TPE

User Manual

TABLE OF CONTENTS

Thank you for purchasing EXCELL Scale, to help use the product properly, operate smoothly, and extend its life cycle, please read this manual carefully.

INSTRUCTIONS FOR USE

1. Thank you for purchasing this Price Computing Scale.
2. To enable you to use this scale correctly, we suggest that you read these instruction carefully.
3. It must be prevented from getting wet. If it gets wet, please wipe it dry with a cloth.
4. Keep it away from high temperatures and damp conditions.
5. Don’t bump the scale against other items, nor load it with excessively heavy weights (The load must not exceed the maximum capacity of the scale).
6. If the indicator is not going to be used for some time, please clean it and store it in a plastic bag in dry conditions. A desiccant sachet may be included to prevent any moisture build up.
7. Objects to be weighed should be placed at the center of the platter, and can’t exceed the dimension of the platter.
8. Any opinions and suggestions on this product are welcome.

PREPARING TO USE THE SCALE

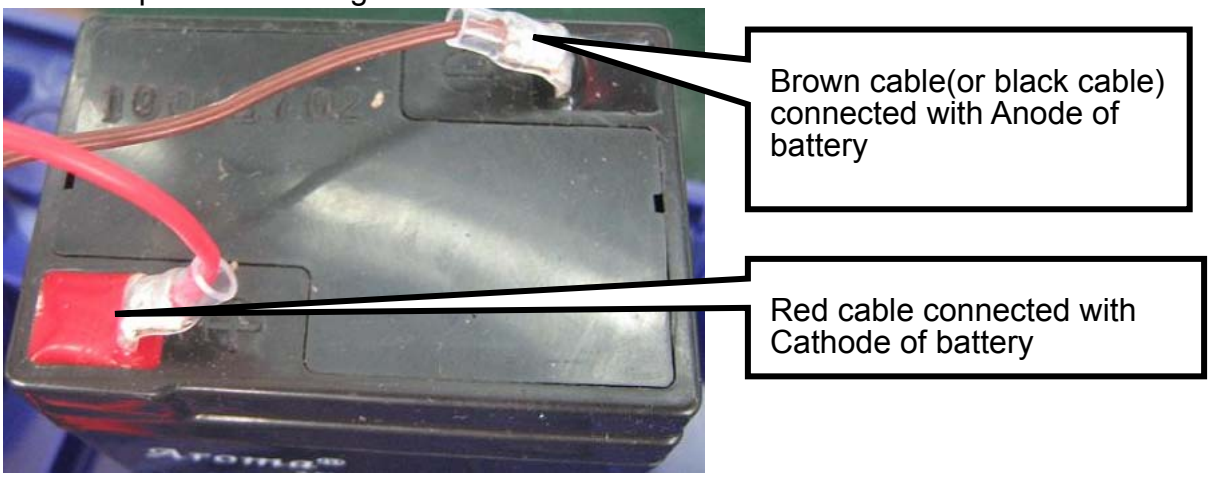
1. Please locate the precision scale on a stable, flat desk and don’t put it on a shaking or unstable desk.
2. Adjust the four leveling feet to make the scale horizontal. Make sure that the bubble level is in the center of the circle.
3. Keep the scale away from places with strong drafts or excessive temperature fluctuations (E.g. from direct sunlight or the air louver of an air conditioner).
4. Don’t put any object on the scale while switching on the scale.
5. Please keep the scale switched on for 15 ~ 20 minutes before operation.
6. Once the scale has been powered on, it will go through an LCD display test and it is ready for use when the display shows zero.
7. When the low battery indicator  appears in the right corner of the display, replace the dry batteries or recharge the battery.
8. Introduction of Storage Battery

Due to the storage battery adopt the advanced free-maintaining technique, customers need not to replenish electrolyte.
The scale should be recharged every 3 months to prevent failure of the internal rechargeable battery.

1. The battery should be charged for 8~10 hours.
2. The temperature of battery should below 45℃.

Maintaining

1. Please do not discharge with over-current when using the battery. Please charge the battery after discharging current.
2. Please take down the battery when the scale is not used for a long time or break the connection of cathode.
3. Do not short the battery terminals to check whether there is current. Please check whether the connection point is firm to guarantee good connection.
4. The battery should be replaced by specialized person. **No reverse-battery or the product will be damaged.**
   a) Anode of battery should be connected with Anode of product battery（usually red cable）
   b) Cathode of battery should be connected with Cathode of product battery (usually brown cable or black cable)
   c) See the picture following



Safety warnings

1. The electrolyte of battery is caustic which causes metal, cotton, etc to corrode.
2. The hydrogen will be resolved when using or charging the battery and it will cause explosion when approaches fire.

CHAPTER 1 INTRODUCTION

1-1 Product Features

- 35 PLU preset key for frequent transactions, each PLU has: Product code, Unit price, Discount rate, Tax rate, Pre-tare.
- Each transaction can have up to 25 items which can be recalled and deleted.
- 2 sale clerks and 2 temporary transaction storage for quick switch between customers
- Money change, Tare, Pre-tare, Zero
- Tax rate and Discount rate can be manually entered and be applied to the individual item or to the subtotal
- 2” Thermal printer with printing speed up to 50mm/s ±20%
- Customization on the head and tail of ticket format, 8 lines for head or tail, and 32 characters per line and 4 different font sizes
- Configurable EAN13 barcode available
- 4 different reports: PLU list, Daily sale report, PLU Data change record, Internal setting table
- Re-printable receipt
- 6V/4Ah rechargeable battery for operating during blackout
- Double-sided LCD display on tower with LED backlight
- 1/3,000 or 1/6,000 resolution
- Auto power off to maintain stability
- Rechargeable battery will provide power when external power is off.

Option

- RS232 + RJ11 (for 12V or 24V) output
- cash drawer(for 12V or 24V)
- Transmission tool TPEUTIL for PC

1-2 Specification

Capacity	Division	Resolution
3/6 kg	1/2g	1/3,000~1/6,000
6/15 kg	2/5 g	1/3,000~1/6,000
15/30 kg	5/10 g	1/3,000~1/6,000
Operating Temperature:：0°C ~ 40°C (32°F ~ 104°F)		
Dimensions：313 x 380 × 515 mm (W x D x H)		
Platter Size: 310 x 252 (W x D)		
Power Supply：AC 110V/220V (±10%) + DC 6V/4AH Rechargeable Battery		
Double-side display on tower: LCD. 6, 6, 6 digits，height 14 mm, LED backlight		
Weight: About 5kg		
Thermal Printer Specification:		
Printer Speed: up to 50mm/s		
Paper Size：42mm roll diameter, 58 mm wide		
Life: 12.5km ± 20%		

1-3 Error Messages

OL ⇒ The weight of the object is over the maximum capacity + 9 divisions.

E 1 ⇒ Zero value is higher than 10% FS.

E 2 ⇒ Zero value is lower than 10% FS.

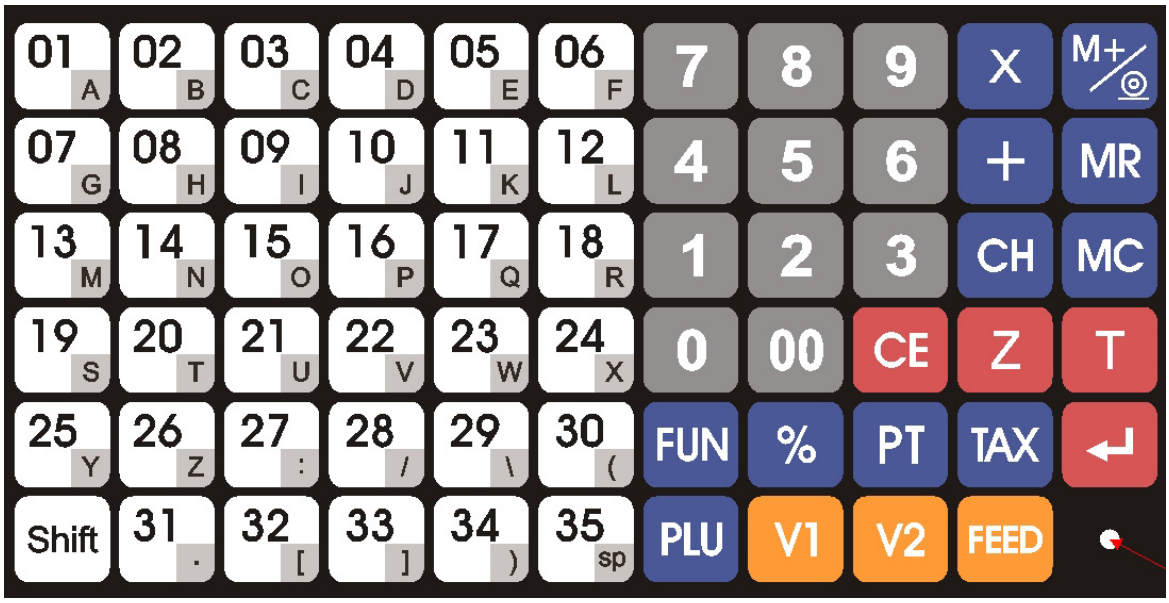
E 4 ⇒ Unstable condition when the scale counts back to zero.

(If E 4 appears, please restart the scale.)

E 6 ⇒ Zero range is too high(350,000) when correcting.

E 7 ⇒ Zero range is too low(80,000) when correcting.

1-4 Keypad Description



▲Appearance of keypad

0 ~ 9 Number Key: To set the unit price or parameters

00 (1) Double zero Key: To input units with two zero
(2) To change charge units

X Quantity Key: To input quantities of non-weighing products

\+ Accumulation key of non-weighing products

M+ Accumulation key of weighing products

MR Check accumulation data

MC (1) Clear memory of one trade
(2) To settle an account
(3) Open cash drawer
(4) Print the receipt

Shift + M+ Re-print the receipt

CH Change Key: Before settle an account (press MC), press CH to calculate the change and displaying on LCD

FUN Function Setting Key: Press 2 0 1 1, then press FUN to enter setting.

% Discount Key:

◆ FREE PRICE single discount

Method: After inputting FREE PRICE, press % key before M+ key to set FREE PRICE single discount.

◆ Before accumulation, input total discount

A. Before inputting unit price, press % key to set total discount and save in memory card (fixed total discount).

B. Press % key before MC key to set total discount (changeable discount, manual input).

TAX Tax rate Key:

◆ FREE PRICE single tax

Method: After inputting FREE PRICE, press TAX key before M+ key to set FREE PRICE single tax rate.

Quantity pricing: 1. Input unit price and press TAX key.
2. Input tax rate and press ↵ key.
3. Press X key then input quantity.
4. Press + key to store in the memory.

Weight pricing: 1. Input unit price and press TAX key.
2. Input tax rate and press ↵ key.
3. Put weighing goods on the platter.
4. Press M+ key to store in the memory.

◆ Before accumulation, input total tax rate

A. Before inputting unit price, press TAX key to set total tax rate and save in memory card (fixed tax rate).

B. Press TAX key before MC key to set total tax rate (changeable tax rate, manual input).

PT Pr-tare Key

Z Zero return key:
Range:± 2% Full scale

T Tare Key:
Range: Full scale

CE Clear Key: clear unit price or parameters

Confirm key

PLU Unit Price Setting Key：

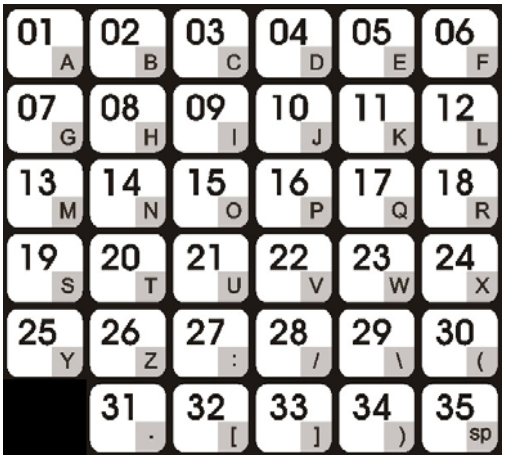
Input amount and press PLU key, then press PLU keys “01~35” to save.

V1 Switch to user A, or switch to Vendor 1

V2 Switch to user B, or switch to Vendor 2

FEED Paper-feed key of Printer :
The printer spits out paper 1 cm, please don’t hold it for long time.
Please change the scroll before paper out to avoid paper jam.

Shift Switching to capital letters or Multiple key.



PLU keys

1-5 Fixing Paper of Printer

Steps:

(1) Open printer upper lid:

(2) Put in the thermal paper roll (thermal side facing downward and out)

(3) Pull out the paper end

(4) Bow and hold down the paper end

(5) Close the printer upper lid

CHAPTER 2 FUNCTION INSTRUCTION

2-1 Internal Value Display

Press Z key and then the weight shows "– – – – – – ". At the same time, please press CE key to display the internal value. Press 0 key to exit the setting.

2-2 Backlight Function (Optional)

<Method 1>

Press Z key, the unit weight displays "– – – – – – " followed by pressing 4 key, backlight mode is Auto-backlight.

Press Z key, the unit weight displays "– – – – – – " followed by pressing 5 key, backlight is off.

< Method 2>

Press 0 key for two seconds, the buzzer will beeps three times, which means the scale have switch to backlight function automatically including auto-backlight or no backlight.

Auto-backlight mode

The backlight will be on when the platter is placed the loading (must be over 10d) or pressing any keys on the keyboard.
When the scale returns to zero(less than 10d), the backlight will be off automatically after 10 seconds.

The backlight status will be memorized.
After the scale is off, the backlight mode will be kept as the same as to turning on the scale next time.

2-3 External weighing calibration

(only when weight external calibration is available.**)**

Operation：

Make sure the scale returns to zero and be in “kg” mode.

Press and hold MC key and then press 00 key.

Unit Price will display “ CAL ” and Weight displays 0.000 kg.

Release these two keys and input the corrected weight value by number keys, and the display will flash the weight value.

Put enough weights according to the display, after the weight is stable, the weight value will stop flashing.

The calibration is now completed, and then you can remove the weights.

2-4 Return to the default setting of weight calibration

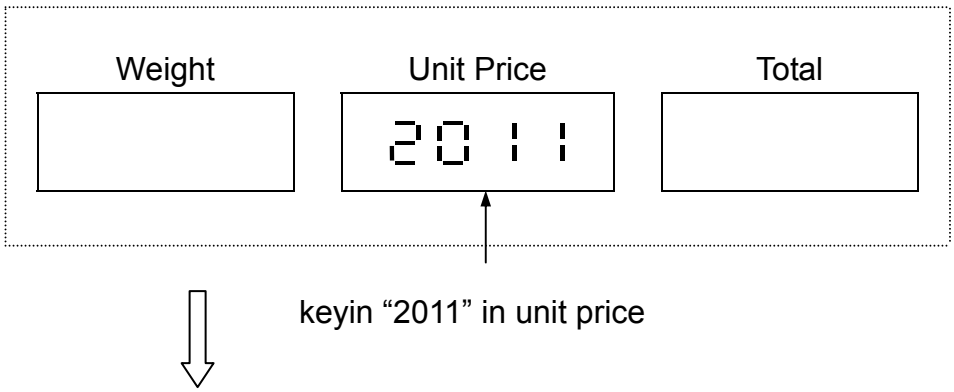
Operation:

Press and hold MC key and press CE key. Release these two keys after the buzzer beeps. Returning to the default setting is now done.

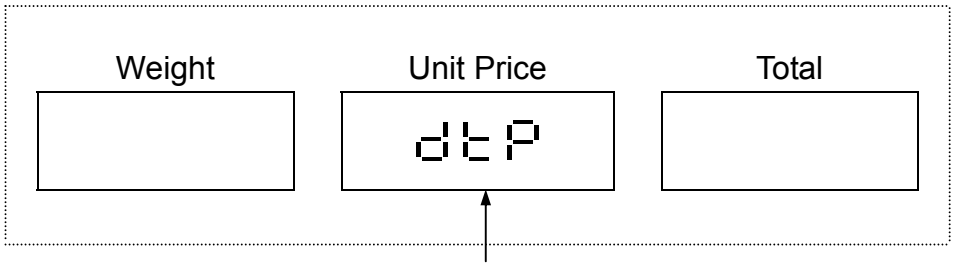
2-5 All-day Accumulation

- All-day accumulating data could only be printed in F7 or transmitted in F9 but can't be showed on the LCD.

- All-day accumulating data couldn't be cleared by F7 or F9 operation, you should clear the data by following steps or the scale will continue accumulating.



keyin "2011" in unit price



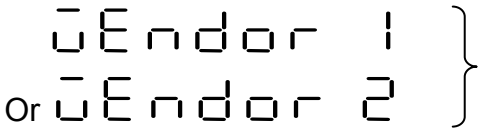
Press MR key , display" dtP "

Press MC key, clear all the accumulating data

Press CE key to exit.

2-6 Vendor switching mode

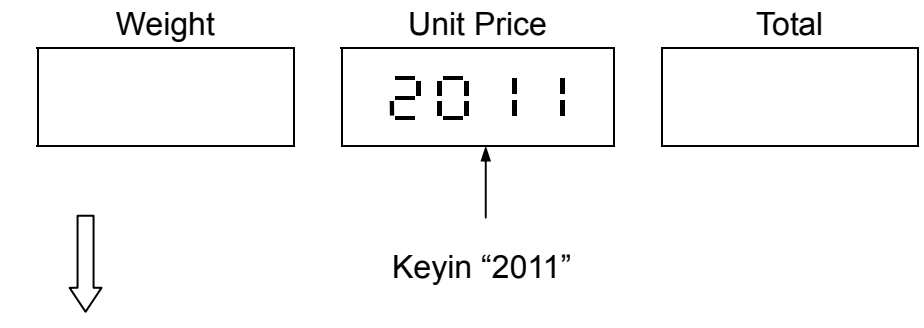
Switch on the scale and the LCD show:

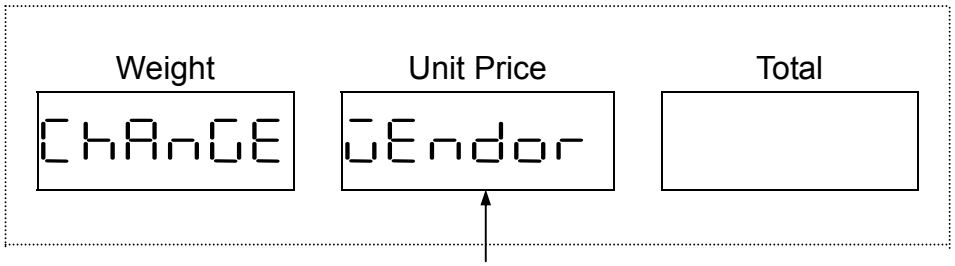


➔ then count backwards and return to zero.

Display Vendor 1 or Vendor 2 means who is using the scale right now.

In weighing mode:



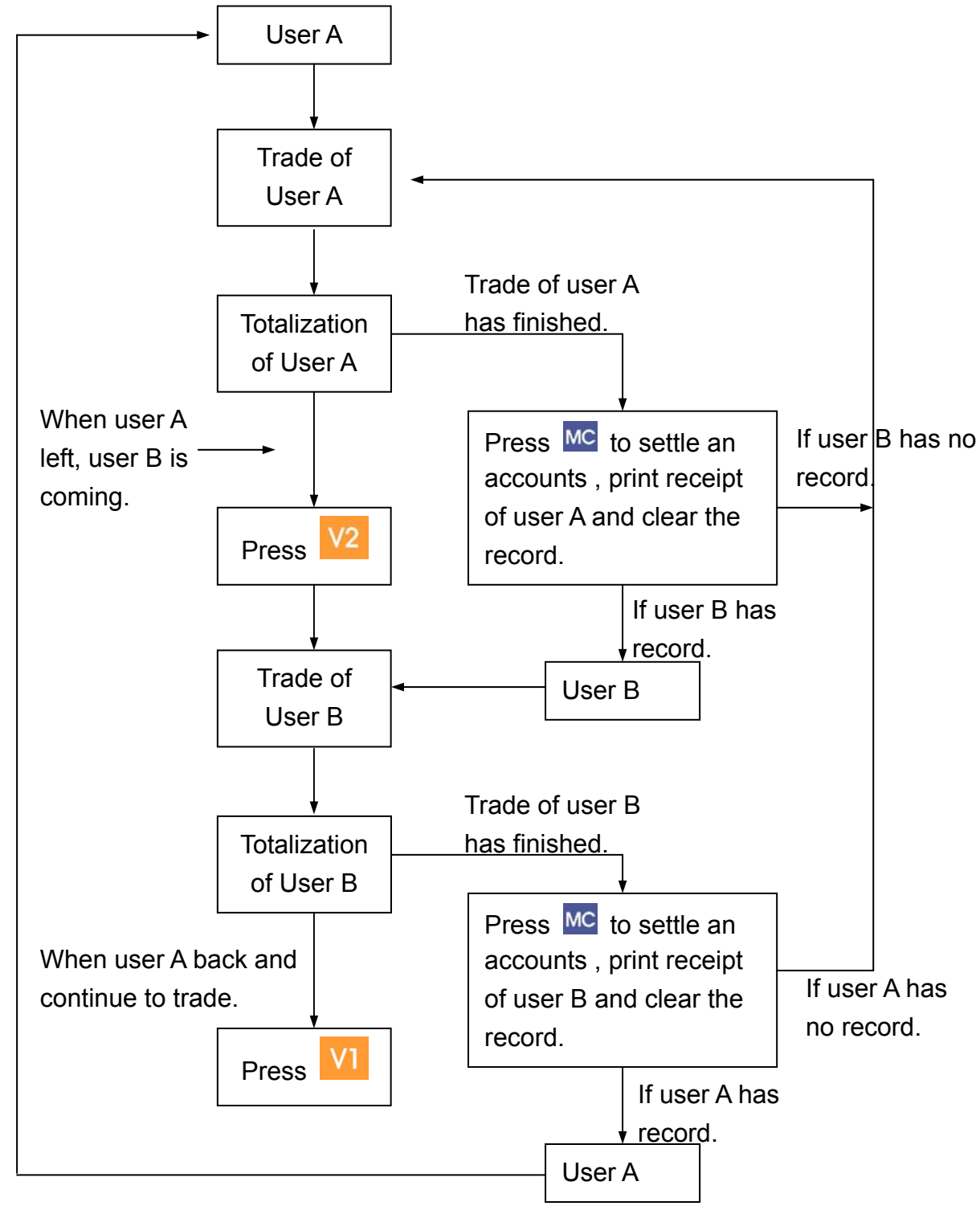


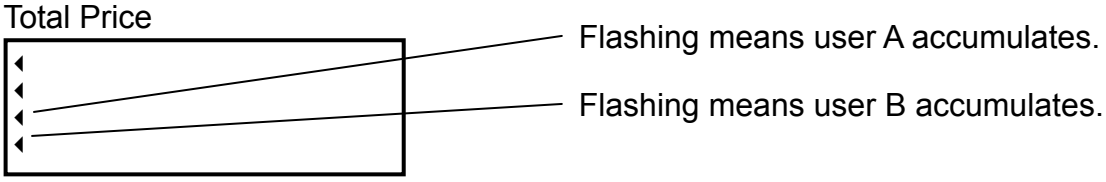
Press Shift key then display “ CHANGE VENDOR”

Press V1 or V2 to change Vendor.

2-7 Two users trade at the same time

(Each user can accumulate 25 trades.)





CHAPTER 3 FUNCTION SETTING

Press 2 0 1 1 and then press FUN key to enter the function setting mode.

F0 LnG	EnG	0	Language setting
F1 232	bAud	0	RS232 baud rate setting
F2 232	bEtC	3	RS232 transmission mode
F3 rtC	For n	0	Time setting (YMD or DMY)
F4 Prh			Print Head data setting
F5 Prt			Print Tail data setting
F6 PLu			PLU data setting (1~35)
F7 rEP	intnAL	0	Print report
F8 Pt	Pr n	000000	Print format parameter setting
F9 232	rEP	0	RS232 report transmission

TAX: Next setting ↵: Enter

PT: Last setting %: ESC

3-1 F0 Language Setting

Use number key 0 ~ 2 to choose,

0: ENG English CodePage:1252

1: CHN T Traditional Chinese CodePage:950

2: CHN S Simplified Chinese CodePage:936

3: FARSI Iran System encoding standard

0: Refer to appendix: ASCII code table WPC1252

3: Refer to appendix: Iran System encoding standard

TAX: Move the cursor rightward

PT: Move the cursor leftward

↵: To confirm

%: To exit

Note：This function depends on different types of control panel

3-2 F 1 RS232 Baud Rate Setting

Use number key 0 ~ 3 to choose,

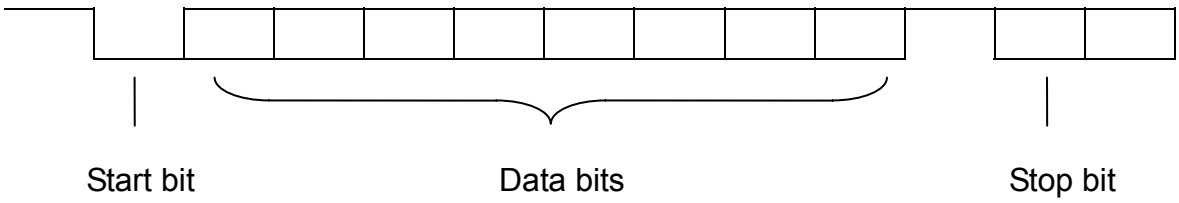
0:38400 bits/sec
1:19200 bits/sec
2:9600 bits/sec ➔original value
3:4800 bits/sec

RS232 interface format

Ⅰ. Mode : UART Signal of EIA-RS0232 C

Ⅱ. Format :

1. Baud rate : 4800,9600,19200,38400 bits/second
2. Data bits : 8 bits
3. Parity bit : None
4. Stop bits : 1 bit
5. Code : ASCII(Exchange code of American standard)



Hardware:

SLAVE (SCALE)	HOST(PC)
D_SUB 9(socket)	D_SUB_9 (plug)
2 TXD	RXD 2
3 RXD	TXD 3
5 GND	GND 5

3-3 F2 RS232 Transmission Mode

Use number key 0 ~ 3 to choose,

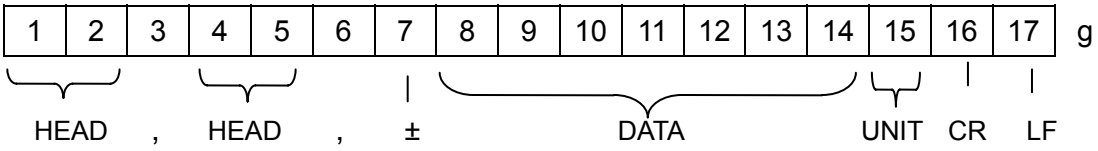
0: Two way transmission
1: Continuous transmission
2: Stable transmission
3: Close RS232 ➔ original value

TAX: Move the cursor rightward
PT: Move the cursor leftward
↵: To confirm
%: To exit

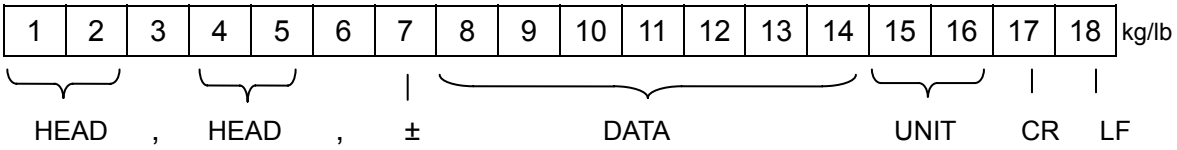
RS232 DATA FORMAT

Stable transmission or continuous transmission

(1) Weight unit is g



(2) Weight unit is kg or lb



HEAD1 (2 BYTES)	HEAD2 (2 BYTES)
OL - Overload , Under load	
ST - Display is Stable	NT - NET Mode
US - Display is Unstable	GS - GROSS Mode

DATA (7 or 8 BYTE)
2D (HEX) = " – " (MINUS)
2B (HEX) = " + " (PLUS)
2E (HEX) = " . " (DECIMAL POINT)

UNIT (2、3 or 4 BYTE)
kg = 6B (HEX) ; 67 (HEX)
lb = 6C (HEX) ; 62 (HEX)
tl.T = 74 (HEX) ; 6C (HEX) ; 2E (HEX) ; 54 (HEX)
hkg = 68 (HEX) ; 6B (HEX) ; 67 (HEX)

For example:

Data format for RS232 continuous transmission are as below.

1. The gross weight (+0.876kg) shows as below, after stable: (under no tare or pre-tare mode)

S	T	,	G	S	,	+			0	.	8	7	6	k	g	0D	0A
HEAD		,	HEAD		,				DATA					UNIT		C	LF

2.The net weight (-1.568lb) shows as below, after unstable: (under no tare or pre-tare mode)

U	S	,	N	T	,	-			1	.	5	6	8	l	b	0D	0A
HEAD		,	HEAD		,				DATA					UNIT		C	LF

3-4 F3 Time Setting

Use number key 0 or 1 to choose,

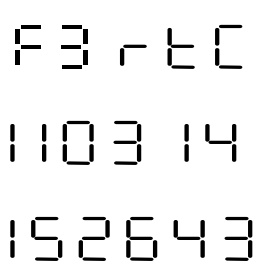
Form 0 : Year / Month / Day
Form 1 : Day / Month / Year

TAX: Move the cursor rightward
PT: Move the cursor leftward
↵: To confirm
%: To exit

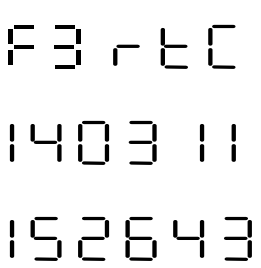
For example: March 14, 2011 3:26:43 p.m.

Use number key “0”~“9” to input,

Y M D

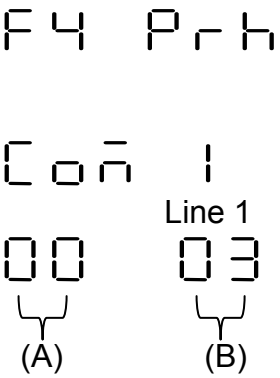


D M Y



3-5 F4 Print Head Data Setting

- 32 standard fonts can be inputted in a line and 8 lines in all.
- Each line can be enlarged twice width or height respectively.
- Byte is displayed as ASCII code.
- Use number key 0 ~ 9 to input.



(A) Font parameters
- 00: Standard
- 10: Width x2
- 01: Height x2
- 11: Height x2 and Width x2
- 20: Width x3
- 02: Height x3
- 22: Height x3 and Width x3

(B) Length of line 1 : 3bytes

Data setting:

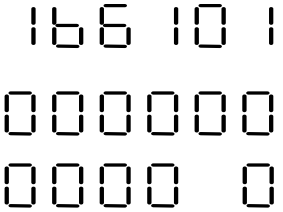
- Please input parameters refer to ASCII Code (HEX).
- 32 bytes in a line （divided into page 0~3）

  Page 0: address 0 ~ 7

  Page 1: address 8 ~ 15

  Page 2: address 16 ~23

  Page 3: address 24 ~31



Content: HEX 1B 61 01 ➔ 3 bytes

TAX: Move the cursor rightward
PT: Move the cursor leftward
↵: To confirm
%: To exit

Description: Printer order (HEX)

1B 61 00	Left justify
1B 61 01	Center justify
1B 61 02	Right justify

For example:

EXCELL PRECISION CO.,LTD. http://www.excell-scale.com TEL:+886-2-8919-1000	(height x2) (height x2) (height x2)

Steps:

F4 PrH CoM 1 Line 1 00 03 Standard 3 bytes	→	1B6 101 Printer center justify 000000 0000 0 Page 0 (0~7)
F4 PrH CoM 2 Line 2 01 27 Height x2 27 bytes	→	455843 E X C 454C4C E L L 2050 0 P Page0 (0~7)
524543 R E C 495349 I S I 4F4E 1 O N Page1 (8~15)	→	20434F C O 2E2C4C . , L 5444 2 T D Page 2 (16~23)
2E0D0A . line feed 000000 0000 3 Page3 (24~31)		

TAX: Move the cursor rightward
PT: Move the cursor leftward
↵: To confirm
%: To exit

F4 PrH Con 3 Line 3 01 29 Height x2 29 bytes	→	687474 h t t 703A2F p : / 2F77 0 / w Page0 (0~7)
77772E w w . 657863 e x c 656C 1 e l Page1 (8~15)	→	6C2d73 l - s 636 16C c a l 652E 2 e . Page 2 (16~23)
636F6d c o m 0d0A00 Line feed 0000 3 Page3 (24~31)		
F4 PrH Con 4 Line 4 01 22 Height x2 22 bytes	→	54454C T E L 3A2638 : + 8 3836 0 8 6 Page0 (0~7)
2d322d - 2 - 383931 8 9 1 392d 1 9 - Page1 (8~15)	→	313030 1 0 0 300d0A 0 a l 0000 2 Page 2 (16~23)

TAX: Move the cursor rightward

PT: Move the cursor leftward

↵: To confirm

%: To exit

After setting，press ↵ key to return to standard font .

F4 PrH Con 5 Line 5 00 00 standard 0 byte	→	000000 000000 0000 0 Page0 (0~7)
F4 PrH Con 6 Line 6 00 00 standard 0 byte	→	000000 000000 0000 0 Page0 (0~7)
F4 PrH Con 7 Line 7 00 00 standard 0 byte	→	000000 000000 0000 0 Page0 (0~7)
F4 PrH Con 8 Line 7 00 00 standard 0 byte	→	000000 000000 0000 0 Page0 (0~7)

TAX: Move the cursor rightward
PT: Move the cursor leftward
↵: To confirm
%: To exit

3-6 F5 Print Tail data setting

- 32 standard fonts can be inputted in a line and 8 lines in all.
- Each line can be enlarged twice width or height respectively.
- Byte is displayed as ASCII code.
- Use number key 0~9 to input.

F5 PrT

Con 1

Line 1

11 12

(A) (B)

(A) Font parameters 00: Standard
10: Width x2
01: Height x2
11: Height x2 and Width x2
20: Width x3
02: Height x3
22: Height x3 and Width x3

(B) Length of line 1 : 3bytes

Data setting:

- Please input parameters refer to ASCII Code (HEX).
- 32 bytes in a line （divided into page 0~3）

Page 0: address 0 ~ 7
Page 1: address 8 ~ 15
Page 2: address 16 ~23
Page 3: address 24 ~31

TAX: Move the cursor rightward
PT: Move the cursor leftward
↵: To confirm
%: To exit

Description: Printer order(HEX)

1B 61 00	Left justify
1B 61 01	Center justify
1B 61 02	Right justify

For example:

Thank you!
See you next time.

} (height x2 width x2)

Steps:

FS PrT Con 1 Line 1 11 12 Height x2 12 bytes Width x2		546861 T h a 6E6620 n k 796F 0 y o Page 0 (0~7)
752 10d u ! line feed 0A0000 0000 1 Page1(8~15)		
FS PrT Con 2 Line 2 00 20 standard 20 bytes	→	536565 S e e 20796F y o 7520 0 u Page 0 (0~7)
6E6578 n e x 742074 t t 696d 1 i m Page1 (8~15)	→	652E0d l 0 0 0A0000 0 a l 0000 2 Page 2 (16~23)

TAX: Move the cursor rightward
PT: Move the cursor leftward
↵: To confirm
%: To exit

After setting，press ↵ key to return to standard font .

FS PrT Con 3 Line 3 00 00 standard 0 byte	→	000000 000000 0000 0 Page0(0~7)
FS PrT Con 4 Line 4 00 00 standard 0 byte	→	000000 000000 0000 0 Page0(0~7)
FS PrT Con 5 Line 5 00 00 standard 0 byte	→	000000 000000 0000 0 Page0(0~7)
FS PrT Con 6 Line 6 00 00 standard 0 byte	→	000000 000000 0000 0 Page0(0~7)
FS PrT Con 7 Line 7 00 00 standard 0 byte	→	000000 000000 0000 0 Page0(0~7)
FS PrT Con 8 Line 8 00 00 standard 0 byte	→	000000 000000 0000 0 Page0(0~7)

TAX: Move the cursor rightward
PT: Move the cursor leftward
↵: To confirm
%: To exit

3-7 F6 PLU Data Setting(1~35)

Each PLU contains content as followed:

1. Unit price (5 bytes)
2. PLU code or P/N 6 code
3. Name (16Byte)
4. Discount 0.00%~99.99%
5. Tax 0.00%~99.99%
6. Pre-tare

PLU 01 6.00 uPr iCE	Use number key to set unit price You can use 00 key to change unit(kg or 100g) Press X PCS (unit price of non-weighing goods) , Press M+/◎ uPriCE (unit price of weighing goods) TAX next PLU (change other PLU only this menu) PT last PLU (change other PLU only this menu) Key in Unit price 6.00/kg, press ↵ to confirm
PLU 01 000010 CodE	Use number key to set PLU code or P/N Key in #000010 Press ↵ to confirm
PLU 01 ➔ APPLE Delay 1s nAmE	PLU name can be set 16 bytes. Use keyboard to input “a” ~ “z” Press Shift key to switch to capital “A” ~ “Z” Key in Apple Press ↵ to confirm
PLU 01 10.00 diSC.	Use number key to set discount 0~99.99% Key in 10.00% Press ↵ to confirm

PLU 01 5.00 tAX	Use number key to set tax 0~ 99.99% Key in 5.00% Press ↵ to confirm
PLU 01 1.000 PrEtAr	Use number key to set tax pre-tare Key in PT 1.000kg Press ↵ to confirm, enter next PLU automatically
PLU 02 5.55 uPr iCE	Use number key to set unit price Use UNIT key to switch weighing units TAX next PLU (change other PLU only this menu) PT last PLU (change other PLU only this menu) Key in unit price 6.00/kg press ↵ to confirm

3-8 F7 Print report

Use number key “0”~“4” to choose, then press ↵ to confirm or % to exit.

F7 rEP intAL 0 **Print Internal Setting**	Internal Setting Report 2011/03/16 14:12:37 = = = = = = = = = = = = = = = = = Version: 09002010 Setting Date: 2011/03/14 Setting Time: 17:45:36 Spec. 60.00/ 0.01/ 0.02kg Decimal Point: 4> 0.00 Country: Sri Lanka Language: English Currency: $ Total PLU: 35	(height x2) Printing time Program version Date of internal calibration Time of internal calibration Specification Decimal point Common country Common Language Money PLU number
F7 rEP PLU 1 **Print PLU data**	PLU LIST 2011/03/16 14:42:27 = = = = = = = = = = = = = = = = = PLU CODE Disc. Tax U/P Name Pre-tare(kg) = = = = = = = = = = = = = = = = = 01 #000001 5.00% 6.00% 0.50 Apple 0.000 02 #000002 10.00% 2.00% 2.00 Beef 0.000 20 #002130 20.00% 5.00% 1.23 Rice 0.200 35 #402179 12.00% 5.00% 3.45 Sea Food 0.000 ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	(height x2) Print time
F7 rEP PLUCHA 2 **PLU data change record** **Note**: Only memorize operation on the scale but not include data transmitted by PC.	PLU Change LIST 2011/03/16 15:11:25 = = = = = = = = = = = = = = = = = PLU CODE Disc. Tax U/P Name Pre-tare(kg) = = = = = = = = = = = = = = = = = **Old** 01 #000000 0.00% 0.00% 0.00 0.000 **New** 01 #000001 5.00% 6.00% 0.50 Apple 0.000 ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ **Old** 02 #000002 10.00% 2.00% 1.90 Beef 0.200 **New** 02 #000002 10.00% 2.00% 2.00 Beef 0.000 ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	(height x2) Print time

F7 rEP dA iLY 3 **All-day accumulating report**	Daily Report 2011/03/16 15:38:34 Vendor 1: = = = = = = = = = = = = = = = = #000000 FREE PRICE Total Net (kg) 250.000 Unit Price ($) ------ Total Amount ($) 17.50 – - - - - - - - - - - - - - - PLU 1 #000001 Apple Total Net (kg) 1550.005 Unit Price ($) 1.00 Total Amount ($) 1550.01 – - - - - - - - - - - - - - - NO WEIGHT PLU 2 #000102 Pork Total Pcs (PCS) 15 Unit Price ($) 2.00 Total Amount ($) 30.00 – - - - - - - - - - - - - - - PLU 3 #000102 Orange Total Net (kg) 1120.015 Unit Price ($) 3.00 Total Amount ($) 3360.05 – - - - - - - - - - - - - - - PLU 4 #000103 Kiwifruit Total Net (kg) 880.000 Unit Price ($) 4.00 Total Amount ($) 3520.00 – - - - - - - - - - - - - - - NO WEIGHT PLU 5 #000005 Beef Total Net (kg) 330.000 Unit Price ($) 5.00 Total Amount ($) 1650.00 – - - - - - - - - - - - - - - NO WEIGHT PLU 6 #000006 Chocolat pie Total Pcs (PCS) 4 Unit Price ($) 6.00 Total Amount ($) 24.00 – - - - - - - - - - - - - - -	(height x2) Print time Data of vendor 1 Free Price of Weighing Good Total Net Unit Price Total Amount(without discount and tax) **weighing good PLU 1** P/N Name Total Net Unit Price Total Amount(without discount and tax) **Non-weighing Good PLU 2** P/N Name Total Net Unit Price Total Amount(without discount and tax) **Weighing Good PLU 3** P/N Name Total Net Unit Price Total Amount(without discount and tax) **Non-weighing Good PLU 4** P/N Name Total Net Unit Price Total Amount(without discount and tax) **Weighing Good PLU 5** P/N Name Total Net Unit Price Total Amount(without discount and tax) **Non-weighing Good PLU 6** P/N Name Total Net Unit Price Total Amount(without discount and tax)

	Subtotal ($) 10151.56 Total Discount($)- 2758.84 Total Tax ($) 1333.49 Total Amount ($) 8726.21 Daily Report 2011/03/16 15:41:34 Vendor 2: = = = = = = = = = = = = = = = = = PLU 1 #000001 Apple Total Net (kg) 5.000 Unit Price ($) 1.00 Total Amount ($) 5.00 - - - - - - - - - - - - - - - PLU 3 #000001 Orange Total Net (kg) 2.000 Unit Price ($) 3.00 Total Amount ($) 6.00 - - - - - - - - - - - - - - - Subtotal ($) 11.00 Total Discount($)- 0.63 Total Tax ($) 0.32 Total Amount ($) 10.69	Subtotal(without discount and tax) Total Discount (height x2) Total Tax (height x2) Total Amount(height x2) (height x2) Print time Trade of vendor 2 **Weighing Good PLU 1** P/N Name Total Net Unit Price Total Amount(without discount and tax) **Weighing Good PLU 3** P/N Name Total Net Unit Price Total Amount(without discount and tax) Subtotal(without discount and tax) Total Discount (height x2) Total Tax (height x2) Total Amount(height x2)
F7 rEP hEdtAL 4 **Print head and tail**	Head/Tail Print 2011/03/16 15:11:25 = = = = = = = = = = = = = = = = = Head EXCELL PRECISION CO.,LTD. http://www.excell-scale.com TEL:+886-2-8919-1000 Tail Thank you! See you next time.	(height x2) Print Time (height x2) (height x2) (height x2) (height x2 width x2)

3-9 F8 Print format parameter setting

F8 Pt

Pr n

000000

(a) (b) (c) (d) (e) (f)

(a) 0 : print but not head 1:print head
(b) 0 : print but not tail 1:print tail
(c) 0 : tail without barcode 1: tail with barcode
(d) 0 : product without barcode 1 : product with barcode
(e) 0 : manual input total Discount 1 : fix total Discount
(f) 0 : manual input total Tax 1 : fix total Tax

(c) Output Bar Code EAN13	(d) Output Bar Code EAN13
First 6 Code: Amount of Transaction	First 6 Code: Net or Quantity of Single Transaction
Next 6 Code: Serial Number of Receipt	Next 6 Code: Amount of Single Transaction
No.13 Code: Check Code	No.13 Code: Check Code

For example: Fix discount 10.00% and Tax 5.00% when checking out at every time.

(a) (b) (c) (d) (e) (f)	(a) (b) (c) (d) (e) (f)	(a) (b) (c) (d) (e) (f)
111111	000000	111011
Print as followed:	Print as followed:	Print as followed:
EXCELL PRECISION CO., LTD http://www.excell.com.tw TEL:+886-2-8919-1000 (a) 2011/04/28 13:34:54 vendor 1: PLU CODE PLU NAME kg(PCS) €/kg (PCS) € #000001 onion NT 2.000 10.00 20.00 Discount =- 5.00% - 1.00 Tax = 6.00% 1.14 0020000020143 (d) Subtotal 20.14 Discount =-10.00% - 2.01 e Tax = 5.00% 0.91 f Total € 19.04 Total number of sales 1 2011/04/28 13:34:55 S/N:000037 0019040000376 (c) Thank you! (b) See you next time.	2011/04/28 13:36:00 vendor 1: PLU CODE PLU NAME kg(PCS) €/kg (PCS) € #000001 onion NT 2.000 10.00 20.00 Discount =- 5.00% - 1.00 Tax = 6.00% 1.14 Subtotal 20.14 Total € 20.14 Total number of sales 1 2011/04/28 13:36:04 S/N:000038	EXCELL PRECISION CO., LTD http://www.excell.com.tw TEL:+886-2-8919-1000 2011/04/28 13:36:35 vendor 1: PLU CODE PLU NAME kg(PCS) €/kg (PCS) € #000001 onion NT 2.000 10.00 20.00 Discount =- 5.00% - 1.00 Tax = 6.00% 1.14 Subtotal 20.14 Discount =-10.00% - 2.01 Tax = 5.00% 0.91 Total € 19.04 Total number of sales 1 2011/04/28 13:36:36 S/N:000039 0019040000390 Thank you! See you next time.

(a) (b) (c) (d) (e) (f)	(a) (b) (c) (d) (e) (f)	(a) (b) (c) (d) (e) (f)
0 1 1000	1 1 1000	000001 1
Print as followed:	Print as followed:	Print as followed:
		

If you pressed CH key and input price, press MC key to print data including Cash & Change which is shown as below:

3-10 F9 RS232 report transmission

Use RS232 to send data to PC and save as txt file. Then use EXCEL to open it to edit.

- Make sure F1 RS232 baud rate and PC baud rate n,8,1 are the same.
- Press number key 0 or 1, then press ↵ to confirm
  0: Send PLU data
  1: Send all-day accumulated data

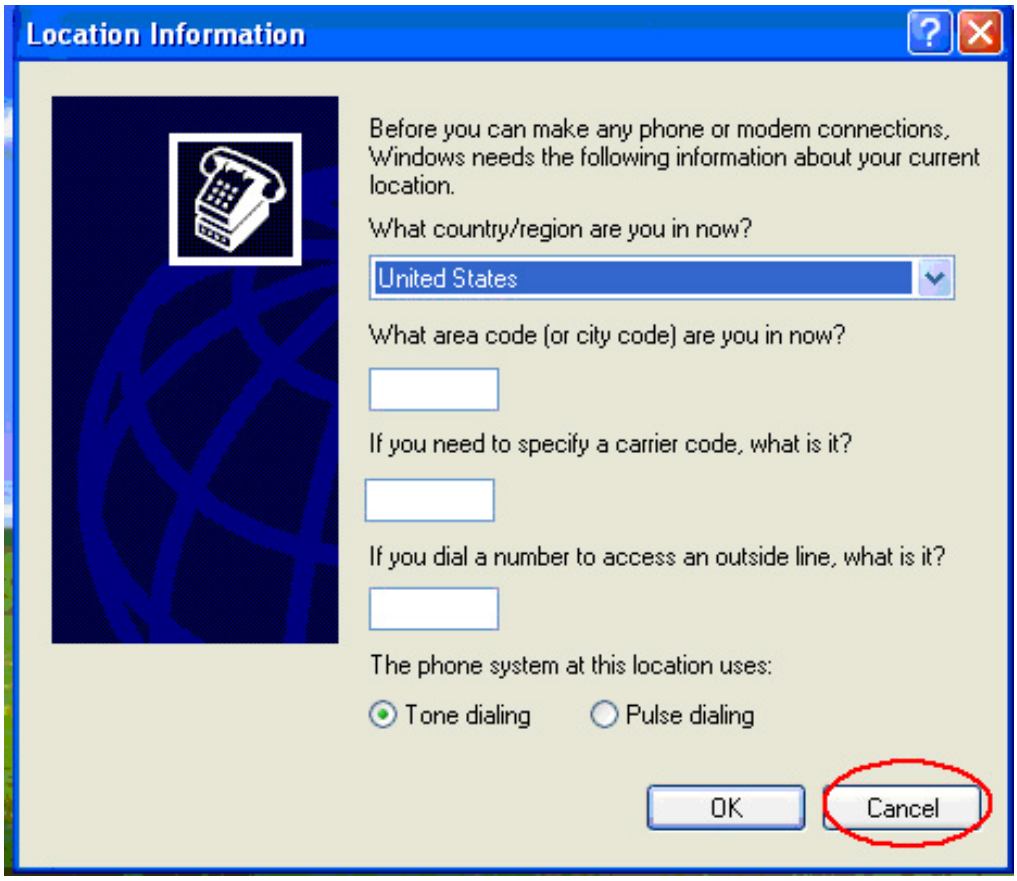
For example:

Baud rate: 9600 N,8,1

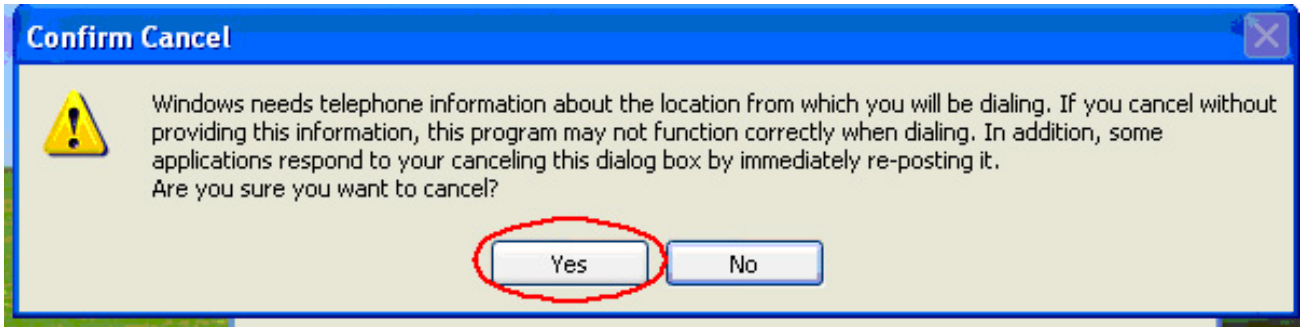
Open the terminating machine on PC to connect.

Steps:

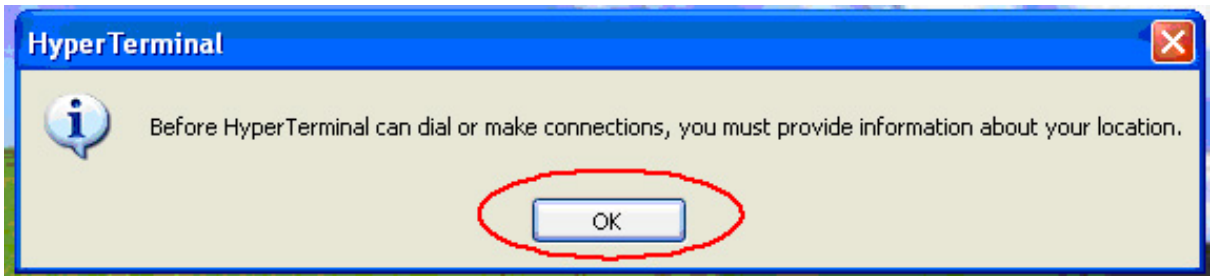
Start > All programs > Acceccories > Communications > Hyper Termina

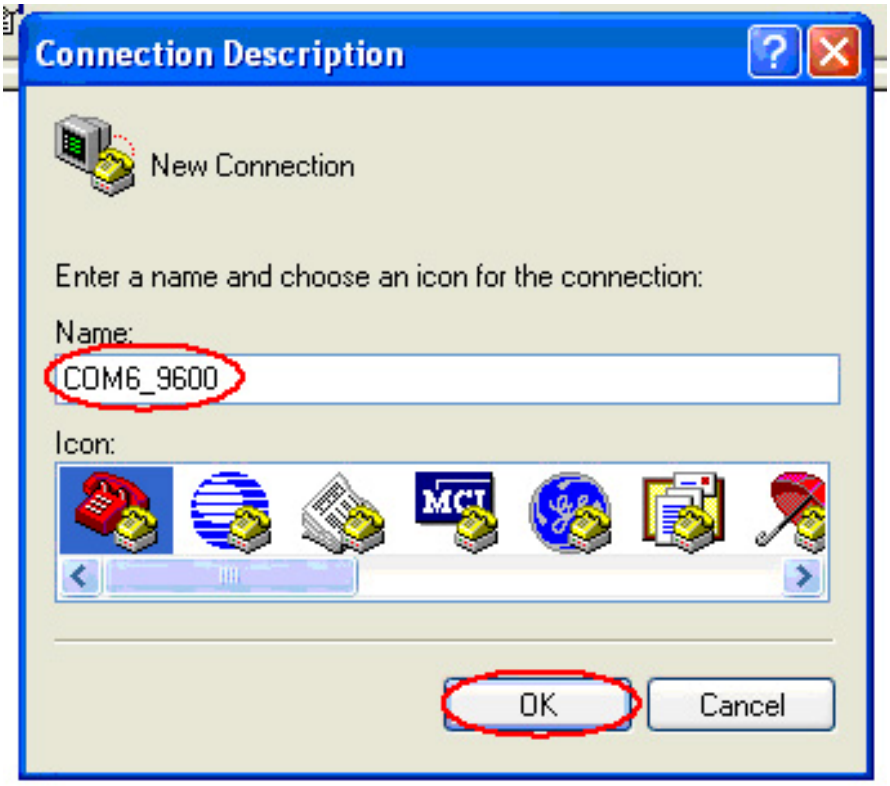


⇩

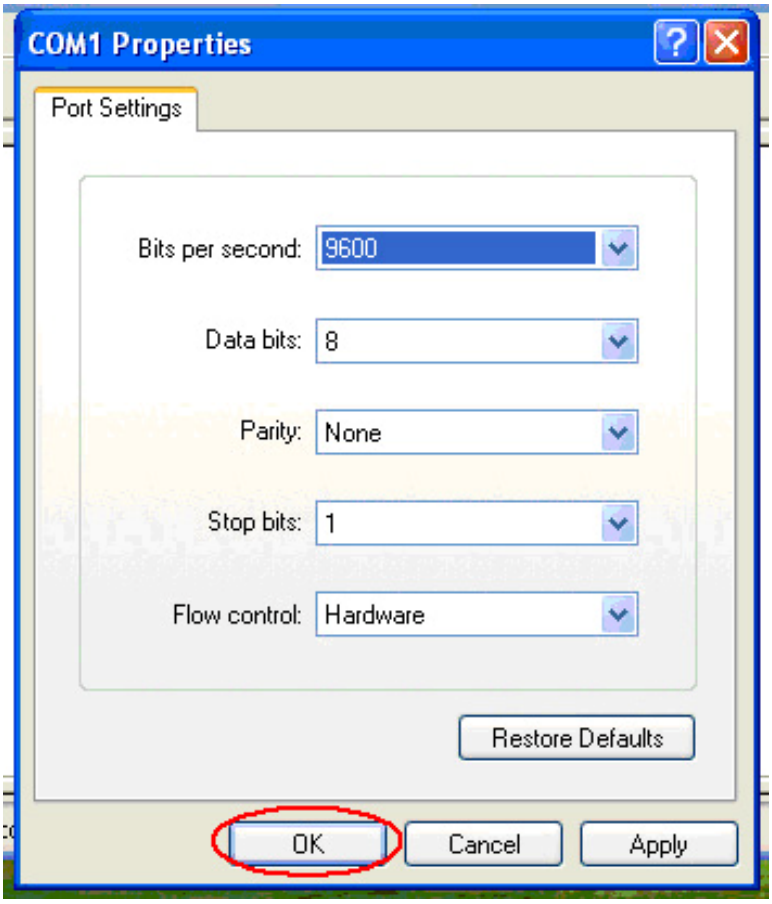


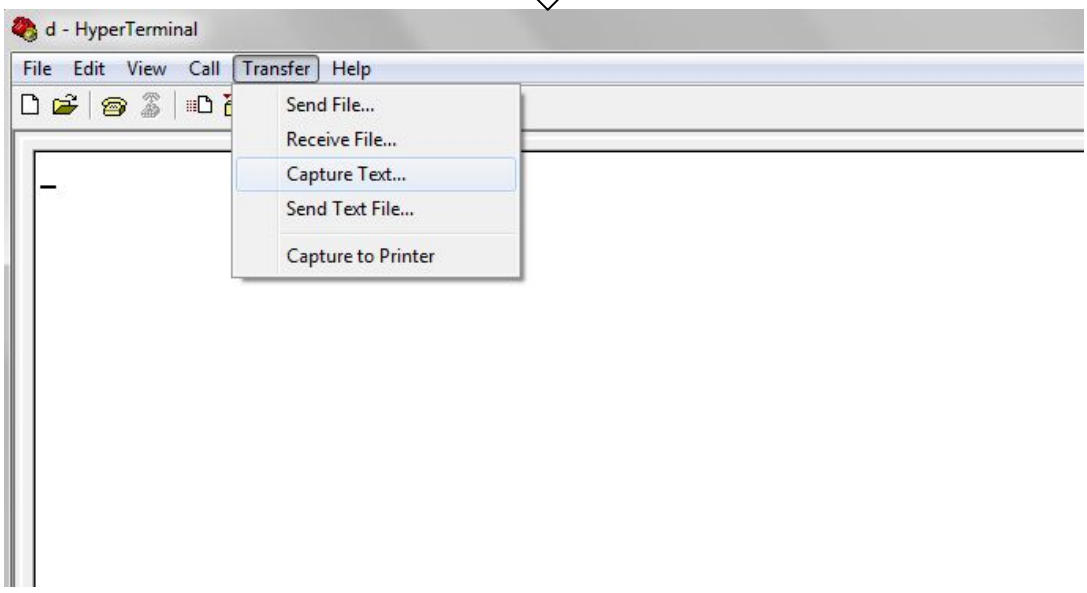
⇩


HyperTerminal
Before HyperTerminal can dial or make connections, you must provide information about your location.
OK

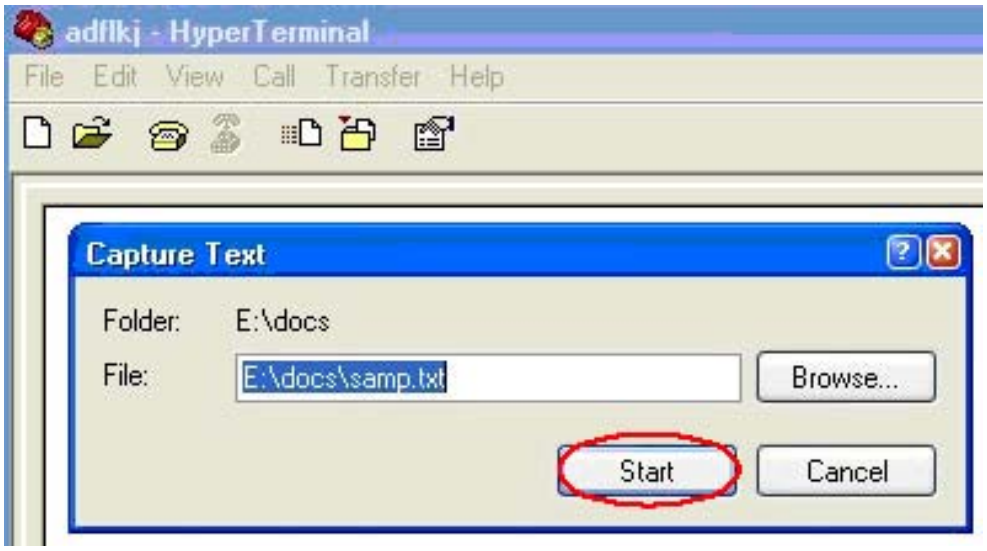

Connection Description
New Connection
Enter a name and choose an icon for the connection:
Name:
COM6_9600
Icon:
OK
Cancel


Connect To
COM6_9600
Enter details for the phone number that you want to dial:
Country/region:
United States (1)
Area code:
43
Phone number:
Connect using:
COM1
OK
Cancel

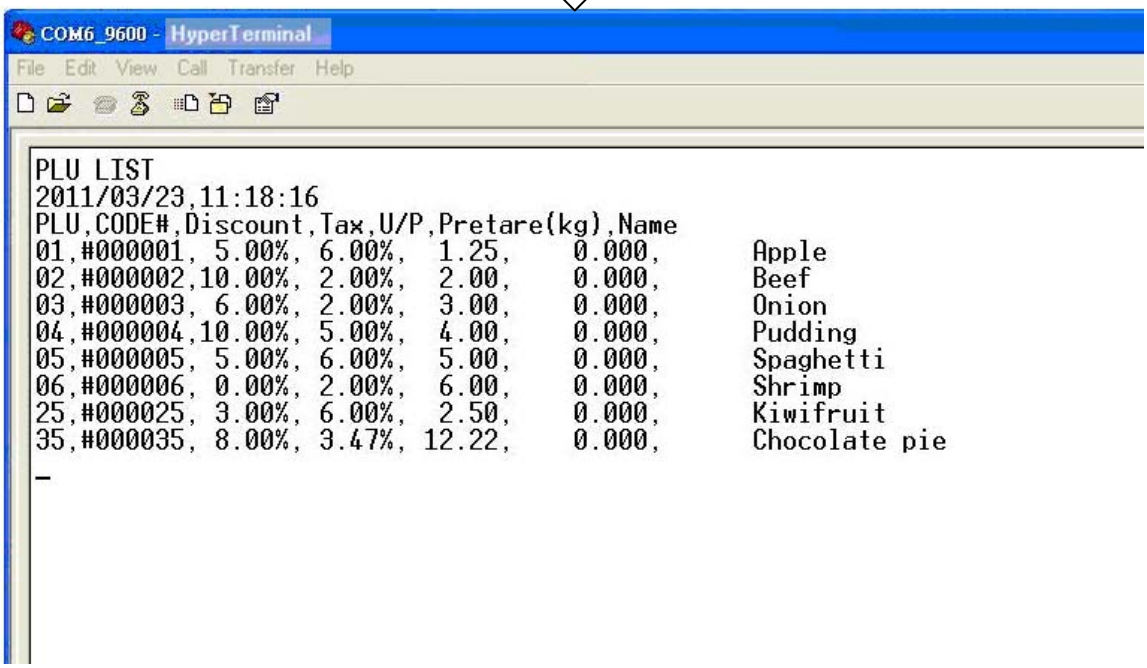




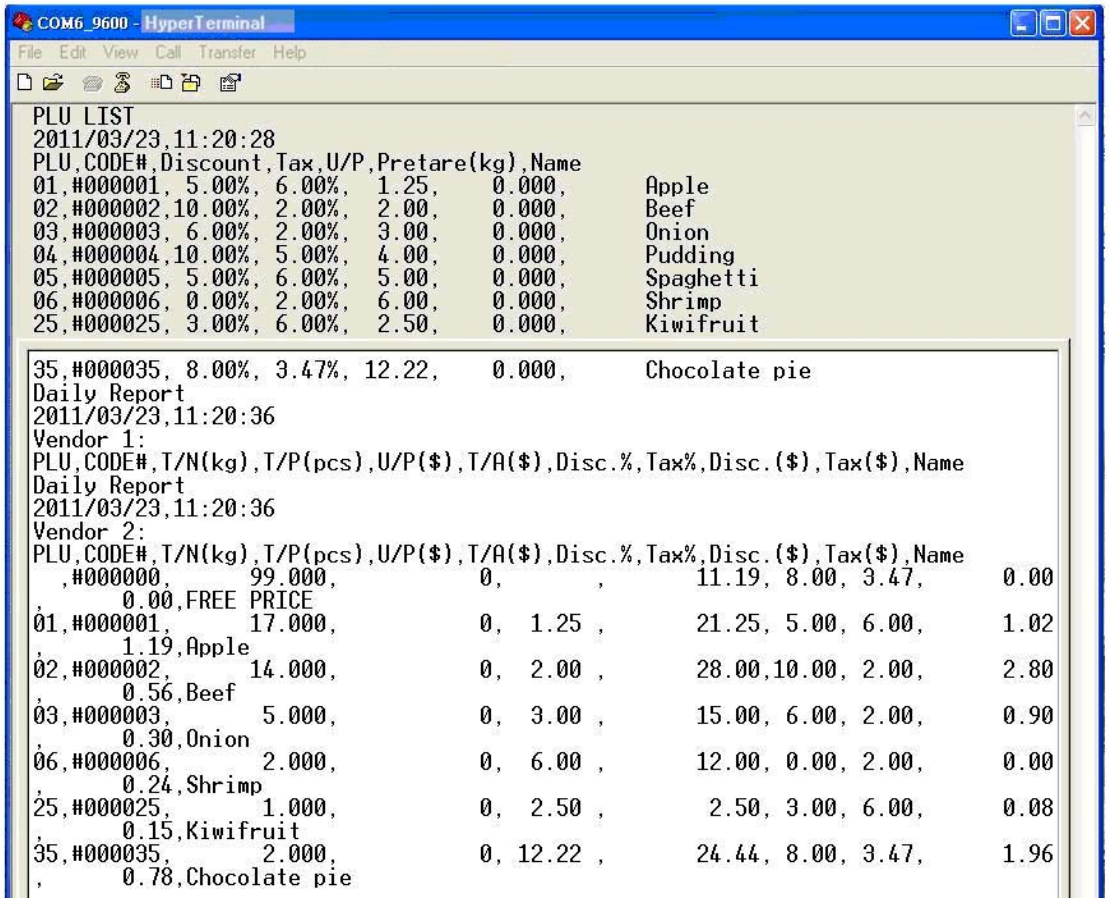
Store the file “*.txt”


adflkj - HyperTerminal
File Edit View Call Transfer Help
Capture Text
Folder: E:\docs
File: E:\docs\samp.txt
Browse...
Start
Cancel

⇩

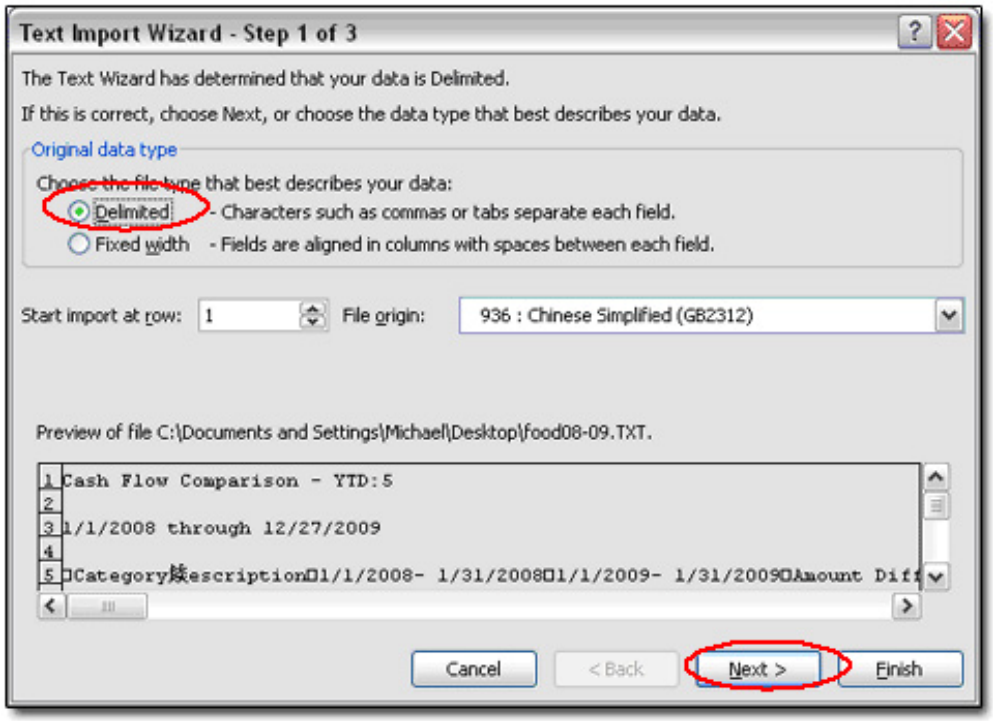

COM6_9600 - HyperTerminal
File Edit View Call Transfer Help
PLU LIST
2011/03/23,11:18:16
PLU,CODE#,Discount,Tax,U/P,Pretare(kg),Name
01,#000001, 5.00%, 6.00%, 1.25, 0.000, Apple
02,#000002,10.00%, 2.00%, 2.00, 0.000, Beef
03,#000003, 6.00%, 2.00%, 3.00, 0.000, Onion
04,#000004,10.00%, 5.00%, 4.00, 0.000, Pudding
05,#000005, 5.00%, 6.00%, 5.00, 0.000, Spaghetti
06,#000006, 0.00%, 2.00%, 6.00, 0.000, Shrimp
25,#000025, 3.00%, 6.00%, 2.50, 0.000, Kiwifruit
35,#000035, 8.00%, 3.47%, 12.22, 0.000, Chocolate pie

⇩

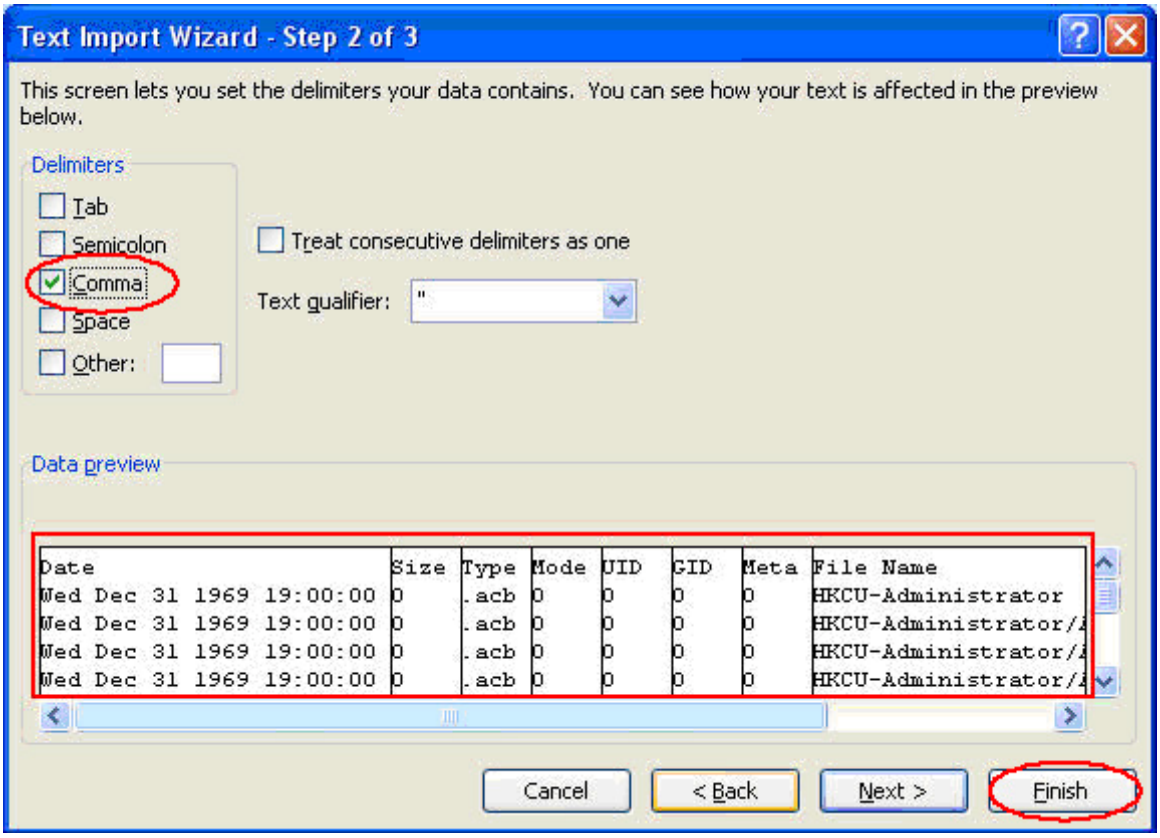


⇩

Open EXCEL and open old file (*.txt) to set comma separated point.



⇩



⇩

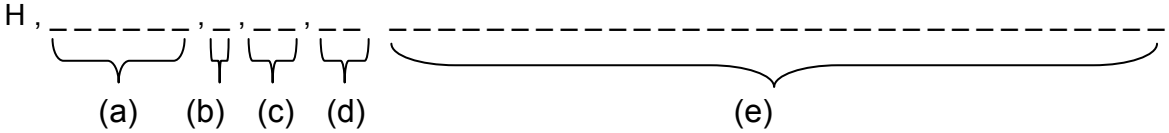
A1 PLU LIST

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	PLU LIST														
2	2011/3/23	11:20:28													
3	PLU	CODE#	Discount	Tax	U/P	Pretare(kg)	Name								
4	1	#000001	5.00%	6.00%	1.25	0	Apple								
5	2	#000002	10.00%	2.00%	2	0	Beef								
6	3	#000003	6.00%	2.00%	3	0	Onion								
7	4	#000004	10.00%	5.00%	4	0	Pudding								
8	5	#000005	5.00%	6.00%	5	0	Spaghetti								
9	6	#000006	0.00%	2.00%	6	0	Shrimp								
10	25	#000025	3.00%	6.00%	2.5	0	Kiwifruit								
11	35	#000035	8.00%	3.47%	12.22	0	Chocolate pie								
12	Daily Report														
13	2011/3/23	11:20:36													
14	Vendor 1:														
15	PLU	CODE#	T/N(kg)	T/P(pcs)	U/P($)	T/A($)	Disc.%	Tax%	Disc.($)	Tax($)	Name				
16	Daily Report														
17	2011/3/23	11:20:36													
18	Vendor 2:														
19	PLU	CODE#	T/N(kg)	T/P(pcs)	U/P($)	T/A($)	Disc.%	Tax%	Disc.($)	Tax($)	Name				
20		#000000	99	0		11.19	8	3.47	0	0	FREE PRICE				
21	1	#000001	17	0	1.25	21.25	5	6	1.02	1.19	Apple				
22	2	#000002	14	0	2	28	10	2	2.8	0.56	Beef				
23	3	#000003	5	0	3	15	6	2	0.9	0.3	Onion				

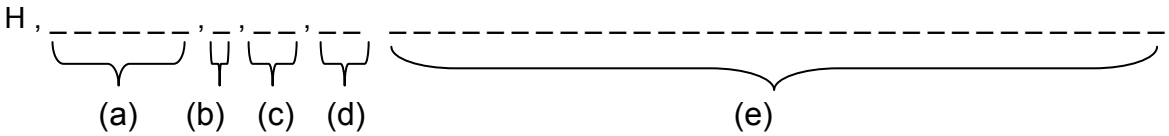
CHAPTER 4 PC SOFTWARE

4-1 Head and Tail Edit

◆ F4 Head format



◆ F5 Tail format



H: head

T: tail

(a) => Line 000001~000008, use ASCII(HEX) to show 30 30 30 30 30 30 30 31~30 30 30 30 30 30 30 38

(b) => Font of ASCII(HEX) code 00 : standard 10: width*2 01:height*2 11:width*2 height*2

(c) => Length of (e) , range from 00 ~ 32 use ASCII(HEX) to show 30 30 ~ 33 32

(d) => Reserve 2byte function

(e) => Edit the content in ASCII(HEX) (Refer to Appendix 4 ASCII CODE TABLE)

For example:

The first line of head is 6 bytes standard font “EXCELL” and line feed.

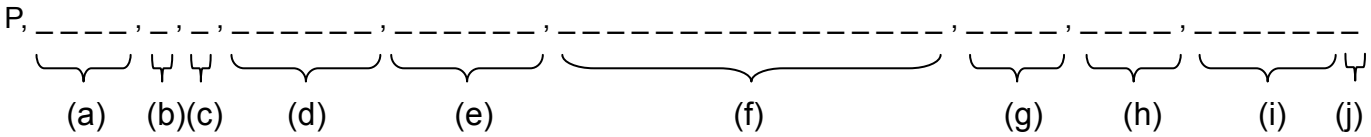
Address	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Byte	H	,	0	0	0	0	0	1	,		,	0	6	,		
ASCII(PC-858) (HEX)	48	2C	30	30	30	30	30	30	2C	00	2C	30	36	2C	00	00

16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
E	X	C	E	L	L										
45	58	43	45	4C	4C	0D	0A	00	00	00	00	00	00	00	00

32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47
00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00

- Before transmission, make sure baud rate of RS232 port is the same as the scale (9600 is recommended).
- The PC send 48 bytes one time. Once the scale gets data, it return 4 byte: O K X X (“X X” means the line. In this case, “X X” means Address 6、7 (line 1)) to the PC which means the next transmission is available.

4-2 PLU Transformat Edit



(a) => PLU address 0001~0035, ASCII(HEX) code: 30 30 30 31 ~ 30 30 33 35

(b) => 0 or 1 ASCII(HEX) code 30: weight pricing

31: quantity pricing

(c) => 0 or 1 ASCII(HEX) code 30: kg weight pricing

31: 100g weight pricing

(d) => 6 bytes Unit price (000000 ~ 099999), ASCII(HEX) code: 30 30 30 30 30 30 ~ 30 39 39 39 39 39

(e) => 6 bytes CODE (P/N) (000000 ~ 999999), ASCII(HEX) code: 30 30 30 30 30 30 ~ 39 39 39 39 39 39

(f) => 16 bytes Name , any letters are available

(g) => 4 bytes Discount (0000 ~ 9999), ASCII(HEX) code: 30 30 30 30 ~ 39 39 39 39

(h) => 4 bytes Tax (0000 ~ 9999), ASCII (HEX) code: 30 30 30 30 ~ 39 39 39 39

(i) => 6 bytes pre-tare (000000 ~ full capacity /s) , ASCII (HEX) code: 30 30 30 30 30 30 ~ full capacity /section

(j) => 1 byte, decimals of unit price

For example:

The following data is saved in PLU 12.

Weight pricing each one 10 yuan

CODE: 001234

Name: Apple

Discount: 10.00%

Tax: 5.00%

Pre-tare: 1.000kg

Address	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Byte	P	,	0	0	1	2	,	1	,	0	,	0	0	0	0	1
ASCII(PC-858) (HEX)	50	2C	30	30	31	32	2C	31	2C	30	2C	30	30	30	30	31

16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
0	,	0	0	1	2	3	4	,	A	p	p	l	e		
30	2C	30	30	31	32	33	34	2C	41	70	70	6C	65	20	20

32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47
									,	1	0	0	0	,	0
20	20	20	20	20	20	20	20	20	2C	31	30	30	30	2C	30

48	49	50	51	52	53	54	55	56	57
5	0	0	,	0	0	1	0	0	0
35	30	30	2C	30	30	31	30	30	30

- Before transmission, make sure baud rate of RS232 port is the same as the scale (9600 is recommended).
- The PC send 59 bytes one time. Once the scale gets data, it return 4 byte: O K X X (“X X” means the line. In this case, “X X” means Address 4、5 (line 12)) to the PC which means the next transmission is available.

4-3 Data Transmission

Windows XP

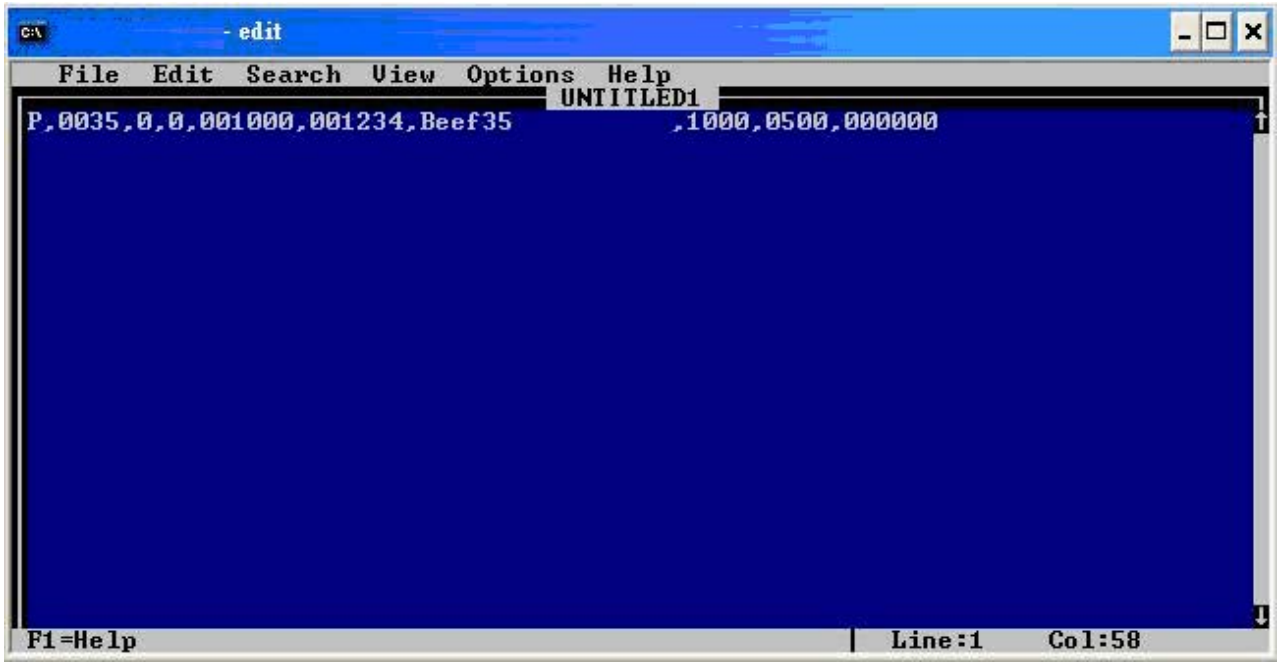
Start > All programs > Accessories > Command Prompt

C:>Documents and Setting>Ken> mode com6:9600,n,8,1

According to the COM on PC
RS232.
Transmitting mode: 9600,n,8,1

Use EDIT to edit needed file (For easier operation, you can download a free software “MadEdit” from the internet.)

C:>Documents and Setting>Ken> edit



Store the file “PLU0035.txt”

C:> Documents and Setting>Ken>copy PLU0035.txt com6
copied (1) File

Transmission has been done.

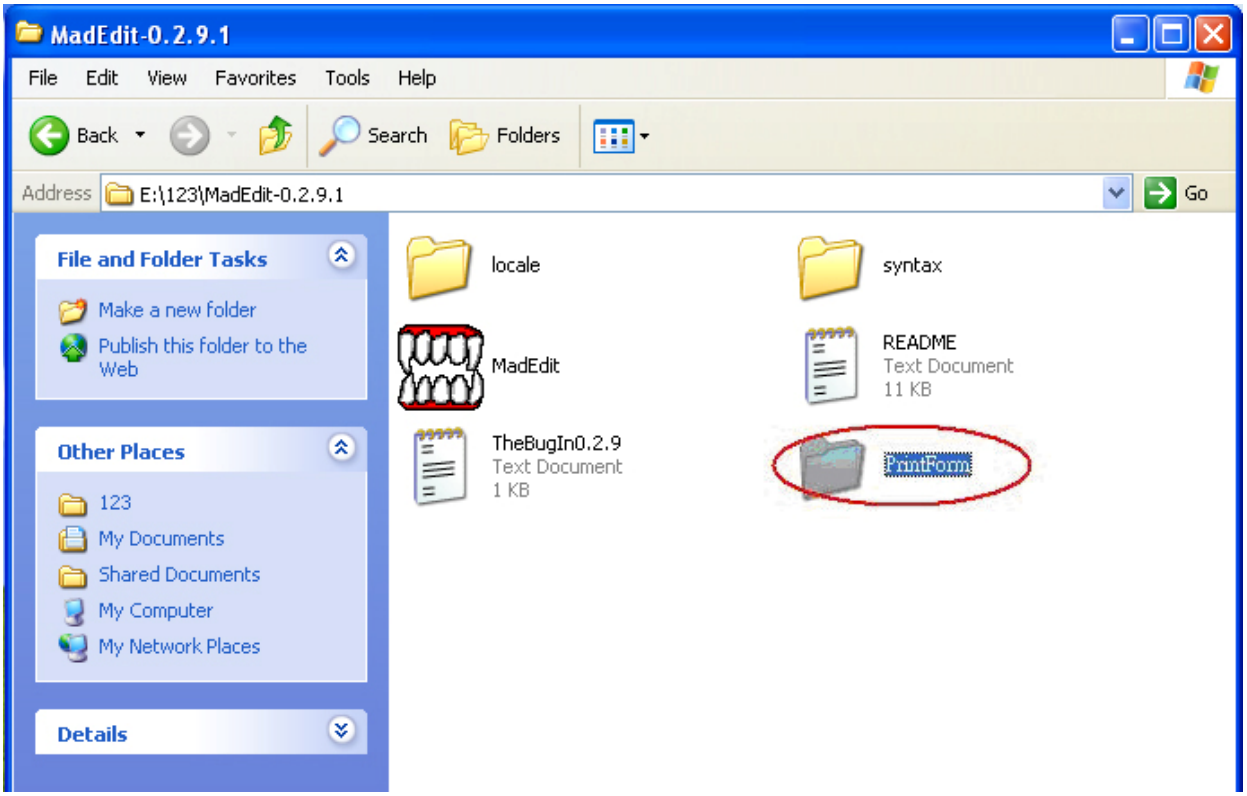
If the transmission failed, the buzzer would beep 2 times. You should check whether the file was wrong.
If the buzzer doesn’t beep, the file has been transmitted.

Operation Method of Madedit

(1)Download “Madedit-0.2.9.1.rar” from the Internet

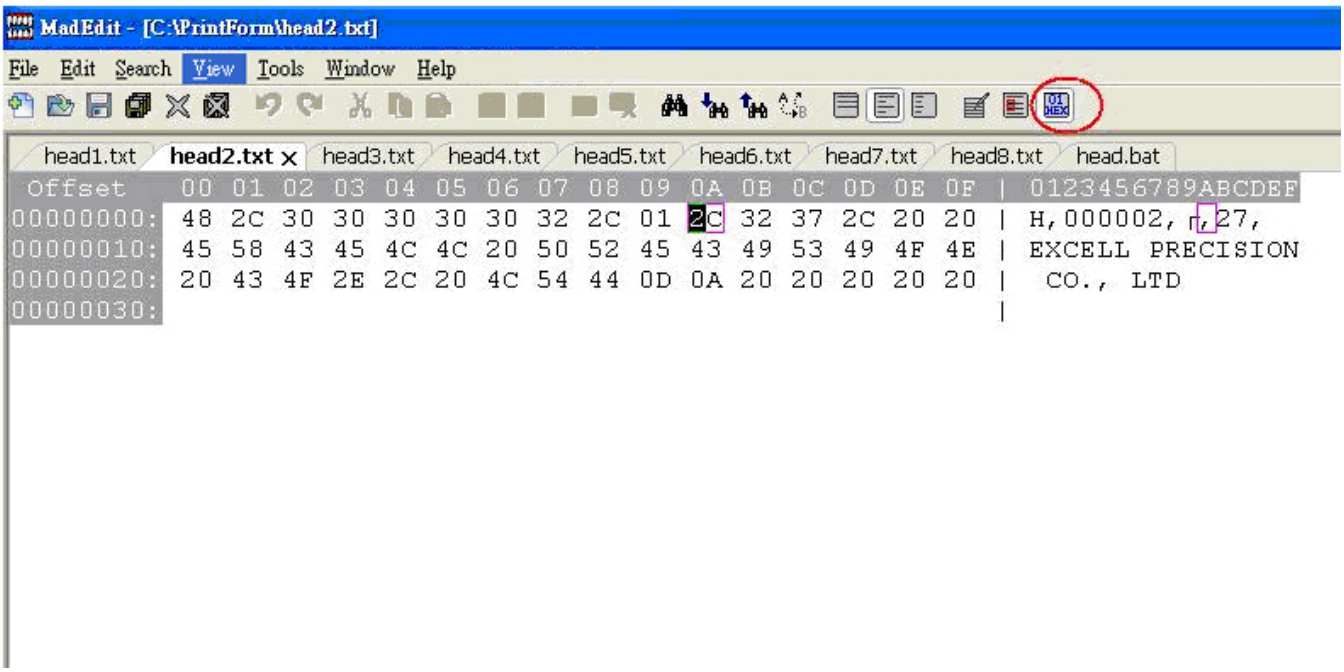
(2)Uncompress the file to Disk C

(3)Create a new folder “PrintForm” in C:\MadEdit-0.2.9.1 (so as to store the file “ *.txt” in it)



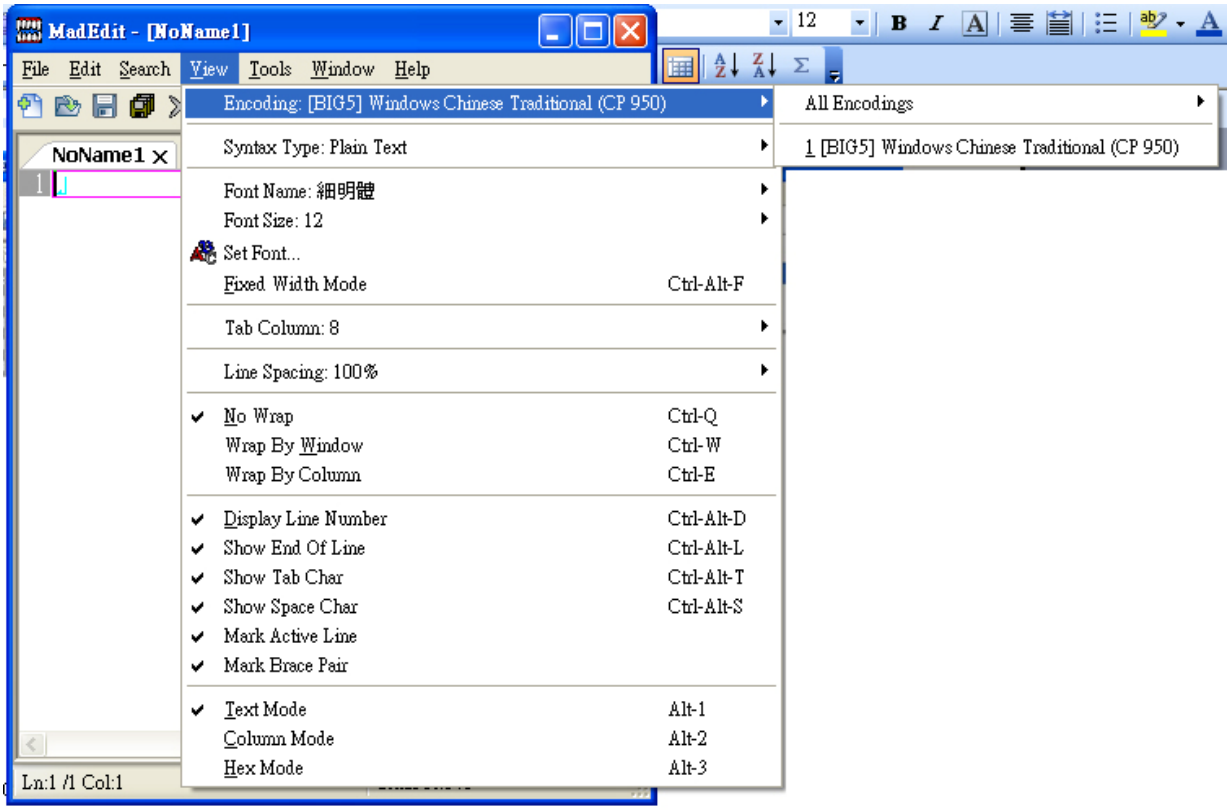
(4)Double-click MadEdit.exe to open it

Click “01 HEX” as followed to unfold contrast of ASCII (HEX) and txt file. You can edit it randomly.



(5) If there are error codes, please change the display mode as followed.

=> select [UTF-8]Unicode 8 bit(UTF-8)



(6) After confirmation, store the file into folder “PrintForm”.

☛ POWER DESCRIPTION

Power Selection

1. 6V 4 Ah rechargeable battery
2. INPUT:100~240VAC 1.2A
   OUTPUT:+12VDC 1.5A

Recharge Voltage

SWITCHING POWER
INPUT:100~240VAC 1.2A
OUTPUT:+12VDC 1.5A

Power Consumption

Printer is free

No backlight	60 mA	longer than 65 hours
backlight	70 mA	longer than 55 hours

Printer is working

Longer than 1 hour

Low Battery Warning

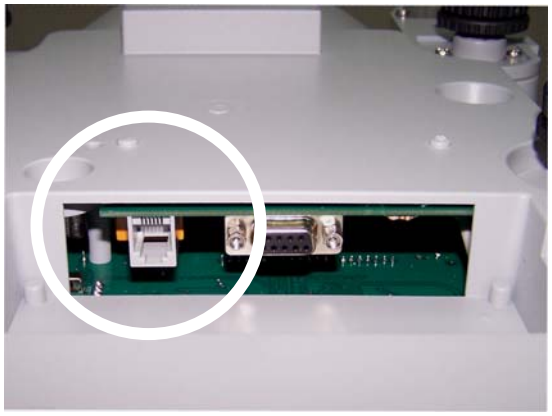
Please charge the battery while the display is shown ()symbol.

- If you don't charge in time, the power will be automatically cut off to protect the battery life after using 20～30 minutes. The scale must be fully charged before operating again.
- When the low battery warning symbol shows up, please recharge the scale immediately for fear of weight instability or data missing.

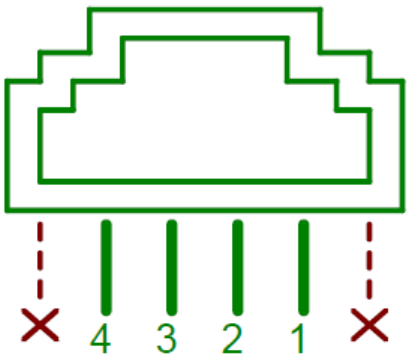
☛ Specification of Cashbox RJ11

▲ RJ11 Appearance

RJ11 is commonly used to set up telephone line, 4PIN or 6PIN.

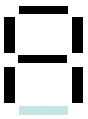
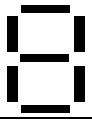
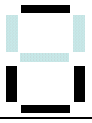
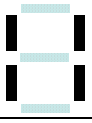
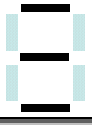


▲ Adapter position under the platter



▲ Pin Assignment

APPENDIX 1: 7 Segment Display Characters

Digit	7 segment letter	Alphabet	7 segment letter	Alphabet	7 segment letter
0		A		N	
1		B		O	
2		C		P	
3		D		Q	
4		E		R	
5		F		S	
6		G		T	
7		H		U	
8		I		V	
9		J		W	
		K		X	
		L		Y	
		M		Z	

APPENDIX 2: ASCII CODE TABLE WPC-1252

Windows-1252 (CP1252)																
	_0	_1	_2	_3	_4	_5	_6	_7	_8	_9	_A	_B	_C	_D	_E	_F
0_	NUL 0000 *0*	SOH 0001 *1*	STX 0002 *2*	ETX 0003 *3*	EOT 0004 *4*	ENQ 0005 *5*	ACK 0006 *6*	BEL 0007 *7*	BS 0008 *8*	HT 0009 *9*	LF 000A *10*	VT 000B *11*	FF 000C *12*	CR 000D *13*	SO 000E *14*	SI 000F *15*
1_	DLE 0010 *16*	DC1 0011 *17*	DC2 0012 *18*	DC3 0013 *19*	DC4 0014 *20*	NAK 0015 *21*	SYN 0016 *22*	ETB 0017 *23*	CAN 0018 *24*	EM 0019 *25*	SUB 001A *26*	ESC 001B *27*	FS 001C *28*	GS 001D *29*	RS 001E *30*	US 001F *31*
2_	SP 0020 *32*	! 0021 *33*	" 0022 *34*	# 0023 *35*	$ 0024 *36*	% 0025 *37*	& 0026 *38*	' 0027 *39*	(0028 *40*	) 0029 *41*	* 002A *42*	+ 002B *43*	, 002C *44*	- 002D *45*	. 002E *46*	/ 002F *47*
3_	0 0030 *48*	1 0031 *49*	2 0032 *50*	3 0033 *51*	4 0034 *52*	5 0035 *53*	6 0036 *54*	7 0037 *55*	8 0038 *56*	9 0039 *57*	: 003A *58*	; 003B *59*	< 003C *60*	= 003D *61*	> 003E *62*	? 003F *63*
4_	@ 0040 *64*	A 0041 *65*	B 0042 *66*	C 0043 *67*	D 0044 *68*	E 0045 *69*	F 0046 *70*	G 0047 *71*	H 0048 *72*	I 0049 *73*	J 004A *74*	K 004B *75*	L 004C *76*	M 004D *77*	N 004E *78*	O 004F *79*
5_	P 0050 *80*	Q 0051 *81*	R 0052 *82*	S 0053 *83*	T 0054 *84*	U 0055 *85*	V 0056 *86*	W 0057 *87*	X 0058 *88*	Y 0059 *89*	Z 005A *90*	[005B *91*	\ 005C *92*	] 005D *93*	^ 005E *94*	_ 005F *95*
6_	` 0060 *96*	a 0061 *97*	b 0062 *98*	c 0063 *99*	d 0064 *100*	e 0065 *101*	f 0066 *102*	g 0067 *103*	h 0068 *104*	i 0069 *105*	j 006A *106*	k 006B *107*	l 006C *108*	m 006D *109*	n 006E *110*	o 006F *111*
7_	p 0070 *112*	q 0071 *113*	r 0072 *114*	s 0073 *115*	t 0074 *116*	u 0075 *117*	v 0076 *118*	w 0077 *119*	x 0078 *120*	y 0079 *121*	z 007A *122*	{ 007B *123*	| 007C *124*	} 007D *125*	~ 007E *126*	DEL 007F *127*
8_	€ 20AC *128*		‚ 201A *130*	ƒ 0192 *131*	„ 201E *132*	… 2026 *133*	† 2020 *134*	‡ 2021 *135*	ˆ 02C6 *136*	‰ 2030 *137*	Š 0160 *138*	‹ 2039 *139*	Œ 0152 *140*		Ž 017D *142*	
9_		‘ 2018 *145*	’ 2019 *146*	“ 201C *147*	” 201D *148*	• 2022 *149*	– 2013 *150*	— 2014 *151*	˜ 02DC *152*	™ 2122 *153*	š 0161 *154*	› 203A *155*	œ 0153 *156*		ž 017E *158*	Ÿ 0178 *159*
A_	NBSP 00A0 *160*	¡ 00A1 *161*	¢ 00A2 *162*	£ 00A3 *163*	¤ 00A4 *164*	¥ 00A5 *165*	¦ 00A6 *166*	§ 00A7 *167*	¨ 00A8 *168*	© 00A9 *169*	ª 00AA *170*	« 00AB *171*	¬ 00AC *172*	SHY 00AD *173*	® 00AE *174*	¯ 00AF *175*
B_	° 00B0 *176*	± 00B1 *177*	² 00B2 *178*	³ 00B3 *179*	´ 00B4 *180*	µ 00B5 *181*	¶ 00B6 *182*	· 00B7 *183*	¸ 00B8 *184*	¹ 00B9 *185*	º 00BA *186*	» 00BB *187*	¼ 00BC *188*	½ 00BD *189*	¾ 00BE *190*	¿ 00BF *191*
C_	À 00C0 *192*	Á 00C1 *193*	Â 00C2 *194*	Ã 00C3 *195*	Ä 00C4 *196*	Å 00C5 *197*	Æ 00C6 *198*	Ç 00C7 *199*	È 00C8 *200*	É 00C9 *201*	Ê 00CA *202*	Ë 00CB *203*	Ì 00CC *204*	Í 00CD *205*	Î 00CE *206*	Ï 00CF *207*
D_	Ð 00D0 *208*	Ñ 00D1 *209*	Ò 00D2 *210*	Ó 00D3 *211*	Ô 00D4 *212*	Õ 00D5 *213*	Ö 00D6 *214*	× 00D7 *215*	Ø 00D8 *216*	Ù 00D9 *217*	Ú 00DA *218*	Û 00DB *219*	Ü 00DC *220*	Ý 00DD *221*	Þ 00DE *222*	ß 00DF *223*
E_	à 00E0 *224*	á 00E1 *225*	â 00E2 *226*	ã 00E3 *227*	ä 00E4 *228*	å 00E5 *229*	æ 00E6 *230*	ç 00E7 *231*	è 00E8 *232*	é 00E9 *233*	ê 00EA *234*	ë 00EB *235*	ì 00EC *236*	í 00ED *237*	î 00EE *238*	ï 00EF *239*
F_	ð 00F0 *240*	ñ 00F1 *241*	ò 00F2 *242*	ó 00F3 *243*	ô 00F4 *244*	õ 00F5 *245*	ö 00F6 *246*	÷ 00F7 *247*	ø 00F8 *248*	ù 00F9 *249*	ú 00FA *250*	û 00FB *251*	ü 00FC *252*	ý 00FD *253*	þ 00FE *254*	ÿ 00FF *255*
	_0	_1	_2	_3	_4	_5	_6	_7	_8	_9	_A	_B	_C	_D	_E	_F

APPENDIX 3: Iran System encoding standard

Code page layout

Only the upper half (128–255) of the table is shown, the lower half (0–127) being plain ASCII. This character set encodes certain presentation forms separately.

	.0	.1	.2	.3	.4	.5	.6	.7	.8	.9	.A	.B	.C	.D	.E	.F
8_	۰ 06F0	۱ 06F1	۲ 06F2	۳ 06F3	۴ 06F4	۵ 06F5	۶ 06F6	۷ 06F7	۸ 06F8	۹ 06F9	، 060C	ـ 0640	؟ 061F	آ FE81	ئ FE8B*	ء 0621
9_	ا FE8D	ا FE8E	ب FE8F*	ب FE91**	پ FB56*	پ FB58**	ت FE95*	ت FE97**	ث FE99*	ث FE9B**	ج FE9D*	ج FE9F**	چ FB7C*	چ FB7C**	ح FEA1*	ح FEA3**
A_	خ FEA5*	خ FEA7**	د 062F	ذ 0630	ر 0631	ز 0632	ژ 0698	س FEB1	س FEB3	ش FEB5	ش FEB7	ص FEB9	ص FEBB	ض FEBD	ض FEBF	ط 0637
B_	▒ 2591	▓ 2592	▓ 2593	┃ 2502	┤ 2524	╡ 2561	╢ 2562	╗ 2556	╕ 2555	╣ 2563	║ 2551	╗ 2557	╝ 255D	╜ 255C	╛ 255B	┐ 2510
C_	└ 2514	┴ 2534	┬ 252C	├ 251C	─ 2500	┼ 253C	╞ 255E	╟ 255F	╚ 255A	╔ 2554	╩ 2569	╦ 2566	╠ 2560	═ 2550	╬ 256C	╧ 2567
D_	╨ 2568	╤ 2564	╥ 2565	╙ 2559	╘ 2558	╒ 2552	╓ 2553	╫ 256B	╪ 256A	┘ 2518	┌ 250C	▉ 2588	▄ 2584	▌ 258C	▐ 2590	▀ 2580
E_	ظ 0638	ع FEC9*	ع FECA**	ع FECC*	ع FECB**	غ FECD*	غ FECE**	غ FED0*	غ FECF**	ف FED1*	ف FED3**	ق FED5*	ق FED7**	ک FB8E*	ک FB90**	گ FB92*
F_	گ FB94**	ل FEDD*	لا FEFB*	ل FEDF**	م FEE1*	م FEE3**	ن FEE5*	ن FEE7**	و 0648	ه FEE9*	ه FEEC	ه FEEB	ی FBFD	ی FBFC	ی FBFE**	00A0
	.0	.1	.2	.3	.4	.5	.6	.7	.8	.9	.A	.B	.C	.D	.E	.F

*The code point given is for the isolated form, the final form is also encoded.
**The code point given is for the initial form, the medial form is also encoded.