



DWP-102N(P)

Set Point Weighing Indicator

User's Guide

PLEASE READ THIS MANUAL VERY CAREFULLY BEFORE
ATTEMPT TO OPERATE THE INSTRUMENT

April 2012

Specifications subject to change without prior notice

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10. DAILY CARE AND MAINTENANCE

- Clean this unit with a soft, damp cloth. If necessary, use a mild detergent in water,
- Do not use any harsh, abrasive material, acetone, volatile solvent, thinner or alcohol for cleaning,
- Verify the accuracy of this unit periodically. Re-calibrate this unit if necessary. In some countries, calibration requires authorized / qualified agent. Contact your dealer for more information,
- Store this unit in a dry and clean place,
- Recharge battery before and every 2 months during long time storage.

9. ERROR CODES

Error Code No.	Description
Err 1	Time value error
Err 2	Date value error
Err 3	Logic error. LO limit is higher than HI limit (and HI is not = 0)
Err 4	Not sense the loadcell signal
Err 5	Exceed maximum power on zero range
Err 6	Exceed maximum manual zero range
Err 7	Tare operation error
Err 8	Offset out of range / unstable during power on
Err 9	ERROR IN PERCENTAGE FUNCTION. INPUT VALUE = 0 or less than 50e
--oL--	Overload (Gross weight is more than Max plus 9d)
UndEr	Under load (Gross weight is less than minus 20d)

1. INSTALLATION

Because of metrological legislation, installation/some metrological parameter settings are limited to be done by authorized personnel only. Do not attempt to change any of the built-in metrological parameters. Contact your dealer for more information and technical assistance.

To ensure performance accuracy, do not use the instrument in where or when the environment condition falls beyond as those listed on **SPECIFICATIONS**.

Do not attempt to open the instrument, no user serviceable parts inside.

2. SPECIFICATIONS

2.1 GENERAL SPECIFICATIONS

Housing	DWP-102N plastic housing with s s bracket
Power supply	110V 60Hz built-in rechargeable battery DWP-102N 6V4AH.
Display	6 digits. 1' LED and 9 status indication
Keys	0-9 numeric and function combined keys and TARE,ZERO,CE keys
Max input	15mV
ADC	$\Sigma - \Delta$
Interface	2 ports RS-232 Output
Stabilization time	1 second typical
Operating temperature	5°C -35°C
Load cell drive voltage	5V/ Max 150mA
Other function	Real-time clock and units conversion of kg ,lb, oz, g
Load cells	8 x 350 Ω Load Cells, or 16 x 700 Ω Load Cells
Load Cell Connection	Supports 4-wire and 6-wire Load Cell Connections

7.2.2.2 Piece count function with check weighing

TIME	17:48:07
DATE	14.04.2009
NET	500.0kg
UNIT.W	1001.04 g
COUNT	499PCS
HIGH	1000PCS
LOW	500PSS
LOWER	THAN LIMIT

7.2.2.3 Percentage function with checkweighing

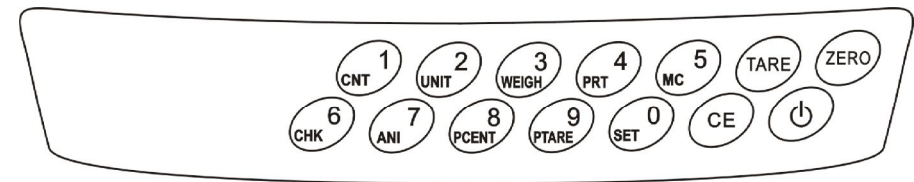
TIME	17:51:09
DATE	14.04.2009
NET	500.0kg
REF %	200.0kg
PERCENT	250.00kg
HIGH	1500.0 %
LOW	750.0 %
HIGHER	THAN LIMIT

TIME	17:39:05
DATE	14.04.2009
NO.	5
NET	200.0kg
TARE	0.0kg
GROSS	200.0kg
TOTAL	3799.0kg
HIGH	2000.0kg
LOW	500.0kg
LOWER	THAN LIMIT

TIME	17:39:15
DATE	14.04.2009
NO.	6
NET	500.0kg
TARE	0.0kg
GROSS	500.0kg
TOTAL	4299.0kg
HIGH	2000.0kg
LOW	500.0kg
ACCEPT	

TIME	17:39:34
DATE	14.04.2009
NO.	7
NET	2500.0kg
TARE	200.0kg
GROSS	2700.0kg
TOTAL	6799.0kg
HIGH	2000.0kg
LOW	500.0kg
HIGHER	THAN LIMIT

3. KEYS, DISPLAY AND CONNECTIONS



1.CNT KEY

Press this key to enter counting function

Press this key as next parameter when setting

2. WEIGHT UNIT KEY

Press this key to shift among various weight units.

Press this key as previous parameter when setting

3. WEIGH KEY

Press this key to back weighing status after counting, checking, animal weighing, percentage function

4. PRINT KEY

Press this key to print the results to a computer or a printer through the RS-232 output. according to the parameter setting whether accumulate or not when printing

5.TARE KEY

Press this key to tare off the weight of a container.

Press this key to enter parameter setting when self-checking after power on

Press this key to confirm the parameter option

6. ZERO KEY

Press this key to set weight displayed to zero when an empty scale has drifted away from a true zero reading.

Cancel or quit from the operations

6. CHECK KEY

Press this key to start check weighing function and to enter value for HI and LO limit.

7. ANI KEY

Press this key to enter animal weighing function

8. PERCENTAGE KEY

Press this key to enter percentage weighing function

9. PTARE KEY

Press this key to enter pre-set tare value

10. MC KEY

Press this key to recall total stored transactions.

11. CE KEY

Press this key to clear value entered.

12. NUMERIC KEYS

Numeric keys 0 ~ 9 and decimal key.

13. ON/OFF

Power on /off the indicator

14. CHECK SYMBOLS

- HI = Weight reading is higher than the HI limit entered,
- OK = Weight reading is in between than the low and HI limits entered,
- LO = Weight reading is lower than the LO limit entered.
-

15. TARE INDICATOR

Visible when the tare function is in effect. Weight reading shown is net value

16. STABLE INDICATOR

Visible when weight reading is stable.

17. ZERO INDICATOR

Visible when instrument is at true zero weight status.

18. WEIGHT UNIT

LED indication as below:

kg = "kg" on, lb = "lb" on

oz = both "kg" and "lb" on; g = neither "kg" nor "lb" on

19. CHARGE INDICATION

Flicker when charging ; invisible when full of charge

7.2.1 Standard Output Print Format

7.2.1.1 Weighing function

7 lines will be transmitted as below: -

TIME	15:21:00
DATE	14.04.2009
NO.	1 (First transaction added to memory)
NET	500.0kg
TARE	0.0kg
GROSS	500.0kg
TOTAL	500.0kg (Total accumulated net weight)

7.2.1.2 Piece count function

TIME	15:30:44
DATE	14.04.2009
NET	300.0kg
UNIT.W	599.949 g
COUNT	500PCS

7.2.1.3 Percentage function

TIME	15:39:13
DATE	14.04.2009
NET	699.0kg
REF %	200.0kg
PERCENT	350.00%

7.2.1.4 Animal weighing function

TIME	16:33:42
DATE	14.04.2009
HOLD.W	496.0kg

7.2.2 Standard Output Print Format of Check weighing Mode¹⁸

7.2.2.1 Weighing function with check weighing

¹⁸ Standard output print format of check weighing mode does not support animal weighing function.

7. RS232 DATA OUTPUT MODE

7.1 AUTO WEIGHT FORMAT STRING

Data is transmitted in ASCII code. Data format is listed on below table.

DATA BIT	DESCRIPTION
1~2	MOTION STATUS US = UNSTABLE ST = STABLE
3	COMMA SEPARATION
4~5	NET/GROSS NT = NET WEIGHT GS = GROSS WEIGHT
6	SIGN (Sign of weight reading) Positive = space. Negative = minus (-)
7~13	WEIGHT VALUE 7-character string containing the current weight including location of decimal point. If there is no decimal point, then the first character is a space.
14	COMMA SEPARATION
15~16	UNIT kg = kilogram lb = pound oz= ounce g=gram
17	Cr
18	LF

7.2 STANDARD PRINT OUTPUT FORMAT

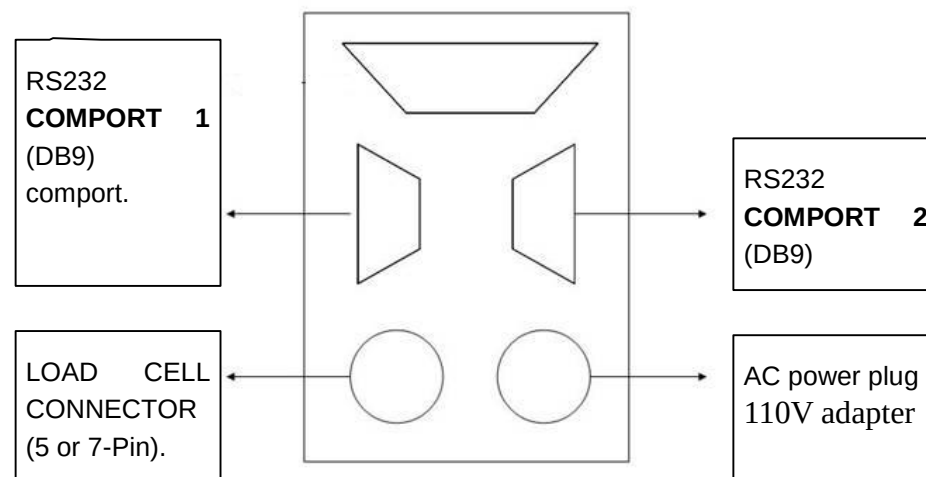
When the manual print or automatic print is triggered, depends on the setting, the standard or the pre-defined custom output print format will be transmitted.

BACKSIDE INSTRUCTION

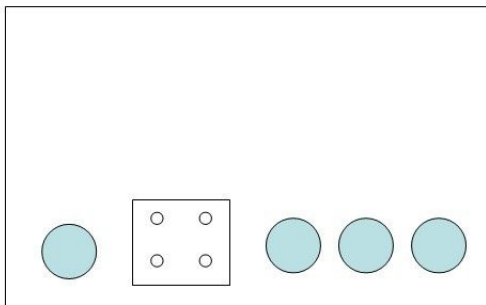
DWP102N:

Control Output Terminal is transmitted here(optional). The DB-25 connector of the external relay board (if ordered) should be plugged in

	DB25
External DC -ve Input :	Pin 25
Control Output #4	Pin 1
Control Output #3	Pin 4
Control Output #2	Pin 8
Control Output #1	Pin 11
External DC 12V +ve Input	Pin7



DWP102S:



DWP-102S use water proof joints which need to get through the round joints and connect onto the PCB

The recommend (from left to right):

- 1) power plug 2) Com2 RS232
- 3) Com1 RS232 (RS485 optional) 4) Loadcell

LO) will then be displayed with or without buzzer¹⁷.

If a relay board is installed, the comparison results are also sent through the relay output at the back of this instrument.

Follow the below steps to trigger check weighing mode: -

- a. During normal operation (of a function), press **[CHECK]**.
- b. The current HI limit is displayed with the **Hi symbol** on, press **[TARE]** to confirm, or
- c. Enter a new HI limit through the numeric keys and then press **[TARE]**,
- d. Display current LO limit with the **Lo symbol** on, press **[TARE]** to confirm, or
- e. Enter a new HI limit through the numeric keys and then press **[TARE]**
- f. Check weighing function is now enabled. The check result is shown by one of the HI/OK/LO symbols,
- g. The same result will be sent to the relay output (if ordered) together with the buzzer signal (if ordered).

NOTE: -

1. For normal comparison, set both HI and LO limits,
2. To check only if result is lower or equal to LO ($\text{result} \leq \text{LO?}$), set HI limit = 0,
3. To check only if result is higher or equal to HI ($\text{result} \geq \text{HI}$), set LO limit = 0,
4. To check if result is equal to a specified value, set both HI limit and LO limit = the specified value

To quit check weighing mode, set both HI and LO limits to zero.

6.11. Quick setting

Press [SET] to get quick setting parameter ,Press **[TARE]** to enter and **[CNT]** and **[UNIT]** to shift : **PARA,CHECK,ANIMAL,RS232, and RECHARGE** : To check the currency when charging(mA)

Count : Display the calibration count value, and the parameter set count value, (press**[ZERO]**or **[TARE]** for 3secs to exit)

¹⁷ Set CHK Bp to obtain the required buzzer output configuration.

- **FLt 2** = Normal (For human weighing, select this parameter),
 - **FLt 3** = Slow
- h. Display last weight release variation value (**rE**) applied. Under the animal weighing function, this instrument will hold a weight result until a pre-defined weight release variation value is achieved,
- i. Select the preferred weight release variation value by pressing **[CNT]** or **[UNIT]** key. 5 auto release range values are available: -
- **rE 1** = auto release disabled,
 - **rE 2** = auto release when weight varies $\geq 2\%$ of rate capacity
 - **rE 3** = auto release when weight varies $\geq 5\%$ of rate capacity
 - **rE 4** = auto release when weight varies $\geq 10\%$ of rate capacity
 - **rE 5** = auto release when weight varies $\geq 20\%$ of rate capacity
 - Press **[TARE]** to enter,

Weighing Animal

- a. Get animal on platform,
- b. This instrument will calculate the mean weight of an animal or a group of animals. The result obtained will be displayed.
HOLD (charging) INDICATOR appears to indicate that this weight value is being held (frozen)¹³, and at the same time, indicator sounds 2beeps
- c. Get other animals on platform in case more animals have to be weight in the same transaction,
- d. An updated weight will be calculated and displayed¹⁴ as above step b.

Press **[Weigh]** back weighing function.

6.10 CHECKWEIGHING MODE^{15 16}

This instrument is equipped with check weighing mode. Check-weighing mode is used to compare the value obtained meets with the preset limits (high and LO limit) set to this instrument. The comparison result (HI, OK or

¹³ When weight value is being frozen, weight unit conversion is not possible.

¹⁴ Provide that extra weight added fulfill the weight release variation value listed on **6.8** step g.

¹⁵ Check weighing mode will not operate when weight is less than 20d (or 20d₁ for dual range).

¹⁶ Set also CHK Bp for desired Check weighing buzzer output.

4. GETTING STARTED

In order to obtain an accurate weighing result, the weighing platform, (**hereinafter referred as platform**) must be placed on a strong and level surface. Avoid using the platform and this instrument (**hereinafter collectively referred as scale**) in environment where excessive wind flow, vibration and extreme temperature change exist

General Warning: -

- **The instrument is not an explosion proof device.**
- **The instrument is not a water proof device.**
- **Do not open the instrument, no user serviceable parts inside. Always contact your dealer for service.**
- **The instrument not to be subject to shock, excessive vibration or extremes of temperature (before or after installation).**

4.1 BUILT-IN RECHARGEABLE BATTERY

The instrument is equipped with a built-in rechargeable battery. Before first time use, recharge it for at least 8 hours to ensure the best battery performance.

4.2 POWER ADAPTOR

Before plugging in the power adaptor, check and make sure the input voltage of the adaptor matches with output voltage of the electricity outlet. If not, contact your dealer immediately.

4.3 CONNECTING OTHER DEVICES¹

4.3.1 Connection with Weighing Platform (Load Cell)

Connect this instrument with a weighing platform (load cell) through load cell connector located at the back according to the below pin assignment table.

4-wire load cell or junction box is used as default, 6-wire load cell is optional

LOAD CELL CONNECTOR PIN #	ASSIGNMENT
1	EXCITATION +ve
2	EXCITATION -ve
3	Shield
4	SIGNAL -ve
5	SIGNAL +ve

4.3.2. Connecting RS232 to computer, printer

RS232 COMPORT ON INSTRUMENT: 2 = RXD ; 3 = TXD; 5 = GND

5. INITIAL SETUP

5.1 INTERNAL SETTINGS

Application parameters can be checked and set through internal functions. Refer to **5.4** for description of all internal functions.

5.2 HOW TO ENTER AND SELECT INTERNAL FUNCTION

Follow the below steps to enter and select desired parameter of an internal function.

- Turn this instrument off and on again,
- Press **[TARE]** during countdown,
- Display **RS232**,
- This instrument is now in internal function,

5.3 KEY FUNCTION DURING INTERNAL FUNCTION MODE

- **[TARE]** = Go to internal function during power on countdown, or Enter, save and return,
- **[ZERO]** = Quit without saving,
- **[1 CNT]** = Go next,
- **[2 UNIT]** = Go previous,
- **[CE]** = Clear,

be entered through numeric keys, then ignore this step,

- Press **[PCENT]**;
- Press **[TARE]** to enter,
- Reference mass is obtained by either one of the below: -
 - By applying the reference mass is applied on step c, or
 - In case there is no reference weight applied to platform, the last reference mass used will be display. To confirm press **[TARE]**
- This instrument is now ready for percentage calculation. Any other weight applied to the platform will be displayed as a percentage of the reference mass.

Press **[Weigh]** back weighing function.

6.9 ANIMAL WEIGHING FUNCTION^{9 10 11}

Follow the below steps to enter **Animal Weighing Function**: -

- select the desired weight unit,
- If a container will be used, place this container to platform and press **[TARE]** to tare off the weight of it.
- Press **[ANI]** to **Animal Weighing Function (Ani)** appears,
- Now is ready to weighing animal
- Display **Ani. AUTO INDICATOR** appears to indicator Animal Weighing Function is in effect.

Set the Animal weighing parameter .

- Press **[SET]**, Display **RS232**, shift to **Animal**; Press **[TARE]** to enter
- Display last filter (**FLt**) value applied. Select the preferred filter value¹² by pressing **[CNT]** or **[UNIT]** key, 3 filter values are available: -
 - **FLt 1** = Fast

⁹ Animal weighing function of this instrument should not be used for trade purposes,

¹⁰ Animal weighing function does not support memory accumulation (M+) function.

¹¹ Animal Weighing function will not operate when weight is less than 20d (or 20d₁ for dual range).

¹² It is a trade off between motion filtering and accuracy. The faster the filter, the shorter the amount of time over which the averaging is taken. The slower the filter, the longer averaging time will take before a reading is displayed. It is recommended that FLt 3 should be applied first. Should situation requires, change to a lower FLt number.

- Animal weighing
- Check weighing (HI/LO check)

6.7 PIECE COUNT FUNCTION⁶

Follow the below steps to enter **Piece Count Function**: -

- select the desired weight unit,
- If a container will be used, place this container to platform and press **[TARE]** to tare off the weight of it,
- Press **[CNT]** to enter counting function
- Enter sample quantity through numeric keys,
- Place samples (with same quantity) on platform then press **[Tare]**,
- Now the indicator display the sample quantity
- Go to sampling process⁷ before start counting.
- Place the goods which desired to counting

Shift among Quantity, Average Piece Weight and Weight Info

- Press **[UNIT]** to shift among quantity, average piece weight and weight info,
- Quantity Display format = numeric numbers & PCS (e.g **1000 PCS**) ,
- Average piece weight display format = numeric numbers & weight unit & / (slash) & PCS (e.g. **499.960g/PCS**) ,
- Weight display format (when Piece Count Function is in effect) = numeric numbers & weight unit & PCS (e.g. **500 kg PCS**).

Press **[Weigh]** back weighing function.

6.8 PERCENTAGE FUNCTION⁸

Follow the below steps to enter **Percentage Function**: -

- select the desired weight unit,
- If a container will be used, place this container to platform and press **[TARE]** to tare off the weight of it,
- If a reference mass (as the 100%) is available, apply it on platform.

NOTE: - If reference mass is not available or the reference mass will

⁶ Piece Count Function Mode does not support memory accumulation function.

⁷ Before this instrument starts counting, the average piece weight must be determined. The process of getting the average piece weight is called sampling.

⁸ Percentage Function does not support memory accumulation (M+) function.

5.4 INTERNAL FUNCTION TABLE					
FUNCTION SHOWN	TO CHECK AND SET		PARAMETERS/NOTE DEFAULT=**		
	what connection		**LC	DJB	REMOTE
	NOTE :LC=When indicator connect to loadcell DJB=When indicator connect to digital junction box REMOTE= When indicator connect to another indicator used as a remote display in version A , only connect to loadcell is available				
	Port 1 RS232 (R S485 optional)		below parameter is same of port 1 and 2		Port 2 RS232
	Serial Mode (Set Output Mode)	**PC (Computer) (NOTE A)	manual (Printer) (NOTE B)	AUTO1 (NOTE C)	AUTO2 (NOTE C)
	Baud/Set Baud Rate)	1200 57600	2400 115200	4800	**9600
	NOTE A:-if PC(output to computer) is selected,set also →protocol→int				
	protocol	**1	2	3	4
	→int=time delay interval between each data transmission. 4 parameters are available for selection 0=max transmission speed **0.5=0.5 second time delay interval between each transmission 1.0=1.0second time delay interval between each transmission 1.5=1.5second time delay interval between each transmission				
	NOTE B:-If Manual(output to printer),set also →AC→Stab Cont→Print Form→label→Copy →Copy=number of copy to be printed.8 parameter are available Copy 1=Send 1 copy **Copy 2=2 copies ... Copy 8=Send 8 copies				
RS232	→ Stab Cont=Stable Control				

**ON(Output to printer is sent only when weight is stable) → Printer Form=Minimum weight to be printed.21 parameters are available: 0d(Minimum weight to be printed disabled 1d(no printout if weight is below 1d) ... 20d(no printout if weight is below 20d) Refer to SPECIFICATIONS for d value or contact your dealer for more information.			
→ Label	lab 1=print in Horizontal format		lab 2=print in Vertical format
	MODE 1		**MODE 2
→ ACC MODE	MODE 1= Accumulate and print at the same time.		
	MODE 2= Accumulate but only print after payment and change		
NOTE C:if AUTO1 is selected, send out signal once automatically when weight is put on scale NOTE D:if AUTO2 is selected, send out signal once automatically when weight is moved away from scale NOTE E:if CMD is selected, allow PC to send out command to indicator			
	If two ports set to manual(printer),only port 1 will work		
ADCnt	Internal Code	Press<TARE> to zero the offset value and to observe the span value of exact load added	
TIME	Time	HH/MM/SS	
DATE	To change time,enter a new time through numeric keys then press <TARE>		
	Date Format & Date Value	** DD/MM/YY	YY/MM/DD MM/DD/YY
BK	To change date,enter a new value through numeric keys then press <TARE>		
	backlight Mode	selected: 1 to 8 (8 is most brightness)	
POWER	Auto Power Off Time(Minutes)	** OFF	1 / 2 / 5 / 10 / 15
Key bP	Instrument remains powered on when powered by extern power adapter		
	Key pad Bluzer	OFF	**ON
CHK bP	check buzzer mode		out off
		in=buzzer when weighing value is within range out=buzzer when weighing value is out of range off=buzzer disable	
	kg	g	Lb oz

of d. While this multiple factor must be an integer. Thus, in case the exact tare weight is not equal to the multiplied value, maximum possible error of the preset tare function is $\pm 0.5d$.

- Manual tare is possible when preset tare is in function.
- Preset Tare is also governed by Repeated Tare

6.5 MEMORY ACCUMULATION FUNCTION

6.5.1 To Accumulate a Transaction to Memory^{2 3}

- Press **[Prt]**⁴ to save and accumulate data of current transaction to memory,
- This instrument returns to normal display status after 2 seconds,
- Repeat **a** to **c** for subsequent transactions⁵,

NOTE: -

- Unstable weight will not be accumulated to memory. If **Prt** is pressed when weight is unstable, this instrument will reject this command and response with beeps.

6.5.2 Memory Recall and Clearance

- Press **MC** to recall total accumulated weight from memory,
- After **MC** is pressed, This instrument displays “**≡ n**” (**n** means the number of transactions accumulated) follow by the total accumulated weight stored in memory,
- At this point: -
 - Press **[ZERO]** to quit, or
 - Press **[ZERO]** followed by **[Weigh]** to clear memory and return operation.

6.6 FUNCTION MODES

Besides weighing function, this instrument is equipped with the below supplementary function modes: -

- Piece Count,
- Percentage,

² Memory Accumulation Function support weighing function only.

³ All data stored will be erased when this instrument is powered off.

⁴ or press **[PRINT]** if RS232 –Manual-ACC = ON

⁶ below how many d, can accumulate again

When a container is used, follow the below steps to tare the weight of the container off to get a net weight result.

- Remove all loads from platform,
- Make sure that the **ZERO INDICATOR** is on. If not, press **[ZERO]**,
- Place container on platform,
- Press **[TARE]** ,
- TARE INDICATOR** appears to indicator tare is in effect and weight displayed display is net result. To cancel tare effect, remove all loads from platform and press **[TARE]** ,
- TARE INDICATOR** not on. to indicator tare effect has been removed and weight displayed display is gross result.

6.4.2 Repeated Tare

When M-tare is set to Mode 1, this instrument does not permit multiple tare operation. Tare effect can only be cancelled when container is removed and gross weight = zero.

When M-tare is set to Mode 2, this instrument will permit multiple tare operations provided that both of the below requirements are met: -

- The tare operation does not permit a reduction of the value of the tare;
- The tare effect can only be cancelled when there is no load on the platform.

6.4.3 Preset Tare

A pre-determined tare weight can be entered via keyboard.

During normal operation, press **[PTARE]**, enter the pre-determined tare weight through numeric keys ,then press **[TARE]**to confirm. This pre-determined tare value will be deducted. "NET" and "PT" indicator will be shown on
To cancel the preset tare effect, remove all loads from platform then press **[ZERO]**.

NOTE: -

- The pre-determined tare weight entered must be equal to the multiple

UNIT	Press <TARE> to shift every unit ON or OFF when weighing status Note that the LED indication light as follow: 1) "kg" on = kg ; 2) "lb" on = lb; 3) both "kg" and "lb" on = oz 4) neither "kg" nor "lb" on = g				
Filter	filter speed	seled 1 to 6(1 for bad working environment where vibration, wind flow, 6 for good working environment where wind and vibration have no affect)			
CAL	calibration parameter setting	restricted functions which may request a password or hardware key to access. These functions are usually for dealer and authorized personnel only and all settings these functions are monitored and recorded. Do not change any setting of these functions to			
To access below function, either: 1) short circuit the enable pins of the ADJ located on main board with a jumper, or 2) enter a correct password when "P" appears					
C-Unit	Calibration Weight Unit	**kg	lb		
DESC	After changing calibration weight unit, Re-calibration after changing weight unit				
CAPA	Decimal point	0	0.0	0.00	0.0000
Inc	Capacity	Set max capacity of scale			
Auto-Z	devision	Set scale devision			
P-Zero	Auto zero tracking speed	0.25/ **0.5 / 1 / 1.5 / 2 / 2.5 / 3.0 / off (d/sec)			
K-Zero	Initial Zero Range(%)	1 / 2 / 5 / **10 / 20 / 50 / 100 / off			
	Manual Zero Range(%)	1 / **2 / 4 / 5 / 10 / 20			
Filter	filter speed	seled 1 to 6(1 for bad working environment where vibration, wind flow, 6 for good working environment where wind and vibration have no affect)			
G1	Gravity Factor of Calibration Place	**g, 7940	● For advance dealers only ● Voided if recalibrated		
G2	Gravity Factor of Calibration Place	**g, 7940			
Linear	Linearity Compensation On/Off	**ON	OFF	ON=Enable(Recommended) OFF=Disable	

U-CAL	User Calibration	Suggested Calibration load > 50% of Max
L-CAL	linearity Calibration	It is used to create new Linearity compensation co-efficient . Before calibration, Set Linear=ON ,and then complete all calibration steps for zero, LD1 and LD2 Suggested Calibration Load: LD1=1/3 of Max LD2=Max
M-tare	repeated tare	Mode 1= Mode 1=repeated tare unavailable **Mode 2
Count	calibration parameter setting way	Mode 2=repeated tare available count
PASS	password setting	will increase count number when power on indicator jump
Reset	reset parameters	need jumper to set calibration parameter Enter new password for calibration parameter setting Reset all parameter to initial

6. INSTRUCTION FOR USE

6.1 POWER ON

Powered on this instrument, it will: -

- Display software number and revision (if any)
- Display all display segments,
- This instrument is now ready for operation.

6.2 START WEIGHING

- If zero weight cannot be obtained when unloaded, press **[ZERO]**. After **[ZERO]** is pressed, the **ZERO INDICATOR** will appear. Refer to **SPECIFICATIONS** for maximum zero range,
- Always place an object onto platform gently. Excessive force applied to platform may cause damage to the weight sensor,
- The weight of the object is displayed on this unit automatically,
- It is a good practice to remove all loads from platform after weighing. It will prolong the life of the weight sensor.

6.3 ABOUT WEIGH UNIT CONVERSION

Depends on the internal settings, this instrument supports kg , g, lb and oz
And can convert when weighing status by the setting of **UNIT(on)**

When a 3 or 4 place (0.000 or 0.0000) decimal place is selected, reading in g is possible during normal operation by the setting of **UNIT(on)**

The weight unit employed before power off will be employed when this instrument is turned on again.

6.4 TARE OFF THE WEIGHT OF A CONTAINER

Tare function is used to temporarily set the scale to zero (such as cancelling the weight of a box or a container) in order to get the net weight result

6.4.1 Manual Tare