# KILOTECH

# **Operation manual for Washdown platform scale**

# Model: KWD 1000 Series

# **FEATURES:**

6 key keypad washdown scale to meet IP65 regulation with 1" high backlight black LCD display accuracy up to 1/7500 auto zeroing and tare function kg/lb unit weight conversion overload protected load cell low power indication battery operation, AC/DC

# **Before Operation:**

- 1. Place the scale on a stable surface.
- 2. Adjust four feet to center of the bubble on the scale.
- 3. Avoid hot sunshine directly on the scale or near the exhaust port of ventilating system.
- 4. Please prevent from getting wet and direct wash the scale, if gets wet please wipe it dry. Always keeps scale cleaning.
- 5. Keep it away from high temperatures and damp conditions.

# **Description of power supply:**

- 1. Power switch: it is located on indicator right bottom side.
- 2. Charging instruction:

Power supplies: DC 6V/4.5A internal rechargeable battery.

Power consumption: about DC 20mA, with backlight about DC 40mA.

Low battery: there is a round lamp on left side of the screen. When the lamp flashing, the battery needs recharging.

# Note:

- 1. The scale is available used lasting over 150 hours. In order to keep sufficient power please recharge it every day to prolong battery life.
- 2. when do recharging, please don't share power with other equipment and avoid electromagnetic interfering from other device.

- 3. If the machine will not be used for long time. The scale must be recharged (the internal battery) every 3 months. When it is used, please recharge scale before using.
- 4. When screen of indication lamp showed red, which means in charging.
- 5. When screen of indication lamp showed green, which means charging finished.

# Symbol of display:

- 1. display resolution: 1/1600 ~ 1/30000
- tare : empty loading, container weight key-in.
  ∃ low battery indication.
- 3. HI/Lo : High weight and Low weight mode.
- 4. N.W. : net weight mode.
- 5. G.W. : gross weight mode.
- 6. ZERO : zero mode.
- 7. lb : unit weight at pound.
- 8. kg : unit weight at kg.

#### Available capacity and division:

<b>Resolution</b>	<u>Capacity</u>		<u>Division</u>
1/3000	60 kg	20 g	
1/3000	150 kg	50 g	
1/3000	300 kg	100 g	

# **Keypad Function:**

1. ZERO (+): a)Press this key to return the display to "0" reading.

b)Press this key to deduct the empty container weight.

- c)When performing as setting functions: Use this key to increase digits (0-9)
  - to your required value during calibration.
- 2. kg/lb : Unit weight conversion (kg /lb or g/oz)
- **3.** HI/LO : a)Preset weight key to check weighing function.
  - Place the desired weight value on platform.
  - Preset HI/LO key to activate the preset value.
  - When a weight is placed on platform and meets or exceed the preset value set, a beep sound will occur to notify the operator.
  - To clear preset alarm function, press HI/LO key again when the display reads '0'.

- Method: press HI/LO key to display LO then key-in lower weight, press HI/LO key again when displays HI then key-in high weight value, while finished press ENTER. When loading is reached the setup range, it will be a beep sound.

b)When perform as setting function: use as a set up key.

- 4. NET/GROSS : when use TARE key to convert net weight or gross weight function. Or perform as setting function: use this key as right movement key during
  - → calibration.
- 5. TARE : To deduct the weight of container.
  - 1. Ensure that there is no weight on the weighing platform.
  - 2. Place an empty container on the scale platform
  - 3. Press TARE key to deduct the weight of the empty container.
  - 4. Place a weight in the container to obtain the net weight of the item.
  - 5. To clear the tare function, simply press the TARE key again.
  - 6. The Tare indicator light is ON when it is activated.
  - 7. The Tare range is from capacity 0kg to the max. capacity.

6. ENTER : when finish Hi/Lo setting, press ENTER key to confirm.

#### **Backlight function setting:**

1. press TARE lasting 3 seconds, when displays 0 release it. Now is at without backlight function. (originate setting)

2. press HI/LO lasting 3 seconds, when displays 1 release it. Now is to setup with backlight function. (heavy power)

3. press MODE lasting 3 seconds, when displays 2 release it. Now is to setup when scale loads it on , will be auto-backlight. When remove it, will be no backlight.

# Calibration

The scale is being calibrated before delivery, please do not calibrate without consulting to the seller to avoid any damage.

- 1. Find the J8 jumper to switch to'ON'. Press HI/LO key and turn on the power at same time after 10 seconds the window shows P6, release it.
- When displays P6, The screen will display some figures backward, about 20 seconds later displays originate calibrated value; if needs to change the value, you may press → (right movement key) and + (increase key) to adjust the value to match your weighing standard's value.
- 3. After adjusting the value, place the weighing standard on scale, when stable press HI/LO to

displays P 8 about 5 seconds later there'll be "pi-pi" sound or indicator lights on/off which means the calibration is done and the scale should display same value as the weighing standard. If there's difference, press HI/LO key again till no any difference.

4. After above steps are finished, please switch to 'off'. Then turn off power and turn on again.

**Special Attentions:** 

- Try to use maximum (full) capacity weighing standard to calibrate to avoid any difference, or else not less than 1/6.
- Do not use weighing standards beyond maximum capacity to avoid damage.
- Keep the scale stable during calibration.

# Zero Point Value Displayed

- 1. When turn on scale, the zero value is showed before displayed 0kg, it must be less 710000.
- 2. Or you may press ZERO key 2 seconds, the zero point value will be displayed, The value range is about 300000 ... 500000. You may re-press ZERO key twice to restore the displayed value.
- Zero value range is best on 40000 ~ 470000, up to two multiple of max. capacity. (ex. A max. capacity scale 30kg, load 30kg standard and press ZERO you may load another 30kg standard, there might be with difference (about 1 to 4 divisions) which is to prevent improper loading to raise the zero value or unable to reach max. capacity situation.
- 4. The difference between No loading and full loading is at 1mV/V, best is at 200000. R8=150 Ohm, R9, R10=18 K ohm, Y1=40 MHz, A/D / 2, 1 mV/V

ERROR MESSAGE / GET RID OF THE PROBLEMS.			
ERROR MESSAGE	HOW TO GET RID OF THE PROBLEMS		
Show instability	Increase "PL" and "PH" value; raise stability, but the speed of display become slowly.		
No loading but with value	Modify "P1" change to 00~99, let the scale remain "0",but when at small weight is unable to read.		
Calibrate do not have pi-pi sound warning	Put weight standard on the platform, no any pi-pi sound warning after 10 second, means load cell signal (s+,s-) is wrong installation		
Can not turn on power	Check battery if electric current too low		
Charge indication do not light	Check power cord whether fall or fuse burned.		

# ERROR MESSAGE / GET RID OF THE PROBLEMS.

DISPLAYED	HOW TO GET RID OF THE PROBLEM	
OL	(1) Means load cell disconnect	
	(2) Loading weight is over than standard capacity.	
OL	Without load cell signal output, replace new one.	
PPP1	Means load cell signal output(s+,s-) is connected opposite.	
PPP2	Means display resolution is bigger than 1/30010, you may setup but reading is unstable, you may raise PL or PH value to improve it.	
PPP3	Means during calibration to forget loading standard, or used weight standard capacity is less than 1/6 which cause load cell output voltage is too small and with big difference in calibration.	
ERR A	Means use weight standard too heavy in calibration or initial zero value is too high.	

1. When indicator show "0.000" and continuing twinkle, it means the battery needs to be charged

<REMARK> Press any key to stop twinkle warning, but when last digit may continuing twinkle to remind low power, if do not recharge, the scale may use only 3~5 hours.

- 2. If show "LLLLL", it means into battery protecting program. User needs to recharge before use.
- 3. Do not display or display is abnormal, it means the battery needs immediately to be charged for keeping the long life.

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