CHAPTER 1
INTRODUCTION

1-1 Welcome

The **JIF-2001** weighing indicator is the product of years of design, development, and in-field testing. It is a stable weighing indicator with various functions. Additional weighing check function enables **JIF-2001** to fulfill the need of users. Interfaces are easy to connect so that users can perform various applications.
With sincere gratitude for your using our products, once any question or problems occurred, please contact us or our distributors immediately for further services.

1-2 Features

JIF-2001 Weighing Indicator has following built-in designs:

- Watchdog virtually eliminates malfunctions which associated with computerized equipment.
- Fully digital calibration makes settings easier: Full Calibration, ZERO adjustment, and SPAN adjustment.
- Drive up to 8 parallel connecting load cells(350Ω).
- 1/15,000 displayed resolution, DC Input 1/12,000. (JIF-2001AH displayed resolution up to 1/60,000 depend on load cell quality).
- 8k bytes SRAM with Li-battery back-up. Information will not disappear even power failure.
- 100 coded Special Function setting (Fn): Hi, Lo, Material, Total Count, Pre-Finish Count, Standard Count, and Pre-tare.
- The settings of function and weighing parameters are all stored in the EEPROM, with storage duration over 40 years.
- With weighing check function, and the buzzer inside, it can provide users with more applications.

- Users can adjust the intensity of digits filter to avoid mechanical vibration which caused by external environments to achieve high-speed and accurate measurement.
- 8 set of control I/O Connector, enable more applications (Can connect to photo cell).
- **20mA** Current Loop can connect to large-size LED Indicator.
- Printing and output data automatically through function preset.
- Optional RS-232: bi-dimensional RS-232 can be connected to computer, monitor or other peripheral.
- Optional Centronic: An interface connected to printer or mini printers.

1-3 System Function Introduction

- RE-INITIALIZE THE SYSTEM:

  Turn the power **OFF**; slide the **SET** switch to ON position; Turn the power **ON**, the screen will show **SELECT**. Please press the **ESC** key, the system will start the re-initialize process.(4-1)

- SYSTEM CHECK：

  Turn the power **OFF**; slide the **SET** switch to ON position; Turn the power **ON**, the screen will show **SELECT**. Please press the **ZERO** key, the system will start the SYSTEM CHECK process. The screen will start the following functions. (4-2)

  ※ **CHECK DISPLAY**
  ※ **CHECK MEMORY**
  ※ **CHECK KEY**
  ※ **CHECK INPUT**

- FUNCTION SETTING:
  Turn the power **OFF**; slide the **SET** switch to ON position; Turn the power **ON**, the screen will show **SELECT**. Please press the **ZERO** key, the system will start the FUNCTION SETTING process. The screen will display following function: (4-4)

  ※ **FUNCTION (F000 F018)**
  ※ **SERIAL INTERFACE (F200 F204)**
  ※ **PRINTER (F300 F305)**
  ※ **CURRENT LOOP (FC00 FC02)**

- CALIBRATION:
  Turn the power **OFF**; slide the **SET** switch to ON position; Turn the power **ON**, the screen will show **SELECT**. Please press the **GROSS/NET** key and the screen will display following function: (4-3)

  ※ **F-CAL (Full-step calibration)**

  For JIF-2001:

  ※ **Adj. ZERO (Calibration: ZERO Adjustment)**
  ※ **Adj. SPAN (Calibration: SPAN Adjustment)**

  For JIF-2001 AH:

  ※ **D-CAL (Digital calibration)**

- SPECIAL FUNCTION SETTING：
  When the power is turned **ON (Set Switch is OFF)**, press **FN** key. The screen will display following functions: (4-5)

  ※ **Set Hi**
  ※ **Set Lo**
  ※ **Mater**
  ※ **T. Count**
  ※ **S. Count**
  ※ **P. F. Count**
  ※ **P. tare**

  ★★★★See more details in “CHAPTER 4”★★★★

CHAPTER 2
INSTALLATION

2-1 Best Conditions For Use

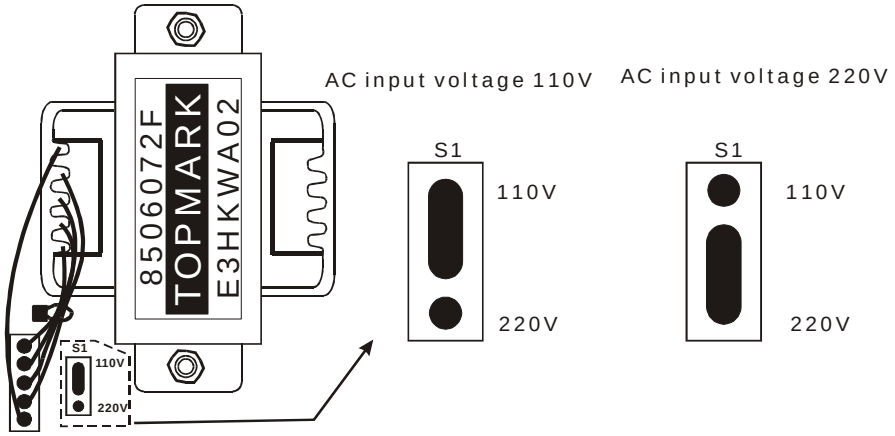
When installing and wire connecting on **JIF-2001A**, please follow the points and guide for preventing any abnormal situation occurred.

- Before connecting the Electric Power Supply, please identify the input Electric voltage type is AC 110V, AC 220V (both for JIF-2001A), or DC input (JIF-2001A) .
- The Grounding Wire shall be properly connected .
- The Operation Temperature shall range within -10℃~ 45℃, please DO not install in any place of direct sun-light .
- The input power shall be AC 110V or AC 220V±10%, if the Electric Power Supply is not stable or the interference signal exists, that may cause uncertain actuation or reaction, even damages .

Therefore, please utilize Electric Power Supply Stabilizer of adequate capacity.

2-2 Power Supply Connecting

- Open the case, there is a jumper〔S1〕near the (TOPMARK) transformer located at the PCB board, please insert a short-circuit pin to the available side.



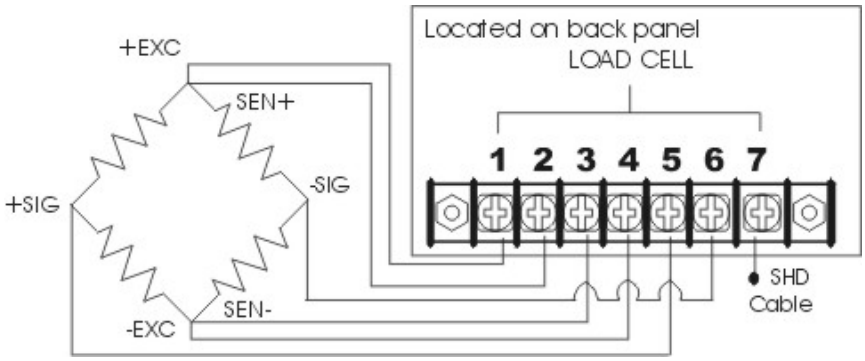
2-3 DC Power Supply Connecting

※DC 12V Input through 3 pin Input in the rear panel.

※Or Input DC 12V through ADAPTOR.

2-4 Connecting the Load Cell

- Do not plug in your power cable until you have completely connected the load cell.



Screw	Signal
1	Positive Excitation Voltage, (EXC+)
2	Positive Sense Voltage, (SEN+)
3	Negative Sense Voltage, (SEN-)
4	Negative Excitation Voltage, (EXC-)
5	Positive Signal Voltage, (SIG+)
6	Negative Signal Voltage, (SIG-)
7	Shield, (SHD)

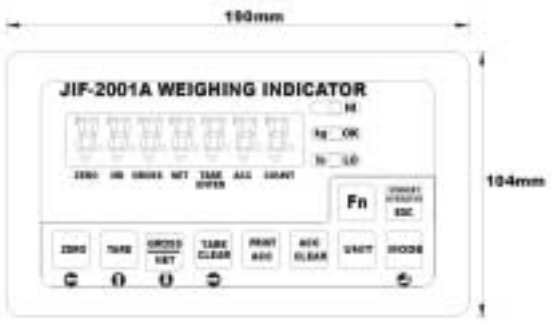
※ It could be dangerous by using improper battery or wrong connection of battery

※To connect your load cell to the weighing Indicator use a six-wire cable with shield-connect the wires as indicated above. If the JIF-2001A is located near the Load Cells (Within five meters or a few yards) you may use a 4-wire cable with shield, but first connect screws 1&2 and 3&4 with independent jumper leads.

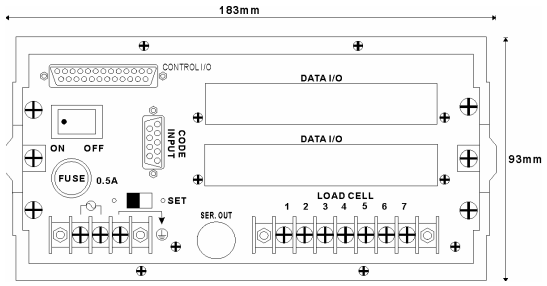
※The analogue output from the Load Cell and input/output signals are sensitive to electrical noise. Do not bind these cables together as it could result in cross-talk interference. Please also keep them away from AC power cables.

2-5 Front and Rear Panel

Dimensions



Front Panel

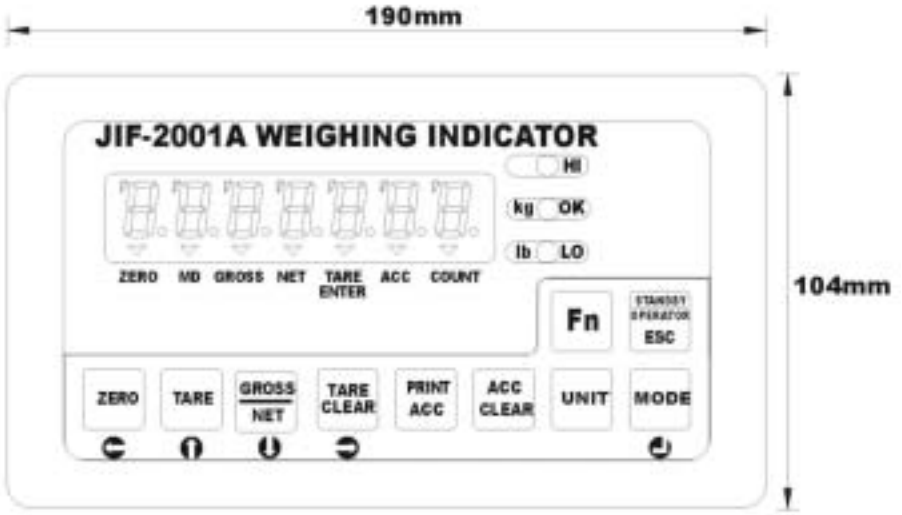


Rear Panel

Side View

For Mounting

CHAPTER 3
SPECIFICATIONS



3-1 Analog Input and A/D Conversion

Type	JIF-2001A
Input Sensitivity	≧0.6uV/D
ZERO Adjustment Range	0.6mV ~24mV
Load-Cell Excitation	DC12V±5, 300mA, Remote Sensing. Can be connected up to 8 load cells(350Ω)
Non-Linearity	0.01 % F.S
Input Noise	±0.3uV p-p
Input Impedance	10MΩor above
A/D Conversion Method	Double Integral System
A/D Resolution	180,000
A/D Conversion Rate	Approx. 8 Times／Sec.

3-2 General

Type	JIF-2001A
Power Requirements	AC 110V or AC220V ±10%, 50／60Hz Approx. 25VA
Net weight	Approx. 3.2 kg〔7.054 lb〕
Operation Temperature	－10 45℃
Maximum Humidity	85%〔non-condensing〕
Physical Dimensions	240 (D) ×190 (W) ×104(H)mm

3-3 Front Panel Description

◎ **DIGITAL SECTION**	
Main Display〔Green Tube〕	7-segment, 7-digit display, VFD screen with a 13mm character size, displays the weight.
Minimum Division	X1、X2、X5、X10、X20、X50
Maximum Display	+750450
Under ZERO Indicator	〝—〞 minus sign
〝ZERO〞 ▼Annunciator	Center of Zero
〝MD〞 ▼Annunciator	Motion Detection (Unstable)
〝GROSS〞 ▼Annunciator	Gross Mode
〝NET〞 ▼Annunciator	Net Mode
〝TARE ENTERED〞 ▼Annunciator	Tare has been entered
〝ACCUM〞 ▼Annunciator	Display Accumulator or Material
〝COUNT〞 ▼Annunciator	Number of Times
〝 ／Hi〞 ●Annunciator	Optional unit／”Hi” Output Status LED Annunciator
〝kg ／OK〞 ●Annunciator	Kilograms Displayed／”OK” Within standard range
〝lb ／Lo〞 ●Annunciator	Ponds Displayed ／”Lo” Output Status LED Annunciator
〝ZERO ／←〞 Key	Stable ZERO／Left shift key
〝TARE／↑〞 Key	TARE’s when stable-in Net, display ZERO ／Increase the number
〝GROSS、NET／↓〞 Key	Changes from “Gross” to “ Net” and vise versa／Decrease the number
〝TARE CLEAR／→〞 Key	Tare is cleared／Right shift Key
〝PRINT／ACC〞 Key	Data will send one time／Print Accumulation
〝ACC／CLEAR〞 Key	Display Accumulator／Clear Accumulation
〝UNIT〞 Key	Changes from kg to lb and vise versa.
〝Fn〞 Key	Special Function Setting
〝MODE／↵〞 Key	Change Mode／Enter Key （Normal =>ACC =>COUNT）
〝STANDBY／ESC Key	Standby Status／ESC

3-4 Panel Key Function Table

Key Function	Function Position		Status
ZERO	Panel Key	ZERO	JIF-2001A returns to the center of ZERO if the weight value within F003 range. ▽ ZERO ON
	Control I / O	Pin1 + Pin 9	
	OP-02 （Command Mode）	Z Cr Lf	
TARE	Panel Key	TARE	JIF-2001A switches to NET mode, ZERO's the display and stores the TARE weight in Memory. ▽ TARE ENTER ON
	Control I / O	Pin 2 + Pin 9	
	OP-02 （Command Mode）	T Cr Lf	
TARE CLEAR	Panel Key	TARE CLEAR	Clear TARE Value ▽ TARE ENTER OFF
	Control I / O	Pin4 + Pin 9	
GROSS	Panel Key	GROSS / NET	Shift to GROSS Mode ▽ GROSS ON
	Control I / O	Pin3 + Pin 9	
	OP-02 （Command Mode）	G Cr Lf	
NET	Panel Key	GROSS / NET	Shift to NET mode ▽ NET ON
	Control I / O	Pin3 + Pin9	
	OP-02 （Command Key）	N Cr Lf	
PRINT	Panel Key	PRINT / ACC	Print or Output latest Data
	Control I / O	Pin 6 + Pin 9	
ACC	Panel Key	PRINT / ACC	Print Accumulation Value Please use MODE key to switch to ▼ ACC
	Control I / O	Pin 5 + Pin 9	
ACC	Panel Key	ACC / CLEAR	Print Accumulation Please use MODE key to swift to ▼ACC
CLEAR	Panel Key	ACC / CLEAR	Clear Accumulation and Count

Key Function	Function Position		Status
UNIT	Panel Key	UNIT	Changes from “Kg” to “Lb” and vise versa.
MODE	Panel Key	MODE	Changes from Display →Weight Value →Accumulation、▽(ACC) →Count、▽COUNT
STANDBY	Panel Key	STANDBY/ OPERATE/ESC	Standby Mode will Pause all operation.
OPERATE	Panel Key	STANDBY/ OPERATE/ESC	Starts operation.
ESC	Panel Key	STANDBY/ OPERATE/ESC	Escape setting Mode
Fn	Panel Key	Fn	Setting Hi, Lo, T. Count, OK. Count, C. Finish, P. tare, and Material Code.
→	Panel Key	→	Right shift key in setting Mode
←	Panel Key	←	Left shift key in setting Mode
↑	Panel Key	↑	Increase value in setting mode
↓	Panel Key	↓	Decrease value in setting mode
↵	Panel Key	↵	Enter key in setting mode

3-5 Quick Function Table

◎ WEIGHT FUNCTION TABLE				
F 000	Decimal Point Adjustment	⓪No Decimal ①1 Decimal ②2 Decimal ❸3 Decimal ④4 Decimal		
F 001	Displayed Unit	⓪Optional unit ❶Kilogram ②Pound ③Gram ④Ton ⑤Ounce		
F 002	Display Update/Digital Filter		Display Update	Digital Filter

			41	4 times/Sec.	1 stage filter
			42	4 times/Sec.	2 stage filter
			43	4 times/Sec.	3 stage filter
			44	4 times/Sec.	4 stage filter
			81	8 times/Sec.	1 stage filter
		●	82	8 times/Sec.	2 stage filter
			83	8 times/Sec.	3 stage filter
			84	8 times/Sec.	4 stage filter
F 003	Set Zero Range	❶±10%②±20% of weighing platform full capacity			
F 004	Motion Detection	1 SEC 1 DIV 2 SEC 8 DIV ; 16 Steps			
F 005	Automatic ZERO Tracking Compensation	1 SEC 0.5 DIV 2 SEC 4.0 DIV; 16 Steps			
F 006	ZERO & TARE keys Availability	ZERO & TARE keys ❶only work when display is STABLE ②always work			
F 007	TARE Key Availability	❶If the GROSS is Negative (-), TARE key does not work.①TARE key always work			
F 008	Buzzer Availability When Checking	❶OFF ①Work when OK ②Work when Hi or Lo			
F 009	Operation Mode	❶Normal Mode ②Weighing Check Mode			
F 010	Accumulation Availability	❶Not Work ①Auto Accumulate when weight stable ② Manual mode ③Accumulate only on OK values			
F 011	Weighing Check Command Mode	❶Stable ②Photocell detect ③ Stable + Photocell detect			
F 012	NET Band	Selectable (enter weight)			
F 013	Weighing checking Sampling	①4 Times/Sec ❷8 Times/Sec ③ 16 Times/Sec			
F 014	Per-set TARE input	❶Not input ①Input Pre-set TARE value by TARE key ②Input Pre-set TARE value when turning on the power or changing Fn code.			
F 015	Fn function order	Order in 7 digits ⓪ No order ① Hi ② Lo ③ Material Code ④Total Count ⑤ Standard Count ⑥ Preset Finish Count ⑦ Preset TARE (Initial: 1234567)			
F 016	Unit conversion rate	Input 6 digit unit conversion rate			
F 017	Unit digit displayed	⓪ None ① 1 Digit ② 2 Digit ③ 3 Digit ④ 4 Digit ⑤ 5 Digit ⑥ 6 Digit			
F 018	Optional Unit	⓪ Optional unit ① Kilogram ② Lb ③ Gram ④ Ton ⑤ Ounce			

※Symbol ❶: Factory Initial.

※Symbol: Checking mode related parameters.

<table>
<tr><td colspan="5">◎ SERIAL 〔 RS-232 〕 OP-02</td></tr>
<tr><td>F 200</td><td>Baud Rate</td><td colspan="3">①1200 BPS ❷2400 BPS ③4800 BPS ④9600 BPS</td></tr>
<tr><td>F 201</td><td>Parity</td><td colspan="3">⓪ None ❶Even Parity ②Odd Parity</td></tr>
<tr><td>F 202</td><td>Output Data</td><td colspan="3">❶Same as display ②Gross data ③NET data
④TARE data ⑤ Gross data, NET data, TARE data</td></tr>
<tr><td rowspan="13"></td><td>Fn Code number</td><td colspan="3">⓪Sending without code number
❶Sending with code number</td></tr>
<tr><td>Weight value</td><td colspan="3">❶Same as display ②Gross data ③NET data
④TARE data ⑤ Gross data, NET data, TARE data</td></tr>
<tr><td>Material Code</td><td colspan="3">❶Sending without code number
①Sending with code number</td></tr>
<tr><td rowspan="10">Weighing Check by Counts</td><td></td><td>Total Count</td><td>Standard Count</td><td>Checking Mode</td></tr>
<tr><td>❶</td><td>Sending without T. Count</td><td>Sending without S. Count</td><td>Sending without Check Mode</td></tr>
<tr><td>①</td><td>Sending without T. Count</td><td>Sending without S. Count</td><td>Sending with Check Mode</td></tr>
<tr><td>②</td><td>Sending without T. Count</td><td>Sending with S. Count</td><td>Sending without Check Mode</td></tr>
<tr><td>③</td><td>Sending without T. Count</td><td>Sending with S. Count</td><td>Sending with Check Mode</td></tr>
<tr><td>④</td><td>Sending with T. Count</td><td>Sending without S. Count</td><td>Sending without Check Mode</td></tr>
<tr><td>⑤</td><td>Sending with T. Count</td><td>Sending without S. Count</td><td>Sending with Check Mode</td></tr>
<tr><td>⑥</td><td>Sending with T. Count</td><td>Sending with S. Count</td><td>Sending without Check Mode</td></tr>
<tr><td>⑦</td><td>Sending with T. Count</td><td>Sending with S. Count</td><td>Sending with Check Mode</td></tr>
<tr><td>Accumulation</td><td colspan="3">❶ Sending without Accumulation ①Sending with Accumulation</td></tr>
<tr><td>F 203</td><td>Sending Weight Value</td><td colspan="3">❶Sending with the same as display ②Sending with F001 unit ③ Sending as F018 unit ④ Sending with F001 and F018 unit</td></tr>
<tr><td>F 204</td><td>Output Mode</td><td colspan="3">❶Stream ②Auto print Mode ③Manual Print Mode ④After accumulate then print ⑤ After weighing check then Print ⑥After weighing Check and within OK value then Print ⑦Command Mode</td></tr>
</table>

※Symbol ❶: Factory Initial.

◎ PRINTER OP-03					
F 300	Date, Time	Setting Year. month, day, hour, minute, second			
F 301	Output Data				
	Date/Time		Date	Time	
		⓪	Not Print	Not Print	
		①	Not Print	Print on Top	
		②	Not Print	Print on All	
		③	Print on Top	Not Print	
		❹	Print on Top	Print on Top	
		⑤	Print on Top	Print on All	
		⑥	Print on All	Not Print	
		⑦	Print on All	Print on Top	
		⑧	Print on All	Print on All	
	Fn Code/ Material Code		Fn code	Material code	
		⓪	Not Print	Not Print	
		①	Not Print	Print on Top	
		②	Not Print	Print on All	
		③	Print on Top	Not Print	
		❹	Print on Top	Print on Top	
		⑤	Print on Top	Print on All	
		⑥	Print on All	Not Print	
		⑦	Print on All	Print on Top	
		⑧	Print on All	Print on All	
	Weighing Check by Counts		Total Count	Standard Count	Checking Mode
		❼	Not Print	Not Print	Not Print
		①	Not Print	Not Print	Print
		②	Not Print	Print	Not Print
		③	Not Print	Print	Print
		④	Print	Not Print	Not Print
		⑤	Print	Not Print	Print
		⑥	Print	Print	Not Print
		⑦	Print	Print	Print
	Weight Value	❶Same as Display ②GROSS Data ③NET Data ④TARE Data ⑤ GROSS Data, NET Data, TARE Data ⑥ GROSS Data, TARE Data, NET Data			
	Unit	⓪ Not Print ❶Print on Top ②Print on all			

F 302	Output Accumulation Data			
			Date	Time
		⓪	Not Print	Not Print
		①	Not Print	Print
		②	Print	Not Print
		❸	Print	Print
			Total Count	Standard Count
		❶	Not Print	Not Print
		①	Not Print	Print
		②	Print	Not Print
		③	Print	Print
F 303	Printing Weight Value	❶Sending with the same as display ②Sending with F001 unit ③ Sending as F018 unit ④ Sending with F001 and F018 unit		
F 304	Output Mode	①Not Print ②Auto print Mode ❸Manual Print Mode ④After accumulate then print ⑤ After weighing check then Print⑥After weighing Check and within OK value then Print		
F 305	Printer Type Select	❶MINI Printer -②Normal Printer		

※Symbol ❶: Factory Initial.

◎ **Current Loop**		
F C00	Data	❶Same as Display ②GROSS Data ③NET Data ④TARE Data ⑤ GROSS Data, NET Data, TARE Data
F C01	Output Mode	❶Stream ②Auto print Mode ③Manual Print Mode ④After accumulate then print ⑤ After weighing check then Print ⑥After weighing Check and within OK value then Print
F C02	Fn Code	❶Sending without Fn Code ① Sending with Fn Code

※Symbol ❶: Factory Initial.

◎ Fn [Setting Special Functions]	
Set Hi	Setting Over limit Value
Set Lo	Setting Under Limit Value
Mater	Setting Material Code
T. Count	Setting Total Count Value
S. Count	Setting OK (Standard) Count Value
P. F. Count	Setting Preset Finish Count alert
P. tare	Preset TARE value

CHAPTER 4
SYSTEM FUNCTIONS

4-1 System Initialize

Re-install resets the JIF-2001A to the initial factory settings.
Use Re-install only if you want to return to their initial settings.

STEP 1: Turn the power **OFF**; slide the **SET** switch to **ON** position; Turn the power **ON**, the screen will show **SELECT**.

STEP 2: Please press the **ESC** key, the screen will show **INIT**.

STEP 3: Please press the ↵ key , the screen will show **no** .
Using the ↑ and ↓ key move to〔 **no** or **Yes** 〕,
then press the ↵ key.

STEP 4: End of operation, **END** displayed. Be sure to slide **SET** to the original side.

4-2 System Check

A system check should be run: after initial installation, after moving your JIF-2001A, after connecting or disconnecting an attachment from the Rear Panel and as means of locating any unexplained system error. An occasional self-check to make sure everything is working properly is a good maintenance practice as well.

STEP 1: Turn the power **OFF**; slide the **SET** switch to ON position; Turn the power **ON**, the screen will show **SELECT**.

STEP 2: Please press the **ZERO** key, the screen will show **CHEC**.

※Please press the ↵ key , the system will check Green Tube and LED in sequence.

※When the screen shows **Sran** , please press the ↵ key. The system will check SRAM. When the screen shows **EE** , please press the ↵ key. The system will check the EEPROM.

PASS will appear on the screen indicating that memory works properly. Please contact distributor if **FAIL** shows on the screen.

※When the screen shows **I-O** , please press the ↵ key . The screen shows **INPUT 0** . Please check the 25 Pin INPUT Connector.

When checking 25 Pin INPUT on the Rear Panel, short-circuit test on COM pin〔the 9th pin〕and connected pins〔first 8th〕. The screen will show the input pin number as **INPUT X** . After finish testing, press ↵ key for next step；If any pin does not show the accordance value of its own〔**Input 1 Input 8**〕, there might be some mistake. Please contact our distributor.

※Check Key〔By user〕

The screen will show **〔 〕.** When press a key, the key number will show in the middle of the screen. The lower side keys from left to right: **KEY 01 KEY 07.** The upper side keys from left to right: **KEY 08 KEY 09**, Press ↵ to finish checking. If the key number does not match, it suggests an error occurred. Please contact us.

STEP 3: Slide the **SET** switch to the original side. Finish checking, display **END**.

※The 8th pin of the connector will not work when using DC power supply.

4-3 CALIBRATION

STEP 1: Turn the power **OFF**; slide the **SET** switch to ON position; Turn the power **ON**, the screen will show **SELECT**.

STEP 2: Please press the **GROSS/NET** key and the system will start to Calibration.

STEP 3: A twinkle **CAL** will show. Please press the ↵ key. The screen will show **F-CAL** . If you do not need Full Calibration, please use the ↑ ↓ keys to choose ZERO Adjust or SPAN Adjust.

1. Select FULL CALIBRATION：

〔1〕***Setting Minimum Division***

When the screen shows **di 01** , this means the smallest division displayed. Use the ↑ ↓ keys to move through the available divisions.〔1、2、5、10、20、50〕. Press the ↵ key to set the smallest division.

〔2〕***Setting Decimal （F000 will change）***

A twinkle decimal point will show on the screen: **d0000.000** .Use the←→ keys to move through the decimal point position. Please press the ↵ key to set the decimal point position.

〔3〕***Setting Maximum Capacity***

When setting maximum capacity, the screen will show **CAP**. →C000.000. Please use the ↑ ↓ key to set the numeric value and use the ←→ keys to move through digits. Press the ↵ to finish the step.

〔 4 〕***ZERO Adjust***

The Screen will display **ZERO**. Please move the calibration mass and objects away on the weighing device then press ↵ key. A display of . . . . . means finishing the Adjustment.

〔 5 〕***SPAN Calibration***

The screen will show **SPAN**. Please place your calibration mass on the weighing device. Use the ↑ ↓ key to set the available numeric value, and the ←→ key to move through digits. After entering the weight value, please press the ↵ key to finish the calibration. The screen will show . . . . . .

※Example of selecting **FULL CALIBRATION (Div 2, 3 decimal, Max cap.20)**

Key	**Screen will display**
Turn the Power Switch OFF	
Slide Set switch to the set side	
Turn the power ON	Twinkle SELECT
Press GROSS/NET key	Twinkle CAL
Press ↵ key	di 01(Twinkle at 01)
Press ↑ key	di 02(Twinkle at 02)
Press ↵ key	010.000 (Twinkle at the Decimal **Point**) ※F000 will subject to change if ←→ keys been pressed
Press ↵ key	CAP →010.00**0** (Twinkle at the 3rd decimal 0)
Press ← key 4 times	0**1**0.000(Twinkle at 1)
Press ↑ key	0**2**0.000(Twinkle at 2)
Press ↵ key	ZERO
Press ↵ key	. . . . . → SPAN
Press ↵ key	000.000(Twinkle at the 3rd Decimal)
Place 1kg Calibration Mass, press ← key 3 times, press ↑ key	00**1**.000(Twinkle at 1)
Press ↵ key	. . . . . → End

2. Select Fine ZERO Adjust

When the screen shows Adj ZERO. Please move the calibration mass and objects away on the Weighing device then press ↵ key. If the screen shows . . . . . , then Fine ZERO Adjust is finished.

※ZERO Adjust only used to perform minor zero drifting.
Please select Full Calibration if there is greater difference.

3. Select Fine SPAN Adjust：

〔 1 〕When the screen shows Adj SPAN. Place your calibration mass on the weighing device and press ↵ key.

〔 2 〕Use the ↑ ↓ key to available value and press ↵ key.

※Fine SPAN Adjust only used to perform minor zero drifting.
Please select Full Calibration if there is greater difference.

STEP 4 : The screen will show **END**.

Slide the **SET** switch to the original side.

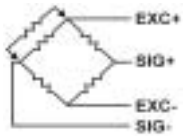
◎**Calibration Errors**

C. Err 1：The resolution exceeds 1：15,000.(1 : 60,000 for JIF-2001 A)

⇨Change the minimum division and maximum capacity within 1／15,000.Resolution ratio= Minimum division／maximum capacity

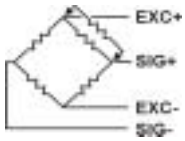
C. Err 2：The load cell output is too large at ZERO calibration.

⇨Add an additional resistor(50kΩ 500KΩ) between EXC+ and SIG—.



C. Err 3：The load cell output is too small at ZERO calibration.

⇨ Add an additional resistor(50kΩ 500KΩ) between EXC+ and SIG+.



C. Err 4：The calibration mass has been mistakenly entered as a value greater than the maximum capacity.

⇨Please reduce the weight of calibration mass, and re-enter the weight value.

C. Err 5: The calibration mass has been wrongly entered zero or it is smaller than the minimum capacity.

⇨Please increase the weight of calibration mass, and re-enter the weight value.

C. Err 6: The load cell output is too low.

⇨Replace your load cell with a more sensitive one or adjust the minimum division.

C. Err 7: The load cell signal pins are reversed, or the load cell output voltage is too low.

⇨Check the load cell connections if reversed or load cell failure.

C. Err 8: The load cell output voltage at maximum capacity is too high.

⇨ Check the load cell specification or load cell failure.

C. Err 9: The maximum, capacity has been wrongly entered as a value smaller than 300.

⇨Check Resolution Table.

C. Err 10: The maximum, capacity has been wrongly entered as a value greater than 750,000.

⇨ Check the load cell specification or load cell failure.

◎Display Resolution Table

Maximum Capacity	Resolution					
	1 Min. Div.	2 Min. Div.	5 Min. Div.	10Min.Div.	20Min.Div.	50Min.Div.
300	1／300	----------	----------	----------	----------	----------
400	1／400	----------	----------	----------	----------	----------
500	1／500	----------	----------	----------	----------	----------
600	1／600	1／300	----------	----------	----------	----------
800	1／800	1／400	----------	----------	----------	----------
1,000	1／1000	1／500	----------	----------	----------	----------
1,200	1／1200	1／600	----------	----------	----------	----------
1,500	1／1500	1／800	1／300	----------	----------	----------
2,000	1／2000	1／1000	1／400	----------	----------	----------
2,500	1／2500	1／1200	1／500	----------	----------	----------
3,000	1／3000	1／1500	1／600	1／300	----------	----------
4,000	1／4000	1／2000	1／800	1／400	----------	----------
5,000	1／5000	1／2500	1／1000	1／500	----------	----------
6,000	1／6000	1／3000	1／1200	1／600	1／300	----------
8,000	1／8000	1／4000	1／1500	1／800	1／400	----------
10,000	1／10000	1／5000	1／2000	1／1000	1／500	----------
12,000	1／12000	1／6000	1／2500	1／1200	1／600	----------
15,000	1／15000	1／8000	1／3000	1／1500	1／800	1／300
20,000	----------	1／10000	1／4000	1／2000	1／1000	1／400
25,000	----------	1／12500	1／5000	1／2500	1／1200	1／500
30,000	----------	1／15000	1／6000	1／3000	1／1500	1／600
40,000	----------	----------	1／8000	1／4000	1／2000	1／800
50,000	----------	----------	1／10000	1／5000	1／2500	1／1000
60,000	----------	----------	1／12000	1／6000	1／3000	1／1200
80,000	----------	----------	----------	1／8000	1／4000	1／1500
100,000	----------	----------	----------	1／10000	1／5000	1／2000
120,000	----------	----------	----------	1／12000	1／6000	1／2500
150,000	----------	----------	----------	1／15000	1／8000	1／3000
200,000	----------	----------	----------	----------	1／10000	1／4000
250,000	----------	----------	----------	----------	1／12500	1／5000
300,000	----------	----------	----------	----------	1／15000	1／6000
400,000	----------	----------	----------	----------	----------	1／8000
500,000	----------	----------	----------	----------	----------	1／10000
600,000	----------	----------	----------	----------	----------	1／12000
700,000	----------	----------	----------	----------	----------	1／14000
750,000	----------	----------	----------	----------	----------	1／15000

☆2001A/DC type maximum resolution 1/12000

☆JIF-2001 A Display Resolution can reach 1/60,000.

(Depends on load cell quality and performance).

4-4 Function

STEP 1: Turn the Power Switch OFF on the Rear Panel, Slide the **SET** switch to the set side. Please turn on the power, the screen will show **SELECT** .

STEP 2 : Please press the **TARE** key, the screen will show **Func**. The system will start function setting.

STEP 3: Use the ↑ ↓ keys to move through the function category (F000, F100, F200 or F300 OR FC00). Then press the ↵ Key. Use the ↑ ↓ keys to choose specific function category (F000 ~ F018, F200 ~ F204, F300 ~ F305, or FC00 ~ FC02). Press the ↵ key to choose specific function. In each function, please use ↑ ↓ and ←→ keys to set function value(see each function chart below). If you want to return to previous function category, please press **ESC** key, or press ↵ key to enter.

※ If any errors occurred (**F err**), please check if each setting value within effective range.

※ note：● or ⓿ Indicates initial factory setting.

STEP 4: When you have finished changing the Function setting, slide **SET** Switch to the original side. The screen will show **END**.

◎ Setting Function

F000	Decimal Point Adjustment		
	0	No Decimal	1234567
	1	1 Decimal	123456.7
	2	2 Decimal	12345.67
●	3	3 Decimal	1234.567
	4	4 Decimal	123.4567

F001	Displayed Unit	
	0	Optional unit
●	1	Kilogram
	2	Pound
	3	Gram
	4	Ton
	5	Ounce

F 002	Display Update/ Digital Filter		Display Update	Digital Filter
		41	4 times/Sec.	1 stage filter
		42	4 times/Sec.	2 stage filter
		43	4 times/Sec.	3 stage filter
		44	4 times/Sec.	4 stage filter
		81	8 times/Sec.	1 stage filter
	●	82	8 times/Sec.	2 stage filter
		83	8 times/Sec.	3 stage filter
		84	8 times/Sec.	4 stage filter

F003	Set ZERO Range	
●	1	±10% of weighing platform Full Capacity
	2	±20% of weighing platform Full Capacity

F004	Motion Detection	
	0	Stable
	11	1 SEC 1 DIV
	12	1 SEC 2 DIV
	13	1 SEC 3 DIV
	14	1 SEC 4 DIV
	15	1 SEC 5 DIV
	16	1 SEC 6 DIV
	17	1 SEC 7 DIV
	18	1 SEC 8 DIV
	21	2 SEC 1 DIV
●	22	2 SEC 2 DIV
	23	2 SEC 3 DIV
	24	2 SEC 4 DIV
	25	2 SEC 5 DIV
	26	2 SEC 6 DIV
	27	2 SEC 7 DIV
	28	2 SEC 8 DIV

F005	Automatic ZERO Tracking Compensation	
	0	Invalid
	11	1 SEC 0.5 DIV
	12	1 SEC 1.0 DIV
	13	1 SEC 1.5 DIV
	14	1 SEC 2.0 DIV
	15	1 SEC 2.5 DIV
	16	1 SEC 3.0 DIV
	17	1 SEC 3.5 DIV
	18	1 SEC 4.0 DIV
	21	2 SEC 0.5 DIV
	22	2 SEC 1.0 DIV
	23	2 SEC 1.5 DIV
●	24	2 SEC 2.0 DIV
	25	2 SEC 2.5 DIV
	26	2 SEC 3.0 DIV
	27	2 SEC 3.5 DIV
	28	2 SEC 4.0 DIV

F006	ZERO & TARE keys Availability	
●	1	ZERO & TARE keys only work when display is STABLE
	2	ZERO & TARE keys always work

F007	TARE key Availability	
●	1	If the GROSS is negative, TARE key does not work
	2	TARE key always work

F008	Buzzer Availability when Checking (Related to Check Mode)	
●	0	OFF
	1	Work when OK
	2	Work when Hi or Lo

F009	Operation Mode (Related to Check Mode)	
●	1	Normal Mode- Buzzer OFF
	2	Weighing Check

F010	Accumulation Availability (Related to Check Mode)	
●	0	Not Work
	1	Auto Accumulate when weight stable
	2	Manual Mode
	3	Accumulate only on OK values

※See 4-9 for details.

F011	Weighing Check Command Mode (Related to Check Mode)	
●	1	Stable
	2	Photo cell detect
	3	Stable + Photo cell detect

※See 4-6 for details.

F012	NET Band (Related to Check Mode)
	Selectable (Enter Weight) ●Factory Initial 000.000

F013	Weighing Checking Sampling (Related to Check Mode)	
	4	4 Times/Sec
●	8	8 Times/Sec
	16	16 Times/Sec

※See 4-6 for details.

F014	Pre-set TARE Input	
●	0	Not Input
	1	Input Pre-set TARE value by TARE key
	2	Input Pre-set TARE value when turning on the power or changing Fn code

⓿Not input

①Input Pre-set TARE value by TARE key

②Input Pre-set TARE value when turning on the power or changing Fn code.

F015	Fn function Order (Related to Check Mode)
Order in 7 digits ⓪No order ①Hi ②Lo ③Material Code ④Total Count ⑤Standard Count ⑥ Preset Finish Count ⑦Preset TARE (Initial: 1234567) ☛If the order sets at: 1234567, the screen will show in order as follows: Hi →Lo→----→P. TARE. (Please refer to 4-5)	

F016	Optional Unit conversion rate
Input 6 Digit unit conversion rate	

F017	Unit Digit displayed	
	0	None
	1	1 Digit
	2	2 Digit
	3	3 Digit
	4	4 Digit
●	5	5 Digit
	6	6 Digit

F018	Optional Unit	
	0	Optional unit
	1	Kilogram
●	2	Lb
	3	Gram
	4	Ton
	5	Ounce

◎SERIAL 〔 RS-232 〕

F200	Baud Rate	
	1	1200 bps
●	2	2400 bps
	3	4800 bps
	4	9600 bps

F201	Parity	
	0	None
●	1	Even
	2	Odd

<table>
<tr><td rowspan="5">F 202</td><td>Output Data</td><td colspan="4">❶Same as display ②Gross data ③NET data
④TARE data ⑤ Gross data, NET data, TARE data</td></tr>
<tr><td>Fn Code number</td><td colspan="4">⓪Sending without code number
❶Sending with code number</td></tr>
<tr><td>Weight value</td><td colspan="4">❶Same as display ②Gross data ③NET data
④TARE data ⑤ Gross data, NET data, TARE data</td></tr>
<tr><td>Material Code</td><td colspan="4">❶Sending without code number
①Sending with code number</td></tr>
<tr><td rowspan="4">Weighing Check by Counts</td><td></td><td>Total Count</td><td>Standard Count</td><td>Checking Mode</td></tr>
<tr><td>❶</td><td>Sending without T. Count</td><td>Sending without S. Count</td><td>Sending without Check Mode</td></tr>
<tr><td>①</td><td>Sending without T. Count</td><td>Sending without S. Count</td><td>Sending with Check Mode</td></tr>
<tr><td>②</td><td>Sending without T. Count</td><td>Sending with S. Count</td><td>Sending without Check Mode</td></tr>
</table>

		③	Sending without T. Count	Sending with S. Count	Sending with Check Mode
		④	Sending with T. Count	Sending without S. Count	Sending without Check Mode
		⑤	Sending with T. Count	Sending without S. Count	Sending with Check Mode
		⑥	Sending with T. Count	Sending with S. Count	Sending without Check Mode
		⑦	Sending with T. Count	Sending with S. Count	Sending with Check Mode
	Accumulation	❶ Sending without Accumulation ①Sending with Accumulation			

※❶ : means factory initial

F203	Sending Weight Value	
●	1	Sending with the same as display
	2	Sending with F001 unit
	3	Sending as F018 unit
	4	Sending with F001 and F018 unit

F204	Output Mode	
●	1	Stream
	2	Auto Print Mode
	3	Manual Print Mode
	4	After accumulate then print
	5	After weighing check then print
	6	After weighing check and within OK value then print
	7	Command Mode

◎PRINTER

F300	Date, Time
Year／ Month ／day hour：minute：second XX／ XX ／ XX XX： XX ： XX	

F301	Output Data				
	Date/Time		Date	Time	
		⓪	Not Print	Not Print	
		①	Not Print	Print on Top	
		②	Not Print	Print on All	
		③	Print on Top	Not Print	
		❹	Print on Top	Print on Top	
		⑤	Print on Top	Print on All	
		⑥	Print on All	Not Print	
		⑦	Print on All	Print on Top	
		⑧	Print on All	Print on All	
	Fn Code/ Material Code		Fn code	Material code	
		⓪	Not Print	Not Print	
		①	Not Print	Print on Top	
		②	Not Print	Print on All	
		③	Print on Top	Not Print	
		❹	Print on Top	Print on Top	
		⑤	Print on Top	Print on All	
		⑥	Print on All	Not Print	
		⑦	Print on All	Print on Top	
		⑧	Print on All	Print on All	
	Weighing Check by Counts		Total Count	Standard Count	Checking Mode
		❶	Not Print	Not Print	Not Print
		①	Not Print	Not Print	Print
		②	Not Print	Print	Not Print
		③	Not Print	Print	Print
		④	Print	Not Print	Not Print
		⑤	Print	Not Print	Print
		⑥	Print	Print	Not Print
		⑦	Print	Print	Print
	Weight Value	❶Same as Display ②GROSS Data ③NET Data ④TARE Data ⑤ GROSS Data, NET Data, TARE Data ⑥ GROSS Data, TARE Data, NET Data			
	Unit	⓪ Not Print ❶Print on Top ②Print on all			

※ ❶ : means factory initial

F 302	Output Accumulation Data			
			Date	Time
		⓪	Not Print	Not Print
		①	Not Print	Print
		②	Print	Not Print
		❸	Print	Print
			Total Count	Standard Count
		❶	Not Print	Not Print
		①	Not Print	Print
		②	Print	Not Print
		③	Print	Print

※❶ : means factory initial

F303	Sending Weight Value	
	1	Sending with the same as display
	2	Sending with F001 unit
●	3	Sending as F018 unit
	4	Sending with F001 and F018 unit

F304	Output Mode	
	0	No output
	1	Stream
	2	Manual Print Mode
●	3	After accumulate then print
	4	After weighing check then print
	5	After weighing check and within OK value then print

F 305	Printer Type Select	
●	1	MINI Printer
	2	Normal Printer

◎ **Current Loop**

FC00	Current Loop Data	
●	1	Same as display
	2	GROSS Data
	3	NET Data
	4	TARE Data
	5	GROSS, NET and TARE Data

FC01	Output Mode	
●	1	Stream
	2	Auto Print Mode
	3	Manual Print Mode
	4	After accumulate then print
	5	After weighing check then print
	6	After weighing check and within OK value then print

FC02	Output Mode	
●	0	Sending without Fn Code
	1	Sending with Fn Code

4-5 Setting Special Functions (Fn)

STEP 1: When the power is turned **ON (Set Switch is OFF)**, please press **FN** key, the screen will show [Code 00]
(The parameter order will show according to F015).

STEP 2: Please use the ↑ ↓ key to set the numeric value, Use the ← → keys to move through digits. Press the ↵ to choose Fn Code or press **ESC** key to the previous page.

STEP 3: The screen will show [Hi]. Please press the ↵ key.
Please use the ↑ ↓ key to set the numeric value, Use the ← → keys to move through digits. Press the ↵ to set Fn Code or press **ESC** key to the previous page.

STEP 4: Press **ESC** to normal mode.

※ Example of setting Special Function: **Set Hi** at 1unit; 3 decimal (Factory initial)

Key	Screen will display
Turn the Power Switch ON	0.000
Press Fn key	Code 00
Press ↵ key	Hi
Press ↵ key	000.000(Twinkle at the 3rd Decimal)
Press ← key three times	000.000(Twinkle at 0)
Press ↑ key	001.000
Press ↵ key	Lo
Press **ESC** key	Code 00
Press **ESC** key	0.000

Set Hi	Setting Over Limit Value
Please Enter 6 digit Over Limit Value NET weight > Over Limit Value ●Factory Initial 000.000	

Set Lo	Setting Under Limit Value
Please Enter 6 digit Under Limit Value NET weight < Under Limit Value ●Factory Initial 000.000	

Mater	Setting Material Ordinal Number
Please Enter 6 digit material Ordinal Number ●Factory Initial 000000	

T. Count	Setting Total Count Value
Please Enter 4 digit Beginning Total Count Value ●Factory Initial 0000	

S. Count	Setting OK (Standard) Count Value
Please Enter 4 digit S. Count Value ●Factory Initial 0000	

P. F. Finish	Setting Preset Finish count alert
Please Enter 4 digit Preset Finish count alert value ●Factory Initial 0000	

※If you wish to set weight time at 1,000 times, please set **P. F. Finish** alert at **1000**. **P. F. Finish** will accumulate once when the object been read stable (As the MD ▼Annunicator Vanished). As long as the accumulated value reached 1000 counts, the screen will show blinking digits. Please press ACC/CLEAR key to clear **P. F. Finish, ACC. And Count.**

(Please note: When F009 sets at 1: P.F. Finish counts as T. Count.
— No checking When F009 sets at 2: P. F. Finish counts as S. Count.
— Only O.K. in Checking mode)

P. tare	Preset TARE value
Please Enter 6 digit preset TARE value ●Factory Initial 000.000 (Function options depend on F014)	

※ Please press Fn key to set **P. Tare**
When F014=0, JIF-2001 A sets at normal mode.
When F014=1, JIF-2001A will input preset TARE value by pressing TARE key manually.
When F014=2, JIF-2001 A will automatically input Pre-set TARE value when turning on the power or changing Fn code.

※If any error occurred, please check if each Fn value within effective range.

4-6 Operation Mode

When F009 sets at 1, the buzzer will not work.
When F009 sets at 2, the JIF-2001 A will set at weighing check status.
Please set Fn Codes. (See 4-5). JIF-2001A will judge if the weight is Hi, OK (Standard), or Lo.
Related checking mode parameters also include F008, F009, F010, F011, F012, F013, and F015. (See 4-4)
If your JIF-2001 A (H) is connected to a computer (PC) or a printer, please also set related checking mode parameters in F2XX, F3XX, and FCXX. (See 4-4).

F009	Operation Mode	
●	1	Normal Mode- Buzzer OFF
	2	Weighing Check

※About F011:How to Weighing check Command Mode to check weigh.

When F011=1 (Stable)

a. Please check if **JIF-2001 A** is displaying ZERO.
b. Please place the object on the weighing structure.
c. **JIF-2001 A** will judge the weight value within Hi, OK, or Lo limits.
   Buzzer will work according to F008 settings.
   Hi, OK, or **Lo** LED will light on according to related checking mode parameters:
d. Sending the check weigh data and finish checking one-time.

When F011=2 (Photocell Detect) - Connect photocell input by pin 7 at Control I/O (See 4-12)

a. Please check if **JIF-2001 A** is displaying ZERO.
b. Please place the object on the weighing conveyer.
c. **JIF-2001 A** will judge the weight value within Hi, OK, or Lo limits according to **F013's sampling speed**.
   Buzzer will work according to F008 settings.
   Hi, OK, or **Lo** LED will light on according to related checking mode parameters:
d. Sending the check weigh data and finish checking one-time.

When F011=3 (Stable + Photocell Detection) - Connect photocell input by pin 7 at Control I/O (See 4-12)

a. Please check if **JIF-2001 A** is displaying ZERO.
b. Please place the object on the weighing structure.
c. **JIF-2001A** will judge the weight value within Hi, OK, or Lo limits by
   i. Weight stable (As the MD ▼Annunciator Vanished).
   ii. **F013 weighing check sampling speed**.

   Also, Buzzer will work according to F008 settings.
   Hi, OK, or **Lo** LED will light on according to related checking mode parameters:
d. Sending the check weigh data and finish checking one-time.

4-7 Operation Mode Status

⇨Please Check the difference between Checking and Normal Modes

Function	Normal Mode	Checking Mode
F000	●	●
F001	●	●
F002	●	●
F003	●	●
F004	●	●
F005	●	●
F006	●	●
F007	●	●
F008		●
F009	Set at 1	Set at 2
F010	Select 0, 1, 2	Select 0, 3
F011		●
F012	●	●
F013		●
F014	●	●
F015	●	●
F016	●	●
F017	●	●
F018	●	●

Serial	Normal Mode	Checking Mode
F200	●	●
F201	●	●
F202	0 1 0 0 0 ⦚ ⦚ ⦚ , ⦚ 1 5 1 5 1	0 1 0 0 0 ⦚ ⦚ ⦚ ⦚ ⦚ 1 5 1 8 1
F203	●	●
F204	Select 1 ~ 4, 7	Select 1 ~ 7

Printer	Normal Mode	Checking Mode
F300	●	●
F301	0 0 0 1 0 ⌇ ⌇ ⌇ ⌇ ⌇ 8 8 5 6 2	0 0 0 1 0 ⌇ ⌇ ⌇ ⌇ ⌇ 8 8 8 6 2
F302	0 0 ⌇ ⌇ 3 2	0 0 ⌇ ⌇ 3 3
F303	●	●
F304	1 ⌇ 3	1 ⌇ 5
F305	●	●

Fn	Normal Mode	Checking Mode
Set Hi		●
Set Lo		●
Mater	●	●
T. Count	●	●
S. Count		●
P. F. Count	●	●
P. tare	●	●

● indicated need to be set at.

4-8 Optional Unit Conversion

How to **display** optional conversion rate: (Factory initial: 1 Kg = 2.20462 Lb)

STEP 1: Please press the **UNIT** key, the screen will show the optional converted unit value.

STEP 2: Please press the **UNIT** key, the screen will show the original unit value according to F001.

How to **set** optional conversion rate: (Factory initial: 1 Kg = 2.20462 Lb)

STEP 1: Turn the Power Switch OFF on the Rear Panel, Slide the **SET** switch to the set side. Please turn on the power, the screen will show **SELECT** .

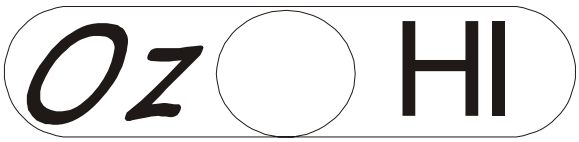
STEP 2: Please press the **TARE** key, the screen will show **Func**. The system will start function setting.

STEP 3: **Please enter F016:** Using the ↑ ↓ keys to move through the function category (F000, F100, F200 or F300 OR FC00), and press the ↵ Key. Use the ↑ ↓ keys to choose specific function category (F000 ~ F018, F200 ~ F204, F300 ~ F305, or FC00 ~ FC02). Press the ↵ key to choose F016.

STEP 4: The screen will show dp → d2.20462. Please use ↑ ↓ and ←→ keys to set optional conversion rate. If you want to return to previous function category, please press **ESC** key, or press ↵ key to enter.

STEP 5: By entering F017, please set unit digits to be displayed. If you set at 0, the screen will not show converted unit value.

STEP 6: By entering F018, please set your optional unit. If your option unit is Ounce, please mark Ounce on the blank space next to Hi LED light.



4-9 Accumulation (of weight value)

How to **display** Accumulation Value: Please press **MODE** key twice, the screen will show AC → 0000.

How to **print** Accumulation Value: Please press **MODE** key twice, the screen will show AC → 0000. Please press the **PRINT/ACC** key (Or input by Pin 5 of Control I/O), the printer will print the accumulated value.

※Please check F302 and F303 for related printing format.

Accumulation **status** in different modes:

When F009=1, and F010=0, Accumulation will not work.
When F009=1, and F010=1, JIF-2001 A will accumulate weight only on stable values.
When F009=1, and F010=2, JIF-2001 A will accumulate weight by pressing PRINT key (Or input by Pin 4 of Control I/O).

When F009=2, and F010=0, Accumulation will not work.
When F009=2, and F010=3, JIF-2001 A will accumulate only on OK values.

4-10 T. Count & S. Count (Number of Weight)

◎How to **display** Total Count Value: Please press **MODE** key three times, the screen will show TC 0000 .

◎How to **display** Standard Count Value (Standard Count will work only when F009=2): Please press **MODE** key four times, the screen will show SC 0000 .

Total Count & Standard Count **status** in different modes:

When F009=1, and F010=0, Total Count will not work.

When F009=1, and F010=1, JIF-2001 A will accumulate **total count** one time only on stable values.

When F009=1, and F010=2, JIF-2001 A will accumulate **total count** one time by pressing PRINT key or input by pin 4 of the control I/O.

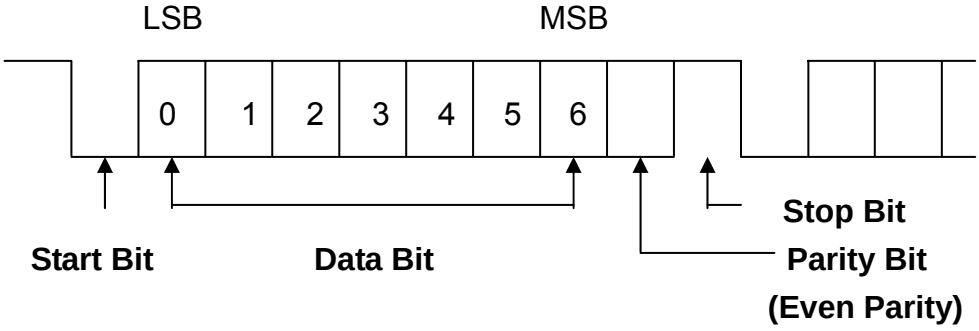
When F009=2,and F010=3,JIF-2001A will accumulate **total count** and **standard count** one time only on OK values.

◎How to **clear** Total Count Value: Please press **ACC/CLEAR** key, the screen will show **Clr Acc** . Please press ↵ Key to clear total count and accumulation value.

4-11 20mA Current Loop

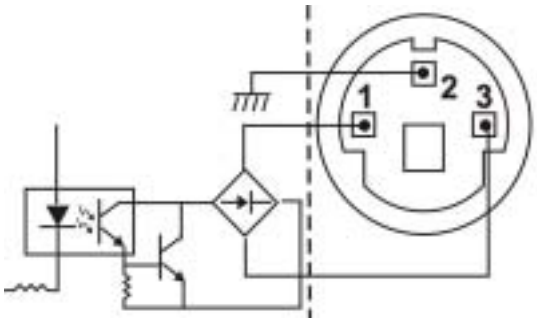
20 mA Current Loop Specifications

〔 1 〕 Baud Rate ：1200 bps
〔 2 〕 Data bit ：7 bit
〔 3 〕 Parity ：Even Parity
〔 4 〕 Stop bit ：1 bit
〔 5 〕 Output Code ：ASCII



	CURRENT LOOP
1	20 mA
0	0 mA

Pin Assignment



Pin 1：Serial Output
Pin 2：Frame Ground
Pin 3：Serial Output
**Output has no polarity = bi-directional.

C	D	,	0	0	S	T	,	N	T	,	+		5	4	3	2	.	1	k	g	Cr	Lf

↑ Code ↑Header 1 ↑Header 2 ↑Data (8 digits in length) ↑unit

HEADER 1		
O	L	→ Overload
S	T	→ STABLE
U	S	→ UNSTABLE

※HEADER 2		
N	T	→ NET
G	S	→ GROSS
T	R	→ TARE

※UNIT		
		→ Optional unit
k	G	→ Kilogram
l	B	→ Pound
	G	→ Gram
	T	→ Ton
o	Z	→ oz

Weight Data ASCII includes:

“ 0 ” …. “ 9 ”

“ ” Space (20H)

“ . ” Decimal Point (2EH)

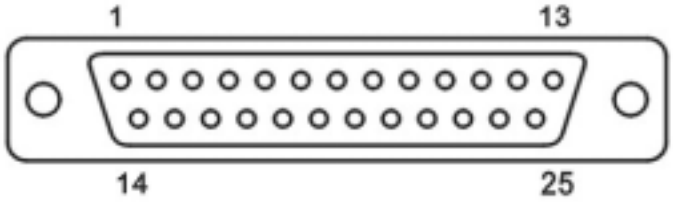
“ — ” Minus (2DH)

“ + ” Plus (2BH)

4-12 Input Interface

Pin Assignment：

CONTROL I/O



Pin	Pin Name	Description
1	ZERO	JIF-2001A returns to the center of ZERO when the weighing device is empty
2	TARE	JIF-2001A switches to NET mode, ZERO's the display and stores the TARE weight in Memory.
3	GROSS/NET	Changes from "GROSS" to "NET" and vise versa
4	TARE CLEAR	Clear TARE and switch to "GROSS" Mode
5	ACC	Manual Accumulation Value
6	PRINT	Print
7	Photocell INPUT	Weighing Checking Mode Auto-Detection
8	Unused	
9	COM	Input Common

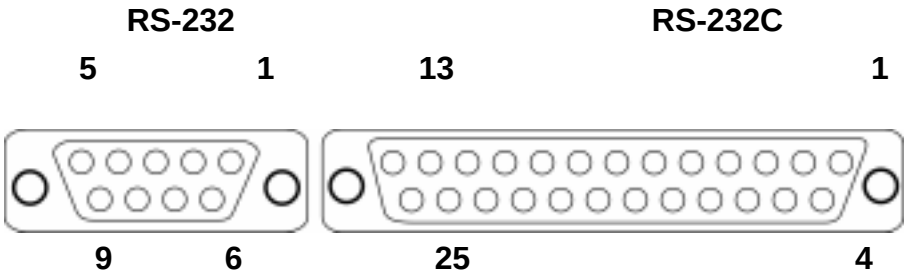
CHAPTER 5
OPTIONS

5-1 Serial Interface OP-02

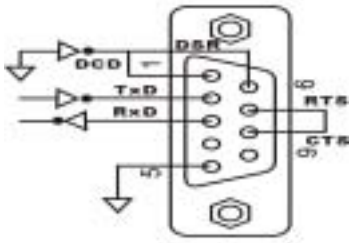
<table>
<tr><td colspan="6">◎ SERIAL 〔 RS-232 〕 OP-02</td></tr>
<tr><td>F 200</td><td>Baud Rate</td><td colspan="4">①1200 BPS ❷2400 BPS
③4800 BPS ④9600 BPS</td></tr>
<tr><td>F 201</td><td>Parity</td><td colspan="4">⓪ None ❶Even Parity ②Odd Parity</td></tr>
<tr><td>F 202</td><td>Output Data</td><td colspan="4">❶Same as display ②Gross data ③NET data
④TARE data ⑤ Gross data, NET data, TARE data</td></tr>
<tr><td rowspan="12"></td><td>Fn Code number</td><td colspan="4">⓪Sending without code number
❶Sending with code number</td></tr>
<tr><td>Weight value</td><td colspan="4">❶Same as display ②Gross data ③NET data ④TARE data ⑤ Gross data, NET data, TARE data</td></tr>
<tr><td>Material Code</td><td colspan="4">❼Sending without code number
①Sending with code number</td></tr>
<tr><td rowspan="10">Weighing Check by Counts</td><td></td><td>Total Count</td><td>Standard Count</td><td>Checking Mode</td></tr>
<tr><td>❼</td><td>Sending without T. Count</td><td>Sending without S. Count</td><td>Sending without Check Mode</td></tr>
<tr><td>①</td><td>Sending without T. Count</td><td>Sending without S. Count</td><td>Sending with Check Mode</td></tr>
<tr><td>②</td><td>Sending without T. Count</td><td>Sending with S. Count</td><td>Sending without Check Mode</td></tr>
<tr><td>③</td><td>Sending without T. Count</td><td>Sending with S. Count</td><td>Sending with Check Mode</td></tr>
<tr><td>④</td><td>Sending with T. Count</td><td>Sending without S. Count</td><td>Sending without Check Mode</td></tr>
<tr><td>⑤</td><td>Sending with T. Count</td><td>Sending without S. Count</td><td>Sending with Check Mode</td></tr>
<tr><td>⑥</td><td>Sending with T. Count</td><td>Sending with S. Count</td><td>Sending without Check Mode</td></tr>
<tr><td>⑦</td><td>Sending with T. Count</td><td>Sending with S. Count</td><td>Sending with Check Mode</td></tr>
<tr><td>Accumulation</td><td colspan="4">❼ Sending without Accumulation ①Sending with Accumulation</td></tr>
<tr><td>F 203</td><td>Sending Weight Value</td><td colspan="4">❶Sending with the same as display ②Sending with F001 unit ③ Sending as F018 unit ④ Sending with F001 and F018 unit</td></tr>
<tr><td>F 204</td><td>Output Mode</td><td colspan="4">❶Stream ②Auto print Mode ③Manual Print Mode ④After accumulate then print ⑤ After weighing check then Print⑥After weighing Check and within OK value then Print⑦Command Mode</td></tr>
</table>

※Symbol ❼: Factory Initial.

◎OP-02



OP-02A1



◆ **Specifications:**

〔1〕Type ：EIA-RS-232C 12V

〔2〕Transmission ：Half Duplex, Asynchronous Transmission

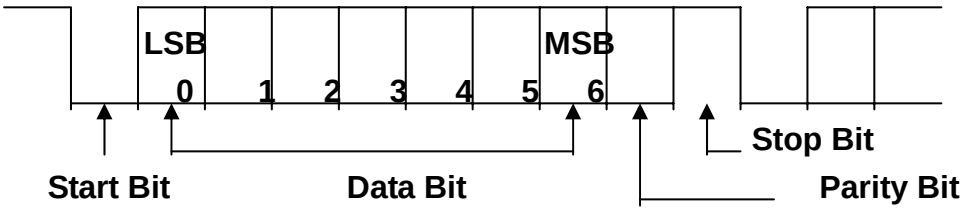
〔3〕Baud Rate ：1200BPS、2400BPS、4800BPS、9600BPS

〔4〕Bit ：7 bit

〔5〕Parity ：Odd Parity、Even Parity

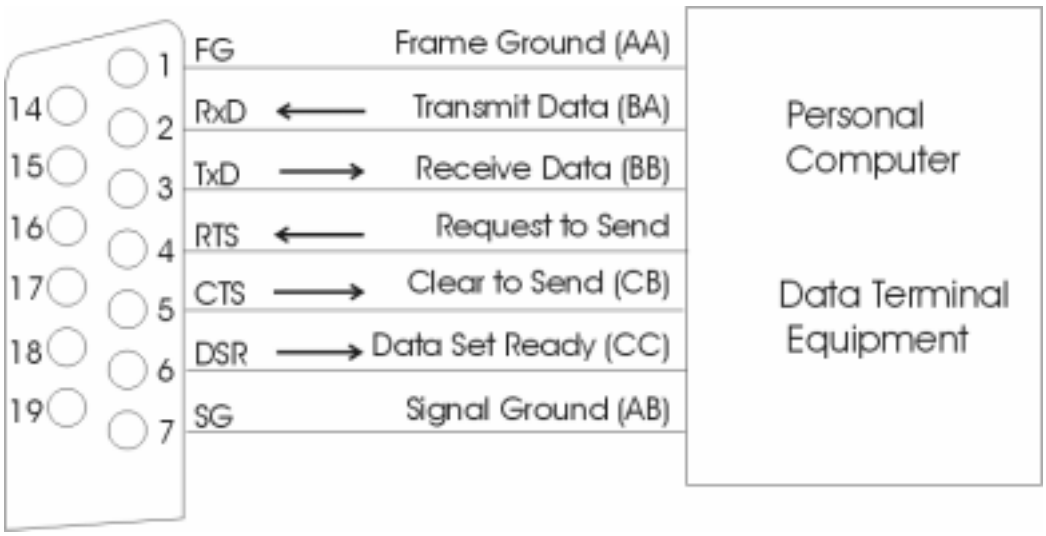
〔6〕Stop Bit ：1 bit

〔7〕Output Code ：ASCII

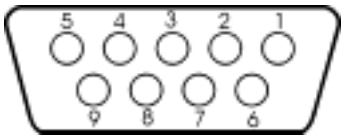


◆ **Descriptions:**

① 25 Pin D- Shape



② 9 Pin D- Shape



Pin 2 TxD (Transmit Data)
Pin 5 SG (Signal Ground)

◆ **Serial Interface〔OP-02〕Data Format.**

※Normal Mode

C	D	,	0	0	S	T	,	N	T	,	+		5	4	3	2	.	1	k	g	Cr	Lf

↑ Code ↑Header 1 ↑Header 2 ↑Data (8 digits in length) ↑unit

※Checking Mode

C	D	,	0	0	S	T	,	N	T	,	+		5	4	3	2	.	1	k	G	Cr	Lf

T	C	,				5	,	A	C	,				3	,	O	K	Cr	Lf

↑Total Count ↑S. Count ↑Checking Status

※Material Code

M	T	,	0	0	0	0	0	0	Cr	Lf

※Accumulation Value

T	T	,	+							0	.	0	0	0	k	g	Cr	Lf

※HEADER 1		
O	L	→ Overload
S	T	→ STABLE
U	S	→ UNSTABLE

※HEADER 2		
N	T	→ NET
G	S	→ GROSS
T	R	→ TARE

※Checking Status		
—	—	→ Unused
L	O	→ Under limit
O	K	→ Within Standard limit
H	I	→ Over limit

※UNIT		
		→ Optional Unit
k	g	→ Kilogram
l	b	→ Pound
	g	→ Gram
	t	→ Ton
o	z	→ oz

Weight Data ASCII includes:

“ 0 ” …. “ 9 ”

“ ” Space (20H)

“ . ” Decimal Point (2EH)

“ — ” Minus (2DH)

“ + ” Plus (2BH)

※Command List Table

Sending Command to JIF-2001A	JIF-2001A response
R Cr Lf 〈READ〉	Sending latest data once (Data format depends on F202 and F203)
Z Cr Lf 〈ZERO〉	JIF-2001A display will ZERO. Z Cr Lf will be sent by JIF-2001A
T Cr Lf 〈TARE〉	JIF-2001A will go to NET Mode and display will TARE. T Cr Lf will be sent by JIF-2001A
TC Cr Lf 〈TARE〉	JIF-2001A will clear TARE and display ZERO. T Cr Lf will be sent by JIF-2001A
N Cr Lf 〈NET〉	JIF-2001A will go to NET Mode. N Cr Lf will be sent by JIF-2001A
G Cr Lf 〈GROSS〉	JIF-2001A will go to GROSS Mode. G Cr Lf will be sent by JIF-2001A

※Invalid Command or Invalid data received → Cr Lf

※Command incomplete → I Cr Lf

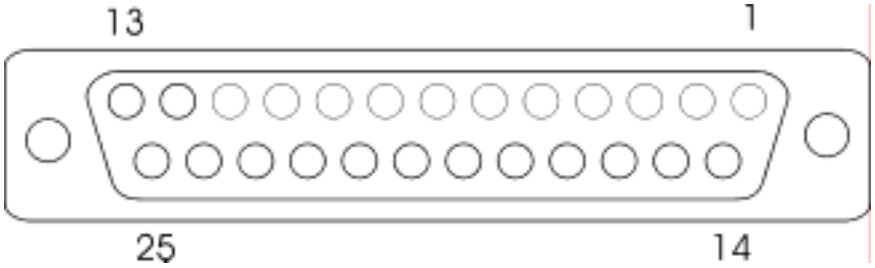
5-2 Printer Interface
〔Including Date and Time〕OP-03

◎PRINTER		OP-03		
F 300	Date, Time	Setting Year. month, day, hour, minute, second		
F 301	Output Data			
	Date/Time		Date	Time
		⓪	Not Print	Not Print
		①	Not Print	Print on Top
		②	Not Print	Print on All
		③	Print on Top	Not Print
		❹	Print on Top	Print on Top
		⑤	Print on Top	Print on All
		⑥	Print on All	Not Print
		⑦	Print on All	Print on Top
		⑧	Print on All	Print on All
	Fn Code/ Material Code		Fn code	Material code
		⓪	Not Print	Not Print
		①	Not Print	Print on Top

		②	Not Print	Print on All	
		③	Print on Top	Not Print	
		❹	Print on Top	Print on Top	
		⑤	Print on Top	Print on All	
		⑥	Print on All	Not Print	
		⑦	Print on All	Print on Top	
		⑧	Print on All	Print on All	
	Weighing Check by Counts		Total Count	Standard Count	Checking Mode
		❶	Not Print	Not Print	Not Print
		①	Not Print	Not Print	Print
		②	Not Print	Print	Not Print
		③	Not Print	Print	Print
		④	Print	Not Print	Not Print
		⑤	Print	Not Print	Print
		⑥	Print	Print	Not Print
		⑦	Print	Print	Print
	Weight Value	❶Same as Display ②GROSS Data ③NET Data ④TARE Data ⑤ GROSS Data, NET Data, TARE Data ⑥ GROSS Data, TARE Data, NET Data			
	Unit	⓪ Not Print ❶Print on Top ②Print on all			
F 302	Output Accumulation Data				
			Date	Time	
		⓪	Not Print	Not Print	
		①	Not Print	Print	
		②	Print	Not Print	
		❸	Print	Print	
			Total Count	Standard Count	
		❶	Not Print	Not Print	
		①	Not Print	Print	
		②	Print	Not Print	
		③	Print	Print	
F 303	Printing Weight Value	❶Sending with the same as display ②Sending with F001 unit ③ Sending as F018 unit ④ Sending with F001 and F018 unit			
F 304	Output Mode	①Not Print ②Auto print Mode ❸Manual Print Mode ④After accumulate then print ⑤ After weighing check then Print ⑥After weighing Check and within OK value then Print			
F 305	Printer Type Select	❶MINI Printer ②Normal Printer			

※Symbol ❶: Factory Initial.

◆I/O SPECIFICATIONS:



PIN	PIN NAME	PIN	PIN NAME
1	/STROBE	14	NC
2	DATA1	15	/ERROR
3	DATA2	16	/INIT
4	DATA3	17	NC
5	DATA4	18	NC
6	DATA5	19	NC
7	DATA6	20	GROUND
8	DATA7	21	GROUND
9	DATA8	22	GROUND
10	/ACKNLG	23	GROUND
11	NC	24	GROUND
12	NC	25	GROUND
13	NC		

◆*PRINT FORMAT:*

Normal： **F009=1**

F010=1、F301=1、F302 = 1,2、F303=1

Data : 89/02/18
Time : 16:30:02
Material :123456
Gross Wt :8.357

Weighing Check： **F009=2**

F301=1、F302=4,5、F303=1

Date ：89/02/18
Time ：15:32:08
Material :123456
Count ：1
AC Weigh ：2.549

F010=2,3、F301=5、F302=3、F303=1

Data :89/02/18
Time :16:30:02
Material :123456
Count : 1
Gross Wt :7.136

Net Wt ：6.136
Tare Wt :1.000

Time :16:35:27
Material :123456
Count : 2
Gross Wt : 9.031
Net Wt :8.031
Tare Wt :1.000
┊ ┊
==========================
Total Weigh :123.456

Time ：15:33:27
Count ：2
AC Weigh :6.725
┊ ┊
===========================
Total Weigh ：23.187
Total Count ：16
Ok Count ：12

Normal Mode： F009=1、F303=2 F301=1、F302=1,2

Date : 89/02/18 Time : 16:25:12 Material : 123456

Weigh		Weigh		Weigh		Weigh		Weigh	
GS	3.214	GS	6.790	GS	7.218	GS	2.117	GS	5.891
GS	4.239	GS	3.561	GS	8.420	GS	6.125	GS	5.321

F010=2,3、F301=5、F302=3

Date : 89/02/18 Time : 17:02:03 Material : 123456

Count	Gross Wt	Net Wt	Tare Wt	Count	Gross Wt	Net Wt	Tare Wt
1	5.210	4.210	1.000	2	3.284	2.284	1.000
3	8.931	7.931	1.000	4	6.421	5.412	1.000
	┊					┊	

===

Total : 862.712

Weighing Check Mode：　F009=2、F303=2　　F301=1、F302=4,5

Date：　89/02/18　Time：　15:17:37　Material：　123456

Count	Weigh	Count	Weigh	Count	Weigh	Count	Weigh
1	AC 2.547	2	AC 5.387	3	AC 8.957	4	AC 6.987
5	AC 6.574	6	AC 1.785	7	AC 4.128	8	AC 3.087

Total　　：33.578
Total Count　：16
Ok Count　　：14

◆ Note: How to print and clear Accumulation

STEP 1: Press ↵ key to accumulation mode.

STEP 2: Press PRINT/ACC to print or press ACC/CLEAR to clear accumulation.