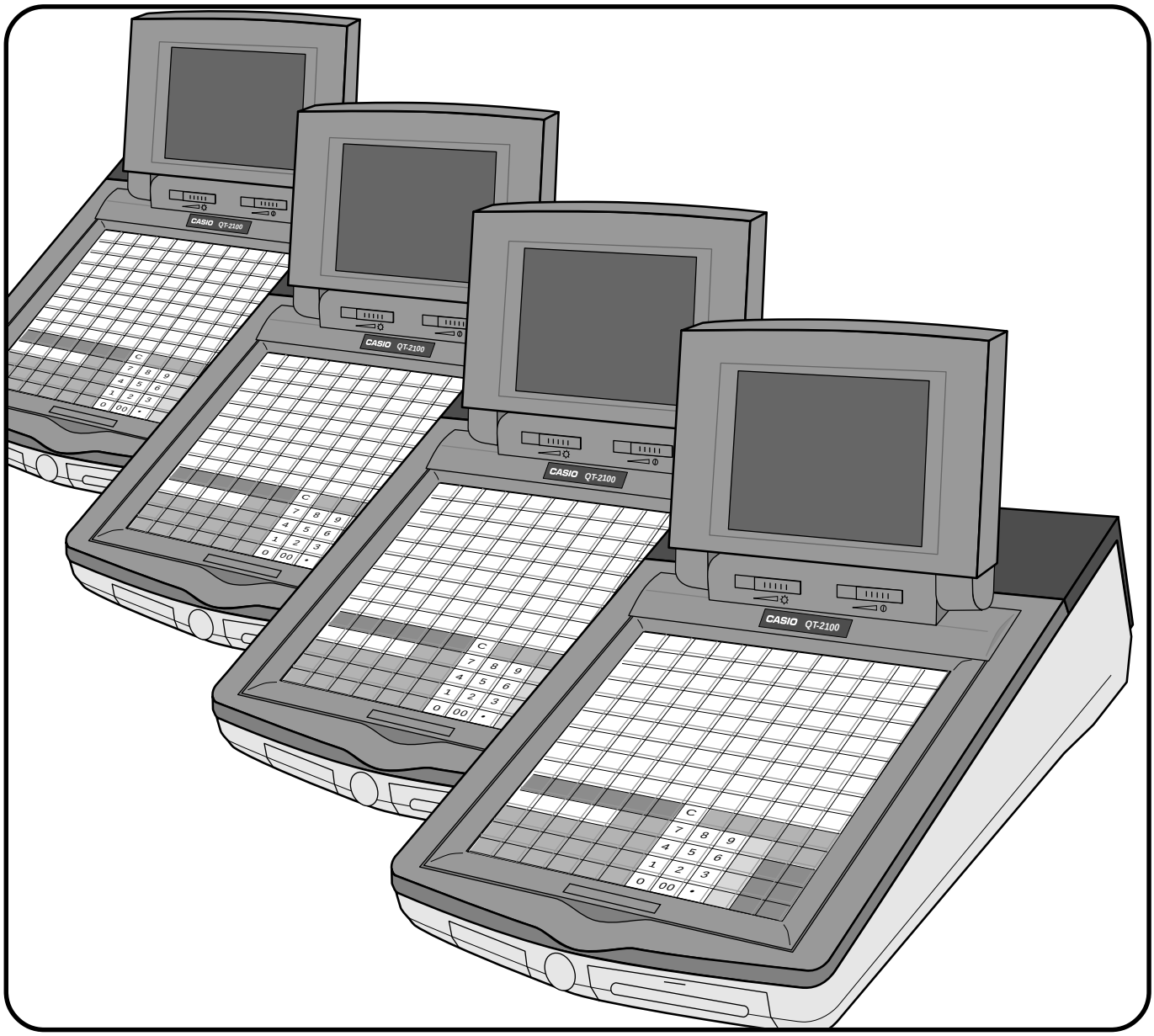
QT-2100

Versatile Intelligent Terminal

Reference Manual

Version 1.0 February 2002



CASIO

This manual is intended to be used as a reference to the QT-2100 system. It provides details to allow whole understanding of the system capabilities, its operation, and how it can be used to solve many problems within the retail outlet. This manual does not describe actual programming, which is covered in the QT-2100 programming manual.

This manual consists of the following chapters:

1. Introduction
   This chapter describes the concepts of development of the QT-2100 system.
2. Hardware configuration
   This chapter outlines the hardware, optional devices and configurations of QT-2100 system.
3. Application systems
   This chapter outlines the application system and overviews the function provided for the QT-2100 system.
4. Manager operation
   This chapter explains the manager operations to use QT-2100 system.
5. Registrations
   This chapter explains actual registration operations with example.
6. Refund mode operation
   This chapter explains registrations in the RF or REG– mode.
7. Read and reset
   This chapter explains detail of the read and reset operations and reports.
8. System down and recovery
   This chapter explains actions to take and recovery methods when the system goes down.
9. Appendices
   These chapters show the record format and descriptions of individual files, total calculation method, meaning of error messages, etc.

Note: Casio reserves the right to change equipment and specifications without obligation and notification. The terms used in this manual may be different from those used in other manuals of Casio's product.

Printing history

Manual version	**Software version**	
Version 1.0: February 2002	First Edition: February 2002	Version 1.0

Introduction

The QT-2100 is a versatile intelligent terminal developed in accordance with the following concepts.

1) System concept
   Developing a high performance economical system by adopting the restaurant, bar system.

– Shared check tracking
  The QT-2100 system has the capability of check tracking system.
– Shared printer system
  All terminals in the cluster can share receipt/journal printer(s) and remote printer(s).
– Collection, consolidation, and auto-program functions
  The QT-2100 system is equipped with these functions by utilizing high-speed in-line data transfer system.
– Versatile terminal
  With the QT-2100 system, any terminal has the same function, and can be designated as the master terminal by programming.

2) Software concept
   A flexible application system for development, adopting the following methods:

– Function classified application system

3) Design concept
   Compact spill-proof body, multi-line LCD

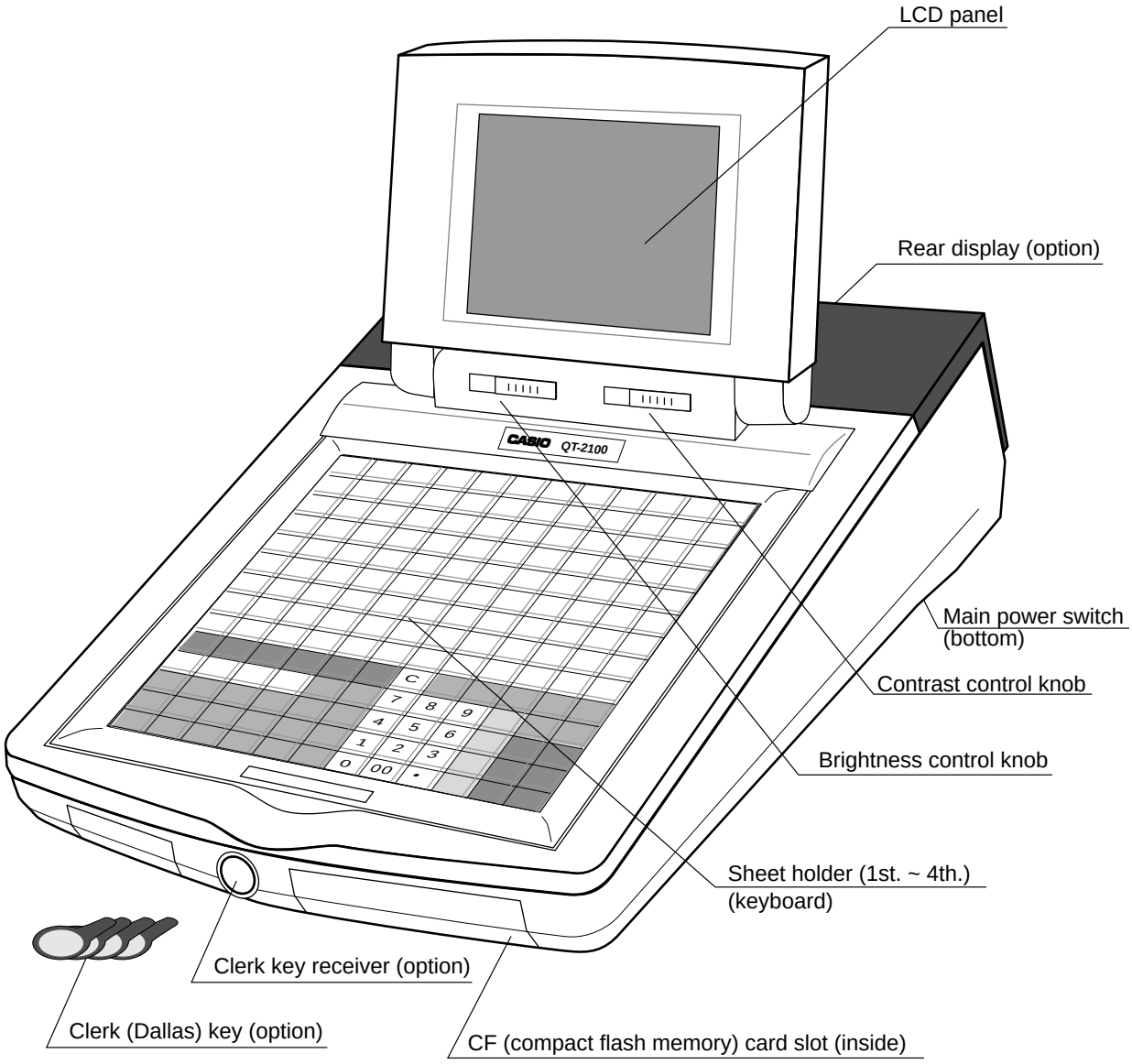
In addition to the above, the QT-2100 is also a terminal following characteristics:

– Expandability
  The QT-2100 system can be connected to various peripheral devices (slip printer, R/J printer, modem, a personal computer, etc.)
– Reliability
  The QT-2100 is provided with a self-diagnosis program so that the terminal can check the hardware. When a malfunction occurs during processing, an error report is logged into the system memory so that the error can quickly be corrected.

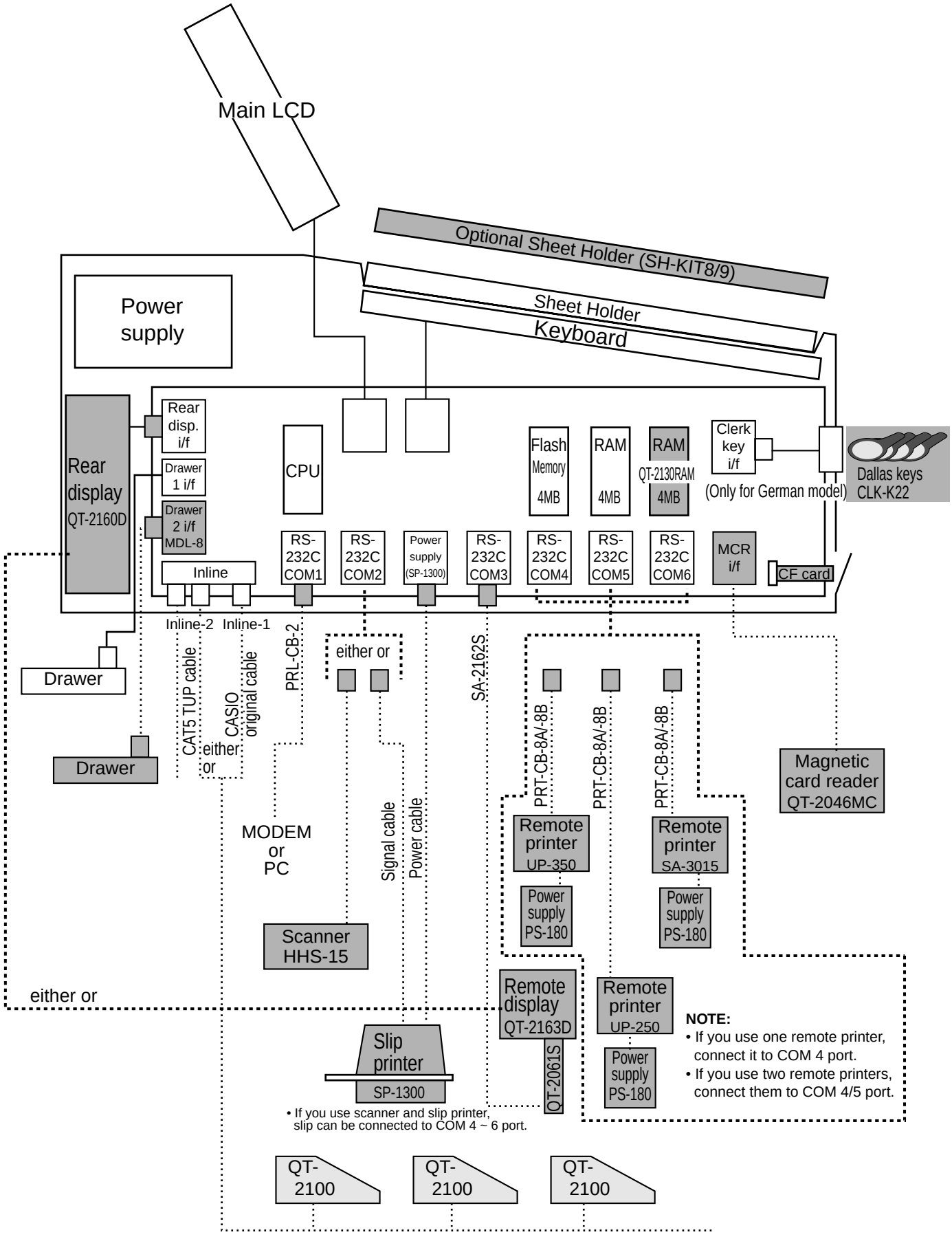
1. Hardware configuration

This section outlines the hardware, optional devices, and configurations of the QT-2100 system.

1-1. General configuration

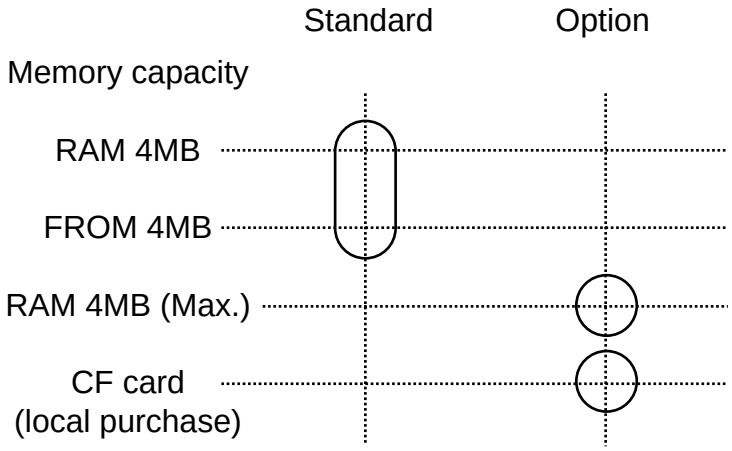


1-2. Hardware diagram



Note: Shadowed device and dot line indicate option devices.

1-3. Memory layout



1-4. Keyboard

1-4-1. Standard keyboard

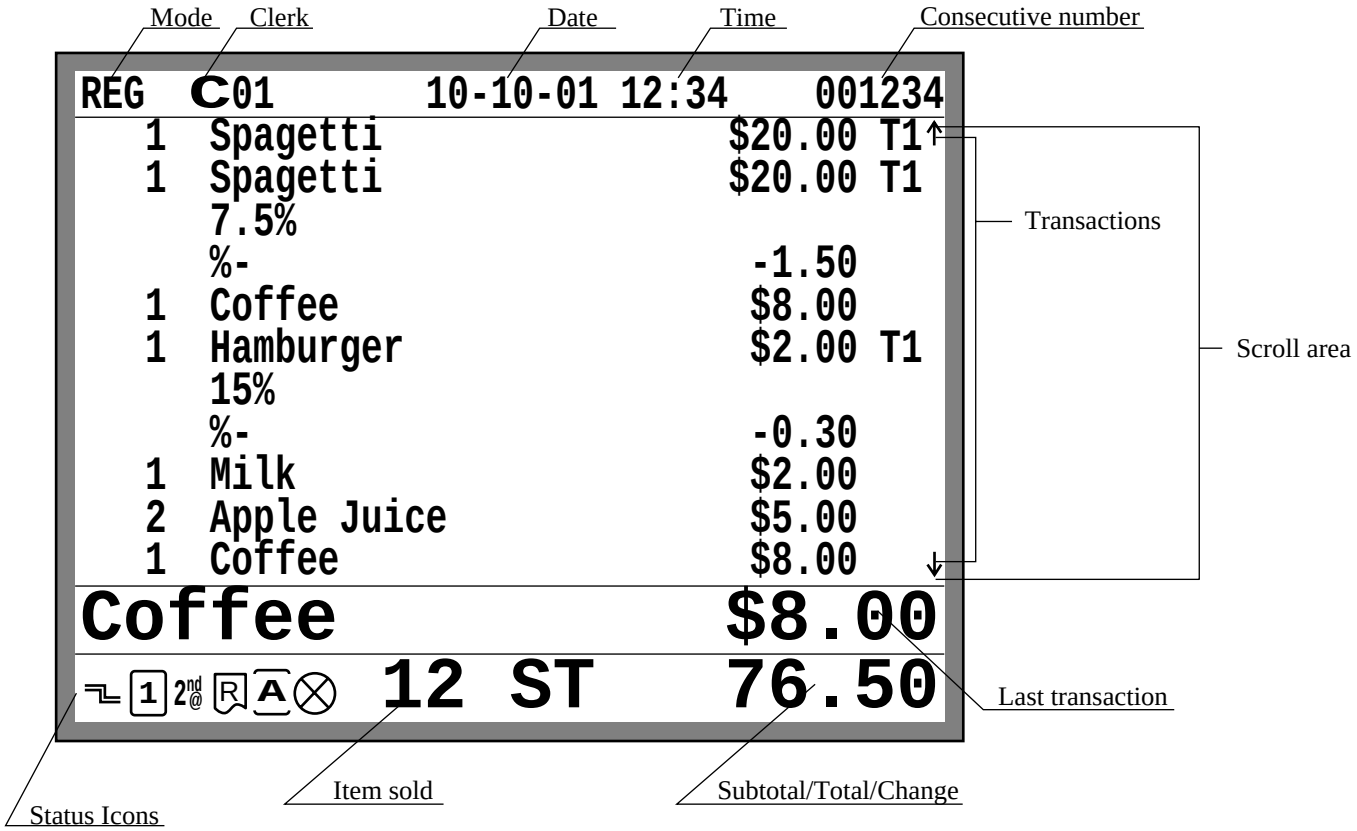
9	18	27	36	45	54	63	72	81	90	99	108
8	17	26	35	44	53	62	71	80	89	98	107
7	16	25	34	43	52	61	70	79	88	97	106
6	15	24	33	42	51	60	69	78	87	96	105
5	14	23	32	41	50	59	68	77	86	85	104
4	13	22	31	40	49	58	67	76	85	94	103
3	12	21	30	39	48	57	66	75	84	93	102
2	11	20	29	38	47	56	65	74	83	92	101
1	10	19	28	37	46	55	64	73	82	91	100
CLK5	REG MODE	#/INS	MENU SHIFT	TABLE TRANS	NEW/OLD CHK	C	X	VOID	CANCEL	VAT	ESC/ SKIP
CLK4	X/Z MODE	ADD CHK	HOUSE BON	SEAT No.	COVERS	7	8	9	CH	RC	PD
CLK3	PGM MODE	SEP CHK	NO	⇧	PAGE UP	4	5	6	CR	SUBTOTAL	
CLK2	DISP ON/OFF	SUBST.	⇦	HOME	⇨	1	2	3	CHK	CASH/AMT TEND	
CLK1	—	%–	YES	⇩	PAGE DOWN	0	00	•	GUEST RECEIPT	NB	

1-4-2. Hard key code of keyboard

14	30	46	62	78	94	110	126	142	158	174	190
13	29	45	61	77	93	109	125	141	157	173	189
12	28	44	60	76	92	108	124	140	156	172	188
11	27	43	59	75	91	107	123	139	155	171	187
10	26	42	58	74	90	106	122	138	154	170	186
9	25	41	57	73	89	105	121	137	153	169	185
8	24	40	56	72	88	104	120	136	152	168	184
7	23	39	55	71	87	103	119	135	151	167	183
6	22	38	54	70	86	102	118	134	150	166	182
5	21	37	53	69	85	101	117	133	149	165	181
4	20	36	52	68	84	100	116	132	148	164	180
3	19	35	51	67	83	99	115	131	147	163	179
2	18	34	50	66	82	98	114	130	146	162	178
1	17	33	49	65	81	97	113	129	145	161	177

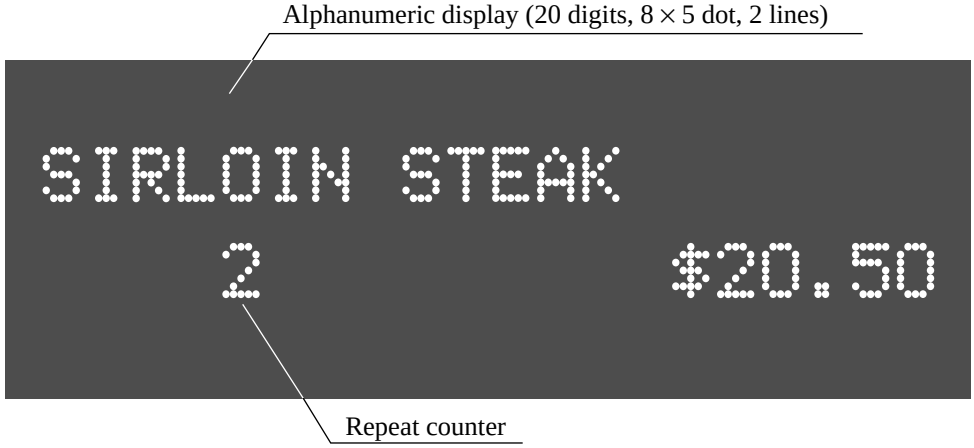
1-5. Display

1-5-1. Main display



- Communication:
- Receipt on: R
- Menu sheet No.: 1
- Character shift: A : Capital, double A : Capital, standard; a : Small, double a : Small, standard
- 2nd unit price 2nd@ or shift PLU level: 2 ~ 8
- Master/BM error: ⊗
- Cut off Master or BM: !

1-5-2. Customer display (Rear or remote display: option)



1-6. Cash drawer

Medium size drawer is provided for the standard QT-2100.
This type of drawer is a close lock type.
Connect two cables (signal and frame ground) to the drawer.
When you want to set the QT-2100 terminal on the drawer, set and tighten two screws on the bottom side to fix the terminal on the drawer.

1-7. Security locks

Security lock provided is cash drawer lock key.
Normally, the mode switch and printer cover lock key are included in security locks, but in QT-2100, the modes are controlled by mode control keys (such as “REG MODE”, “X/Z MODE”, etc.) and the printers connected to QT-2100 system have no printer cover keys.

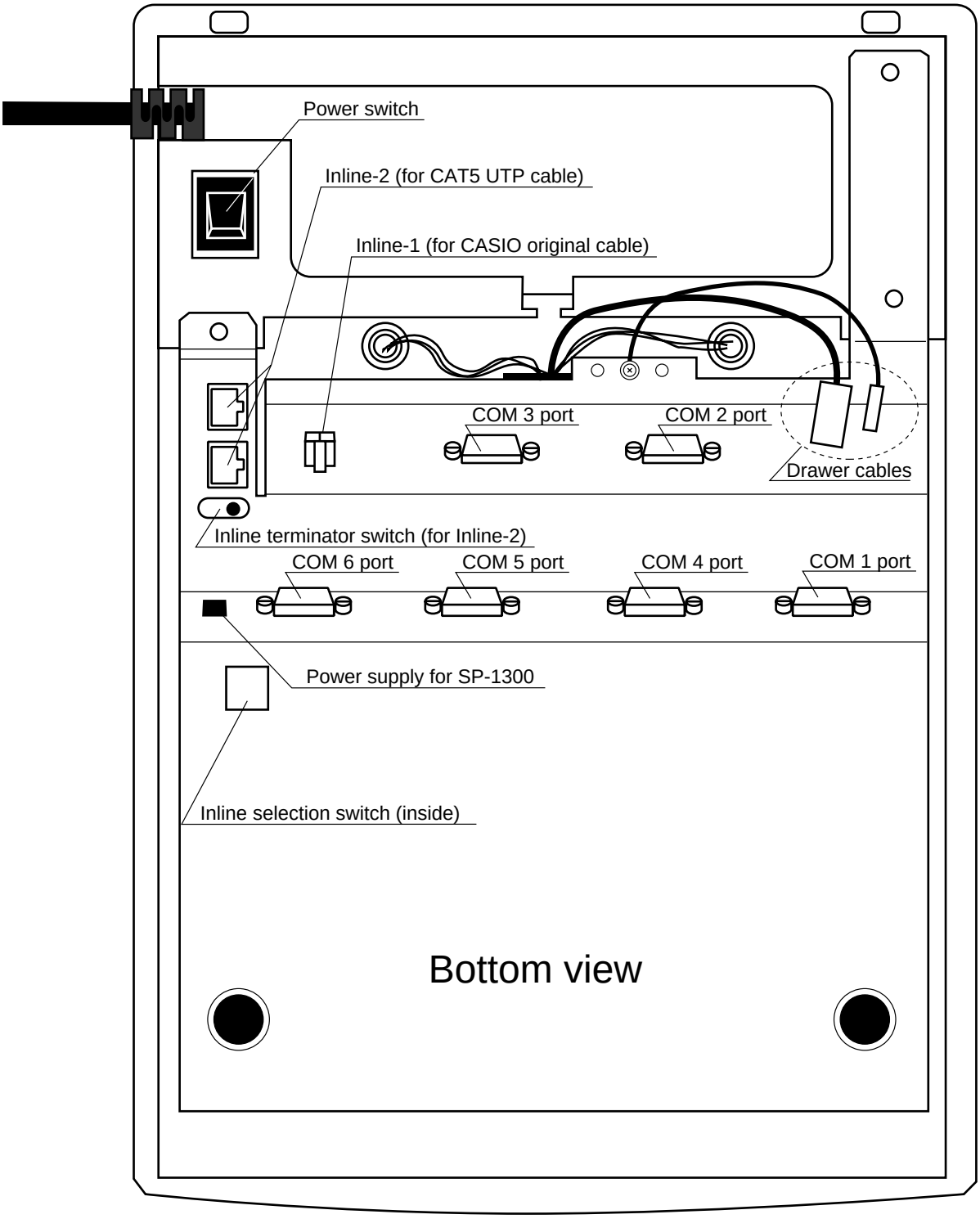
1-7-1. Drawer lock key

This key is used to lock the cash drawer.

1-7-2. Clerk switch — Dallas key— (for German model only)

The clerk switch is provided only for German model, and is located on the front side of the terminal. The clerk keys (for 6 clerks) are used enable/disable the register instead of the clerk sign on/off operation. The clerk switch and clerk keys are optional items for other countries.

1-8. Input/output connectors



1-9. Optional peripherals

The following optional peripherals can be used by plugging them into the appropriate port.

1) Personal computer/MODEM: RS-232C COM 1 port

2) Slip printer: RS-232C COM 2 port
   SP-1300
   The slip printer is used for validations, detailed slips, endorsements and check prints.

3) Scanner: RS-232C COM 2 port
   Hand-held scanner (HHS-15)

4) Remote customer display: RS-232C COM 3 port
   QT-2163D

5) Receipt/journal printer: RS-232C COM 4 ~ 6 port
   UP-350, UP-250 or SA-3015
   The receipt/journal printer is used for receipts/journal/reports/kitchen orders.
   If you use one remote printer, connect it to COM 4 port.
   If you use two remote printers, connect them to COM 4/5 port.

6) Inline and other QT-2100: Inline port
   You can use either CASIO original cable (same as QT-2000) or CAT5 TUP cable.

7) Drawer: drawer port

1-10. System configuration

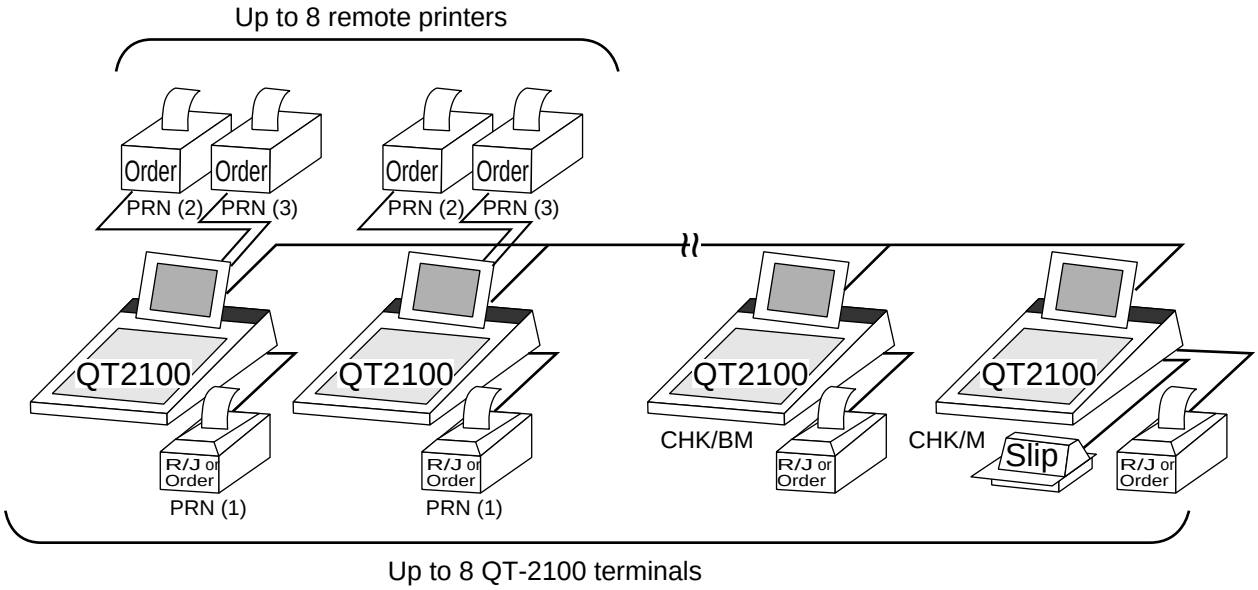
This section represents the system configuration of the QT-2100. The QT-2100 has three different system configurations, such as shared check tracking/floating clerk interrupt system, Inline collection/consolidation system and Online collection/consolidation system.

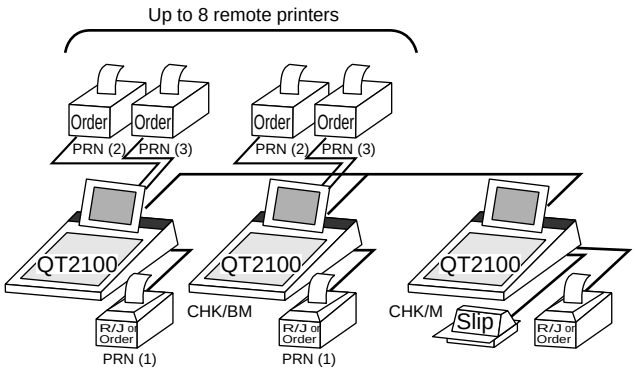
Before detail explanation, we should define the words:

1) Check master:
   Check master is the master server of shared check tracking system and floating clerk interrupt system. This terminal has check index and detail files and controls them.
2) Check backup master:
   Check backup master is the backup server of shared check tracking system and floating clerk interrupt system. This terminal also has check index and detail files and update them at the same timing of master.
   When the check master goes down, the backup master plays the role of check master.
3) Check self master:
   Check self master has its check tracking system files and clerk interrupt files for itself.
4) Satellite:
   The terminal which is not assigned to 1) ~ 3) above.
5) Remote printer:
   Remote printer prints data sent from both its own QT-2100 terminal and other terminal of the system.
6) Local printer:
   Local printer prints data sent from its own QT-2100 terminal.

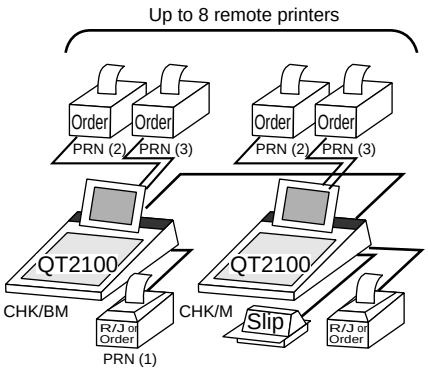
1-10-1. Shared check tracking system/floating clerk interrupt system

System Recommendation





3 terminals/system



2 terminals/system

Available peripherals versus ECR definition

✓: Available

ECR definition	Peripherals			
	Remote printer	Local printer	Slip printer	PC/ MODEM
Check master	✔	✔	✔	✔
Check backup master	✔	✔	✔	✔
Self master	✔	✔	✔	✔
Satellite	✔	✔	✔	✔

Available combinations ECR definition

✓: Available

ECR definition	Check master	Check backup master	Self master	Terminal w/ remote printer
Check master				✔
Check backup master				✔
Self master				✔
Terminal w/ remote printer	✔	✔		

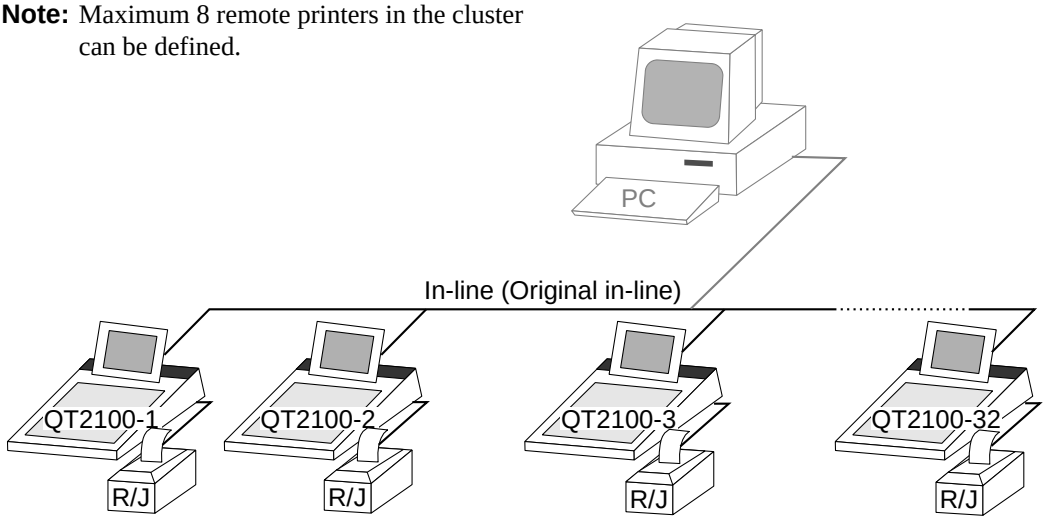
Note:

1) Please follow the system recommendation above. Otherwise the system performance may be slow down.

1-10-2. Inline collection/consolidation system

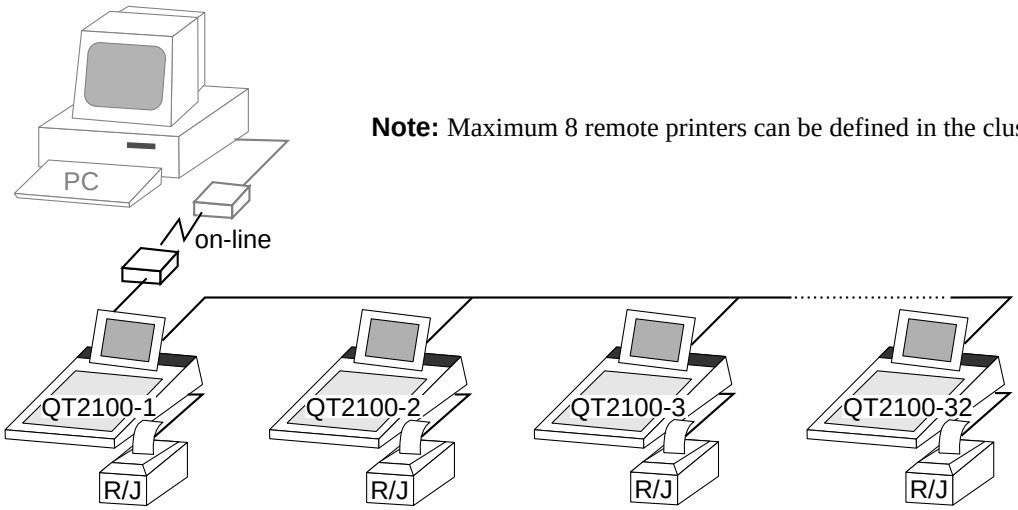
- Inline collection/consolidation and auto-programming for up to 32 QT-2100 terminals.

Note: Maximum 8 remote printers in the cluster can be defined.



1-10-3. Online collection/consolidation system

- Online collection/consolidation and auto-programming for up to 32 QT-2100 terminals.



Note: Maximum 8 remote printers can be defined in the cluster.

2. Application systems

This section describes the configuration of application system and their related setting with the QT-2100. Reading this section provides a general understanding of the overall system of the QT-2100.

2-1. General description of application system

2-1-1. File concept

Programming data for each function, as well as registration data, are assigned and handled in the RAM of the QT-2100 in data blocks called files. Each files identified by a 3-digit file number, and consists of multiple records that affect the length and data format of the file. The QT-2100 stores the location in RAM for each file in a work area, and specification of a data location for accessing is accomplished using the file number, record number and record format.
Memory management on a file basis allows flexibility memory allocation in accordance with the application of a specific terminal and its memory capacity. The number of records per file can be programmed, and a file can even be programmed for zero records.

There are three types of files:

– Terminal files:
  Terminal files include system work files, daily total files, periodic total 1 and periodic total 2 files. Periodic total files have only totalizer field, and totalize the same data which is accumulated to terminal files at the same time. The periodic total 1 files have 100 order file numbers, and the periodic total 2 files have 200 order file numbers.
  These files can be reset individually and separately from the terminal files. This provides access to weekly and monthly total data. The periodic total 1 files and 2 files have the same functions, and can accumulate data with different periods. The same number of records as the corresponding terminal file must be reserved for each periodic total files.
– Consolidation files:
  Consolidation files are work files for consolidation of daily total, periodic 1 total and periodic 2 total data from each terminal, and have 300, 400 and 500 order file numbers, respectively. The same number of records as the corresponding terminal files must be reserved for each file, on the master terminal.
– Consolidation work files:
  Consolidation work files are work files for collection/consolidation of daily, periodic 1/2 data from each terminal. The files have 600 order file numbers.
  The file number of records as the corresponding terminal file must be reserved for each consolidation file.

Each file requires an internal work area, so calculation of actual file size can be performed using the following formula:

Record length × Number of records + Work area = Actual file size

The following table shows all the files available for QT-2100. See the Appendix A-3 of this manual for detail formats of individual files.

File No.	File description	Record length	Max. No. of records	Work size	Description	Attribu-tion	Allocat-able
System files							
901	System connection table	18	33	75		Program	No
902	I/O parameter	5	11	69		Program	No
903	Printer connection	27	99	81		Program	No
904	Consecutive number	6	5	69		Buffer	No
999	System error log	11	20	75		Buffer	No
Function and total files							
001	Fixed totalizer	26	78	81		Pgm/Sales	No
101	(periodic total 1)	10	78	75		Sales	Yes
201	(periodic total 2)	10	78	75		Sales	Yes
301	(daily consolidation)	10	78	75	for master	Sales	Yes
401	(periodic 1 consolidation)	10	78	75	for master	Sales	Yes
501	(periodic 2 consolidation)	10	78	75	for master	Sales	Yes
601	(consolidation work)	10	78	75	for master	Buffer	Yes
002	Free function	38	999	99		Pgm/Sales	Yes
102	(periodic total 1)	10	999	75		Sales	Yes
202	(periodic total 2)	10	999	75		Sales	Yes
302	(daily consolidation)	10	999	75	for master	Sales	Yes
402	(periodic 1 consolidation)	10	999	75	for master	Sales	Yes
502	(periodic 2 consolidation)	10	999	75	for master	Sales	Yes
602	(consolidation work)	10	999	75	for master	Buffer	Yes
003	Subdepaprtment	54	99	135		Pgm/Sales	Yes
103	(periodic total 1)	15	99	81		Sales	Yes
203	(periodic total 2)	15	99	81		Sales	Yes
303	(daily consolidation)	15	99	81	for master	Sales	Yes
403	(periodic 1 consolidation)	15	99	81	for master	Sales	Yes
503	(periodic 2 consolidation)	15	99	81	for master	Sales	Yes
603	(consolidation work)	15	99	81	for master	Buffer	Yes
004	PLU	92	9999	177		Pgm/Sales	Yes
104	(periodic total 1)	30	9999	99		Sales	Yes
204	(periodic total 2)	30	9999	99		Sales	Yes
304	(daily consolidation)	30	9999	99	for master	Sales	Yes
404	(periodic 1 consolidation)	30	9999	99	for master	Sales	Yes
504	(periodic 2 consolidation)	30	9999	99	for master	Sales	Yes
604	(consolidation work)	30	9999	99	for master	Buffer	Yes
005	Department	54	99	135		Pgm/Sales	Yes
105	(periodic total 1)	15	99	81		Sales	Yes
205	(periodic total 2)	15	99	81		Sales	Yes
305	(daily consolidation)	15	99	81	for master	Sales	Yes
405	(periodic 1 consolidation)	15	99	81	for master	Sales	Yes
505	(periodic 2 consolidation)	15	99	81	for master	Sales	Yes
605	(consolidation work)	15	99	81	for master	Buffer	Yes
006	Group	26	99	81		Pgm/Sales	Yes
106	(periodic total 1)	10	99	75		Sales	Yes
206	(periodic total 2)	10	99	75		Sales	Yes
306	(daily consolidation)	10	99	75	for master	Sales	Yes
406	(periodic 1 consolidation)	10	99	75	for master	Sales	Yes
506	(periodic 2 consolidation)	10	99	75	for master	Sales	Yes
606	(consolidation work)	10	99	75	for master	Buffer	Yes
009	Hourly sales	20	96	87		Sales	Yes
109	(periodic total 1)	20	96	87		Sales	Yes
209	(periodic total 2)	20	96	87		Sales	Yes
309	(daily consolidation)	20	96	87	for master	Sales	Yes
409	(periodic 1 consolidation)	20	96	87	for master	Sales	Yes
509	(periodic 2 consolidation)	20	96	87	for master	Sales	Yes
609	(consolidation work)	20	96	87	for master	Buffer	Yes
010	Monthly sales	20	32	87		Sales	Yes
110	(periodic total 1)	20	32	87		Sales	Yes

File No.	File description	Record length	Max. No. of records	Work size	Description	Attribu-tion	Allocat-able
210	(periodic total 2)	20	32	87		Sales	Yes
310	(daily consolidation)	20	32	87	for master	Sales	Yes
410	(periodic 1 consolidation)	20	32	87	for master	Sales	Yes
510	(periodic 2 consolidation)	20	32	87	for master	Sales	Yes
610	(consolidation work)	20	32	87	for master	Buffer	Yes
012	Void reason	29	99	87		Pgm/Sale	Yes
112	(periodic total 1)	10	99	75		Sales	Yes
212	(periodic total 2)	10	99	75		Sales	Yes
312	(daily consolidation)	10	99	75	for master	Sales	Yes
412	(periodic 1 consolidation)	10	99	75	for master	Sales	Yes
512	(periodic 2 consolidation)	10	99	75	for master	Sales	Yes
612	(consolidation work)	10	99	75	for master	Buffer	Yes
018	Table analysis	32	99	93		Pgm/Sale	Yes
118	(periodic total 1)	10	99	75		Sales	Yes
218	(periodic total 2)	10	99	75		Sales	Yes
318	(daily consolidation)	10	99	75	for master	Sales	Yes
418	(periodic 1 consolidation)	10	99	75	for master	Sales	Yes
518	(periodic 2 consolidation)	10	99	75	for master	Sales	Yes
618	(consolidation work)	10	99	75	for master	Buffer	Yes
020	Grand total	24	3	75		Pgm/Sale	No
120	(periodic total 1)	8	3	69		Sales	Yes
220	(periodic total 2)	8	3	69		Sales	Yes
320	(daily consolidation)	8	3	69	for master	Sales	Yes
420	(periodic 1 consolidation)	8	3	69	for master	Sales	Yes
520	(periodic 2 consolidation)	8	3	69	for master	Sales	Yes
620	(consolidation work)	8	3	69	for master	Buffer	Yes
055	Shift PLU	91	9999	189		Sales	Yes
155	(periodic total 1)	70	9999	147		Sales	Yes
255	(periodic total 2)	70	9999	147		Sales	Yes
355	(daily consolidation)	70	9999	147	for master	Sales	Yes
455	(periodic 1 consolidation)	70	9999	147	for master	Sales	Yes
555	(periodic 2 consolidation)	70	9999	147	for master	Sales	Yes
655	(consolidation work)	70	9999	147	for master	Buffer	Yes
Clerk							
007	Clerk	95	99	165		Program	Yes
030	Clerk detail link	4	99	75		Program	Yes
027	Clerk (Dallas) key ID	14	200	75		Program	Yes
011	Clerk detail	10	9801	75		Sales	Yes
111	(periodic total 1)	10	9801	75		Sales	Yes
211	(periodic total 2)	10	9801	75		Sales	Yes
311	(daily consolidation)	10	9801	75	for master	Sales	Yes
411	(periodic 1 consolidation)	10	9801	75	for master	Sales	Yes
511	(periodic 2 consolidation)	10	9801	75	for master	Sales	Yes
611	(consolidation work)	10	9801	75	for master	Buffer	Yes
Time & Attendance							
014	Hourly / Labor	26	96	99		Sales	Yes
114	(periodic total 1)	26	96	99		Sales	Yes
214	(periodic total 2)	26	96	99		Sales	Yes
314	(daily consolidation)	26	96	99	for master	Sales	Yes
414	(periodic 1 consolidation)	26	96	99	for master	Sales	Yes
514	(periodic 2 consolidation)	26	96	99	for master	Sales	Yes
614	(consolidation work)	26	96	99	for master	Buffer	Yes
019	Work time	18	4158	111		Sales	Yes
319	(daily consolidation)	18	4158	75	for master	Sales	Yes
800	Time zone	6	24	81		Program	Yes
801	Employee	36	99	135		Program	Yes
802	Job code	22	50	87		Program	Yes

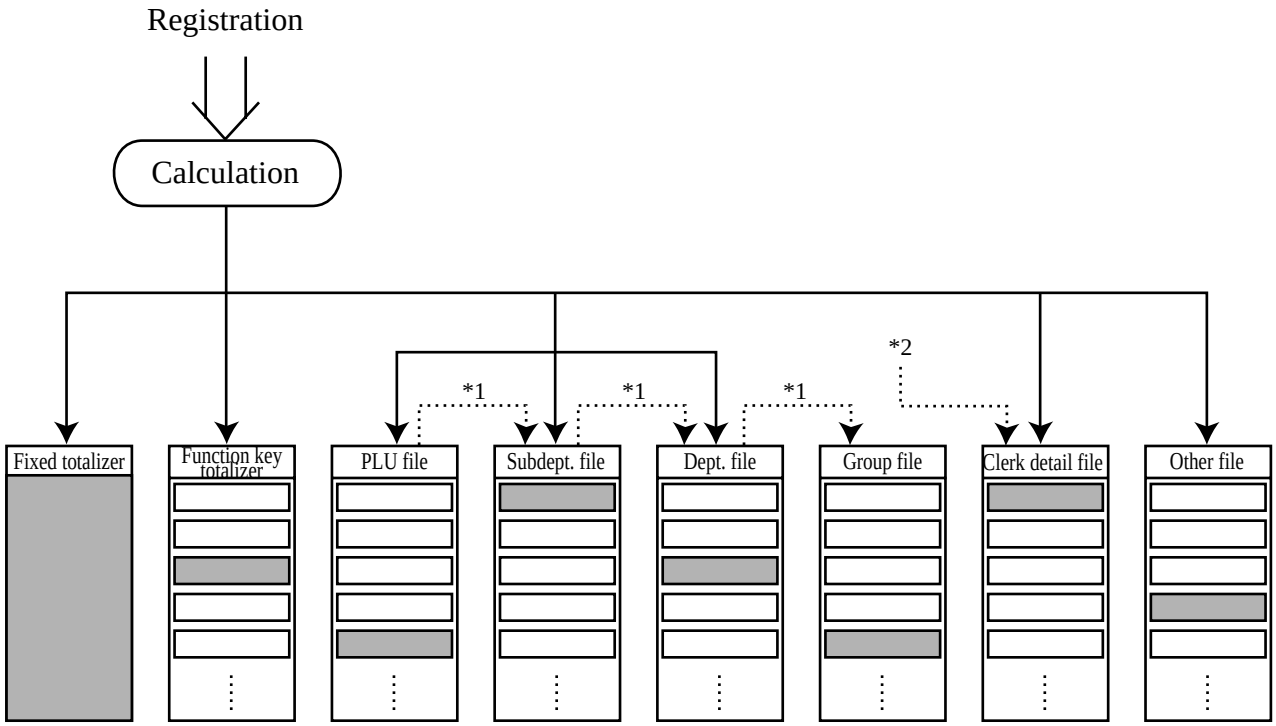
File No.	File description	Record length	Max. No. of records	Work size	Description	Attribu-tion	Allocat-able
803	Schedule	11	2079	111		Program	Yes
806	Time & Attendance work	99	1	657		Buffer	Yes
Check							
015	Check Index	300	200	69		Buffer	Yes
060	Check detail	80	9999	69		Buffer	Yes
066	Check detail work	80	2000	69		Buffer	Yes
Hourly item							
021	Hourly item	10	1920	75		Sales	Yes
121	(periodic total 1)	10	1920	75		Sales	Yes
221	(periodic total 2)	10	1920	75		Sales	Yes
321	(daily consolidation)	10	1920	75	for master	Sales	Yes
421	(periodic 1 consolidation)	10	1920	75	for master	Sales	Yes
521	(periodic 2 consolidation)	10	1920	75	for master	Sales	Yes
621	(consolidation work)	10	1920	75	for master	Buffer	Yes
031	Hourly item link	4	480	75		Program	Yes
IDC							
057	IDC (1)	50	9999	69		Sales	Yes
357	(consolidation file)	50	9999	69	for master	Sales	Yes
657	(consolidation work)	50	9999	69	for master	Sales	Yes
058	IDC (2)	50	9999	69		Sales	Yes
358	(consolidation file)	50	9999	69	for master	Sales	Yes
658	(consolidation work)	50	9999	69	for master	Sales	Yes
059	IDC (3)	50	9999	69		Sales	Yes
359	(consolidation file)	50	9999	69	for master	Sales	Yes
659	(consolidation work)	50	9999	69	for master	Sales	Yes
063	IDC buffer	50	9999	69		Buffer	Yes
804	IDC link	6	999	81		Program	Yes
Program / message / buffer							
016	Scanning PLU link	9	300	75		Program	Yes
022	General control	6	37	69		Program	No
023	Special character	16	58	69		Program	No
024	Report header	16	31	69		Program	No
025	Tax table	74	10	93		Program	Yes
026	Pulldown group	103	999	189		Program	Yes
028	Set menu table	80	999	183		Program	Yes
029	Batch X/Z	9	10	69		Program	Yes
032	Receipt/slip message	40	48	69		Program	Yes
033	Endorse message	40	4	69		Program	Yes
035	Print buffer	80	999	69		Buffer	Yes
036	Registration buffer	80	2000	69		Buffer	Yes
039	Character recall	40	9999	69		Program	Yes
041	Check print	3	9	69		Program	Yes
044	Display buffer	40	1000	69		Buffer	Yes
047	Graphic logo	13	432/864	69		Program	Yes
048	Electronic journal memory	41	1000	69		Buffer	Yes
648	Electronic journal (collection)	41	12336	69	for master	Buffer	Yes
054	PLU 2nd @	46	9999	99		Program	Yes
062	Scheduler	14	99	75		Program	Yes
065	Order character	16	99	69		Program	Yes
074	Key table	36	192	171		Program	No
099	Euro program	4	3	69		Program	Yes
905	Auto program control	3	20	75		Program	Yes
Arrangement							
038	Arrange group (1)	24	9999	69		Program	Yes
138	Arrange group (2)	24	9999	69		Program	Yes
238	Arrange group (3)	24	9999	69		Program	Yes
338	Arrange group (4)	24	9999	69		Program	Yes
438	Arrange group (5)	24	9999	69		Program	Yes

2-1-2. Linkage of totalizers

Registered data is accumulated to totalizers which are reserved for each functions.
The QT-2100 has the following types of totalizers:

1) Fixed totalizers
   Registration data is accumulated for individual terminals.
2) Function key totalizers
   Data input by finalize or transaction keys is accumulated in totalizers for each key. Operation types, as well as data used in operation differ depending on the key.
3) Subdepartment totalizers
   Registration data is accumulated in totalizers for each subdepartment.
4) Department totalizers
   Registration data is accumulated in totalizers for each department.
5) Group totalizers
   Registration data is accumulated in totalizers for each group.
6) PLU totalizers
   Registration data is accumulated in totalizers for each PLU.
7) Clerk totalizers
   Registration data is accumulated for each relevant clerk. A clerk detail totalizer can be linked to a fix totalizer, finalize key, transaction key, or item totalizer (department/PLU/subdepartment/group), and accumulate data registered for the destination totalizer for each relevant clerk.
8) Other totalizer
   Functions for hourly sales, monthly sales void reason, table analysis, time attendance and hourly item also have totalizers.

Registration data flow



*1 Linking between PLUs, subdepartments, departments and groups can be programmed to meet the needs of the retail environment.
PLUs can be programmed to link with subdepartments, departments or group, while subdepartment can be programmed to link with department or group, and department can be programmed to link with group.
When a PLU is programmed to link with a department, data registered for the PLU is also accumulated to the department. In addition, when the department is programmed to link with a group, data registered for the PLU is simultaneously reflected the department totalizer and group totalizer.

*2 When data is registered to a totalizer which is preset in the clerk detail link table, the data is also accumulated to the clerk detail totalizer reserved for each relevant clerk.

2-1-3. Function keys

The keys on the keyboard can be assigned various functions that are used for registration as required for the terminal. For convenience sake, these functions are called by function keys.
There are two types of function keys:

1) System keys
There are function keys which have functions that are fixed by the system (Numeral keys, clear key, home position key, left/right/up/down cursor key, yes/no key, on/off key, mode selection key and ESC/SKIP key

2) Free Function/department/flat PLU keys
These function keys are used for finalize a transaction, to specify the functions for a registration or to specify the meaning of a entry. These function keys have programmable functions, which are set to the function key/department/PLU file.
Free function keys include finalize key, transaction key, department key and flat PLU key.

The list of all function keys provided for QT-2100 is shown on the next page. General descriptions of individual function keys are found in the chapter 2-2.

Function	Code	Initial character
Add check	094	**ADD CHK**
Arrangement	044	**ARG**
Bill copy	047	**BILL**
Break-in/out	109	**BREAK-IN/OUT**
Cancel	236	**CANCEL**
Cash amount tendered	001	**CASH**
Charge	002	**CHARGE**
Check endorsement	039	**CK.E**
Check print	012	**CHKP**
Check tender	003	**CHECK**
Clerk number	072	**CLK#**
Clerk transfer	013	**CLK TRANS**
Clock-in/out	108	**CLOCK-IN/OUT**
Coupon	023	**COUPON**
Coupon 2	036	**CPN2**
Credit	004	**CREDIT**
Cube	090	**XXX**
Currency exchange	045	**CE**
Customer number	043	**CT**
Department	051	**DEPT nn**
Department number	135	**DEPT#**
Deposit	025	**DEPOSIT**
Discount	028	**%–**
Display mode	219	**DISP MODE**
Dutch account	140	**DUTCH**
Eat-in	128	**EAT-IN**
Electronic journal Disp	207	**EJ DISP**
Error correct/Void	034	**VOID**
First unit price	069	**1st@**
Flat PLU	063	**PLU nnnn**
House Bon	114	**HOUSE BON**
Ketten Bon	113	**X/KETTEN**
List	136	**LIST**
List number	137	**LIST#**
Loan	019	**LOAN**
Lock out unused key	000	**NOP**
Media change	118	**MEDIA CHG**
Menu shift	064	**MENU**
Merchandise subtotal	080	**MDST**
Minus	027	**–**
Multiplication	082	**X**
New balance	006	**NB**
New check	091	**NEW CHK**
New/Old check	093	**NEW/OLD**
Normal receipt	016	**NRMRCT**
No sale	042	**NS**
Non-add	040	**#**
Non-add/No sale	041	**#/NS**
OBR	103	**OBR**
Old check	092	**OLD CHK**
Open	067	**OPEN**
Open2	068	**OPEN2**
Open Check	117	**OPEN CHK**
Operator number	078	**OPE#**
Operator read/reset	073	**OPE X/Z**
Paid out	021	**PD**
Pick up	022	**P.UP**
Plus	029	**+**
PLU	048	**PLU#**

Function	Code	Initial character
Post Entry	115	**POST ENTRY**
Premium	030	**%+**
Price inquiry	008	**PRCINQ**
Price	049	**PRC**
Quantity/For	083	**QT**
Recall	131	**RECALL**
Receipt	038	**RCT**
Receipt On/OFF	076	**RCT ON/OFF**
Received on account	020	**RC**
Refund	033	**RF**
Reverse Display	206	**REVERSE**
Round Repeat	116	**R REPEAT**
Seat number	119	**SEAT#**
Second unit price	070	**2nd@**
Selective item subtotal	085	**SIST**
Separate check	095	**SEP CHK**
Shift PLU	065	**SFT PLU**
Slip back feed/Release	054	**SB/R**
Slip feed/Release	056	**SF/R**
Slip print	055	**SLIP**
Square	084	**XX**
Stock inquiry	009	**STKINQ**
Store	130	**STORE**
Subdepartment	133	**SUBDEPT nn**
Subdepartment number	134	**SDPT#**
Substitution	111	**SUBST.**
Subtotal	075	**SUBTOTAL**
Table number	058	**TBL#**
Table transfer	014	**TABLE TRANS**
Take-out	129	**TAKE-OUT**
Tax status shift	057	**T/S**
Taxable amount subtotal	077	**TAST**
Tax exempt	062	**EXEMPT**
Text print	011	**PRT**
Text recall	010	**CHAR**
Tray total	074	**TRAY TTL**
Tip	015	**TIP**
Validation	037	**VLD**
VAT	046	**VAT**
X/Z mode	122	**X/Z MODE**
System keys		
Numeric key	000n201	**n=1~9, "0"=10**
Clear	202	
Decimal point	098	**.**
Display On/Off	120	**DISP ON/OFF**
Escape/Skip	211	
Home position	218	**HOME**
Page down	220	**PAGE DOWN**
Page up	221	**PAGE UP**
Program mode	123	**PGM MODE**
Register mode	121	**REG MODE**
Three zero	097	**000**
Two zero	096	**00**
Yes	212	
No	213	
Left arrow	214	
Right arrow	215	
Up arrow	216	
Down arrow	217	

2-1-4. Keyboard layout

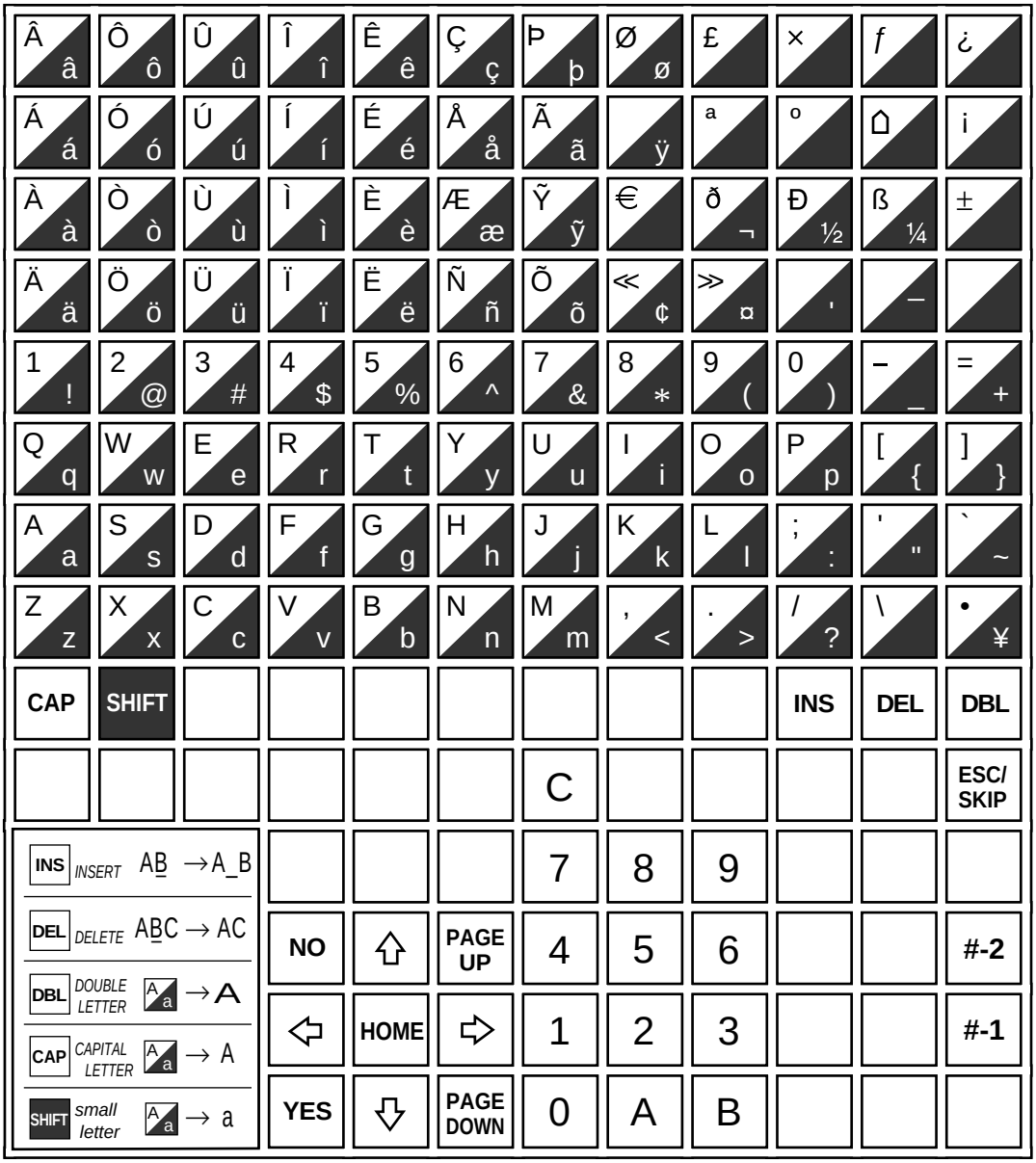
Normally, the keyboard is assigned functions which are required for registration of transactions. The keyboard is also used for character input when entering descriptors or names during programming.
The QT-2100 automatically switches the keyboard to its character input function when it determines that character input is required for the operation sequence you are performing. This means that you can input characters without having to worry about manually changing the keyboard input mode.

The function key layout is fully programmable to meet the specific needs of each terminal. The actual programming of key layouts can be performed in the PGM4 mode, and programmed data is written onto the key conversion table (file 074).
The allocation can also be programmed when programming each function file for programming function keys such as finalize keys, transaction keys, department keys, and touch PLU keys.

Standard function key layout

9	18	27	36	45	54	63	72	81	90	99	108
8	17	26	35	44	53	62	71	80	89	98	107
7	16	25	34	43	52	61	70	79	88	97	106
6	15	24	33	42	51	60	69	78	87	96	105
5	14	23	32	41	50	59	68	77	86	85	104
4	13	22	31	40	49	58	67	76	85	94	103
3	12	21	30	39	48	57	66	75	84	93	102
2	11	20	29	38	47	56	65	74	83	92	101
1	10	19	28	37	46	55	64	73	82	91	100
CLK5	REG MODE	#/INS	MENU SHIFT	TABLE TRANS	NEW/OLD CHK	C	X	VOID	CANCEL	VAT	ESC/ SKIP
CLK4	X/Z MODE	ADD CHK	HOUSE BON	SEAT No.	COVERS	7	8	9	CH	RC	PD
CLK3	PGM MODE	SEP CHK	NO	⇧	PAGE UP	4	5	6	CR	SUBTOTAL	
CLK2	DISP ON/OFF	SUBST.	⇦	HOME	⇨	1	2	3	CHK	CASH/AMT TEND	
CLK1	—	%–	YES	⇩	PAGE DOWN	0	00	•	GUEST RECEIPT	NB	

Alphanumeric key layout



2-1-5. Mode control

With the QT-2100, each clerk can be programmed to enable or disable operations in the following modes:

- RF mode
- REG– mode
- REG mode
- X/Z mode
- Program 1 ~ 6 mode
- Manager mode
- Inline X/Z mode
- Inline auto program, CF backup/restore mode

Also, each clerk can be programmed to enable or disable operations of every function key. Though the QT-2100 has no REG 2 mode, on the page 63 in the Clerk Control function chapter, the manager control procedure is described.

Arrangement execution mode programmed in the arrangement key ignores the mode control program by the clerk.

Please note that if a clerk want to operate an arrangement, he/she should allow to operate arrangement function.

2-1-6. Operation prompt and error messages

The QT-2100 displays or prints messages to indicate the status of the terminal being operated or programmed. These messages help to determine the status of the terminal or the required subsequent action.

2-1-6-1. Operation prompt

All prompt messages, together with descriptors and symbol characters for printing on receipts, slips or reports are contained in the list below. These messages cannot be added, modified or deleted.

Prompt message	Meaning
Data cannot be printed out. **Do you want to display?**	Request to check the data which cannot be printed out.
Do you want to clear data?	Confirmation to reset displayed report.
Cancel OK?	Confirmation of all void operation.
Please wait. **Item Consolidation Mode.**	Please wait. ECR now processing. In the item consolidation mode.
Non Consolidation Mode.	Not in the item consolidation mode.
REG Mode	Mode change : REG mode
REFUND Mode	Mode change : RF mode
REG– Mode	Mode change : REG– mode
Training	Training operator
Please Sign on.	Sign off
Enter Check/Table Number.	CHK# compulsory
Enter Table Number.	TBL# compulsory
Enter Number of covers.	Covers compulsory
Enter Seat Number.	Seat# compulsory
Perform Slip Printing.	Slip compulsory
Issue Guest Receipt.	GUEST RCT compulsory
Perform Validation Printing.	VLD compulsory
Perform Check Printing.	CHK-PRT compulsory
Perform Check Endorsement.	CHK-END compulsory
Operation Code?	Secret No entry for REG 2 mode.
Copy of not printed data	Display header of non printed data
Re_configuration...	During system reconfiguration
Re_configuration end	System reconfugiration ends
Clock-in OK?	Time and attendance clock-in operation
Clock-out OK?	Time and attendance clock-out operation
Break-in OK?	Time and attendance break-in operation
Break-out OK?	Time and attendance break-out operation
Enter cash tip amount and press <YES> key.	Time and attendance tip declaration compulsory
Communication Error	Communication error during clock-in
This procedure stops system maximum 60 sec. **OK ?**	Alert before flash memory clear.

2-1-6-2. Error messages

Error messages are displayed to indicate that an error has occurred and a compulsory operation must be performed. All error messages cannot be added, modified or deleted.

Prompt message	Meaning
Operator mistake.	Operation error
E001 Wrong Mode.	Check tracking (Open mode error)
E003 Wrong operator.	Error clerk/Error clerk in CHK tracking
E005 Insufficient memory.	Memory allocation over
E011 Close the drawer.	Drawer compulsory
E016 Change back to REG mode.	Prohibit plural operation in RF mode
E017 Enter Check/TBL number.	Check # compulsory
E018 Enter Table number.	Table # compulsory
E019 Enter Number of covers.	Cover compulsory
E020 Enter Seat number.	Seat number compulsory
E023 Stock running short.	Alarm when any item drops below its programmed minimum stock quantity during registration.
E024 No stock is available.	Error when actual stock value for a registration items is a negative value.
E026 Stay down compulsory ERR. Enter Item(s).	Stay down compulsory
E028 Not found PLU or C/D is mismatch.	Scanning PLU is not found or OBR code is mis-matched.
E029 No registration is possible while you are in the tender operation.	Attempted registration whilst partial tender operation is being done.
E031 Press ST key before Finalization.	ST compulsory
E033 Enter tendered amount.	Amount tender compulsory
E035 Change amount exceeds the limit.	Change amount exceeds the limit.
E036 Remove money from the drawer.	Contents of the drawer exceed the programmed limit — Sentinel function.
E037 Digit or Amount Limitation Over.	H.D.L., H.A.L.O error
E038 Perform Money Declaration	Money declaration compulsory
E040 Issue Guest Receipt.	Guest receipt compulsory
E041 Print Validation.	Validation compulsory
E044 Print Cheque.	CHK-PRT compulsory
E045 Print Check-Endorsement.	CHK-END compulsory
E046 REG Buffer Full. Please Finalize or NB.	Registration buffer full
E047 Print bill.	Slip compulsory
E048 Insert Slip Paper and retry.	Alarm when no paper is inserted in the Slip.
E049 CHECK memory full	CHK tracking index full/near end
E050 Detail memory Full.	CHK tracking memory full/near end
E051 CHK/TBL No. is occupied.	Attempt is made to use the New Check key to open a new check using a number that is already used for an existing check tracking memory.
E052 CHK/TBL No. is busy.	Attempt to use the same check number whilst the specified number is being used in the other terminal.

Prompt message	Meaning
E053 CHK/TBL No. is not opened.	CHK# not found
E054 Out of CHK/TBL No. Range	CHK# range over
E056 Store range full.	All check # are occupied in range.
E057 No item exists in detail.	Round Repeat cannot be found in detail.
E058 Enter post entry item.	Post Entry item exists in detail.
E059 Press Eat-in or Take-out key.	Press Eat-in or Take-out key.
************** **E060 Printer offline.**	Printer offline. "****" means ECR logical ID and priter number.
************** **E061 Printer error**	Printer downed. "****" means ECR logical ID and printer number.
************** **E061 Printer error** **YES:Retry to print** **NO :Show on the screen** **ESC:Discard data**	
************** **E062 Printer paper end**	Paper near-end/end "****" means ECR logical ID and printer number.
************** **E062 Printer paper end** **YES:Retry to print** **NO :Show on the screen** **ESC:Discard data**	
E064 Printer buffer full **YES:Retry to print** **NO :Show on the screen** **ESC:Discard data**	Print buffer full at sender side
************** **E070 Terminal out of action.** **Cannot print.**	Down at target ECR which has printer "****" means ECR logical ID and printer number.
************** **E071 Target terminal printer** **BF full.** **YES:Retry to print** **NO :Show on the screen** **ESC:Discard data**	Printer buffer full at target ECR which has printer "****" means ECR logical ID and printer number.
************** **E072 Target printer terminal** **is busy.**	Busy at target ECR which has printer "****" means ECR logical ID and printer number.
************** **E073 Your receipt/order may not be** **issued.**	Time out at ECR which has printer "****" means ECR logical ID and printer number.

Prompt message	Meaning
********** E073 Your receipt/order may not be issued. YES:Retry to print NO :Show on the screen ESC:Discard data	Time out at ECR which has printer "****" means ECR logical ID.
E075 Negative Balance. Cannot be finalized.	Attempted finalization when balance is less than zero.
E080 Electronic Journal Full Please clear E-Journal.	Electronic journal full
E082 ***** Illegal Data *****	Illegal Electronic journal data
E083 Cannot create E-Journal. Check Flash memory.	Electronic journal file cannot be created.
********** E105 Check/TBL Tracking Master down. Please call Manager. YES:Retry for connection. NO :Remove it from system.	CHK master down "****" means ECR logical ID.
********** E106 Check/TBL Tracking Backup master down. Please call Manager. YES:Retry for connection. NO :Remove it from system.	CHK BM down "****" means ECR logical ID.
********** E107 Both Master&Backup master down. CHK/TBL tracking or Clerk interrupt is not available.	CHK M/BM down "****" means ECR logical ID.
********** E108 CHK/TBL Master is removed from system.	Master down then take it off from system "****" means ECR logical ID.
********** E109 CHK/TBL Backup master is removed from system.	Backup master down then take it off from system "****" means ECR logical ID.
E110 CHK data mismatch between Master and Backup master.	Data mismatch has occurred.
E130 Middle of Pick up or Loan Press Cancel Key.	During picking up
E131 Middle of <Bill Copy> Press Cancel key.	During Bill copy
E133 Middle of <Media Change> Press Cancel key.	During Media CHG
E134 Middle of Clerk Transfer Press ESC key.	During CLK Trans
E136 Middle of <Separate Check> Press ESC key.	During SEP CHK

Prompt message	Meaning
E139 Not allowed to be negative by Minus/Coupon key.	Credit balance error
E140 Wrong menu.	This sheet holder is prohibited by PGM.
E141 Press <TRAY TOTAL> twice before finalization.	<TRAY TOTAL> key is not pressed twice before finalization.
E145 Arrangement syntax error.	Arrangement syntax error
E150 Incorrect value entry.	Incorrect entry for PGM
E151 Incorrect key Pressed.	Linking is incorrect.
E152 PGM File or Memory number does not Exist.	No such file, no such record
E164 Empoloyee No. is not Found in the Employee File.	Employee No. is not set in the Employee File.
E165 Employee No. is not Clocking-in	Employee has not done CLOCK-IN operation yet.
E166 Employee No. is Occupied	Employee who has done CLOCK-IN operation attempts to operate CLOCK-IN again.
E167 Incorrect JOB code	Employee attempts to operate CLOCK-IN with incorrect JOB code.
E168 Your Operation is out of Schedule. Please Call Manager.	Employees operate CLOCK-OUT in not allowance time.
E169 Work Hours Exceeded. Please Call Manager.	Overtime work.
E170 No Shift Reminds in the Schedule. You cannot Clock-in.	There is no empty shift left.
E171 Please Break-out and Retry.	Employee attempts to operate CLOCK-OUT whilst he/she is in a break time.
E172 Break Hours Exceeded. Please Call Manager.	Break hours are exceeded.
E173 This employee is at work now.	Employee is at work without break.
E174 This employee is taking a break now.	Employee who has not done BREAK-OUT operation attempts to operate BREAK-IN.
E175 Please Clock-in/Break-out before you sign on. or Please Call Manager.	Sign on after you clock-in or break out.
E176 You cannot Clock-in. Please reset Employee Report.	Employee Report.
E177 Time&Attendance Data Communication Error. Please Call Manager.	Time&Attendance Data communication error. IDC FILE (1) memory is full of items.
E180 IDC FILE (1) memory full. Please clear IDC data.	IDC FILE (2) memory is full of items.
E181 IDC FILE (2) memory full. Please clear IDC data.	IDC FILE (3) memory is full of items.
E182 IDC FILE (3) memory full. Please clear IDC data.	CF card is not inserted to the slot.
E200 Insert CF card.	CF card data or formats illegal.
E201 Format error.	Insufficient memory is remained in CF card.
E203 Insufficient memory.	File name duplication error.
E205 The file already exists. Do you want to replace? YES:Replace the file. NO :Input new name.	

2-1-7. Printing control system

The following describes the control system for printing of receipts, the journal, validation, slips and X/Z reports.

2-1-7-1. Receipt/journal print control during normal registration

Normally, the receipt and journal are printed to reflect the details of a registration as it is performed, with the receipt being issued with the finalize operation. By using the Receipt On/Off key, the receipt issuance status can be turned off to suspend printing and issuance of receipts when so desired. Pressing the Receipt On/Off key turns the receipt issuance status on or off, and when the receipt issuance status is On, the icon "Receipt On" appears. Switching receipt printing OFF does not affect printing of the journal (for SA-3015).

The following programming can be performed for receipt and journal printing:

Description	Program location
Receipt "Item consolidation"	PGM3; Machine Control3 in General Feature
Receipt "Sort by group, department"	PGM3; Machine Control3 in General Feature
Print consecutive number on the receipt/journal	PGM3; Machine Control3 in General Feature
Print date/time on the receipt/journal	PGM3; Machine Control3 in General Feature
Vertical double character for UP-350	PGM3; Machine Control3 in General Feature
Set menu detail on Guest/Slip	PGM3; Print Control in General Feature
Print PLU number	PGM3; Print Control in General Feature
Print finalized total	PGM3; Print Control in General Feature
Print taxable amount	PGM3; Print Control in General Feature
Print taxable status	PGM3; Print Control in General Feature
Print total number of item sold	PGM3; Print Control in General Feature
Print customer number (number of covers)	PGM3; Print Control in General Feature
One line feed after finalization	PGM3; Print Control in General Feature
Time format (24H/12H)	PGM3; Print Control in General Feature

2-1-7-2. Validation print control

The QT-2100 allows use of the receipt/journal printer (SA-3015) or the slip printer (SP-1300) for validation printing of item registrations, function registrations and sales totals. To perform validation printing, insert the validation paper into the validation slot of the receipt/journal printer or into the slip printer, and then press the <Validation> key (function code 037).
The following shows the print format for validation performed using either the receipt/journal printer or the slip printer.

There are three general types of validation printing:
1) Finalization validation
2) Transaction validation
3) Item validation

Finalization validation is performed following finalization operations with finalize keys. When a validation is performed following receipt issuance, the sales total is printed, while partial tendering, the tendered amount for the specified medium is printed.

Transaction validation is valid for the following function keys:
– Received on account, Paid out, Pick up, Loan, Check cashing, Minus, Plus, Discount, Premium, Void keys

You can program the allowable number of validation printings or multiple validation printing status for the above listed keys.
Also some of these keys can be programmed as validation compulsory, this means that registration is not permitted until the validation of the former registration has been performed.

Item validation is performed directly following an item registration listed below.
– Departments
– Subdepartments
– PLUs

You can program the multiple validation printing status for above items.

2-1-7-3. Slip print control

Connection of an optional receipt/journal printer (SA-3015) or an optional slip printer (SP-1300) to the QT-2100 makes it possible to print transaction details on a slip.
To print a slip, insert a slip paper into the printer, and adjust paper position by pressing the <Slip feed/release> key (function code 056) or the <Slip back feed/release> key (function code 054) and then press the <Slip batch print> key (function code 055). Or it is possible to find the appropriate slip printing start line automatically.
After printing a slip, the paper is automatically released.
If the paper is not released for some reasons, press <Slip feed/release> or <Slip back feed/release> to release the paper.
Before using slip printer, you should program the maximum lines of slip.

The following sections are the features to control slip printing format:

2-1-7-4. Endorsement message print control

The QT-2100 allows printing of endorsement messages on the slip printer (SA-3015 or SP-1300) for check registrations. To perform endorsement message printing, insert the paper into the slip printer following finalization using the <Check> key or check cashing transaction using the <Check> key, and press the following key:

– Endorsement key (function code 039)

Check key and check cashing key can be programmed for compulsory endorsement print.
The endorsement message contents should be programmed into the endorsement message file (file 033).

2-1-7-5. Check printing print control

The QT-2100 allows printing check tendered amount in letters and numbers on a check inserted into the slip printer. To perform check printing, insert the paper into the slip printer following check finalization using the <Check> key or check cashing transaction using the <Check> key, and press the following key:

– Check print key (function code 012)

Check key can be programmed for compulsory check print. The check printing format is controlled by the check print message file (file 041).

2-1-7-6. X/Z report print control

The QT-2100 can output a report in the read (X) or reset (Z) mode. The following shows the programming for X/Z print controls:

Description	Program location
Items on the fixed totalizer report	PGM3; Report Control1 in General Feature
Items zero skip	PGM3; Report Control2 in General Feature
Average spend/item on monthly report	PGM3; Report Control2 in General Feature
PLU order (memory/random code)	PGM3; Report Control2 in General Feature
Print/Non print PLU No. on PLU report	PGM3; Report Control2 in General Feature
Print/Non print Sales ratio	PGM3; Report Control2 in General Feature
Print/Non print Z counter	PGM3; Report Control2 in General Feature
Print/Non print Item discount totalizer	PGM3; Report Control2 in General Feature
Print GT	PGM3; Report Control2 in General Feature

2-2. General description of individual function keys

This section describes individual function key that can be assigned to the keys on the keyboard of QT-2100.

2-2-1. System keys

The system key consist on a non-programmable function key.
The following system keys are available.

1) Numeric keys (0, 1 ~ 9, 00, 000, decimal point)

These keys are used for inputting numerical data such as PLU codes, amounts, quantities, etc. These keys must be allocated on the keyboard.

2) Clear key

This key is used for clearing numerical values after they have been input, and after incorrect function keys have been pressed. This key also can be used to clear errors. This key must be allocated on the keyboard.

3) Home position key

This key is used for returning cursor to the home position.

4) Left, right, up, down arrow keys

These keys are used for moving the cursor.

5) Yes key

This key is used for consenting the selection and proceeding steps.

6) No key

This key is used for cancelling the selection and proceeding steps.

7) Mode selection keys (REG MODE, X/Z MODE, PGM MODE)

REG MODE key; This key is used for selecting the REG, REF, REG– modes.
X/Z MODE key; This key is used for selecting the X/Z, MGR, Inline X/Z modes (collection/consolidation), Auto PGM (program upload/download), CF (CF card).
PGM MODE key: This key is used for selecting modes the PGM1, PGM2, PGM3, PGM4, PGM5, PGM6 modes.

8) ESC/SKIP key

This key is used for terminating a programming sequence, X/Z sequence, and return the primary status. This key is also used to terminate a report being issued in PGM, X, and Z mode.

9) Display on/off key

This key is used to turn on/off the QT-2100 terminal.

10) Page up key

This key is used for turning the window forwards.

11) Page down key

This key is used for turning the window backwards.

2-2-2. Finalize keys

This section covers the general description of each finalize key, with its respective options. Finalize keys have programmable functions which may be used as required.

1) Tender key

This key is used for finalizing transactions. Up to four media in drawer totalizers are reserved in the fixed totalizer file, and cash key is linked to cash in drawer, charge key to charge in drawer, check key to check in drawer and credit key to credit in drawer.
When this key is pressed, the total amount of the transaction is calculated. Normally, a receipt is issued and the drawer opens at the same time. The total amount is added to the appropriate totalizers and counters, with consecutive numbers being increased by one. When an amount exceeding the sales amount is received, the change is calculated, displayed and printed on the receipt.
This key can also be used in combination with other finalize keys for partial tender and can also be used to specify the type of media during loan, pick up or media change operation.
This key has the following programmable functions:

- Key location
- Function code (Cash = 001, Charge = 002, Credit = 003, Check = 004)
- Sixteen character descriptor
- High amount lock out (subtotal/tender)
- Change due to high amount lock out
- Maximum number of validation print
- Compulsory validation status
- Restriction (to 00, 25, 50, 75) on the last two digits for amount tendered (cash only)
- Compulsory batch slip printing
- Compulsory check endorsement (check only)
- Compulsory check print (check only)
- Prohibit entry of a partial payment
- Prohibit the entry of the amount tendered
- Amount tendered compulsory
- Print VAT breakdown
- Check cashing commission (Use an amount/Use a rate)
- Validation amount (Print subtotal amount/Print amount tendered)

2) New balance key

This key is used for adding the latest registered total amount to the previous balance to obtain a new balance.
When this key is pressed, the total amount of the transaction is calculated. Normally, a receipt is issued. The total amount is added to the appropriate totalizers and counters, with consecutive numbers being increased by one.
This key has the following programmable functions:

- Key location
- Function code (New balance = 006)
- Sixteen character descriptor
- Maximum number of validation print
- Compulsory validation status
- Compulsory batch slip printing
- Open cash drawer
- Print VAT breakdown
- Service charge (Use an amount/Use a rate)
- Barcode printing

2-2-3. Transaction keys

Each of the transaction keys have programmable functions which may be used as required. Programmable functions that are common to all transaction keys are listed below.

– Key location
– Sixteen character descriptor

The general description of each transaction key, with individual options, is outlined on the following pages.

1) Price inquiry key (Function code 008)

This key is used to confirm the price and descriptors of PLU without registering.

2) Stock inquiry key (Function code 009)

This key is used to confirm the stock quantity and descriptors of PLU without registering.

3) Text recall key (Function code 010)

This key is used to recall characters. In addition to the common programming, this key has the following options:

– Allow mode change after pressing this key as first transaction.
– Print/Non print this registration on post receipt/slip/guest receipt.
– Record No. designation of the text recall file.
– Printing color on order printer (black, normal/red, reverse).
– Output order printer selection.
– Start record No. of displaying “TEXT RECALL WINDOW”.
– Display/Print with quantity
– Staydown “TEXT RECALL WINDOW”.

4) Text print key (Function code 011)

This key is used to recall characters. In addition to the common programming, this key has the following options:

– Print/Non print this registration on post receipt/slip/guest receipt.
– Printing color on order printer (black, normal/red, reverse)
– Output order printer selection.

5) Check print key (Function code 012)

This key is used to print the check on the slip printer (incl. SA-3015). Pressing this key allows the selection from the following list to print on a check.

1. Check amount in Arabic numerals (normal size/double size)
2. Date (normal size/double size)
3. Check print message

This item noted above can be arranged into a check print format according to the needs of the store. Check printing using this key is valid only for the following operation of the check key. In addition to the common programming, this key has the following option:

– Number of back feed lines before check printing.

6) Clerk transfer key (Function code 013)

This key is used to transfer opened checks to another clerk.

In addition to the common programming, this key has the following option:

– Assigning clerk number (Use memory number/Use clerk secret number)

7) Table transfer key (Function code 014)

This key is used to transfer the contents of a check to another check.

In addition to the common programming, this key has the following options:

– Allow to add in checks while table transferring
– Transfer the customer number
– Do not transfer the detail transactions (ST transfer)
– Auto check transfer
– Receipt is issued, even if the receipt switch is OFF
– Print receipt

8) Tip key (Function code 015)

This key is used to register tips. In addition to the common programming, this key has the following options:
– High digit lock out
– Multiple validation

9) Normal receipt key (Function code 016)

This key is used to change the order status from Bon to normal and from single item sales to normal.

10) Loan key (Function code 019)

This key inputs the amount of money provided for making change. This operation affects media totals, rather than sales totals.
Loans are made for all types of money which can be specified by finalize keys. In addition to the common programming, this key has the following options:
– High amount lock out
– Compulsory validation
– Maximum number of printing validation

11) Received on account key (Function code 020)

This key is used to register amounts received for purposes other than sales transactions. This transaction affects media totals, rather than sales totals. In addition to the common programming, this key has the following options:
– High amount lock out
– Compulsory validation
– Maximum number of printing validation

12) Paid out/Euro key (Function code 021)

This key is used to register amounts of paid outs from the register. This transaction affects media totals, rather than sales totals. If the terminal has the file 099 (Euro program file), this key also works as "Euro" key. Euro key has the following features: (1) Converting the main currency to the sub currency, when registering a subtotal amount. (2) Specifying sub currency while entering an amount for payment or declaration in drawer. In addition to the common programming, this key has the following options:
– High amount lock out
– Compulsory validation
– Maximum number of printing validation

13) Pick up key (Function code 022)

When sales receipts are removed from the drawer or when the amount in-drawer exceeds the limit value (sentinel function), the manager performs a pick up operation. This key is used for this function. This operation affects media totals, rather than sales totals.
Pick ups are made for all types of money which can be specified by finalize keys. In addition to the common programming, this key has the following options:
– High amount lock out
– Compulsory validation
– Maximum number of printing validation

14) Coupon key (Function code 023)

This key is used for registering coupons. This operation affects the coupon amount in the coupon totalizers. The registered coupon amounts is not deducted from the department, PLU or gross totalizers, but from the net totalizers only. (selecting GROSS specification)
In addition to the common programming, this key has the following options:
– Multiple validation
– Taxable status
– Allow credit balance
– Allow key operation after subtotal
– Allow key operation after item registration
– High digit lock out
– Commission status

15) Deposit key (Function code 025)

This key is used to register deposits. In addition to the common programming, this key has the following options:

– Key attribution (Deposit +/Deposit –)
– Multiple validation
– Compulsory validation
– Open cash drawer
– Media definition (Cash/Charge/Check/Credit)
– High amount lock out

16) Minus key (Function code 027)

This key is used to register subtraction. This operation affects the subtraction amount in the minus key totalizers. The registered amounts is not deducted from the department, PLU or gross totalizers, but from the net totalizers only. (selecting GROSS specification)
In addition to the common programming, this key has the following options:

– Multiple validation
– Taxable status
– Allow credit balance
– Allow key operation after subtotal
– Allow key operation after item registration
– High digit lock out
– Commission status

17) Discount key (Function code 028)

This key applies a preset % or manual input % to obtain the discount amount for the last registered item or subtotal. In addition to the common programming, this key has the following options:

– Discount rate
– Multiple validation
– Taxable status
– Allow manual rate override
– Allow key operation after subtotal
– Allow key operation after item registration
– Result rounding (Round off/Cut off/Round up)
– Commission status

18) Plus key (Function code 029)

This key is used for registering surcharge. This operation affects the surcharge amount in the plus key totalizers. The registered amounts is not added to the department, PLU or gross totalizers, but from the net totalizers only. (selecting GROSS specification)
In addition to the common programming, this key has the following options:

– Multiple validation
– Taxable status
– Allow key operation after subtotal
– Allow key operation after item registration
– High digit lock out
– Commission status

19) Premium key (Function code 030)

This key applies a preset % or manual input % to obtain the premium amount for the last registered item or subtotal. In addition to the common programming, this key has the following options:

- Premium rate
- Multiple validation
- Taxable status
- Allow manual rate override
- Allow key operation after subtotal
- Allow key operation after item registration
- Result rounding (Round off/Cut off/Round up)
- Commission status

20) Refund key (Function code 033)

This key declares next input for a return money.

21) Error correct/Void key (Function code 034)

This key is used to correct the last registered item, discount, premium, amount tendered, etc. This key also invalidates proceeding data registered for departments, PLUs or set menus only.

In addition to the common programming, this key has the following option:

- Select void reason
- Item delete

22) Coupon 2 key (Function code 036)

This key is used to register coupons. The registered coupon amounts is deducted from the department, PLU or gross totalizers and the net totalizers.

23) Validation key (Function code 037)

This key validates item or transaction amounts on slips. Validation can be made compulsory for certain function keys. Multiple validation can be prohibited for certain function keys.

24) Receipt key (Function code 038)

This key issues a receipt for the last transaction (post-finalization receipt) when the original receipt is not issued. This key also issues a guest receipt. The guest receipt can be designated by seat number.

In addition to the common programming, this key has the following options:

- Maximum number of post receipts
- Post/Guest receipt format (Print out/Display)
- Print current time on guest receipt
- Reset the finalized check
- Issue post receipt after clerk interrupt/check tracking
- Order printer number of issuing guest receipts
- Line numbers of the guest bottom message

25) Check endorsement key (Function code 039)

This key is used to print a preset check endorsementusing the slip printer.

In addition to the common programming, this key has the following option:

- Line number of auto back feed before printing

26) Non add key (Function code 040)

This key prints reference numbers (personal check number, card number etc.) In addition to the common programming, this key has the following options:

- Allow mode change after non add registration as first transaction
- Order character record number
- Printing color on order printer (black, normal/red, reverse)
- Selection of order printer number (1 ~ 7)

27) Non add/No sale key (Function code 041)

This key prints reference numbers (personal check number, card number etc.)
This key also opens the drawer between transaction.
In addition to the common programming, this key has the following options:
– Allow mode change after non add registration as first transaction
– Order character record number
– Printing color on order printer (black, normal/red, reverse)
– Selection of order printer number (1 ~ 7)

28) No sale key (Function code 042)

This key opens the drawer between transaction.

29) Customer number key (Function code 043)

This key registers the number of customers.
In addition to the common programming, this key has the following option:
– Prohibit replacement/Allow replacement/Add enter value

30) Arrangement key (Function code 044)

This key is used to activate an arrangement program programmed in the arrangement file. Any operation that can be performed from the keyboard, as well as mode, can be programmed in an arrangement program, and can be performed merely by pressing this key.
The mode control function of this key can be programmed for all modes except for the OFF mode.

31) Currency exchange key (Function code 045)

This key converts foreign currency to local currency or vice versa using the exchange rate preset for the key and displays the result.
This key is used for conversions of a home currency subtotal or merchandise subtotal to equivalent of another country's currency.
This key is also used for conversion of another country's currency payment to the equivalent of the home currency.
In addition to the common programming, this key has the following options:
– Amount symbol definition
– Foreign currency totalizer definition
– Result rounding (Round off/Cut off/Round up)
– Monetary mode
– Monetary symbols (decimal, separator)
– Drawer assignment (1, 2)

32) VAT key (Function code 046)

This key is used to print VAT breakdowns.

33) Bill copy key (Function code 047)

This key is used to issue bill copy.

34) PLU key (Function code 048)

This key is used to enter PLU numbers.

35) Price key (Function code 049)

This key is used in the following transactions to enter a unit price.
– Department registration using the department number key
– Subdepartment registration using the subdepartment number key
– Open PLU registration

In case of the department or subdepartment registration mentioned above, the Price key is pressed after entering the unit price to override a unit price preset to the department or subdepartment. If the preset price is to be registered as it is, simply press the Price key.

36) Department key (Function code 051)

This key is used to register items for a department.
In addition to the common programming, department key has the following options:
– Single item, Bon, Taxable, Commission, Hash status
– Multiple validation
– Zero unit price, negative price
– H.A.L.O. (High amount lock out), L.D.L. (Low digit limitation)
– Link group etc. (refer to the Programming manual)

37) Slip back feed/Release key (Function code 054)

This key is used to back feed slips inserted into the slip printer. This is done by specifying the number of feed lines. This key is also used to release the slip paper holder if numbers are not entered.

38) Slip print key (Function code 055)

This key is used to execute a slip batch printing on the slip printer. Pressing this key prints the sales details. Actual printing is performed following receipt issuance.
In addition to the common programming, this key has the following options:
– Compulsory slip printing
– Print time. (effective under compulsory only)
– Clear finalized check.
– Print Euro total line.

39) Slip Feed/Release key (Function code 056)

This key is used to feed slips inserted into the slip printer. This is done by specifying the number of feed lines. This key is also used to release the slip paper holder if numbers are not entered.

40) Tax status shift key (Function code 057)

This key activates tax table which is specified by the tax status programmed for this key. The tax status is programmed for the departments, subdepartments, PLUs, minus, plus, discount and premium keys. Pressing this key during registration converts taxable item to non taxable, and non taxable item to taxable. In addition to the common programming, this key has the following option:
– Tax status

41) Table number key (Function code 058)

This key is used to input table numbers.

42) Tax exempt key (Function code 062)

This key is used to change taxable amounts to nontaxable amounts. This key works adding on a tax system only. In addition to the common programming, this key has the following option:
– Tax status

43) Flat PLU key (Function code 063)

This key is used to register items to Flat PLU.
In addition to the common programming, flat PLU key has the following options:
– Single item, Bon, taxable, commission, hash status
– Condiment/Preparation status, Double Bon status
– Random code, Unit/Minimum stock
– Set menu/Order character/Pulldown group link
– Subdepartment link, department link, group link
etc. (refer to the Programming manual)

44) Menu shift key (Function code 064)

This key is used to shift Flat PLU key to the n-th (n = 1 ~ 8) menu.
In addition to the common programming, this key has the following option:
– Menu sheet number to shift

45) Shift PLU key (Function code 065)

This key is used to shift Flat PLU key to the n-th (n = 1 ~ 8) level.
In addition to the common programming, this key has the following option:
– Sheet level number to shift
– Status/Staydown

46) Open key (Function code 067)

This key is used to release the maximum amount limit or low digit limit (programmable) for an amount which exceeds the limit.

47) Open 2 key (Function code 068)

This key is used to suspend the compulsory specifications listed below.
In addition to the common programming, this key has the following options:
– Release customer number compulsory
– Release table number compulsory
– Release check number compulsory
– Release credit balance (ST < or = 0) error
– Release check endorsement compulsory
– Release check print compulsory
– Release slip auto batch print compulsory
– Release slip manual batch print compulsory
– Release seat number compulsory etc. (refer to the Programming manual)

48) First unit price key (Function code 069)

This key is used to register a specific item at the first unit price.

49) Second unit price key (Function code 070)

This key is used to register a specific item at the second unit price.

50) Clerk number key (Function code 072)

This key is used to assign a clerk's secret number.
In addition to the common programming, this key has the following options:
– Clerk secret number (Clerk keys for all clerks)

51) Operator read/reset key (Function code 073)

This key is used to issue a clerk's individual X/Z report.
In addition to the common programming, this key has the following options:
– Issue stand-alone report/Issue consolidation report
– Display report/Print report

52) Tray total key (Function code 074)

This key is used to obtain the range subtotal amount.
In addition to the common programming, this key has the following options:
– Accumulate tray total amount to the key totalizer when the <TRAY TOTAL> key pressed twice. If this option is selected, finalization operation can be done only the tray total amount is zero.

53) Subtotal key (Function code 075)

This key is used to obtain subtotal amount with add-on tax and previous balance.
In addition to the common programming, this key has the following options:
– Multiple validation
– Include add-on tax
– Print when key is pressed
– Display subtotal in Euro

54) Receipt On/Off key (Function code 076)

This key is used to change the status "Receipt issue" or "No receipt."
– Receipt off/Receipt and journal off

55) Taxable amount subtotal key (Function code 077)

This key is used to obtain taxable amount subtotal. In addition to the common programming, this key has the following option:

– Tax status

56) Operator number key (Function code 078)

This key is used to enter a clerk number during clerk transfer.

57) Merchandise subtotal key (Function code 080)

This key is used to obtain subtotal excluding the add-on tax amount and the previous balance.

In addition to the common programming, this key has the following options:

– Multiple validation
– Print when key is pressed.

58) Multiplication key (Function code 082)

This key is used to enter quantities for multiplication. The maximum quantity that can be registered with this key is 4 integer and 3 decimals. An error occurs if the result exceeds 8 digits, including the minus sign.

In addition to the common programming, this key has the following options:

– Rounding the result
– Entering order (quantity × @ or @ × quantity)

59) Quantity/For key (Function code 083)

This key provides the same functions as the multiplication key. In addition, this key also has a split pricing function. The function is used to calculate the price per unit for particular items, which are sold in bulk in order to obtain the total amount for the number of units purchased.

In addition to the common programming, this key has the following option:

– Rounding the result

60) Square key (Function code 084)

This key provides the same functions as the multiplication key. In addition, this key also has a square multiplication function.

In addition to the common programming, this key has the following option:

– Rounding the result

61) Selective item subtotal key (Function code 085)

This key is used to obtain the selective item 1/2 of the subtotal amount. In addition to the common programming, this key has the following option:

– Selective item status 1/2

62) Cube key (Function code 090)

This key provides the same functions as the multiplication key. In addition, this key also has a cube multiplication function.

In addition to the common programming, this key has the following option:

– Rounding the result

63) New check key (Function code 091)

This key is used in a check tracking system to input a new check number in order to open a new check under that number.

In addition to the common programming, this key has the following option:

– Enable auto check assignment

64) Old check key (Function code 092)

This key is used in a check tracking system to input the number of an existing check (previously created by the New check key) whose details are stored in the check tracking memory. Existing checks are reopened to perform further registration or to finalize them.

In addition to the common programming, this key has the following option:

– Enable to open the finalized check

65) New/Old check key (Function code 093)

This key is used in a check tracking system to input check numbers in order to open new checks and to reopen existing checks. When the clerk inputs a check number, the register checks to see if that number already exists in the check tracking memory. If there is no matching number in the memory, a new check is opened under the input number. If the check number input matches a number already stored in the memory, that check is reopened for further registration or finalization.

In addition to the common programming, this key has the following option:

– Enable auto check assignment

66) Add check key (Function code 094)

This key is used in a check tracking system to combine the details of more than one check into a single check.

67) Separate check key (Function code 095)

This key is used in a check tracking system to separate selected items or to separate by seat number from one check to another check.

68) OBR (Optical Barcode Reader) key (Function code 103)

This key is used to enter scanning PLU code manually.

69) Clock-in/out key (Function code 108)

This key is used to register the time when employees start/finish their job.

In addition to the common programming, this key has the following options:

– The purpose of users
– Print when the key is pressed

70) Break-in/out key (Function code 109)

This key is used to register the starting/finishing time when employees have a recess.

In addition to the common programming, this key has the following options:

– The purpose of users

71) Substitution key (Function code 111)

Replaces group PLU with a PLU not preset in the pulldown menu.

72) Ketten Bon key (Function code 113)

This key is used to enter quantities for multiplication. Multiplication by this key issues singular order prints.

In addition to the common programming, this key has the following options:

– Result rounding
– Entering order (quantity × @ or @ × quantity)

73) House Bon key (Function code 114)

This key is used to register items for in-store use.

74) Post Entry key (Function code 115)

This key is used to indicate the reserved item of set menu and register it as a fixed item later on.

– Enter post entry
  Press this key while the window is opened, the key descriptor appears on the screen and it is registered as a reserved item.
– Fix post entry
  After finishing the set menu registration, move the cursor on to the reserved item, press this key again, then the appropriate window will be opened to fix it.

75) Round Repeat key (Function code 116)

This key is used to register the same items which were ordered just before.

In addition to the common programming, this key has the following options:

– Perform new balance after round repeat
– Include plus/minus, premium/discount result to round repeat amount

76) Open check key (Function code 117)

This key is used to issue an open check report of an assigned clerk.
In addition to the common programming, this key has the following option:
– Print/Display open check

77) Media change key (Function code 118)

This key is used to change media in drawer amounts. Pressing this key enters media change operation.

78) Seat number key (Function code 119)

This key is used to enter and print seat number.

79) Eat-in key (Function code 128)

This key is used to specify if the customer eats in the restaurant. Before closing a transaction press this key.
In addition to the common programming, this key has the following options:
– Exempt tax status
– Print when the key is pressed.

80) Take-out key (Function code 129)

This key is used to specify if the customer takes out items. Before total a transaction. Press this key for the tax exemption.
In addition to the common programming, this key has the following options:
– Exempt tax status
– Print when the key is pressed.

81) Store key (Function code 130)

This key is used for storing the check number of the registered items. Program this key in the transaction at the drive-through entrance. When this key is pressed, registered item data will be stored, and then these data will transfer to the youngest check number.
In addition to the common programming, this key has the following options:
– Print VAT breakdown.
– Print receipt.

82) Recall key (Function code 131)

This key is used for recalling the transferred check number by the store key. When you press this key, the check number will appear in order of the oldest record.
In addition to the common programming, recall key has the following options:
– Enable to open the pre-closed check

83) Subdepartment key (Function code 133)

This key is used to register items for the subdepartment.
In addition to the common programming, subdepartment key has the following options:
– Single item, taxable, commission, hash status
– Multiple validation
– Zero unit price, negative price
– H.A.L.O. (High amount lock out), L.D.L (Low digit limitation)
– Link department, link group etc. (refer to the Programming manual)

84) Subdepartment number key (Function code 134)

This key is used to enter subdepartment numbers.

85) Department number key (Function code 135)

This key is used to enter department numbers.

86) List key (Function code 136)

This key is used to display menu lists.
In addition to the common programming, this key has the following option:
– Record No. of the pull-down group (4 kinds)

87) List number key (Function code 137)

This key is used to designate list number.

88) Dutch account key (Function code 140)

This key is used to share the total payment by customer.
In addition to the common programming, this key has the following options:
– Maximum customer numbers for one Dutch account

89) Reverse display key (Function code 206)

This key is used for changing the LCD as a black line on white ground/white line on black ground.

90) Electronic journal display key (Function code 207)

This key is used to display the stored journal.

91) Display mode key (Function code 219)

This key is used to change display modes (normal mode/item consolidation mode).

92) Cancel key (Function code 236)

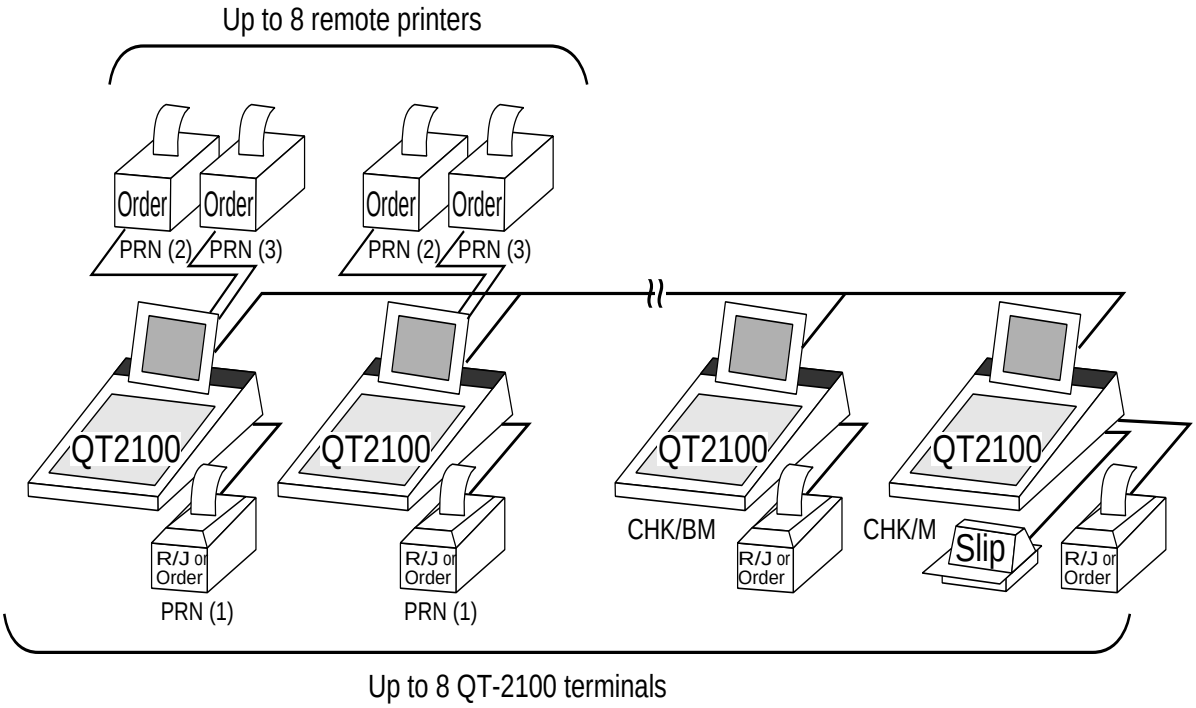
Invalidates all preceding data registered for departments, PLUs and set menus within a transaction. This key must be pressed before the transaction involving the data to be invalidated is finalized. It is also effective even after calculation of subtotal amount.
In addition to the common programming, this key has the following options:
– Cancellation range
– Correct set menu/pulldown link while it is registered.

2-3. Remote printer control

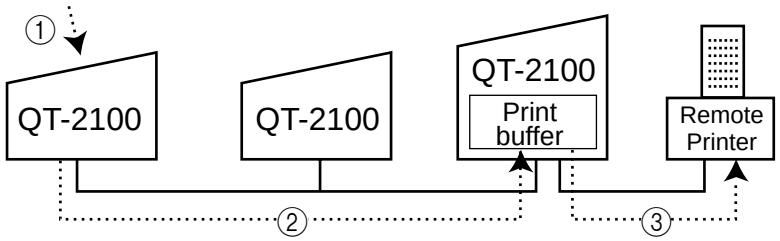
Up to eight printers for printing kitchen orders etc.

2-3-1. Remote printer system configuration

Please refer to page 18 for the system configuration.



The printing processing of the remote printer is performed as shown in the figure below.



① A transaction is made at a terminal.
② The terminal sends printing data to the terminal with remote printer.
③ The terminal with remote printer sends data to the appropriate remote printer.

2-3-2. Remote printer control setting

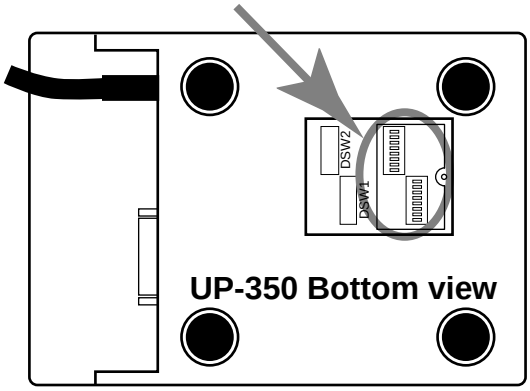
Remote printer settings:

After changing the DIP switch configuration, remote printer initialization (power on by pressing the <LF> key) is necessary.

UP-350

SW No.		Function	ON	OFF
1	1	Data reception error	Ignored	Prints "?"
	2	Receive buffer capacity	45 bytes	4k bytes
	3	Handshaking	XON/XOFF	DTR/DSR
	4	Data word length	7 bits	8 bits
	5	Parity check	Yes	No
	6	Parity selection	Even	Odd
	7	Transmision speed	See transmission speed setting	
	8			

SW No.		Function	ON	OFF
2	1	Busy condition	Buffer full	Buffer full or Offline
	2	Reserved		Fixed
	3	Print density	See density setting	
	4			
	5	Reserved		Fixed
	6	Reserved		Fixed
	7	I/F 6 pin reset signal	Enabled	Disabled
	8	I/F 25 pin reset signal	Enabled	Disabled



UP-350 Bottom view

Transmission speed setting

bps	SW No. 7	SW No. 8
2400	ON	ON
4800	OFF	ON
9600	ON	OFF
19200	OFF	OFF

Density setting

	SW No. 3	SW No. 4
Light	ON	ON
↑	OFF	OFF
↓	ON	OFF
Dark	OFF	ON

UP-250

Dip switch is located at the bottom of the printer.

SW No.		Function	ON	OFF
1	1	Data reception error	Ignored	Prints "?"
	2	Receive buffer capacity	40 bytes	1k byte
	3	Handshaking	XON/XOFF	DTR/DSR
	4	Data word length	7 bits	8 bits
	5	Parity check	Yes	No
	6	Parity selection	Even	Odd
	7	Baud rate	4800 bps	9600 bps
	8	Busy condition	Buffer full	Buffer full or Offline

SW No.		Function	ON	OFF
2	1	No. of digits (7x9 font / 9x9 font)	42 / 35 digits	40 / 33 digits
	2	Internal use		
	3	#6 pin reset signal	Enabled	Disabled
	4	#25 pin reset signal	Enabled	Disabled

Memory allocation of files required when remote printers are connected

- Registration buffer (file 036)
- Printer buffer (file 035)

Other setting

- General machine features

2-3-3. Remote printer output control

The following print items are controlled by programming.

- 0 to 9 line feed above and below printing
- Dashed line print control
- Paper auto cut
- Data communication speed
- Backup remote printer specification
- Print color (normal/reverse or black/red) control: included in the item programming
- Output remote printer number: included in the item programming
- Remote printer output in training mode
- Item amount printing
- Alert when remote printer is down

2-3-4. Remote printer backup processes

Remote printer error or terminal with remote printer error

In case of the backup printer is assigned, when the terminal which sends printing data to remote printer detects the remote printer or the terminal with remote printer abnormality, the remote printer cross backup (see the next section) is made. In case of no backup printer is assigned or the backup printer is also downed, the data will be able to display on the terminal LCD.

Remote printer cross backup

When there is more than one remote printer in the system, a setting can be made to enable remote printer cross backup.

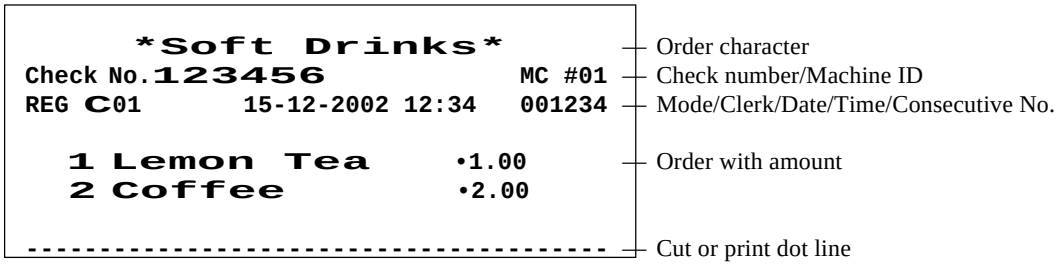
Cross backup (example):

Remote printer 1 backup → Remote printer 2
Remote printer 2 backup → Remote printer 3
or
Remote printer 1 with terminal 1 backup → Remote printer 2 with terminal 2
Remote printer 2 with terminal 2 backup → Remote printer 3 with terminal 3

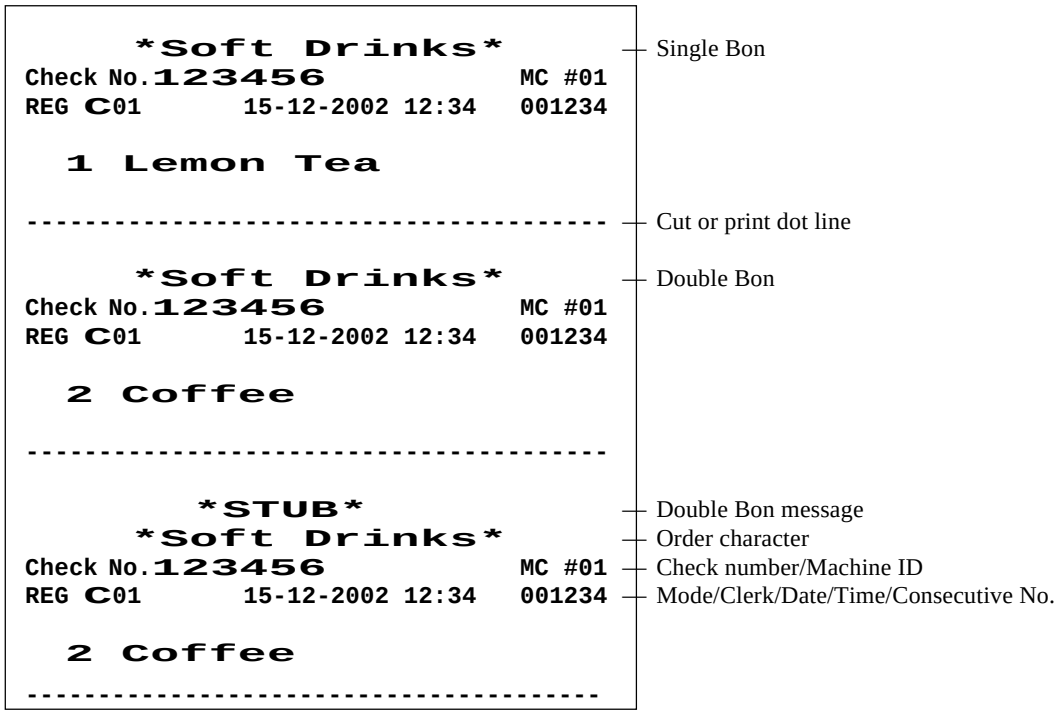
Note that remote printer backup extends a single level only. If remote printer 1 goes down in the above example, remote printer 2 performs backup printing. If remote printer 2 now goes down, remote printer 3 does not take over backup printing.

Remote printer print sample

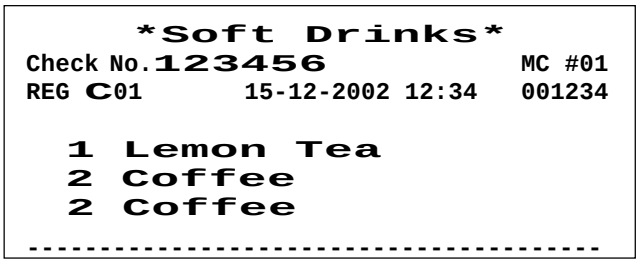
1) Order printing (Normal receipt printing with amount)



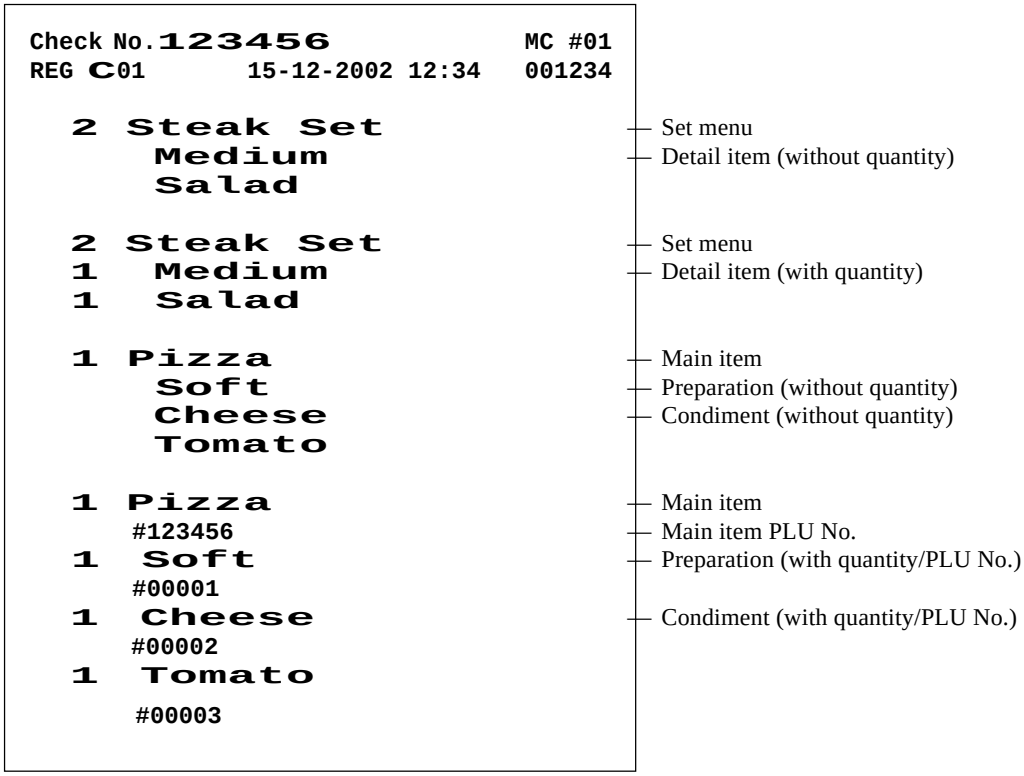
2) Order printing (Single bon/double bon)



3) Order printing (Normal receipt printing without amount)



4) Order printing (Set menu/preparation/condiment)

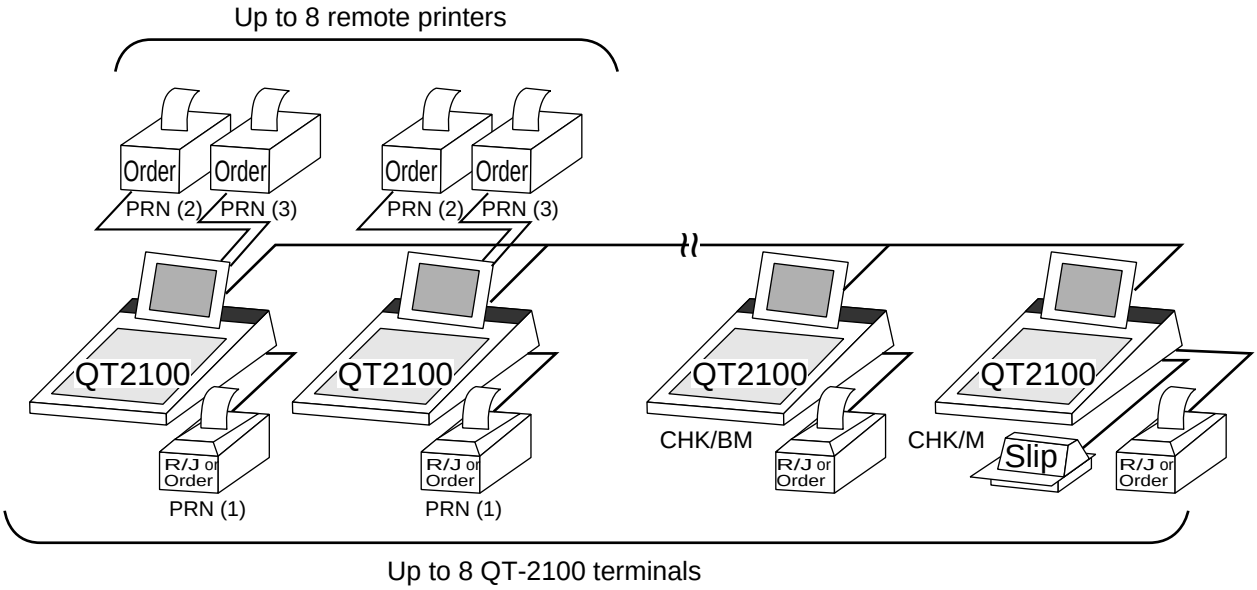


2-4. Check tracking system

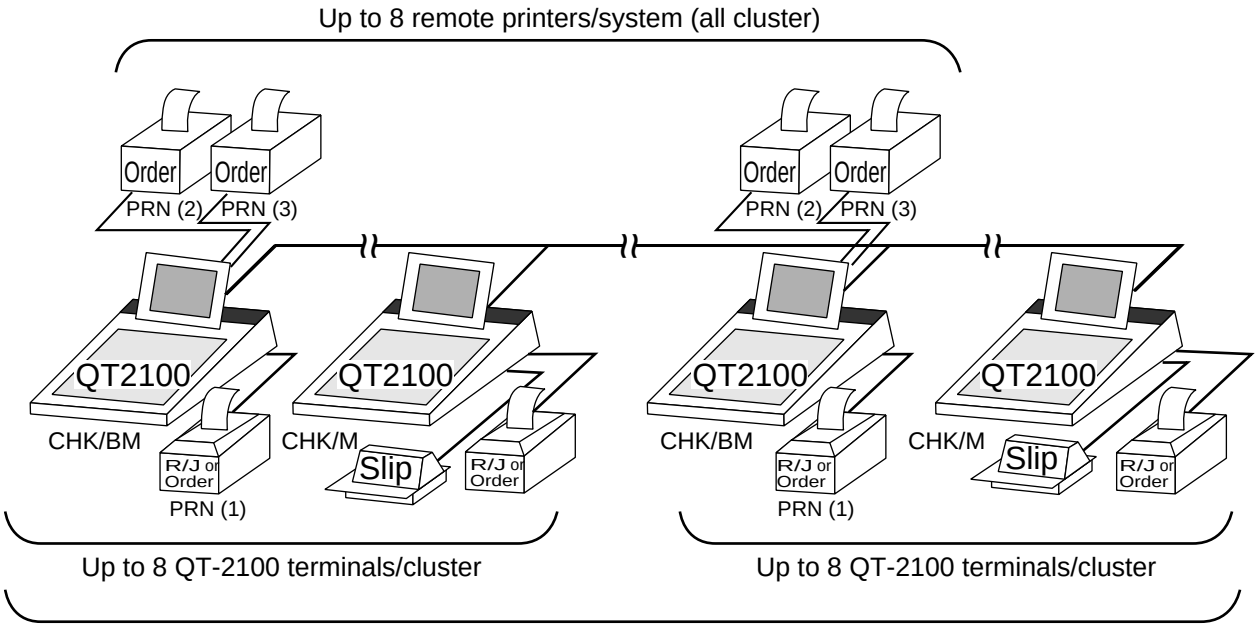
2-4-1. Shared check tracking system

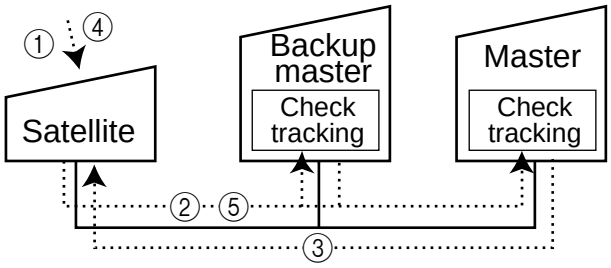
With this shared check tracking system, there is no PC for the master terminal, but a master and a backup master terminal act shared check tracking master/backup master. Up to 8 terminals can be included in the cluster and check tracking can be performed for multiple terminals connected to inline. This means that any terminal can be used to recall a temporary closed check of one's cluster for additional registration or finalization.

System configuration (1 cluster system)



System configuration (multi cluster system)





Shared check tracking processing in one cluster is performed as shown in the figure shown above.

① A shared check operation (such as “new check” or “old check” etc.) is made at a terminal.
② The terminal sends the check number to the check tracking master and a backup master.
③ The master and backup master sends back the check data (if the check number exists) or opens a new check number.
④ A shared check transaction is finalized (by “new balance” or other finalize key).
⑤ The terminal sends the check data to the master and the backup master. And the master/backup master clears the busy status of the check number.

2-4-2. Shared check tracking requirement

The following definition of memory allocation is required in each terminal before you can perform shared check tracking.

- Number of check tracking tables:
  For satellite, minimum one, for master, more than the number of estimated open checks should be defined.*
- Number of items/tables (per one item block):
  This is not the maximum number of items or functions but the number ordinarily registered items or functions per one table. If the number of items or functions exceeds this value during registration, the next block is used automatically for the following transactions.

* In case of using the next block, one more check tracking table is consumed.

- Number of item blocks:
  Ordinarily, the registration requires oneitem blocks—but in a party for example—more items are registered per one table. So it is necessary to define how many item blocks can be used.
  The maximum number of items or functions per one check is defined by the formula:
  = Number of items/tables × Number of item blocks (1 ~ 10)

When memory near end and memory end happens during registration, an error occurs. See section A-5. Error messages of this manual.

2-4-3. Data backup when the master goes down

When the system has the backup master for the check tracking system, registered check tracking data are stored both master and backup master automatically.
As soon as the system detects master down, the backup master roles as master for the check tracking system.
(It is necessary to switch to backup master manually. See the “System down & Recovery” chapter on page 16 of QT-2100 Installation & Down Recovery manual.)

When the system has no backup master for the check tracking system or both master and backup master become down, no more check tracking operation and clerk interrupt operation can be made.

2-5. Other check tracking system control

2-5-1. The timing to clear check detail and index file after finalization

There are two timings to clear detail and index files.

1. The check is cleared after printing finalized data on slip or guest check receipt, or the check is also cleared when the new or old check operation is made on the terminal finalized the transaction.
2. The check is cleared after printing finalized data on slip or guest check receipt, or check is also cleared when the same finalized check number is assigned in new check operation.

This option is set on the page 54 of the Programming manual.

2-5-2. Table transfer

This function is used for transferring the contents of a check to another check.
The detail data can be excluded from the transferring check by programming (ST transfer).
There are two cases depends on the status of the transferring check.

1. If the transfer check is not used.
   The entered check number is overwritten.
2. The check number is already used.
   Add the contents to the existing contents.

This option is set on the page 121 of the Programming manual.

2-5-3. Store and Recall

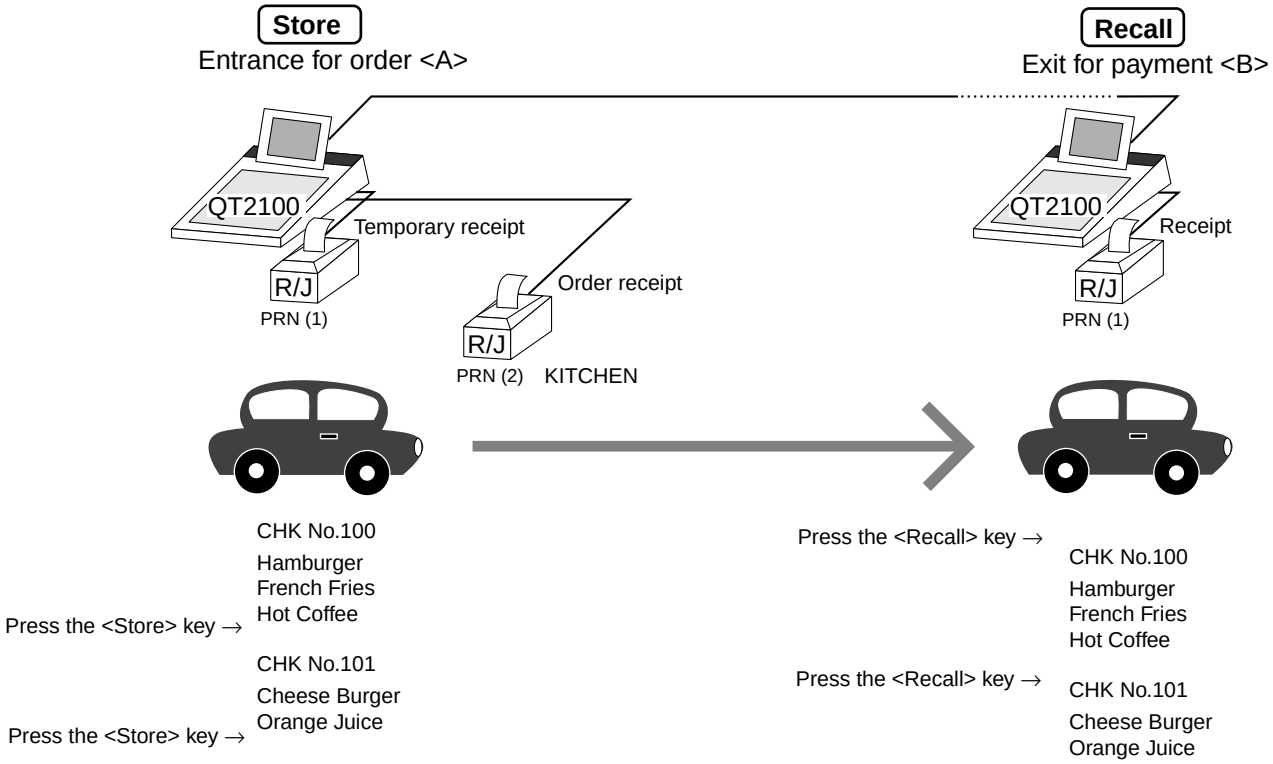
These functions are used for the driving through purchase.
The check number used in store operation is defined by check No. range programming.

2-5-3-1 Store

This function is used for storing the check No. of the registered items. The Detail/Index at the drive-through entrance record the registered items and store it's check No., and then print out the temporary receipt. A customer receive this temporary receipt, and drive up to the exit with this to receive the ordered item. The stored data transfer to the check tracking taster/backup Master.

2-5-3-1 Recall

This function is used for recalling the transferred check No. to total the sum. The totalizer at the drive-through exit recall transferring check No. in order of the oldest record. A customer can recieve the ordered items, and pay for them.



1. Press the <STORE> key at <A> to summarize the registered items. The contents of these check No. transfer to the check tracking master/backup Master.

2. Press the <RECALL> key to recall.

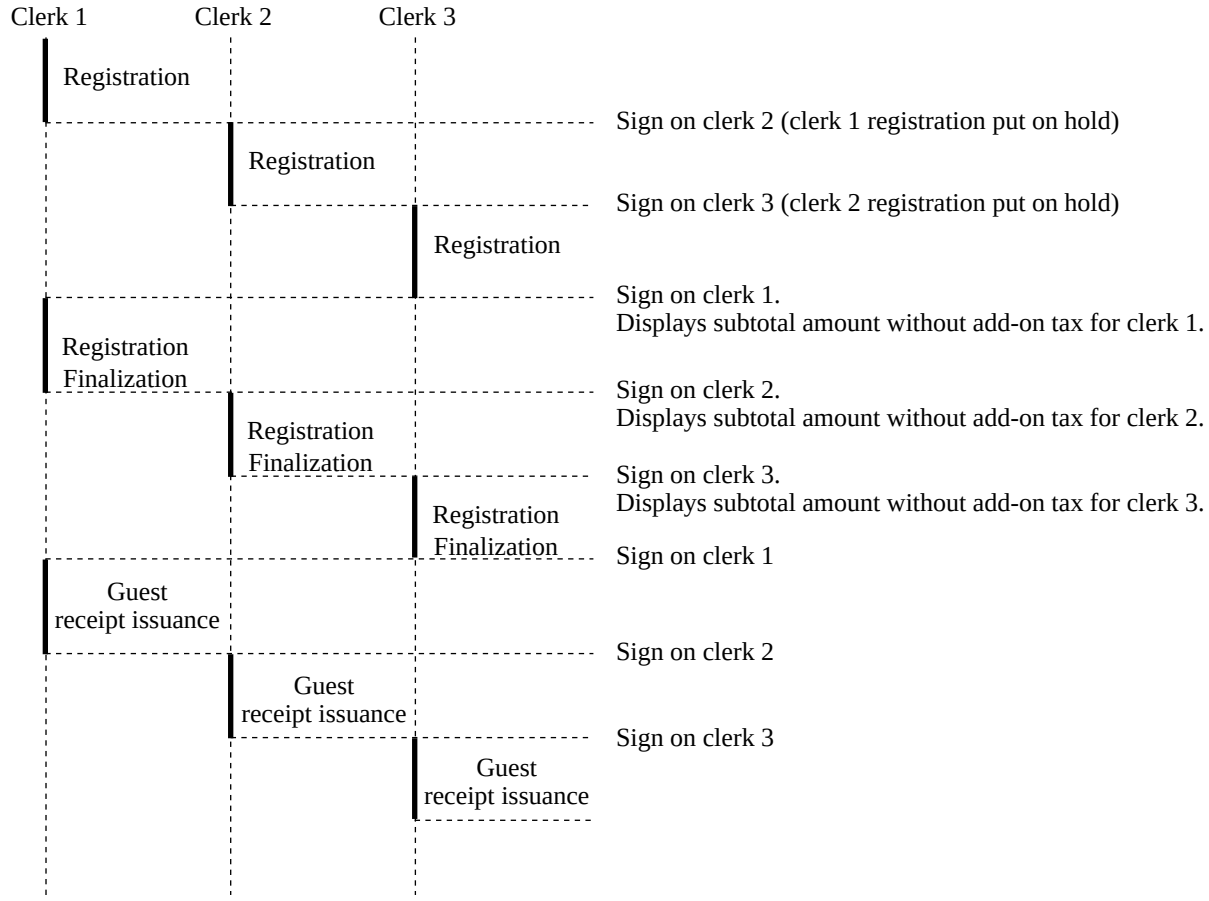
Important

- A four-digit check No. should be used.
- When Open Check Z (All) report is printed out, the check No. range will be reset. After this operation, the next check No. by using Store function will be the range start.
- This function works with the option "Clearing CHK/TBL No. by using the same number again" to "Check number" only. (Refer to page 54 of Programming manual)

2-6. Clerk control function

2-6-1. Clerk interrupt

The register can be programmed to allow the clerk interrupt function, which makes it possible for multiple clerk to simultaneously use the same register. If a clerk starts registration of a transaction, another can be interrupt the original registration and begin a new one. The original clerk can later resume the interrupted original registration. You can use the clerk interrupt function with the check tracking function.



Notes

1) Error correct operation
   The error correct operation cannot be performed for registrations made before a clerk change. The error correct operation should be performed before clerk change.
2) Guest receipt
   A guest receipt can be issued following clerk change, and receipts can be issued separately for each clerk.
3) Cancel operation
   The cancel operation can be performed not the all receipt but only the same transaction.

2-6-2. Clerk detail memory

The register can total any daily total memory (such as fixed totalizer, department PLU, etc.) clerk by clerk.
After initialization, clerks have 10 detail memories which are assigned to gross, net, and 4 media in drawers. If you want to set more detail memories to clerks, allocate clerk detail memory and detail link memory at the same time.

Clerk detail memory: File 011/111/211/311/411/511/611
Clerk detail link: File 030

2-6-3. Clerk training

Clerk training can be performed when employing new clerks or retraining clerks.
Training is normally performed during working hours, and the QT-2100 has the following training functions.

1) It is not necessary to remove one terminal from the system for training purpose during working hours.
2) Programming options, etc., are controlled exactly the same way as a working clerk.
3) Receipts are different from those normally used. The training receipts are filled with training filler ("*" default.)
4) Only the REG/RF/REG– mode can be used for training.

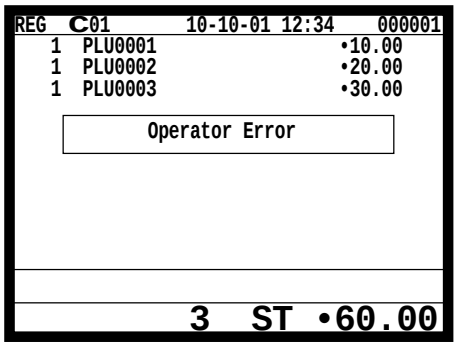
2-6-4. Manager mode control

There is no REG 2 mode on the QT-2100, but you can control some functions (you want) under manager control.

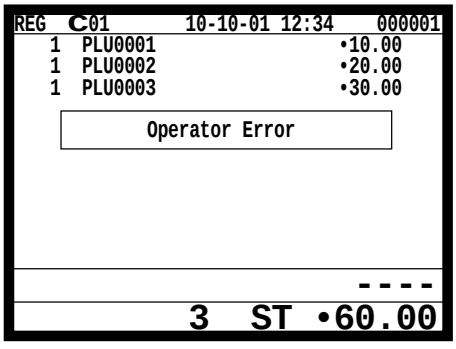
Preparation for this function:

1) Set "NO" to any functions you want to disable for CLERKS in the Allowed function 1 ~ 5 list in the clerk programming. (See page 85 ~ 88 of the programming manual.)
2) Set the type of operator to "Manager" for the manager. (See page 81 of the programming manual.)

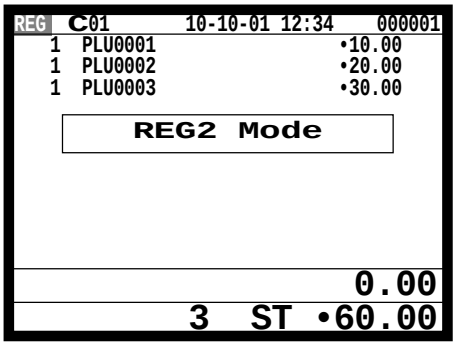
Operation for this function:



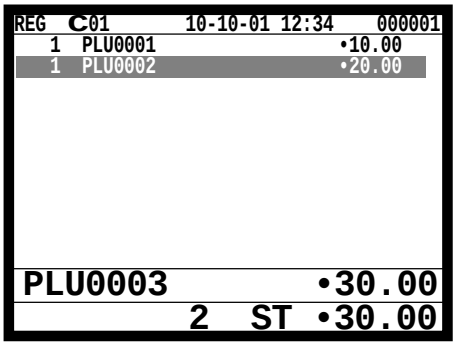
1. When the transaction is prohibited, the register displays error message and the clerk calls the manager.



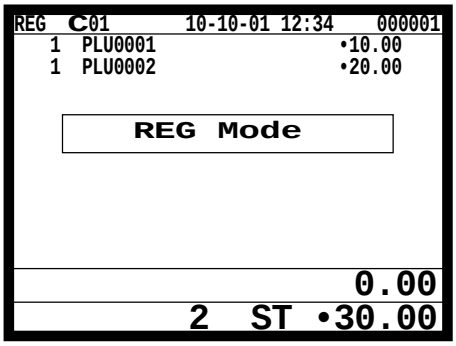
2. The manager enters "2" and press the <REG mode> key.



3. The manager enters his/her secret code and press the <YES> key. After this operation, the prohibited transaction can be registered.



4. Perform manager operation (in this example; void operation).



5. Pressing the <REG mode> key is required, when the manager returns his/her office.

2-7. Arrangement key function and scheduler

The arrangement key function provides a macro command function for the QT-2100 system. Any operation that can be performed using the keyboard of the QT-2100 can be programmed to the arrangement file (file 038 ~ 438). Any operation programmed to the arrangement file can be performed by pressing the arrangement key (function code 044). Multi operations can be programmed into one arrangement program, and also entry of a numeric parameter can be included anywhere in the arrangement program.
For example, when an arrangement program is programmed for executing fixed totalizer Z consolidation for all terminal and the program is linked to an arrangement key, that operation can be executed simply by pressing the arrangement key.
The scheduler function is provided for scheduled execution of arrangement key operation. Execution of every specified time, as well as scheduled execution, can be performed using this function.
The scheduler file (file 062) must be reserved to use the scheduler function.

2-7-1. Arrangement key function

The arrangement file and arrangement keys must be reserved for the QT-2100 to use the arrangement key function.
The arrangement file is used to store the arrangement programs. An arrangement file record is 24 bytes long, and a maximum of 999 records can be reserved. Arrangement programs are programmed using character data, and multiple arrangement programs can be programmed in the arrangement file.
Multiple arrangement keys can be preset on the keyboard, and each key can be linked to an arrangement program. The linked arrangement program is then called and executed by pressing the arrangement key.
The following table shows the command parameters of the arrangement key function that can be interpreted and executed by the QT-2100.
Command parameters can only be separated by spaces.
Note that spaces cannot be included within the command parameter.
Details of command parameters and their functions are explained next.

1) Number input

There are two methods to enter a number in an arrangement program.

– Constant number input
  Preset a fixed number (constant value) enclosed in parentheses in the arrangement program.
  Example: To enter “1234” → preset **(1234)**

– Input of a single number when the arrangement program is executed
  A single number can be entered using the arrangement key. The number entered can be used at any position and any time in the arrangement program.
  Generally, an input number is temporarily stored in the work area (number entry buffer) reserved for data processing, and is cleared after the processing is performed. With the arrangement key function, a parameter save buffer is provided for saving the contents of the number entry buffer. When a “**%GET**” command is encountered in an arrangement program during processing, the data in the number entry buffer is saved to the parameter save buffer. Set “**%PUT**” command to use the data saved in the parameter buffer. The “**%PUT**” command can be used to load the data saved in the parameter save buffer into the numeric entry buffer. These commands may be included as often as necessary. The data in the parameter save buffer is changed only when a “**%GET**” command is processed.

Note:
- Set a "**%GET**" command, first, to use the number entered by the arrangement key later.
- When the "**%GET**" is programmed following constant number input, the constant number is saved to the parameter save buffer. In case of entering a number is entered just before the <ARG> key in the REG mode, the number entered is put at the top of the value programmed in the arrangement.
- Numbers input using a "**%PUT**" command or by "(**[number]**)" are entered to the number entry buffer in the same way as numbers input using the 10-key pad.

2) Key function specification

Any function key can be specified for an arrangement key function. :
[function code]:[record number] → Used for ordinary function keys
The numbers can be specified for zero suppression.

Note:
The arrangement key itself, cannot be programmed for in an arrangement program.

3) Mode setting

Any mode key can be specified for an arrangement key function. :
[function code]:[mode definition]→ Used for mode keys

Note:

121:01	: REG mode
121:02	: RF mode
121:03	: REG– mode
122:01	: X/Z mode:
122:02	: MGR mode:
122:03	: Collection/Consolidation mode:
122:04	: Auto-program mode:
122:05	: CF card:
123:01	: PGM1 mode:
123:02	: PGM2 mode:
123:03	: PGM3 mode:
123:04	: PGM4 mode:
123:05	: PGM5 mode:
123:06	: PGM6 mode:

4) Display control

There are four commands for controlling the display:

DON1	: Switch the LCD on.
DOFF1	: Switch the LCD off.
ON1	: Update the LCD.
OFF1	: Not update the LCD.

5) R/J print control

There are two commands for controlling the R/J printer:

PON : Power the R/J switch on.
POFF : Power the R/J switch off.

6) Controlling the flow of arrangement command execution

There are 24 commands for controlling the flow of arrangement command execution:

:Snnnn : This is a start mark of an arrangement. "nnnn" (4-digits code) are used for arrangement table number set to each arrangement key.

:[label] : Preset the label (name of specific position) to specify the jump destination point in the arrangement file. The actual data for labels can be freely designated.
Example: To specify "LABEL-1" as label → :LABEL-1

G:[label] : This is an absolute jump command. If the system encounters this command, command execution flow unconditionally jumps and continues from the point preset by the label.

I > ([number]):[label] : This is a conditional jump command. If the system encounters this commands, the value in the number entry buffer compared with the specific number. If the value in the buffer is larger than the specified number, the command execution flow jumps and continues from the point preset by the label. If a condition is not match with the above-mentioned condition, the step advances to the next command.

I < (**[number]):[label]** : This is a conditional jump command. If the value in the number entry buffer is less than the specified number, the command execution flow jumps to the point preset by the label. If a condition is not match with the above-mentioned condition, the step advances to the next command.

I – ([number]):[label] : This is a conditional jump command. If the system encounters this command, the value in the numeric entry buffer is compared with the specific number. If the value in the buffer is equal to the specific number, the command execution flow jumps and continues from the point preset by the label. If a condition is not match with the above-mentioned condition, the step advances the next command.

KNO1 : This is a command to enter the <#-1> key.

KNO2 : This is a command to enter the <#-2> key.

NE : This is a command to wait for numeric entry. After entering numerics, press the <Arrangement> key to continue the arrangement program.

B:nn : This is a command to sound buzzer for nn (nn = 01 ~ 99) seconds.

? : Force to execute the arrangement even if an error occurred during the arrangement.

ANO : Disable clerk auto signoff.
AYES : Enable clerk auto signoff.

CFFMT : Format CF card.
CFSVnnn'mmmm' : Backup to CF card (nnnn: command code, mmmm: file name).
CFLDnnn'mmmm' : Restore from CF card (nnnn: command code, mmmm: file name).

JCL : Clear Electronic journal older half data
JCLA : Clear all Electronic journal data

CLPn : Set the default @ menu sheet number to "n" (n = 0 ~ 2) and "stay down @ menu sheet assignment" of all clerk.
CLMn : Set the default menu sheet number to "n" (n = 0 ~ 8) and "stay down menu sheet assignment" of all clerk.
CLSn : Set the default shift PLU level number to "n" (n = 0 ~ 8).

211: : Press the "ESC" key.
212: : Press the "Yes" key.
213: : Press the "No" key.

7) End of the arrangement programs

The end command "**E**" must be included at the end (exit) point of an arrangement program.

2-7-2. Arrangement program example

This section shows examples of arrangement programs.
The following example shows an arrangement program that executes X consolidation of the file set in the batch 1 ~ 9 files for all terminals.

Example:

Programming the following operation for the arrangement table 12
– Set the mode to Inline X/Z.
– Enter operation code “1111100000000”.
– Wait for the numeric entries (batch number).
– Enter the <#-2> key.
– Enter the <ESC> key.

```
:S0012            ;Designate the table number (mandatory)
122:03            ;Set the mode to Inline X/Z.
NE                ;Wait for the batch number
I<(0):ERR1        ;If the input number is less than 1, the process jumps to the ERR1.
I>(9):ERR1        ;If the input number is larger than 10, the process jumps to the ERR1.
%GET              ;Save the entered number to the parameter save area.
202:0031          ;Press “Clear” button.
(1111100000000)   ;Input the operation code for system command
%PUT              ;Pick up the entered number from the parameter save area.
KNO2              ;Specify the <#-2> key for entering the operation code.
211:0045          ;Specify the <ESC> key to execute this operation.
:ERR1             ;When the input number is not 1 to 9, the following commands are
                   processed.
E                 ;End the program (mandatory).
```

2-7-3. Scheduled execution of arrangement key function

An arrangement key function can be executed on a scheduled basis. In order to execute an arrangement key function on a scheduled basis, it is necessary to make appropriate settings in the scheduler file (file 062).

There are two functions for execution on a scheduled basis:

1) Execute an arrangement key function at the specified time every other day.
2) Interval execution of an arrangement key function by setting start time, ending time, and the interval.

See the page 102 of Programming manual for programming details.

2-8. Making graphic logo

A graphic logo can be printed on UP-350 receipt. This graphic logo is stored in the graphic logo file (file 047), and printed at the top of the receipt instead of a normal logo message. This graphic logo data cannot be made by the terminal program, it can be made only by PC and downloaded from PC.

2-8-1. About graphic logo

Graphic logo size: 432 × 104 or 432 × 208 pixels
Printing sample:

```
   **********************************
   *     CASIO QT-2100 TERMINAL     *
   *        GRAPHIC LOGO AREA       *
   **********************************

******COMMERCIAL MESSAGE LINE 1*********
******COMMERCIAL MESSAGE LINE 2*********
******COMMERCIAL MESSAGE LINE 3*********
******COMMERCIAL MESSAGE LINE 4*********
```

2-8-2. Making graphic logo procedure

Before following this procedure please allocate “Graphic logo” file (file 047) on the terminal.

1. Making a bit-map image file (432 × 104 or 432 × 208 pixels; 1-bit color).
2. Convert this bit-map file to the internal file by executing “CV-10.”
3. Send the converted data from the PC to the terminal via online.
4. Select “Print Graphic” option in the message control of the general feature in the PGM 3 mode.
5. Turn off and on the terminal by the <ON/OFF> button.

2-9. Hourly item

This function enables to memorize the detailed data of quantity and amount/price of each item dealt hourly.
It is possible to calculate the proceeds and record the hourly item in any totalizer, and also it is possible to print out as an hourly item report.

2-9-1. Programming necessary files before using hourly item function.

Hourly item function requires the following files to function properly, so they must be programmed before using it. See the Programming manual for the details on format of individual files.

– Time zone file

This file is used to specify the time zone for the detail items individually. You can enter the starting time and the ending time of the time zone, moreover specify the cycle time that indicates an unit of the appropriate intervals.

– Hourly item link file

This file is used to record the Hourly item which links with the appropriate time zone. You can also specify the particular totalizer for each time zone.

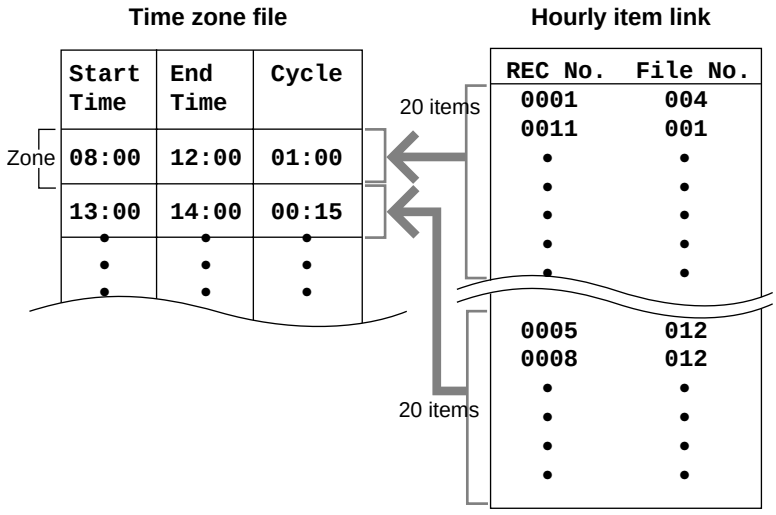
– Hourly item

This file is used to store the contents of the quantity and amount/price of each item. Specify a particular totalizer for each hourly item link file. The following seven files enable to link the data for hourly item link file: fixed totalizer, function, subdepartment, PLU, department, group, void reason.

Hourly item report example

```
 08:00->09:00
Hamburger              3          $2.00
French Fries           3          $1.50
---------------------------------------
                       6          $3.50

09:00->10:00
Cheese Burger          2          $3.00
Hot Coffee             2          $0.50
---------------------------------------
                       4          $3.50
                     •
                     •
11:00->12:00
Apple Pie              1          $1.00
Hot Milk               1          $1.00
---------------------------------------
                     •
 13:00->13:15
                     •
                     •
                     •
 13:15->13:30
```



A maximum of 20 records corresponds to each time zone.

2-10. Time and attendance

This function allows shop owners to control his / her employees' working condition. Time & attendance require the following files.

– Employee file

This file is used to regulate the labor conditions.
You can program the type of job, the maximum work of hours in a week or shift schedule of a day per employee.

– Job code file

This file is used to classify the types of job. You can program the general work pay and the overtime pay ratio per job file.
If some employees have a common job, divide the job code individually in case their pay ratio is different.

– Schedule file

This file is used to administrate the employees' schedule. You can assign a starting and an ending time, a grace period, break minutes allowed, and the default job code for the shift. and the grace period. It is possible to record maximum 21 shifts (3 shifts / day × 7 days) per employee for the schedule file.

Grace period – this is a period of time in minutes which allows an employee to clock-in / out before their scheduled times. Grace period works in conjunction with the schedule. If the scheduler is not being utilized then the grace period inputs indicated below become inactive.

Grace period before start time – this input indicates how many minutes an employee may clock-in before the scheduled clock-in time.

Grace period after start time – this input indicates how many minutes an employee may clock-in after the scheduled clock-in time.

Grace period after end time – this input indicates how many minutes an employee may clock-out after the scheduled clock-out time.

Grace period before end time – this input indicates how many minutes an employee may clock-out before the scheduled clock-out time.

(See "4-1-15. Programming time & attendance" for Programming manual.)

		Job Code	Start Time	End Time	Break Time	Grace Before Start	Grace After Start	Grace Before End	Grace After End
First day	Shift	1	9:00	12:00	00:15	10	10	5	15
	Shift	5	9:00	12:00	00:15	10	10	5	15
	Shift	2	9:00	12:00	00:15	10	10	5	15
Second day	Shift	3	9:00	12:00	00:15	10	10	5	15
	Shift	2	9:00	12:00	00:15	10	10	5	15
	Shift	4	9:00	12:00	00:15	10	10	5	15
Seventh day									

Each employee can have 3 shifts per day. The schedule file can hold 7 days schedule. So, totally 21 files can be registered in this file.

– Work time file

This file is used to administrate each employees' weekly hourly wages, work hours, and proceeds.

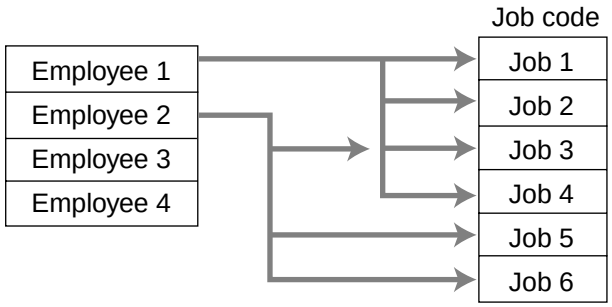
– Time zone file

This file is used to administrate the cycle time. You can specify the length of time zone.

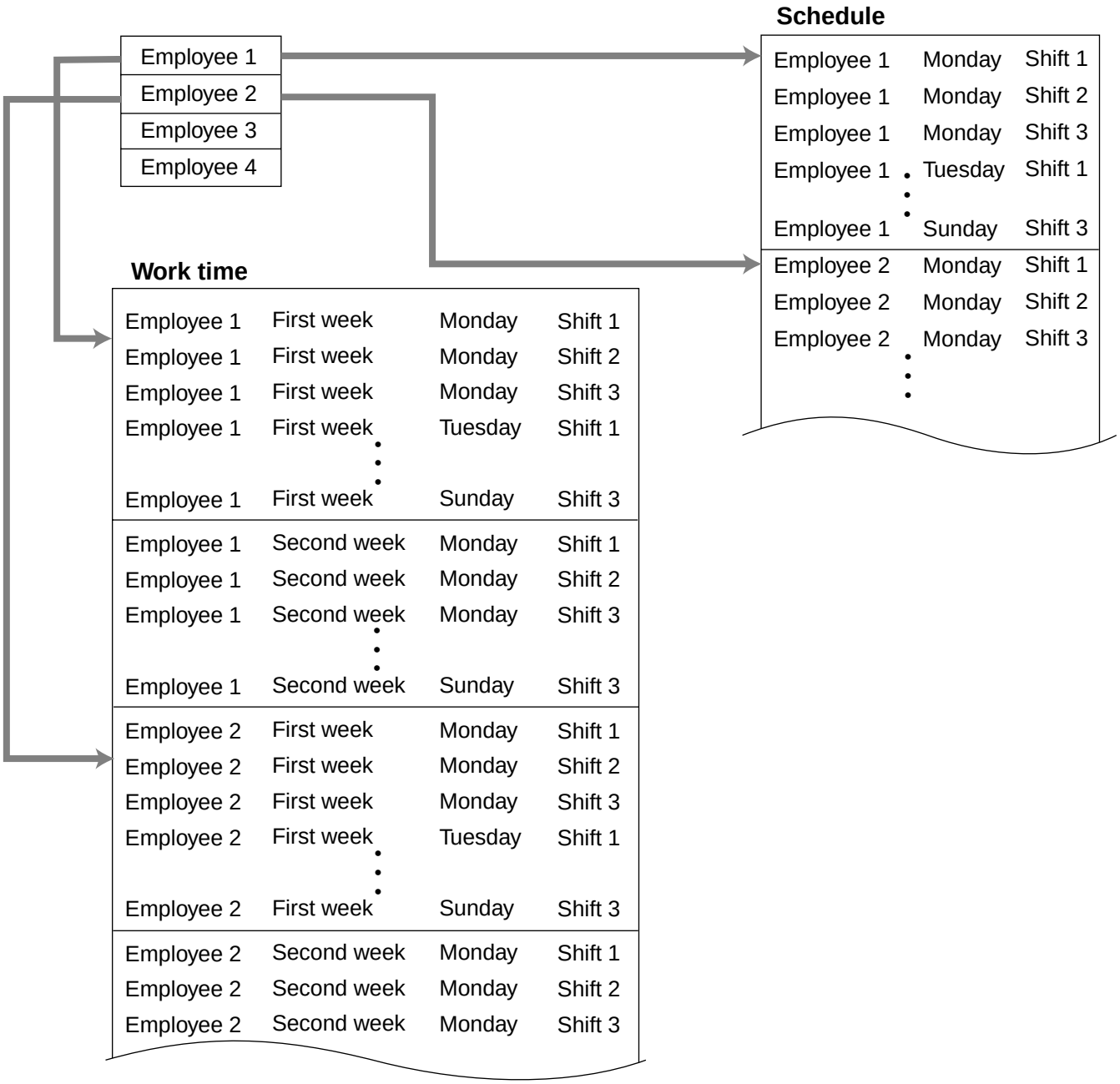
2-10-1. Corresponding relations of the file

Employees' job assign

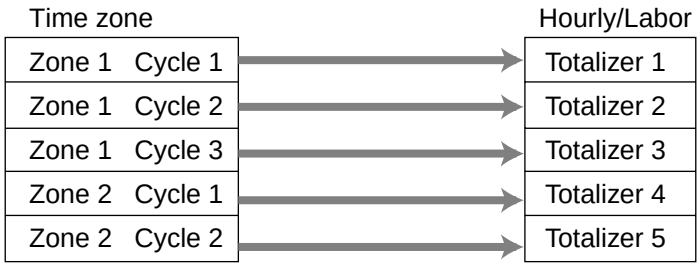
This function is used to assign a job to each employee. Before assigning the job, be sure to program the details of the jobs. Every employee file can link to some job code files (maximum 4 jobs), so some employees may link to the same job code file. But be sure to make individual job files if the employees work under different hourly wages.



Employee's Schedule and total business results per week

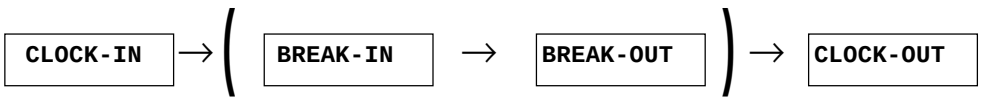


Calculating the total wages of the employees per hour



Flow of Time & Attendance operation

The following flow shows the order of time & Attendance function by pressing the specified keys: It is possible to specify one key as both <CLOCK-IN> and <CLOCK-OUT> function, or specify two keys separately. (Refer to "4-3-7-33 Worksheet for clock-in/clock-out" in Programming manual for details.)



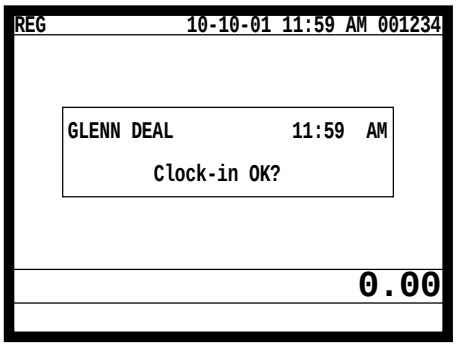
2-10-2. CLOCK-IN Operation

This function is used to register the Starting work time.

2-10-2-1. CLOCK-IN operation (1)

Program: Not using the window and impossible to specify job code.
Allow to specify job code = NO, Display job code window = NO
(Refer to Programming manual, page 74.)

Operation



1. XXXXXX <CLOCK-IN>
   When this message appears, press the <YES> key to register the start of working hours.
   When you press the <NO> key, previous menu will appear.

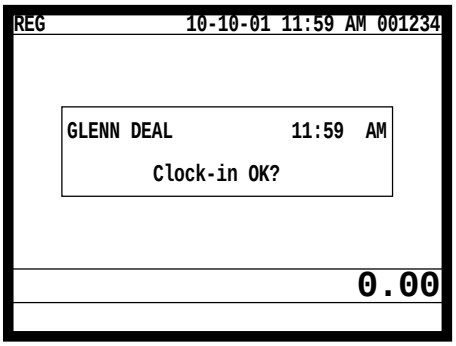
XXXXXX
Employee No.

2-10-2-2. CLOCK-IN operation (2)

Program type:

Allow to specify job code = YES, Display job code window = NO
(Refer to Programming manual, page 74.)

Operation



1. XXXXXX . YY <CLOCK-IN>
   When this message appears, press the <YES> key to register the start of working hours.
   When you press the <NO> key, previous menu will appear.
   Enter the employee No. (within 6 digits), "."(decimal point), and the job code (2 digits).

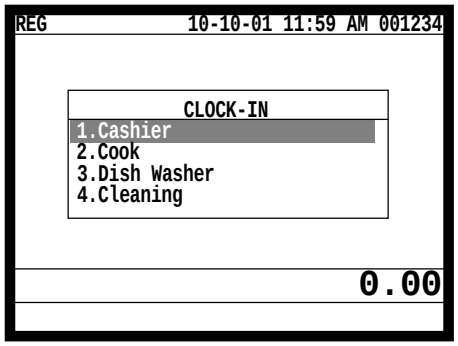
XXXXXX . YY
Employee No. *Job code*

2-10-2-3. CLOCK-IN operation (3)

Program type:

Display job code window = YES
Allow to clock-in with non-preset job-code = NO
(Refer to Programming manual, page 74.)

Operation



1. XXXXXX <CLOCK-IN>
2. Choose the appropriate Job Code from the CLOCK-IN menu, and press the <YES> key to register the start of working hours.

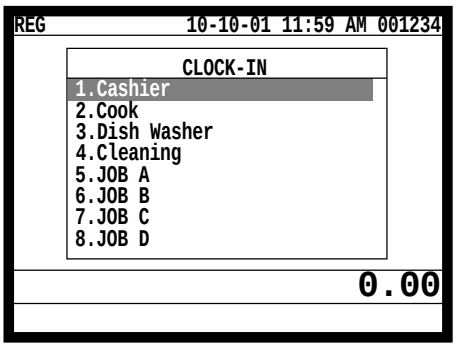
→ Job codes that are programmed in Employee file are displayed.

XXXXXX
Employee No.

2-10-2-4. CLOCK-IN operation (4)

Program type: Display job code window = YES
Allow to clock-in with non-preset job code = YES
(Refer to Programming manual, page 74.)

Operation



1. XXXXXX <CLOCK-IN>
2. Choose the appropriate Job Code from the CLOCK-IN menu, and press the <YES> key to register the start of working hours.

→ All job codes that are programmed in job code file are displayed.

XXXXXX
Employee No.

Receipt sample

```
REG          12-31-2002 11:59 AM 001234   — Header

    Harrison                              — Employee character (16 digits)
      CLOCK-IN                 11:59 AM   — Special character (REC #29), time
      JOB                 Dish Washier    — Special character (REC #33), job character
```

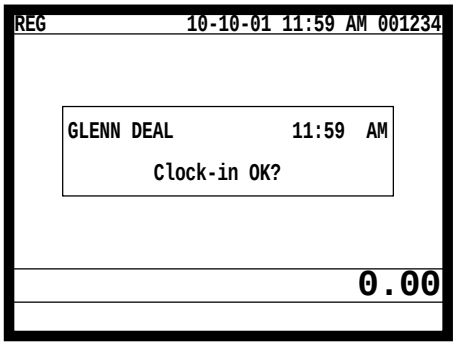
According to the programming special characters (Programming manual: page 152), a receipt for each employee is printed out.

2-10-3. CLOCK-OUT Operation

This function is used to register the ending work time.

2-10-3-1. CLOCK-OUT operation (1)

Operation

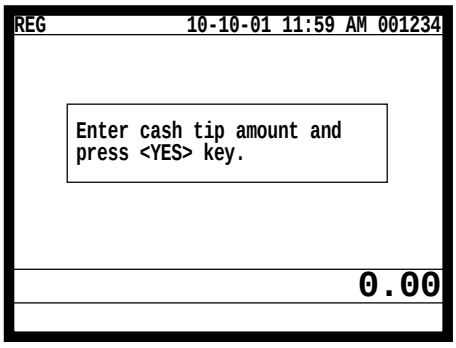


1. XXXXXX <CLOCK-OUT>.
2. When this message appears, press the <YES> key to register the end of working hours.
   When you press the <NO> key, previous menu will appear.

2-10-3-2. CLOCK-OUT operation (2)

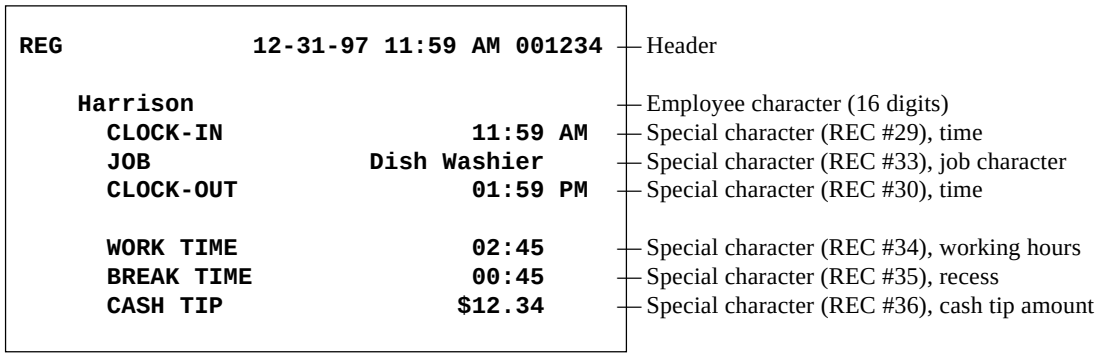
Program: Tip declaration compulsory (refer to Programming manual, page 73.)

Operation



1. XXXXXX <CLOCK-OUT>.
2. When this message appears, the employee should enter the cash tip amount, if not, it is impossible to close the accounts
   When you press the <NO> key, previous menu will appear.

Receipt sample

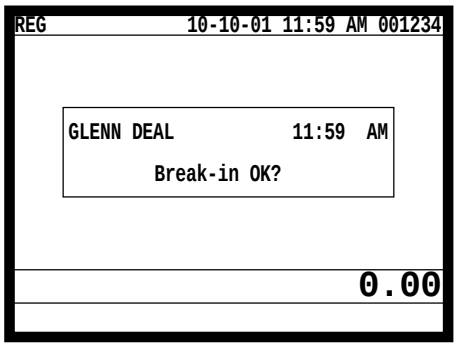


According to the programming special characters (Programming manual: page 152), the receipt for above operations' details are printed out.

2-10-3-3. BREAK-IN Operation

This function is used for the employees to register a recess.

Operation

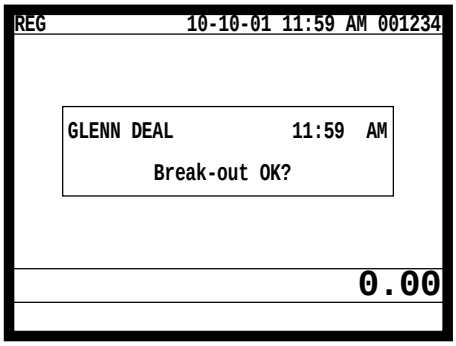


1. XXXXXX <BREAK-IN>.
2. When this message appears, press the <YES> key to register the recess.
   The receipt is not printed out, except electronic journal.

2-10-3-4. BREAK-OUT Operation

This function is used for the employees to register the end of a recess.

Operation



1. XXXXXX <BREAK-OUT>.
2. When this message appears, press the <YES> key to register the end of a recess.
   The receipt is not printed out, except electronic journal.

2-10-3-5. Manager Operation

When the manager operate CLOCK-IN after signing on, the manager can operate and modify any employee's record despite of corresponding employee number.
Following operations are possible to operate by the manager:

Specify the job code/CLOCK-IN/ CLOCK-OUT/BREAK-IN/BREAK-OUT

Operating Flow

Manager sign on → CLOCK-IN/OUT operation, BREAK-IN/OUT operation → Sign off

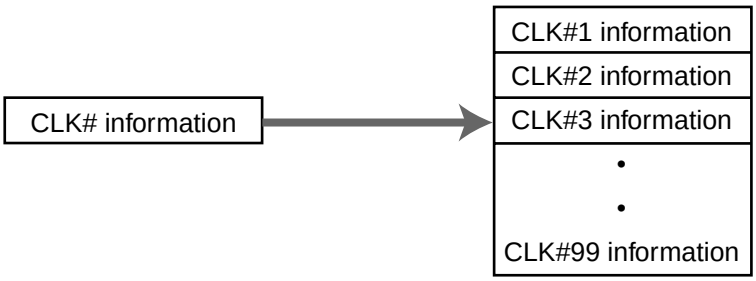
2-11. Sign on control

This function is used to ban the sign-on operated by an employee who has not CLOCK-IN. The following conditions should be fixed.

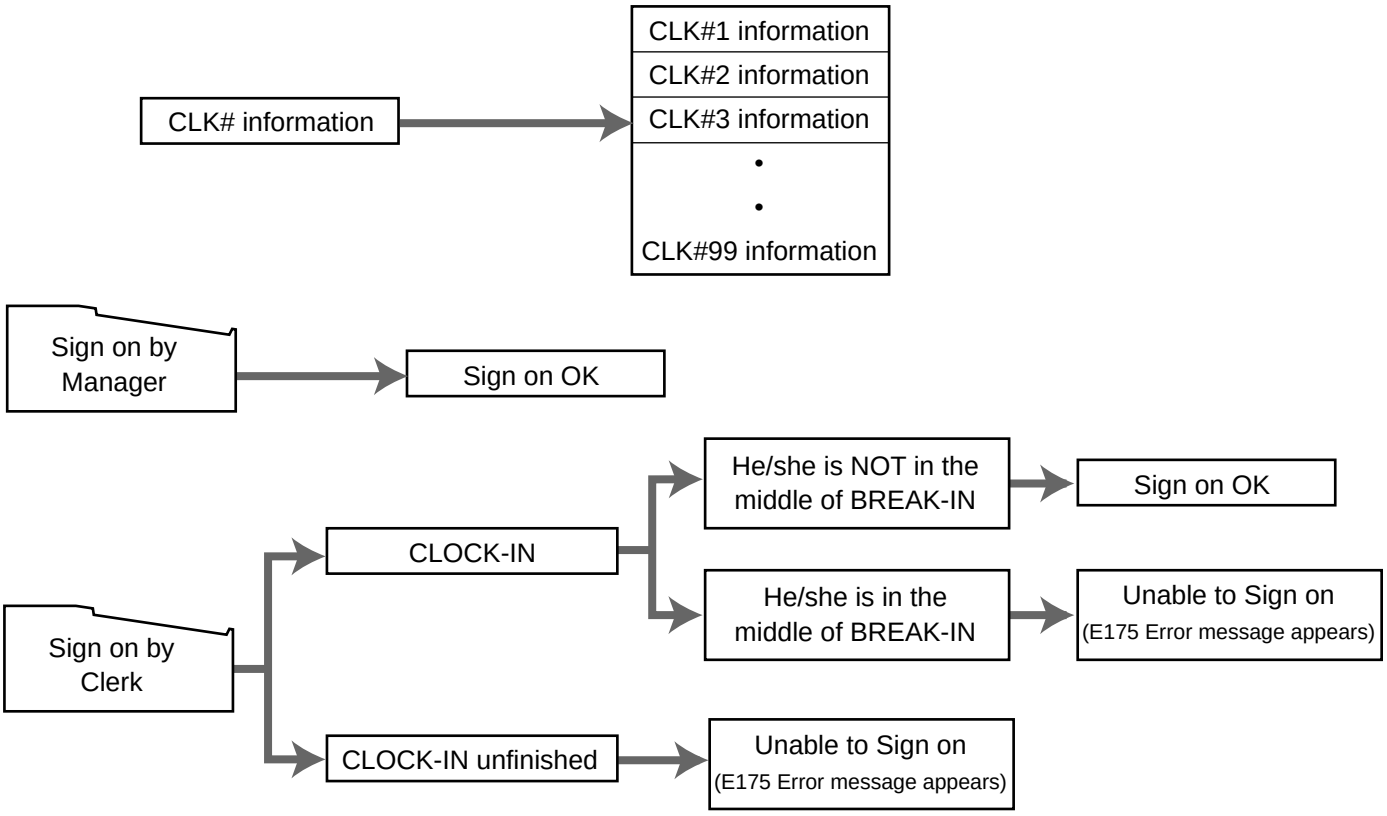
- Use only one terminal (master terminal) for the CLOCK-IN/OUT operation. This terminal should be connected inline to the satellite terminals. But the time and attendance work file (file 806) should be allocated to all terminals.
- The clerk file's information should be common among all the terminals.
- Be sure there is a clerk who is specified as "Manager" in the clerk file. If no manager, it may be locked to operate.

2-11-1. Sign on

1. When an employee normally operate CLOCK-IN/OUT, BREAK-IN/OUT, the employee's attendance information is sent from the main terminal to the satellite terminals.

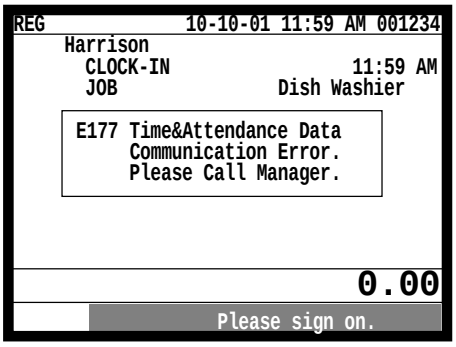


Flow of sign on



2-11-2. Solution to abnormality of master terminal

When the satellite terminals cannot receive any information from the master terminal, the master terminal shows the error message on the window and prints out the receipt with terminal IDs that failed to communicate the data.



Receipt image

```
REG            12-31-2002 11:59 AM 001234   — Header

Communication Error                         — Fixed flash message
                     MC#01          XXXX    — Machine ID, Error code
                     MC#03          XXXX    — Machine ID, Error code
```

- The error message and receipt will appear whenever the sign-in is failed. If you cannot solve the inline data communication problem, program the system connection again, and remove the uncommunicative terminal.

2-11-3. Solution to abnormality of satellite terminal

- When the satellite terminal cannot receive any information from the main terminal, the default CLOCK-IN/OUT information remain.
  In this case, only manager can sign on.
- When the satellite terminal could receive the CLOCK-IN/OUT information from the master terminal a few times, but failed to receive after then, the CLOCK-IN/OUT information in all the satellite terminals leaves the last received information. In such case, the last received information control employees' sign on/off. (Manager can always sign on.)

2-11-4. Sign on compulsory

When the satellite terminal cannot receive the information in spite of normal CLOCK-IN operation on the master terminal, an employee may not sign on for some reason.
In such case, the manager needs the following operation.

1. Sign on by the manager (normal sign on operation.)
2. 99 xxxx <CLK#> (xxxx: the secret code of the corresponding employee, 4-digit.)
3. Sign off by the manager or the corresponding employee (normal sign off operation.)

Note:

When the error message appeared under the employee's CLOCK-IN operation, manager should operate above steps.

2-12. IDC (Item Data Capture)

This function is used for capturing all the registered item data by the REG / REF / REG– modes. IDC file stores these captured items. If there is no record to capture item data, the new data are appended to the IDC file.

2-12-1. Available capturing items

Select the appropriate items that should be captured, and program these items into the IDC link file. The available items and their contents are indicated below.

Items	Contents	File No.
PLU	• The index of the transaction. • The report of the items/functions, or all the detailed statements.	004
Subdepartment		003
Department		005
Function		002
Pulldown group		026
Clerk	• The index of the transaction. • The report of all the detailed statements.	007

IDC function file

	Function		Code			Function		Code			Funtion		Code	
	NOP		000	–		PLU#	*7	048	O		SUBST.		111	–
●	CASH		001	O		PRC		049	–		K/KETTEN	*1	113	O
●	CHARGE		002	O	●	DEPT01		051	O		HOUSE BON	*1	114	O
●	CHECK		003	O		SB/R		054	–		POST ENTRY		115	–
●	CREDIT		004	O		SLIP		055	–		R REPEAT		116	–
●	NB		006	O		SF/R		056	–		OPEN CHK		117	–
	PRCINQ		008	–		T/S	*1	057	O	●	MEDIA CHG		118	O
	STKINQ		009	–		TBL#		058	–		SEAT#		119	–
●	CHAR		010	O	●	EXEMPT		062	O		DISP ON/OFF		120	–
●	PRT		011	O	●	PLU0001		063	O		REG MODE	*5	121	O
	CHKP		012	–		MENU		064	–		X/Z MODE		122	–
	CLK TRANS		013	–		SFT PLU	*7	065	O		PGM MODE		123	–
●	TBL TRANS	*10	014	O		OPEN		067	–	●	EAT-IN		128	O
●	TIP		015	O		OPEN2		068	–	●	TAKE-OUT		129	O
	NRMRCT	*1	016	O		1st@	*7	069	O		STORE		130	–
●	LOAN		019	O		2nd@	*7	070	O		RECALL		131	–
●	RC		020	O		CLK#	*5	072	O	●	SUBDEPT01		133	O
●	PD		021	O	●	OPE X/Z		073	–		SDPT#	*7	134	O
●	P.UP		022	O	●	TRAY TTL		074	O		DEPT#	*7	135	O
●	COUPON		023	O		SUBTOTAL	*8	075	O		LIST	*7/11	136	O
●	DEPOSIT		025	O		RCT ON/OFF		076	–		LIST#	*7/11	137	O
●	–		027	O		TAST		077	–		DUTCH		140	–
●	%–	*2	028	O		OPE#		078	–		Numerics (0 ~ 9)		201	–
●	+		029	O		MDST	*8	080	O		CLEAR		202	–
●	%+	*2	030	O		X	*1	082	O		REVERSE DSP		206	–
	RF	*1	033	O		QT	*8	083	O		EJ DlSP		207	–
●	VOID	*3	034	O		XX	*1	084	O		ESC		211	–
	CPN2	*1	036	O		SIST	*2	085	O		YES		212	–
	VLD		037	–		XXX	*1	090	O		NO		213	–
	RCT		038	–		NEW CHK	*5	091	–		←		214	–
	CK.E		039	–		OLD CHK	*5	092	–		→		215	–
●	#		040	O		NEW/OLD	*5	093	–		↑		216	–
●	#/NS	*4	041	O		ADD CHK	*9	094	–		↓		217	–
	NS		042	–		SEP CHK	*9	095	–		HOME		218	–
	CT		043	–		00		096	–		DISP MODE		219	–
	ARG	*6	044	O		000		097	–		PAGE DOWN		220	–
	CE	*1	045	O		Decimal point		098	–	●	PAGE UP		221	–
	VAT		046	–		CLOCK-IN/OUT		108	–		CANCEL		236	O
	BILL		047	–		BREAK-IN/OUT		109	–					

● : Available items to be programmed as target for IDC.
❍ : IDC target
– : Out of target

*1 This function itself is not captured. But it is captured with the captured items or functions.

*2 Subtotal is captured with subtotal discount (%-), premium (%+).
Selective item subtotal is captured with selective item discount or premium.

*3
1. Error correct is not captured.
2. This function itself is not captured. But it is captured with voided items.
3. Void reason is also captured.

*4 Non-add is captured, but not NS.

*5 This function is captured in header record.

*6 This function itself is captured. But the functions that are executed by this function are captured.

*7 This function is not captured. But item itself might be an IDC target.

*8 When the option (printed when the key is pressed) is selected, it is captured.

*9 Transferred items by the add check and the separate check are not captured.

*10 ST transfer is not captured.

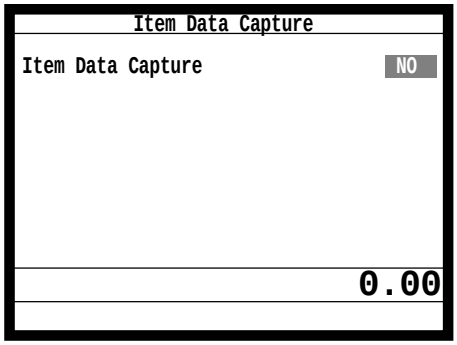
*11 Pulldown group number should be within the range of 001 to 099, in case of using pulldown group with IDC.

2-12-2. Set up the IDC start / end

Specify IDC Start or IDC End in manager mode. IDC does not start if you not allocate necessary files for IDC.

- When IDC function is stopped, you can restart IDC by performing FC or INIT 2 (“1-3 How to flag clear QT-2100 terminal” Programming manual, page 14).

Operation



Note:

1. If you stop the IDC when the IDC file is full of items, you can stop the error sound without clearing any registered data.
2. The necessary files for IDC
   - File 036 (Registration buffer)
   - File 063 (IDC buffer)
   - File 057~ 059 (IDC file)
   - File 804 (IDC link file)

2-12-3. How to memorize the captured items

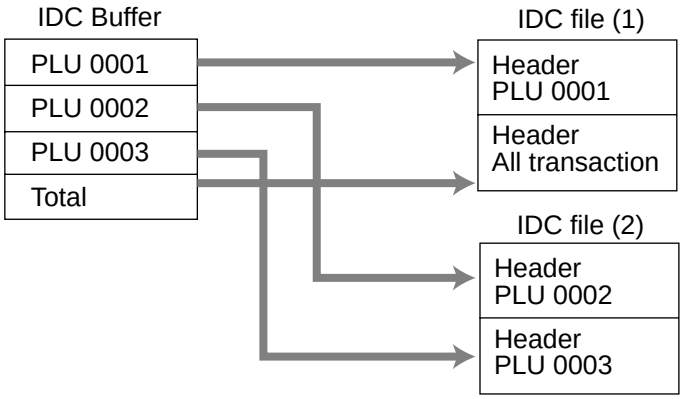
Flow of the transferring data

1. Program: “Store data = Whole transaction” (refer to Programming manual, page 77.)
   Whole IDC Buffer and the header will be captured.

Example
PLU 0001———> Memorized into IDC file (1)
PLU 0002———> Memorized into IDC file (2)
PLU 0003———> Memorized into IDC file (2)

2. Program: “Store data = Item only” (refer to Programming manual, page 77.)
   When an appropriate item is selected, this item and the header will be captured (see the illustration below).

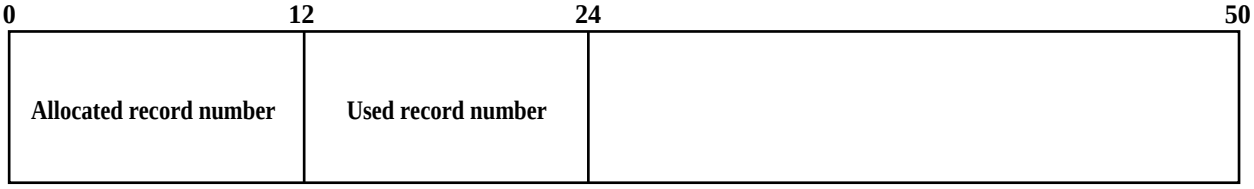
Example
PLU 0001———> Memorized all the transaction into the IDC file (1)
PLU 0002———> Memorized into IDC file (2)
PLU 0003———> Memorized into IDC file (2)



2-12-4. IDC data file structure

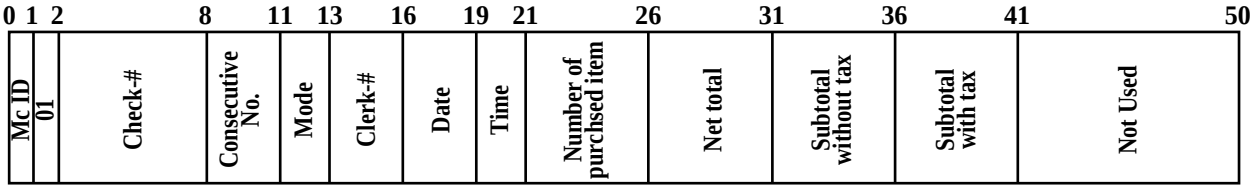
Header

Header (Top of the IDC file)



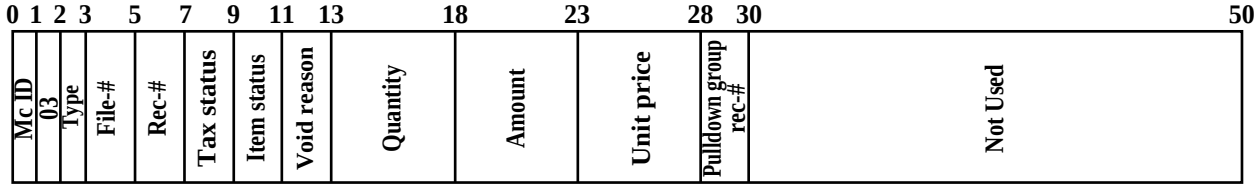
Header (Index of the transaction)

First Record



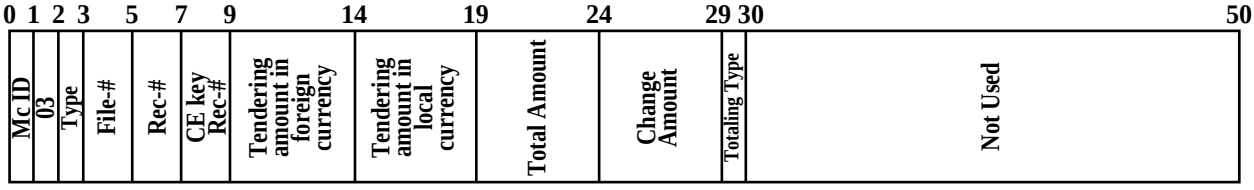
Item

Item (PLU / Subdepartment, Department)

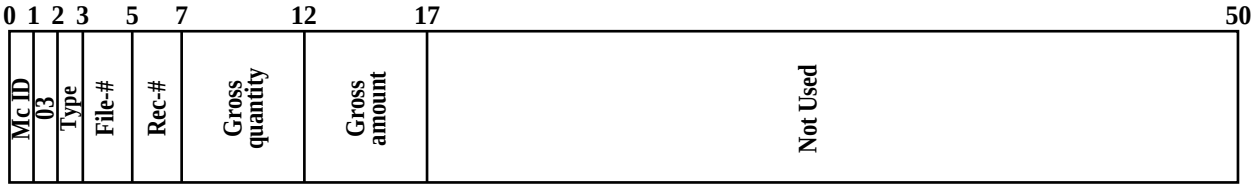


Function

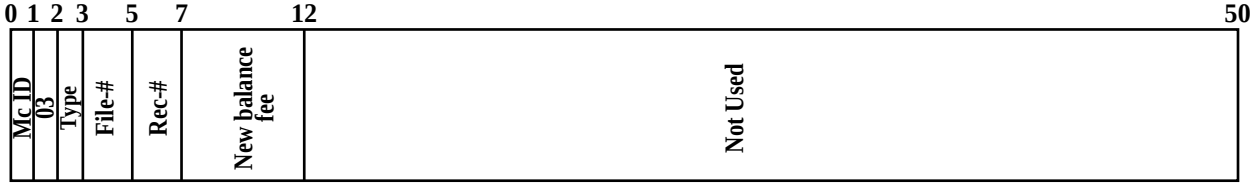
Cash, Charge, Check, Credit



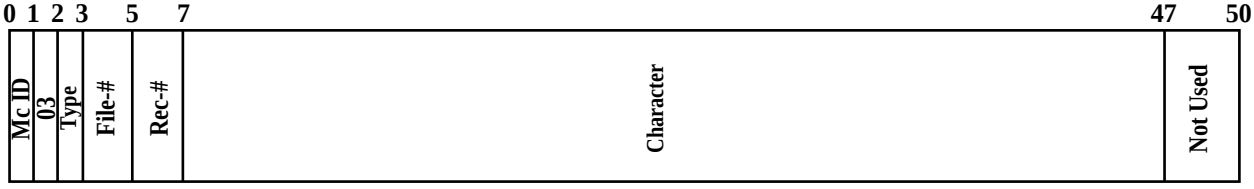
New balance



New balance charge

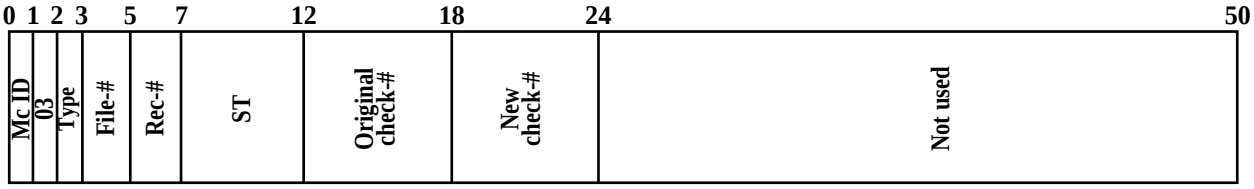


Character print/Character recall

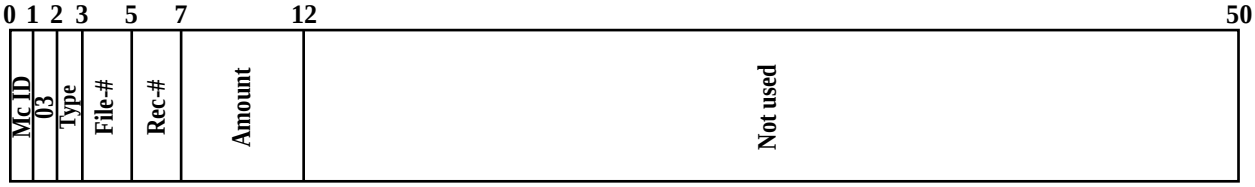


Function

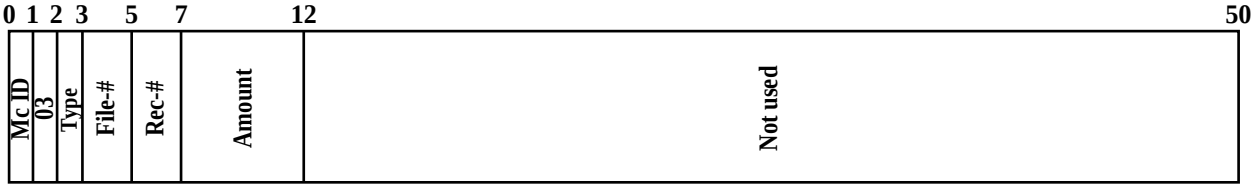
Table transfer



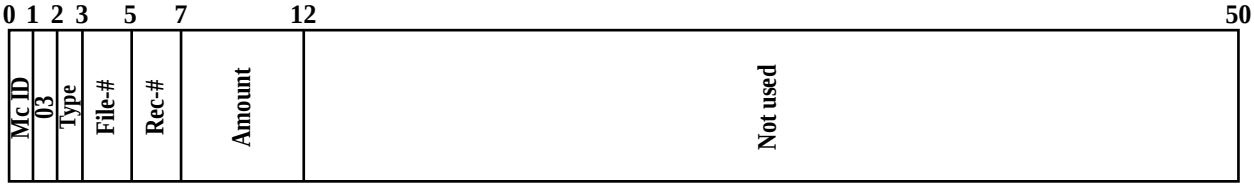
Tip



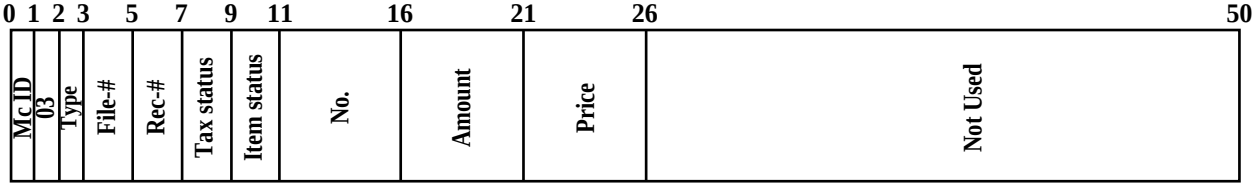
Loan / Pickup



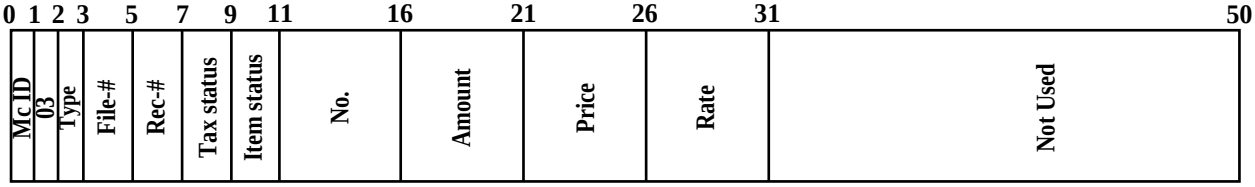
Received on account / Paid out / Deposit



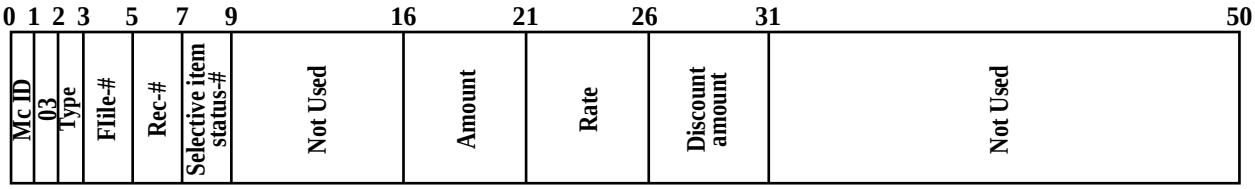
+ / – / Coupon



%+ / %–

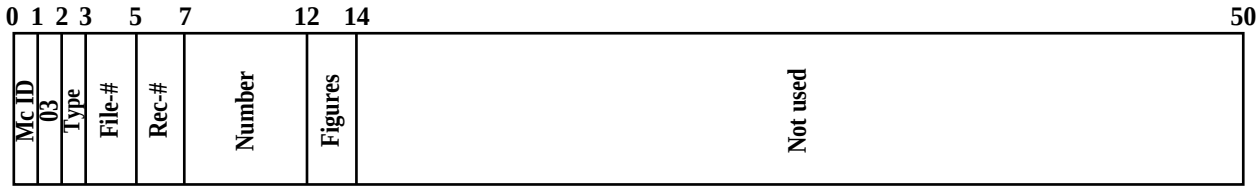


%+ / %– after Selective item subtotal

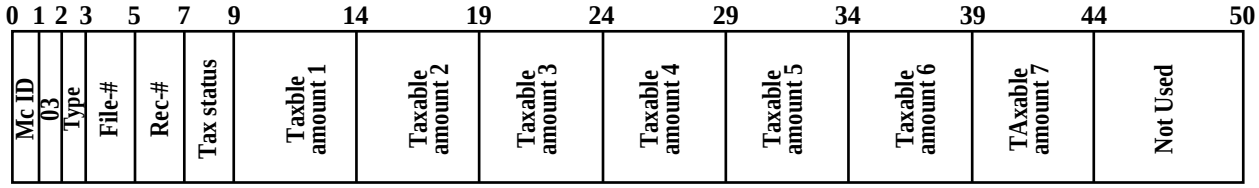


Function

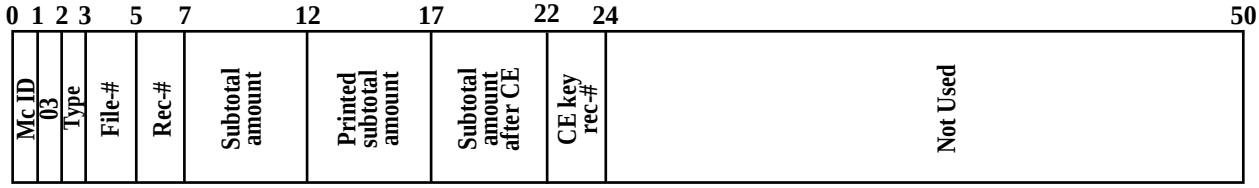
 # Printing of #, # / NS



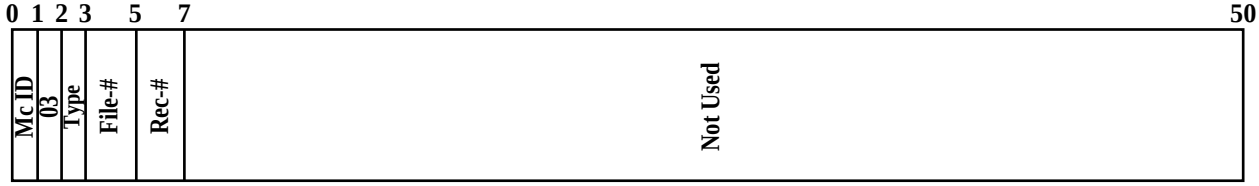
Exempt



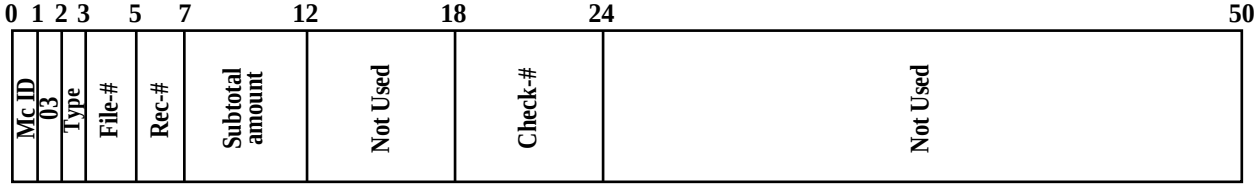
ST / MDST



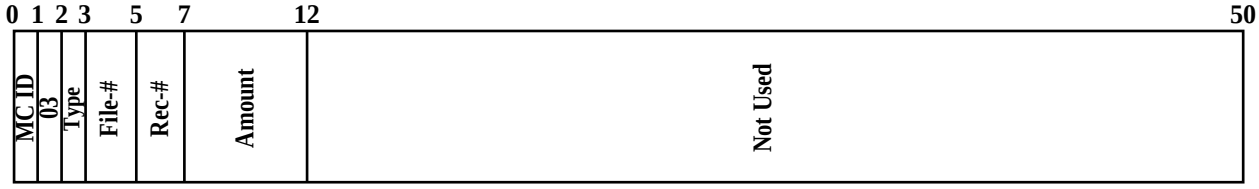
Media change, Tray total



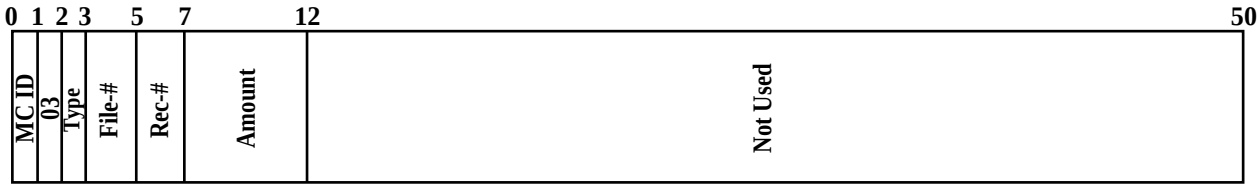
Store



Eat-in / Take-out



Cancel

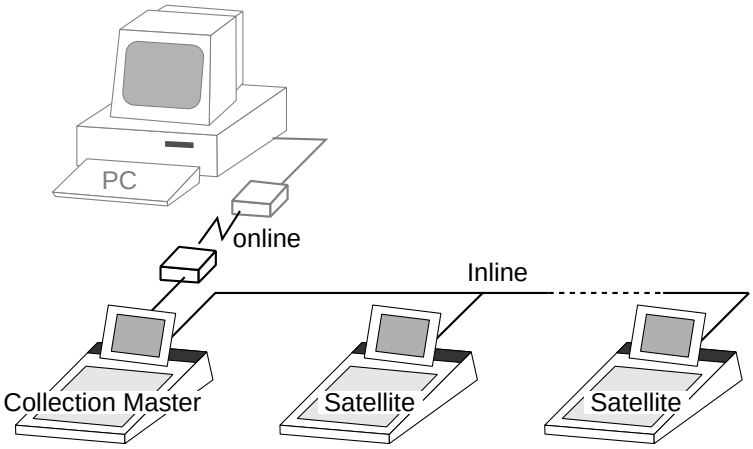


2-12-5. IDC data type

Type of data	Amount	Capture item
DTLTYPE_SDEPT	10	Main item : Subdepartment
DTLTYPE_DEPT	15	Main item : Department
DTLTYPE_PLU	20	Main item : PLU
DTLTYPE_SET_FIX	25	Dependent item : Set-menu/child (fixed)
DTLTYPE_SET_SEL	30	Dependent item : Set-menu/child (option)
DTLTYPE_COND	35	Dependent item : Condiment
DTLTYPE_PREP	40	Dependent item : Preparation
DTLTYPE_ITEM_PLUS	60	Dependent item (discount) : item +
DTLTYPE_ITEM_MINUS	61	Dependent item (discount) : item -
DTLTYPE_ITEM_CPN	62	Dependent item (discount) : item CPN
DTLTYPE_ITEM_P_PLUS	63	Dependent item (discount) : item %+
DTLTYPE_ITEM_P_MINUS	64	Dependent item (discount) : item %-
DTLTYPE_CASH	71	Finalize : Cash
DTLTYPE_CHARGE	72	Finalize : Charge
DTLTYPE_CHECK	73	Finalize : Check
DTLTYPE_CREDIT	74	Finalize : Credit
DTLTYPE_NBCHKTRC	80	NB (check tracking) operation
DTLTYPE_NBTBLTR	82	NB (table transferring) operation
DTLTYPE_CANCEL	85	Cancel
DTLTYPE_TBLTR	86	Table transfer
DTLTYPE_NBFEE	87	NB charge
DTLTYPE_STORE	88	Store
DTLTYPE_ST_PLUS	100	ST +
DTLTYPE_ST_MINUS	101	ST -
DTLTYPE_ST_CPN	102	ST CPN
DTLTYPE_ST_P_PLUS	103	ST %+
DTLTYPE_ST_P_MINUS	104	ST %-
DTLTYPE_SIST_PERCENT_PLUS	105	SIST %+
DTLTYPE_SIST_PERCENT_MINUS	106	SIST %-
DTLTYPE_ST	111	ST
DTLTYPE_MDST	112	MDST
DTLTYPE_PLT_CHAR	113	PRINT CHAR
DTLTYPE_SHARP	115	# Print
DTLTYPE_TIP	116	Tip
DTLTYPE_DEPO	117	Deposit
DTLTYPE_TXEX	118	Tax exempt
DTLTYPE_EATIN	119	Eat-in
DTLTYPE_TAKEOUT	120	Takeout
DTLTYPE_TRAY_TTL	121	Tray total
DTLTYPE_RC	150	RC
DTLTYPE_PD	151	PD
DTLTYPE_MEDIA_CHG	152	Medial change
DTLTYPE_GET_MONEY	153	Media change (get)
DTLTYPE_PUT_MONEY	154	Media change (put)
DTLTYPE_LOAN	155	Loan
DTLTYPE_PICKUP	156	Pick up
DTLTYPE_FIN_LOANPICKUP	157	Finalize loan/pick up
DTLTYPE_AMOUNT_EXCHANGE	158	Currency exchange
DTLTYPE_CASH_IN_CHECK	159	Cashing a check

2-12-6. Transferring IDC

It is possible to do collection of IDC files through inline system. Refer to the terminal structure as below.



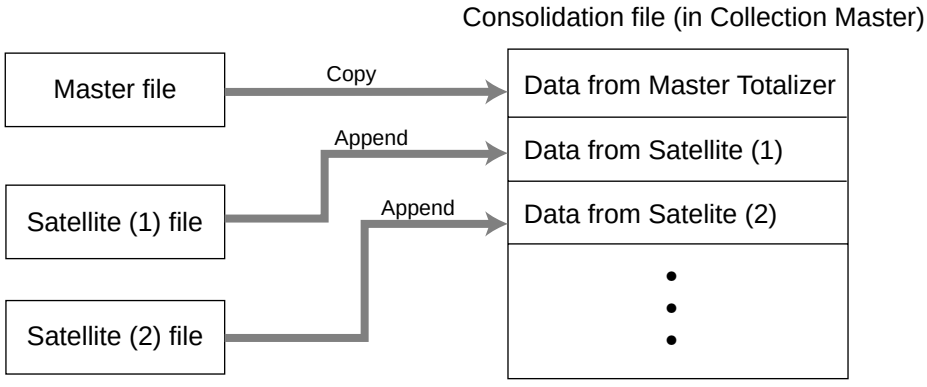
Flow of the IDC

PC sends Z-lock command by using job command to collection master.

1. PC enables to check the Z-lock confirmation.
2. PC sends the consolidation command by using Job command to collect IDC files from all satellite terminals.
3. Collection master receives the IDC data from each satellite in order.
   PC enables to check whether the collection master has finished the job.
4. PC sends the Z-command or X-command to the collection master.
5. PC receives the collection data from consolidation file. If the Z-command has issued at step 4, consolidation file in the collection master are all reset.

Data transferring flow

IDC data in each terminal totalizer is appended to the consolidation file individually.



Notes:

- Just after IDC starts, the total file is cleared to receive new data.
- Just after the receiving is over, the data is remained in the consolidation file. To clear this data, send the Z-command or the file-clear command to the collection master from the PC. (Set “No”, to “Reset consolidation total after inline consolidation” in the programming the communication in the machine feature programming.
- In case of collection Z, all of the IDC files in the satellite terminals are cleared.

3. Manager operation

This section describes manager operations (such as machine initialization, IPL, manager functions etc.) of QT-2100.

3-1. Machine initialization

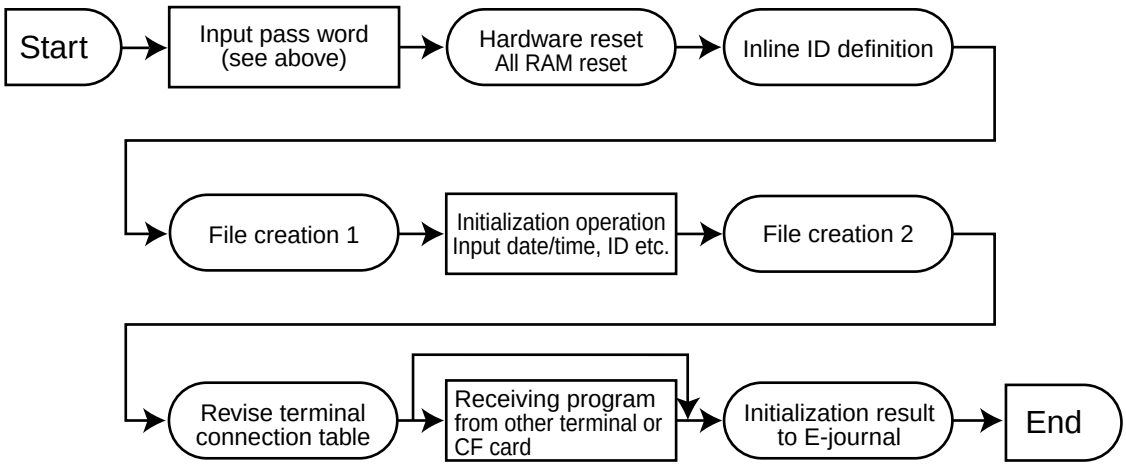
There are three different types of initialization such as INIT, FC, and INIT2.
INIT; Machine initialization, all program and total data are reset.
FC; Flag clear, all program and total data are remained, only the current transaction data are reset.
INIT2; Machine initialization 2, all program data are remained, only total data are reset.
The procedures of machine initialization are described in the chapter 1 of the QT-2100 programming manual. The required passwords are listed below.

Operation		Password	Digit meaning
Normal operation	Init	2 0 0 0 0	for the U.S.
		1 0 0 0 0	for other area
	Flag clear	No need	
	Init2	8888888888	
Define machine ID	Init	nn00020000	nn = Machine ID (for the U.S.)
		nn00010000	nn = Machine ID (for other area)

* See the “INIT code” section to notice the detail information of the last three digits.

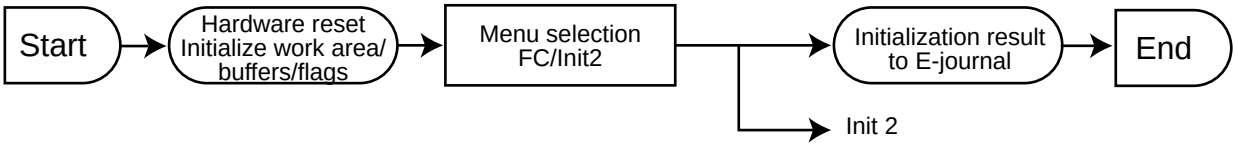
3-1-1. INIT

Initialization process is as follows:



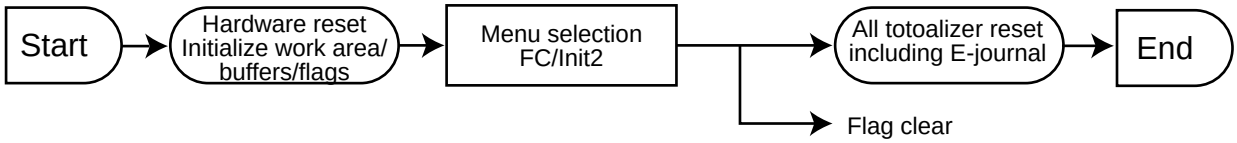
3-1-2. Flag clear

Flag clear process is as follows:



3-1-3. INIT 2

Initialization 2 process is as follows:



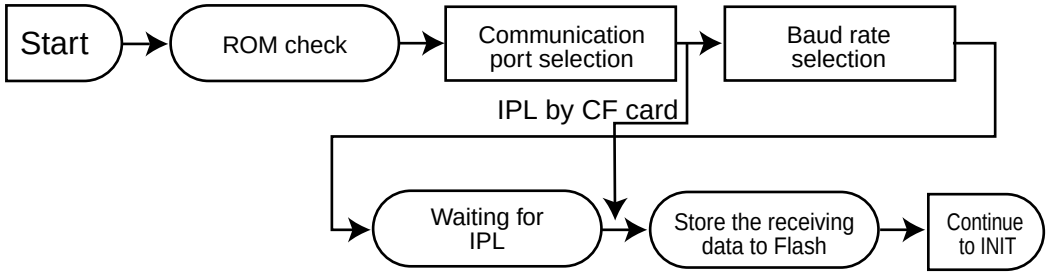
Description	Choice	Program code
Logical ID (01~32)-----Omissible	Significant number	D_{10} D_9
Always “000”		0 0 0 D_8 D_7 D_6
Area code: 2: U.S. 1: Other area	Significant number	D_5
Always “000”		0 D_4
Rear/remote display 0 : default display, 1: with no rear nor remote display, 2 : with rear display, 3: with remote display	Significant number	D_3
COM 2 0 : Use slip printer (SP-1300), 1 : Use hand held scanner (HHS-15)	Significant number	D_2
COM 1 0 : Use XMODEM	Significant number	D_1

3-2. IPL (Initial Program Loading)

IPL should be made before initializing when the application software has been modified.

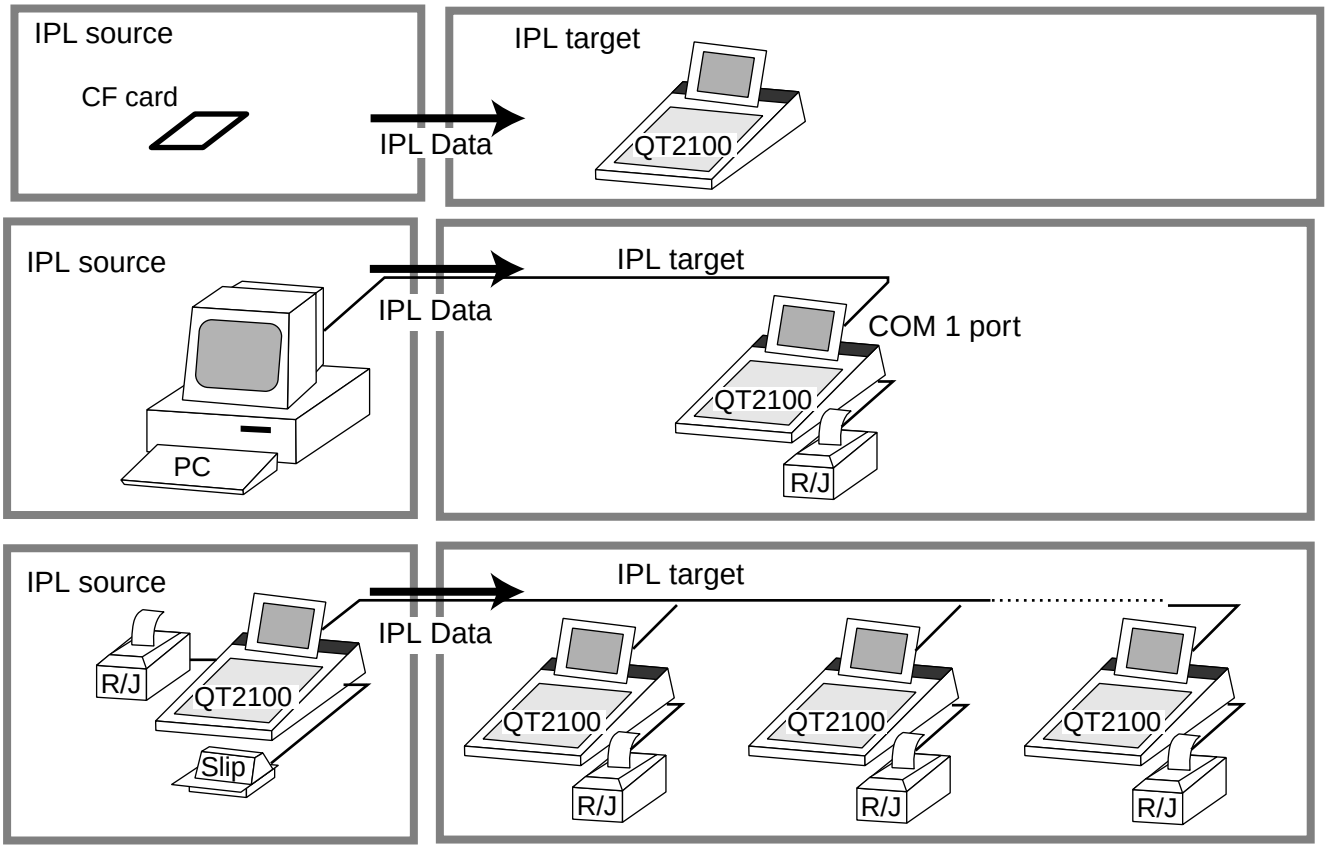
3-2-1. IPL

Initial program loading process is as follows: IPL code = 44449999

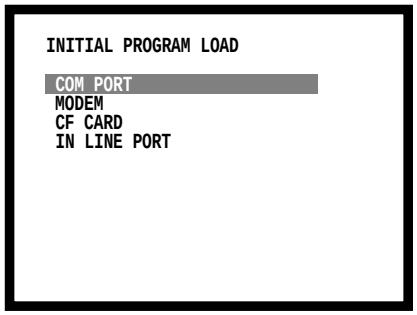


3-2-2. System configuration before IPL operation

Connect source terminal (PC) and target terminals or insert the IPL CF card to the terminal.

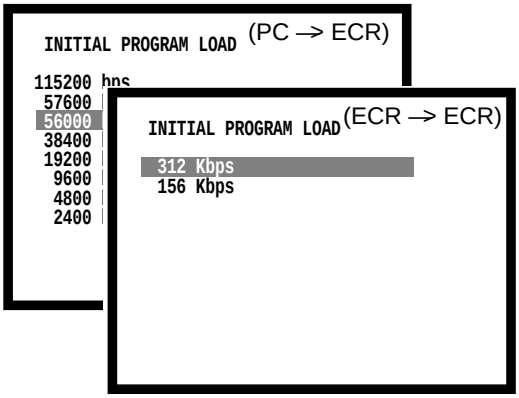


3-2-3. IPL operation

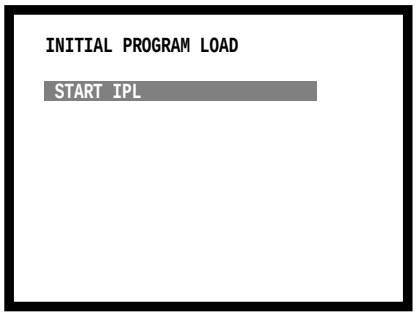


If you select “CF card”, insert the CF card into the slot before this step.

1. Select the appropriate method to loading IPL data and press the <YES> key.

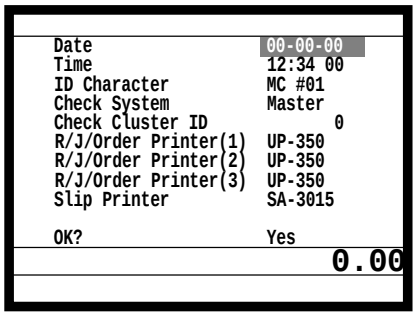


2. If you choose COM port or IN LINE port, select baud rate which the IPL source device is used and press the <YES> key.



3. Press the <YES> key to proceed, in case of downloading via inline, ID definition is made by this timing. So press the <YES> key terminal by terminal.

Send IPL data from other terminal or PC.
About the operation of the IPL data source device, refer to the Auto-program section in the Manager Operation chapter of this manual.



4. After finishing IPL, this menu is shown on the screen.

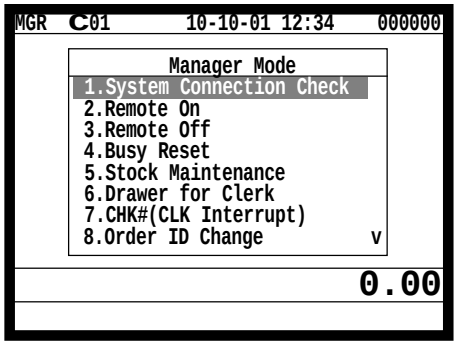
3-3. Manager function

Using the manager function makes it possible to control the terminal conditions. The contents of the manager function are as follows:

1. System connection check
2. Remote on
3. Remote off
4. Busy reset
5. Stock maintenance
6. Drawer for clerk
7. CHK# (Clerk interrupt)
8. Order ID change
9. Error log print
10. System re-configuration
11. Item Data Capture
12. EURO Change over.

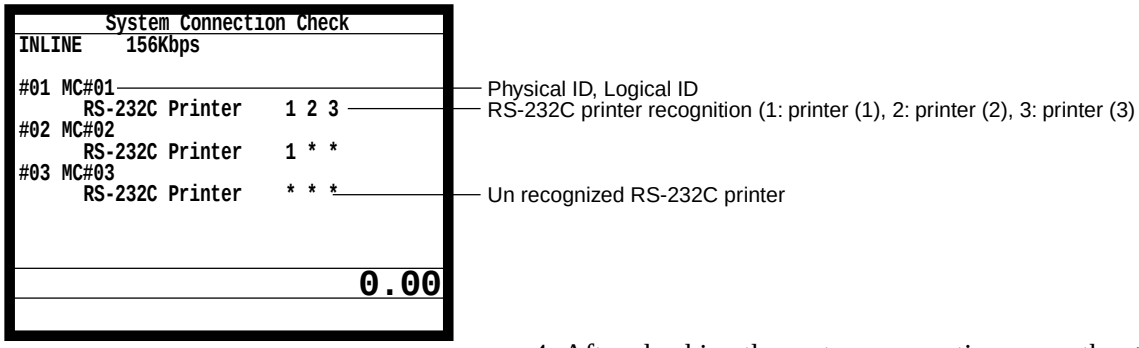
3-3-1. System connection check

This command shows the connection status of terminals, and printers.



1. Sign on a clerk (if necessary).
2. Press <X/Z MODE> repeatedly to assign manager mode.

3. Select “1. System Connection Check” and press the <YES> key.



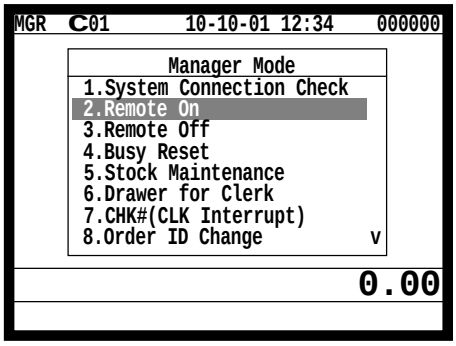
4. After checking the system connection, press the <ESC> key to return the previous menu.

Note:

If there is unrecognized terminal there it shows “*” as below.
e.g.) #04 **********

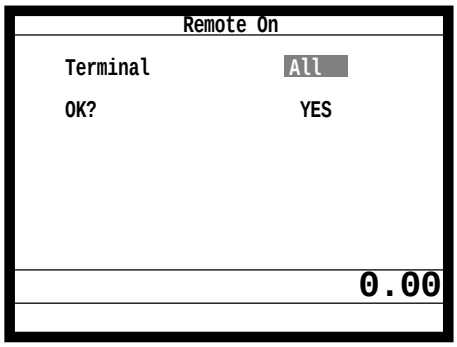
3-3-2. Remote on

This command is used to power on the terminals connected with the same inline.



1. Sign on a clerk (if necessary).
2. Press <X/Z MODE> repeatedly to assign manager mode.

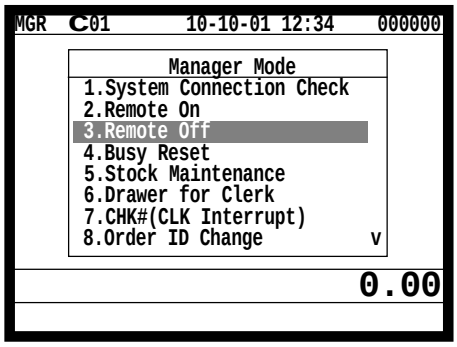
3. Select “2. Remote On” and press the <YES> key.



4. Select all terminals or individual terminal, select “YES” to execute this command.

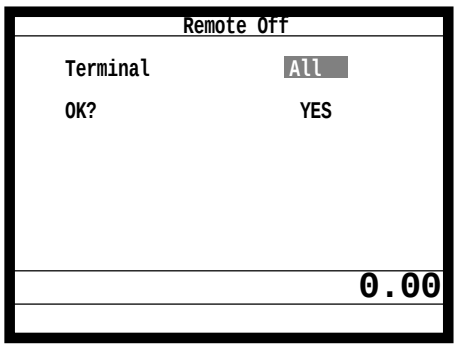
3-3-3. Remote off

This command is used to power off the terminals connected with the same inline.



1. Sign on a clerk (if necessary).
2. Press <X/Z MODE> repeatedly to assign manager mode.

3. Select “3. Remote Off” and press the <YES> key.

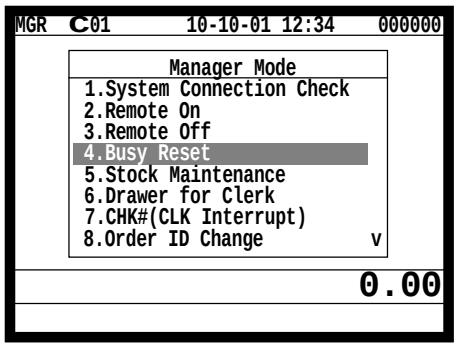


4. Select all terminals or individual terminal, select “YES” to execute this command.

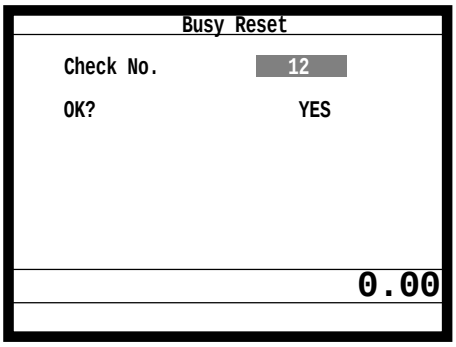
Note: In case of waking up a terminal manually, enter **9999999999** and press the <YES> key.

3-3-4. Busy reset

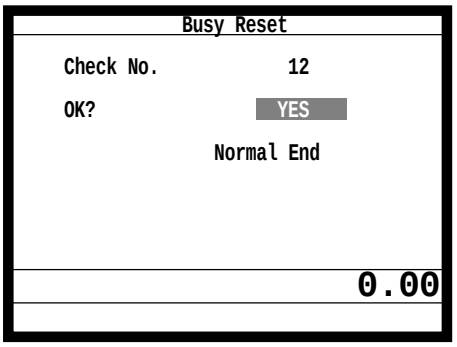
This command is used to release the busy flag of the check used by other dead terminal. Executing this command always releases this flag, so please be careful to perform this operation.



1. Sign on a clerk (if necessary).
2. Press <X/Z MODE> repeatedly to assign Manager Mode.



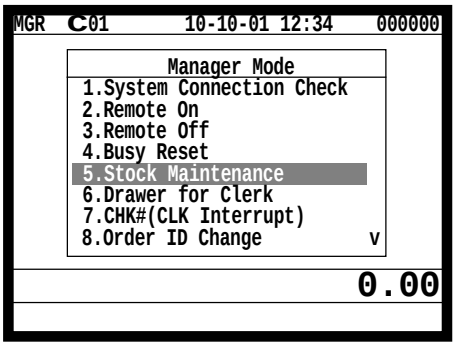
3. Select “4. Busy Reset” and press the <YES> key.



4. Enter the appropriate check number, and then select “YES” to execute this command.

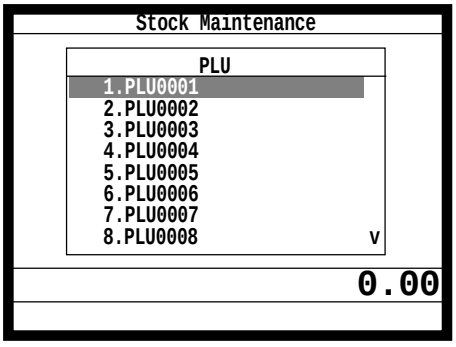
3-3-5. Stock maintenance

This command is used to update PLU stock quantities brought by purchasing or inventory processing.

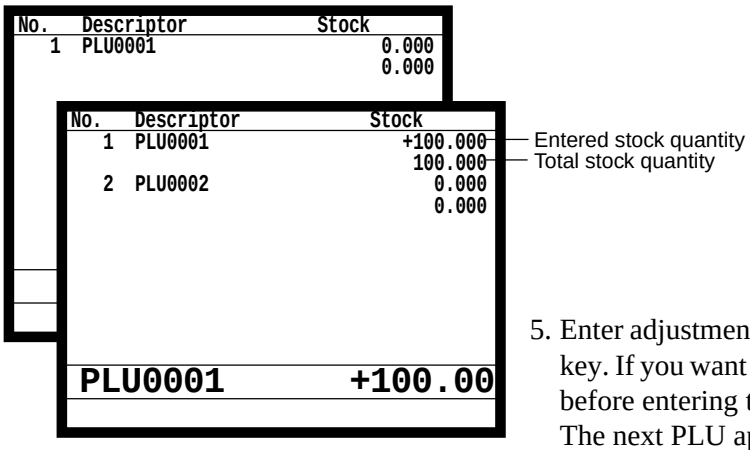


1. Sign on a clerk (if necessary).
2. Press <X/Z MODE> repeatedly to assign manager mode.

3. Select “5. Stock Maintenance” and press the <YES> key.



4. Select the appropriate PLU and press the <YES> key.

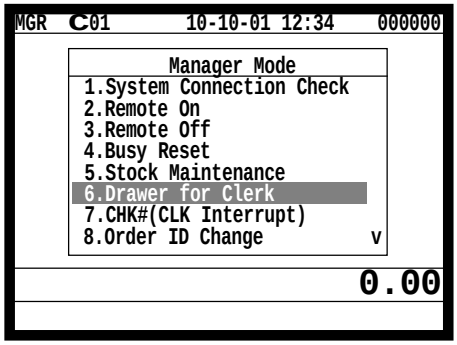


5. Enter adjustment (adding) stock value and press the <YES> key. If you want to decrease stock value, press the <RF> key before entering the stock value.
   The next PLU appears on the screen.

6. Press the <ESC> key to return to the previous menu.

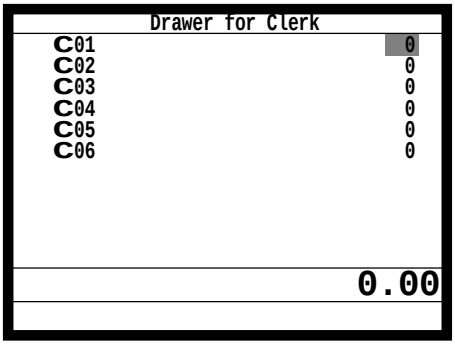
3-3-6. Drawer for clerk

This command is used to designate the drawer 1 or 2.



1. Sign on a clerk (if necessary).
2. Press <X/Z MODE> repeatedly to assign manager mode.

3. Select “6. Drawer for Clerk” and press the <YES> key.

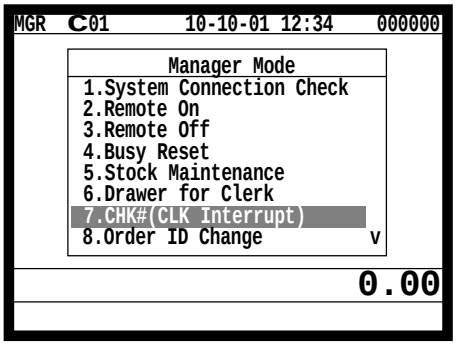


4. Enter the appropriate drawer number (1 or 2, 0 means drawer 1), and press the <YES> key.

5. Press the <ESC> key to return to the previous menu.

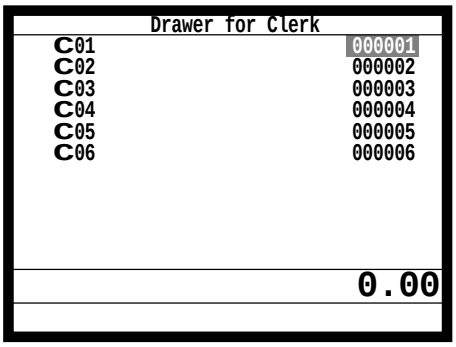
3-3-7. CHK# (Clerk interrupt)

This command is used to designate the check number for clerk interrupt to each clerk.



1. Sign on a clerk (if necessary).
2. Press <X/Z MODE> repeatedly to assign Manager Mode.

3. Select “7. CHK# (CLK Interrupt)” and press the <YES> key.

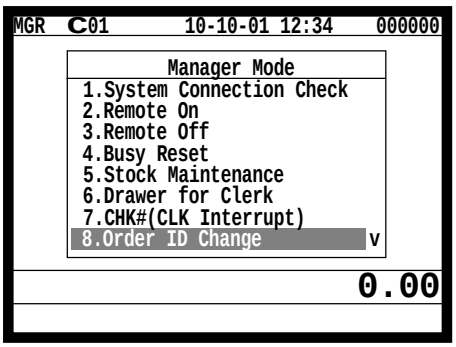


4. Enter the appropriate check number, and press the <YES> key.

5. Press the <ESC> key to return the previous menu.

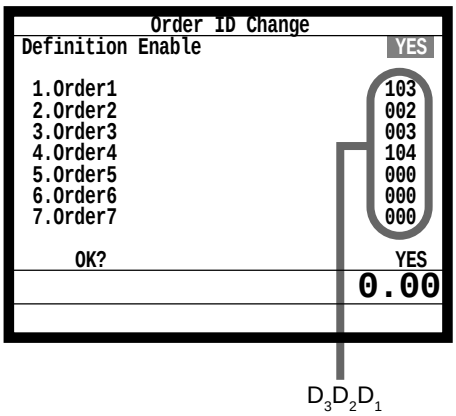
3-3-8. Order ID change

This command is used to change the target printer of order temporarily.



1. Sign on a clerk (if necessary).
2. Press <X/Z MODE> repeatedly to assign manager mode.

3. Select “8. Order ID Change” and press the <YES> key.



4. Select “YES” of the Definition Enable field, and enter an appropriate ID number of each order printer and press the <YES> key. Select “YES” of the last line execute this command.

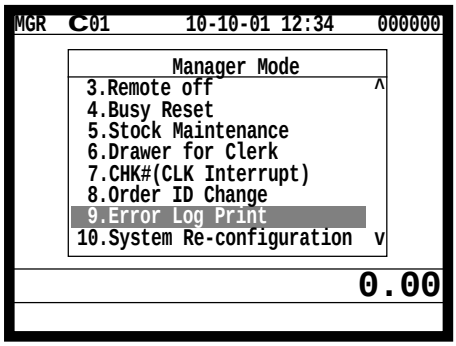
5. Press the <ESC> key to return to the previous menu.

Note: D_3 D_2 D_1

In case of D_3 = 1, D_2 & D_1 is ECR physical ID that connect to printer-1.
In case of D_3 = 2, D_2 & D_1 is ECR physical ID that connect to printer-2.
In case of D_3 = 3, D_2 & D_1 is ECR physical ID that connect to printer-3.

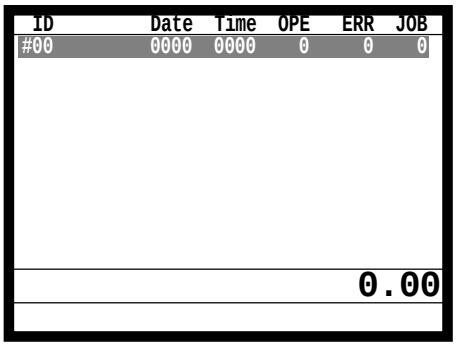
3-3-9. Error log print

This command is used to display/print out the error log file.

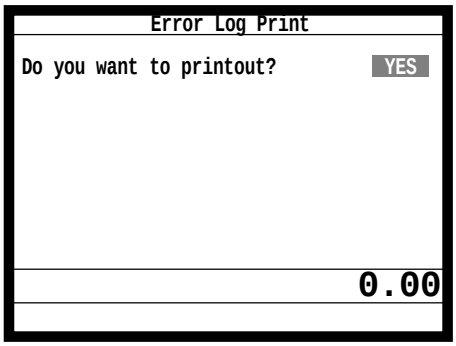


1. Sign on a clerk (if necessary).
2. Press <X/Z MODE> repeatedly to assign manager mode.

3. Select “9. Error Log Print” and press the <YES> key.



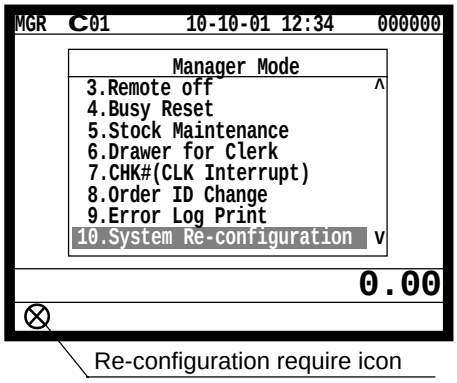
4. The display shows current error log.
   Then press the <ESC> key.



5. Press the <YES> key if you want to print error log.
   If you do not want to print error log, press the <ESC> key.

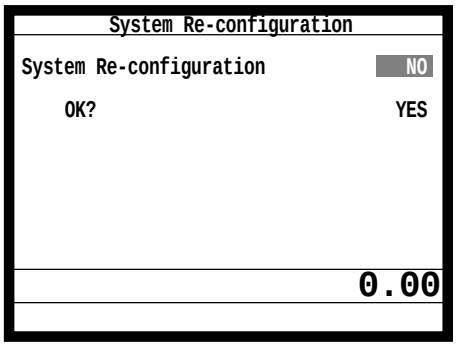
3-3-10. System re-configuration

This command is one procedure of down recovery. It backs the contents of the system configuration file to the original value.
It should be executed under these conditions:
1) After issuing "Open check report."
2) All ECRs are connected and work normally (Check by system connection check)
3) No ECRs are during registration, collection, consolidation, sending/receiving programs.
4) Activate "System re-configuration" command at the terminal on which the "System re-configuration" icon is lit.



1. Sign on a clerk (if necessary).
2. Press <X/Z MODE> repeatedly to assign manager mode.

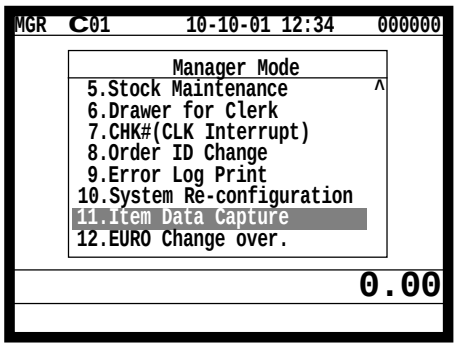
3. Select "10. System Re-configuration" and press the <YES> key.



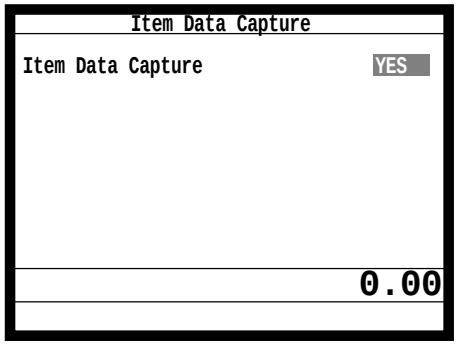
4. Choose the option "YES (Perform system re-configuration)/ NO (Abort this procedure)" and press the <YES> key.

3-3-11. Item Data Capture

You can change the IDC status (capture transaction data or not) by the operation described below.



1. Sign on a clerk (if necessary).
2. Press <X/Z MODE> repeatedly to assign manager mode.

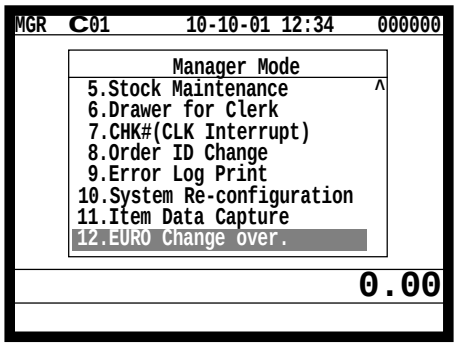


3. Select “11. Item Data Capture” and press the <YES> key.
4. Choose the option “YES (capture item data)/NO (not capture item data)” and press the <ESC> key.

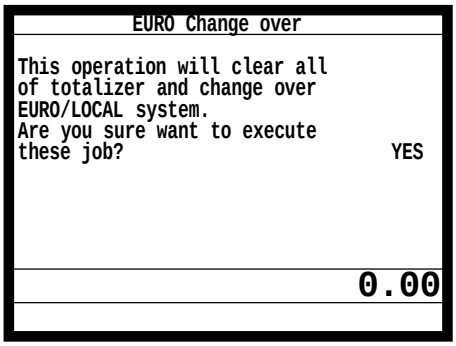
3-3-12. Euro change over

After this operation, the following subjects are made:
(1) The Euro is defined as main currency and the local as sub currency.
(2) All totals and counts are reset.
(3) Unit prices (department, subdepartment, PLU, 2nd @, shift PLU) are converted in Euro.

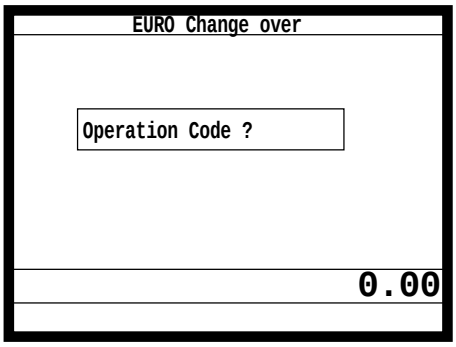
Before “change over operation”,
(1) Issue all reset report including open check report, if necessary.
(2) Sign off all cashier/clerk and stop all operations of all terminals of the system.



1. Sign on a clerk (if necessary).
2. Press <X/Z MODE> repeatedly to assign manager mode.



3. Select “12. EURO Change over” and press the <YES> key.



4. If you want to proceed this step, press the <YES> key. To abort this step, press the <NO> or <ESC> key.

5. If you want to proceed this step, enter “8888888888” and press the <YES> key. (It takes a few minutes.)
To abort this step, press the <NO> or <ESC> key.

```
EURO Change over.

Done update EURO rate and sym-
bols.
Please check unit price and
fix totalizer euro-in-drawer
title character.
```

— Print completion message

Perform the same operation of all the terminals of the system.

3-4. System command execution

System command functions are provided to perform nonregistration operations, such as collection/consolidation system control, backup/restore operation of files in the terminals, and remote power on/off control.

3-4-1. X/Z reporting

X/Z command execution

1. Issuing flash report
X/Z mode → <X> or <X/FOR>, <XX>, <XXX>, <X/KETTEN>

2. Issuing other reports
X/Z mode → $D_7D_6D_5D_4D_3D_2D_1$ <#-1>

Meaning of the command data

Digit	Value	Meaning
D_7	0	No edition
	1	Editing by group
	2	Editing by department
	3	Editing by subdepartment
	4	Editing by order character
D_6	0	No extraction
	1	Inactive (Zero sales)
	4	Out of stock
D_5	0	No classification
	3	CLERK
	4	TOTAL ONLY (open check report / Employee activity)
D_4	0	Execution in X mode
	1	Execution in Z mode
D_3	0	Issuing daily area
	1	Issuing periodic 1 area
	2	Issuing periodic 2 area
	3	Issuing daily consolidation area
	4	Issuing periodic 1 consolidation area
	5	Issuing periodic 2 consolidation area
D_2D_1	00 ~ 09	Batch report 1 ~ 10
	11	Fixed totalizer
	12	Free function
	14	PLU
	64	PLU stock
	13	Subdepartment
	15	Department
	16	Group
	17	Clerk
	19	Time zone
	20	Monthly
	25	Open check
	28	Table analysis
	58	Electronic Journal
	22	Void reason
	81 ~ 88	Menu sheet 1 ~ 8
	71	Flash
	24	Hourly/Labor
	29	Employee or Employee activity
	31	Hourly item
	67	IDC (1) clear
	68	IDC (2) clear
	69	IDC (3) clear

3-4-2. X/Z collection / consolidation

X/Z collection / consolidation execution

Inline X/Z mode → $D_{14}D_{13}D_{12}D_{11}D_{10}D_9D_8D_7D_6D_5D_4D_3D_2D_1$ <#-2> → <ESC>

Meaning of the command data

Digit	Value	Meaning
D_{14}~D_{10}	11110	Collection
	11111	Consolidation
	11112	Collection and Consolidation
D_9D_8	00	Fixed
D_7	0	No edition
	1	Editing by group
	2	Editing by department
	3	Editing by subdepartment
	4	Editing by order character
D_6	0	No extraction
	1	Inactive (Zero sales)
	4	Out of stock
D_5	0	Always “0”
D_4	0	Execution in X mode
	1	Execution in Z mode
D_3	0	Issuing daily area
	1	Issuing periodic 1 area
	2	Issuing periodic 2 area
D_2D_1	00 ~ 09	Batch report 1 ~ 10
	11	Fixed totalizer
	12	Free function
	14	PLU
	64	PLU stock
	13	Subdepartment
	15	Department
	16	Group
	17	Clerk
	19	Time zone
	20	Monthly
	22	Void reason
	28	Table analysis
	58	Electronic Journal
	31	Hourly item

3-4-3. Remote power control

Remote power control execution

Manager mode → $D_4D_3D_2D_1$ <#-2>

Meaning of the command data

Digit	Value	Meaning
D_4D_3	00	All terminal
	01 ~ 32	Terminal ID of individual terminal
D_2D_1	10	Remote power on
	11	Remote power off

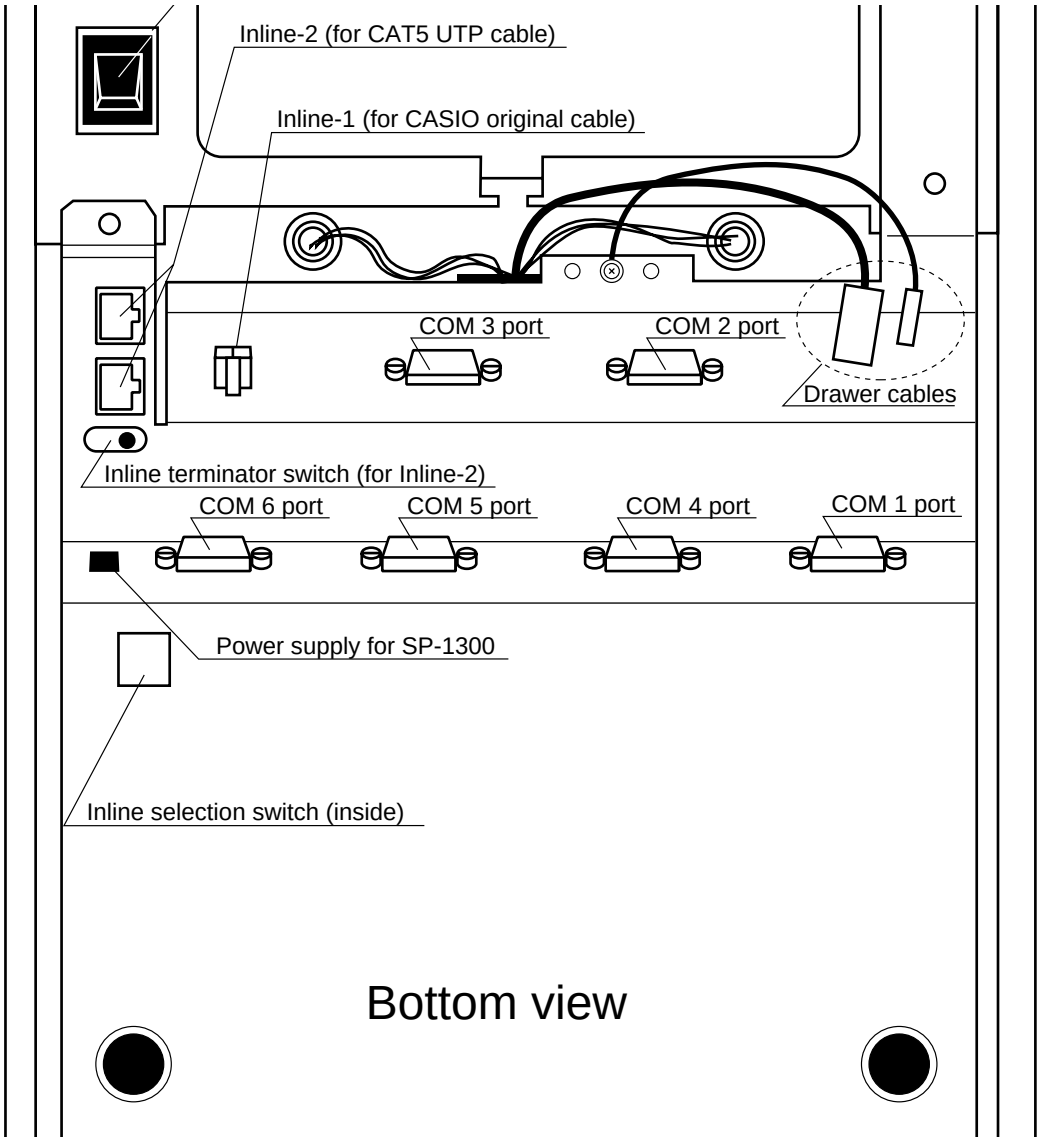
3-5. Data Communication System

The following details the inline and online data communication functions available with the QT-2100 system.

3-5-1. In/online connectors

With the QT-2100, there are the following in/online connectors in the bottom side and right side of the body.

Inline	(Standard)	INLINE-1 or INLINE-2
RS-232C COM1	(Standard)	For MODEM or PC direct connection
RS-232C COM2	(Standard)	For Hand held scanner (HHS-15) or Slip printer (SP-1300)
RS-232C COM3	(Standard)	For Remote customer display (QT-2163D)
RS-232C COM4 ~ 6	(Standard)	For printer (UP-350/SA-3015/UP-250)) or Slip printer (SP-1300)



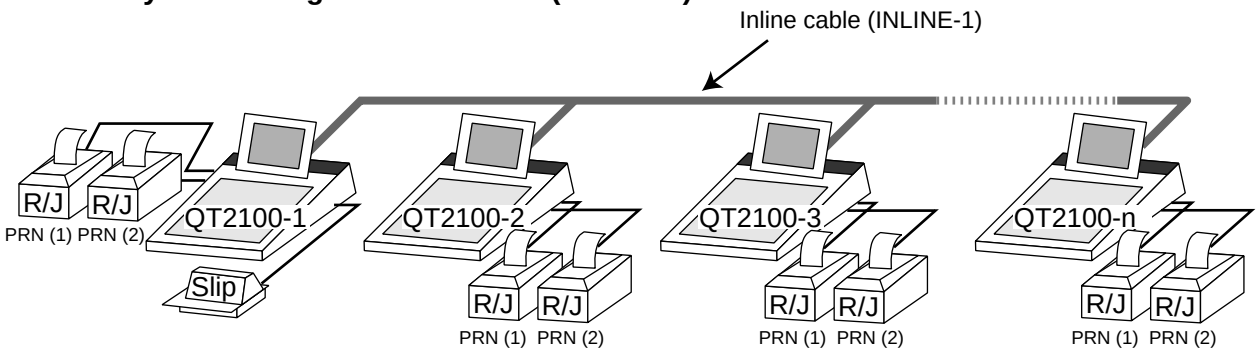
3-5-2. Hardware interface

With the QT-2100, there are the following in/online connectors in the bottom side of the body.

3-5-2-1. Inline interface

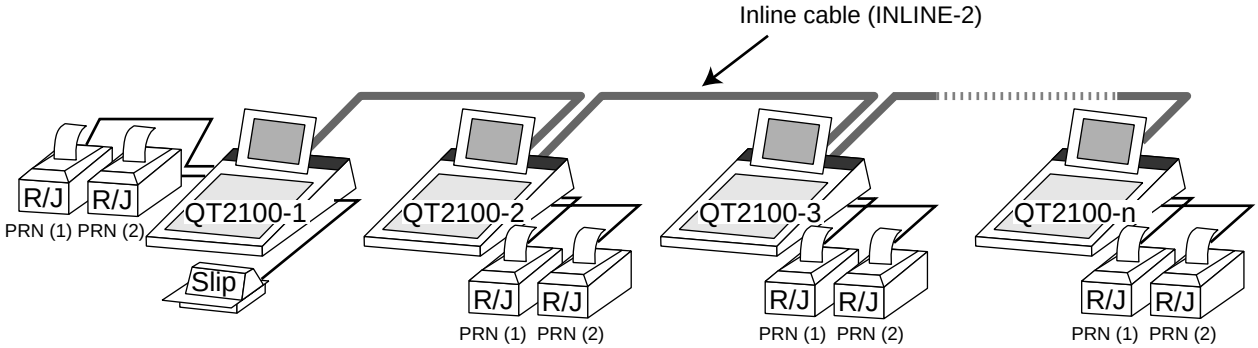
The maximum inline cable length and the maximum connection unit will be varied by the inline communication speed as shown below list.

By CASIO original inline cable (INLINE-1)



Inline communication speed (bps)	Maximum connection units (terminals)	Maximum cable length (m)
312 k bps	20	430
156 k bps	32	890

By CAT5 cable (INLINE-2)



Inline communication speed (bps)	Maximum connection units (terminals)	Maximum cable length (m)
312 k bps	32	230
312 k bps	8	420
312 k bps	4	450

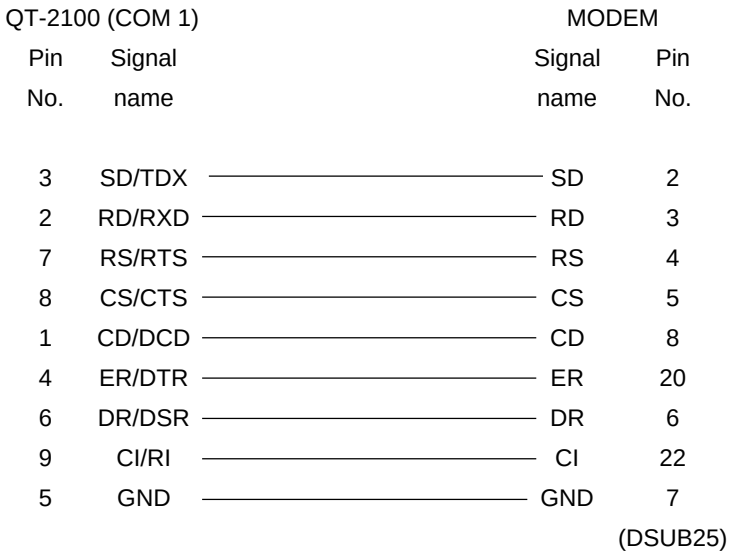
3-5-2-2. Online interface

Only the RS-232C COM 1 port can be connected with a modem or personal computer.

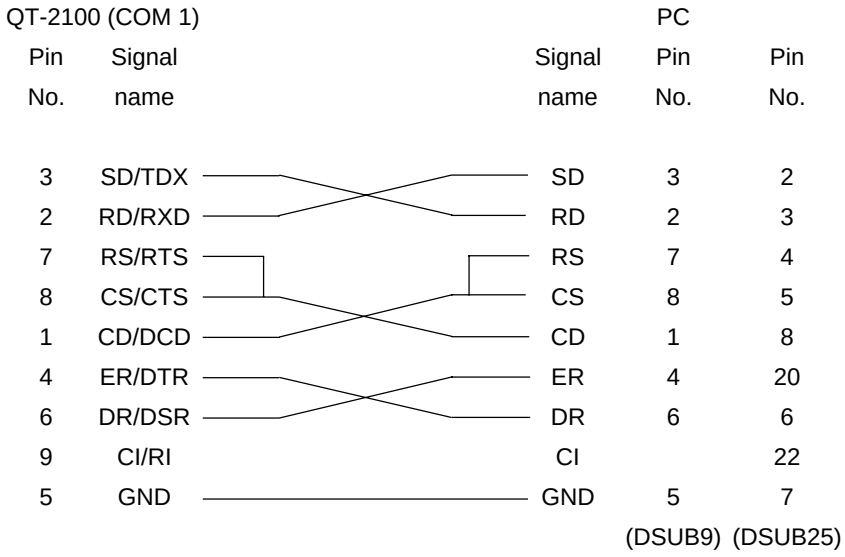
1) Specification of RS-232C COM 1 port

Communication method:	Half duplex communication
Configuration of connection:	Point-to point
Line type:	Public lines/exclusive lines
Starting method:	Center (host computer) based start up
Protocol:	Async.
Communication speed:	2400/4800/9600/19200/38400/57600/115200 bps
Error control:	CRC-128 or CRC-1024
Text length:	128 or 1024 bytes

2) The cable diagram between QT-2100 and MODEM



3) The cable diagram between QT-2100 and PC



3-5-3. In/Online functions

3-5-3-1. Inline functions

The list below shows the main functions available with the QT-2100 system. Power on/off is automatically performed for terminals whose mode is in the OFF mode when those functions are performed.

1) X/Z data collection for each terminal
2) X/Z data consolidation for each terminal
3) X/Z data collection/consolidation for each terminal
4) Program data copy and upload between terminals (auto-program function)

Functions 1), 2) and 3) can only be performed from a terminal that is programmed as master in which consolidation files are allocated.

3-5-3-2. Online functions

The QT-2100 can be controlled from the personal computer by connecting it to RS-232C port 1 (COM1).
Power on/off is automatically performed for terminals whose mode is in the OFF mode when those functions are performed.

3-6. Collection/Consolidation system

This section provides the general description of the data collection/consolidation system of the QT-2100. The collection/consolidation system is managed by the master/satellite system using inline network. Installation of any special hardware devices is not required for collection/consolidation as inline interfaces are standard feature. Communication is possible with the connection of inline cable.
In this section, the term “master” means a terminal which collects or consolidates data registered on each terminal (called “satellite”) connected the inline.
The differences between collection and consolidation are as follows.

– Collection

Outputs the data of the master and individual satellite terminals from the master terminal. If the master's receipt/journal printer is specified as a report printer, the data is printed out by each specified terminal. The total values for the data of each terminal are not output.

– Consolidation

Totals data from the master and satellites, and then output it to a specific device. Output for individual terminals is not performed when consolidation is specified.

Types of totalizer files

There are following seven types of totalizer files:

– Daily total files

Daily total files accumulate registered data.

– Periodic total 1 files

These files accumulate registered data at the point of sale or at the reset point of the daily files, and can be reset separately from the daily total files. Therefore, the total data within specific period can be accessed by using these files.

– Periodic total 2 files

These files have same functions as the periodic total 1 files, but can reset separately for getting the different periodic total data within different period.

– Daily consolidation files

These are files to consolidate the daily data.

– Periodic total 1 consolidation files

These are files to consolidate the periodic 1 data.

– Periodic total 2 consolidation files

These are files to consolidate the periodic 2 data.

– Consolidation work files

These files are work files to collect or consolidate the data of daily total, periodic total 1 or periodic total 2 files.

The daily consolidation files, periodic total 1 consolidation files, periodic total 2 consolidation files and consolidation work files must be reserved as work files at the master terminal during collection/consolidation operations.

NOTE:

Only a file with the same number of records as the records of corresponding files need to be reserved. For example, if the number of department is 50, then the same number, 50 records, should be reserved for department of other types.

File description and number list

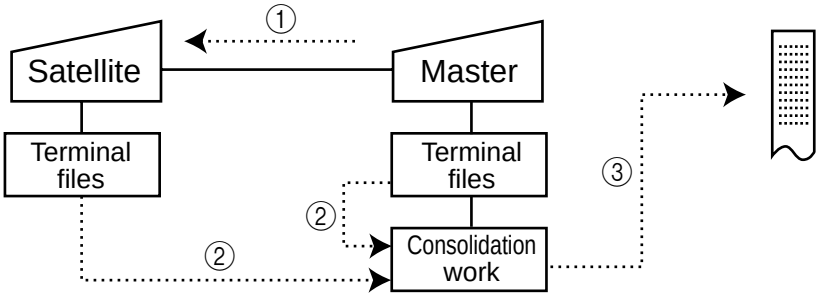
File description	Terminal files			Consolidation files			Consolidation work
	Daily total	Periodic 1 total	Periodic 2 total	Daily consolidation	Periodic 1 consolidation	Periodic 2 consolidation	
Fixed totalizer	001	101	201	301	401	501	601
Transaction key	002	102	202	302	402	502	602
Subdepartment	003	103	203	303	403	503	603
PLU	004	104	204	304	404	504	604
Department	005	105	205	305	405	505	605
Group	006	106	206	306	406	506	606
Clerk detail	011	111	211	311	411	511	611
Hourly sales	009	109	209	309	409	509	609
Monthly sales	010	110	210	310	410	510	610
Void table	012	112	212	312	412	512	612
Table analysis	018	118	218	318	418	518	618
Grand total	020	120	220	320	420	520	620
Hourly item	021	121	221	321	421	521	621
Hourly labor	014	114	214	314	414	514	614

3-6-1. X/Z collection

This is used when it is desirable to obtain the counters and totals of the individual terminals. For collection results (normal end or error end), the satellite does not print it out on the receipt/journal during X collection. But the results of the Z collection are printed out in the journal during Z collection.
The printer should be connected to the collection master terminal.

3-6-1-1. X collection processing

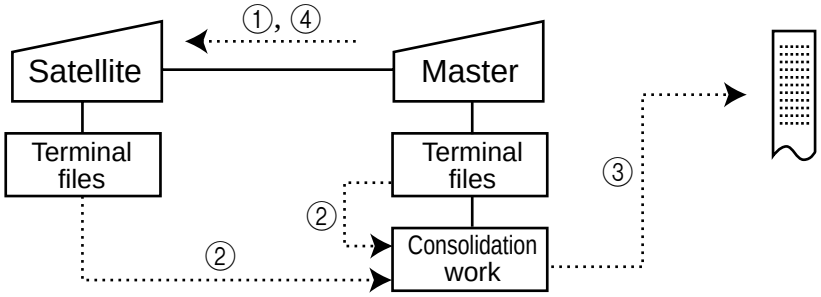
X collection processing is performed as the figure shown below.
① An X collection command is started up from the master terminal.



② The terminals send their report data to the consolidation work file of the master.
③ Report data from the satellite's terminal file are printed out on the master's R/J printer.
④ After the master terminal's processing completes, the same processes described in the item ① to ③ are executed for the other terminals. Data will be sent without the clerk noticing, even when the satellite in the process of registering.

3-6-1-2. Z collection processing

Z collection processing is performed as the figure shown below.

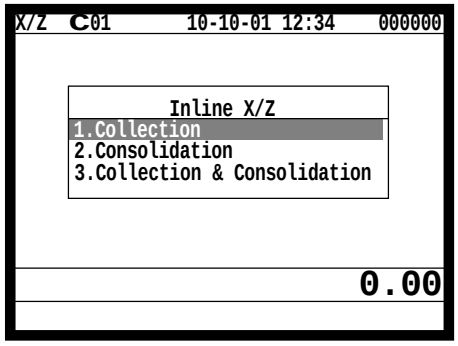


① When a Z collection command is started up from the master terminal, the master first locks an objected terminal.
② The terminals send their report data to the consolidation work file of the master terminal.
③ Report data from the satellite's terminal file are printed out on the master's R/J printer.
④ The data of satellite's terminal file are cleared, and then the Z lock of the satellite terminal is released.
⑤ After the master terminal's processing completes, the same processes described in the item ① to ④ are executed for the other terminal.

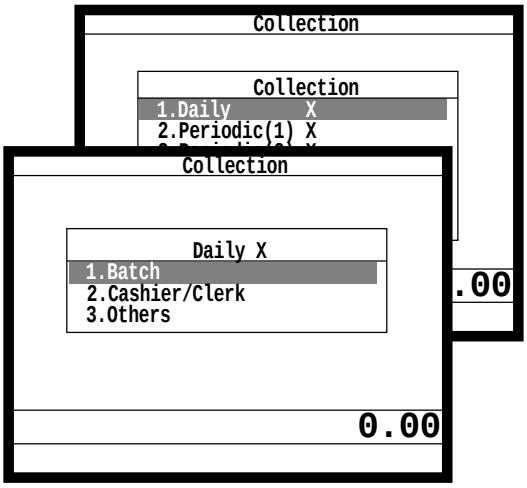
NOTE:

- When a Z collection is performed, the consolidation data cannot be output. If output of consolidation data is desired, perform “collection/consolidation” processing described later.
- Even if an error is occurred, or if the processing is terminated, the data to be collected remains as they are, and Z lock statuses are automatically released.

3-6-1-3. X/Z collection command execution

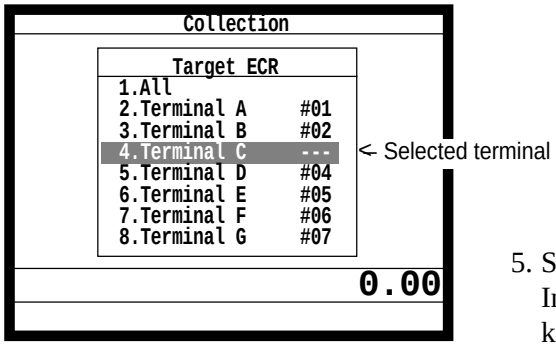


1. Sign on a clerk (if necessary).
2. Press <X/Z MODE> repeatedly to assign Inline X/Z.

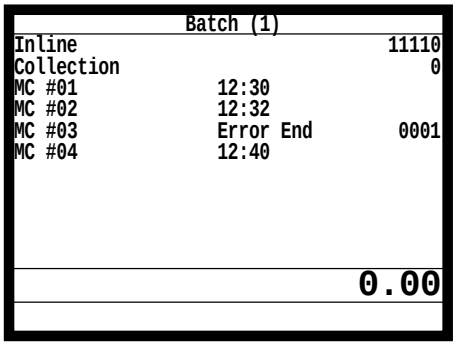


3. Select “1. Collection” and press the <YES> key.

4. Select the types and kinds you want to collect.
   (Please refer to the X/Z report chapter about the report types and kinds.)



5. Select the target terminal(s).
   In case of selecting individual terminal(s), press the <ESC> key when you finish to designate terminal(s).



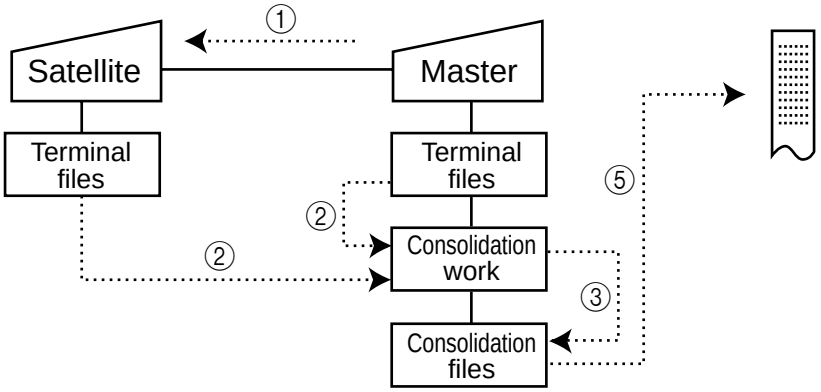
6. Press the <ESC> key twice to terminate this process.

3-6-2. X/Z consolidation

This is used when it is desirable to obtain the counters and totals of all terminals in the store. After consolidating data from all specified terminals, the master prints the details on the receipt/journal printer.
Regardless of whether they are in the process of registration, the satellite terminals send data and do not print out the reports, when X consolidation is performed. But, during the Z consolidation, satellites are locked from registrations.

3-6-2-1. X consolidation processing

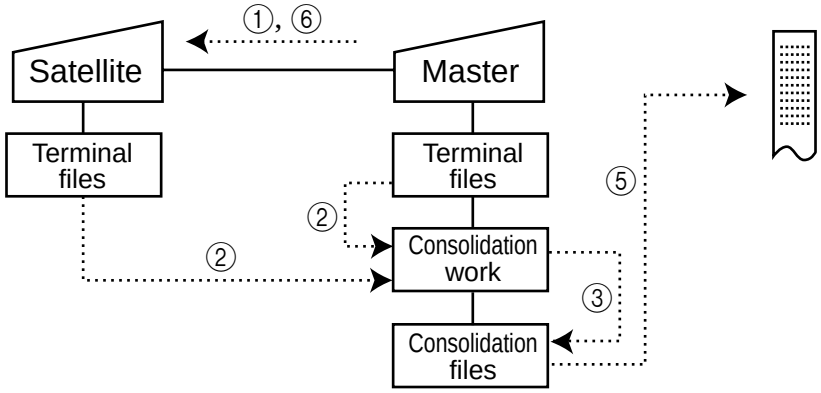
X consolidation processing is performed as the figure shown below.



① An X consolidation command is started up from the master terminal.
② Data of the satellite's terminal file are sent to the master terminal, and are copied to the consolidation work file.
③ The data in the consolidation work file is added to the consolidation file.
④ The same process described in item ① to ③ is executed for other terminal.
⑤ After the above collection processing is completed for all terminals, the data accumulated in the consolidation work file are reported on the master's R/J printer.

3-6-2-2. Z consolidation processing

Z consolidation processing is performed as the figure shown below.

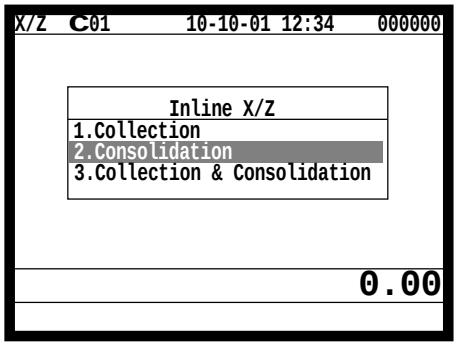


① A Z consolidation command is started up from the master terminal.
The master first locks an objected terminal.
② Data of the satellite's terminal files are sent to the master terminal, and are copied to the consolidation work file.
③ The data in the consolidation work file is added to the consolidation file.
④ After the master terminal's processing completes, the same processes described in item ① to ③ are executed for all other terminal.
⑤ The data accumulated in the consolidation file are reported on the master's R/J printer.
⑥ After the above collection processing completes for all terminals, the files of all satellite terminals are cleared, and then satellite's Z lock statuses are released.

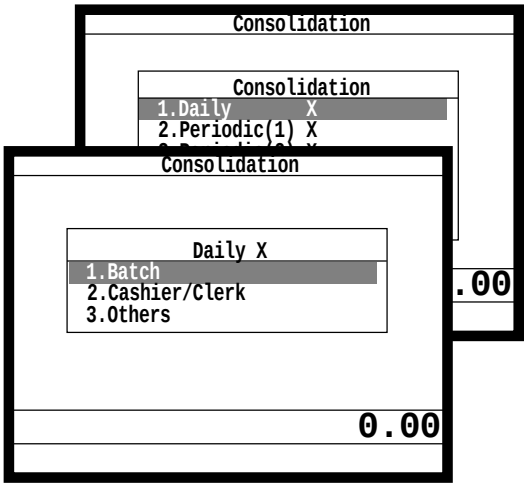
NOTE:

- Even if an error is occurred, or if the processing is terminated, the data to be collected remains as they are, and Z lock statuses are automatically released. Therefore, retrying the same operation can be performed.

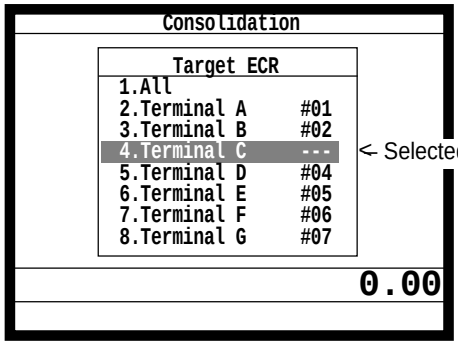
3-6-2-3. X/Z consolidation command execution



1. Sign on a clerk (if necessary).
2. Press <X/Z MODE> repeatedly to assign Inline X/Z.
3. Select “2. Consolidation” and press the <YES> key.

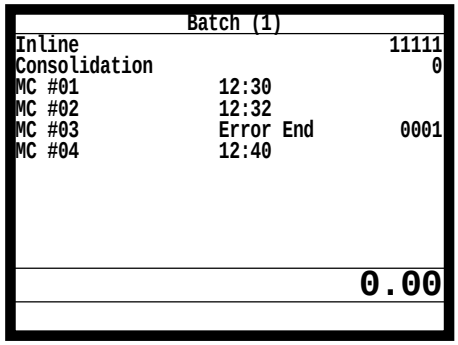


4. Select the types and kinds you want to collect.
   (Please refer to the X/Z report chapter about the report types and kinds.)



← Selected terminal

5. Select the target terminal.
   In case of selecting individual terminal(s), press the <ESC> key when you finish to designate terminal(s).



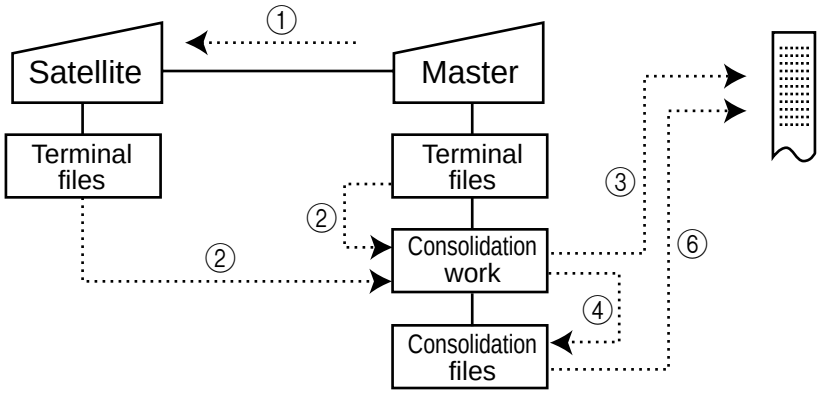
6. Press the <ESC> key twice to terminate this process.

3-6-3. X/Z collection/consolidation

This is used when it is desirable to obtain the counters and totals of the individual terminals (collection) and of all terminals in the store (consolidation) by one procedure. After printing reports of all specified terminals on the master's receipt/journal printer, the master prints the consolidation report. Regardless whether they are in the process of registration, the satellite terminals are send data and do not print out the reports, when X collection/ consolidation is performed. But, during the Z collection/consolidation, satellites are locked from registrations.
After consolidating data from all specified terminals, the master prints the details on the receipt/journal printer.

3-6-2-1. X collection/consolidation processing

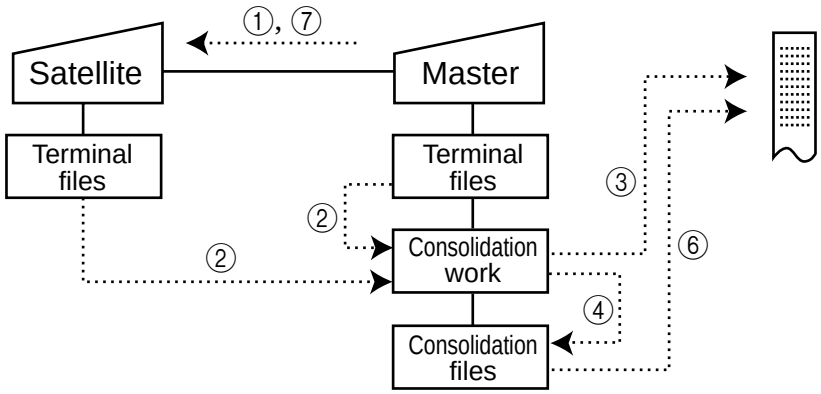
X collection/consolidation processing is performed as the figure shown below.



① An X collection/consolidation command is started up from the master terminal.
② Data of the satellite's terminal file are sent to the master terminal, and are copied to the consolidation work file.
③ The data in the consolidation work file is reported on the master's R/J printer.
④ The data in the consolidation work file is added to the consolidation file.
⑤ The same process described in item ① to ④ is executed for other terminal.
⑥ After the above collection processing is completed for all terminals, the data accumulated in the consolidation file are reported on the master's R/J printer.

3-6-3-2. Z collection/consolidation processing

Z collection/consolidation processing is performed as the figure shown below.



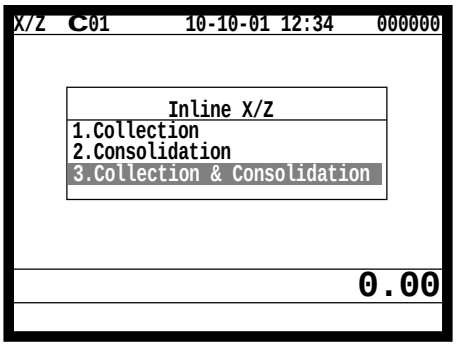
① A Z collection/consolidation command is started up from the master terminal. The master first locks an objected terminal.
② Data of the satellite's terminal file are sent to the master terminal, and are copied to the consolidation work file.
③ The data in the consolidation work file are reported on the master's R/J printer.
④ The data in the consolidation work file is added to the consolidation file.
⑤ After the master terminal's processing completes, the same processes described in item ① to ④ are executed for all other terminal.
⑥ The data accumulated in the consolidation file are reported on the master's R/J printer.
⑦ After the above collection processing completes for all terminals, the files of all satellite terminals are cleared, and then satellite's Z lock statuses are released.

NOTE:

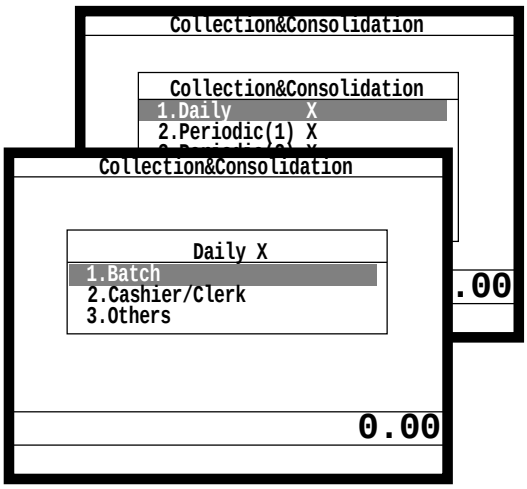
- Even if an error is occurred, or if the processing is terminated, the data to be collected remains as they are, and Z lock statuses are automatically released. Therefore, retrying the same operation can be performed.

3-6-2-3. X/Z collection/consolidation command execution

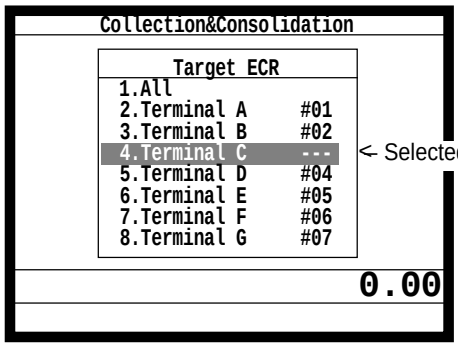
1. Sign on a clerk (if necessary).
2. Press the <X/Z MODE> key repeatedly to assign Inline X/Z.



3. Select "3. Collection & Consolidation" and press the <YES> key.

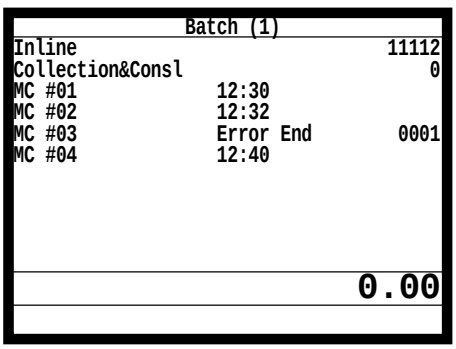


4. Select the types and kinds you want to collect.
(Please refer to the X/Z report chapter about the report types and kinds.)



← Selected terminal

5. Select the target terminal.
In case of selecting individual terminal(s), press the <ESC> key when you finish to designate terminal(s).



6. Press the <ESC> key twice to terminate this process.

3-7. Auto-programming function

Using the auto programming function makes it possible to save and load the terminal program files. Methods available for saving the terminal program are as follows:

1) Saving another terminal connected through inline.
2) Saving onto a personal computer connected through online.
3) Saving onto a CF card inserted in the CF card slot.

To ensure quick recovery from a corrupted file resulting from user error or system failure, it is recommended that you maintain back up copies of current terminal programs on a file basis.
Terminal program files can be loaded using procedures opposite to those used for saving.

Note:

Data except for program data, such as data in totalizers, counters, and work area, cannot be saved by the auto programming function. (except for copying all terminal files)

Caution:

Do not remove or insert a CF card during sending/receiving data from/to it.

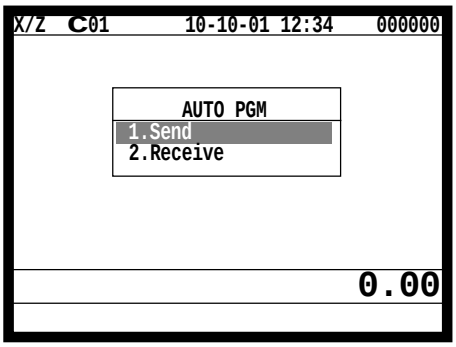
3-7-1. Auto programming functions

The QT-2100 terminal is capable of saving and loading terminal program files. The terminal program file has the following transfer functions:

1) Copy all terminal files (send/receive)
   (send: activation by source terminal/receive: activation by target terminal)
   This function copies all terminal files (except system work files and terminal ID) with counters and totalizers. When a file is not reserved on the target terminal, that file is created automatically.
2) Copy all terminal program files (send/receive)
   This function copies all terminal files (except system work files and terminal ID) without counters and totalizers. When a file is not reserved on the target terminal, the processing for that file is skipped.
3) Copy individual terminal program files (send/receive)
   This function copies the specific terminal program file (except system work files) without counters and totalizers.
4) Copy unit price field of particular files (send/receive)
   This function copies the unit price field of specific files (i.e. PLU, PLU 2nd@).
5) Copy application programs to flash memory: (IPL by wire)
   This function copies the application programs to flash memory.
   Even by using this function, you cannot made the CF card for IPL.
   Note: The target terminal should be in the IPL mode. (refer to page 95 of this manual)

3-7-2. Auto program operation and CF card utilities

The procedures of auto program function



1. Sign on a clerk (if necessary)
2. Press the <X/Z Mode> key repeatedly to assign "AUTO PGM."

3. Select the appropriate menu you want by following the guidance. The hierarchy of the AUTO PGM menus are described below.

Auto-program menu hierarchy

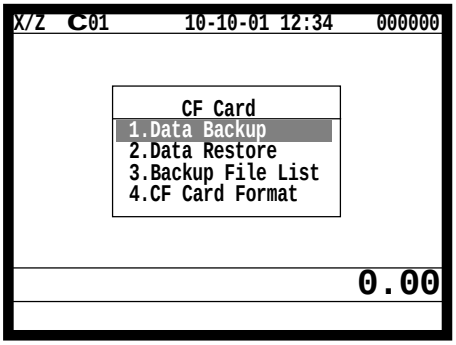
Send

- **Copy All**
  - All Data
  - All PGM
- **Unit Price only**
  - PLU
  - PLU 2nd@
- **Range**
  - PLU
  - PLU 2nd@
- **Individual Files**
  - Fixed Totalizer
  - Free Function
  - Sub Department
  - PLU
  - Department
  - Group Character
  - Cashier / Clerk
  - Void
  - Scanning PLU link
  - Table Analysis
  - GT Character
  - General Feature
  - Special Character
  - Report Header
  - Tax Table
  - Pulldown Group
  - Set Menu Table
  - Clerk key ID
  - Batch X / Z
  - Clerk Detail
  - Receipt / SLIP Msg
  - Endorse Message
  - ARG GP1
  - ARG GP2
  - ARG GP3
  - ARG GP4
  - ARG GP5
  - Text Recall
  - Check Print
  - Graphic Logo
  - PLU 2nd@
  - Shift PLU
  - Scheduler
  - Order Char Link
  - Keyboard
  - System Connection
  - I / O Parameter
  - Printer Connection
  - Hourly/Item Link
  - Time Zone
  - Employee
  - Job Code
  - Schedule
  - IDC Link
  - Euro (Sub Curr)
  - Auto Pgm control
- **IPL**

Receive

- **Copy All**
  - All Data
  - All PGM
- **Unit Price only**
  - PLU
  - PLU 2nd@
- **Individual Files**
  - Fixed Totalizer
  - Free Function
  - Sub Department
  - PLU
  - Department
  - Group Character
  - Cashier / Clerk
  - Void
  - Scanning PLU link
  - Table Analysis
  - GT Character
  - General Feature
  - Special Character
  - Report Header
  - Tax Table
  - Pulldown Group
  - Set Menu Table
  - Clerk key ID
  - Batch X / Z
  - Clerk Detail
  - Receipt / SLIP Msg
  - Endorse Message
  - ARG GP1
  - ARG GP2
  - ARG GP3
  - ARG GP4
  - ARG GP5
  - Text Recall
  - Check Print
  - Graphic Logo
  - PLU 2nd@
  - Shift PLU
  - Scheduler
  - Order Char Link
  - Keyboard
  - System Connection
  - I / O Parameter
  - Printer Connection
  - Hourly/Item Link
  - Time Zone
  - Employee
  - Job Code
  - Schedule
  - IDC Link
  - Euro (Sub Curr)
  - Auto Pgm control

The procedure of Data Backup to the CF card



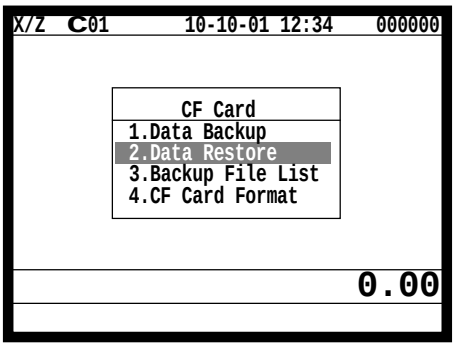
1. Sign on a clerk (if necessary)
2. Press the <X/Z Mode> key repeatedly to assign “CF card.”

3. Select the appropriate menu you want by following the guidance. Insert the CF card to the slot securely.
   The hierarchy of the Data Backup is described below.

Data Backup menu hierarchy

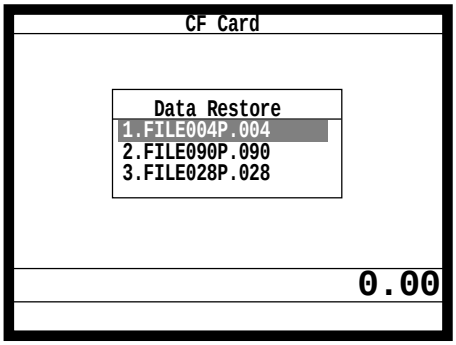
- **Backup**
  - **Copy All**
    - All Data
    - All PGM
  - **Individual Files**
    - Fixed Totalizer
    - Free Function
    - Sub Department
    - PLU
    - Department
    - Group Character
    - Cashier / Clerk
    - Void
    - Scanning PLU link
    - Table Analysis
    - GT Character
    - General Feature
    - Special Character
    - Report Header
    - Tax Table
    - Pulldown Group
    - Set Menu Table
    - Clerk Key ID
    - Batch X / Z
    - Clerk Detail
    - Receipt / SLIP Msg
    - Endorse Message
    - ARG GP1
    - ARG GP2
    - ARG GP3
    - ARG GP4
    - ARG GP5
    - Text Recall
    - Check Print
    - Graphic Logo
    - PLU 2nd@
    - Shift PLU
    - Scheduler
    - Order Char Link
    - Keyboard
    - System Connection
    - I / O Parameter
    - Printer Connection
    - Hourly/tem Link
    - Time Zone
    - Employee
    - Job Code
    - Schedule
    - IDC Link
    - Euro (Sub Curr)
    - Auto Pgm control

The procedure of Data Restore from the CF card



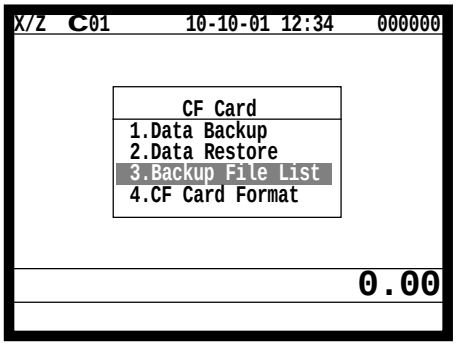
1. Sign on a clerk (if necessary)
2. Press the <X/Z Mode> key repeatedly to assign “CF card.”

3. Insert the CF card to the slot securely.
   Select “2. Data Restore” and press the <YES> key.



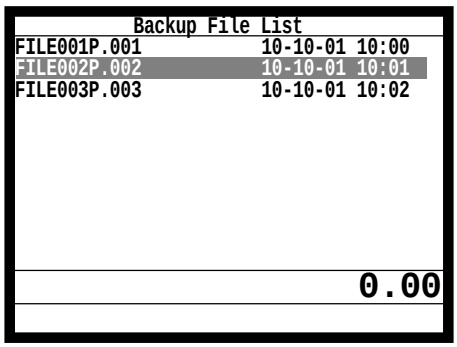
4. Select the appropriate file you want to restore.

The procedures of taking the file list of the CF card and deleting the file



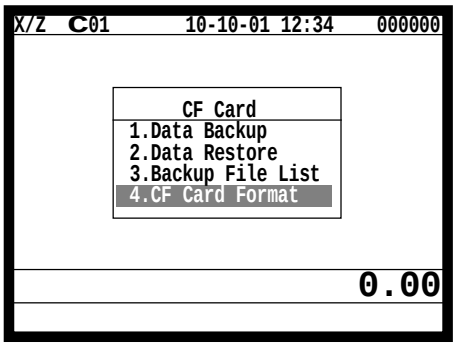
1. Sign on a clerk (if necessary)
2. Press the <X/Z Mode> key repeatedly to assign “CF card.”

3. Insert the CF card to the slot securely.
   Select “3. Backup File List” and press the <YES> key.



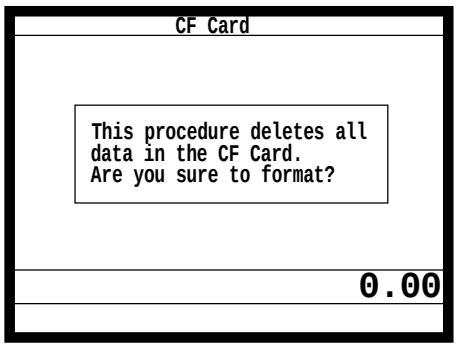
4. In case of deleting a file, select the appropriate file and press the <YES> key.

The procedures of formatting the CF card



1. Sign on a clerk (if necessary)
2. Press the <X/Z Mode> key repeatedly to assign “CF card.”

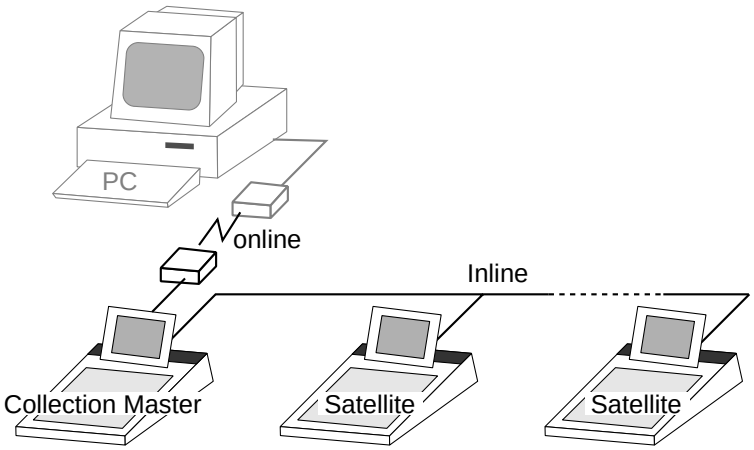
3. Insert the CF card to the slot securely.
   Select “4. CF Card Format” and press the <YES> key.



4. Press the <YES> key to continue formatting, <NO> means abortion.

3-8. Collecting Electronic journal data

It is possible to do collection of electronic journal through inline system.
Refer to the terminal structure as below.



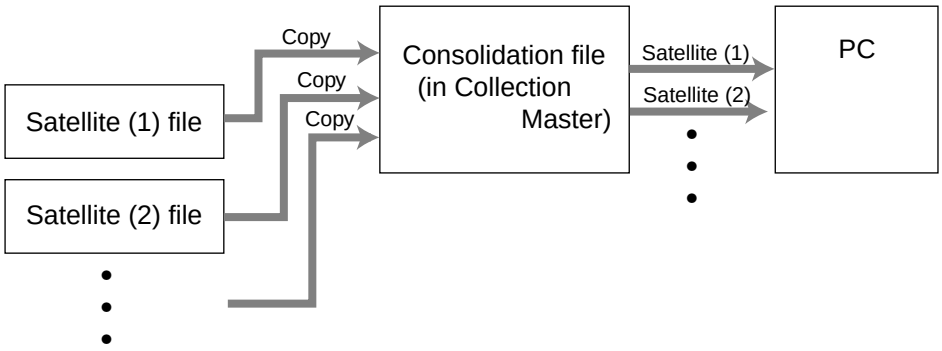
Flow of the file collection

PC sends Z-lock command by using job command to collection master.

1. PC enables to check the Z-lock confirmation.
2. PC sends the collection command by using job command to collect E-journal files from one satellite terminal.
3. Collection master receives the E-journal data from one satellite.
   PC enables to check whether the collection master has finished the job.
4. PC sends the Z-command or X-command to the collection master.
5. PC receives the collection data from consolidation file. If the Z-command has issued at step 4, consolidation file in the collection master are all reset.
6. Back to step 2 until all designated terminals are collected.

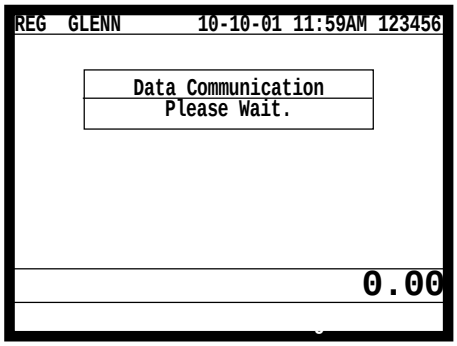
Data transferring flow

E-journal data in each terminal is copied to the consolidation file individually.



Notes:

- Just after the receiving is over, the data is remained in the consolidation file. To clear this data, send the Z-command or the file clear command to the collection master from the PC.
- In case of collection Z, the electronic journal file in the satellite terminals are cleared.



1. Z-lock window appears on the screen if Z-lock command is issued.

4. Registrations

This section describes characteristic registrations of the QT-2100.

4-1. Clerk sign on/off operation

The following examples illustrate the clerk sign on/off operation.

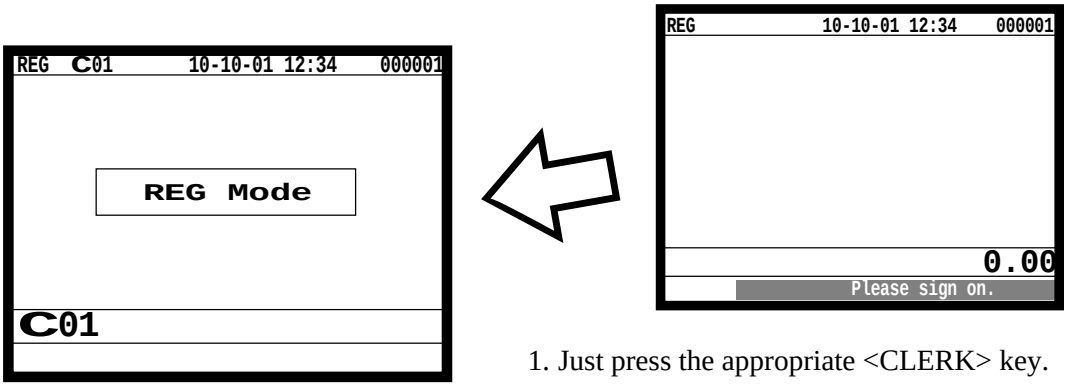
- When a clerk (Dallas) key is used, sign on operation can be performed by touching the clerk key receiver by the appropriate clerk (Dallas) key.

Note: After inititalization, clerk key ID should be set.

- When a clerk ID number is programmed for the clerk key, sign on operation can be performed by merely pressing the clerk key.

It is the same procedure that even clerks are assigned as “clerk”, “cashier” or “manager.”

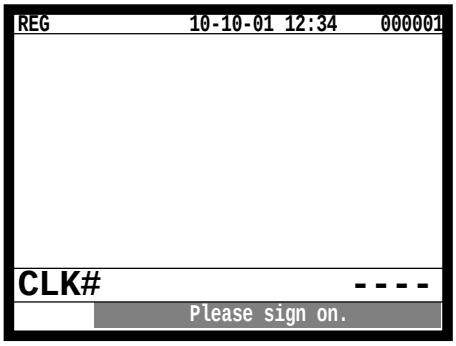
1) Clerk sign on operation (Clerk key has the clerk number setting.)



1. Just press the appropriate <CLERK> key.

2) Clerk sign on operation (Clerk key has no clerk number setting.)

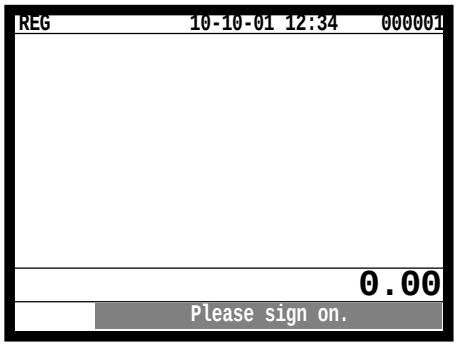
In case of the store has many clerks to control, you need not allocate all clerk keys on the keyboard but allocate a few clerk key and program no clerk number one of the clerk key.



1. Press the <CLERK> key, if you want to display no clerk number entries.

2. Enter the appropriate clerk number and press the <CLERK> key.

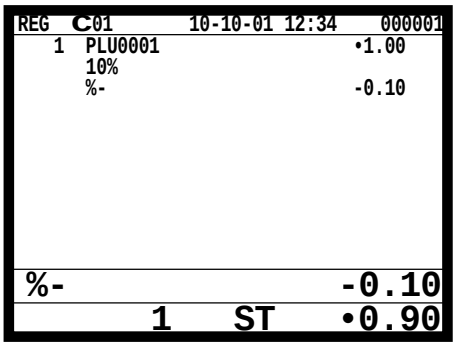
3) Clerk sign off operation



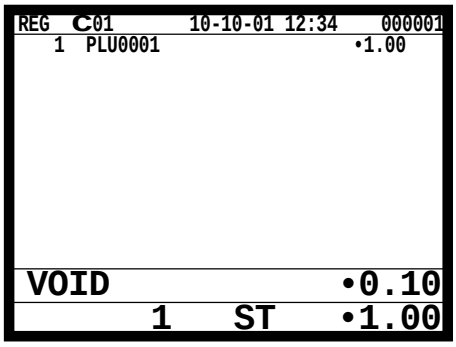
1. Enter “0” and press the <CLERK> key.

4-2. Voiding the last registered item (<VOID> key operation)

Use the <VOID> key to cancel a data that has just been registered using a function key. The <VOID> key can be used to cancel data registered using departments, subdepartments, PLUs, partial tenders, or the <PRICE>, <+>, <–>, <%+>, <%–>, <LOAN> or <PICKUP> key. You can only use the <VOID> key to cancel a registration if you have not yet started registration of the next item.



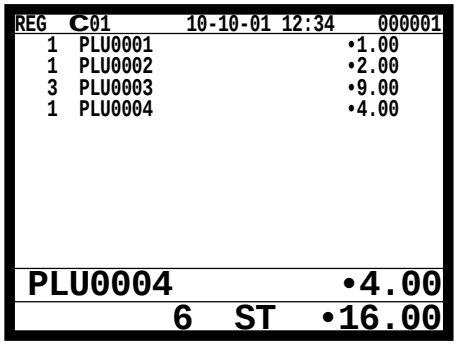
1. Wrong registration is made.



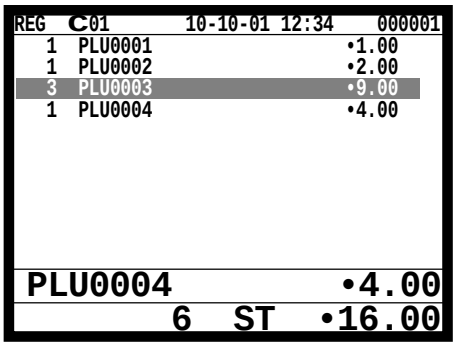
2. Press the <VOID> key to cancel the data and reregister the transaction.

4-3. Voiding the previous registered item (<VOID> key operation)

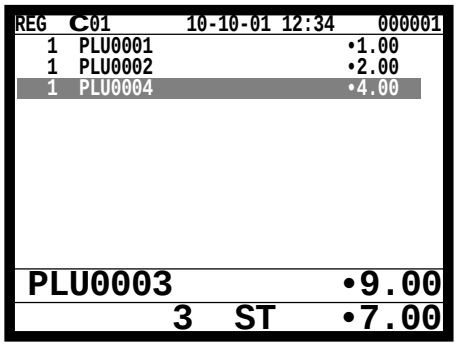
If data has been registered using a function key and registration of the next item has begun, use the <VOID> key to cancel previous registered data. Entries using departments, subdepartments or PLUs can be cancelled using the <VOID> key.



1. Wrong registration is made.



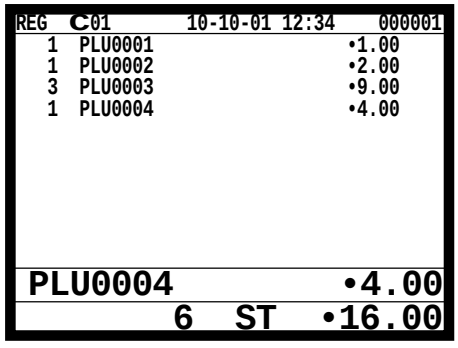
2. Press the upper/lower arrow key to designate the item registration.



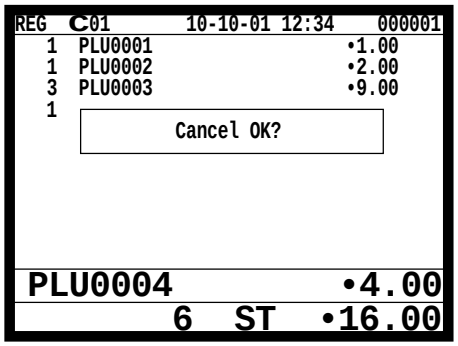
3. Press the <VOID> key to cancel the item and reregister the transaction.

4-4. Cancelling of all data registered during the transaction

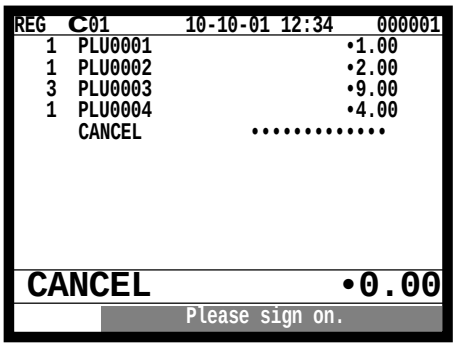
Press the <CANCEL> key to cancel all data registered (except partial tendering) during the transaction. This operation lets you clear registered data and restart from the beginning. The cancel operation must be performed before the transaction is finalized.



1. Wrong registration is made.



2. Press the <CANCEL> key.



3. Press the <YES> key to cancel the transaction.

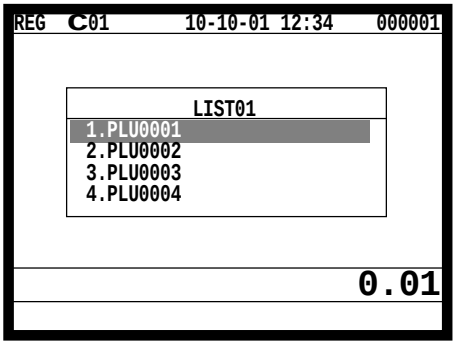
4-5. Using the LIST function

<List> or No. <List-#>
↓
PLU 1 ← Select one of these.
PLU 2 ←
PLU 3 ←

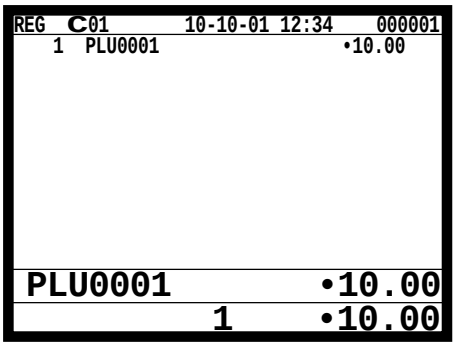
Before using the LIST function, the following programs are necessary to use this function.

1) Allocating the <LIST> key or the <LIST-#> key (page 24 of the Programming manual)
In case of using the <LIST> key, <LIST> key(s) should be allocated on the keyboard before step 2.
2) Programming pulldown group (page 34 of the Programming manual)
3) Programming item price (page 159 of the Programming manual)

Normal registration by using the <LIST> and <LIST-#> key

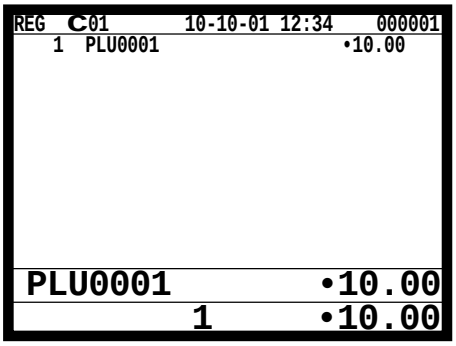


1. Press the <LIST> key or enter the list No. and press the <LIST-#> key.



2. Select the appropriate item and press the <YES> key.

Direct selection by using the <LIST> key



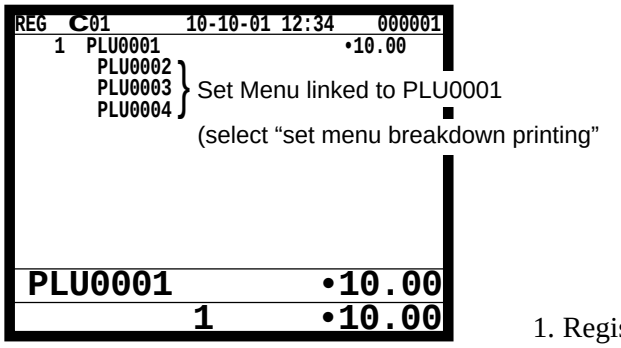
1. Press the appropriate record number and press the <LIST> key brings direct selection of the item.

4-6. Using the Set Menu function and Pulldown group function

4-6-1. Using the Set Menu function

Before using the set menu function, the following programs are necessary to use this function.

1) Programming set menu table (page 36 of the Programming manual)
2) Programming PLU "Set menu table linking" (page 108 of the Programming manual)
3) Programming item prices (page 159 of the Programming manual)



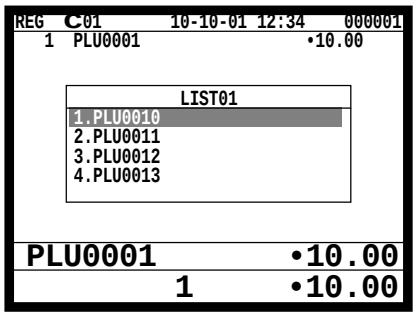
1. Registering a PLU linked to a set menu.

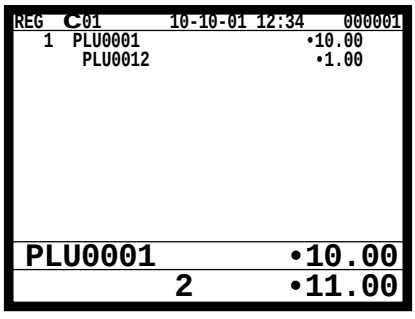
4-6-2. Using the Pulldown group function

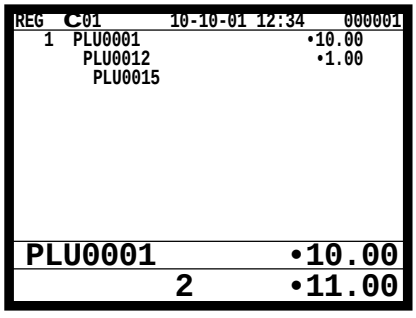
PLU (Parent) registration
↓
Child PLU 1 ← Select one of these.
Child PLU 2 ←
Child PLU 3 ←

Before using the pulldown group function, the following programs are necessary to use this function.

1) Programming pulldown group table (page 34 of the Programming manual)
2) Programming PLU "List Link No." (page 108 of the Programming manual)
3) Programming item prices (page 159 of the Programming manual)





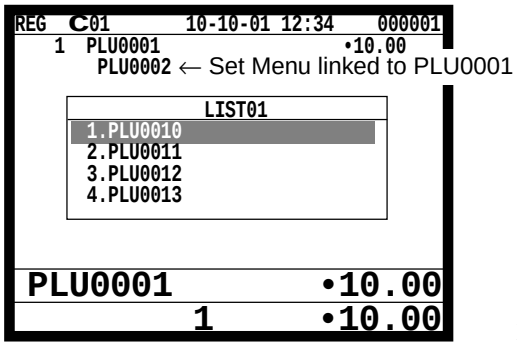


1. Register the parent (main) PLU. The list linked appears.
2. Select the appropriate (child/grandchild) PLU and press the <YES> key.

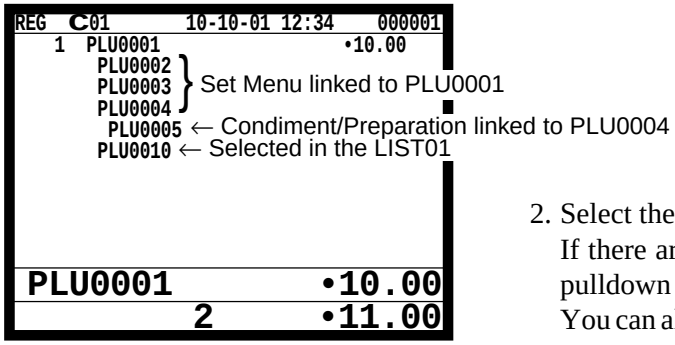
4-6-3. Using the Set menu and Pulldown group function

Before using the set menu and pulldown group function, the following programs are necessary to use this function.

1) Programming set menu table (page 36 of the Programming manual)
2) Programming pulldown group table (page 34 of the Programming manual)
3) Allocate the pulldown menu key, if you want to use. (page 24 of the Programming manual)
4) Programming PLU "Set menu table linking" and "List Link No." (page 108 of the Programming manual)
5) Programming item prices (page 159 of the Programming manual)



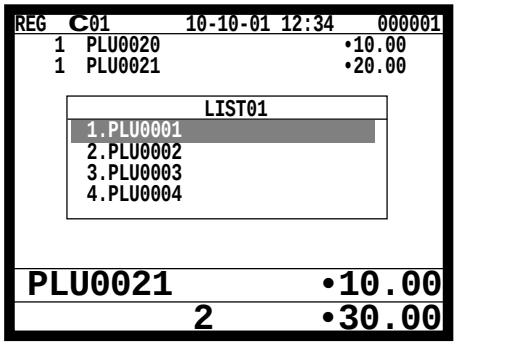
1.Registering a PLU linked to a set menu and pulldown group.



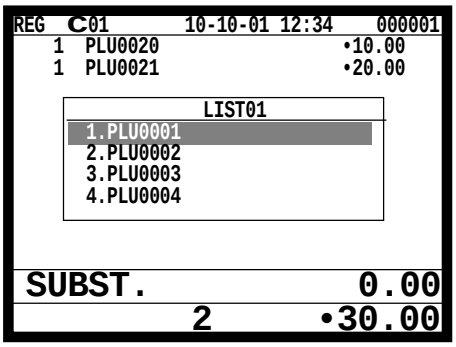
2. Select the appropriate item and press the <YES> key.
   If there are more pulldown groups linked to the PLU, next pulldown group or a PLU appears on the screen.
   You can also select items directly by using the pulldown key.

4-6-4. Using the Substitution key

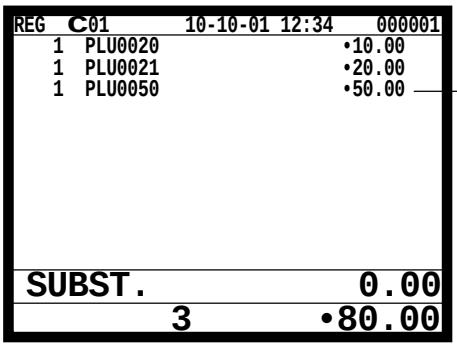
Normally, you can select item(s) in a pulldown group. If the customer requires to take an item from another set menu/pulldown group, the <SUBSTITUTION> key should be used.



1. A PLU linked to a pulldown group is registered, but no items in the list cannot be selected.



2. Press the <SUBSTITUTION> key.

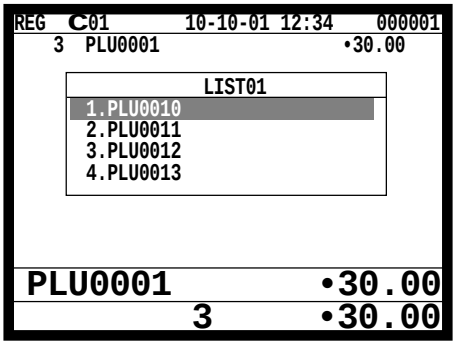


3. Register the appropriate item.

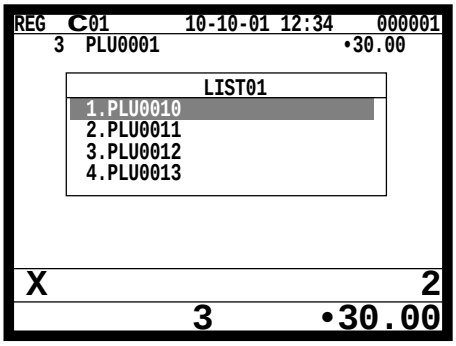
4-6-5. Inner multiplication

Normally, the quantity of list linked PLU or set menu child PLU follows the same quantity as main PLU. But it is possible to register a different number of list linked PLU or child PLU from the number of main PLU.
Before using the inner multiplication, the following program is necessary in addition to the Pulldown Group or Set Menu Table to use this function.

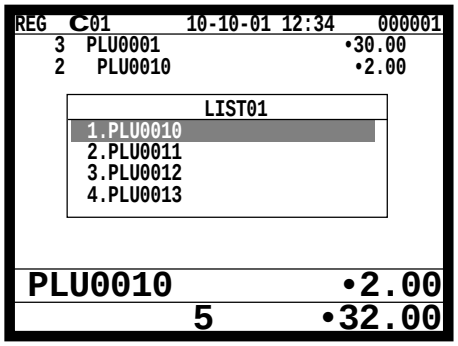
1) Programming “Set Menu/Condiment” program (page 53 of the Programming manual)



1. An multiplication of a PLU is made.



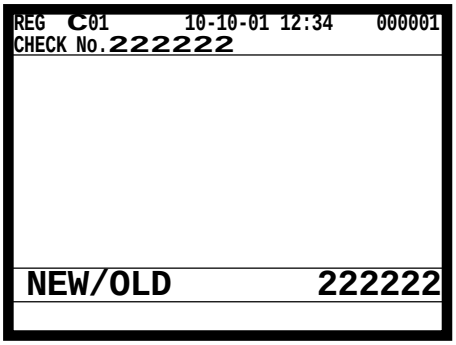
2. Enter appropriate quantity and press the <X> key, after that, select the appropriate PLU (in case of pulldown group.)



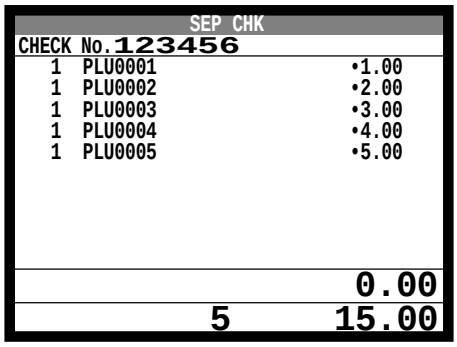
3. Enter appropriate quantity and press the <X> key, after that, select the appropriate PLU (in case of pulldown group.)

4-7. Separate check

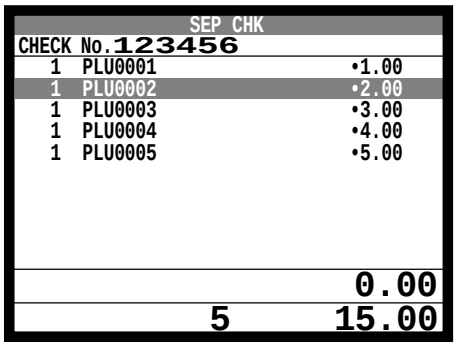
Separate check is used to transfer the registered items in the original check to the other check or pick up the registered items in the original check to finalize them.



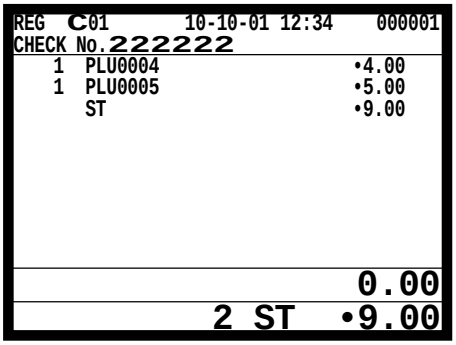
1. Enter the check number to which the registered items are transferred and press the <NEW/OLD CHK> key.



2. Enter the original check number and press the <SEPARATE CHECK> key.



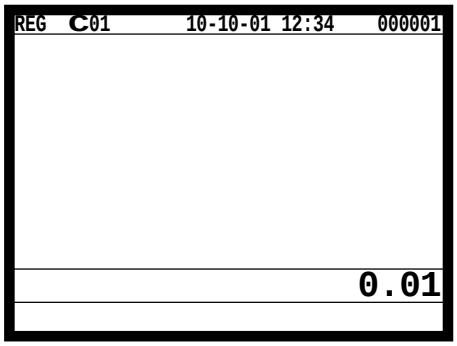
3. Select the transferring items and press the <YES> key.

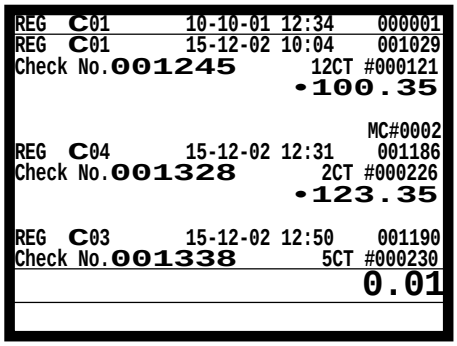


4. After selecting items, press the <ESC> key to terminate. The selected items are transferred to other check.

4-8. Open check

To display or print out the opened check report of the signed on operator.

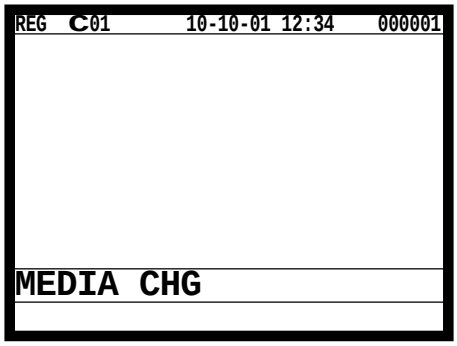




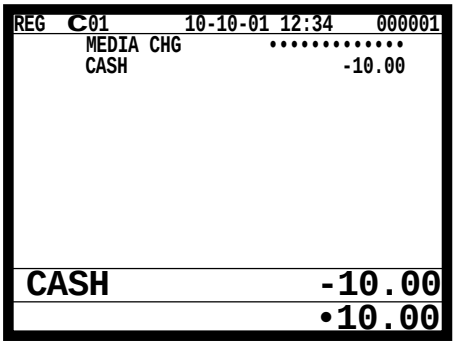
1. Enter the signed on clerk record number.
2. Press the <OPEN CHK> key.
3. The open check report is issued or displayed (depends on the program).

4-9. Media Change

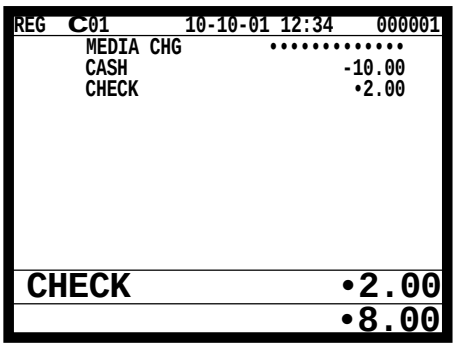
This key is used to change media in drawer amounts. Pressing this key begins media change operation.



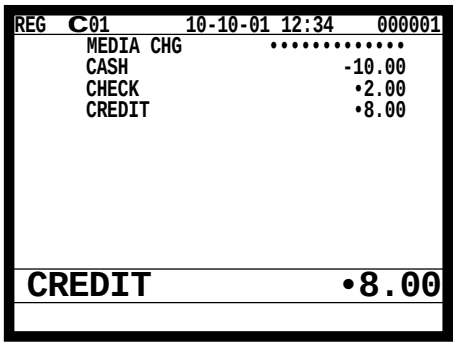
1. First press the <MEDIA CHANGE> key.



2. Enter the in drawer amount to be changed and press the media key to be changed.



3. Enter the amount to change and press the media to change, until the change amount equals to the changed amount.



4-10. Eat-in / Takeout

This function is used for specifying if the customer eat in the restaurant or takeout.
When the <EAT-IN> or <TAKE-OUT> key is pressed before finalization, tax exemption will be applied.
After registering one of these keys, it is impossible to register items except void, cancel, subtotal, change and partial payment (including subtotal according to the currency conversion.) If you want to release the compulsory, press the <OPEN 2> key.
Be sure to program before using this function.

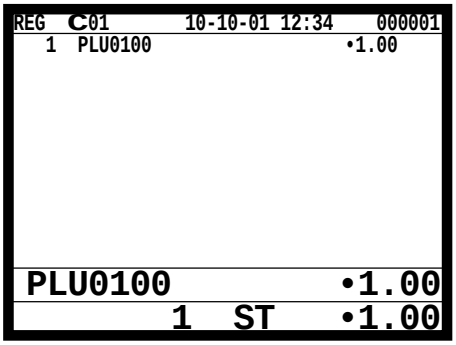
Example of receipt image

```
    1   Hamburger       $2.00
    1   French fries    $1.50
    1   Coffee          $1.00
        TAKE-OUT
```

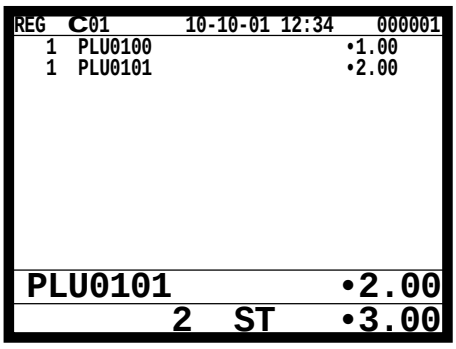
4-11. Scanning PLU

This function is used for registering PLU items by scanner or OBR code <OBR>.
Before using this function, you should program the start record number of scanning PLU link (the 22th record of the general control program) and OBR code to the scanning PLU link file. Applicable OBR codes are EAN-13, EAN-8 and UPC-A.

To register a scanning PLU item



1. Just scan the item PLU0100.

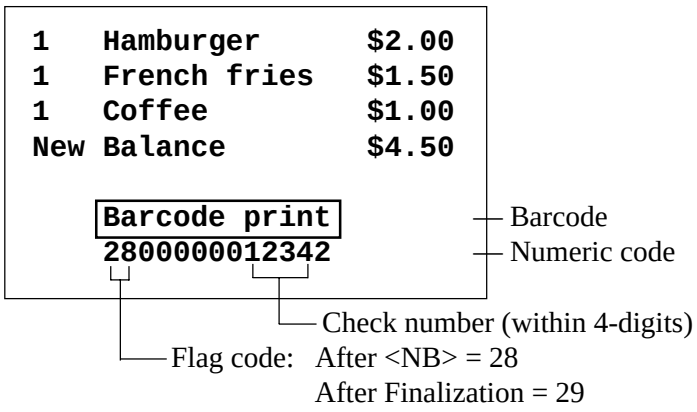


2. Enter the OBR code on the label and press the <OBR> key.

4-12. Printing barcode on receipts

This function is used for registering old check by scanning the barcode on the new balance receipt or issuing guest receipt by scanning the barcode on the finalizing receipt.

Example of receipt image

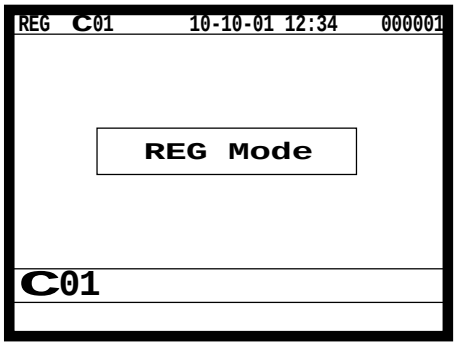


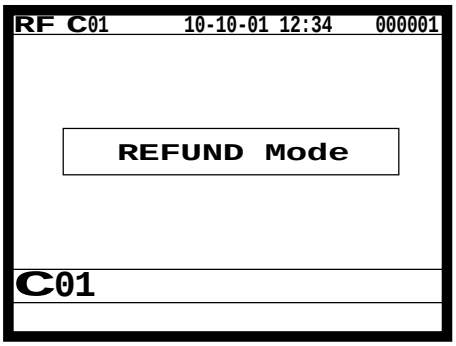
5. Refund mode operation

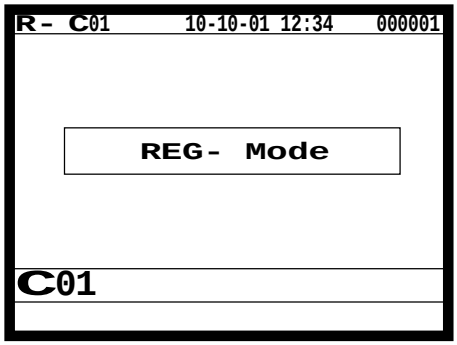
The general procedure for entering the RF or REG– mode is as follows.

5-1. Selecting RF or REG– Mode

After sign on operation, pressing the <REG. MODE> key turns the mode to RF Mode and REG– Mode.
Refund registration or register minus (REG–) registration starts with this operation.







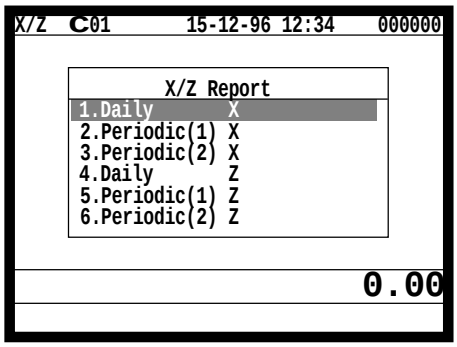
Note: Key operations are similar to that in the register mode.

To avoid miss-registration in the RF or REG– mode, return the mode to the former one immediately.

6. Read and reset operations

By setting the mode to the X or Z, the contents of totalizers and counters are enabled to read. The X mode allows report at any time during business hours. The Z mode is only performed at the end of the business day, since it clears the data stored to the totalizers and counters.

6-1. The procedures of reading or resetting



1. Sign on a clerk (if necessary).
2. Press <X/Z MODE> to assign X / Z report.
3. Select the appropriate menu you want by following the guidances. The hierarchy of the X / Z menus are described below.

Refer to page 108, 109 of this manual for X / Z command.

- X/Z Report
  - Daily X
    - Batch
      - Batch 1 ~ n (n = 1 ~ 10) ····· (n: allocated batch number)
    - Cashier/Clerk
      - Individual
      - All clerk
    - Open Check
      - Individual
      - Clerk
      - All
      - Only total (X only)
      - All Information (X only)
    - E-journal
      - All
      - Date & Consecutive number (X only)
      - Reset only (Z only)
    - Others
      - Individual key ····· (Daily X/Z only)
      - Flash ····· (Daily X only)
      - Fixed totalizer
      - Free Function
      - PLU
      - PLU stock ····· (Daily X/Z only)
      - Sub Department
      - Department
      - Group
      - Hourly sales
      - Monthly sales
      - Table analysis
      - Void
      - Hourly product
      - IDC
        - IDC (1) clear (Z only)
        - IDC (2) clear (Z only)
        - IDC (3) clear (Z only)
  - Periodic 1 X
    - Batch ····· Same as Daily X
    - Cashier/Clerk ····· Same as Daily X
    - Others ····· Same as Daily X
  - Periodic 2 X ····· Same as Periodic 1 X
  - Daily Z ····· Same as Daily X
  - Periodic 1 Z ····· Same as Periodic 1 X
  - Periodic 2 Z ····· Same as Periodic 2 X
  - Time & Attendance
    - Employee activity
    - Employee
    - Employee edit
    - Hourly Labor

6-2. Report sample

Cashier / clerk report

Z	0001017 CASHIER/CLERK		123	Mode/Report code/Report title/Z No. (Z only)
C01			1	Clerk name/Drawer No.
GROSS		35	•38.00	Gross sales title/Gross counter/Gross totalizer
NET	No	10	•38.00	Net sales title/Net counter/Net totalizer
CAID			•35.00	Cash in drawer title/Cash in drawer
CHID			•3.00	Charge in drawer title/Charge in drawer
CKID			•0.00	Check in drawer title/Check in drawer
CRID			•0.00	Credit in drawer title/Charge in drawer
CASH	No	10	•35.00	Cash key descriptor/Counter/Totalizer (programmable)

Individual key

X	0000095			Mode/Report code
CASH	No	11	•38.00	Function key descriptor/Counter/Totalizer
CHECK	No	0	•0.00	
CREDIT	No	1	•12.00	
ADD CHK	No	0		
--				
TL		12	•50.00	TL descriptor/Counter/Totalizer

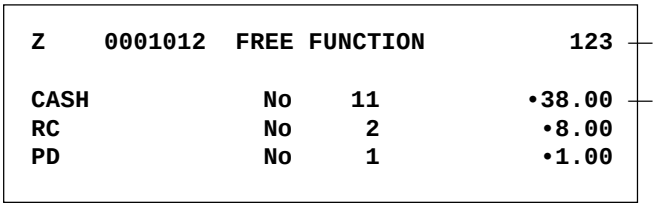
Flash

X	0000071 FLASH			Mode/Report code/Report title
NET	No	11	•38.00	Net sales title/Net counter/Net totalizer
CAID			•35.00	Cash in drawer title/Cash in drawer
CHID			•0.00	Charge in drawer title/Charge in drawer
CKID			•0.00	Check in drawer title/Check in drawer
CRID			•0.00	Credit in drawer title/Charge in drawer

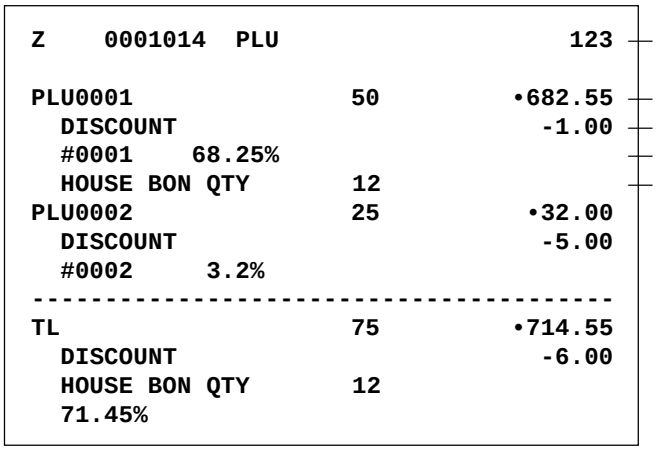
Fixed totalizer

Z	0000011 FIXED TTL		123	Mode/Report code/Report title/Z No. (Z only)
GROSS		35	•38.00	Gross sales title/Gross counter/Gross totalizer
NET	No	11	•38.00	Net sales title/Net counter/Net totalizer
CAID			•35.00	Cash in drawer title/Cash in drawer
CHID			•0.00	Charge in drawer title/Charge in drawer
CKID			•0.00	Check in drawer title/Check in drawer
CRID			•0.00	Credit in drawer title/Credit in drawer
RF	No	2	•8.00	Refund mode descriptor/Counter/Totalizer
COVER	CT	2		Customer count descriptor/Counter
TA1			•0.00	Taxable amount 1 descriptor/Taxable amount 1
TX1			•0.00	Tax 1 descriptor/Tax 1 amount
EX1			•0.00	Tax exempt 1 descriptor/Tax exempt amount 1
			•0.00	
EX9				
TA10			•0.00	Taxable amount 10 descriptor/Taxable amount 10
TX10			•0.00	Tax 10 descriptor/Tax 10 amount
EX10			•0.00	Tax exempt 10 descriptor/Tax exempt amount 10
GT1			•1236901437.04	Grand total 1 descriptor/Grand total 1
GT2			•1569567830.40	Grand total 2 descriptor/Grand total 2
GT3			•1325670420.24	Grand total 3 descriptor/Grand total 3
			000001--->001279	Consecutive No. range

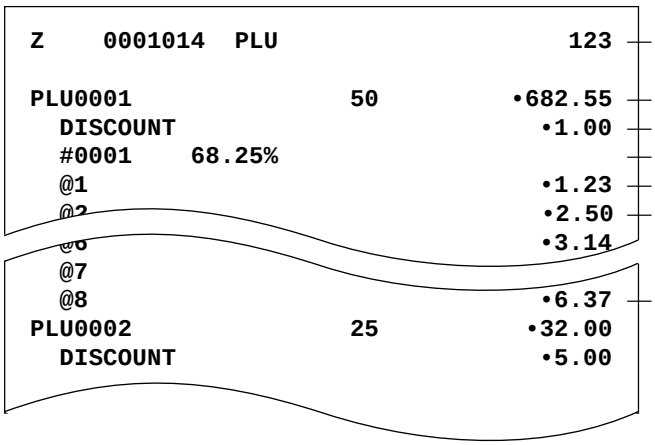
Free function



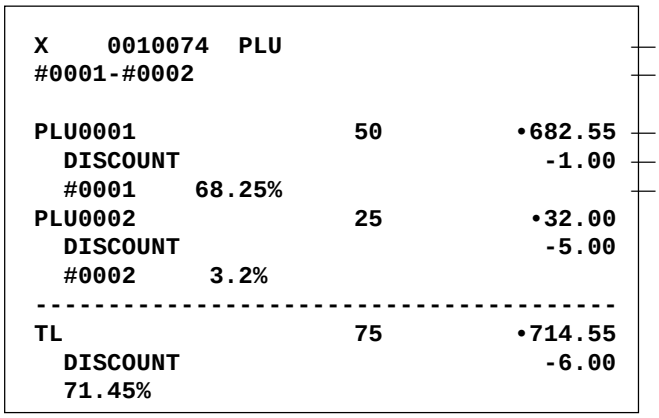
PLU



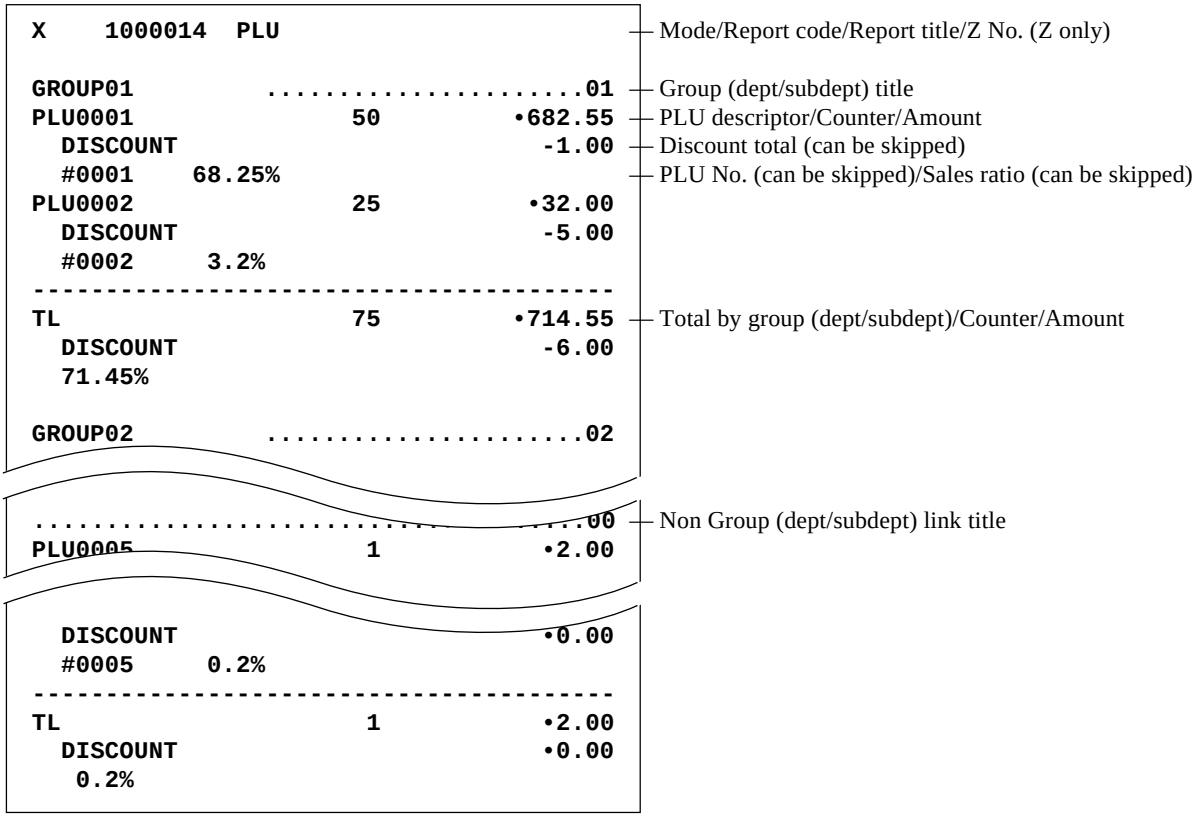
PLU (with shift PLU)



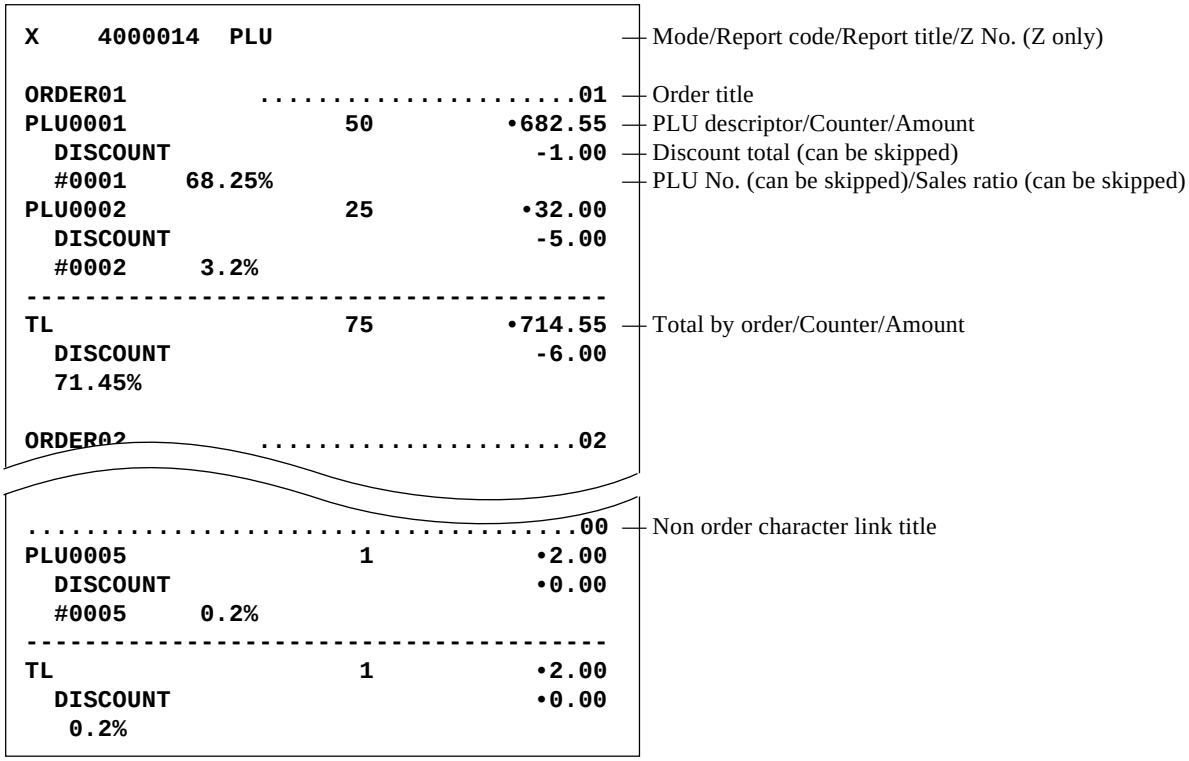
PLU (by range)



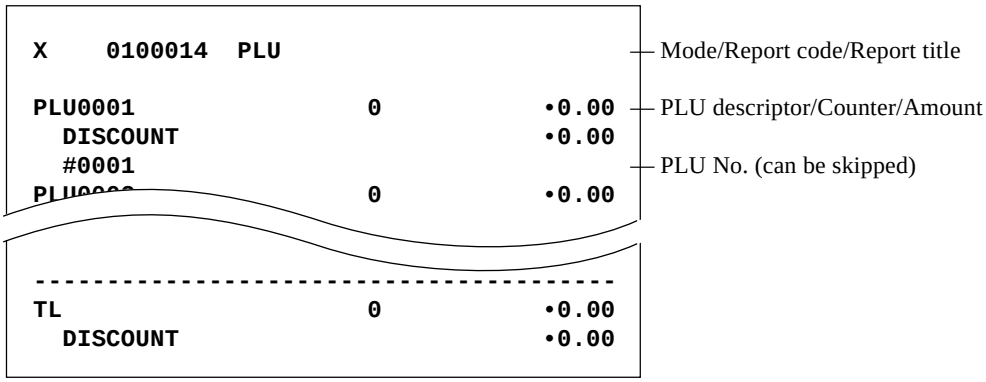
PLU (by group / dept / subdept)



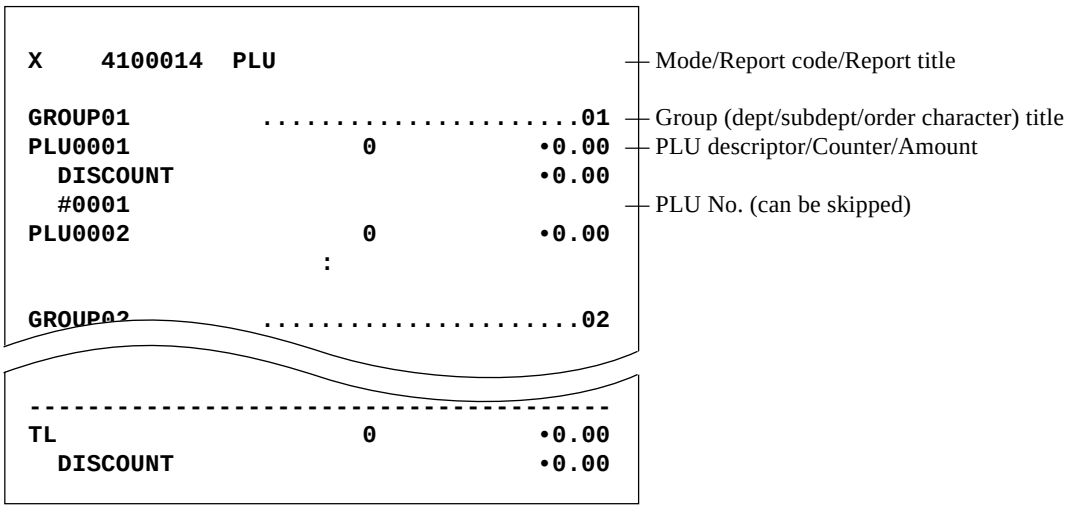
PLU (by order character)



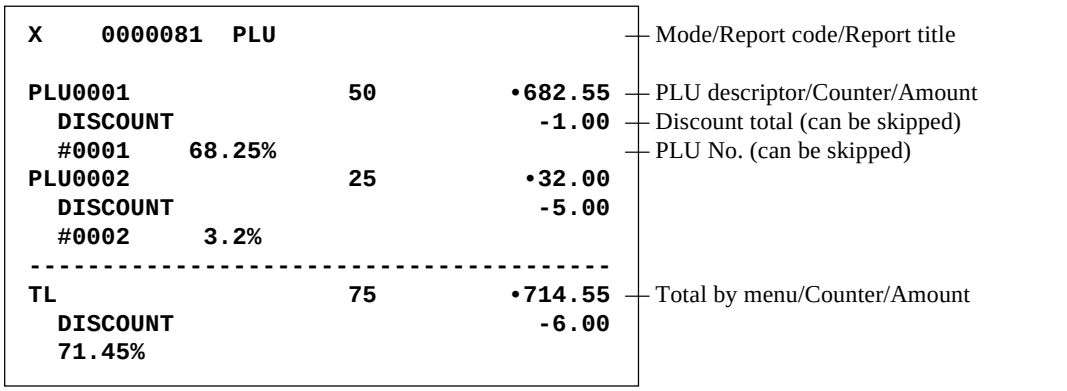
PLU zero sales



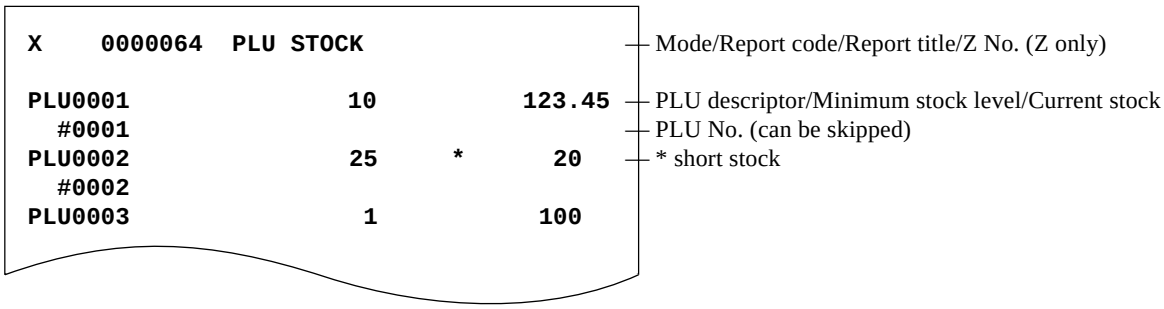
PLU zero sales (by group / dept / subdept / order)



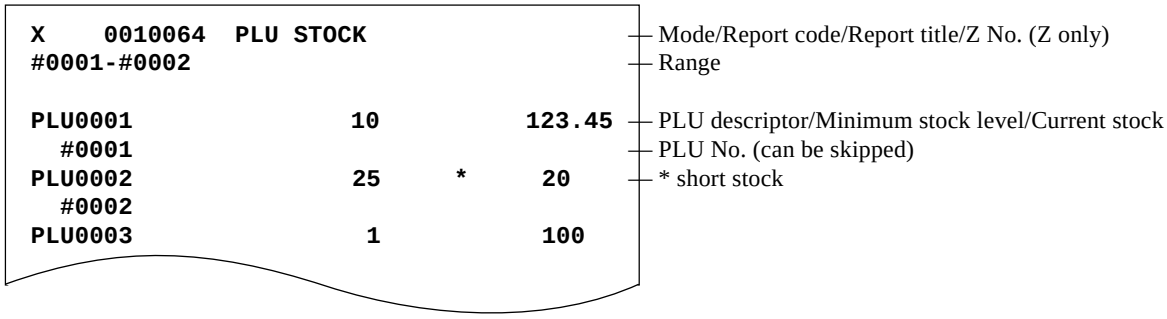
PLU (by menu level)



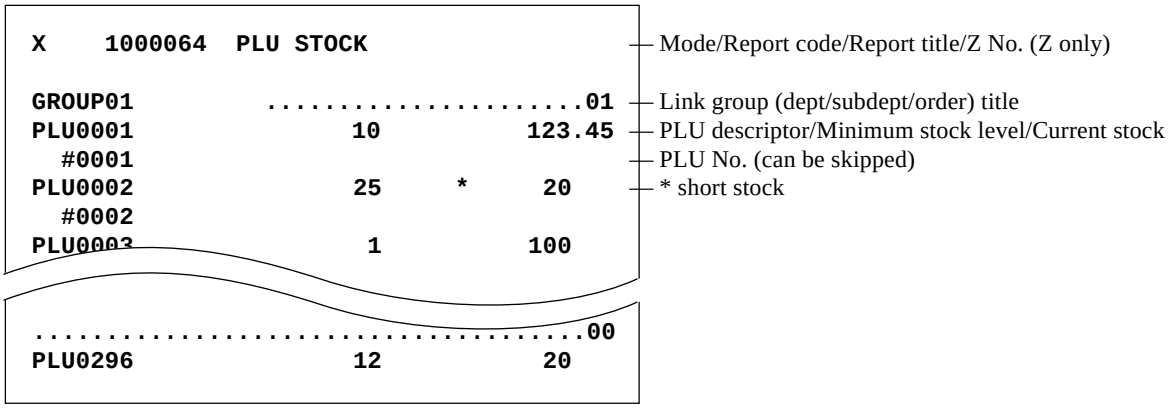
PLU stock



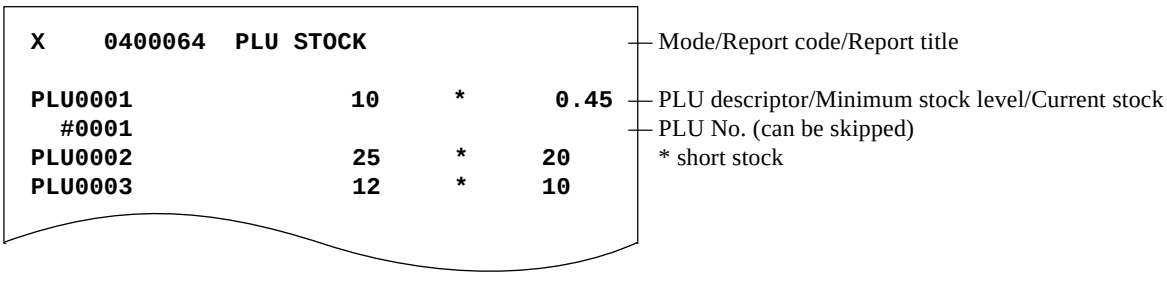
PLU stock (by range)



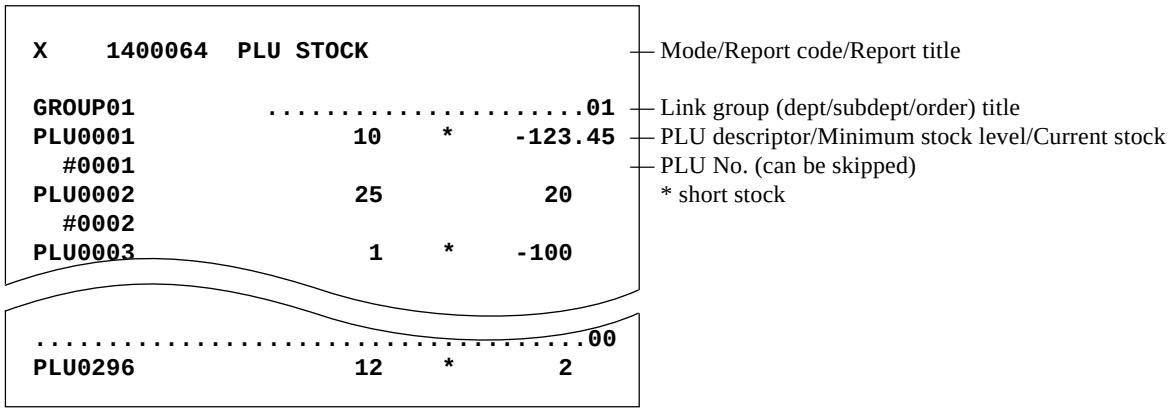
PLU stock (by group / dept / subdept / order)



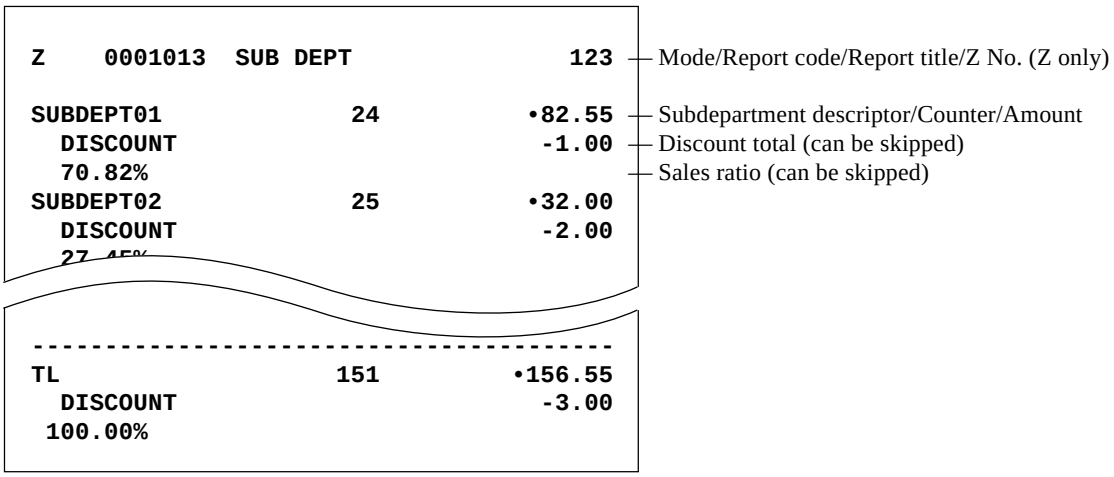
PLU less stock



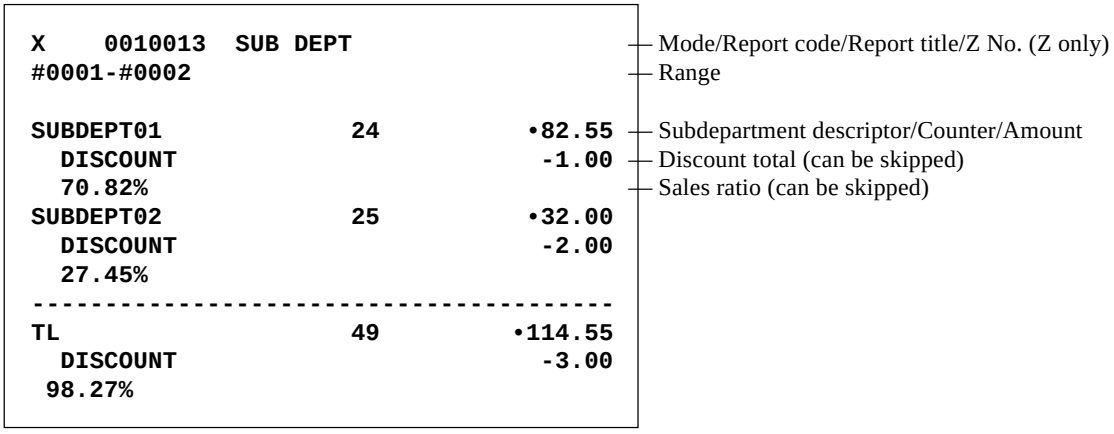
PLU less stock (by group / dept / subdept / order)



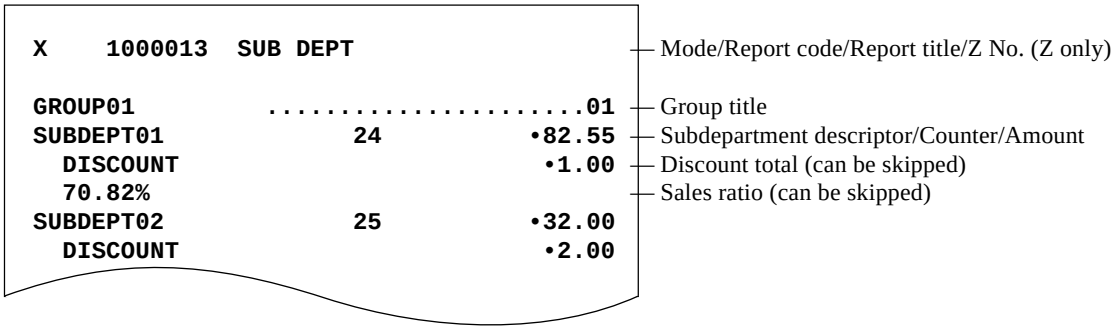
Subdepartment (all)

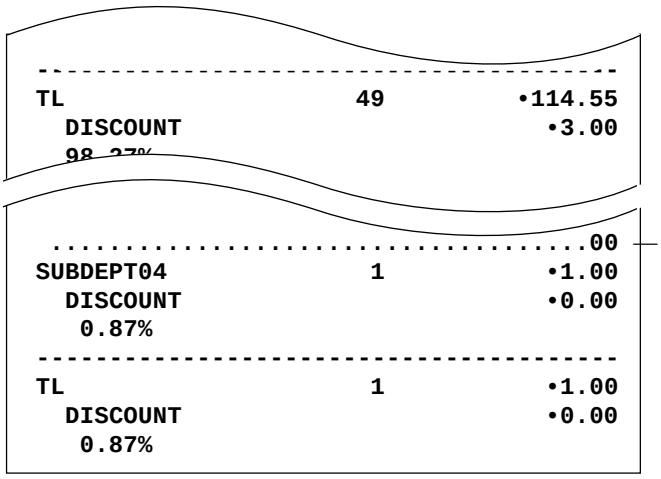


Subdepartment (by range)



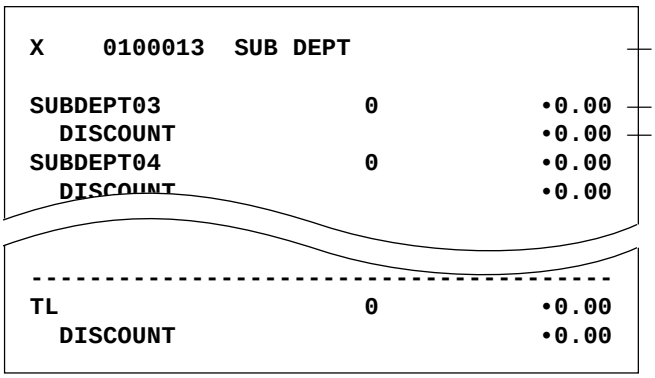
Subdepartment (by group / dept)





No group link

Subdepartment zero sales

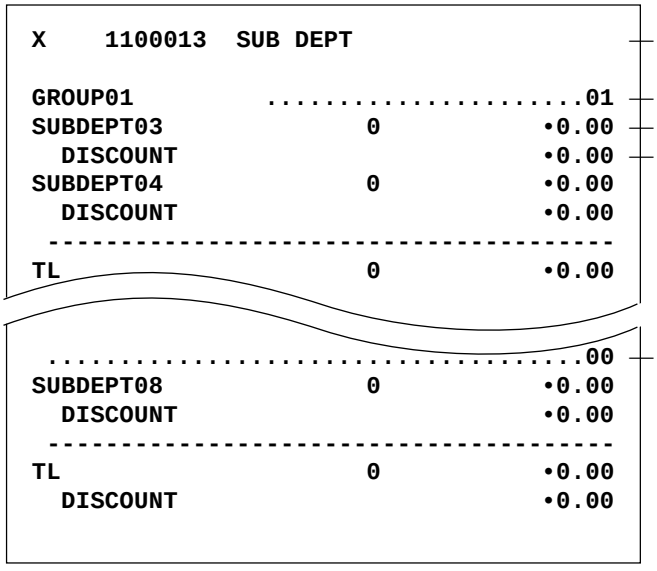


Mode/Report code/Report title

Subdepartment descriptor/Counter/Amount

Discount total (can be skipped)

Subdepartment zero sales (by group / dept)



Mode/Report code/Report title

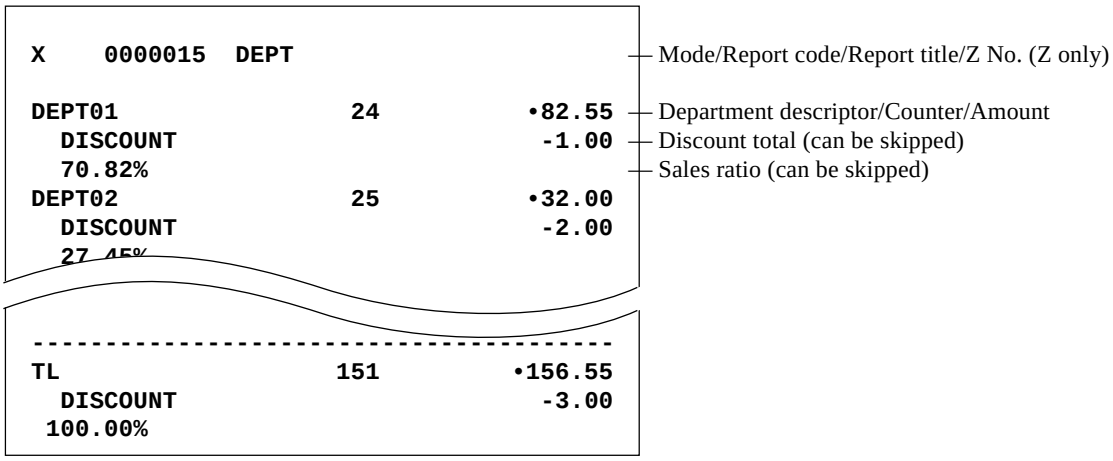
Group title

Subdepartment descriptor/Counter/Amount

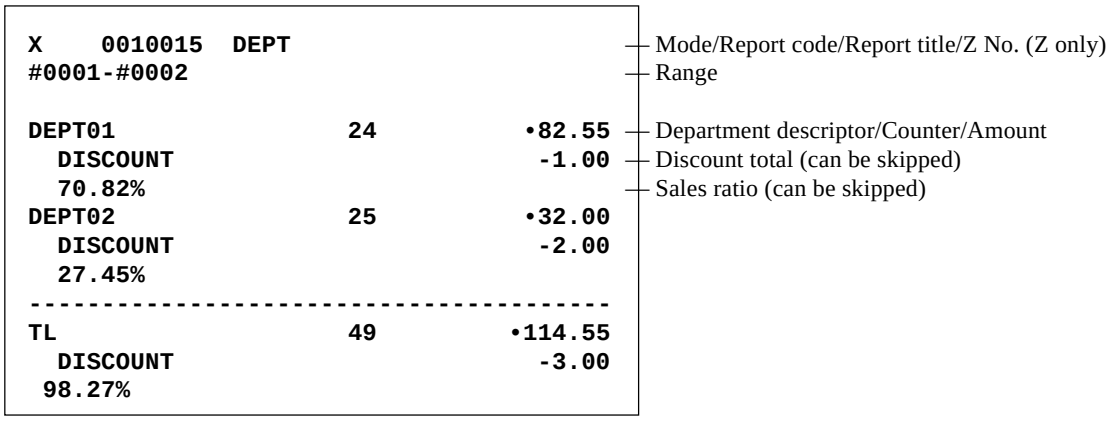
Discount total (can be skipped)

No group link

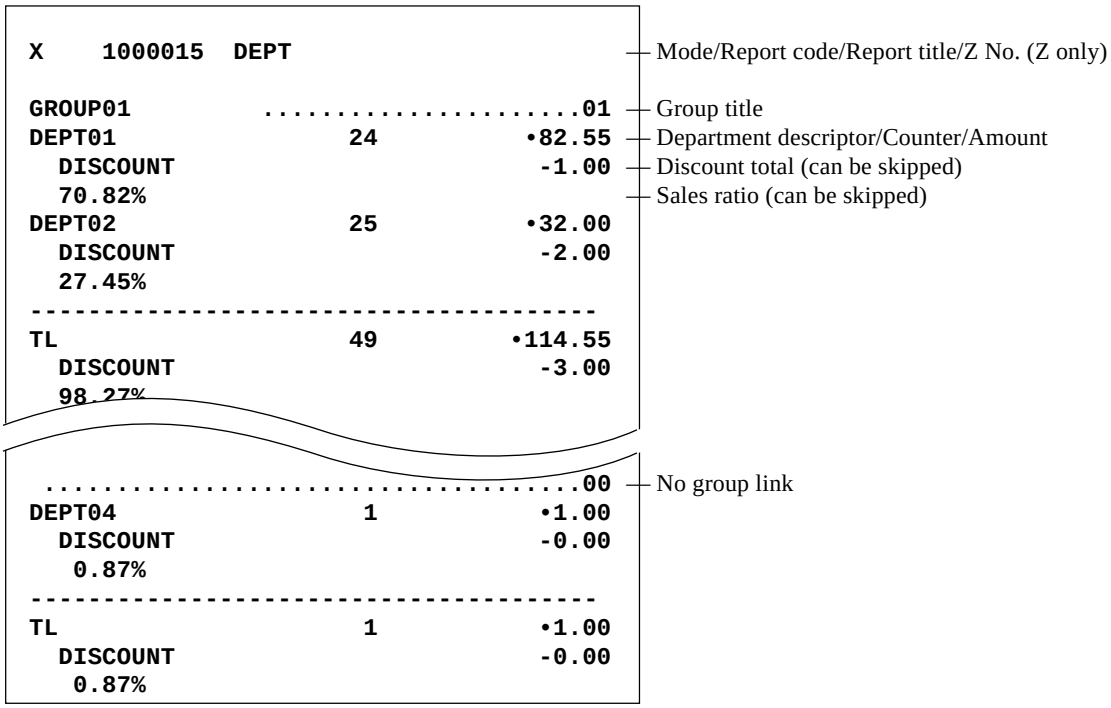
Department (all)



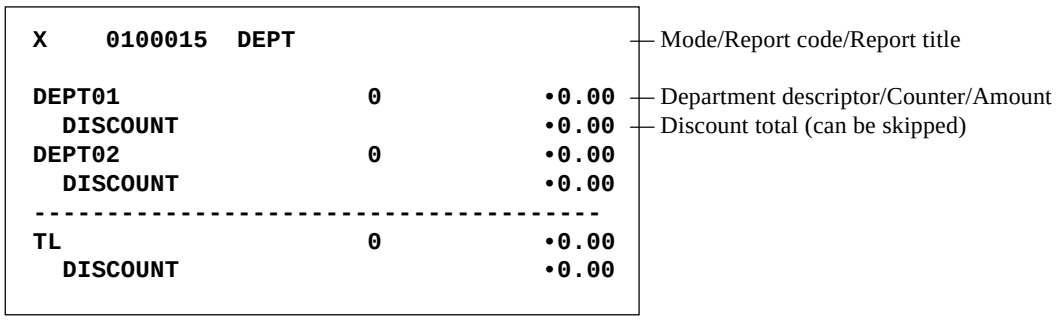
Department (by range)



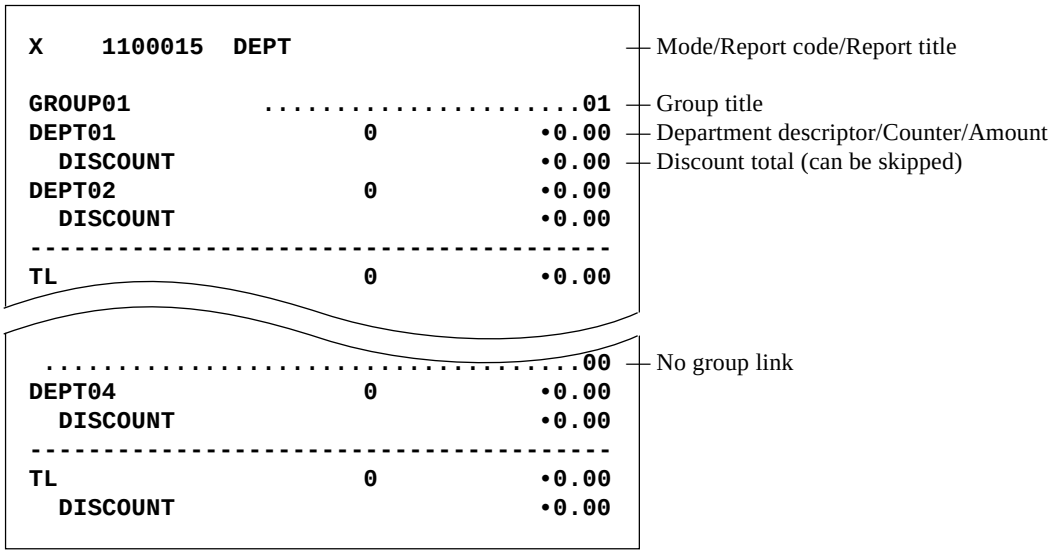
Department (by group)



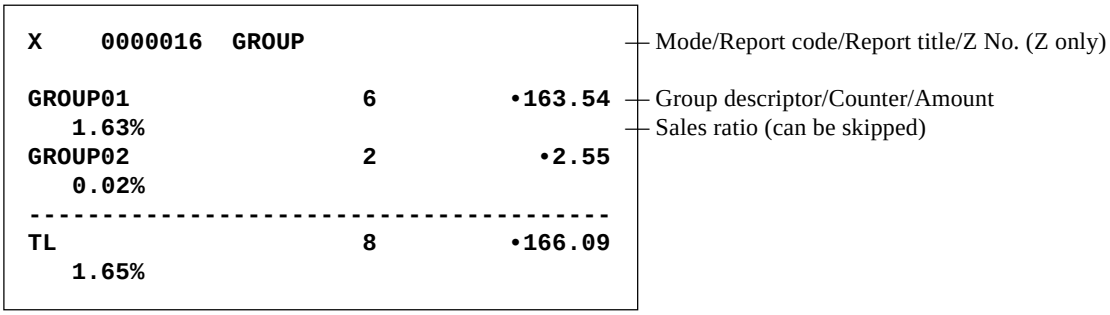
Department zero sales



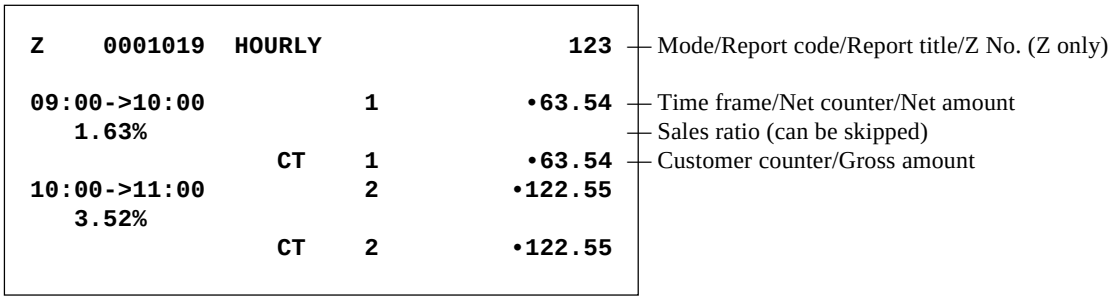
Department zero sales (by group)



Group



Hourly sales



Monthly sales

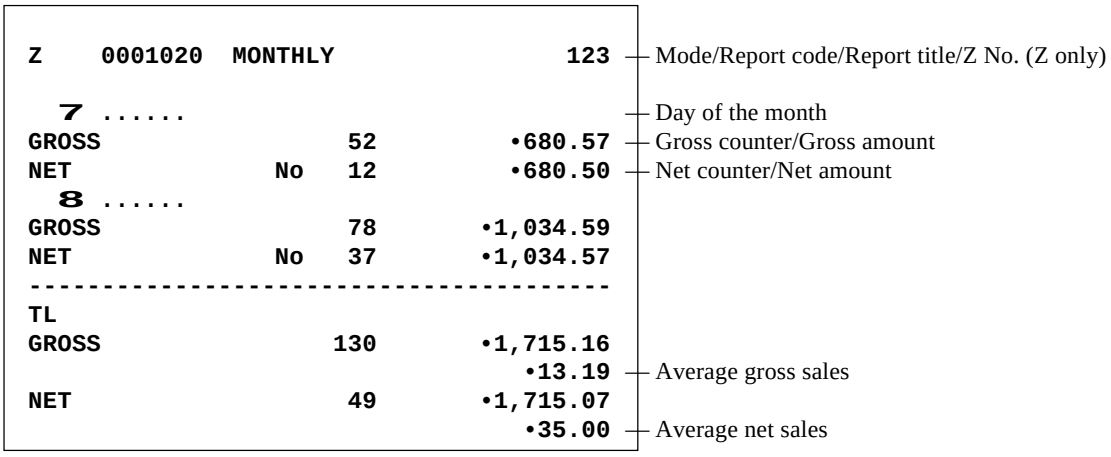
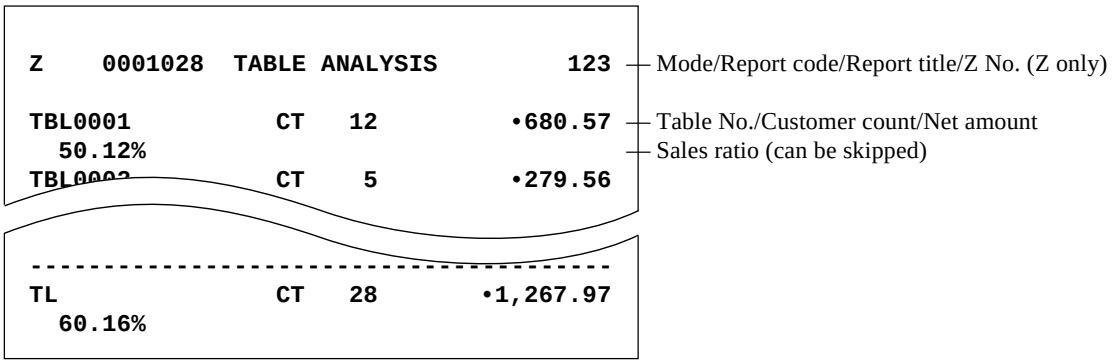
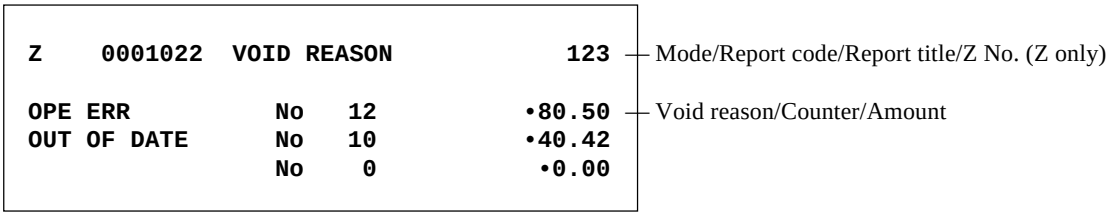


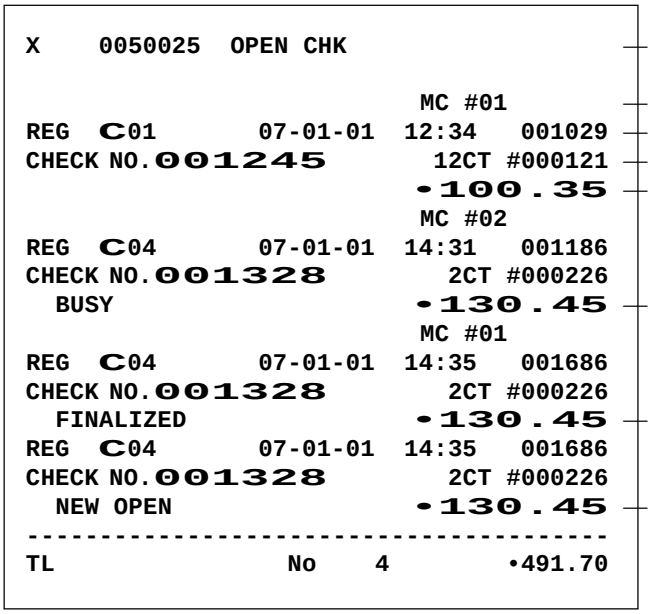
Table analysis



Void reason

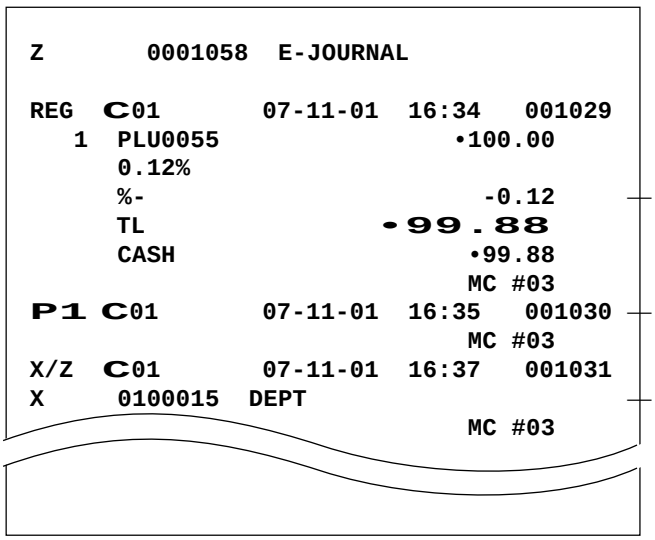


Open check



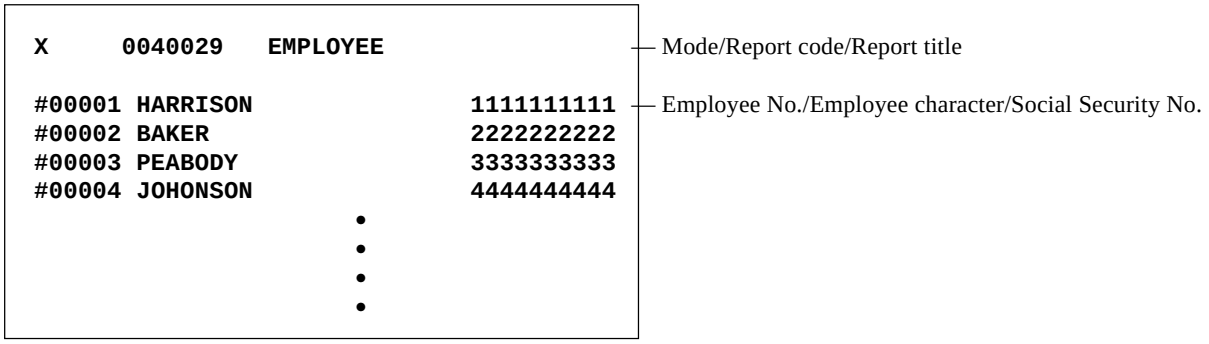
— Mode/Report code/Report title
— Latest machine No.
— Mode/Clerk/Date/Time/Consecutive No.
— Check No./Cover No./Table No.
— Subtotal amount (temporary closed by NB)
— Busy status
— Finalized status
— Newly opened status

Electronic journal (E-journal)

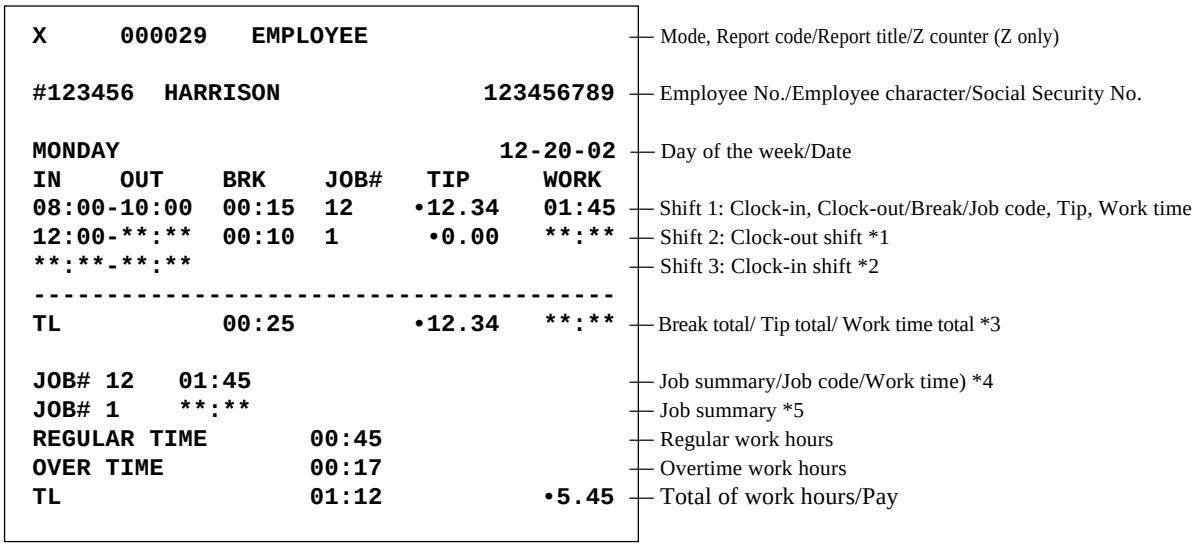


— Registrations
— Some program are made in Program 1 mode.
— Report issued

Employee activity

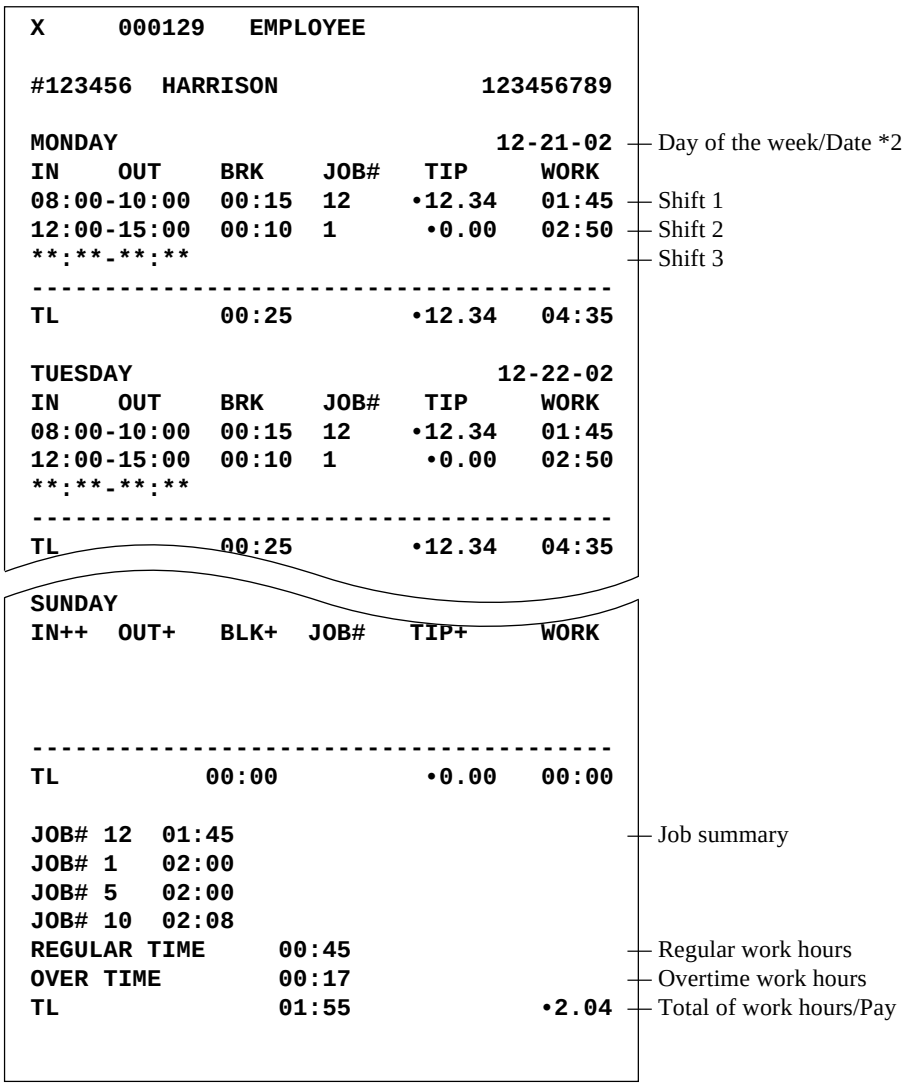


Employee report (daily)



*1 If employee is not clocked-out the shift, then "****:****" is printed on OUT & WORK.
*2 If employee is not clocked-in the shift, then "****:**-**:****" is printed on IN&OUT.
*3 If employee is not clocked-out the shift yet, then "****:****" is printed on WORK.
*4 JOB summary is printed in order to clock-in the shift.
If there is the same JOB code, then it will add to the JOB that was found before.
*5 If employee is not clocked-out the shift, then "****:****" is printed. No JOB # is printed, if employee is not clocked-in the shift.

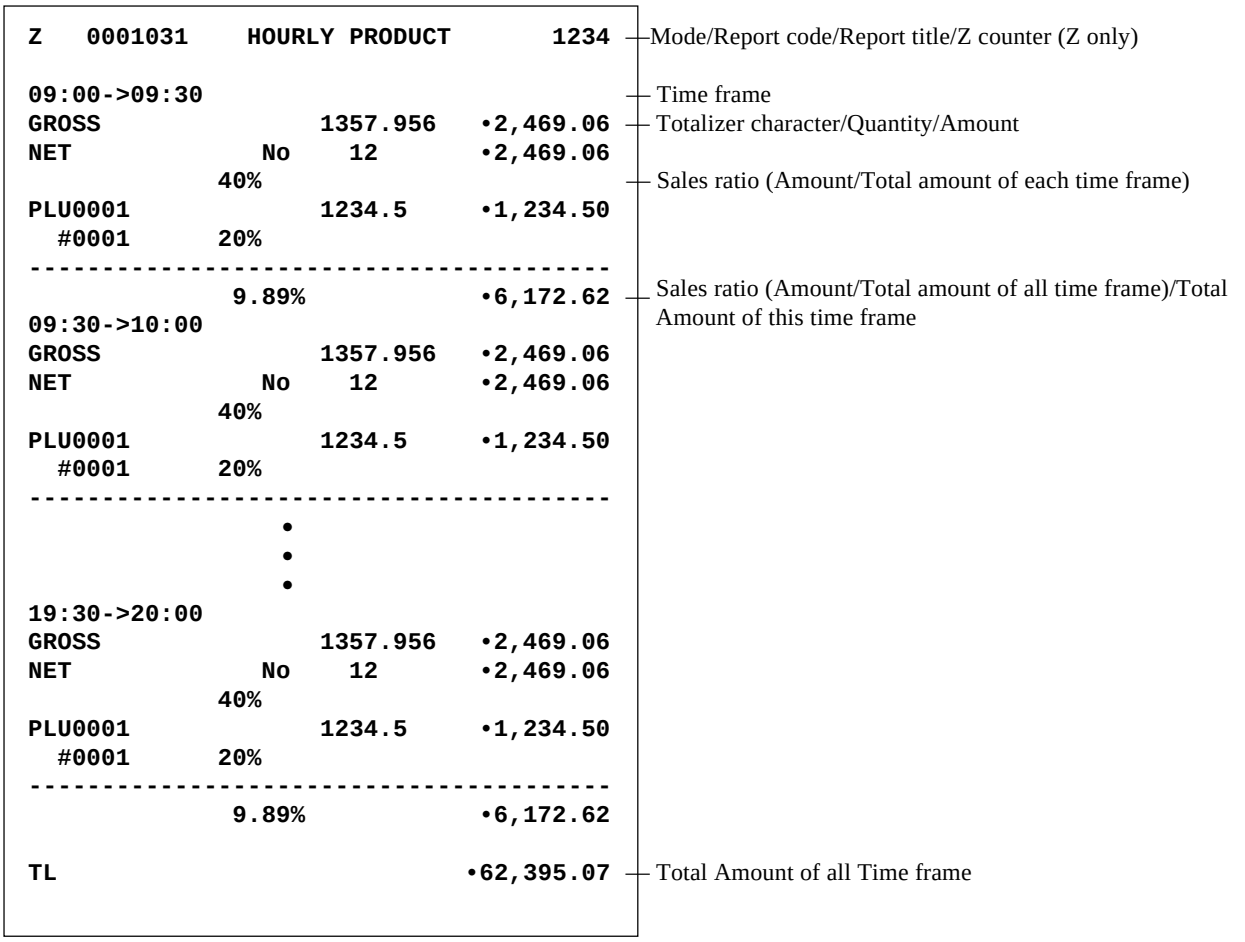
Employee report (weekly / bi-weekly)



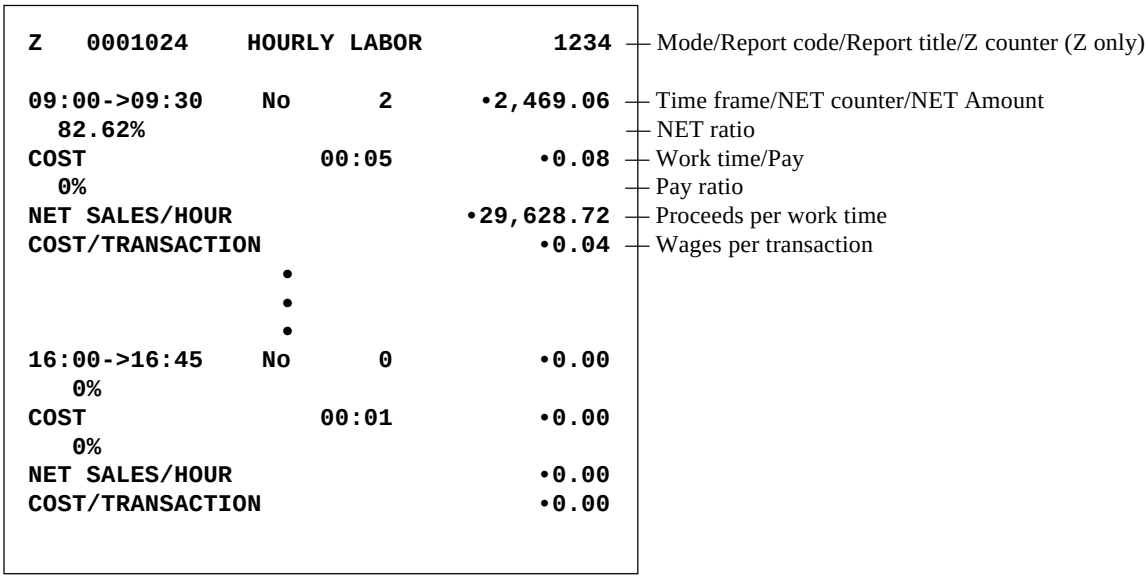
*1 If all shift in one day of the week is zero (no data), then that day of the week is not printed on the report.

*2 The report always starts from Monday.

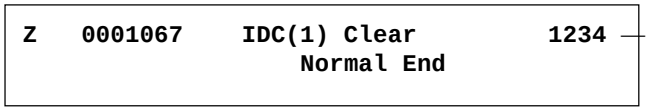
Hourly item



Hourly labor report



IDC clear


Z 0001067 IDC(1) Clear 1234
Normal End
Mode/Report code/Report title/Z counter

A-1. Function key list

Function	Code	Initial character
Add check	094	**ADD CHK**
Arrangement	044	**ARG**
Bill copy	047	**BILL**
Break-in/out	109	**BREAK-IN/OUT**
Cancel	236	**CANCEL**
Cash amount tendered	001	**CASH**
Charge	002	**CHARGE**
Check endorsement	039	**CK.E**
Check print	012	**CHKP**
Check tender	003	**CHECK**
Clerk number	072	**CLK#**
Clerk transfer	013	**CLK TRANS**
Clock-in/out	108	**CLOCK-IN/OUT**
Coupon	023	**COUPON**
Coupon 2	036	**CPN2**
Credit	004	**CREDIT**
Cube	090	**XXX**
Currency exchange	045	**CE**
Customer number	043	**CT**
Department	051	**DEPT nn**
Department number	135	**DEPT#**
Deposit	025	**DEPOSIT**
Discount	028	**%–**
Display mode	219	**DISP MODE**
Dutch account	140	**DUTCH**
Eat-in	128	**EAT-IN**
Electronic journal Disp	207	**EJ DISP**
Error correct/Void	034	**VOID**
First unit price	069	**1st@**
Flat PLU	063	**PLU nnnn**
House Bon	114	**HOUSE BON**
Ketten Bon	113	**X/KETTEN**
List	136	**LIST**
List number	137	**LIST#**
Loan	019	**LOAN**
Lock out unused key	000	**NOP**
Media change	118	**MEDIA CHG**
Menu shift	064	**MENU**
Merchandise subtotal	080	**MDST**
Minus	027	**–**
Multiplication	082	**X**
New balance	006	**NB**
New check	091	**NEW CHK**
New/Old check	093	**NEW/OLD**
Normal receipt	016	**NRMRCT**
No sale	042	**NS**
Non-add	040	**#**
Non-add/No sale	041	**#/NS**
OBR	103	**OBR**
Old check	092	**OLD CHK**
Open	067	**OPEN**
Open2	068	**OPEN2**
Open Check	117	**OPEN CHK**
Operator number	078	**OPE#**
Operator read/reset	073	**OPE X/Z**
Paid out	021	**PD**
Pick up	022	**P.UP**
Plus	029	**+**
PLU	048	**PLU#**

Function	Code	Initial character
Post Entry	115	**POST ENTRY**
Premium	030	**%+**
Price inquiry	008	**PRCINQ**
Price	049	**PRC**
Quantity/For	083	**QT**
Recall	131	**RECALL**
Receipt	038	**RCT**
Receipt On/OFF	076	**RCT ON/OFF**
Received on account	020	**RC**
Refund	033	**RF**
Reverse Display	206	**REVERSE**
Round Repeat	116	**R REPEAT**
Seat number	119	**SEAT#**
Second unit price	070	**2nd@**
Selective item subtotal	085	**SIST**
Separate check	095	**SEP CHK**
Shift PLU	065	**SFT PLU**
Slip back feed/Release	054	**SB/R**
Slip feed/Release	056	**SF/R**
Slip print	055	**SLIP**
Square	084	**XX**
Stock inquiry	009	**STKINQ**
Store	130	**STORE**
Subdepartment	133	**SUBDEPT nn**
Subdepartment number	134	**SDPT#**
Substitution	111	**SUBST.**
Subtotal	075	**SUBTOTAL**
Table number	058	**TBL#**
Table transfer	014	**TABLE TRANS**
Take-out	129	**TAKE-OUT**
Tax status shift	057	**T/S**
Taxable amount subtotal	077	**TAST**
Tax exempt	062	**EXEMPT**
Text print	011	**PRT**
Text recall	010	**CHAR**
Tray total	074	**TRAY TTL**
Tip	015	**TIP**
Validation	037	**VLD**
VAT	046	**VAT**
X/Z mode	122	**X/Z MODE**
System keys		
Numeric key	000n201	**n=1~9, "0"=10**
Clear	202	
Decimal point	098	**.**
Display On/Off	120	**DISP ON/OFF**
Escape/Skip	211	
Home position	218	**HOME**
Page down	220	**PAGE DOWN**
Page up	221	**PAGE UP**
Program mode	123	**PGM MODE**
Register mode	121	**REG MODE**
Three zero	097	**000**
Two zero	096	**00**
Yes	212	
No	213	
Left arrow	214	
Right arrow	215	
Up arrow	216	
Down arrow	217	

File No.	File description	Record length	Max. No. of records	Work size	Description	Attribu-tion	Allocat-able
System files							
901	System connection table	18	33	75		Program	No
902	I/O parameter	5	15	69		Program	No
903	Printer connection	27	99	81		Program	No
904	Consecutive number	6	5	69		Buffer	No
999	System error log	11	20	75		Buffer	No
Function and total files							
001	Fixed totalizer	26	78	81		Pgm/Sales	No
101	(periodic total 1)	10	78	75		Sales	Yes
201	(periodic total 2)	10	78	75		Sales	Yes
301	(daily consolidation)	10	78	75	for master	Sales	Yes
401	(periodic 1 consolidation)	10	78	75	for master	Sales	Yes
501	(periodic 2 consolidation)	10	78	75	for master	Sales	Yes
601	(consolidation work)	10	78	75	for master	Buffer	Yes
002	Free function	38	999	99		Pgm/Sales	Yes
102	(periodic total 1)	10	999	75		Sales	Yes
202	(periodic total 2)	10	999	75		Sales	Yes
302	(daily consolidation)	10	999	75	for master	Sales	Yes
402	(periodic 1 consolidation)	10	999	75	for master	Sales	Yes
502	(periodic 2 consolidation)	10	999	75	for master	Sales	Yes
602	(consolidation work)	10	999	75	for master	Buffer	Yes
003	Subdepaprtment	54	99	135		Pgm/Sales	Yes
103	(periodic total 1)	15	99	81		Sales	Yes
203	(periodic total 2)	15	99	81		Sales	Yes
303	(daily consolidation)	15	99	81	for master	Sales	Yes
403	(periodic 1 consolidation)	15	99	81	for master	Sales	Yes
503	(periodic 2 consolidation)	15	99	81	for master	Sales	Yes
603	(consolidation work)	15	99	81	for master	Buffer	Yes
004	PLU	92	9999	177		Pgm/Sales	Yes
104	(periodic total 1)	30	9999	99		Sales	Yes
204	(periodic total 2)	30	9999	99		Sales	Yes
304	(daily consolidation)	30	9999	99	for master	Sales	Yes
404	(periodic 1 consolidation)	30	9999	99	for master	Sales	Yes
504	(periodic 2 consolidation)	30	9999	99	for master	Sales	Yes
604	(consolidation work)	30	9999	99	for master	Buffer	Yes
005	Department	54	99	135		Pgm/Sales	Yes
105	(periodic total 1)	15	99	81		Sales	Yes
205	(periodic total 2)	15	99	81		Sales	Yes
305	(daily consolidation)	15	99	81	for master	Sales	Yes
405	(periodic 1 consolidation)	15	99	81	for master	Sales	Yes
505	(periodic 2 consolidation)	15	99	81	for master	Sales	Yes
605	(consolidation work)	15	99	81	for master	Buffer	Yes
006	Group	26	99	81		Pgm/Sales	Yes
106	(periodic total 1)	10	99	75		Sales	Yes
206	(periodic total 2)	10	99	75		Sales	Yes
306	(daily consolidation)	10	99	75	for master	Sales	Yes
406	(periodic 1 consolidation)	10	99	75	for master	Sales	Yes
506	(periodic 2 consolidation)	10	99	75	for master	Sales	Yes
606	(consolidation work)	10	99	75	for master	Buffer	Yes
009	Hourly sales	20	96	87		Sales	Yes
109	(periodic total 1)	20	96	87		Sales	Yes
209	(periodic total 2)	20	96	87		Sales	Yes
309	(daily consolidation)	20	96	87	for master	Sales	Yes
409	(periodic 1 consolidation)	20	96	87	for master	Sales	Yes
509	(periodic 2 consolidation)	20	96	87	for master	Sales	Yes
609	(consolidation work)	20	96	87	for master	Buffer	Yes
010	Monthly sales	20	32	87		Sales	Yes
110	(periodic total 1)	20	32	87		Sales	Yes

File No.	File description	Record length	Max. No. of records	Work size	Description	Attribu-tion	Allocat-able
210	(periodic total 2)	20	32	87		Sales	Yes
310	(daily consolidation)	20	32	87	for master	Sales	Yes
410	(periodic 1 consolidation)	20	32	87	for master	Sales	Yes
510	(periodic 2 consolidation)	20	32	87	for master	Sales	Yes
610	(consolidation work)	20	32	87	for master	Buffer	Yes
012	Void reason	29	99	87		Pgm/Sale	Yes
112	(periodic total 1)	10	99	75		Sales	Yes
212	(periodic total 2)	10	99	75		Sales	Yes
312	(daily consolidation)	10	99	75	for master	Sales	Yes
412	(periodic 1 consolidation)	10	99	75	for master	Sales	Yes
512	(periodic 2 consolidation)	10	99	75	for master	Sales	Yes
612	(consolidation work)	10	99	75	for master	Buffer	Yes
018	Table analysis	32	99	93		Pgm/Sale	Yes
118	(periodic total 1)	10	99	75		Sales	Yes
218	(periodic total 2)	10	99	75		Sales	Yes
318	(daily consolidation)	10	99	75	for master	Sales	Yes
418	(periodic 1 consolidation)	10	99	75	for master	Sales	Yes
518	(periodic 2 consolidation)	10	99	75	for master	Sales	Yes
618	(consolidation work)	10	99	75	for master	Buffer	Yes
020	Grand total	24	3	75		Pgm/Sale	No
120	(periodic total 1)	8	3	69		Sales	Yes
220	(periodic total 2)	8	3	69		Sales	Yes
320	(daily consolidation)	8	3	69	for master	Sales	Yes
420	(periodic 1 consolidation)	8	3	69	for master	Sales	Yes
520	(periodic 2 consolidation)	8	3	69	for master	Sales	Yes
620	(consolidation work)	8	3	69	for master	Buffer	Yes
055	Shift PLU	91	9999	189		Sales	Yes
155	(periodic total 1)	70	9999	147		Sales	Yes
255	(periodic total 2)	70	9999	147		Sales	Yes
355	(daily consolidation)	70	9999	147	for master	Sales	Yes
455	(periodic 1 consolidation)	70	9999	147	for master	Sales	Yes
555	(periodic 2 consolidation)	70	9999	147	for master	Sales	Yes
655	(consolidation work)	70	9999	147	for master	Buffer	Yes
Clerk							
007	Clerk	95	99	165		Program	Yes
030	Clerk detail link	4	99	75		Program	Yes
027	Clerk (Dallas) key ID	14	200	75		Program	Yes
011	Clerk detail	10	9801	75		Sales	Yes
111	(periodic total 1)	10	9801	75		Sales	Yes
211	(periodic total 2)	10	9801	75		Sales	Yes
311	(daily consolidation)	10	9801	75	for master	Sales	Yes
411	(periodic 1 consolidation)	10	9801	75	for master	Sales	Yes
511	(periodic 2 consolidation)	10	9801	75	for master	Sales	Yes
611	(consolidation work)	10	9801	75	for master	Buffer	Yes
Time & Attendance							
014	Hourly / Labor	26	96	99		Sales	Yes
114	(periodic total 1)	26	96	99		Sales	Yes
214	(periodic total 2)	26	96	99		Sales	Yes
314	(daily consolidation)	26	96	99	for master	Sales	Yes
414	(periodic 1 consolidation)	26	96	99	for master	Sales	Yes
514	(periodic 2 consolidation)	26	96	99	for master	Sales	Yes
614	(consolidation work)	26	96	99	for master	Buffer	Yes
019	Work time	18	4158	111		Sales	Yes
319	(daily consolidation)	18	4158	75	for master	Sales	Yes
800	Time zone	6	24	81		Program	Yes
801	Employee	36	99	135		Program	Yes
802	Job code	22	50	87		Program	Yes

File No.	File description	Record length	Max. No. of records	Work size	Description	Attribu-tion	Allocat-able
803	Schedule	11	2079	111		Program	Yes
806	Time & Attendance work	99	1	657		Buffer	Yes
Check							
015	Check Index	300	200	69		Buffer	Yes
060	Check detail	80	9999	69		Buffer	Yes
066	Check detail work	80	2000	69		Buffer	Yes
Hourly item							
021	Hourly item	10	1920	75		Sales	Yes
121	(periodic total 1)	10	1920	75		Sales	Yes
221	(periodic total 2)	10	1920	75		Sales	Yes
321	(daily consolidation)	10	1920	75	for master	Sales	Yes
421	(periodic 1 consolidation)	10	1920	75	for master	Sales	Yes
521	(periodic 2 consolidation)	10	1920	75	for master	Sales	Yes
621	(consolidation work)	10	1920	75	for master	Buffer	Yes
031	Hourly item link	4	480	75		Program	Yes
IDC							
057	IDC (1)	50	9999	69		Sales	Yes
357	(consolidation file)	50	9999	69	for master	Sales	Yes
657	(consolidation work)	50	9999	69	for master	Sales	Yes
058	IDC (2)	50	9999	69		Sales	Yes
358	(consolidation file)	50	9999	69	for master	Sales	Yes
658	(consolidation work)	50	9999	69	for master	Sales	Yes
059	IDC (3)	50	9999	69		Sales	Yes
359	(consolidation file)	50	9999	69	for master	Sales	Yes
659	(consolidation work)	50	9999	69	for master	Sales	Yes
063	IDC buffer	50	9999	69		Buffer	Yes
804	IDC link	6	999	81		Program	Yes
Program / message / buffer							
016	Scanning PLU link	9	300	75		Program	Yes
022	General control	6	37	69		Program	No
023	Special character	16	58	69		Program	No
024	Report header	16	31	69		Program	No
025	Tax table	74	10	93		Program	Yes
026	Pulldown group	103	999	189		Program	Yes
028	Set menu table	80	999	183		Program	Yes
029	Batch X/Z	9	10	69		Program	Yes
032	Receipt/slip message	40	48	69		Program	Yes
033	Endorse message	40	4	69		Program	Yes
035	Print buffer	80	999	69		Buffer	Yes
036	Registration buffer	80	2000	69		Buffer	Yes
039	Character recall	40	9999	69		Program	Yes
041	Check print	3	9	69		Program	Yes
044	Display buffer	40	1000	69		Buffer	Yes
047	Graphic logo	13	432/864	69		Program	Yes
048	Electronic journal memory	41	1000	69		Buffer	Yes
648	Electronic journal (collection)	41	12336	69	for master	Buffer	Yes
054	PLU 2nd @	46	9999	99		Program	Yes
062	Scheduler	14	99	75		Program	Yes
065	Order character	16	99	69		Program	Yes
074	Key table	36	192	171		Program	No
099	Euro program	4	3	69		Program	Yes
905	Auto program control	3	20	75		Program	Yes
Arrangement							
038	Arrange group (1)	24	9999	69		Program	Yes
138	Arrange group (2)	24	9999	69		Program	Yes
238	Arrange group (3)	24	9999	69		Program	Yes
338	Arrange group (4)	24	9999	69		Program	Yes
438	Arrange group (5)	24	9999	69		Program	Yes

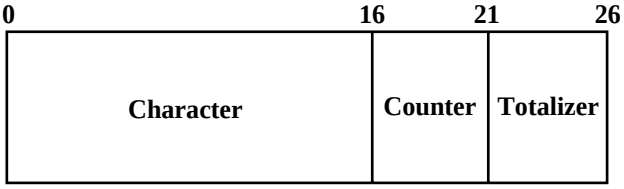
The capacity consumed by each file is calculated by the formula: Capacity = Record length × No. of records + Work size

A-3. File format

A-3-1. Fixed totalizer file

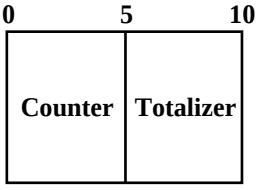
A-3-1-1 Fixed totalizer (daily)

File name: Fixed totalizer (daily) File No.: 001 Max. allocatable records: 78 (fixed)



A-3-1-2 Fixed totalizer (periodic/consolidation)

File name: Fixed totalizer (periodic 1) File No.: 101 Max. allocatable records: 78 (fixed)
File name: Fixed totalizer (periodic 2) File No.: 201 Max. allocatable records: 78 (fixed)
File name: Fixed totalizer (daily consolidation) File No.: 301 Max. allocatable records: 78 (fixed)
File name: Fixed totalizer (periodic 1 consolidation) File No.: 401 Max. allocatable records: 78 (fixed)
File name: Fixed totalizer (periodic 2 consolidation) File No.: 501 Max. allocatable records: 78 (fixed)
File name: Fixed totalizer (consolidation work) File No.: 601 Max. allocatable records: 78 (fixed)



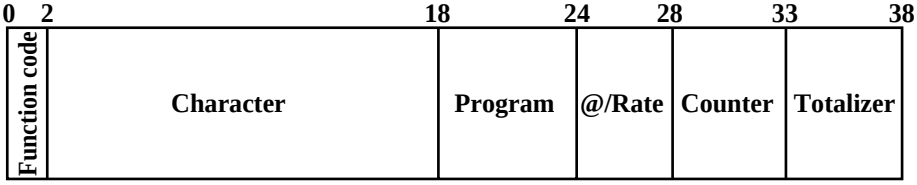
Rec No.	Message
001	Gross sales total
002	Net sales total
003	Cash in drawer
004	Not used
005	Not used
006	Not used
007	Charge in drawer
008	Not used
009	Not used
010	Not used
011	Check in drawer
012	Not used
013	Not used
014	Not used
015	Credit in drawer
016	Not used
017	Not used
018	Not used
019	Not used
020	Not used
021	Not used
022	Not used
023	Refund mode total
024	Customer count
025	Average sales per customer
026	Check cashing service fee
027	New Balance fee
028	Not used
029	Clerk commission 1 total
030	Clerk commission 2 total
031	Foreign currency cash in drawer 1
032	Foreign currency check in drawer 1
033	Foreign currency cash in drawer 2
034	Foreign currency check in drawer 2
035	Foreign currency cash in drawer 3
036	Foreign currency check in drawer 3
037	Reduction
038	Item return
039	Clear counter

Rec No.	Message
040	Not used
041	Rounding
042	ST transfer void
043	Not used
044	Not used
045	Taxable amount 1
046	Tax 1
047	Tax exempt 1
048	Taxable amount 2
049	Tax 2
050	Tax exempt 2
051	Taxable amount 3
052	Tax 3
053	Tax exempt 3
054	Taxable amount 4
055	Tax 4
056	Tax exempt 4
057	Taxable amount 5
058	Tax 5
059	Tax exempt 5
060	Taxable amount 6
061	Tax 6
062	Tax exempt 6
063	Taxable amount 7
064	Tax 7
065	Tax exempt 7
066	Taxable amount 8
067	Tax 8
068	Tax exempt 8
069	Taxable amount 9
070	Tax 9
071	Tax exempt 9
072	Taxable amount 10
073	Tax 10
074	Tax exempt 10
075	Euro cash in drawer
076	Euro charge in drawer
077	Euro check in drawer
078	Euro credit in drawer

A-3-2. Transaction key file

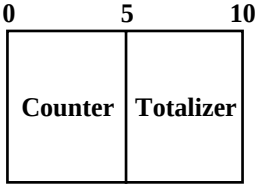
A-3-2-1 Transaction key (daily)

File name: Transaction key (daily) File No.: 002 Max. allocatable records: 999



A-3-2-2 Transaction key (periodic/consolidation)

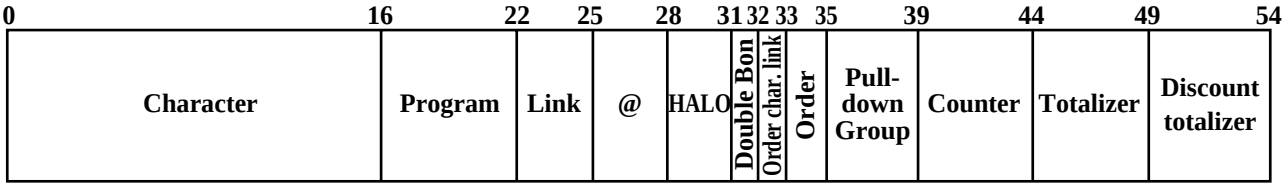
File name: Transaction key (periodic 1) File No.: 102 Max. allocatable records: 999
File name: Transaction key (periodic 2) File No.: 202 Max. allocatable records: 999
File name: Transaction key (daily consolidation) File No.: 302 Max. allocatable records: 999
File name: Transaction key (periodic 1 consolidation)
File No.: 402 Max. allocatable records: 999
File name: Transaction key (periodic 2 consolidation)
File No.: 502 Max. allocatable records: 999
File name: Transaction key (consolidation work) File No.: 602 Max. allocatable records: 999



A-3-3. Subdepartment file

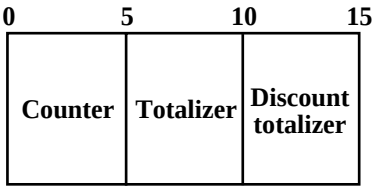
A-3-3-1 Subdepartment (daily)

File name: Subdepartment (daily) File No.: 003 Max. allocatable records: 99



A-3-3-2 Subdepartment (periodic/consolidation)

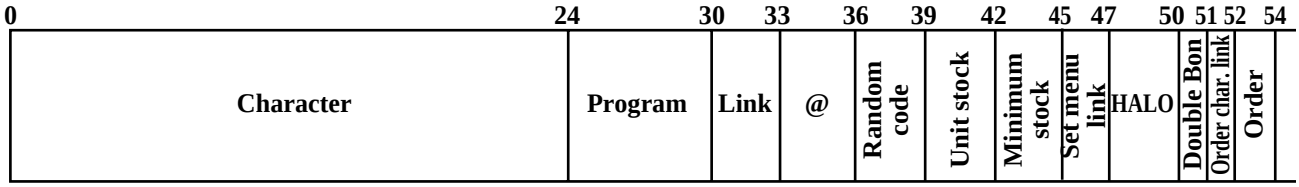
File name: Subdepartment (periodic 1) File No.: 103 Max. allocatable records: 99
File name: Subdepartment (periodic 2) File No.: 203 Max. allocatable records: 99
File name: Subdepartment (daily consolidation) File No.: 303 Max. allocatable records: 99
File name: Subdepartment (periodic 1 consolidation) File No.: 403 Max. allocatable records: 99
File name: Subdepartment (periodic 2 consolidation) File No.: 503 Max. allocatable records: 99
File name: Subdepartment (consolidation work) File No.: 603 Max. allocatable records: 99

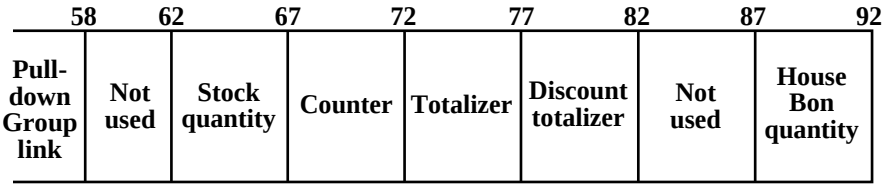


A-3-4. PLU file

A-3-4-1 PLU (daily)

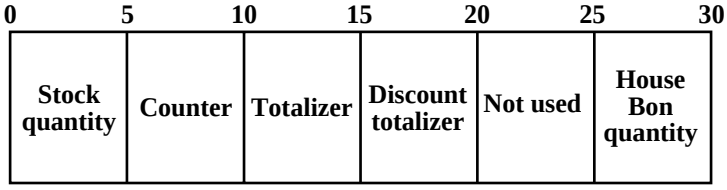
File name: PLU File No.: 004 Max. allocatable records: 9999





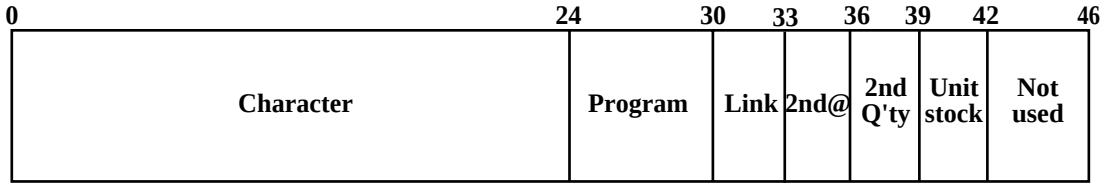
A-3-4-2 PLU (periodic/consolidation)

File name: PLU (periodic 1) File No.: 104 Max. allocatable records: 9999
File name: PLU (periodic 2) File No.: 204 Max. allocatable records: 9999
File name: PLU (daily consolidation) File No.: 304 Max. allocatable records: 9999
File name: PLU (periodic 1 consolidation) File No.: 404 Max. allocatable records: 9999
File name: PLU (periodic 2 consolidation) File No.: 504 Max. allocatable records: 9999
File name: PLU (consolidation work) File No.: 604 Max. allocatable records: 9999



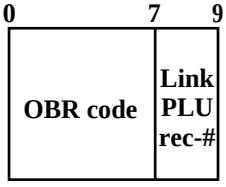
A-3-4-3 PLU 2nd@

File name: PLU 2nd@ File No.: 054 Max. allocatable records: 9999



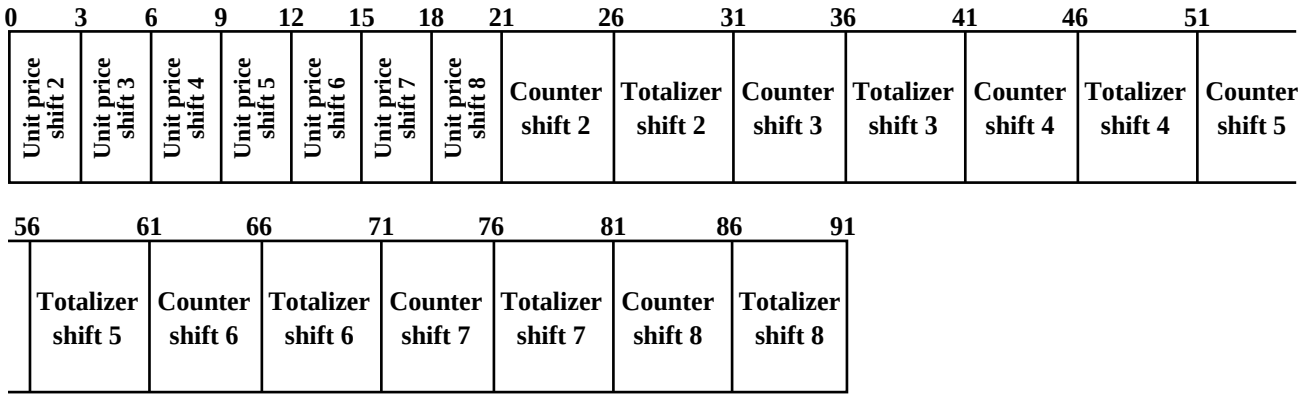
A-3-4-4 Scanning PLU link

File name: Scanning PLU link File No.: 016 Max. allocatable records: 300



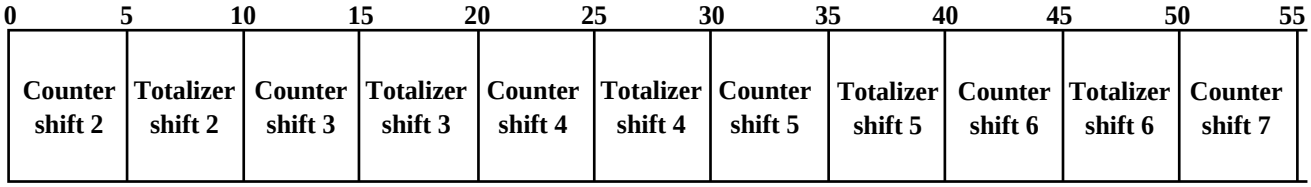
A-3-4-5 Shift PLU (daily)

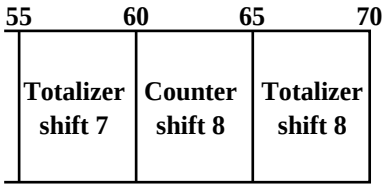
File name: Shift PLU File No.: 055 Max. allocatable records: 9999



A-3-4-6 Shift PLU (periodic/consolidation)

File name: Shift PLU (periodic 1) File No.: 155 Max. allocatable records: 9999
File name: Shift PLU (periodic 2) File No.: 255 Max. allocatable records: 9999
File name: Shift PLU (daily consolidation) File No.: 355 Max. allocatable records: 9999
File name: Shift PLU (periodic 1 consolidation) File No.: 455 Max. allocatable records: 9999
File name: Shift PLU (periodic 2 consolidation) File No.: 555 Max. allocatable records: 9999
File name: Shift PLU (consolidation work) File No.: 655 Max. allocatable records: 9999

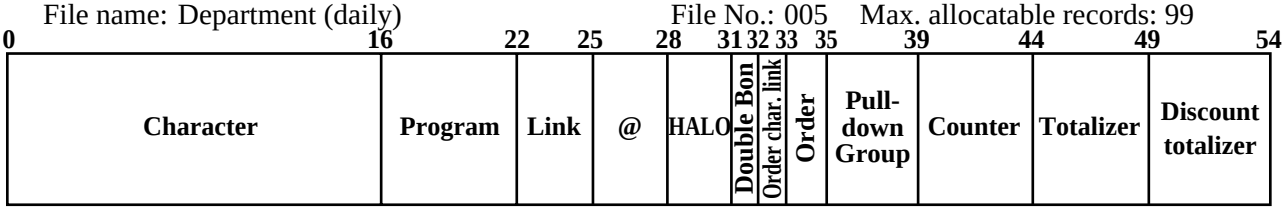




A-3-5. Department file

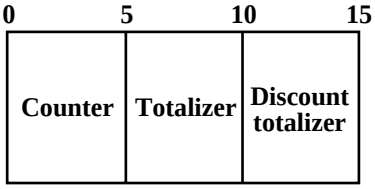
A-3-5-1 Department (daily)

File name: Department (daily) File No.: 005 Max. allocatable records: 99



A-3-5-2 Department (periodic/consolidation)

File name: Department (periodic 1) File No.: 105 Max. allocatable records: 99
File name: Department (periodic 2) File No.: 205 Max. allocatable records: 99
File name: Department (daily consolidation) File No.: 305 Max. allocatable records: 99
File name: Department (periodic 1 consolidation) File No.: 405 Max. allocatable records: 99
File name: Department (periodic 2 consolidation) File No.: 505 Max. allocatable records: 99
File name: Department (consolidation work) File No.: 605 Max. allocatable records: 99



Progrm field for PLU, department, subdepartment, PLU 2nd@

Description		Choice	Program code
Single item control: (Not effective for PLU 2nd@) Normal receipt = 0, Single item receipt = 3		Significant number	□ D_{12}
Selective item status 1 (Not effective for PLU 2nd@)	a	No = 0 Yes = 1	□ (a+b) D_{11}
Selective item status 2 (Not effective for PLU 2nd@)	b	No = 0 Yes = 2	
Normal/condiment/preparation (Only effective for PLU) Normal item = 0, Condiment = 1, Preparation = 2		Significant number	□ D_{10}
U.S., Singapore: Taxable status 1	a	No = 0 Yes = 1	0 □ (a+b+c) D_9 D_8
Taxable status 2	b	No = 0 Yes = 2	
Taxable status 3	c	No = 0 Yes = 4	
Canada: Taxable 1 = 01, Taxable 2 = 02, Taxable 3 = 03, Taxable 4 = 04 Taxable 1 & 2 = 05, Taxable 1 & 3 = 06, Taxable 1 & 4 = 07 Non taxable = 00		Significant number	□ □ D_9 D_8
Other area: Taxable status 01 ~ 10 (“00” means Non-tax)		Significant number	
Multiple validation (Not effective for PLU 2nd@) (If “No”, only one validation is possible.)	a	Yes = 0 No = 1	□ (a+b) D_7
Full hash (Not effective for PLU 2nd@)	b	No = 0 Yes = 2	
Open PLU (Only effective for PLU)	c	No = 0 Yes = 4	
Enable 0 unit price.	a	No = 0 Yes = 1	□ (a+b+c) D_6
Enable negative price. (Not effective for PLU 2nd@)	b	No = 0 Yes = 2	
Hash (Not effective for PLU 2nd@)	c	No = 0 Yes = 4	
Register by unit price of pulldown main item. (i.e. ignore sub item unit price)	a	No = 0 Yes = 1	□ (a+b) D_5
Use premium item of pulldown set.	b	No = 0 Yes = 2	
Low digit limitation (LDL) for manually entered unit price. (Not effective for PLU 2nd@)		Significant number	□ D_4
Always “0”			0 D_3
Commission 1 (Not effective for PLU 2nd@)	a	No = 0 Yes = 1	□ (a+b) D_2
Commission 2 (Not effective for PLU 2nd@)	b	No = 0 Yes = 2	
Always “0”			0 D_1

Link field (for PLU, subdepartment, department, PLU 2nd@)

Description	Choice	Program code
Link subdepatment record number (for PLU and PLU 2nd@)	Significant numbers	D_6 D_5
Link depatment record number (for PLU PLU 2nd@ and subdepartment)	Significant numbers	D_4 D_3
Link group record number	Significant numbers	D_2 D_1

Random code field (for PLU)

Description	Choice	Program code
PLU random code (only for PLU)	Significant numbers	D_6 D_5 D_4 D_3 D_2 D_1

Set menu link field (for PLU)

Description	Choice	Program code
Set menu table number (only for PLU)	Significant numbers	D_4 D_3 D_2 D_1

Unit/minimum stock field (for PLU, PLU 2nd@)

Description	Choice	Program code
Unit stock quantity (0.001 ~ 99.999) Enter with decimal point. (If "0", treats as "1".) (for PLU and PLU 2nd@)	Significant numbers	D_{12} D_{11} D_{10} D_9 D_8
Always "0"		0 D_7
Minimum stock quantity (0.001 ~ 99.999) Enter with decimal point. (for PLU and PLU 2nd@)	Significant numbers	D_6 D_5 D_4 D_3 D_2
Always "0"		0 D_1

HALO field (for PLU, subdepartment, department)

Description	Choice	Program code
High amount limit for entering unit price manually. (not for PLU 2nd@)	Significant numbers	D_6 D_5 D_4 D_3 D_2 D_1

Order character link field (for PLU, subdepartment, department)

Description	Choice	Program code
Order character record number (00 ~ 99) (not for PLU 2nd@)	Significant numbers	D_2 D_1

Double bon field (for PLU, subdepartment, department)

Description	Choice	Program code
Number of Bon receipts (1 ~ 9) (If "0", no Bon is issued.) (not for PLU 2nd@)	Significant number	□ D_1

Order character link field (for PLU, subdepartment, department)

Description		Choice	Program code
Order printing color: 1 Black: UP-250 (Normal : UP-350), 2 Red: UP-250 (Reverse: UP-350) (not for PLU 2nd@)		1 = 0 2 = 1	□ D_4
Print out to order printer #1. (not for PLU 2nd@)	a	No = 0 Yes = 1	□ (a+b+c) D_3
Print out to order printer #2. not for PLU 2nd@)	b	No = 0 Yes = 2	
Print out to order printer #3. (not for PLU 2nd@)	c	No = 0 Yes = 4	
Print out to order printer #4. (not for PLU 2nd@)	a	No = 0 Yes = 1	□ (a+b+c) D_2
Print out to order printer #5. (not for PLU 2nd@)	b	No = 0 Yes = 2	
Print out to order printer #6. (not for PLU 2nd@)	c	No = 0 Yes = 4	
Print out to order printer #7. (not for PLU 2nd@)		No = 0 Yes = 1	□ D_1

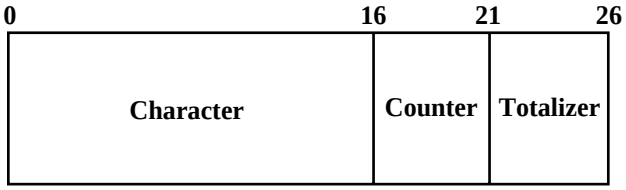
Pulldown group field (for PLU, subdepartment, department)

Description	Choice	Program code
Pulldown group record number (1) (not for PLU 2nd@)	Significant numbers	□ □ D_8 D_7
Pulldown group record number (2) (not for PLU 2nd@)	Significant numbers	□ □ D_6 D_5
Pulldown group record number (3) (not for PLU 2nd@)	Significant numbers	□ □ D_4 D_3
Pulldown group record number (4) (not for PLU 2nd@)	Significant numbers	□ □ D_2 D_1

A-3-6. Group file

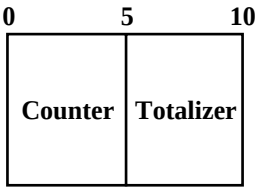
A-3-6-1 Group (daily)

File name: Group (daily) File No.: 006 Max. allocatable records: 99



A-3-6-2 Group (periodic/consolidation)

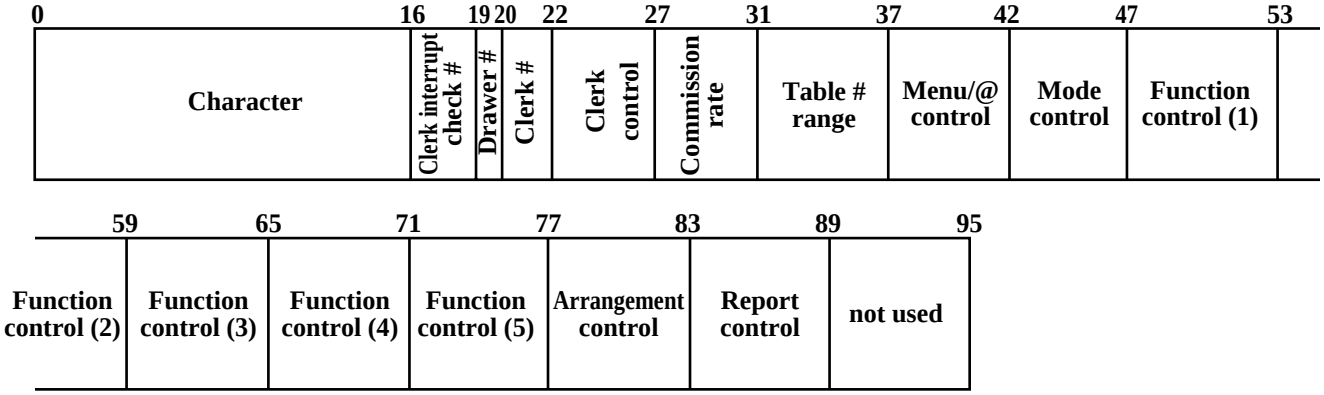
File name: Group (periodic 1) File No.: 106 Max. allocatable records: 99
File name: Group (periodic 2) File No.: 206 Max. allocatable records: 99
File name: Group (daily consolidation) File No.: 306 Max. allocatable records: 99
File name: Group (periodic 1 consolidation) File No.: 406 Max. allocatable records: 99
File name: Group (periodic 2 consolidation) File No.: 506 Max. allocatable records: 99
File name: Group (consolidation work) File No.: 606 Max. allocatable records: 99



A-3-7. Clerk file

A-3-7-1 Clerk (programming)

File name: Clerk (programming) File No.: 007 Max. allocatable records: 99



A-3-7-1-1 Commission rate

Description	Choice	Program code
Commission rate 1 (0.01 ~ 99.99%)	Significant numbers (with decimal)	□ □ □ □ D_8 D_7 D_6 D_5
Commission rate 2 (0.01 ~ 99.99%)	Significant numbers (with decimal)	□ □ □ □ D_4 D_3 D_2 D_1

A-3-7-1-2 Table range

Description	Choice	Program code
Minimum value for table range (1 ~ 999999) ("0" means no programming.)	Significant numbers	□ □ □ □ □ □ D_{12} D_{11} D_{10} D_9 D_8 D_7
Maximum value for table range (1 ~ 999999) ("0" means no programming.)	Significant numbers	□ □ □ □ □ □ D_6 D_5 D_4 D_3 D_2 D_1

A-3-7-1-3 Clerk control

Description		Choice	Program code
Check number compulsory		No = 0 Yes = 4	□ D_{10}
Table number compulsory	a	No = 0 Yes = 1	□ (a+b+c) D_9
Number of customer compulsory	b	No = 0 Yes = 2	
Guest receipt compulsory (at finalization)	c	No = 0 Yes = 4	
Guest receipt compulsory (at new balance)	a	No = 0 Yes = 1	□ (a+b+c) D_8
Slip auto-batch print compulsory (at finalization)	b	No = 0 Yes = 2	
Slip auto-batch print compulsory (at new balance)	c	No = 0 Yes = 4	
Clerk attribution: Cashier = 0, Clerk = 1, Manager = 2		Significant number	□ D_7
Training clerk		No = 0 Yes = 1	□ D_6
Enable to open check created by other clerk	a	No = 0 Yes = 1	□ (a+b+c) D_5
Disable to sign on	b	No = 0 Yes = 2	
Sign off at finalization	c	No = 0 Yes = 4	
Always “0”			0 D_4
Seat number compulsory	a	No = 0 Yes = 1	□ (a+b) D_3
Eat-in/Take-out compulsory	b	No = 0 Yes = 2	
Always “0”			0 D_2
Void operation: Complete void = 0, Current transaction = 1, Not allowed = 2		Significant number	□ D_1

A-3-7-1-4 Menu/@ control

Description		Choice	Program code
Enable to use 1st menu sheet.	a	Yes = 0 No = 1	□ (a+b+c) D_{10}
Enable to use 2nd menu sheet.	b	Yes = 0 No = 2	
Enable to use 3rd menu sheet.	c	Yes = 0 No = 4	
Enable to use 4th menu sheet.	a	Yes = 0 No = 1	□ (a+b+c) D_9
Enable to use 5th menu sheet.	b	Yes = 0 No = 2	
Enable to use 6th menu sheet.	c	Yes = 0 No = 4	
Enable to use 7th menu sheet.	a	Yes = 0 No = 1	□ (a+b) D_8
Enable to use 8th menu sheet.	b	Yes = 0 No = 2	
Always “000”			**0** **0** **0** D_7 D_6 D_5
Default shift PLU sheet number after sign on. (0 ~ 8) (Do not set the disabled sheet No., “0” means maintaining previous menu sheet.)		Significant number	□ D_4
Default menu sheet number after sign on. (0 ~ 8) (Do not set the disabled sheet No., “0” means maintaining previous menu sheet.)		Significant number	□ D_3
Default @ menu sheet number after sign on. (0 ~ 2) (Do not set the disabled sheet No., “0” means maintaining previous menu sheet.)		Significant number	□ D_2
Status/Stay down menu sheet assignment.	a	Status = 0 Stay down = 1	□ (a+b) D_1
Status/Stay down @ menu sheet assignment.	b	Status = 0 Stay down = 2	

A-3-7-1-5 Mode control

Description		Choice	Program code
Enable to operate in REG mode.	a	Yes = 0 No = 1	□ (a+b+c) D_{10}
Enable to operate in REF mode.	b	Yes = 0 No = 2	
Enable to operate in REG– mode.	c	Yes = 0 No = 4	
Always “0”			0 D_9
Enable to operate in PGM1 mode.	a	Yes = 0 No = 1	□ (a+b+c) D_8
Enable to operate in PGM2 mode.	b	Yes = 0 No = 2	
Enable to operate in PGM3 mode.	c	Yes = 0 No = 4	
Enable to operate in PGM4 mode.	a	Yes = 0 No = 1	□ (a+b+c) D_7
Enable to operate in PGM5 mode.	b	Yes = 0 No = 2	
Enable to operate in PGM6 mode.	c	Yes = 0 No = 4	
Always “0”			0 D_6
Enable to oprate in X/Z mode.	a	Yes = 0 No = 1	□ (a+b+c) D_5
Enable to operate in Manager mode.	b	Yes = 0 No = 2	
Enable to operate in collection/consolidation mode.	c	Yes = 0 No = 4	
Enable to operate in Auto-PGM mode	a	Yes = 0 No = 1	□ (a+b) D_4
Enable to operate in CF card Auto-PGM mode	b	Yes = 0 No = 2	
Always “00”			0 0 D_3 D_2
Default mode after sign on: REG = 0, PGM1 = 1, X/Z = 2		Significant number	□ D_1

A-3-7-1-6 Function control 1

Description		Choice	Program code
Enable to operate cash.	a	Yes = 0 No = 1	□ (a+b+c) D_{12}
Enable to operate charge.	b	Yes = 0 No = 2	
Enable to operate check.	c	Yes = 0 No = 4	
Enable to operate credit.	a	Yes = 0 No = 1	□ (a+b) D_{11}
Enable to operate new balance.	b	Yes = 0 No = 4	
Enable to operate price inquiry.	a	Yes = 0 No = 2	□ (a+b) D_{10}
Enable to operate stock inquiry.	b	Yes = 0 No = 4	
Enable to operate text recall.	a	Yes = 0 No = 1	□ (a+b+c) D_9
Enable to operate text print.	b	Yes = 0 No = 2	
Enable to operate check print.	c	Yes = 0 No = 4	
Enable to operate clerk transfer.	a	Yes = 0 No = 1	□ (a+b+c) D_8
Enable to operate table transfer.	b	Yes = 0 No = 2	
Enable to operate tip.	c	Yes = 0 No = 4	
Enable to oprate normal receipt.		Yes = 0 No = 1	□ D_7
Enable to operate loan.	a	Yes = 0 No = 1	□ (a+b+c) D_6
Enable to operate received on account.	b	Yes = 0 No = 2	
Enable to operate paid out.	c	Yes = 0 No = 4	
Enable to operate pick up.	a	Yes = 0 No = 1	□ (a+b) D_5
Enable to operate coupon.	b	Yes = 0 No = 2	
Enable to operate deposit.	a	Yes = 0 No = 1	□ (a+b) D_4
Enable to operate minus.	b	Yes = 0 No = 4	
Enable to operate percent minus.	a	Yes = 0 No = 1	□ (a+b+c) D_3
Enable to operate plus.	b	Yes = 0 No = 2	
Enable to operate percent plus.	c	Yes = 0 No = 4	
Enable to operate refund.		Yes = 0 No = 4	□ D_2
Enable to operate coupon 2.		Yes = 0 No = 4	□ D_1

A-3-7-1-7 Function control 2

Description		Choice	Program code
Enable to operate validation.	a	Yes = 0 No = 1	□ (a+b+c) D_{12}
Enable to operate receipt.	b	Yes = 0 No = 2	
Enable to operate check endorse.	c	Yes = 0 No = 4	
Enable to operate non add.	a	Yes = 0 No = 1	□ (a+b+c) D_{11}
Enable to operate non add/no sale.	b	Yes = 0 No = 2	
Enable to operate no sale.	c	Yes = 0 No = 4	
Enable to operate No. of customer	a	Yes = 0 No = 1	□ (a+b+c) D_{10}
Enable to operate arrangement.	b	Yes = 0 No = 2	
Enable to operate currency exchange.	c	Yes = 0 No = 4	
Enable to operate VAT.	a	Yes = 0 No = 1	□ (a+b) D_9
Enable to operate bill copy.	b	Yes = 0 No = 2	
Always “0”.			0 D_8
Enable to operate slip back feed/release.		Yes = 0 No = 4	□ D_7
Enable to operate slip print.	a	Yes = 0 No = 1	□ (a+b+c) D_6
Enable to operate slip feed/release.	b	Yes = 0 No = 2	
Enable to operate tax shift.	c	Yes = 0 No = 4	
Enable to operate table number.		Yes = 0 No = 4	□ D_5
Enable to operate money declaration.	a	Yes = 0 No = 1	□ (a+b) D_4
Enable to operate shift PLU.	b	Yes = 0 No = 2	
Enable to operate menu shift.	a	Yes = 0 No = 1	□ (a+b) D_3
Enable to operate tax exempt.	b	Yes = 0 No = 2	
Enable to operate open.	a	Yes = 0 No = 1	□ (a+b+c) D_2
Enable to operate open 2.	b	Yes = 0 No = 2	
Enable to operate 1st@.	c	Yes = 0 No = 4	
Enable to operate 2nd@.	a	Yes = 0 No = 1	□ (a+b) D_1
Enable to operate clerk No.	b	Yes = 0 No = 4	

A-3-7-1-8 Function control 3

Description		Choice	Program code
Enable to operate operator X/Z.	a	Yes = 0 No = 1	□ (a+b+c) D_{12}
Enable to tray total.	b	Yes = 0 No = 2	
Enable to operate subtotal.	c	Yes = 0 No = 4	
Enable to operate receipt on/off.	a	Yes = 0 No = 1	□ (a+b+c) D_{11}
Enable to operate TA/ST.	b	Yes = 0 No = 2	
Enable to operate operator No.	c	Yes = 0 No = 4	
Enable to operate MD/ST.		Yes = 0 No = 2	□ D_{10}
Enable to operate X.	a	Yes = 0 No = 1	□ (a+b+c) D_9
Enable to operate X/For.	b	Yes = 0 No = 2	
Enable to operate X/XX.	c	Yes = 0 No = 4	
Enable to operate X/XXX.	a	Yes = 0 No = 1	□ (a+b) D_8
Enable to operate Ketten Bon.	b	Yes = 0 No = 2	
Enable to operate selective item ST.		Yes = 0 No = 1	□ D_7
Always “00”			0 0 D_6 D_5
Enable to operate new check.	a	Yes = 0 No = 1	□ (a+b+c) D_4
Enable to operate old check.	b	Yes = 0 No = 2	
Enable to operate new/old check.	c	Yes = 0 No = 4	
Enable to operate add check.	a	Yes = 0 No = 1	□ (a+b) D_3
Enable to operate separate check.	b	Yes = 0 No = 2	
Always “00”			0 0 D_2 D_1

A-3-7-1-9 Function control 4

Description		Choice	Program code
Enable to operate substitution.	a	Yes = 0 No = 1	□ (a+b) D_{12}
Enable to operate House Bon.	b	Yes = 0 No = 4	
Always “0”			0 D_{11}
Enable to operate operator open check.	a	Yes = 0 No = 1	□ (a+b+c) D_{10}
Enable to operate media change.	b	Yes = 0 No = 2	
Enable to operate seat number.	c	Yes = 0 No = 4	
Enable to operate display on/off.	a	Yes = 0 No = 1	□ (a+b+c) D_9
Enable to operate REG mode.	b	Yes = 0 No = 2	
Enable to operate X/Z mode	c	Yes = 0 No = 4	
Enable to operate PGM mode.		Yes = 0 No = 1	□ D_8
Enable to operate post entry.	a	Yes = 0 No = 1	□ (a+b+c) D_7
Enable to operate round repeat.	b	Yes = 0 No = 2	
Enable to operate eat-in.	c	Yes = 0 No = 4	
Enable to operate take-out.	a	Yes = 0 No = 1	□ (a+b+c) D_6
Enable to operate store.	b	Yes = 0 No = 2	
Enable to operate recall.	c	Yes = 0 No = 4	
Enable to operate reverse display.	a	Yes = 0 No = 1	□ (a+b) D_5
Enable to operate electronic journal display.	b	Yes = 0 No = 2	
Enable to operate home position.	a	Yes = 0 No = 1	□ (a+b+c) D_4
Enable to operate display mode change.	b	Yes = 0 No = 2	
Enable to operate Dutch account.	c	Yes = 0 No = 4	
Always “0”			0 D_3
Enable to operate all void of this transaction.		Yes = 0 No = 4	□ D_2
Enable to operate all void from the top of this receipt.		Yes = 0 No = 1	□ D_1

A-3-7-1-10 Function control 5

Description		Choice	Program code
Enable to operate price.	a	Yes = 0 No = 1	□ (a+b+c) D_{12}
Enable to operate PLU No.	b	Yes = 0 No = 2	
Enable to operate subdepartment No.	c	Yes = 0 No = 4	
Enable to operate department No.	a	Yes = 0 No = 1	□ (a+b) D_{11}
Enable to operate list No.	b	Yes = 0 No = 2	
Enable to operate flat PLU.	a	Yes = 0 No = 1	□ (a+b+c) D_{10}
Enable to operate department key.	b	Yes = 0 No = 2	
Enable to operate subdepartment key.	c	Yes = 0 No = 4	
Enable to operate list key.		Yes = 0 No = 1	□ D_9
Always “0000”			0 0 0 0 D_8 D_7 D_6 D_5
Always “0000”			0 0 0 0 D_4 D_3 D_2 D_1

A-3-7-1-11 Arrangement control

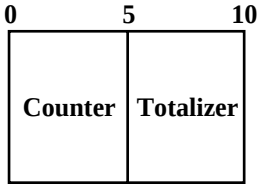
Description		Choice	Program code
Enable to operate arrange group 1.	a	Yes = 0 No = 1	□ (a+b+c) D_{12}
Enable to operate arrange group 2.	b	Yes = 0 No = 2	
Enable to operate arrange group 3.	c	Yes = 0 No = 4	
Enable to operate arrange group 4.	a	Yes = 0 No = 1	□ (a+b+c) D_{11}
Enable to operate arrange group 5.	b	Yes = 0 No = 2	
Always “00000”			0 0 0 0 0 D_{10} D_9 D_8 D_7 D_6
Always “00000”			0 0 0 0 0 D_5 D_4 D_3 D_2 D_1

A-3-7-1-12 Report control

Description		Choice	Program code
Enable to issue daily X report.	a	Yes = 0 No = 1	□ (a+b) D_{12}
Enable to issue daily Z report.	b	Yes = 0 No = 2	
Enable to issue periodic 1 X report.	a	Yes = 0 No = 1	□ (a+b+c) D_{11}
Enable to issue periodic 1 Z report.	b	Yes = 0 No = 2	
Enable to issue periodic 2 X report.	a	Yes = 0 No = 1	□ (a+b) D_{10}
Enable to issue periodic 2 Z report.	b	Yes = 0 No = 2	
Always “0”			0 D_9
Enable to issue batch X/Z 1 report.	a	Yes = 0 No = 1	□ (a+b+c) D_8
Enable to issue batch X/Z 2 report.	b	Yes = 0 No = 2	
Enable to issue batch X/Z 3 report.	c	Yes = 0 No = 4	
Enable to issue batch X/Z 4 report.	a	Yes = 0 No = 1	□ (a+b+c) D_7
Enable to issue batch X/Z 5 report.	b	Yes = 0 No = 2	
Enable to issue batch X/Z 6 report.	c	Yes = 0 No = 4	
Enable to issue batch X/Z 7 report.	a	Yes = 0 No = 1	□ (a+b+c) D_6
Enable to issue batch X/Z 8 report.	b	Yes = 0 No = 2	
Enable to issue batch X/Z 9 report.	c	Yes = 0 No = 4	
Enable to issue employee X/Z report.	a	Yes = 0 No = 1	□ (a+b+c) D_5
Enable to issue employee edit report.	b	Yes = 0 No = 2	
Enable to issue batch X/Z 10 report.	c	Yes = 0 No = 4	
Enable to issue operator X report.	a	Yes = 0 No = 1	□ (a+b) D_4
Enable to issue operator Z report.	b	Yes = 0 No = 2	
Always “00”			0 0 D_3 D_2
Enable to issue X/Z report by file.	a	Yes = 0 No = 1	□ (a+b+c) D_1
Enable to issue individual key/item X/Z report.	b	Yes = 0 No = 2	
Enable to issue other individual X/Z report.	c	Yes = 0 No = 4	

A-3-7-2 Clerk detail (daily, periodic / consolidation)

File name: Clerk detail (daily)	File No.: 011	Max. allocatable records: 9801
File name: Clerk detail (periodic 1)	File No.: 111	Max. allocatable records: 9801
File name: Clerk detail (periodic 2)	File No.: 211	Max. allocatable records: 9801
File name: Clerk detail (daily consolidation)	File No.: 311	Max. allocatable records: 9801
File name: Clerk detail (periodic 1 consolidation)	File No.: 411	Max. allocatable records: 9801
File name: Clerk detail (periodic 2 consolidation)	File No.: 511	Max. allocatable records: 9801
File name: Clerk detail (consolidation work)	File No.: 611	Max. allocatable records: 9801

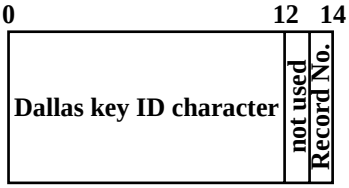


A-3-7-3 Clerk detail link

File name: Clerk detail link File No.: 030 Max. allocatable records: 99

A-3-7-4 Clerk (Dallas) key ID

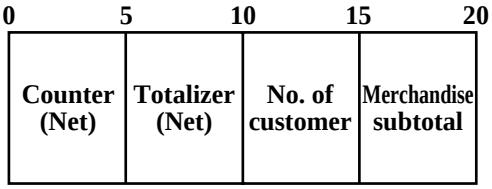
File name: Clerk (Dallas) key ID File No.: 027 Max. allocatable records: 200



A-3-8. Hourly sales file

A-3-8-1 Hourly sales (daily, periodic/consolidation)

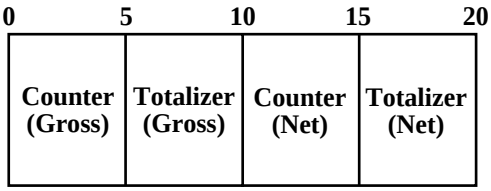
File name: Hourly sales (daily)	File No.: 009	Max. allocatable records: 96
File name: Hourly sales (periodic 1)	File No.: 109	Max. allocatable records: 96
File name: Hourly sales (periodic 2)	File No.: 209	Max. allocatable records: 96
File name: Hourly sales (daily consolidation)	File No.: 309	Max. allocatable records: 96
File name: Hourly sales (periodic 1 consolidation)	File No.: 409	Max. allocatable records: 96
File name: Hourly sales (periodic 2 consolidation)	File No.: 509	Max. allocatable records: 96
File name: Hourly sales (consolidation work)	File No.: 609	Max. allocatable records: 96



A-3-9. Monthly sales file

A-3-9-1 Monthly sales (daily, periodic/consolidation)

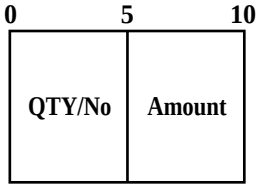
File name: Monthly sales (daily)	File No.: 010	Max. allocatable records: 32 (fixed)
File name: Monthly sales (periodic 1)	File No.: 110	Max. allocatable records: 32 (fixed)
File name: Monthly sales (periodic 2)	File No.: 210	Max. allocatable records: 32 (fixed)
File name: Monthly sales (daily consolidation)	File No.: 310	Max. allocatable records: 32 (fixed)
File name: Monthly sales (periodic 1 consolidation)	File No.: 410	Max. allocatable records: 32 (fixed)
File name: Monthly sales (periodic 2 consolidation)	File No.: 510	Max. allocatable records: 32 (fixed)
File name: Monthly sales (consolidation work)	File No.: 610	Max. allocatable records: 32 (fixed)



A-3-10. Hourly item file

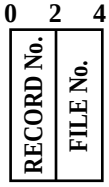
A-3-10-1 Hourly item

File name: Hourly Item (daily)	File No.: 021	Max. allocatable records: 1920
File name: Hourly Item (periodic 1)	File No.: 121	Max. allocatable records: 1920
File name: Hourly Item (periodic 2)	File No.: 221	Max. allocatable records: 1920
File name: Hourly Item (daily consolidation)	File No.: 321	Max. allocatable records: 1920
File name: Hourly Item (periodic 1 consolidation)	File No.: 421	Max. allocatable records: 1920
File name: Hourly Item (periodic 2 consolidation)	File No.: 521	Max. allocatable records: 1920
File name: Hourly Item (consolidation work)	File No.: 621	Max. allocatable records: 1920



A-3-10-2 Hourly item link (Hourly production link)

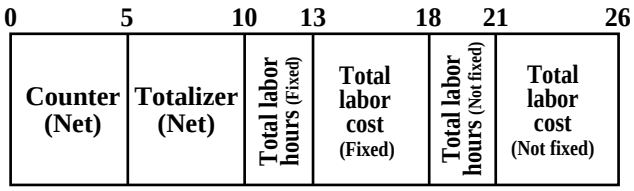
File name: Hourly item link File No.: 031 Max. allocatable records: 480



Description	Choice	Program code
Link record No.	Significant number	D_8 D_7 D_6 D_5
Always “0”		0 (D_4)
Link file No.	Significant number	D_3 D_2 D_1

A-3-10-3 Hourly / Labor

File name: Hourly / Labor File No.: 014 Max. allocatable records: 96



A-3-11. Work time file

File name: Work Time File No.: 019 Max. allocatable records: 4158
File name: Work Time (daily consolidation) File No.: 319 Max. allocatable records: 4158

Min. number of files to fix the work time:
The number of employee × 7 (days) × 3 (shift) × 2 (weeks)
Max. allocatable records:
99 × 7 × 3 × 2 = 4158

Rec#001~#003: Correspond to Monday of Employee Rec#001 (First week)
Rec#004~#006: Correspond to Tuesday of Employee Rec#001 (First week)
Rec#007~#009: Correspond to Wednesday of Employee Rec#001 (First week)
Rec#010~#012: Correspond to Thursday of Employee Rec#001 (First week)
Rec#013~#015: Correspond to Friday of Employee Rec#001 (First week)
Rec#016~#018: Correspond to Saturday of Employee Rec#001 (First week)
Rec#019~#021: Correspond to Sunday of Employee Rec#001 (First week)
Rec#020~#024: Correspond to Monday of Employee Rec#001 (Second week)
Rec#025~#027: Correspond to Tuesday of Employee Rec#001 (Second week)
Rec#028~#030: Correspond to Wednesday of Employee Rec#001 (Second week)
Rec#031~#033: Correspond to Thursday of Employee Rec#001 (Second week)
Rec#034~#036: Correspond to Friday of Employee Rec#001 (Second week)
Rec#037~#039: Correspond to Saturday of Employee Rec#001 (Second week)
Rec#040~#042: Correspond to Sunday of Employee Rec#001 (Second week)

Rec#043~#045: Correspond to Monday of Employee Red#002 (First week)

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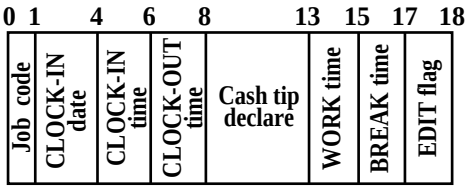
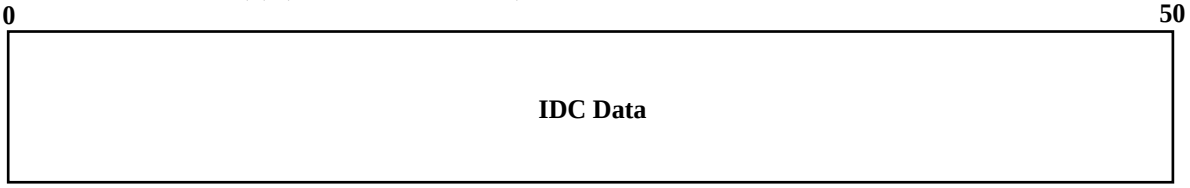


A-3-13. IDC file

A-3-13-1 IDC file (1)

File name: IDC (1) File No.: 057 Max. allocatable records: 9999
File name: IDC (1) (daily consolidation) File No.: 357 Max. allocatable records: 9999
File name: IDC (1) (consolidation work) File No.: 657 Max. allocatable records: 9999



A-3-13-2 IDC file (2)

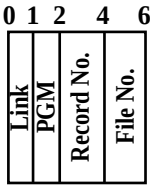
File name: IDC (2) File No.: 058 Max. allocatable records: 9999
File name: IDC (2) (daily consolidation) File No.: 358 Max. allocatable records: 9999
File name: IDC (2) (consolidation work) File No.: 658 Max. allocatable records: 9999
File structure is same as IDC file (1)

A-3-13-3 IDC file (3)

File name: IDC (3) File No.: 059 Max. allocatable records: 9999
File name: IDC (3) (daily consolidation) File No.: 359 Max. allocatable records: 9999
File name: IDC (3) (consolidation work) File No.: 659 Max. allocatable records: 9999
File structure is same as IDC file (1)

A-3-13-4 IDC link

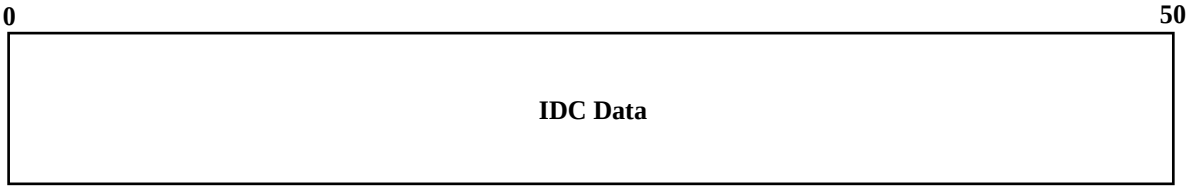
File name: IDC link File No.: 804 Max. allocatable records: 999



Description	Choice	Program code
Always “0”		0 (D_{12})
Specify IDC link file No link = 0, IDC (1) = 1, IDC (2) = 2, IDC (3) = 3	Significant number	□ (D_{11})
Always “0”		0 (D_{10})
Target for IDC: All transactions = 0, Only item/function = 1	Significant number	□ (D_9)
Record No. of the target for IDC	Significant number	□ □ □ □ (D_8 D_7 D_6 D_5)
Always “0”		0 (D_4)
File No. of the target for IDC	Significant number	□ □ □ (D_3 D_2 D_1)

A-3-13-5 IDC buffer

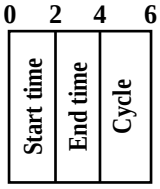
File name: IDC Buffer File No.: 063 Max. allocatable records: 9999



A-3-14. Time zone file

File name: Time zone File No.: 800 Max. allocatable records: 24

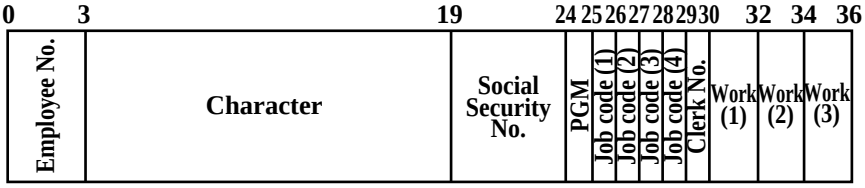
Divide one day into some time zones, and assign the length of one cycle per zone.



Description	Choice	Program code
Zone start time (hour)	00 ~23	D_{12} D_{11}
Zone start time (minute) (00~59)	00 ~ 59	D_{10} D_{9}
Zone end time (hour) (00~23)	00 ~ 23	D_{8} D_{7}
Zone end time (minute) (00~59)	00 ~ 59	D_{6} D_{5}
Zone cycle (hour) (00~23)	00 ~ 23	D_{4} D_{3}
Zone cycle (minute) (00, 15, 30, 45)	00, 15, 30, 45	D_{2} D_{1}

A-3-15. Employee file

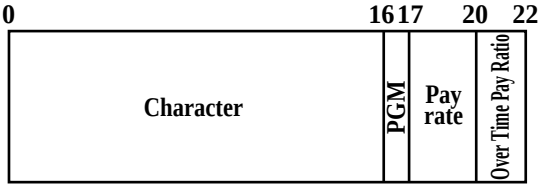
File name: Employee File No.: 801 Max. allocatable records: 99



Description		Choice	Program code
Employee No. (within a 6-digits: 000000~999999) (“000000” means no select number) Reading “zero” can be ignored. eg) 001234 → 1234		Significant number	□ ~ □ D_{44} ~ D_{39}
Character (16-degits)		Significant character	□ ~ □ D_{38} ~ D_{23}
Social security No. (within a 10-digits) Reading “zero” cannot be ignored. eg) 0001234567 → 0001234567		Significant number	□ ~ □ D_{22} ~ D_{13}
Specify job code	a	No = 0 Yes = 1	□ (a+b+c) D_{12}
Clock-in without job code or with undefined Job	b	No = 0 Yes = 2	
Use the job code window during clock-in operation	c	No = 0 Yes = 4	
Enable to clock-in with ignoring the schedule	a	No = 0 Yes = 2	□ (a+b) D_{11}
Minor employee	b	No = 0 Yes = 1	
Job code 1 (00~99) (“00” means no select number)		Significant number	□ □ D_{10} D_{9}
Job code 2 (00~99) (“00” means no select number)		Significant number	□ □ D_{8} D_{7}
Job code 3 (00~99) (“00” means no select number)		Significant number	□ □ D_{6} D_{5}
Job code 4 (00~99) (“00” means no select number)		Significant number	□ □ D_{4} D_{3}
Cashier/Clerk record number (00~99)		Significant number	□ □ D_{2} D_{1}

A-3-16. Job code file

File name: Job code File No.: 802 Max. allocatable records: 50



Description	Choice	Program code
Character (within a 16-digit) (No character means no setting.)	Significant character	□ ~ □ D_{28} ~ D_{13}
Tip declaration compulsory during clock-out operation	No = 0 Yes = 1	□ D_{12}
Always “0”		0 D_{11}
Pay rate ($0.00~$9999.99)	Significant number	□ ~ □ D_{10} ~ D_5
Overtime pay ratio (0.00 ~ 99.99) (“0.00” means “1.00”)	Significant number	□ □ □ □ D_4 D_3 D_2 D_1

A-3-17. Schedule file

File name: Schedule File No.: 803 Max. allocatable records: 2079

Min. number of files to fix the work time: The number of employee × 7 days × 3 shift
Max. allocatable records: 99 × 7 × 3 = 2079

Rec#001: Correspond to Monday Shift 1 of Employee Rec#001
Rec#002: Correspond to Monday Shift 2 of Employee Rec#001
Rec#003: Correspond to Monday Shift 3 of Employee Rec#001

Rec#004: Correspond to Tuesday Shift 1 of Employee Rec#001
Rec#005: Correspond to Tuesday Shift 2 of Employee Rec#001
Rec#006: Correspond to Tuesday Shift 3 of Employee Rec#001

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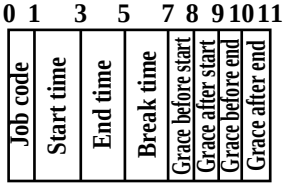
Rec#021: Correspond to Sunday Shift 3 of Employee Rec#001

Rec#022: Correspond to Monday Shift 1 of Employee Rec#002
Rec#023: Correspond to Monday Shift 2 of Employee Rec#002
Rec#024: Correspond to Monday Shift 3 of Employee Rec#002

Rec#025: Correspond to Tuesday Shift 1 of Employee Rec#002
Rec#026: Correspond to Tuesday Shift 2 of Employee Rec#002
Rec#027: Correspond to Tuesday Shift 3 of Employee Rec#002
* When 00 is entered, Grace Before/After Start/End time are recognized unlimitedly.

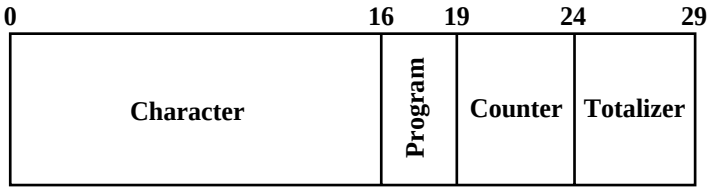


Description	Choice	Program code
Job code (00 ~ 99) (“00” means no select number)	Significant number	D_{22} D_{21}
Start time (hour) (00 ~ 23)	Significant number	D_{20} D_{19}
Start time (minute) (00 ~ 59)	Significant number	D_{18} D_{17}
End time (hour) (00 ~ 23)	Significant number	D_{16} D_{15}
End time (minute) (00 ~ 59)	Significant number	D_{14} D_{13}
Break time (hour) (00 ~ 23)	Significant number	D_{12} D_{11}
Break time (minute) (00 ~ 59)	Significant number	D_{10} D_{9}
Grace before start (minute) (00 ~ 99)	Significant number	D_{8} D_{7}
Grace after start (minute) (00 ~ 99)	Significant number	D_{6} D_{5}
Grace before end (minute) (00 ~ 99)	Significant number	D_{4} D_{3}
Grace after end (minute) (00 ~ 99)	Significant number	D_{2} D_{1}

A-3-18. Void table file

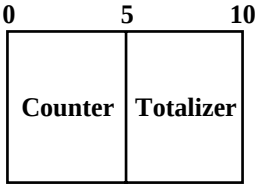
A-3-18-1 Void table (daily)

File name: Monthly sales (daily) File No.: 012 Max. allocatable records: 99



A-3-18-2 Void table (periodic/consolidation)

File name: Monthly sales (periodic 1) File No.: 112 Max. allocatable records: 99
File name: Monthly sales (periodic 2) File No.: 212 Max. allocatable records: 99
File name: Monthly sales (daily consolidation) File No.: 312 Max. allocatable records: 99
File name: Monthly sales (periodic 1 consolidation) File No.: 412 Max. allocatable records: 99
File name: Monthly sales (periodic 2 consolidation) File No.: 512 Max. allocatable records: 99
File name: Monthly sales (consolidation work) File No.: 612 Max. allocatable records: 99

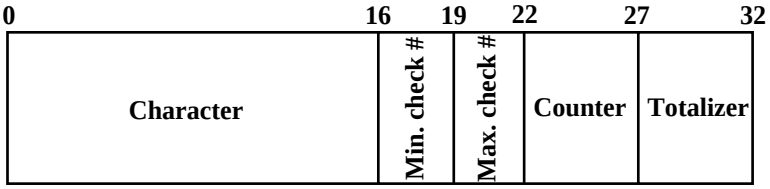


Description	Choice	Program code
Return stock value.	Yes = 0 No = 1	D_1

A-3-19. Table analysis file

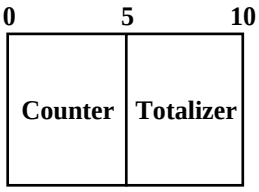
A-3-19-1 Table analysis (daily)

File name: Table analysis (daily) File No.: 018 Max. allocatable records: 99



A-3-19-2 Table analysis (periodic/consolidation)

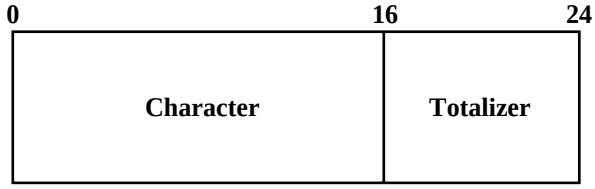
File name: Table analysis (periodic 1) File No.: 118 Max. allocatable records: 99
File name: Table analysis (periodic 2) File No.: 218 Max. allocatable records: 99
File name: Table analysis (daily consolidation) File No.: 318 Max. allocatable records: 99
File name: Table analysis (periodic 1 consolidation) File No.: 418 Max. allocatable records: 99
File name: Table analysis (periodic 2 consolidation) File No.: 518 Max. allocatable records: 99
File name: Table analysis (consolidation work) File No.: 618 Max. allocatable records: 99



A-3-20. Grand total file

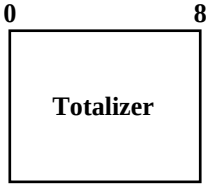
A-3-20-1 Grand total (daily)

File name: Grand total (daily) File No.: 020 Max. allocatable records:3 (fixed)



A-3-20-2 Grand total (periodic/consolidation)

File name: Grand total (periodic 1) File No.: 120 Max. allocatable records: 3 (fixed)
File name: Grand total (periodic 2) File No.: 220 Max. allocatable records: 3 (fixed)
File name: Grand total (daily consolidation) File No.: 320 Max. allocatable records: 3 (fixed)
File name: Grand total (periodic 1 consolidation) File No.: 420 Max. allocatable records: 3 (fixed)
File name: Grand total (periodic 2 consolidation) File No.: 520 Max. allocatable records: 3 (fixed)
File name: Grand total (consolidation work) File No.: 620 Max. allocatable records: 3 (fixed)



A-3-21. General control file

A-3-21-1 General control

File name: General control File No.: 022 Max. allocatable records:37 (fixed)

Rec No.	Contents
001	Date order, Monetary mode
002	Machine number
003	Consecutive number
004	Rounding, Tax system
005	Receipt control (1)
006	Calculation, Operation control
007	(future use)
008	Report control (1)
009	Report control (2)
010	Receipt control (2), Till timer
011	(future use)
012	Report control (3)
013	Communication control
014	Report control (4)
015	Report control (5)
016	Time frame
017	Receipt control (3), Money declaration
018	Slip/Guest receipt control
019	Journal control
020	Message print control
021	Order control
022	Scanning control
023	(future use)
024	(future use)
025	Set menu, Condiment
026	Check tracking
027	Clerk interrupt
028	Display control
029	Menu sheet number control (1)
030	(future use)
031	Menu sheet number control (2)
032	Menu sheet number control (3)
033	Menu sheet number control (4)
034	Menu sheet number control (5)
035	Time & Attendance
036	Store/Recall range
037	Auto check No. range

A-3-21-1-1 Date order, monetary mode

Description		Choice	Program code
Date order: Year/Month/Day = 0/1, Day/Month/Year = 2, Month/Day/Year = 3		Significant number (0 ~ 3)	□ D_{12}
Monetary mode: 0 = 0, 0.0 = 1, 0.00 = 2, 0.000 = 3		Significant number (0 ~ 3)	□ D_{11}
Always “00000”			0 0 0 0 0 D_{10} D_9 D_8 D_7 D_6
Always “00000”			0 0 0 0 0 D_5 D_4 D_3 D_2 D_1

A-3-21-1-2 Machine number

Description	Choice	Program code
Machine number	Significant number	□ □ □ □ D_4 D_3 D_2 D_1

A-3-21-1-3 Rounding, Tax system

Description		Choice	Program code
Rounding: No rounding = 0, IF1 = 1, IF2 = 2, Denmark = 3, Norway = 4, Singapore = 5		Significant number (0 ~ 5)	□ D_{10}
Tax system: VAT/Columbia = 0, U.S. = 1, Canada = 2, Singapore = 3		Significant number (0 ~ 3)	□ D_9
Always “0”			□ D_8
Allow amount tender in RF/REG– mode operation.	a	Yes = 0 No = 2	□ (a+b) D_7
Cash drawer opening: ① Immediately when the transaction is finalized. ② After validation compulsory is released.	b	① = 0 ② = 4	
Always “00”			0 0 D_6 D_5
High amount limit specification for money in drawer amount. (Sentinel function)		Maximum value (0 ~ 9) Number 0f zeros (0 ~ 9)	□ □ D_4 D_3
Always “00”			0 0 D_2 D_1

A-3-21-1-4 Consecutive number

Description	Choice	Program code
Reset consecutive number after daily fixed totalizer reset report is issued.	Yes = 1 No = 0	□ D_8
Always “0”		0 D_7
Consecutive number start value:		□ □ □ □ □ □ D_6 D_5 D_4 D_3 D_2 D_1

A-3-21-1-5 Receipt control (1)

Description		Choice	Program code
Always issue a receipt.		No = 0 Yes = 1	□ D_{11}
Print total line during finalization.	a	Yes = 0 No = 1	□ (a+b+c) D_{10}
Time sysmtem: ① 24 hour system, ② 12 hour system	b	① = 0 ② = 2	
Feed one line after issuing receipt.	c	No = 0 Yes = 4	
Always “0”			0 D_9
Break-down set menu printing. (Receipt, slip, guest receipt and display)		Yes = 0 No = 4	□ D_8
Always “000”			0 0 0 D_7 D_6 D_5
Print number of item sold.	a	No = 0 Yes = 1	□ (a+b+c) D_4
Print tax symbols.	b	Yes = 0 No = 2	
Print finalization of single item receipt.	c	Yes = 0 No = 4	
Always “0”			0 D_3
Print customer header by double sized character.	a	No = 0 Yes = 2	□ (a+b) D_2
Print unit price on receipt.	b	No = 0 Yes = 4	
Print clear key operation.	a	No = 0 Yes = 1	□ (a+b+c) D_1
Print number of customers on header.	b	Yes = 0 No = 2	
Print PLU No. on receipt.	c	No = 0 Yes = 4	

A-3-21-1-6 Calculations, Operation control

Description		Choice	Program code
Follow the taxable status and commission status of +/– to the previous item.	a	Yes = 0 No = 1	□ (a+b+c) D_{12}
Restrict 0 or 5 on the last digit.	b	No = 0 Yes = 2	
Display operator guidance.	c	Yes = 0 No = 4	
Always "0"			0 D_{11}
Accumulate to periodic totals after daily reset operation.	a	No = 0 Yes = 1	□ (a+b+c) D_{10}
Force to declare the money in drawer. (Inline X/Z)	b	Yes = 0 No = 2	
Force to declare the money in drawer.	c	No = 0 Yes = 4	
Force to press subtotal before finalization.	a	No = 0 Yes = 1	□ (a+b+c) D_9
Allow credit balance while finalization.	b	Yes = 0 No = 2	
Allow multiple refund/register minus mode operation.	c	Yes = 0 No = 4	
Affect the result of +/–, %+/%– to the item.	a	No = 0 Yes = 1	□ (a+b) D_8
Include add-on tax in net total.	b	Yes = 0 No = 2	
Include commission in net total.		Yes = 0 No = 2	□ D_7
Sounds key confirmation tone.	a	Yes = 0 No = 2	□ (a+b) D_6
Allow to issue post receipt, even if the original one is issued.	b	No = 0 Yes = 4	
Connect slit drawer.		No = 0 Yes = 4	□ D_5
Prohibit registration when the stock quantity becomes negative.	a	Yes = 0 No = 2	□ (a+b) D_4
Alert when the stock quantity becomes under minimum stock quantity.	b	No = 0 Yes = 4	
Affect to stock quantity even if the refund operation.	a	No = 0 Yes = 1	□ (a+b+c) D_3
Merge refund item registration to the original one. (Item consolidation)	b	No = 0 Yes = 2	
Allow one registration of +/–, %+/%– per one transaction.	c	No = 0 Yes = 4	
Round on the least significant digit of %+/%– registration.		No = 0 Yes = 1	□ D_2
Allow numeric entry while compulsory drawer opening.	a	Yes = 0 No = 1	□ (a+b+c) D_1
Use <YES> key to select an item.	b	Yes = 0 No = 2	
PLU numbering: By memory No. (sequential) = 0, By random code = 4	c	Significant number	

A-3-21-1-7 Report control (1)

Description		Choice	Program code
Print gross total.	a	Yes = 0 No = 1	□ (a+b+c) D_{12}
Print net total.	b	Yes = 0 No = 2	
Print cash in drawer.	c	Yes = 0 No = 4	
Print cash in drawer difference. (future)	a	Yes = 0 No = 1	□ (a+b+c) D_{11}
Print charge in drawer.	b	Yes = 0 No = 2	
Print charge in drawer difference. (future)	c	Yes = 0 No = 4	
Print check in drawer.	a	Yes = 0 No = 1	□ (a+b+c) D_{10}
Print check in drawer difference. (future)	b	Yes = 0 No = 2	
Print credit in drawer.	c	Yes = 0 No = 4	
Print credit in drawer difference. (future)		Yes = 0 No = 1	□ D_9
Print refund mode total.		Yes = 0 No = 4	□ D_8
Print number of customers.	a	Yes = 0 No = 1	□ (a+b) D_7
Print average sales per customer.	b	Yes = 0 No = 2	
Print check cashing fee total.	a	Yes = 0 No = 1	□ (a+b) D_6
Print new balance fee total.	b	Yes = 0 No = 2	
Print commission 1 total.	a	Yes = 0 No = 1	□ (a+b+c) D_5
Print commission 2 total.	b	Yes = 0 No = 2	
Print foreign currency in drawer.	c	No = 0 Yes = 4	
Print discount total.	a	Yes = 0 No = 1	□ (a+b+c) D_4
Print refund total.	b	Yes = 0 No = 2	
Print clear counter.	c	No = 0 Yes = 4	
Print rounding total.		Yes = 0 No = 2	□ D_3
Always “00”			0 0 D_2 D_1

A-3-21-1-8 Report control (2)

Description		Choice	Program code
Print taxable amount 1.	a	Yes = 0 No = 1	□ (a+b+c) D_{10}
Print tax 1.	b	Yes = 0 No = 2	
Print tax exempt 1.	c	Yes = 0 No = 4	
Print taxable amount 2.	a	Yes = 0 No = 1	□ (a+b+c) D_9
Print tax 2.	b	Yes = 0 No = 2	
Print tax exempt 2.	c	Yes = 0 No = 4	
Print taxable amount 3.	a	Yes = 0 No = 1	□ (a+b+c) D_8
Print tax 3.	b	Yes = 0 No = 2	
Print tax exempt 3.	c	Yes = 0 No = 4	
Print taxable amount 4.	a	Yes = 0 No = 1	□ (a+b+c) D_7
Print tax 4.	b	Yes = 0 No = 2	
Print tax exempt 4.	c	Yes = 0 No = 4	
Print taxable amount 5.	a	Yes = 0 No = 1	□ (a+b+c) D_6
Print tax 5.	b	Yes = 0 No = 2	
Print tax exempt 5.	c	No = 0 Yes = 4	
Print taxable amount 6.	a	Yes = 0 No = 1	□ (a+b+c) D_5
Print tax 6.	b	Yes = 0 No = 2	
Print tax exempt 6.	c	Yes = 0 No = 4	
Print taxable amount 7.	a	Yes = 0 No = 1	□ (a+b+c) D_4
Print tax 7.	b	Yes = 0 No = 2	
Print tax exempt 7.	c	Yes = 0 No = 4	
Print taxable amount 8.	a	Yes = 0 No = 1	□ (a+b+c) D_3
Print tax 8.	b	Yes = 0 No = 2	
Print tax exempt 8.	c	Yes = 0 No = 4	
Print taxable amount 9.	a	Yes = 0 No = 1	□ (a+b+c) D_2
Print tax 9.	b	Yes = 0 No = 2	
Print tax exempt 9.	c	Yes = 0 No = 4	
Print taxable amount 10.	a	Yes = 0 No = 1	□ (a+b+c) D_1
Print tax 10.	b	Yes = 0 No = 2	
Print tax exempt 10.	c	No = 0 Yes = 4	

A-3-21-1-9 Receipt control (2), Till timer

Description		Choice	Program code
Print taxable amount 1.	a	Yes = 0 No = 1	□ (a+b+c) D_{12}
Print taxable amount 2.	b	Yes = 0 No = 2	
Print taxable amount 3.	c	Yes = 0 No = 4	
Print taxable amount 4.	a	Yes = 0 No = 1	□ (a+b+c) D_{11}
Print taxable amount 5.	b	Yes = 0 No = 2	
Print taxable amount 6.	c	Yes = 0 No = 4	
Print taxable amount 7.	a	Yes = 0 No = 1	□ (a+b+c) D_{10}
Print taxable amount 8.	b	Yes = 0 No = 2	
Print taxable amount 9.	c	Yes = 0 No = 4	
Print taxable amount 10.		Yes = 0 No = 1	□ D_9
Always “000”			0 0 0 D_8 D_7 D_6
Prohibit registration, ① while all drawers open, ② while clerk’s own drawer opens.		① = 0 ② = 1	□ D_5
Till timer (00 ~ 59 minutes)		Significant numbers	□ □ D_4 D_3
Till timer (00 ~ 59 seconds)		Significant numbers	□ □ D_2 D_1

A-3-21-1-10 Report control (3)

Description		Choice	Program code
Print grand total 1 (periodic 1 & 2 report).	a	Yes = 0 No = 1	□ (a+b+c) D_6
Print grand total 2 (periodic 1 & 2 report).	b	Yes = 0 No = 2	
Print grand total 3 (periodic 1 & 2 report).	c	Yes = 0 No = 4	
Print grand total 1 (daily report).	a	Yes = 0 No = 1	□ (a+b+c) D_5
Print grand total 2 (daily report).	b	Yes = 0 No = 2	
Print grand total 3 (daily report).	c	Yes = 0 No = 4	
Always “000”			0 0 0 D_4 D_3 D_2
Print the average of the monthly report.		Yes = 0 No = 1	□ D_1

A-3-21-1-11 Communication control

Description		Choice	Program code
Broadcast the program data after completion of a program.		No = 0 Yes = 1	□ D_{12}
Always “000”			0 0 0 D_{11} D_{10} D_9
Print Z collection/consolidation result.	a	Yes = 0 No = 1	□ (a+b+c) D_8
Reset Z collection/consolidation result.	b	Yes = 0 No = 2	
Copy stock quantity from consolidation file to daily file after Z consolidation.	c	No = 0 Yes = 4	
Retry to poll th the terminal which has not responded for the first polling.	a	Yes = 0 No = 2	□ (a+b) D_7
Allow inline master operation.	b	Yes = 0 No = 4	
Print report before Z collection/consolidation.		Yes = 0 No = 4	□ D_6
Source file selection: ① Terminal file, ② Consolidation file	a	① = 0 ② = 1	□ (a+b) D_5
Add to the consolidation file after Z operation.	b	Yes = 0 No = 4	
Always “0000”			0 0 0 0 D_4 D_3 D_2 D_1

A-3-21-1-12 Report control (4)

Description		Choice	Program code
Print/Display fixed totalizer read report.	a	Print = 0 Display = 1	□ (a+b+c) D_{12}
Print/Display transaction read report.	b	Print = 0 Display = 2	
Print/Display department/subdepartment read report.	c	Print = 0 Display = 4	
Print/Display PLU/stock read report.	a	Print = 0 Display = 1	□ (a+b) D_{11}
Print/Display group read report.	b	Print = 0 Display = 4	
Print/Display clerk read report.	a	Print = 0 Display = 1	□ (a+b+c) D_{10}
Print/Display hourly/monthly read report.	b	Print = 0 Display = 2	
Print/Display open check read report.	c	Print = 0 Display = 4	
Print/Display table analysis read report.	a	Print = 0 Display = 1	□ (a+b) D_9
Print/Display E-journal read report.	b	Print = 0 Display = 4	
Print/Display hourly item read report.	a	Print = 0 Display = 1	□ (a+b+c) D_8
Print/Display employee read report.	b	Print = 0 Display = 2	
Print/Display hourly/labor read report.	c	Print = 0 Display = 4	
Always “0”.			0 D_7
Print/Display fixed totalizer reset report.	a	Print = 0 Display = 1	□ (a+b+c) D_6
Print/Display transaction reset report.	b	Print = 0 Display = 2	
Print/Display department/subdepartment reset report.	c	Print = 0 Display = 4	
Print/Display PLU/stock reset report.	a	Print = 0 Display = 1	□ (a+b) D_5
Print/Display group reset report.	b	Print = 0 Display = 4	
Print/Display clerk reset report.	a	Print = 0 Display = 1	□ (a+b+c) D_4
Print/Display hourly/monthly reset report.	b	Print = 0 Display = 2	
Print/Display open check reset report.	c	Print = 0 Display = 4	
Print/Display table analysis reset report.	a	Print = 0 Display = 1	□ (a+b) D_3
Print/Display E-journal reset report.	b	Print = 0 Display = 4	
Print/Display hourly item reset report.	a	Print = 0 Display = 1	□ (a+b+c) D_2
Print/Display employee reset report.	b	Print = 0 Display = 2	
Print/Display hourly/labor reset report.	c	Print = 0 Display = 4	
Print/Display employee activity read report.	a	Print = 0 Display = 2	□ (a+b) D_1
Print/Display financial report.	b	Print = 0 Display = 4	

A-3-21-1-13 Report control (5)

Description		Choice	Program code
Zero-skip department/subdepartment report.	a	Yes = 0 No = 1	□ (a+b) D_{12}
Zero-skip clerk report.	b	Yes = 0 No = 2	
Zero-skip transaction report.	a	Yes = 0 No = 1	□ (a+b+c) D_{11}
Zero-skip PLU report.	b	Yes = 0 No = 2	
Zero-skip hourly report.	c	Yes = 0 No = 4	
Zero-skip group report.	a	Yes = 0 No = 1	□ (a+b+c) D_{10}
Zero-skip monthly report.	b	Yes = 0 No = 2	
Zero-skip table analysis report.	c	Yes = 0 No = 4	
Zero-skip hourly item report.	a	Yes = 0 No = 1	□ (a+b) D_9
Zero-skip hourly labor report.	b	Yes = 0 No = 2	
Zero-skip shift PLU.		Yes = 0 No = 1	□ D_8
Always “00”			0 0 D_7 D_6
Print PLU No. on the PLU report.		No = 0 Yes = 4	□ D_5
Print sales ratio.	a	No = 0 Yes = 1	□ (a+b+c) D_4
Issue double Z report.	b	No = 0 Yes = 2	
Print the re-calculate amount of taxable amount and tax amount.	c	No = 0 Yes = 4	
Print consecutive No. range of the day on the fixed total report.	a	No = 0 Yes = 1	□ (a+b) D_3
Reset stock after batch reset report.	b	No = 0 Yes = 4	
Print reset counter.	a	Yes = 0 No = 1	□ (a+b+c) D_2
Print item discount totalizer.	b	No = 0 Yes = 2	
Printing order of PLU report: ① Memory No. (sequential), ② Random code	c	① = 0 ② = 4	
Always “0”			0 D_1

A-3-21-1-14 Time frame

Description	Choice	Program code
Interval time of hourly report (00 ~ 23 hours)	Significant number	□ □ □ □ D_8 D_7 D_6 D_5
Interval time of hourly report (00 ~ 59 minutes): (“0000” treats as 01:00.)		
Start time of hourly report (00 ~ 23 hours)	Significant number	□ □ □ □ D_4 D_3 D_2 D_1
Start time of hourly report (00 ~ 59 minutes)		

A-3-21-1-15 Receipt control (3), Money declaration

Description		Choice	Program code
Money declaration compulsory (cash). (future)	a	No = 0 Yes = 1	□ (a+b+c) D_{10}
Money declaration compulsory (charge). (future)	b	No = 0 Yes = 2	
Money declaration compulsory (check). (future)	c	No = 0 Yes = 4	
Money declaration compulsory (credit). (future)	a	No = 0 Yes = 1	□ (a+b) D_9
Print double-hight characters in UP-350.	b	No = 0 Yes = 2	
Classify registered items by group in receipt.	a	No = 0 Yes = 1	□ (a+b+c) D_8
Classify registered items by department in receipt.	b	Yes = 0 No = 2	
Classified item printing format: ① Total, ② Detail with total	c	① = 0 ② = 4	
Include VAT amount in commission subtotal.	a	No = 0 Yes = 1	□ (a+b) D_7
Print total line in classified item printing.	b	Yes = 0 No = 2	
Rounding of commission: Round off = 0, cut off = 1, round up = 2		Significant number	□ D_6
Append two zeros in unit price programming.	a	No = 0 Yes = 1	□ (a+b+c) D_5
Capture the details of the copy guest receipt in electronic journal.	b	No = 0 Yes = 2	
Skip the consecutive No. of the electronic journal.	c	No = 0 Yes = 4	
Print date on receipt.	a	Yes = 0 No = 1	□ (a+b+c) D_4
Print date on journal.	b	Yes = 0 No = 2	
Print consecutive number on receipt/journal.	c	Yes = 0 No = 4	
Print time on receipt.	a	Yes = 0 No = 1	□ (a+b+c) D_3
Print time on journal.	b	Yes = 0 No = 2	
Merge the same department/PLU registration on receipt. (Item consolidation)	c	No = 0 Yes = 4	
Auto-cut receipt/report.		No = 0 Yes = 1	□ D_2
Always “0”			0 D_1

A-3-21-1-16 Slip/Guest receipt control

Description		Choice	Program code
Maximum printing lines of slip (00 ~ 99)		Significant numbers	□□ D_{10} D_9
Classify registered items by group on slip & guest receipt.	a	No = 0 Yes = 1	□ (a+b+c) D_8
Classify registered items by department on slip & guest receipt.	b	No = 0 Yes = 2	
Classified item printing format: ① Total, ② Detail with total	c	① = 0 ② = 4	
Print total line in classified item printing format.		Yes = 0 No = 2	□ D_7
Always "0"			0 D_6
Slip back feed after slip printing. *	a	No = 0 Yes = 1	□ (a+b+c) D_5
Slip back feed after validation printing. *	b	No = 0 Yes = 2	
Slip back feed after check printing/check endorsement printing. *	c	No = 0 Yes = 4	
Print date on slip & guest receipt.	a	Yes = 0 No = 1	□ (a+b+c) D_4
Print time on slip & guest receipt.	b	Yes = 0 No = 2	
Print consecutive No. on slip & guest receipt.	c	Yes = 0 No = 4	
Slip print range: ① From the top of the transaction, ② This receipt	a	① = 0 ② = 1	□ (a+b+c) D_3
Enable slip auto line find.	b	No = 0 Yes = 2	
Merge the same department/PLU registration on slip & guest receipt. (Item consolidation)	c	No = 0 Yes = 4	
Slip auto feed lines.		Significant numbers	□□ D_2 D_1

* These programs are only effective for SP-1300.

A-3-21-1-17 Journal control

Description	Choice	Program code
Record operations in training mode on journal/electronic journal.	Yes = 0 No = 2	□ D_2
Alert electronic journal memory near-end/full error.	Yes = 0 No = 1	□ D_1

A-3-21-1-18 Message print control

Description		Choice	Program code
Print receipt logo message.	a	No = 0 Yes = 1	□ (a+b+c) D_{12}
Print receipt commercial message.	b	No = 0 Yes = 2	
Print receipt bottom message.	c	No = 0 Yes = 4	
Print slip commercial message.	a	No = 0 Yes = 1	□ (a+b+c) D_{11}
Print slip bottom message.	b	No = 0 Yes = 2	
Print slip intermediate message.	c	No = 0 Yes = 4	
Print bill top message.	a	No = 0 Yes = 1	□ (a+b+c) D_{10}
Print bill copy message.	b	No = 0 Yes = 2	
Print bill bottom message.	c	No = 0 Yes = 4	
Receipt logo data: ① Character type, ② Graphic type	a	① = 0 ② = 1	□ (a+b) D_9
Print commercial message on X/Z report.	b	No = 0 Yes = 2	
Always “0000”			0 0 0 0 D_8 D_7 D_6 D_5
Always “0000”			0 0 0 0 D_4 D_3 D_2 D_1

A-3-21-1-19 Order control

Description		Choice	Program code
Print order with order character.	a	No = 0 Yes = 1	□ (a+b) D_{12}
Print order with amount.	b	No = 0 Yes = 2	
Print double bon message.	a	No = 0 Yes = 1	□ (a+b) D_{11}
Breakdown set menu printing on order.	b	No = 0 Yes = 4	
Alert when the order printer is down.		Yes = 0 No = 1	□ D_{10}
Always “00000”			0 ~ 0 D_9 ~ D_5
Cut order.	a	No = 0 Yes = 2	□ (a+b) D_4
Print hyphens.	b	No = 0 Yes = 4	
Output orders during training.	a	No = 0 Yes = 2	□ (a+b) D_3
Merge the same department/PLU registration on order receipt. (Item consolidation)	b	No = 0 Yes = 4	
No. of feed lines before order cutting. (0 ~ 9)		Significant number	□ D_2
No. of feed lines after order cutting. (0 ~ 9)		Significant number	□ D_1

A-3-21-1-20 Scanning PLU

Description	Choice	Program code
Start record number of scanning PLU link.	Significant numbers	□ □ □ □ D_{12} D_{11} D_{10} D_9
Always “00000000”		□ ~ □ D_8 ~ D_1

A-3-21-1-21 Set menu, Condiment

Description	Choice	Program code
Number of details for post entry (0 ~ 9)	Significant number	□ D_3
Calculate detail item prices in set menu. (If "No", calculate only quantity and stock.)	Yes = 0 No = 2	□ D_2
Set menu / Pulldown link type: Fine dining = 1, Fast food = 2, Fine dining quantity = 3	Significant number	□ D_1

A-3-21-1-22 Check tracking

Description		Choice	Program code
Check tracking method: ① Check No., ② Table No.	a	① = 0 ② = 1	□ (a+b) D_9
Maximum digit of check No.: ① 6-digit, ② 12-digit	b	① = 0 ② = 4	
Tax calculation by new balance.		No = 0 Yes = 1	□ D_8
Print previous balance, when registering old check.		Yes = 0 No = 2	□ D_7
Always "000"			0 0 0 D_6 D_5 D_4
Merge the same department/PLU registration by old check. (Item consolidation)		No = 0 Yes = 4	□ D_3
Display detail items of the previous check when registering <OLD CHK>.	a	Yes = 0 No = 1	□ (a+b) D_2
Item consolidation when registering <SEP CHK>.	b	No = 0 Yes = 1	
Capture the item data		No = 0 Yes = 1	□ D_1

A-3-21-1-23 Clerk interrupt

Description	Choice	Program code
Enable clerk interrupt.	No = 0 Yes = 1	□ D_{12}
Enable to register a clerk who has no clerk number.	No = 0 Yes = 4	□ D_{11}
Always "0000"		0 0 0 0 D_{10} D_9 D_8 D_7
Always "0000"		0 0 0 0 D_6 D_5 D_4 D_3
Auto sign off timer (clerk interrupt/non clerk interrupt system) (00 ~ 99 seconds, "00" means no auto sign off.)	Significant numbers	□ □ D_2 D_1

A-3-21-1-24 Display control

Description	Choice	Program code
Back light off timer (00 ~ 59 minutes, “00” means never turn off.)	Significant numbers	D_2 D_1

A-3-21-1-25 Menu sheet number control (1)

Description		Choice	Program code
Sheet No. of the 1st parent menu sheet.		Significant number	□ D_{12}
Summed up menu sheet 1 to parent 1.	a	No = 0 Yes = 1	□ (a+b+c) D_{11}
Summed up menu sheet 2 to parent 1.	b	No = 0 Yes = 2	
Summed up menu sheet 3 to parent 1.	c	No = 0 Yes = 4	
Summed up menu sheet 4 to parent 1.	a	No = 0 Yes = 1	□ (a+b+c) D_{10}
Summed up menu sheet 5 to parent 1.	b	No = 0 Yes = 2	
Summed up menu sheet 6 to parent 1.	c	No = 0 Yes = 4	
Summed up menu sheet 7 to parent 1.	a	No = 0 Yes = 1	□ (a+b) D_9
Summed up menu sheet 8 to parent 1.	b	No = 0 Yes = 2	
Sheet No. of the 2nd parent menu sheet.		Significant number	□ D_8
Summed up menu sheet 1 to parent 2.	a	No = 0 Yes = 1	□ (a+b+c) D_7
Summed up menu sheet 2 to parent 2.	b	No = 0 Yes = 2	
Summed up menu sheet 3 to parent 2.	c	No = 0 Yes = 4	
Summed up menu sheet 4 to parent 2.	a	No = 0 Yes = 1	□ (a+b+c) D_6
Summed up menu sheet 5 to parent 2.	b	No = 0 Yes = 2	
Summed up menu sheet 6 to parent 2.	c	No = 0 Yes = 4	
Summed up menu sheet 7 to parent 2.	a	No = 0 Yes = 1	□ (a+b) D_5
Summed up menu sheet 8 to parent 2.	b	No = 0 Yes = 2	
Always “000”			**0** **0** **0** D_4 D_3 D_2
Sum up manu sheets to one sheet.	a	No = 0 Yes = 1	□ (a+b) D_1
Reset child menu sheets with parent menu sheet together.	b	No = 0 Yes = 2	

A-3-21-1-26 Menu sheet number control (2)

Description		Choice	Program code
Enable quantity extension of flat PLU.	a	No = 0 Yes = 1	□ (a+b+c) D_{12}
Enable quantity extension of subdepartment key.	b	No = 0 Yes = 2	
Enable quantity extension of department key.	c	No = 0 Yes = 4	
Always “000000”			0 0 0 0 0 0 D_{11} D_{10} D_9 D_8 D_7 D_6
Always “00000”			0 0 0 0 0 D_5 D_4 D_3 D_2 D_1

A-3-21-1-27 Menu sheet number control (3)

Description	Choice	Program code
Start PLU number of 1st menu sheet	Significant numbers	□ □ □ □ D_{12} D_{11} D_{10} D_9
Start PLU number of 2nd menu sheet	Significant numbers	□ □ □ □ D_8 D_7 D_6 D_5
Start PLU number of 3rd menu sheet	Significant numbers	□ □ □ □ D_4 D_3 D_2 D_1

A-3-21-1-28 Menu sheet number control (4)

Description	Choice	Program code
Start PLU number of 4th menu sheet	Significant numbers	□ □ □ □ D_{12} D_{11} D_{10} D_9
Start PLU number of 5th menu sheet	Significant numbers	□ □ □ □ D_8 D_7 D_6 D_5
Start PLU number of 6th menu sheet	Significant numbers	□ □ □ □ D_4 D_3 D_2 D_1

A-3-21-1-29 Menu sheet number control (5)

Description	Choice	Program code
Start PLU number of 7th menu sheet	Significant numbers	□ □ □ □ D_{12} D_{11} D_{10} D_9
Start PLU number of 8th menu sheet	Significant numbers	□ □ □ □ D_8 D_7 D_6 D_5
Always “0000”		0 0 0 0 D_4 D_3 D_2 D_1

A-3-21-1-30 Time & Attendance

Description		Choice	Program code
Full aged employee: Weekly work time (00 ~ 99 hours)		Significant numbers	□ □ □ □ D_{12} D_{11} D_{10} D_9
Weekly work time (00 ~ 59 minutes)			
Minor employee: Weekly work time (00 ~ 99 hours)		Significant numbers	□ □ □ □ D_8 D_7 D_6 D_5
Weekly work time (00 ~ 59 minute)			
Allow employee Z even if employee are not clocked-out.	a	No = 0 Yes = 1	□ (a+b+c) D_4
Use Weekly / Bi-weekly	b	Weekly = 0 Bi-weekly = 2	
Enable clerk to sign on after clock-in	c	No = 0 Yes = 4	
Always “0”			0 D_3
Recognize break time as work time		No = 0 Yes = 1	□ D_2
Rounding of work hours • No rounding = 0, • per 10 minutes = 1; 00 ~ 04 = 00, 05 ~ 09 = 10 (min.), • per 15 minutes = 2; 00 ~ 07 = 00, 08 ~ 14 = 15 (min.), • per 20 minutes = 3; 00 ~ 10 = 00, 11 ~ 19 = 20 (min.), • per 30 minutes = 4; 00 ~ 15 = 00, 16 ~ 29 = 30 (min.)		Significant number	□ D_1

A-3-21-1-31 Store/Recall range

Description	Choice	Program code
Reset the Store/Recall starting number. (after Open check Z)	No = 0 Yes = 1	□ D_9
Store/Recall starting number (0000 = 0001) *	Significant numbers	□ □ □ □ D_8 D_7 D_6 D_5
Store/Recall ending number (0000 = 9999) *	Significant numbers	□ □ □ □ D_4 D_3 D_2 D_1

* Be sure that all terminals have common value.
* The starting number should be smaller than the ending number.

A-3-21-1-32 Auto check range

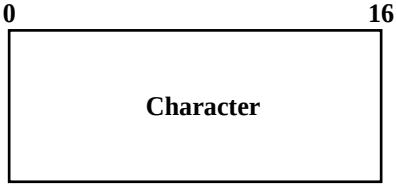
Description	Choice	Program code
Auto check starting number (0000 = 0001) *	Significant numbers	□ □ □ □ D_8 D_7 D_6 D_5
Auto check ending number (0000 = 9999) *	Significant numbers	□ □ □ □ D_4 D_3 D_2 D_1

* Be sure that all terminals have common value.
* The starting number should be smaller than the ending number.

A-3-22. Special character file

A-3-22-1 Special character

File name: Special character File No.: 023 Max. allocatable records: 58 (fixed)

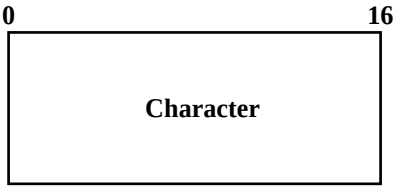


Rec No.	Contents		Descriptor
001	Amount symbol (3), @(2), No (2), split pricing (1),	U.S.	$ @No / *
	Training filler (1)	Others	• @No / *
002	No. of item sold (2), Customer count (2), Square (6), Double sized customer count(6)		NoCTX COVERS
003	Multiplication (6)	U.S.	BUSY
	Recalling for a check (6)	Others	X BUSY
004	Taxable symbol 1 (3 each)		T1 T2 T3 T4 T5
005	Taxable symbol 2 (3 each)		T12T13T14 T23
006	Taxable symbol 3 (3 each)		T1
007	Foreign currency × 4 (2 each), Selective item symbol × 3 (1 each), Center dot (1)		* * * * •
008	Mode symbol 1 (4 each)		REG RFR – MGR
009	Mode symbol 2 (4 each)		Pn†X/Z
010	Mode symbol 3 (4)		TRG
011	Decimal of amount, Decimal of quantity, Delimiter (1 each)		.,
012	A.M., P.M. (3 each)		AM PM
013	Slip continued (12), page (2)		CONTINUED P
014	Online password (8)		
015	Display subtotal symbol (ST key) (16)		SUBTOTAL
016	Subtotal symbol (16)		ST
017	Total symbol (16)		TL
018	Change symbol (16)		CG
019	Check cashing fee (16)		-
020	Check cashing amount (16)		CACG
021	Bon message (16)		** STUB **
022	Not used		
023	Check No. (12)		CHECK No.
024	Service total (16)		SRVC TL
025	Item discount total (16)		DISCOUNT
026	House Bon quantity of item (16)		HOUSE BON QTY
027	Seat No. (16)		SEAT#
028	Total symbol (X/Z report) (16)		TL
029	Clock-in symbol (16)		CLOCK-IN
030	Clock-out symbol (16)		CLOCK-OUT
031	Break-in symbol (16)		BREAK-IN
032	Break-out symbol (16)		BREAK-OUT
033	Job code symbol (16)		JOB
034	Work time symbol (16)		WORK TIME
035	Break time symbol (16)		BREAK TIME
036	Tip declaration symbol (16)		CASH TIP
037	Regular work hours (Employee report) (16)		REGULAR TIME
038	Overtime work hours (Employee report) (16)		OVER TIME
039	Employee report (1) (4 each)		IN OUT BRK JOB#
040	Employee report (2) (4 each), Edit symbol (1)		TIP WORK*
041	Hourly labor pay (16)		COST
042	Hourly labor proceeds (16)		NET SALES/HOUR
043	Pay per transaction (16)		COST/TRANSACTION
044	Euro amount symbol (3)		EUREUR
045	not used		
046	Occupied new check (Open check report) (16)		NEW OPEN
047	Finalized check (Open check report) (16)		FINALIZED
048	not used		
049	not used		
050	Unit price of shift PLU 1 (PLU report)		@1
051	Unit price of shift PLU 2 (PLU report)		@2
052	Unit price of shift PLU 3 (PLU report)		@3
053	Unit price of shift PLU 4 (PLU report)		@4
054	Unit price of shift PLU 5 (PLU report)		@5
055	Unit price of shift PLU 6 (PLU report)		@6
056	Unit price of shift PLU 7 (PLU report)		@7
057	Unit price of shift PLU 8 (PLU report)		@8
058	Taxable symbol 4 (3 each)		T6 T7 T8 T9 T10

A-3-23. Report header file

A-3-23-1 Report header

File name: Report header File No.: 024 Max. allocatable records: 30 (fixed)

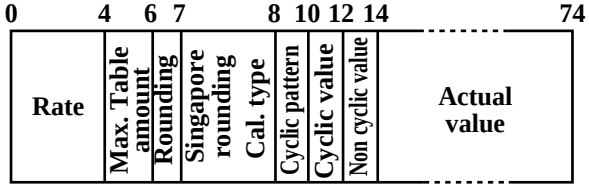


Rec No.	Contents	Descriptor
001	Fixed totalizer report	**FIXED TTL**
002	Transaction key report	**FREE FUNCTION**
003	Subdepartment report	**SUB DEPT**
004	PLU report	**PLU**
005	Department report	**DEPT**
006	Group report	**GROUP**
007	Cashier/clerk report	**CASHIER/CLERK**
008	not used	
009	Hourly sales report	**HOURLY**
010	Monthly sales report	**MONTHLY**
011	Flash (Financial) report	**FLASH**
012	Open check report	**OPEN CHK**
013	Table analysis report	**TABLE ANALYSIS**
014	PLU stock report	**PLU STOCK**
015	Void causal report	**VOID REASON**
016	Electronic journal report	**E-JOURNAL**
017	Time & Attendance	**EMPLOYEE**
018	Hourly labor	**HOURLY LABOR**
019	Hourly item	**HOURLY PRODUCT**
020	not used	
021	IDC (1) reset	**IDC(1) Clear**
022	IDC (2) reset	**IDC(2) Clear**
023	IDC (3) reset	**IDC(3) Clear**
:		
030	not used	

A-3-24. Tax table file

A-3-24-1 Tax table

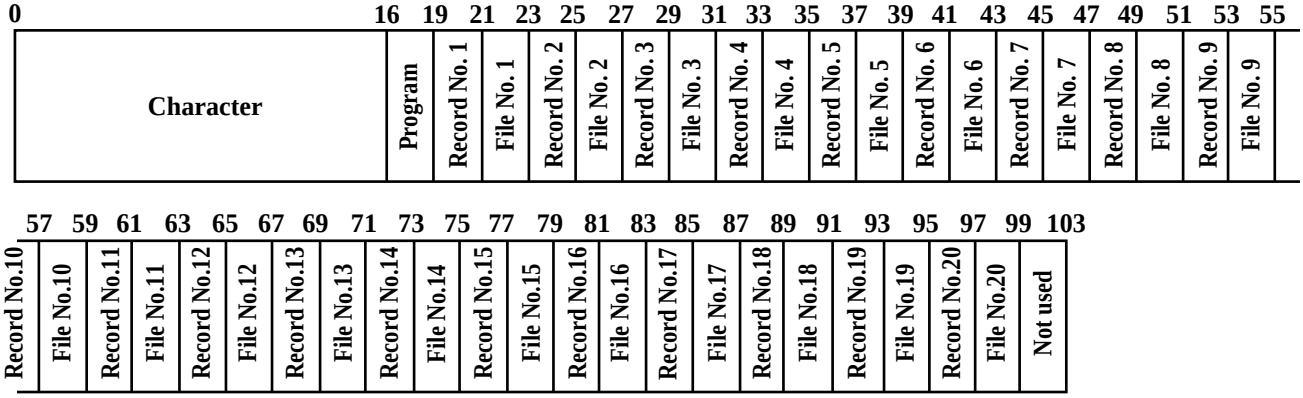
File name: Tax table File No.: 025 Max. allocatable records: 10



A-3-25. Pulldown group file

A-3-25-1 Pulldown group

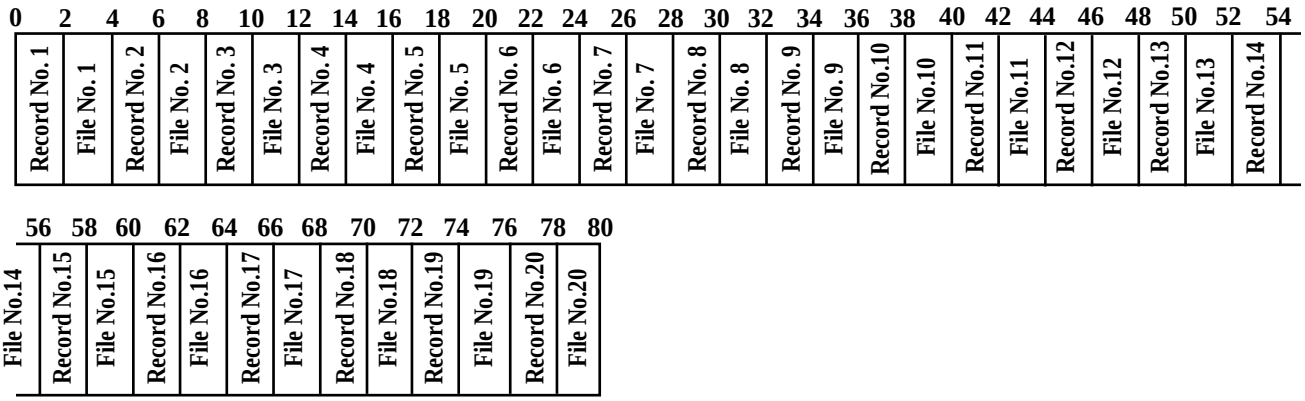
File name: Pulldown group File No.: 026 Max. allocatable records: 999



A-3-26. Set menu table file

A-3-26-1 Set menu table

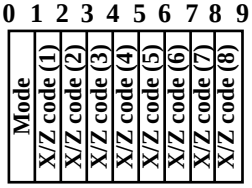
File name: Set menu table File No.: 028 Max. allocatable records: 999



A-3-27. Batch X/Z file

A-3-27-1 Batch X/Z

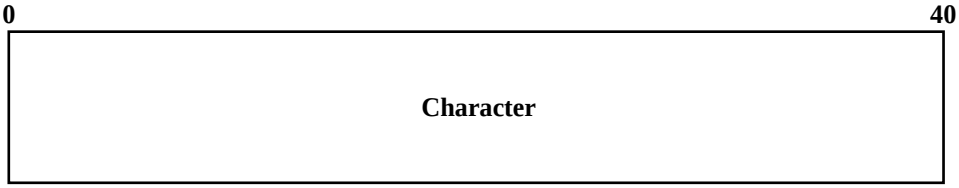
File name: Batch X/Z File No.: 029 Max. allocatable records: 10



A-3-28. Receipt/Slip message file

A-3-28-1 Receipt/Slip message

File name: Receipt/Slip message File No.: 032 Max. allocatable records: 48

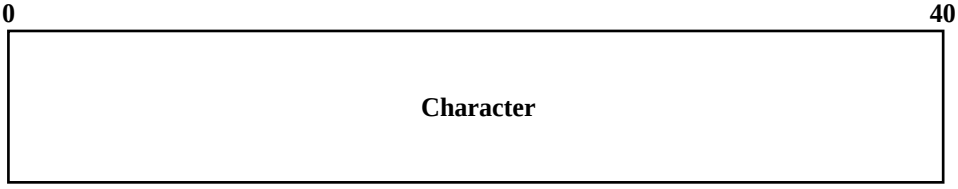


Rec No.	Message
1 ~ 4	Receipt logo message
5 ~ 8	Receipt commercial message
9 ~ 12	Receipt bottom message
13 ~ 16	Bill top message
17 ~ 20	Bill copy message
21 ~ 24	Bill bottom message
25 ~ 28	Slip logo message
29 ~ 32	Slip intermediate message
33 ~ 36	Slip bottom message
37	Not used
38 ~ 47	Guest bottom message
48	Copy receipt message

A-3-29. Check endorsement message file

A-3-29-1 Check endorsement message

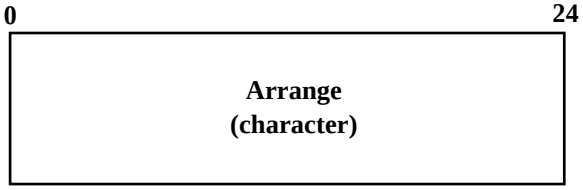
File name: Check endorsement message File No.: 033 Max. allocatable records: 4



A-3-30. Arrangement file

A-3-30-1 Arrangement group (1) ~ (5)

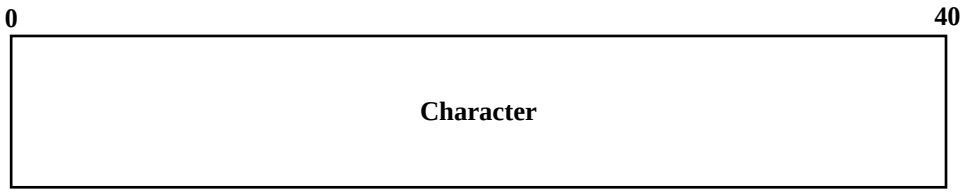
File name: Arrangement group (1) File No.: 038 Max. allocatable records: 9999
File name: Arrangement group (2) File No.: 138 Max. allocatable records: 9999
File name: Arrangement group (3) File No.: 238 Max. allocatable records: 9999
File name: Arrangement group (4) File No.: 338 Max. allocatable records: 9999
File name: Arrangement group (5) File No.: 438 Max. allocatable records: 9999



A-3-31. Character recall file

A-3-31-1 Character recall

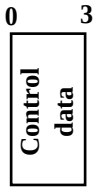
File name: Character recall File No.: 039 Max. allocatable records: 9999



A-3-32. Check print file

A-3-32-1 Check print

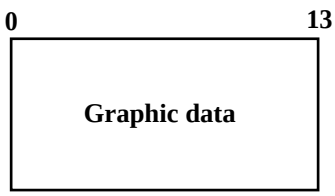
File name: Check print File No.: 041 Max. allocatable records: 9



A-3-33. Graphic logo file

A-3-33-1 Graphic logo

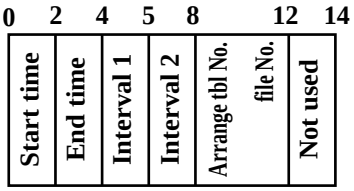
File name: Graphic logo File No.: 047 Max. allocatable records: 432 (fixed)
or 864 (fixed)



A-3-34. Scheduler file

A-3-34-1 Scheduler

File name: Scheduler File No.: 062 Max. allocatable records: 99

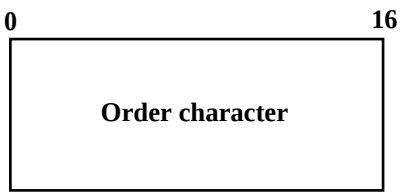


Description	Choice	Program code
Scheduler start time (00:00 ~ 23:59)	Significant numbers	D_{28} D_{27} D_{26} D_{25}
Scheduler end time (00:00 ~ 23:59)	Significant numbers	D_{24} D_{23} D_{22} D_{21}
Always “0”		0 D_{20}
Interval control 1: Daily = 0, Weekly = 1, Monthly = 2	Significant number	D_{19}
Interval control 2: Daily; No meaning Weekly; Define day of a week 00; Sunday, 01; Monday, 02; Tuesday, 03; Wednesday, 04; Thursday, 05; Friday, 06; Saturday Monthly; Define date, 01 ~ 31, 99 means the end of the month	Significant numbers	D_{18} D_{17}
Interval time (00:00 ~ 23:59)	Significant numbers	D_{16} D_{15} D_{14} D_{13}
Always “0”		0 D_{12}
Arrangement table No.	Significant numbers	D_{11} D_{10} D_9 D_8
Arrangement file No.	Significant numbers	D_7 D_6 D_5
Always “0000”		D_4 D_3 D_2 D_1

A-3-35. Order character file

A-3-35-1 Order character

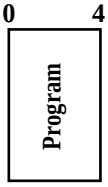
File name: Order character File No.: 065 Max. allocatable records: 99



A-3-36. Euro program file

A-3-36-1 Euro program file

File name: Euro program File No.: 099 Max. allocatable records: 3 (fixed)



1st record

Description	Choice	Program code
Exchange rate: Subtotal in local (main currency) to Euro (sub currency)	Significant numbers	D_8 D_7 D_6 D_5 D_4 D_3
Exchange rate decimal position (0 ~ 6) Example (D_8 ~ D_2): 123.456 = 1234563, 1.23456 = 1234565	Significant number	D_2
Rounding: Cut off = 0/2, Round off = 1, Round up = 3	Significant number	D_1

2nd record

Description	Choice	Program code
Exchange rate: Tendered amount in Euro (sub currency) to local (main currency)	Significant numbers	D_8 D_7 D_6 D_5 D_4 D_3
Exchange rate decimal position (0 ~ 6) Example (D_8 ~ D_2): 123.456 = 1234563, 1.23456 = 1234565	Significant number	D_2
Rounding: Cut off = 0/2, Round off = 1, Round up = 3	Significant number	D_1

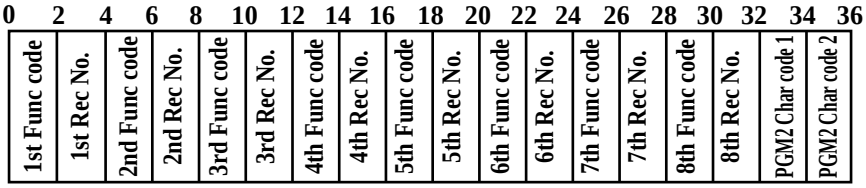
3rd record

Description		Choice	Program code
Monetary mode of sub currency: (0 ~ 3)		Significant number	D_6
Open cash drawer even if in partial tender.		No = 0 Yes = 1	D_5
Drawer number for sub currency: Main = 0/1, Sub (option) = 2		Significant number	D_4
Print Euro totals on X/Z report.		No = 0 Yes = 1	D_3
Print change due in currency that is not used for actual change.	a	No = 0 Yes = 1	(a+b) D_2
Actual change currency	b	Main = 0 Sub = 2	
Print total in sub currency while finalizing.	a	No = 0 Yes = 1	(a+b+c) D_1
Print tax amount in sub currency while finalizing.	b	No = 0 Yes = 2	
Print amount tender/total in sub currency while finalizing.	c	No = 0 Yes = 4	

A-3-37. System files

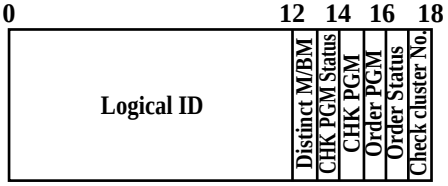
A-3-37-1 Key table

File name: Key table File No.: 074 Max. allocatable records: 192 (fixed)



A-3-37-2 System connection table

File name: System connection table File No.: 901 Max. allocatable records: 33



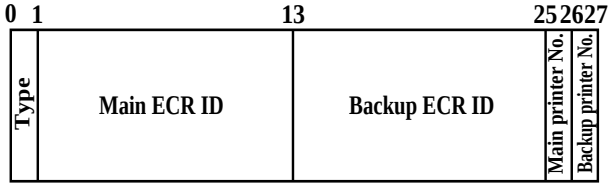
Description	Choice	Program code
Logical ID characters (within 12 characters)	Significant characters	D_{24} D_{23} D_{22} D_{21} D_{20} D_{19} / D_{18} D_{17} D_{16} D_{15} D_{14} D_{13}
Terminal: Oneself = 02, Others = 01	Significant numbers	D_{12} D_{11}
Check tracking master/backup master (program value): Master = 01, Backup master = 02, Self master = 03, Satellite = 00	Significant numbers	D_{10} D_9
Check tracking master/backup master (current value): Master = 01, Backup master = 02, Self master = 03, Satellite = 00	Significant numbers	D_8 D_7
Always “00000”		0 0 0 0 0 D_6 D_5 D_4 D_3 D_2
Check tracking cluster number (0 ~ 9) (“0” means no designation.)	Significant number	D_1

A-3-37-3 I/O parameter table

File name: I/O parameter table File No.: 902 Max. allocatable records: 15

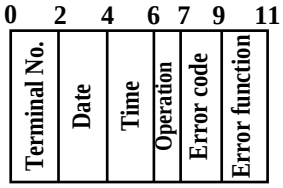
A-3-37-4 Printer definition table

File name: Printer definition table File No.: 903 Max. allocatable records: 24



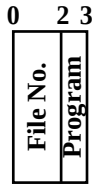
A-3-37-5 System error log

File name: System error log File No.: 999 Max. allocatable records: 999



A-3-37-6 Auto program control

File name: Auto program control File No.: 905 Max. allocatable records: 20



A-4. Counter and Totalizer calculation method

The following calculation methods of totalizer memories are explained in this chapter.

Calculations to totalizer memories belonging to the fixed totalizer file

All formulas in these explanations are calculated in the registration mode.
In the RF mode, the values in totalizers are calculated using the opposite sign.
In the REG– mode, the value in totalizers and counters are calculated using the opposite sign.

A-4-1 Fixed totalizer file

Total or counter	Increments or Decrements by
Gross sales quantity	Number of products registered for Departments + Subdepartments + PLUs (non hash) {For Department, Subdepartment and PLUs Single items : +1 Multiplication : Input quantity Split price : Input quantity Square : Input quantity × Input quantity Cube : Input quantity × Input quantity × Input quantity} – Last item void – Return item – Previous item void – Cancel
Gross sales amount	Amount of products registered for Departments + Subdepartments + PLUs (non hash) {For Department, Subdepartment and PLUs Single items : Preset or manually input prices Multiplication : Preset or manually input prices × Input quantity Split price : (Preset or manually input prices / Input unit quantity) × Input quantity Square : Preset or manually input prices × Input quantity × Input quantity Cube : Preset or manually input prices × Input quantity × Input quantity × Input quantity} – Last item void – Return item – Previous item void – Cancel
Net sales quantity	+1 (When a transaction is finalized for sale. For REG– mode –1 is affected.)
Net sales amount	Amount at the finalization (exclude tip) :{Department + Subdepartment + PLU product registration amounts (non full hash) – Last item void amounts for the above – Item return amounts for the above – Previous item void amounts for the above – Cancel amounts for the above} + {Plus (+ key) + Premium (%+ key) – Error correction amounts – Cancel amounts} – {Minus (– key) + Discount(%– key) + Coupon – Error correction amounts – Cancel amounts} + {Manual tax – Error correction amounts – Cancel amounts} + Results of tax table calculations (add-on tax)

Total or counter	Increments or Decrements by
Medium in drawer (Cash, charge, check, credit)	Sales total or tendered total by specified medium + Received on account total (Cash in drawer only) – Paid out (Cash in drawer only) + Check cashing (Check in drawer only) + Loan totals by selected medium – Pick up totals by selected medium – Change amounts generated with the specific medium (Cash in drawer only) – Total of check cashing transaction (Cash in drawer only)
Number of RF mode items	+1 (When cash sales, charge sales, credit sales, and check sales transaction are finalized in the RF/REG– mode.)
RF mode amount	Absolute value of total sales amount for RF/REG– mode registrations.
Customer count	Entered number of covers or +1
Average sales per customer	Net sales amount / Customer count
Check cashing service fee	+ Check amount × Service ratio or + Service fee amount
New balance fee	+ MD/ST amount × Service charge ratio or + Service charge fee amount
Clerk commission total	Item sales (commissionable) × Clerk commission rate
Foreign currency in drawer	Entered amount in foreign currency.
Discount amount	+ Registered amount of Minus, %-, Coupon key
Item return amount	+ Registered item amount by RF, Void key
Clear count	+ 1 (REG, RF, REG– mode) (When the <CLEAR> key is pressed.)
Rounding	+ Fraction amount by roundings (Roundings include IF1/2, Denmark, Norway and Singapore.)
Taxable amount	Subtotal of taxable amount at finalization of sale (in case of add-on tax) Subtotal of taxable amount / (1 + VAT rate) at finalization of sale (in case of add-in tax)
Tax amount	Result of calculation using tax table for taxable amount at finalization of sales
GT 1	Grand total of net sales totals
GT 2	Registrations absolute value: {Registration amount (Department, Subdepartment, PLU) + Last item void amount + Previous item void amount + Refund amount} + {Plus, Minus, Premium, Discount, Coupon + Last item void amount}
GT 3	Net sales total – add-on tax – add-in tax – commission

A-5. Error messages

A-5-1 Error messages

When an error occurs on a QT-2100 terminal, a buzzer sounds and the appropriate error message appears on the main display, indicating what action to take.
The following table lists the error messages and describes the action to take.

Prompt message	Meaning
Operator mistake.	Operation error
E001 Wrong Mode.	Check tracking (Open mode error)
E003 Wrong operator.	Error clerk/Error clerk in CHK tracking
E005 Insufficient memory.	Memory allocation over
E011 Close the drawer.	Drawer compulsory
E016 Change back to REG mode.	Prohibit plural operation in RF mode
E017 Enter Check/TBL number.	Check # compulsory
E018 Enter Table number.	Table # compulsory
E019 Enter Number of covers.	Cover compulsory
E020 Enter Seat number.	Seat number compulsory
E023 Stock running short.	Alarm when any item drops below its programmed minimum stock quantity during registration.
E024 No stock is available.	Error when actual stock value for a registration items is a negative value.
E026 Stay down compulsory ERR. Enter Item(s).	Stay down compulsory
E028 Not found PLU or C/D is mismatch.	Scanning PLU is not found or OBR code is mis-matched.
E029 No registration is possible while you are in the tender operation.	Attempted registration whilst partial tender operation is being done.
E031 Press ST key before Finalization.	ST compulsory
E033 Enter tendered amount.	Amount tender compulsory
E035 Change amount exceeds the limit.	Change amount exceeds the limit.
E036 Remove money from the drawer.	Contents of the drawer exceed the programmed limit — Sentinel function.
E037 Digit or Amount Limitation Over.	H.D.L., H.A.L.O error
E038 Perform Money Declaration	Money declaration compulsory
E040 Issue Guest Receipt.	Guest receipt compulsory
E041 Print Validation.	Validation compulsory
E044 Print Cheque.	CHK-PRT compulsory
E045 Print Check-Endorsement.	CHK-END compulsory
E046 REG Buffer Full. Please Finalize or NB.	Registration buffer full
E047 Print bill.	Slip compulsory
E048 Insert Slip Paper and retry.	Alarm when no paper is inserted in the Slip.
E049 CHECK memory full	CHK tracking index full/near end
E050 Detail memory Full.	CHK tracking memory full/near end
E051 CHK/TBL No. is occupied.	Attempt is made to use the New Check key to open a new check using a number that is already used for an existing check tracking memory.
E052 CHK/TBL No. is busy.	Attempt to use the same check number whilst the specified number is being used in the other terminal.

Prompt message	Meaning
E053 CHK/TBL No. is not opened.	CHK# not found
E054 Out of CHK/TBL No. Range	CHK# range over
E056 Store range full.	All check # are occupied in range.
E057 No item exists in detail.	Round Repeat cannot be found in detail.
E058 Enter post entry item.	Post Entry item exists in detail.
E059 Press Eat-in or Take-out key.	Press Eat-in or Take-out key.
************** **E060 Printer offline.**	Printer offline. "****" means ECR logical ID and priter number.
************** **E061 Printer error**	Printer downed. "****" means ECR logical ID and printer number.
************** **E061 Printer error** **YES:Retry to print** **NO :Show on the screen** **ESC:Discard data**	
************** **E062 Printer paper end**	Paper near-end/end "****" means ECR logical ID and printer number.
************** **E062 Printer paper end** **YES:Retry to print** **NO :Show on the screen** **ESC:Discard data**	
E064 Printer buffer full **YES:Retry to print** **NO :Show on the screen** **ESC:Discard data**	Print buffer full at sender side
************** **E070 Terminal out of action.** **Cannot print.**	Down at target ECR which has printer "****" means ECR logical ID and printer number.
************** **E071 Target terminal printer** **BF full.** **YES:Retry to print** **NO :Show on the screen** **ESC:Discard data**	Printer buffer full at target ECR which has printer "****" means ECR logical ID and printer number.
************** **E072 Target printer terminal** **is busy.**	Busy at target ECR which has printer "****" means ECR logical ID and printer number.
************** **E073 Your receipt/order may not be** **issued.**	Time out at ECR which has printer "****" means ECR logical ID and printer number.

Prompt message	Meaning
********** E073 Your receipt/order may not be issued. YES:Retry to print NO :Show on the screen ESC:Discard data	Time out at ECR which has printer "****" means ECR logical ID.
E075 Negative Balance. Cannot be finalized.	Attempted finalization when balance is less than zero.
E080 Electronic Journal Full Please clear E-Journal.	Electronic journal full
E082 ***** Illegal Data *****	Illegal Electronic journal data
E083 Cannot create E-Journal. Check Flash memory.	Electronic journal file cannot be created.
********** E105 Check/TBL Tracking Master down. Please call Manager. YES:Retry for connection. NO :Remove it from system.	CHK master down "****" means ECR logical ID.
********** E106 Check/TBL Tracking Backup master down. Please call Manager. YES:Retry for connection. NO :Remove it from system.	CHK BM down "****" means ECR logical ID.
********** E107 Both Master&Backup master down. CHK/TBL tracking or Clerk interrupt is not available.	CHK M/BM down "****" means ECR logical ID.
********** E108 CHK/TBL Master is removed from system.	Master down then take it off from system "****" means ECR logical ID.
********** E109 CHK/TBL Backup master is removed from system.	Backup master down then take it off from system "****" means ECR logical ID.
E110 CHK data mismatch between Master and Backup master.	Data mismatch has occurred.
E130 Middle of Pick up or Loan Press Cancel Key.	During picking up
E131 Middle of <Bill Copy> Press Cancel key.	During Bill copy
E133 Middle of <Media Change> Press Cancel key.	During Media CHG
E134 Middle of Clerk Transfer Press ESC key.	During CLK Trans
E136 Middle of <Separate Check> Press ESC key.	During SEP CHK

Prompt message	Meaning
E139 Not allowed to be negative by Minus/Coupon key.	Credit balance error
E140 Wrong menu.	This sheet holder is prohibited by PGM.
E141 Press <TRAY TOTAL> twice before finalization.	<TRAY TOTAL> key is not pressed twice before finalization.
E145 Arrangement syntax error.	Arrangement syntax error
E150 Incorrect value entry.	Incorrect entry for PGM
E151 Incorrect key Pressed.	Linking is incorrect.
E152 PGM File or Memory number does not Exist.	No such file, no such record
E164 Empoloyee No. is not Found in the Employee File.	Employee No. is not set in the Employee File.
E165 Employee No. is not Clocking-in	Employee has not done CLOCK-IN operation yet.
E166 Employee No. is Occupied	Employee who has done CLOCK-IN operation attempts to operate CLOCK-IN again.
E167 Incorrect JOB code	Employee attempts to operate CLOCK-IN with incorrect JOB code.
E168 Your Operation is out of Schedule. Please Call Manager.	Employees operate CLOCK-OUT in not allowance time.
E169 Work Hours Exceeded. Please Call Manager.	Overtime work.
E170 No Shift Reminds in the Schedule. You cannot Clock-in.	There is no empty shift left.
E171 Please Break-out and Retry.	Employee attempts to operate CLOCK-OUT whilst he/she is in a break time.
E172 Break Hours Exceeded. Please Call Manager.	Break hours are exceeded.
E173 This employee is at work now.	Employee is at work without break.
E174 This employee is taking a break now.	Employee who has not done BREAK-OUT operation attempts to operate BREAK-IN.
E175 Please Clock-in/Break-out before you sign on. or Please Call Manager.	Sign on after you clock-in or break out.
E176 You cannot Clock-in. Please reset Employee Report.	Employee Report.
E177 Time&Attendance Data Communication Error. Please Call Manager.	Time & Attendance Data communication error.
E180 IDC FILE (1) memory full. Please clear IDC data.	IDC FILE (1) memory is full of items.
E181 IDC FILE (2) memory full. Please clear IDC data.	IDC FILE (2) memory is full of items.
E182 IDC FILE (3) memory full. Please clear IDC data.	IDC FILE (3) memory is full of items.
E200 Insert CF card.	CF card is not inserted to the slot.
E201 Format error.	CF card data or formats illegal.
E203 Insufficient memory.	Insufficient memory is remained in CF card.
E205 The file already exists. Do you want to replace? YES:Replace the file. NO :Input new name.	File name duplication error

A-5-2 Operation prompt

All prompt messages, together with descriptors and symbol characters for printing on receipts, slips or reports are contained in the list below. These messages cannot be added, modified or deleted.

Prompt message	Meaning
Data cannot be printed out. **Do you want to display?**	Request to check the data which cannot be printed out.
Do you want to clear data?	Confirmation to reset displayed report.
Cancel OK?	Confirmation of all void operation.
Please wait. **Item Consolidation Mode.**	Please wait. ECR now processing. In the item consolidation mode.
Non Consolidation Mode.	Not in the item consolidation mode.
REG Mode	Mode change : REG mode
REFUND Mode	Mode change : RF mode
REG– Mode	Mode change : REG– mode
Training	Training operator
Please Sign on.	Sign off
Enter Check/Table Number.	CHK# compulsory
Enter Table Number.	TBL# compulsory
Enter Number of covers.	Covers compulsory
Enter Seat Number.	Seat# compulsory
Perform Slip Printing.	Slip compulsory
Issue Guest Receipt.	GUEST RCT compulsory
Perform Validation Printing.	VLD compulsory
Perform Check Printing.	CHK-PRT compulsory
Perform Check Endorsement.	CHK-END compulsory
Operation Code?	Secret No entry for REG 2 mode.
Copy of not printed data	Display header of non printed data
Re_configuration...	During system reconfiguration
Re_configuration end	System reconfugiration ends
Clock-in OK?	Time and attendance clock-in operation
Clock-out OK?	Time and attendance clock-out operation
Break-in OK?	Time and attendance break-in operation
Break-out OK?	Time and attendance break-out operation
Enter cash tip amount and press <YES> key.	Time and attendance tip declaration compulsory
Communication Error	Communication error during clock-in
This procedure stops system maximum 60 sec. **OK ?**	Alert before flash memory clear.

A-5-3 System error code

All error codes are contained in the list below. These error codes are displayed or printed on error log report.

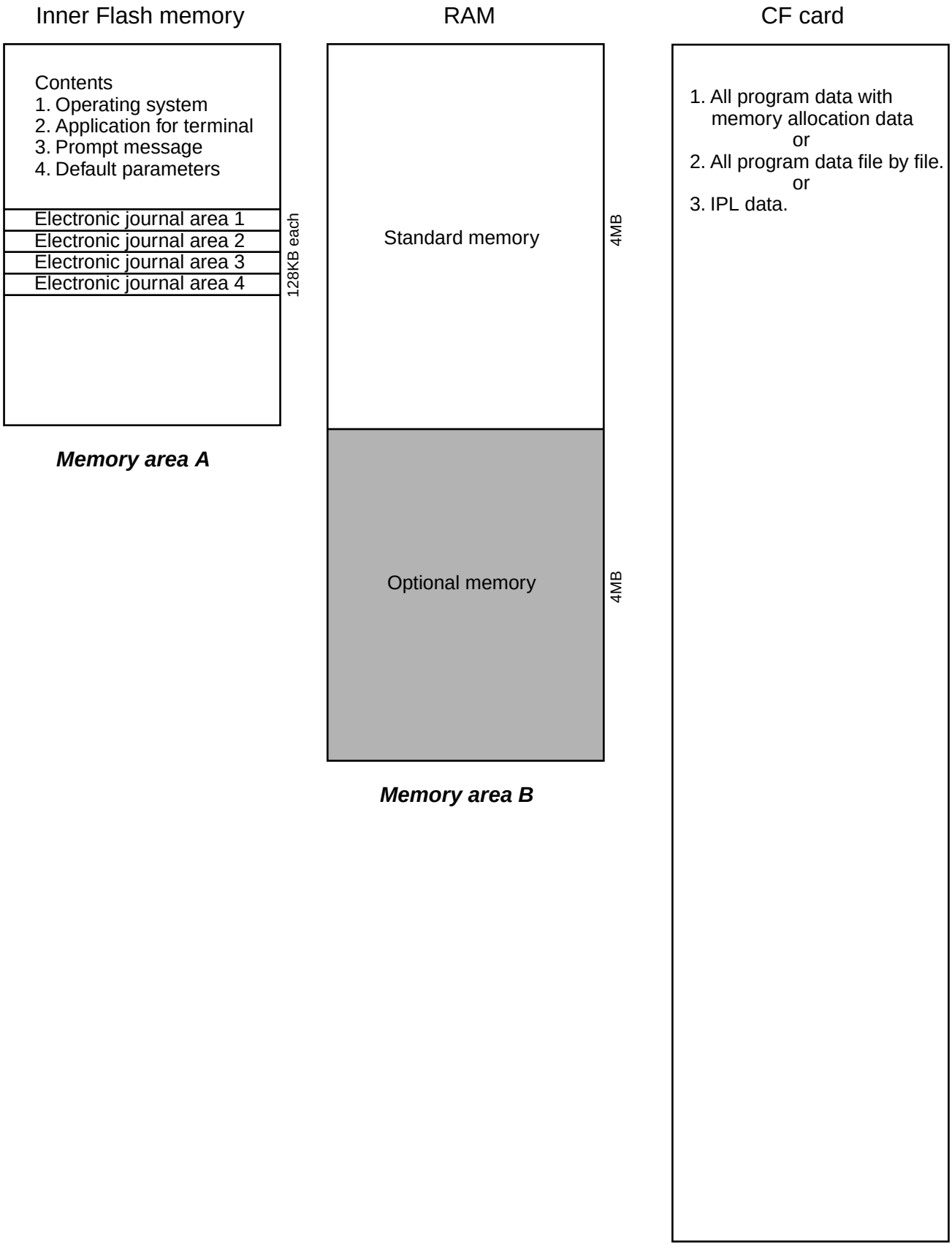
Error code	Meaning
0010	Handler access error (software)
0011	Cannot execute handler (system configuration)
0012	Break by PC
0013	Break by ECR
0014	DSR off before receiving command packet
0015	Receive illegal command number of command packet
0016	Receive illegal character
0017	Send error (hardware)
0018	Receive error (hardware)
0019	Receive illegal data packet
0020	No response error
0021	Receive illegal command phase
0022	Received illegal packet
0023	CNET receive error
0024	Illegal termination by sender
0025	Received illegal packet during receiving data packets
0026	Not enough data packets received
0027	Flash erase error
0028	Flash write error
0040	No “H” information
0041	No “I” information
0042	No “F” information
0044	Illegal packet format
0045	No file exists
0046	Illegal block
0047	Illegal command packet
0048	Illegal command No. (Not CMD)
0049	Illegal command No. (Not DATA)
0050	Sequence error
0051	Turn off DSR signal
0052	Received cancellation
0053	Retry over while waiting command
0054	Retry over while waiting EOT
0055	Retry over while waiting data
0056	Received EOT
0057	Retry over while waiting ACK
0058	Retry over while sending data
0059	Retry over while waiting “C”
0060	Retry over while sending response
0061	Retry over while excluding
0064	Break end
0065	Error during printing report header
0066	Error during printing report data
0067	Error during printing report data in work file
0068	Error during printing report data in consolidation file
0069	Work file clear error
0070	Consoloidation file clear error
0071	Z lock error
0072	Z clear error
0073	Z lock release error

Error code	Meaning
0074	Error during accumulating to consolidation file
0075	Error during copying report data from terminal memory to work.
0076	Error during copying stock data to terminal memory
0077	Z lock error on satellite terminal
0078	Z clear error on satellite terminal
0079	Z lock release error on satellite terminal
0128	Parameter error/Maximum length of send error
0130	Error drive
0134	Network parameter error
0138	Detect error in core system
0140	Parameter error (record length exceeds work buffer)
0141	EOF over
0144	Calculation overflow
0145	Undefined value of n_open () mode
0146	Mismatch of type when closing network
0147	Parameter error
0152	Defined ncb is not network resource
0153	Retry over by the target busy
0155	Sequence error
0156	No port exists
0158	Target port in use
0160	Error while getting priority
0161	Fail to change temporary priority
0162	Error semaphore operation to keep resource
0163	Fail to get new sled
0164	Error while getting semaphore
0165	Error to operate semaphore
0166	Error during delay
0167	Error during termination
0168	Error when resource return
0170	Error during getting task ID
0171	No code is found while search/pick up
0172	Cannot get work buffer
0173	File opened/fail to activate task
0174	No file exists
0175	ITRON service error
0176	Cannot create file
0177	Record number error
0178	Detect error while memory area opening
0179	Detect error while returning mail box/double create error
0180	Detect error while handling memory
0190	rcb is not mail box resource
0192	Error send message id
0194	Send message length over
0197	ending response
0198	Time out while waiting for ending response/no receive message
0202	No free FCB
0204	Memory capacity shortage
0205	Fail to create mail box
0209	Cannot find the coincide PCB resource
0210	Cannot find the coincide RCB resource
0232	ID collision when network starts
0233	Cannot find the target ID
0235	Protocol error
0247	Stop token

A-6. Memory map

This chapter shows the memory map of the QT-2100 terminal and their behaviors by initialization operations.

A-6-1 Memory map



A-6-2 Memory behavior

Memory behavior under the following operations

Note: These operations are followed by the initialization operation (top left button).

1. 44449999 <ST>
   Clears Memory area (A), and ready to load the IPL data and default parameters from other terminal or CF card.
2. 100000/20000 <ST>
   Clears Memory area (B) and ready to load the user program from other terminal or CF card.
3. nn001000/nn002000 <ST>
   Set the selected machine ID “nn” and clears Memory area (B) and ready to load the user program from other terminal or CF card.

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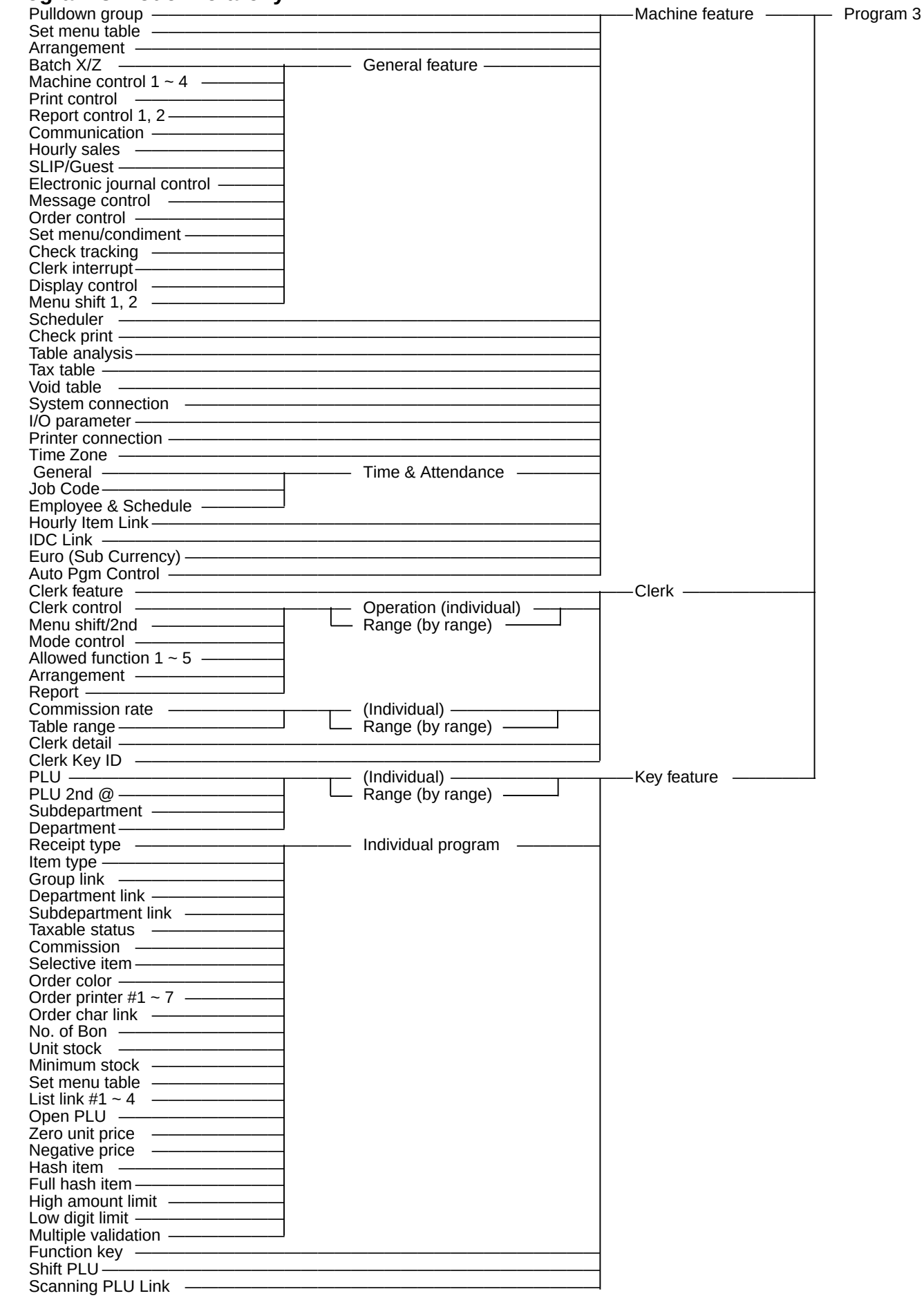
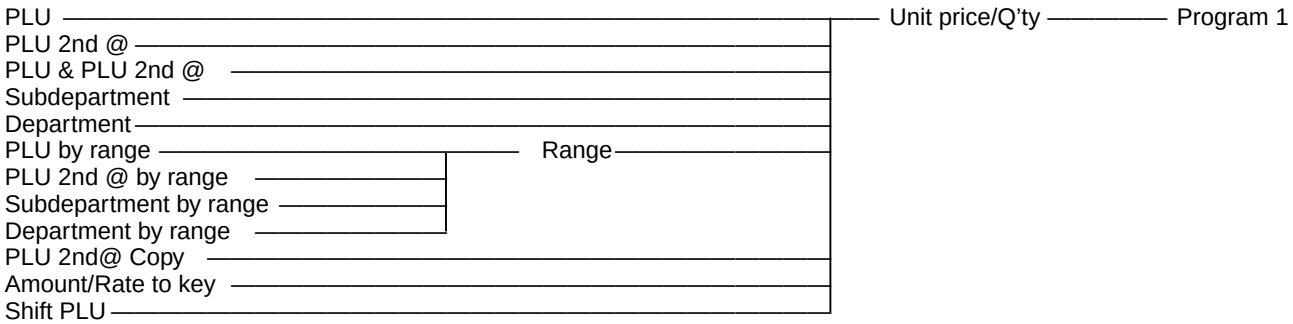
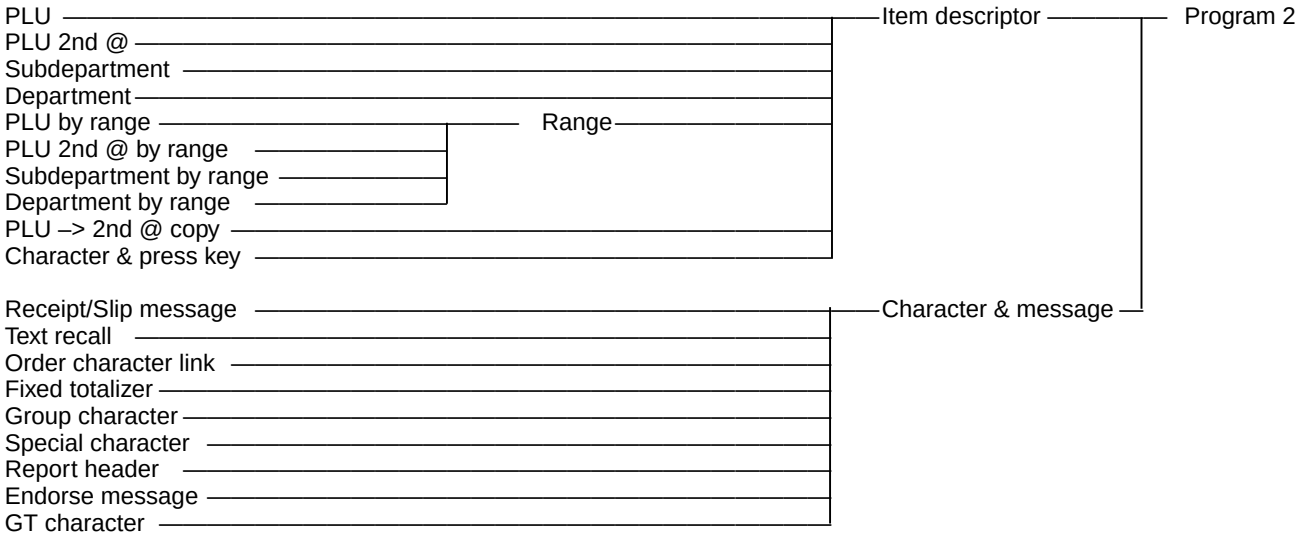
Program 3 mode Hierarchy



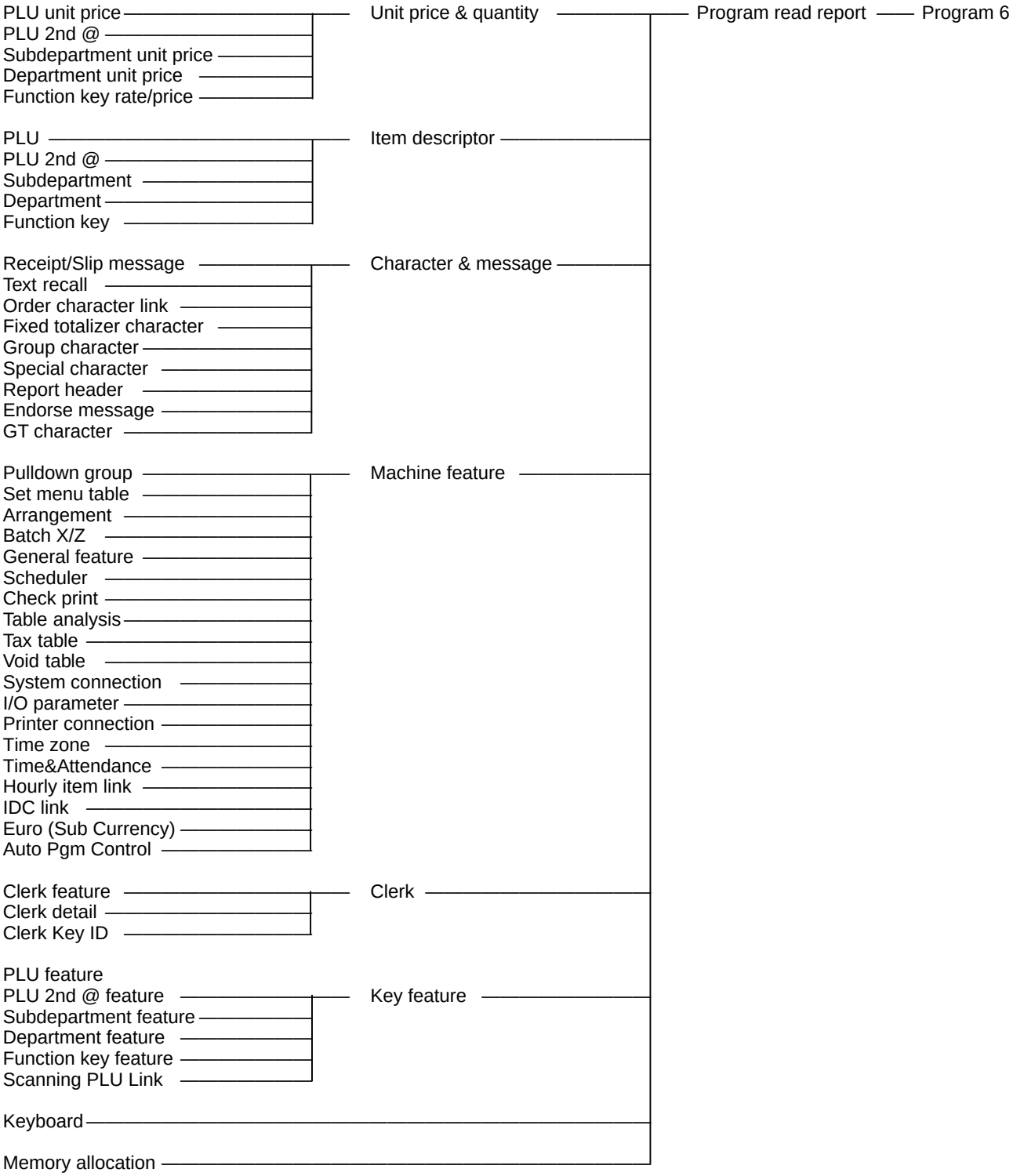
Program 1 mode Hierarchy



Program 2 mode Hierarchy



Program 6 mode Hierarchy



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