

# GMI-800 Digital Weighing Indicator Operation Manual

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Version 2.2



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**Gamma Scale**

Tel: (905) 455-8333

Fax: (905) 455-0658

E-mail: [info@gammascale.com](mailto:info@gammascale.com)

Website: [www.gammascale.com](http://www.gammascale.com)

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## 1. Technical Parameters

- 1.1 Accuracy class: Grade III
- 1.2 Zero point temperature drift:  $\leq 0.15\mu\text{V}/\text{C}$
- 1.3 Sensitivity temperature drift:  $\leq 10\text{ppm}/\text{C}$
- 1.4 A/D conversion resolution ratio: 500000
- 1.5 Display resolution ratio: 30000
- 1.6 A/D conversion rate: 168T/S
- 1.7 Display update rate: 10T/S
- 1.8 Signal input range: 0mV - 8mV
- 1.9 Min. display value: 1 / 2 / 5 available
- 1.10 Non-linearity:  $\leq 0.01\%\text{F.S}$
- 1.11 Baud rate: 600, 1200, 2400, 4800, 9600(optional)
- 1.12 Load cell excitation: DC5V, drives up to 4 load cells of 350ohm
- 1.13 operation temperature:  $-10 - 40^{\circ}\text{C}$
- 1.14 Storage environment temperature:  $-25^{\circ}\text{C} - 55^{\circ}\text{C}$
- 1.15 Relative humidity:  $\leq 85\%$  (no condensation)
- 1.16 Power supply: AC adaptor 9V 800mA  
DC: storage battery 6V (Option)
- 1.17 Display style: 6-digit 1-inch 7-segment LCD (with backlight)
- 1.18 Dimensions (LXWXH): 180x85x190mm and 260x150x180mm
- 1.19 Net weight: 3.3kg

## 2. Features

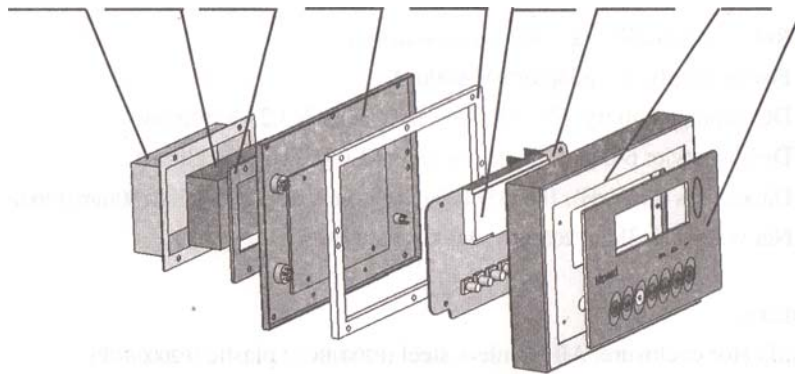
- 2.1 Indicator enclosure: All stainless steel

- 2.2 Indicator display angle adjustable ( $\geq 90^\circ$ )
- 2.3 Bracket mounting stander
- 2.4 IP66
- 2.5 Digit filtering
- 2.6 Full range tare
- 2.7 Overload indicating
- 2.8 Unit converting
- 2.9 RS-232 output
- 2.10 Backlight mode selection
- 2.11 Auto shut-off selection

## 3. Construction

### 3.1 Assembly diagram

PCB-Battery box-Battery-Rubber seal-Back cover-Rubber seal-LCD assembly



### 3.2 Connection

- 7-core socket (load cell input)
- Bracket assembly
- 5-core socket (RS232 output)

### 3.3 LCD screen

- (1) "lb" weight unit
- (2) "kg" weight unit
- (3) Zero position indicating
- (4) Weight stabilization indicating
- (5) Auto-backlight switch-on cursor
- (6) Net and gross weight indicating
- (7) AC adaptor power on indicating
- (8) Storage battery charge and voltage indicating
- (9) 6-digit 1-inch 7-segment (containing decimal point) character

## 4. Operation Keys Instruction

### 4.1 Zero-setting

Under weighing state, when the displayed weight is not more than 2% of Max Capacity, press this key to make the display return to zero (the repeat zero range can't be more than 4% of the Max. Capacity). After this key is pressed, cursor on the LCD screen will appear.

### 4.2 Tare

Under weighing state, when the weight loaded on the scale platform is not more than Max. Capacity plus 9d ("d" refers to division value); tare by pressing this key, and the cursor on the screen will change from "G" to "N". At this time, remove the load from the scale platform, the screen displays a negative value. Press this key again, the display returns to zero and the cursor "N" returns to "G".

### 4.3 Unit converting

Under weighing state when Fl. 1=2, press this key once, the weight unit will convert between "kg" and "lb".

### 4.4 Backlight key

Under weighing state, change the backlight mode by pressing this key.

### 4.5 Power key

Turn on and turn off power supply.

## 5. RS-232 Output and Printing

### 6.1 Serial output

The 5-core metal socket is used for RS-232 hardware interface; the socket is mounted on back of the indicator.

### 6.2 Ticket printing output

This indicator can equip with EPSON TM-U295 micro-printer, the printer prints ticket as the following format:

No.01	No.02
G=1.576 lb	G=0.714 kg
T=0.948 lb	T=0.429 kg
N=0.628 lb	N=0.285 kg

## **6. Power on Operation**

Connect power adaptor, press [I/O] to turn on the indicator with AC power. After being turned on, it will first display "BC" and then a version number, then it will excuse self-checking from "9" to "0" successively. If connection is correct and zero position is normal, the indicator will display on Zero.

Note: The indicator will automatically enter "weighing" mode after power on.

## **7. Backlight Selection**

The indicator has LED backlight function, which ensures the normal operation under insufficient sunlight condition.

## **8. Rechargeable Battery (Option)**

This unit can be installed rechargeable battery for easily use, call local dealer to get this option installed.

There is a symbol on LCD screen to indicate capacity of storage battery, it always flash when you are using AC power no matter it has battery installed or not.

With battery installed, when scale in charge mode, the charge light will indicate charge capacity by showing different colors:

Red means the battery need to continuous recharge;

Yellow means the capacity is 70% full;

Green means 100% full.

## **9. Use Guide**

1. When scale load exceeds Max. Capacity, the indicator displays "FULL".
2. GMI-800 indicator can be washing down with water, but don't wash it with high corrosive solvent.
3. Make sure the ground terminal of AC power is properly grounded.
4. Don't disassemble it without authorization.
5. Turn off power supply and pull out its plug at once if it is out of order. Non-professional can't repair it without authorization; contact our sales agent in local area.
6. To calibrate the indicator, do it after the indicator is warmed up for 30 minutes.

## **10. Setting and Calibrating**

In order to setup and calibrate your indicator, please contact your local dealer or device supplier, this section opens to authorized technician only.

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