**USER MANUAL LGCN**

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## I. INTRODUCTION

Thank you for your purchase of JADEVER high precision electronic counting scale, which enables you to measure both quantity and weight. The scale is easy to operate, precise, stable and with fast display reaction. It is applicable in the electronic, hardware, plastic, medicine, textile and various other industries. It is useful for packaging, inventory and various production and quality control cases. It will help you save your time, labor, money, and reduce material waste, lower cost, improve your work efficiency, thus to achieve maximum return on investment.

## II. FEATURES

1. The microprocessor in this scale features
   (1) automatic zero point tracking function.
   (2) Tare and pre-tare function. Tare range is unlimited.
2. Easy operating and water-resistant membrane keypad.
3. Easy to read backlight LCD display.
4. With counting function, the scale can be used as a weighing scale.
5. ACAI function is applicable for the accuracy of unit weight.
6. The case shell is made of ABS shockproof plastics; stainless steel weighing pan is used for long-term operation.
7. The scale can be connected with such external device as small form printer of RS-232 interface (optional).
8. Single-phase RS-232 standard interface (optional).



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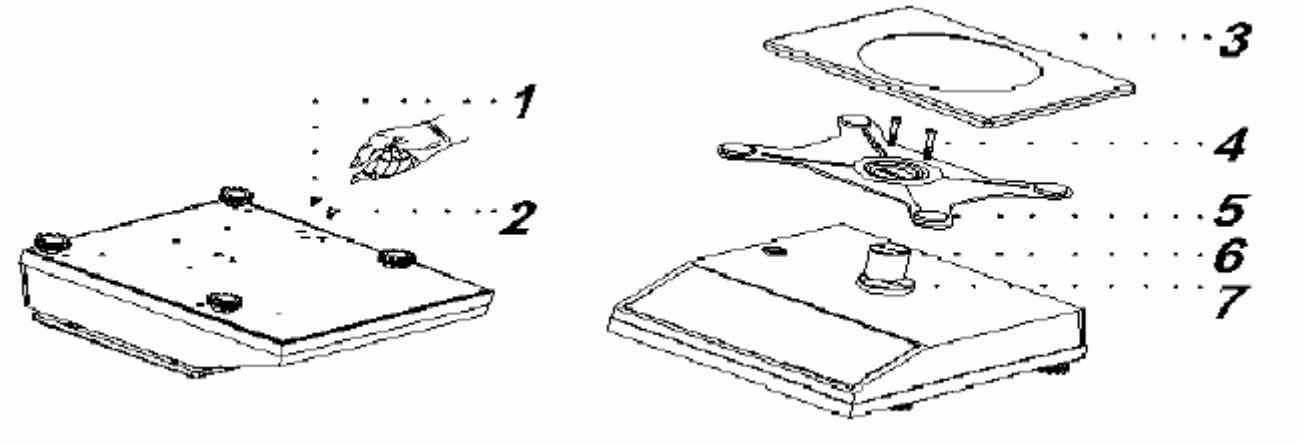
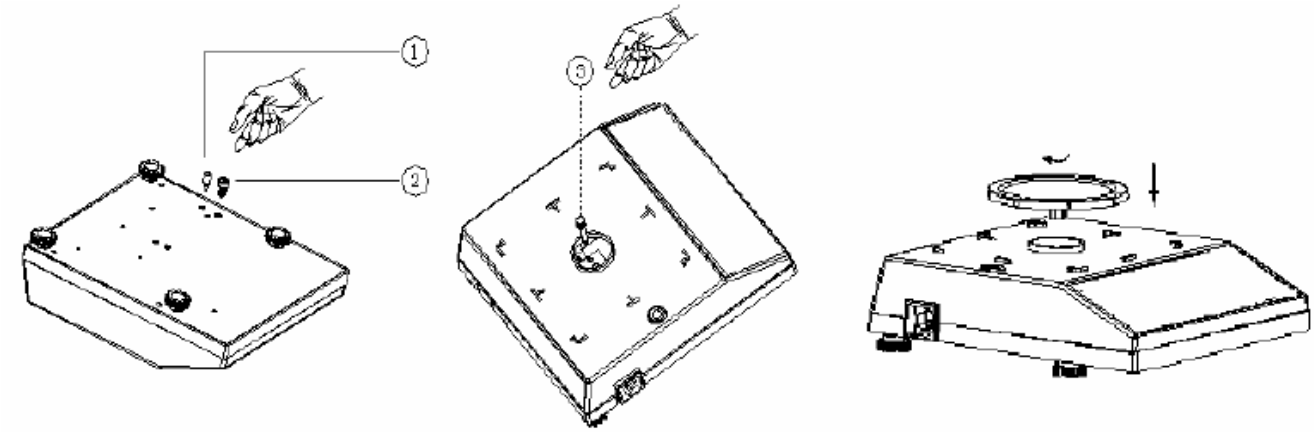
## III. ASSEMBLY

### A. Models LGCN-1530, LGCN-7515,LGCN-1530K




1. Remove the protection copper screw [2], and then screw out the protection copper screw [1];
2. Align the three-hole aluminum column [6] and center of the three round holes on the scale support [5] with the corresponding hole on the "-"shaped iron piece inside hole [7]. Then fix the three-hole aluminum column [6] and scale support [5] on the "-"shaped iron piece of the scale by tightening the M5 Allen screw [4] using an Allen wrench;
3. Put the stainless steel weighing pan [3] on the scale support [5].

### B. Model LGCN-3075




1. Remove the protection copper screw [2], and then screw out the protection copper screws [1] & [3];
2. Screw in the round weighing pan clockwise and downwards.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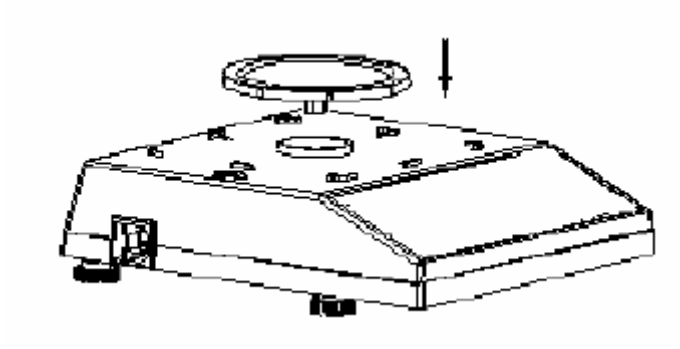
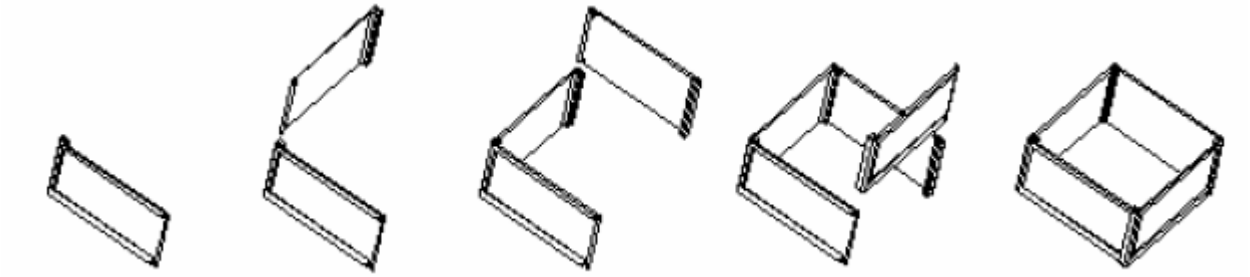
**C. Model LGCN-150**



1. Place the round weighing pan directly onto the scale support.

**D. Wind Shield**



**Note: Always reinstall the transportation protection device before transporting the scale, lest the precision sensor should be damaged due to bumping and falling during transportation.**

## IV. PRECAUTIONS

1. Full charge the battery after unpacking the scale.

   **Recharge the battery**: When battery symbol appears on the LCD display, charge the battery with AC power cord plug in, the indicator of charge will light up in red; when it becomes green means charge completed. (It takes about 8 hours to full charge the battery.)

2. Install the equipment on a level and stable surface.
3. Do not install the equipment near the air conditioning or a vibrating machine.
4. Install the equipment in an environment with steady temperature (-5 ~40 ), avoid rapid temperature changes.
5. Independent AC outlet for this equipment is recommended, check the voltage before plug in.
6. Warm up the equipment for 15 minutes before use.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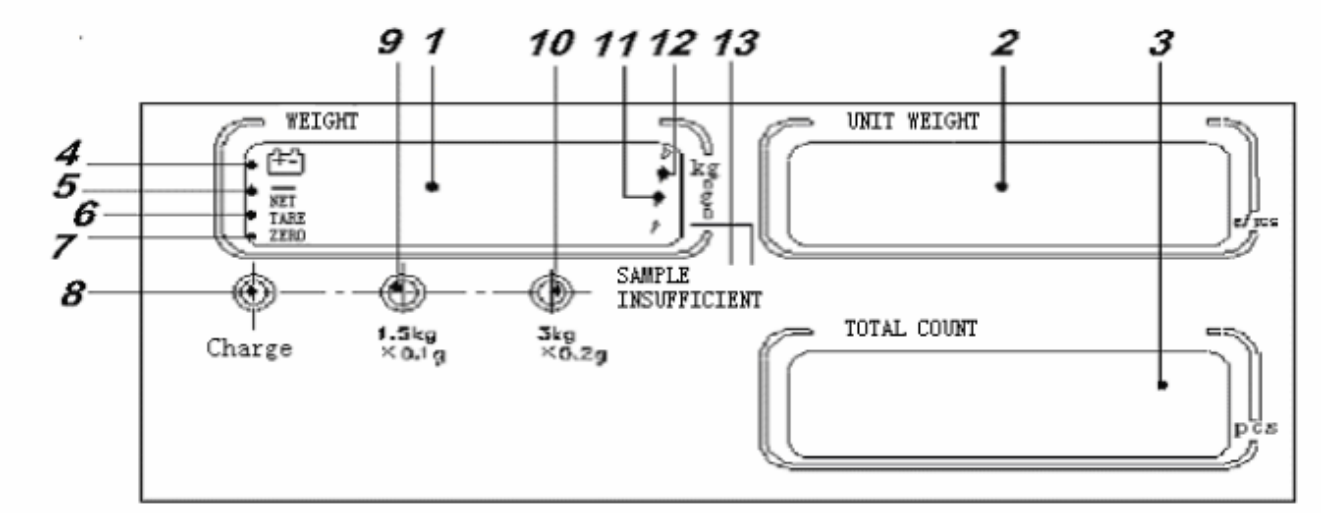
## V. LCD Display




1. Weight ---- Display the total weight of the object.

2. Unit weight ---- Display the unit weight.

3. Total count ---- Display the number of objects being counted.

4. Low battery ---- “ ”symbol shown on the first screen means battery is low, recharge of the battery is required.

5. Minus sign ---- Showing minus quantity.

6. Tare ---- “TARE” shown on the weight screen means tare weight is set.

7. Zero ---- “ZERO” shown on the weight screen after reset of the weight to zero.

8. Indicator for battery ---- “  ” symbol shown on the first screen means battery is low, and the indicator is red, recharge of battery is required; when the indicator turns green, means the battery is fully charged.

9. Min. weighing capacity indicator ---- First range indication.(N/A for LGCN-150)

10. Min. weighing capacity indicator ---- Second range indication.(N/A for LGCN-150)

11. Gram unit indicator ---- Indicating that the current unit used is gram.

12. Kilogram unit indicator ---- Indicating that the current unit used is kilogram (applicable for LGCN-7515/LGCN-1530K only)

13. Indicator of insufficient sample ---- Indicating that the number of sample is less than 10 pcs or unit weight less than 0.8 of minimum capacity-resolution.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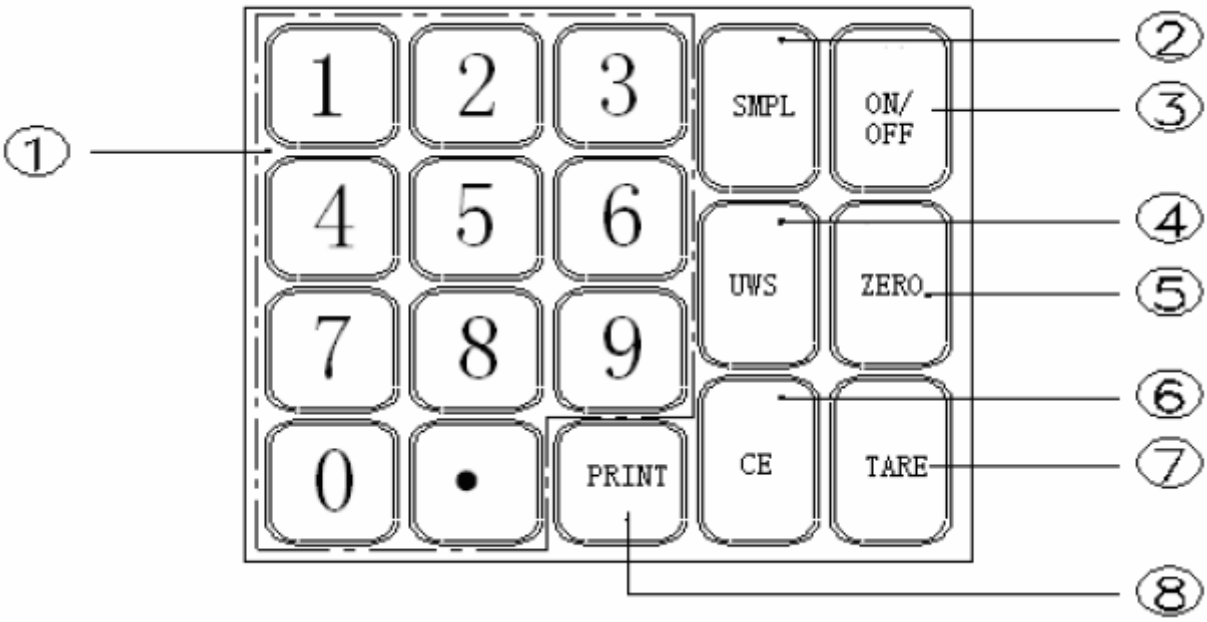
## *VI. KEYPAD*




1. Numeric keys **0** – **9** for inputting the number.

2. **SMPL** key: for averaging the unit weight of the object.

   ***Operation:*** Put some known number of samples on the weighing pan, key in the quantitative value by pressing **0** – **9**, then press **SMPL** key again. The weight, unit weight, and the total quantity will be shown on the three screens respectively.

3. **ON/OFF** key: for switching on/off the equipment as well as functioning with other keys.

4. **UWS** key: Key in the value of unit weight directly if it is known and press **UWS** to complete the input.

   Then the counting function is applicable ***Operation:*** Please press **0** – **9**, and ● key to input the unit weight, then press the **UWS** key. The total weight, input unit weight and total quantity of the materials will be shown in turn on the three screens.

5. **ZERO** key: for resetting the scale. Press **ZERO** key and the symbol of **ZERO** **0,0** will be shown on the left screen.

6. Press **CE** key: for canceling the input.

   A. Press **CE** key to clear the value on unit weight screen to zero when pressing the wrong numeric key.

   B. Press **CE** key to cancel the value in the **SMPL** or **UWS** command.



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**7.** TARE key: for setting the tare weight. There are two tare methods:

A. ***Direct tare:*** Put the container on the weighing pan, press **TARE** key, the symbol of **NET TARE 0,0** will be shown on the total weight screen, which indicates that the weight of container on the weighing pan has been deducted.

B. ***Pre-tare:*** Press **0** – **9**, and ● and key directly to input the container's weight value if it is known, the corresponding keyed-in value will be shown on the weight screen, press **TARE** key, and the symbol of **NET TARE 0,0** will be shown on the total weight screen, which means it is ready to weigh now.

C. **Cancel tare:**

a. Remove the container from the weighing pan, the symbol of **NET TARE ZERO 1000,0** will be shown on the total weight screen, press **TARE** key to return to zero.

b. Under the tare mode, press **ZERO** key to cancel tare. (if the weight of the material on the weighing pan is within the zero adjustment range, then it will return to zero; otherwise, the normal weighing function is applicable)

**Note:** A. When using the pre-tare mode, the pre-tare value must be multiple of the minimum capacity-resolution and the maximum value shall be full range.
B. Tare range is unlimited. Take 1kg for example, tare has to be cancelled at zero mode.

**8.** **PRINT** key: for printing output.

**9.** ●key: as a decimal key.

**VII. FUNCTION SETTING** (Press **ZERO** key, following settings will return to weighing mode. Power on while holding down **ZERO** key, ***SET SCALE*** and ***FUnC*** will be shown on the three screens respectively.

**A. Backlight setting:**

Pres **0** key to change the setting: backlight ON, backlight 0FF, backlight ONOFF.

***Set0 Li9Ht*** and ***onoFF***

Automatic backlight when weight is over 9 times of minimum capacity-resolution.

**B. Filter setup:**

Press **2** key to switch the filter degree as 1, 2, 3 or 4. Level 4: Reaction is slower, effect on filtering is higher.

***Set2 FiLt*** and ***– 2 -***


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**C. Auto power off setup:**

Press **3** key to set the time of auto power off. Auto power off enables automatic turn-off of the scale when there's no load on the pan, depending on the setup time. The available settings are OFF, 5, 10, 30, 60 minutes.

***Set3 oFFt*** and ***60***

**D. Zero band:**

Press **4** key to set in circle d0, d1, d2, d3, d4, d5 as min. weight display.

***Set4 2Ero*** and ***d1***

**E. Baud rate setting:**

Press 5 key to set baud rate at (9600, 4800, 2400).

***Set5 bAUd*** and ***9600***

**F. Printing mode setting:**

Press **9** key to set the printing mode,

1) Prt. Pr – data sent when key pressed
2) Prt. Co – data sent continuously.

***Set9 Print*** and ***PrtCo***

**G. External form printer setting:**

Press **TARE** key to set PC, TP, EZ ,SH as desired. G, H is continuous operation after F setting.

***Set9 Print*** and ***PC***

**H. External printing stability setting:**

Press **SMPL** key to see yes, no. Note: this is stability setting of printing.

***Set9 Print*** and ***no***

**VIII. WEIGHING UNIT SETTING**

Power on while holding down **SMPL** key to enter into setting mode:
will be shown on the three screens respectively.

***Set0 0*** and **-**

Press **1 1 3 2** , then press **SMPL** key to enter into unit selection mode will be shown on the screens respectively.

***Set SetU*** and ***9***

Press **1** key to select g or lb, after the setting, press **SMPL** key, then press **ZERO** key to return to normal weighing mode.


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**IX. SINGLE-POINT CALIBRATION**

Power on while holding down SMPL key, the screens will show

***Set0 0*** and **-**

Press **1 1**, then press **SMPL** key to enter into calibration mode,

***CAL P***blinking and ***9*** will be shown on the screens respectively,

calibrate zero point with zero load; when the screens show

***CAL P*** and ***9*** respectively, press SMPL key, the screens will show ***CAL 0*** and ***9*** respectively;

Press numeric keys **0** – **9**, to input the calibration value; the input calibration value shall be round number only, and the unit shall be gram.

Then press • key to end the input, and press **SMPL** key again; the screens will show ***CAL CAP*** and ***9***, which means calibration is ongoing; when ***CAL PASS*** and ***9*** appear on the screens, it means that the calibration is completed.

After taking off the weights, press **SMPL** key, and then **ZERO** key to return to normal weighing mode.

X. LINEAR CALIBRATION

Power on while holding down **TARE** key, the screens will show

***CAL LinE*** and ***3P***

Press TARE key again to enter into linear automatic calibration, the Total Count screen will show **on 0** perform zero load calibration; when the screen shows **on 1**, load on 1/3Max weight to perform 1/3 load calibration; then press **TARE** key when the Total Count screen shows **on 2**load on 2/3Max eight to perform 2/3 load calibration; then press **TARE**key; when the Total Count screen shows **on 3** add the Max weight to perform full load calibration; when the Total Count screen shows **PASS**, means that the calibration is completed.

Take off the weights, press **TARE** key, and then **ZERO** key to return to normal weighing mode.

Notes:

1. When performing calibration, please press **TARE** key after the standard weight to be calibrated is placed in position.
2. Max is full load weight.
3. Take off the weights after the calibration is completed to return to weighing mode.



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## XI. PRECISION SETTING- (Only applicable for version 2.0 and above)

Power on while holding down **SMPL** key to enter into the setting mode: ***Set 0*** and **-** will be shown on the three screens respectively.

Press **1 1 2 3** keys and then **SMPL** key to enter into the unit selection mode.

The screens will show respectively. ***Set Set1*** and ***1***

Press **1** key to set **1** (precision 15000), **2** (precision 6000 or 7500), after setting is completed, press **SMPL** key, and then **ZERO** key to return to normal weighing mode.

## XII. WEIGHING UNIT CONVERSION

1 kg = 1000 g  1 lb = 453.59237 g
1 oz = 28.349523125 g  1 lb = 16 oz

## APPENDIX 1:
## ERROR MESSAGE

### 1. Error message

| Err. Msg. | Problem |
|---|---|
| Err2 | Initial zero point over ±10% (take 10% as the benchmark) |
| Err3 | Over or below A/D resolution range |
| Err4 | EEPROM Chksum error |
| Err5 | Overload (max. capacity +9e) |
| Err6 | Wrong calibration weight |
| over | Quantity of materials over display range when inputting unit weight or sampling |
| Err | Pre-tare over max. capacity |
| Battery symbol | Low battery |

### 2. Troubleshooting

| When | Err. Msg. | Troubleshooting |
|---|---|---|
| Power on | Err2 | Check and remove any object from weighing pan or malfunction of LOAD CELL |
| Power on | Err3 | Check if A/D or LOAD CELL malfunctions |
| Power on | Err4 | Beep alert. Switch power off and power on again, or perform calibration |
| Operating at normal weighing mode | Err5 | Checking if the weighing object is over the max. capacity +9e |
| Calibrating | Err6 | Change weight |
| Power on | Battery symbol | Charge the battery with power on |


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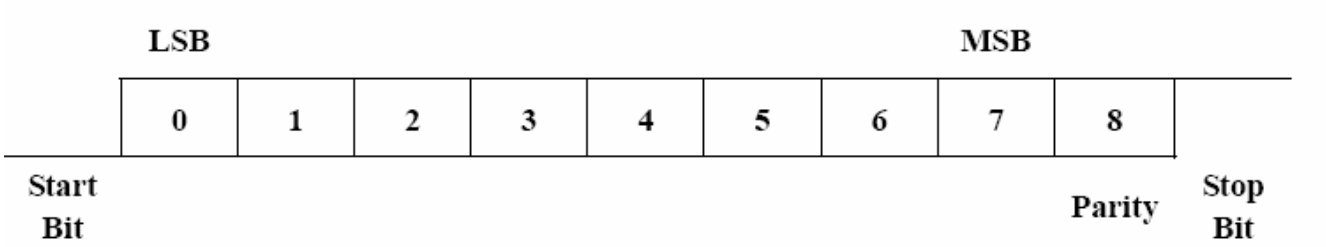
**APPENDIX 2:**

**RS-232 OUTPUT FORMAT**

**Baud Rate : 2400, 4800, 9600**
**Data Bit : 8**
**Parity : N ( None )**
**Stop Bit : 1**
**Code : ASCII**

**Bit Format :**




## Data Format:

### 1. g

| G/N | . | W | . | : | +/- | | | | | | | | | g | CR | LF |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

weight

| U | . | W | . | : | +/- | | | | | | | | g | / | p | c | s | CR | LF |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

Unit weight

| T | o | t | a | l | : | | | | | | p | c | s | CR | LF |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

pcs

Example:
G.W. : +2567.2 g
U.W. : +0.6148 g/pcs
Total : 4176 pcs

### 2. kg

| G/N | . | W | . | : | +/- | | | | | | | | | k | g | CR | LF |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

weight

| U | . | W | . | : | +/- | | | | | | | | g | / | p | c | s | CR | LF |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

Unit weight

| T | o | t | a | l | : | | | | | | p | c | s | CR | LF |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

pcs

Example:
G.W. : +12.565 kg
U.W. : +3.0089 g/pcs
Total : 4176 pcs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## 3. lb

| G/N | . | W | . | : | +/- | | | | | | | | l | b | CR | LF |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

weight

| U | . | W | . | : | +/- | | | | | | | | l | b | / | p | c | s | CR | LF |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

Unit weight

| T | o | t | a | l | : | | | | | | p | c | s | CR | LF |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

pcs

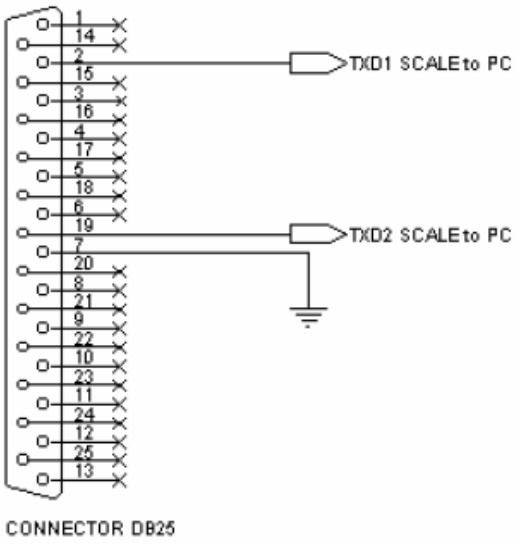
Example:
G.W. : +2.2352 lb
U.W. : +0.5352 lb/pcs
Total : 4 pcs

**G = GROSS**
**N = NET**

## Printer and output format (example: g)

| SH-24 | TP-24 | EZ2-S |
|---|---|---|
| G.W. : +2567.2 g<br>U.W. : +0.6148 g/pcs<br>Total : 4176 pcs | G.W. : +2567.2 g<br>U.W. : 0.6148 g/pcs<br>Total : 4176 pcs | G.W. : +2567.2 g<br>U.W. : +0.6148 g/pcs<br>Total : 4176 pcs |

## RS-232 Connector (Signal Output)



CONNECTOR DB25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