

## MK Lab

# **MKL SERIES**

MKL-W

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#### A, August 2022

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## **1** NOTICES AND CAUTIONS

#### **1.1 OPERATION CAUTIONS**

**1.1.1.** The indicator can be cleaned using a damp cloth but avoid soaking and cleaning directly with water.

**1.1.2.** In case that the scale does not return to zero position, please press [ZERO] key, the auto zero tracking function will set zero. If not, then please power the scale off and on again to set a new zero point.

**1.1.3.** If a mobile phone or wireless instrument is being used very nearby to the scale, the display may be disturbed but should return to normal status. If not, please restart.

**1.1.4.** The load should not exceed the maximum capacity in order to prevent it from damaging the scale.

#### **1.2 CHARGING NOTICES**

**1.2.1.** The indicator can use a 5V DC adaptor or USB socket with Type C connector cable.

**1.2.2.** When the voltage of lithium battery is below 3.5V, the display will show "L-bAt" with an alarm, which means the battery should be recharged immediately to avoid over discharge.

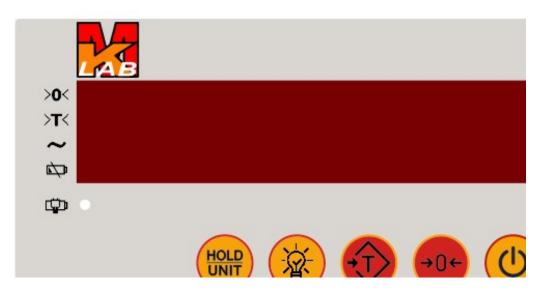
**1.2.3.** When recharging, an LED appears lower left of the display in red. When fully charged it will turn green.

**1.2.4.** If it is found that the scale cannot be used for a long time after charging, the battery is damaged and should be replaced by the user.

#### 1.3 OVERLOAD ALARM

When the load exceeds the maximum weight + 9 d, there will be a "beeping" warning and the display will show "--- oL ----". Please remove or reduce the load immediately.

## 2 DISPLAYS AND KEYS



(fig 1)

KEY	FUNCTION
[ON/OFF]	ON/OFF KEY
→0+ [ZERO]	IN WEIGHING MODE, PRESS TO SET ZERO. IN SETTING MODE, PRESS TO SCROLL THE SETTINGS.
(TARE)	IN WEIGHING MODE, PRESS TO TARE. IN SETTING MODE, PRESS TO SET PARAMETERS.
[BRIGHTNESS]	IN WEIGHING MODE, ADJUST THE BRIGHTNESS OF THE LED DISPLAY.
HOLD UNIT [HOLD/UNIT]	IN WEIGHING MODE, SHORT PRESS TO HOLD AND LONG PRESS TO CHANGE UNITS.

## **3** OPERATION INSTRUCTIONS

#### 3.1 POWER ON

Turn on the power switch. All segments will be displayed, and the self-test will be performed. After the self-test is completed, the battery voltage will be displayed for one second, and then it will automatically set to zero and enter the weighing mode.

#### 3.2 ZERO

Before weighing, check whether the zero indicator >0< is on. If the zero indicator is not on, please press the [ZERO] key to set it. Note: The zero range is  $\pm$  2% of the maximum weighing.

#### 3.3 TARE

When the item needs to be placed into a container and the net value of the items weighed, the container can be placed on the weighing pan first. Press the [TARE] key, the tare indicator >T< is on, indicating that the weight of the container has been deducted, and the items inside can be weighed.

To cancel the tare weight, when it displays the negative value after removing the container, press the [TARE] key, the >T< indicator is off and the >0< indicator is on, the tare weight is cancelled.

#### 3.4 UNITS

Press [Hold/Unit] key for one second or above to switch over the units. The available units are kg, lb and oz.

#### 3.5 BRIGHTNESS SETTING

To set the brightness of the weight and indicator LEDs press the [BRIGHTNESS] key. Each press will scroll through the four different brightness of the LED.

#### 3.6 SLEEP FUNCTION

When the weight is stable for a certain amount of time (The time can be set in user setting SP menu: 5s, 10s, 15s, 20s, 25s, 30s), the scale enters battery saving mode. The battery saving LED only will flash. The display will show the weight again when the weight is changed or any of the keys are pressed.

#### 3.7 POWER OFF AUTOMATICALLY

When the weight is stable for a certain time (The time can be set in user setting Pr menu: 5 minutes, 10 minutes, 15 minutes, 20 minutes, 25 minutes, 30 minutes), the scale will automatically shut down completely.

When both the sleeping mode and auto power-off mode are on, it will enter sleeping mode first. If it remains stable until the power off time set then the scale also turns off automatically.

#### 3.8 VOLTAGE DETECTION FUNCTION

If the battery voltage <3.6V, the low voltage indicator is on solid to remind the user that the battery voltage is low and should be charged as soon as possible.

If the battery voltage <3.5V, the buzzer will sound at 10 second intervals and the display flashes "-L-bAt-", notifying the user that the battery can no longer be used and must be charged immediately.

Note: When the weight is stable in weighing mode, the voltage is automatically checked every 10 seconds.

#### 3.9 HOLD FUNCTION

When the weighing is stable, the weight can be held automatically or manually, the HOLD indicator will be on. The hold function also can be released automatically or manually.

## **4** PARAMETER SETTING

#### 4.1 ENTER SETTINGS MODE

Press and hold down the [TARE] key and switch ON to enter the setting mode.

Press [TARE] key to scroll user settings. Press [ZERO] key to confirm the changes and move to the next setting.

#### 4.2 BRIGHTNESS SETTING

This function is used to adjust the brightness of the LEDs at power on. Press the [TARE] key to modify the brightness, press the [ZERO] key to confirm and move to the auto power-off setting.

#### 4.3 AUTO POWER-OFF SETTING

This function is used to set the time of auto power-off. Press [TARE] key to change the auto power-off time in minutes. If the display shows OF, the auto power-off function is disabled. Press [ZERO] key to confirm and move to auto-sleep setting.

#### 4.4 AUTO-SLEEP SETTING

This function is used to set the sleep time. When the weight is stable for a set time, the display will be shut off and just the battery saving LED will flash. The display will be turned on again if a key is pressed or the weight is changed.

Press [TARE] key to change the sleeping time in seconds. If the display shows OF, the sleeping function is off is disabled. Press [ZERO] key to confirm and move to hold function setting.

#### 4.5 HOLD

This function is to set the HOLD operation. Press [TARE] key to scroll through the options.

If "Hold 1" is selected the HOLD function will not be active and [ZERO] key will move to brightness setting.

If "Hold 2" Auto, or "Hold 3" Manual is selected then it will lead to Setting of the Hold Time.

Hold 1	No hold function
Hold 2	Automatic function
Hold 3	Manual hold function

#### 4.6 SETTING OF THE HOLD TIME (HTI SETTING)

This parameter is to set the time for which the display is held in seconds. Use the [Tare] key to scroll through the options  $0^{4}$ .

- 0 -- Holds the display for an infinite time until the [hold] key is pressed.
- 1 -- Holds the display for 10 seconds or press [hold] key to release.
- 2 -- Holds the display for 20 seconds or press [hold] key to release.
- 3 -- Holds the display for 30 seconds or press [hold] key to release.
- 4 -- Holds the display for 40 seconds or press [hold] key to release.

Press the [Zero] key to confirm the selection and move back to the first parameter setting.

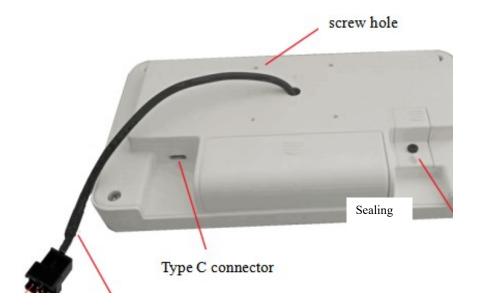
Press the ON/OFF key to exit setting mode.

## SPECIFICATION

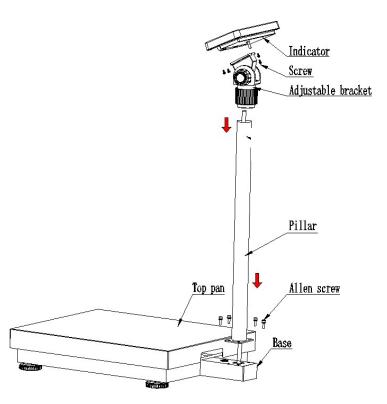
Maximum Capacity	75/150/300kg
Division (d)	10g/20g/50g
Min recommended	20d
Stability Time ~	1-2s
Display	LED display
Tare Range	Full range
Overload Alarm	Auto alarm when the weight is over 9d of max capacity
Power Supply	Lithium battery: DC 3.7V, 2200mAH, USB cable type C
	Adaptor: DC5V 1A OPTIONAL
Power Consumption	<30mA
Environment	Storage: -10°C to +50°C Use: 0°C to +40°C
Temperature	
Environment	Storage: 5% to 90%R.H. Use: 10% to 80%R.H.
Humidity	

## **6** INSTALLATION

### 6.1 CONNECTORS



#### 6.2 INSTALLATION DIAGRAM



#### FCC / IC CLASS A DIGITAL DEVICE EMC VERIFICATION STATEMENT

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules and Canadian ICES-003/NMB-003 regulation. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at their own expense.

#### WEEE 2012/19/EU



This device may not be disposed of in domestic waste. This also applies to countries outside the EU, per their specific requirements. Disposal of batteries (if fitted) must conform to local laws and restrictions.

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The manufacturer reserves the right to make changes to the technology, features, specifications and design of the equipment without notice.

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