OPERATION MANUAL

Model: DI-162

Edition	Month	Year
1st	November	2005
2nd	March	2006
3rd	May	2006
4th	June	2006
5th	Dec.	2007

CONTENTS

1. General Specification

1.1 General Layout

➢ **DI-162**
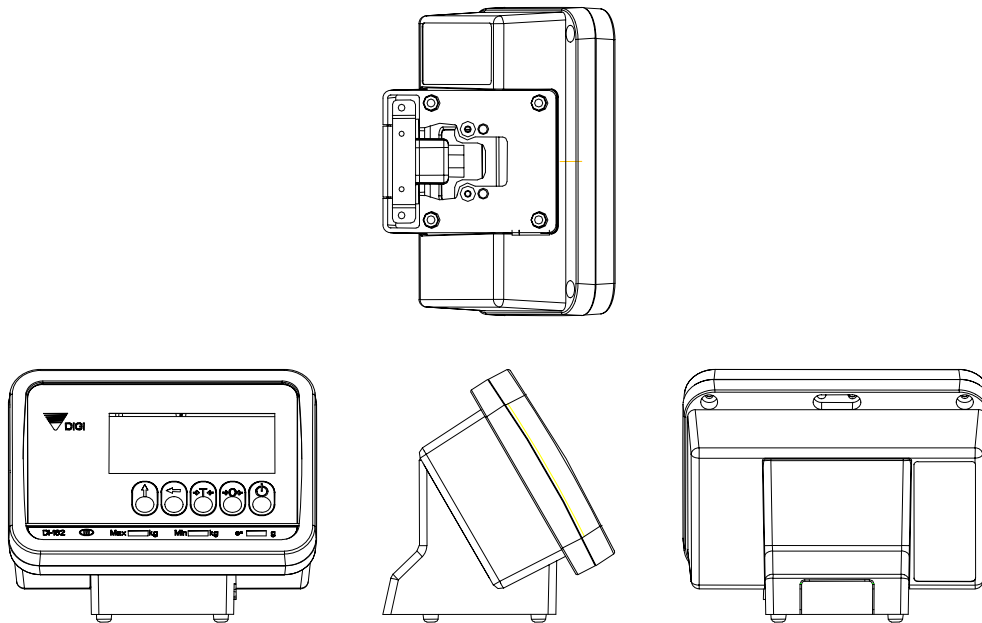
DI-162SS
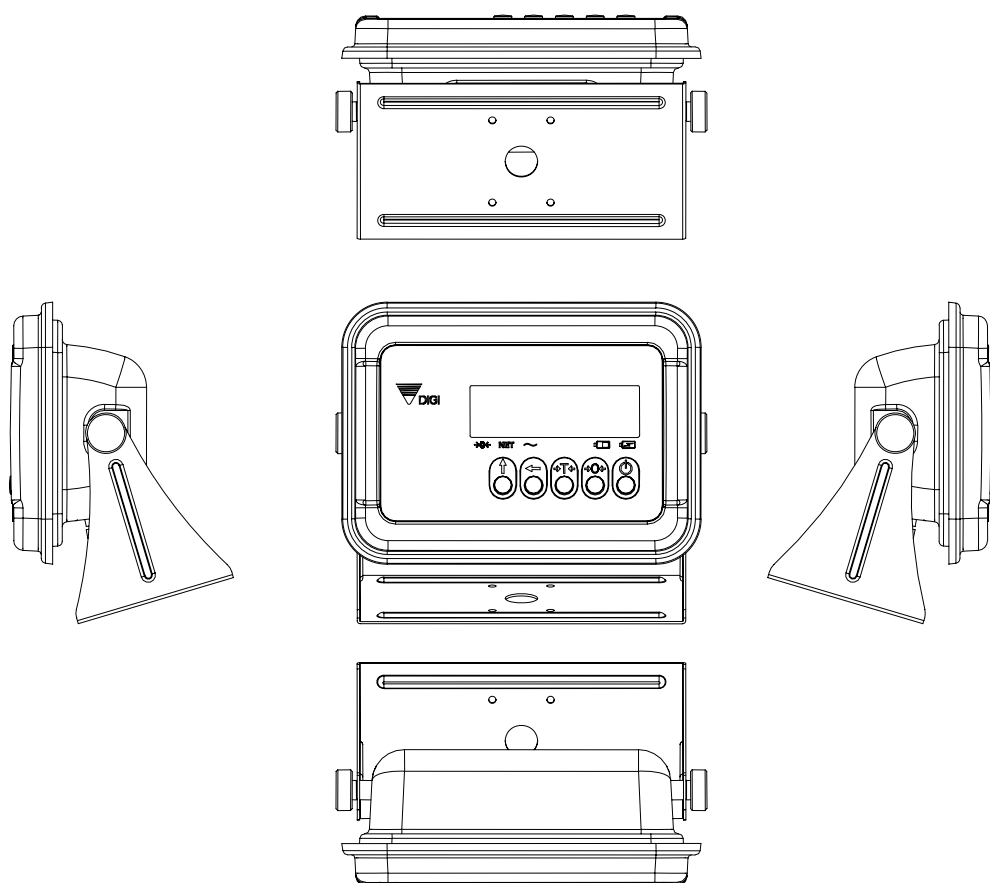
DI-162C
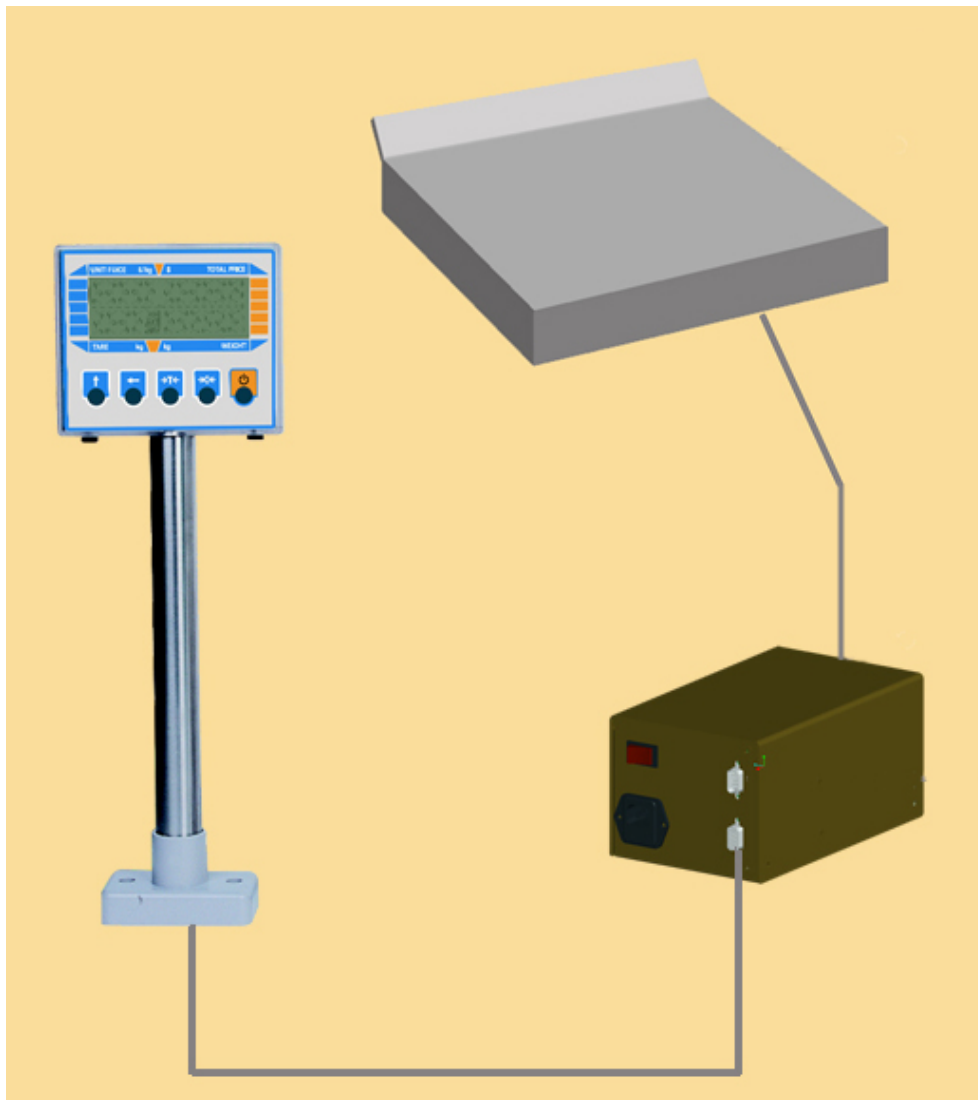
DS-162 HD
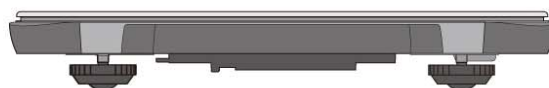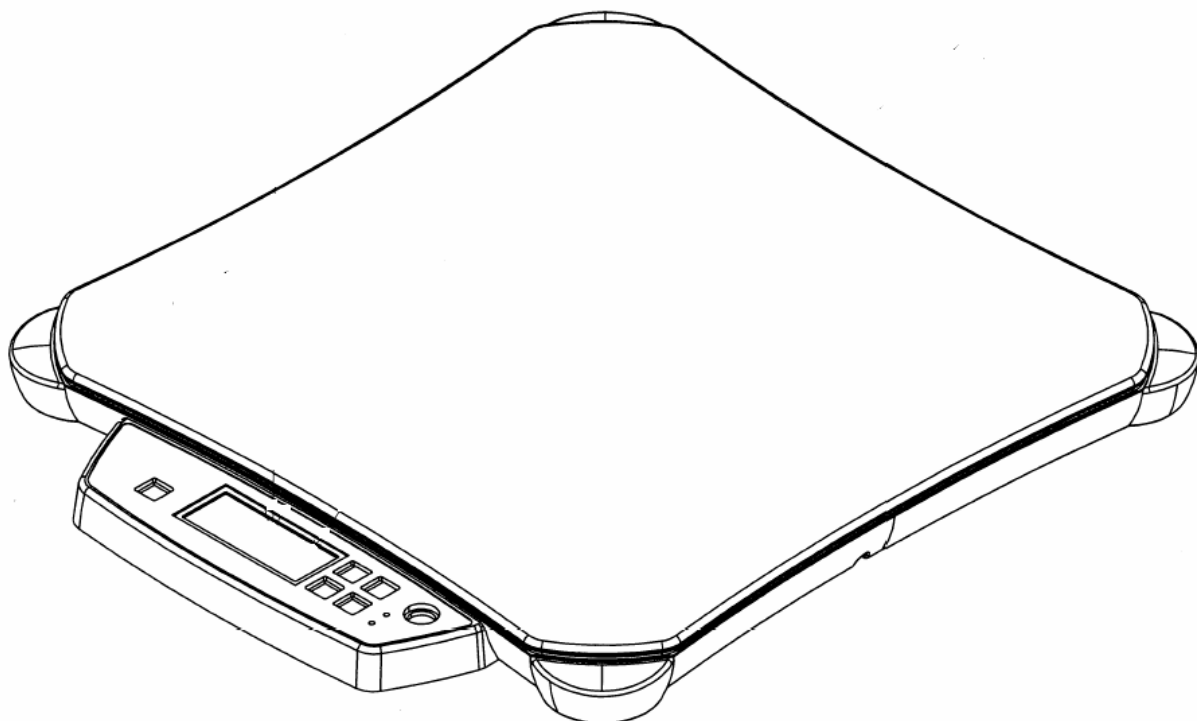
DI-162 P
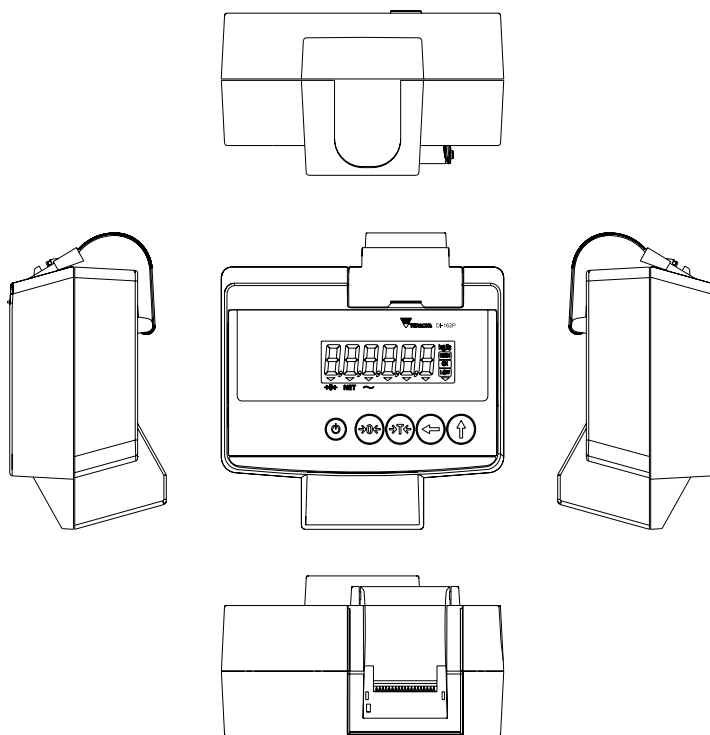
1.2 Features

* Low cost digital indicator.

* Quick response to weight changes.

* Resolution   : Display Resolution: variable

            : Internal Resolution: 1/300,000.

*Low power consumption.

* Auto Power Off

* Calibration by software.

* 6 digits with 8 segments LCD Operator displays.

* 5 operational keys:

      UP; LEFT; TARE; ZERO; ON/OFF;

* One scale channels for remote weighing platforms connection.(14 pin Am phenol)

* Support 4x load cells 350 Ohm.

* RS-232C interface for data communication

*Two set point(Hi/OK/Low).

* External Remote Display.

* IP67 waterproof, moisture-proof, mist-proof and dustproof (DI-162SS)

* Waterproof keyboard and splash proof housing (DI-162SS)

DI-162 P:

* Low cost digital indicator.

* Quick response to weight changes.

* Resolution   : Display Resolution: variable

                   : Internal Resolution : 1/300,000.

* Calibration by software.

* 6 digits with 8 segments large size LCD Operator displays with backlight. (figure size: 23×10.9 mm).

* Waterproof keyboard and splash proof housing.

* 5 operational keys:

       UP;   LEFT;   TARE;   ZERO;   ON/OFF;

* Plastic housing or Stainless housing.

* One scale channels for remote weighing platforms connection .(14 pin Am phenol)

* Support 4x load cells 350 Ohm.

*Two set point(Hi/OK/Low).

* External Remote Display.

DS-162 HD

* Quick response to weight changes.

* Low power consumption: Rechargeable Battery backup for 30 hours (Backlight Off) 5 hours (Backlight On)of continuous usage .

* Intelligent power control

A. When AC power is available, scale will use AC power only whatever rechargeable battery is installed or not. When AC power is shut off, scale will use battery automatically.

B. When scale works on rechargeable battery, if the battery is weak, the battery indictor will light up. When the power from battery becomes low such that the scale cannot compute accurately, all Displays will shut off except the Battery indicator. The power is then shut off completely after 1 minute.

C. Scale detects rechargeable battery voltage and control battery charge process automatically. The battery charge indicator lights up when rechargeable battery is being charged.

* Calibration by software.

* 6 digits with 8 segments large size LCD Operator displays with backlight. (figure size: 19×9 mm).

* Waterproof keyboard and splash proof housing.

* 5 operational keys:

   UP; LEFT; TARE; ZERO; ON/OFF;

* RS-232C interface for data communication .

* Capacity: 60kg/(10~20)g, 150kg/(20~50)g

* Platter size: 429mmx429mm

* Waterproof rating: IPX5

*,Net weight: 6.4 kg

1.3 Operating Conditions

* Power Source   :   AC   240/230/220V, 117/100V(+10%,-15%).

                 : Rechargeable battery (6V 1.2Ah).

* Operating Temperature   : -10℃/14℉ ~ +40℃/+104℉ (OIML).

* Operating Humidity   : 15 ~ 85% RH.

* Power Consumption   : 18W when using AC power.

                 : 0.5W when using rechargeable battery.

1.4 Charging Conditions (for Rechargeable battery only)

* Power Source   :   AC   240/230/220V, 117/100V(+10%,-15%).

* Charge Current   : 300 mA.

* Charge Time   : 5 - 6 hours.

1.5 Analog Specification

* Input sensitivity   : 0.4mV/V~ 4mV/V.

* Zero adjust range   : 0 ± 5mV.

* Zero balance range   : 0 ± 0.5mV.

* L/C applied voltage   : DC 5V.

* Speed of A/D conversion   : 20times/sec ~ 30 times/sec.

* Internal Resolution   : 300,000.

1.6 Display and Indicators

➢ **DI-162**

  * **Weight Display   : 6 digits**
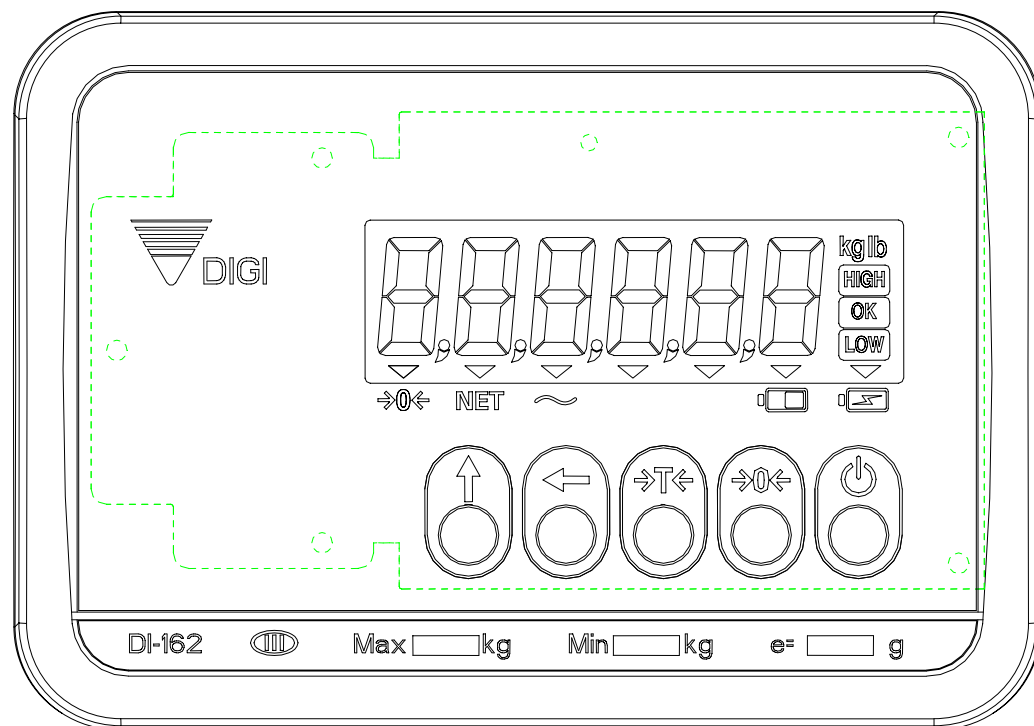
DI-162SS

* Weight Display : 6 digits

DIGI

kg lb
HIGH
OK
LOW

⇥0⇤ NET ~

DI-162 SS ⅢⅢⅢ Max [   ] kg   Min [   ] g   e=d=[   ] g
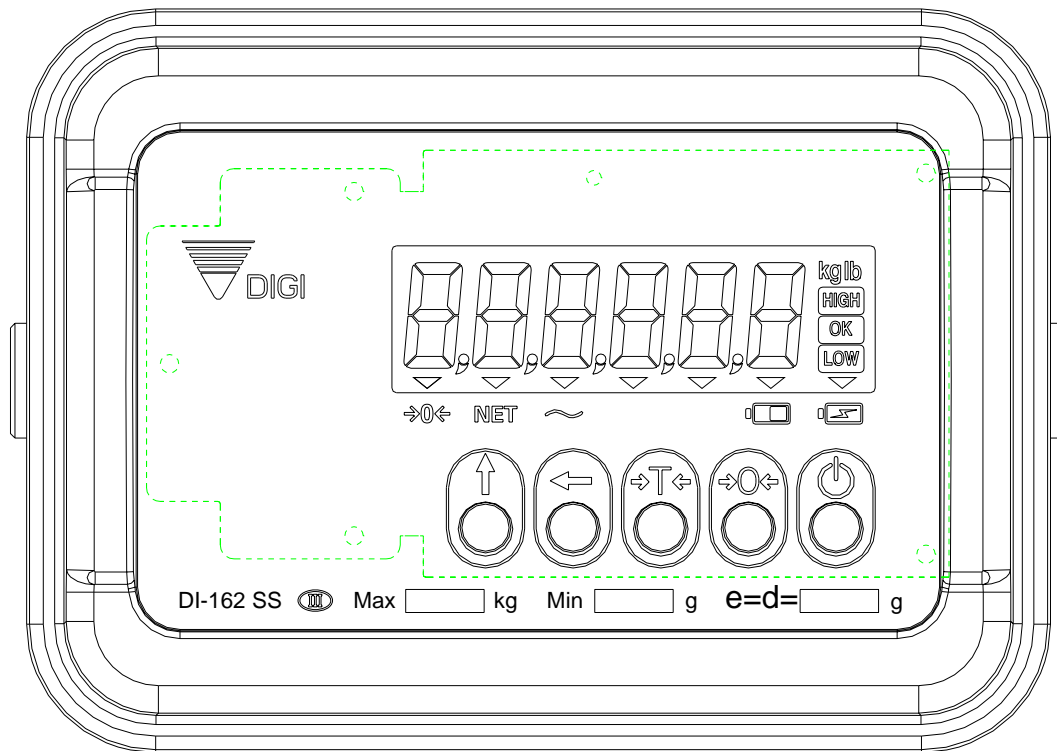
DI-162C

* Unit Price　　: 5 digits　(Display　　when　　use Checkout-Dialog 02/04/06 protocol)

*Total Price　: 6 digits　(Display　　when　　use Checkout-Dialog 02/04/06 protocol)

* Tare　　　　　: 4 digits　(Display　　when　　use Checkout-Dialog 02/04/06 protocol)

* Weight Display: 6 digits

➢ Indicators

→0← -------▾sign will light up when current zero point is within 1/4d of true zero and true zero.

NET ------- ▼sign will light up when tare weight is set.

〜 -------▼sign will light up when weight/scale is in stable condition.

▯▭ -------▼sign on when Battery is weak and needs to charge (only for rechargeable battery type).
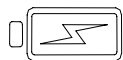
▯⚡ -------▼sign on when Battery is charging (only for rechargeable battery type).

kg -------sign on when the display unit of weight is kg.

lb -------sign on when the display unit of weight is lb.

HIGH -------sign on when weight is high than setpoint2.

OK -------sign on when weight is between setpoint1 and setpoint2

LOW ------- sign on when weight is below setpoint1

and high than 1d.

1.7 Dimensions

DI-162: **200mm/7.9in (W) × 164mm/6.5in (H) ×150mm/5.9in (D)**

DI-162SS: **200mm/7.9in (W) × 164mm/6.5in (H) ×150mm/5.9in (D)**

DI-162C: **130mm (W) × 110mm (H) ×35mm (D)**

1.8 External Connectors

* AC plug.

* Load cell connect.

* RS-232C interface.

* Remote Display interface

DS-162HD

* Weight Display   : 6 digits
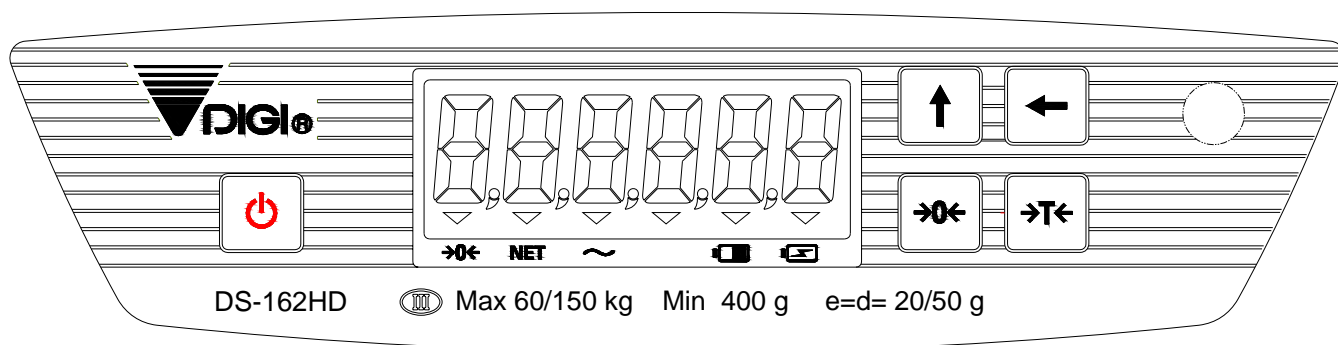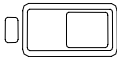
DS-162HD   ⬛ Max 60/150 kg   Min 400 g   e=d= 20/50 g

Indicators

→0← -------▼sign will light up when current zero point is within 1/4d of true zero and true

zero.

NET ------- ▼sign will light up when tare weight is set.

∿ -------▼sign will light up when weight/scale is in stable condition.

⬚ -------▼sign on when Battery is weak and needs to charge (only for rechargeable

battery type).

⬚ -------▼sign on when Battery is charging (only for rechargeable battery type).

External Dimensions
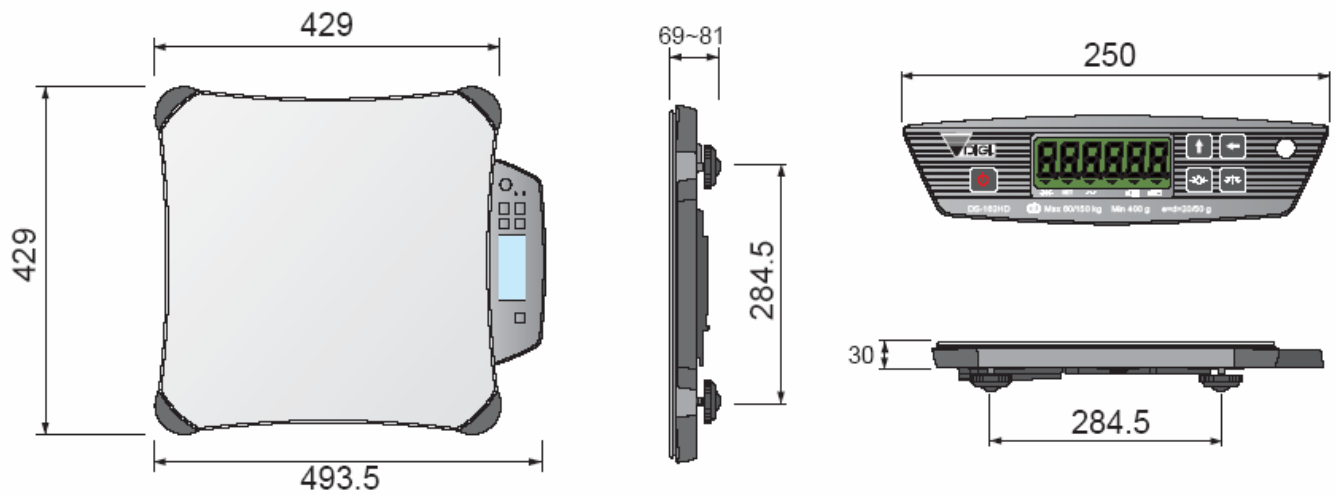
External Connectors

* AC plug.

* RS-232C interface.

DS-162 P

Display and Indicators
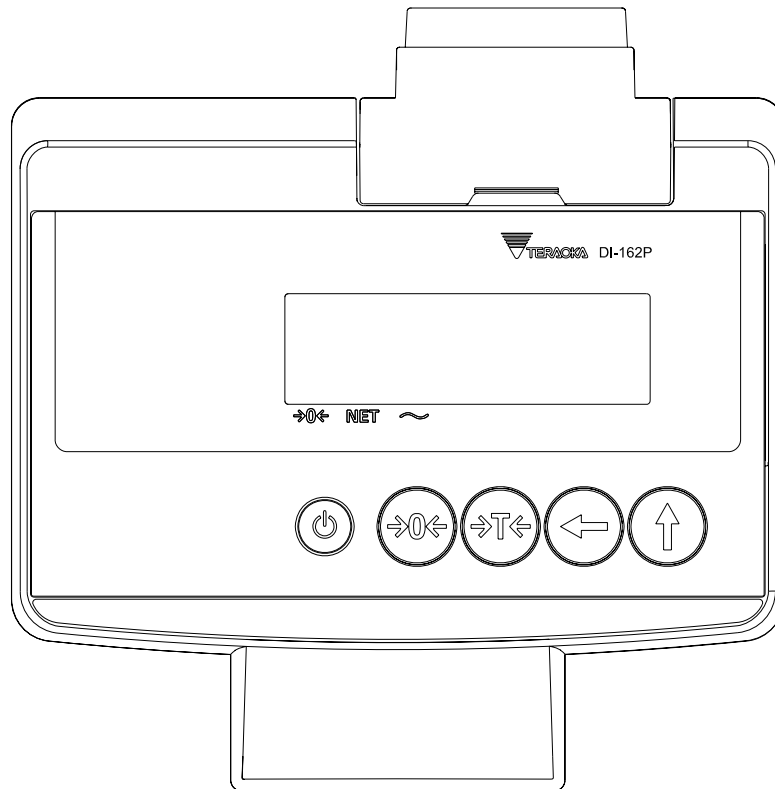
Display Specifications

    * Weight Display   : 6 digits
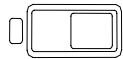
Indicators

    ⇨0⇦   -------▼sign will light up when current zero point is within 1/4d of true zero and true zero.

   NET   ------- ▼sign will light up when tare weight is set.

    ∼   -------▼sign will light up when weight/scale is in stable condition.

kg -------sign on when the display unit of weight is kg.

lb -------sign on when the display unit of weight is lb.

HIGH -------sign on when weight is high than setpoint2.

OK -------sign on when weight is between setpoint1 and setpoint2

LOW ------- sign on when weight is below setpoint1 and high than 1d.

Dimensions

200mm/7.9in (W) × 16

External Connectors

* AC plug.

* Load cell connect.

* Remote Display interface

2. Main Operation

[ON/OFF] ------To turn on or off the display.

[REZERO] ------To re-zero the scale.

[TARE]   -------To set tare weight.

[←]   -------To set digital tare weight value, /To shift the digital which to be edit.

[↑]   -------To change weight unit, /To change numeric data for set-up mode.

2.1 Zero Resetting

OPERATION	Key-in	WEIGHT	ZERO	NET	STABLE
Weighing mode.		0.0 0 0	▼		▼
Put tare (e.g. 3 g) on platter		0.0 0 3			▼
Zero resetting.	[REZERO]	888888			
		0.0 0 0	▼		▼
Remove the weight		- 0.0 03			▼
Zero resetting.	[REZERO]	888888			
		0.0 0 0	▼		▼

Note: 1) If the weight is within the available range of zero resetting, the display will return to 0.

If it is out of the range, the weight will remain in the display, the buzzer will beep alarm.

2.2 One-touch Tare Weight Reduction

OPERATION	Key-in	WEIGHT	ZERO	NET	STABLE
Weighing mode.		0.0 0 0	▼		▼
Put tare (e.g. 30 g) on platter		0.0 3 0			▼
Subtract the tare weight.	[TARE]	0.0 0 0		▼	▼
Remove the weight		- 0.0 3 0	▼	▼	▼
Clear the tare weight.	[TARE]	0.0 0 0	▼		▼

Note: 1) If the tare weight is within the available rang of
tare reduction, the display will return to 0 and NET lamp
will light up .

If it is out of the range, the weight will remain in the
display, the buzzer will beep alarm.

2.3 Digital Tare Weight Reduction

OPERATION	Key-in	WEIGHT	ZERO	NET	STABLE
Weighing mode.		0.0 0 0	▼		▼
Press [←] to shift a digit to where tare weight to be set. Digit to set the tare will blink	[←]	0.0 0 0	▼		▼
Press [↑] to input the weight. Each time [↑] is pressed, the figure will advance 1 only.	[↑]	0.0 0 1	▼		▼
Repeat step # 1 and # 2 until desired tare weight is set at each digit.		0.0 3 5	▼		▼
Set the tare weight.	[TARE]	-0.0 3 5	▼	▼	▼
Clear the tare weight.	[TARE]	0.0 0 0	▼		▼

Note: 1) If the tare weight is within the available rang of
tare reduction, the display will return to 0 and NET lamp
will light up .

If it is out of the range, the weight will remain in the display, the buzzer will beep alarm.

2.4 Change Weight Unit

OPERATION	Key-in	WEIGHT	ZERO	NET	STABLE	
Weighing mode.		0.0 0 0	▼		▼	kg
Put tare (e.g.　400 g) on platter		0.4 0 0			▼	kg
Press [↑] to shift weight unit alternately between kg and lb.	[↑]	0.8 8 0			▼	lb
Return to kg mode	[↑]	0.4 0 0			▼	kg
Remove the weight		0.0 0 0	▼		▼	kg

2.5 SPAN SW ON/OFF Check

OPERATION	Key-in	WEIGHT	ZERO	NET	STABLE	
Weighing mode.		0.0 0 0	▼		▼	kg
Press [REZERO]	[REZERO]	8 8 8 8 8 8				
Press [T][←][←] by holding [REZERO]	[REZERO]+	STE20				
Displays software code for 2 seconds.	[T][←][←]					
If the SPAN SW is at off status, it will display "S-OFF".		S-OFF				
If the SPAN SW is at on status, it will display "S-ON".		S-ON				
Returns to weight mode after 3 seconds.		0.0 0 0	▼		▼	kg

2.6 Internal Count Display

OPERATION	Key-in	WEIGHT	ZERO	NET	STABLE	
Weighing mode.		0.0 0 0	▼		▼	kg
Press [REZERO]	[REZERO]	8 8 8 8 8 8				
Press [←][←][T] by holding [REZERO] To display A / D row data	[REZERO]+ [←][←][T]	1,2,0,2,3,4				
Press[↑] key. To display internal Count,		1.0.0.0.0.0				
Press[↑] key. To display A / D row data.		1,2,0,2,3,4				
Press[T]key returns to weight mode.	[T]	0.0 0 0	▼		▼	kg

2.7 SPEC Data Setting for Weigh & Measure

Turn on the SPAN SW. (JP1 on Main Board.)

OPERATION	Key-in	WEIGHT	ZERO	NET	STABLE	
Weighing mode.		0.0 0 0	▼		▼	kg
Press [REZERO]	[REZERO]	8 8 8 8 8 8				
Press [←] 3 times by holding [REZERO] SP No. and SP data alternately display	[REZERO]+ [←][←][←]	SP00/ 1 1 0 0				
Press [←] to shift a digit to where SPEC data to be set. Digit to set the SPEC will blink.	[←]	1 1 0 0				
Press [↑] to select SPEC set. Each time [↑] is pressed, the figure will shift between 1 and 0.	[↑]	1 1 1 0				
Press [REZERO] to save SPEC change.	[REZERO]	SP01/ 0 0 0 0				
Press [TARE] to store the SPEC setting and exit to weight mode		0.0 0 0	▼		▼	kg

Note:

1): Press [TARE] key to go back to weighing mode without save

change.

2):As introduced at the previous section, there are 2 kinds of key-operation when entering SPEC setting mode.

a . [REZERO] + [T] [T] [T]   ------- for SPEC No.0-No.19

b . [REZERO] + [←] [←] [←]   -------for SPEC No.20-No.39

When SPEC setting operation , the following display will appear.

Bit3	Bit2	Bit1	Bit0
1	1	0	0

SPEC data

*The SPEC No. such as "SP01" and   SPEC data such as "1100" alternately display at start.

*After any key is pressed , it stop alternately display.

*The blinking digit indicates the current programmable position.

When setting or changing SPEC data, key switches function are as follows.

[REZERO]   -----------SPEC No. skips each time this key is pressed.

[T]   ------------ To renew the data and exit this mode.

[←]   ------------ To move digit position. The blinking position

will move to next digit.

[⬆]   ------------ To change SPEC data to either "0" or "1".

2.8 Set point Set

OPERATION	Key-in	WEIGHT	ZERO	NET	STABLE		
Weighing mode.		0.0 0 0 0			▼	kg	
Press [REZERO]	[REZERO]	8 8 8 8 8					
Press [⬆][⬆][⬆] by holding [REZERO]	[REZERO]+ [⬆][⬆][⬆]	SPT1/ 0 0.0 0 0 0					
Move the position to edit according to capacity by[⬅].	[⬅][⬅][⬅]	0 0.0 0 0 0					
Enter the setpoint1 weight at the blink digit by press [⬆].	[⬆][⬆]	0 0.2 0 0 0					
Press [REZERO] to next step.	[REZERO]	SPT2/0 0 0. 0 0 0					
Move the position to edit according to capacity by[⬅].	[⬅][⬅][⬅][⬅]	0 0.0 0 0 0					
Enter the capacity weight at the blink digit by press [⬆].	[⬆]	0 1.0 0 0 0					
Press [REZERO] to save setting and return to weight.	[REZERO]	0.0 0 0 0				kg	
Put weight (e.g. 0.1kg) on platter.		0.1 0 0 0				kg	LOW
Add weight (e.g. 0.2kg) on platter.		0.3 0 0 0				kg	OK
Add weight (e.g. 0.8kg) on platter.		1.1 0 0 0				kg	HIGH
Remove the weight on platter.		0.0 0 0 0				kg	

Note: This function depends on SPEC3 bit0.
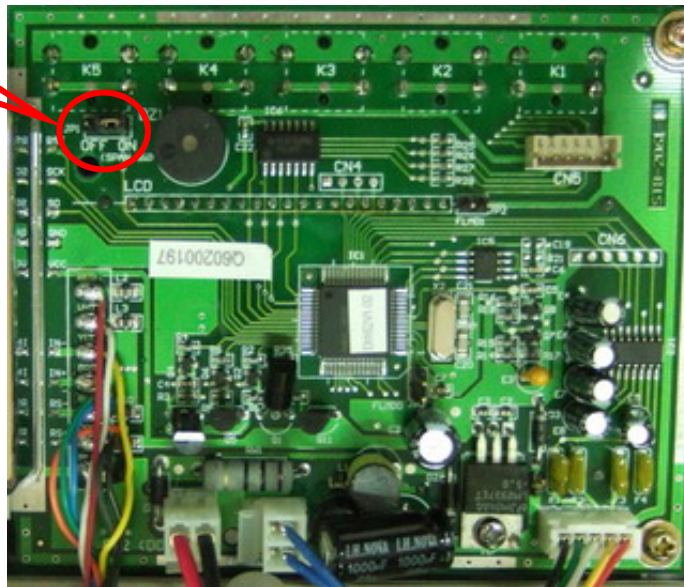
3. Initial Setup

3.1 Prepare

➢ **Connect DI-162 with the weighing platform**

➢ **Plug in the power supply**

3.2 Setup

➢ **Set the relative specification**

➢ **Calibration**

  ● **Turn on the SPAN SW first (JP1 on Main Board.)**

3.2.1. Weight Calibration (SPAN Adjustment)

OPERATION	Key-in	WEIGHT	ZERO	NET	STABLE	
Weighing mode.		0.0 0 0	▼		▼	kg
Press [REZERO]	[REZERO]	8 8 8 8 8 8				
Press [←] [T] [T] by holding [REZERO]	[REZERO]+ [←][T][T]	CAL				
"G0" and "0.0000" alternately display		G0 / 9.7 9 4 6				
Move the position to edit G by press [←].	[←][←][←][←]	0. 0 0 0 0				
Select the G value at the blink digit by press [↑].	[↑][↑][↑][↑][↑][↑] [↑][↑][↑]	9. 0 0 0 0				
Press [REZERO] to save setting and exit to next step. "DP" and "00000.0" alternately display		DP / 0 0 0 0 0.0				
Change the position of Decimal Point by press [←].	[←][←]	0 0 0.0 0 0				
OPERATION	Key-in	WEIGHT	ZERO	NET	STABLE	
Press [REZERO] to save setting and exit to next step.	[REZERO]	CAP1 /0 0 0. 0 0 0				
Move the position to edit capacity by press [←].	[←][←][←][←]	0 0 0. 0 0 0				
Select the capacity weight at the blink digit by press [↑].	[↑][↑]	0 2 0. 0 0 0				
Press [REZERO] to save setting and exit to next step.	[REZERO]	d1 / 1				
Press [↑]to select set minimum display figure.	[↑][↑]	5				
Press [REZERO] to save setting and exit to next step.	[REZERO]	CAP2 /0 0 0. 0 0 0				
Move the position to edit according to capacity by[←].	[←][←][←][←]	0 0 0. 0 0 0				
Enter the capacity weight at the blink digit by press [↑].	[↑]	0 1 0. 0 0 0				
Press [REZERO] to save setting and exit to next step.	[REZERO]	d2 / 1				
Press [↑] to select set minimum display figure.		2				
Press [REZERO] to save setting and exit to next step. Select weight unit by press [↑].	[REZERO]	UNIT / kg				kg
Press [REZERO] to save setting and exit to next step.	[REZERO]	CAL00				kg

Press [REZERO] to insure the zero point.	[REZERO]	- - - - - -				kg
		CALSP /2 0.0 0 0				kg
Put weight (e.g. 10kg) on platter. Enter the weight which is used to calibrate by taking the same steps as above.		1 0.0 0 0				kg
Press [REZERO] to take SPAN calibration.	[REZERO]	- - - - - -				kg
Return to weight mode.		1 0.0 0 0			▼	kg

Note:

1): G value entry may be skipped if G calibration inhibit (depends on SPEC23 bit1).

9.976 is the default G value of Shanghai.

2): If calibrate with FS weight, skip enter weight by press [REZERO], the default calibration weight is FS.

3): You had better use more than 1/3 capacity weight to calibrate the full SPAN. If using less 30 % of capacity weight, weight error may be created incidentally.

4): Check to see if the displayed weight is correct when placing 1 / 3, 2 / 3, and full capacity weight.

● 3.2.2. G Calibration (Gravity Adjustment)

Turn on the SPAN SW. (JP1 on Main Board.)

OPERATION	Key-in	WEIGHT	ZERO	NET	STABLE	
Weighing mode.		9.0 0 0			▼	kg
Press [REZERO]	[REZERO]	8 8 8 8 8 8				
Press [←][T][↑] by holding [REZERO]	[REZERO]+ [←][T][↑]	G1/ 0.0 0 0 0				
"G1" and "0.0000" alternately display		G1/ 0.0 0 0 0				
Move the position to edit G by press [←].	[←][←][←][←]	0. 0 0 0 0				
Select the G value at the blink digit by press [↑].	[↑][↑][↑][↑][↑][↑][↑][↑]	8. 0 0 0 0				
Press [REZERO] to calibration and exit to weight mode.		8.0 0 0			▼	kg

Note: This function depends on SPEC23 bit1.

Operational Specification List
   For The Customer - (1 4 1)

SPEC NO.	BIT 3	BIT 2	BIT 1	BIT 0
0	**Auto Power-off function** (for no key operation & weigh operation) 0000 - Auto power-off disable when scale is not in use 0001 - 3 minute 0010 - 10 minutes 0011 - 30 minutes 0100 - 1 hour 0101 - 3 hours 0110 ~ 1111 - Not used			
1	**Buzzer** 0 - On 1 - Off	**Error alarm** 0 - On 1 - Off	**Set point alarm** 0 - On 1 - Off	
2	**Control of LCD Backlight** 00 - Always ON 01 – Always OFF 10 - Auto 11 - Not used		**Stable and weight change > =[10e, RS-232C Standard stream type only output one data** 0 – Yes (V1.13) 1 - No	**Set point type** 0 - % Weight 1 – Weight
3	**RTS/CTS handshaking of RS-232C** 0 - On 1 - Off	**Baud rate of RS-232C** 000 - 1200 bps 100 - 19200 bps 001 - 2400 bps 101 - Not used 010 - 4800 bps 110 - Not used 011 - 9600 bps 111 - Not used		
4	**Stop bit of RS-232C** 0 - 1 bit 1 - 2 bit	**Data length of RS-232C** 0 - 7 bit 1 - 8 bit	**Parity of RS-232C** 00 - None 01 - Odd 10 - Even 11 - Not used	
5	**RS-232C PC protocol** 0000 - Inhibit data transfer 0110 - type S(ICL CS500) 0001 - Standard stream type (Continuous output) 0111~1011not used 0010 - Standard manual type 1100 – Printer GP460Pro (V1.12) 0011 - Standard command type 1101 – Printer LP2844 (V1.12) 0100 - type M(Checkout-Dialog 02/04) 1110 - Printer GP460R or LableDoctor 0101 - type P(Checkout-Dialog 06) 1111 - Printer EPSON TM-U220			
6	**Interval of time out error of RS-232C** 00 - 1 second 01 - 3 second 10 - 5 second 11 - 10 second		**Transmission condition of RS-232C** 0 - Weight stable 1 – Unconditional	**Additional parity code in text of RS-232C** 0 - No 1 – Yes
7	**Tare weight in text of RS-232C** 0 - No 1 – Yes	**Scale No. in text of RS-232C** 0 - No 1 – Yes	**Header Code in text of RS-232C** 0 - No 1 – Yes	**Weight range of data output** 0 – Always 1 – Over 20e
8	**Key operation for tare in POS-weight-mode.** (for checkout Dialog02/04 and Dialog 06 only.) 0 - Allow 1 - Inhibit	**Calculate and check CS, KW validly.** (for checkout Dialog 06 only.) 0 - No 1 – Yes	**STATUS data in text of RS-232C** 0 - No 1 – Yes	**RS-232C Manual type output when weight is 0.** (V1.13) 0 - No 1 - Yes

9	PC send "w" in Standard command mode 0 - Allow 1 - Inhibit（V1.09）	PC send "t" in Standard command mode 0 - Allow 1 - Inhibit（V1.09）	RS232C High speed output when baud rates >=9600 (V1.13) 0 – high speed 1 – low speed	Weight unit after net weight and tare weight in the text of RS-232C 0 - Allow 1 - Inhibit（V1.11）
10	Scale No. Low 4 digit (0000~1111) （V1.03）			
11	Scale No. High 4 digit (0000~1111) （V1.03）			
12	Output RS232 data condition (V1.13) 0 – Set Point ok 1 - Always	External printer print format for LP2844 or GP460Pro 000 - Default Format 001 - Customer Format 1 101 - Customer Format 5 010 - Customer Format 2 110 - Customer Format 6 011 - Customer Format 3 111 - Customer Format 7 100 - Customer Format 4 （V1.12）		
13	Set Point buzzer type (V1.13) 0 – beep between SP 1 – beep outside SP	Total weight printing when weight is zero (V1.13) 0 - Inhibit 1 - Allow	Sending default format to the LP2844 or GP460Pro (V1.13) 0 - Inhibit 1 - Allow	Output data when SPEC 2 bit 1 is enable or using printer (V1.13) 0 - Net weight > 0 1 - Always

For Weight & Measure - (1 4 2)
　　NOTE:　It can only work when the SPAN Switch is on (Enable)

SPEC　NO.	BIT 3	BIT 2	BIT 1	BIT 0
20	Version display when power on 0 - Allow 1 – Inhibit	Type of Decimal point 0 - .(Standard) 1 - ,(Europe)	Start range 00 - ±10% F.S. 01 - ±20% F.S. 10 - ±50% F.S. 11 - ±100% F.S.（V1.02）	
21	Negative weight display mask 0 - Minus gross > 9e 1 - Minus gross Weight	Re-call Last zero data 0 - Allow 1 – Inhibit	GAIN 00 – 16　/*　3mV/V */ 01 – 32　/*　2mV/V */ 10 – 64　/*　1mV/V */ 11 – 128 /* 0.4mV/V */	
22	Weight stability condition 00 - Loose 01 - Normal 10 - Tight 11 – Stringent		G Calibration 0 - Allow 1 – Inhibit	IR mode protected by SPAN SW 0 - NO 1 – YES
23	Manual tare cancellation 0 - Allow 1 – Inhibit	Tare subtraction 0 - Allow 1 – Inhibit	Tare accumulation 0 - Allow 1 – Inhibit	Auto tare clear when rezero 0 - Allow 1 – Inhibit

24	**Digital tare** 0 - Allow 1 – Inhibit	**Priority of Tare Operation** 0 – One Touch Tare Priority 1 –Digit Tare Priority	**Zero tracking when tare** 0 - Allow 1 – Inhibit	**Weight reset when tare** 0 - Allow 1 – Inhibit

25	**Tare auto clear**
	
	0 - Allow
	1 – Inhibit
		Auto clear condition
		
		0 - >= Gross 21e
		     & >= Net 5e
		1 - >=Net 1e &
		    Price not 0
		    (Remote display version set to 1 only)
			Unit price auto clear
			
			0 - Allow
			1 – Inhibit
				Animal Mode
				
				0 - Allow
				1 – Inhibit

26	**Decimal point position on unit price and total price display**
	
	00 - No decimal point for Unit & Total Price
	01 - 2nd digit (0000.0) for Unit,
	     2nd digit (00000.0) for Total Price
	10 - 3rd digit (000.00) for Unit,
	     3rd digit (0000.00) for Total Price
	11 - 4th digit (00.000) for Unit,
	     4th digit (000.000) for Total Price
		Rounding for total price
		
		00 - Rounding
		01 - Truncation
		10 - Cut up
		11 - Not used		

27	**Weight change or remove check of data output** 0 - Change 1 - Remove	**Additional rounding for total price** 000 - No additional rounding 001 - 1/4 rounding (25 step) 010 - Special rounding (5 step) 011 - 5 floor rounding (0-4 -> 0, 5-9 -> 5) 100 - Rounding for 1st digit 101 - Truncate 1st digit 110 - Cut up 1st digit 111 - Not used		
28	**UP key function** 0 – Weight unit convert 1 – Data send （V1.04）	**Re-zero function** 0 - Allow 1 – Inhibit （V1.02）	**Re-Zero range** 00 - ±2% F.S. 01 - ±4% F.S. 10 - ±10% F.S. 11 - ±100% F.S. （V1.02）	
29	**Motion Detection** 000 Set inhibit 001 Weak 010 Little bit weak 011 Standard 100 Little bit strong 101 Strong 110 111 (SP_29_321)（V1.05）			**Internal Count Display** 0 - 15000 1 - 30000 (SP_29_0) (V1.04)
30			**Auto Hold** 0 – Off 1 – On （V1.08）	**Remote display indicate type** 0 - Icon 1 – Triangle (V1.08)

5. Error Message

➢ **Error Message Display**

Please following the solution when you see the error message

ERROR	Probable Cause	Solution
8 8 8 8 8 8 (Lock-up)	Zero-point is out of range.	Need to re-calibrate the scale.
O F	When displayed weight exceeded capacity +9d, or something is on the platter when power on.	Remove the item on the platter.
U F	When displayed minus weight >= 9d.	REZERO or ON/OFF again.