

RADIANCE INSTRUMENTS LTD.	PRODUCT MANUAL			REV.: 3
	PRODUCT	MULTI-PURPOSE DIGITAL THERMOMETER		06 May. 2013
	MODEL	RT801	Version: 12	PAGE 1 of 2

FEATURES

- Internal/external temperature display switchable
- External temperature high and low alarm setting
- Maximum / Minimum reading memory
- °C / °F exchange
- High accuracy
- Low battery indication
- Display backlight
- Waterproof external sensor
- Foldaway stand
- Magnetic attachment
- Velcro magic tape fixing
- CE, NSF and RoHS compliant



SPECIFICATION

Measurement range	Internal: -10 to +50 °C / -14 to +122 °F External: -50 to +70 °C / -58 to +158 °F
Accuracy	±0.5°C between -20~50°C , ±1°C rest range ±1°F between -4~122°F, ±1.8°F rest range
Display Resolution	0.1°
Display reading update	10 seconds
Display Size	48(W) x 21(H) mm
Battery	3 volt, size CR2032 or equivalent x 1 piece (included)
Battery life	About 10,000 hours in continuous operation
Sensor cord length	3 meters
Ambient temperature	0 ~ 50°C / 32 ~ 122°F
Product size	73(W) x 52(H) x 18(D) mm
Accessories	1) Sensor holder x 1 pc 2) Double side tape x 1 pc 3) Battery x 1 pc 4) Velcro magic tape x 1 pc 5) External sensor x 1 pc

INSTALLATION

1. Plug the external sensor into unit.
2. Open the battery cover and install the battery with correct polarity positioning.
3. Unit Mounting:
 - a) By magnets - Attach the thermometer directly to the flat iron substance.
 - b) By Velcro magic tape - Wipe the desired installation place clean. Peel off one side of the protective paper from the Velcro magic tape and attach the tape onto the recess area under-side the magnets. Remove the protective paper from Velcro magic tape and attach thermometer firmly onto the place.
4. External sensor fixing:
 - a) General measurement- Use the double side tape to stick the rectangular shape sensor holder onto the desired place or use the screw provided to fix the holder. Insert the external sensor into the sensor holder
 - b) Aquarium measurement- Press the suction cup firmly onto the glass inside the aquarium tank with a depth of about 100mm / 4" then insert the external sensor into the suction cup.
5. Peel off display protective sheet.

OPERATION

°C / °F EXCHANGE

Press [°C/°F] on the backside to change temperature unit.

INTERNAL / EXTERNAL TEMPERATURE DISPLAY

Press [EXT/INT] button to display external or internal temperature.

INT: Reading from the internal sensor of the thermometer

EXT: Reading from the external sensor of the thermometer

MAXIMUM AND MINIMUM READING MEMORY

1. Press [MAX/MIN] to display maximum reading measured.
2. Press the button again to display minimum reading measured.
3. Press the button once more to display normally.
4. To reset the memory, Press and hold the button until a bar "---.-" is displayed.
5. Always reset the memory once before taking new readings.

RADIANCE INSTRUMENTS LTD.	PRODUCT MANUAL			REV.: 3
	PRODUCT	MULTI-PURPOSE DIGITAL THERMOMETER		06 May. 2013
	MODEL	RT801	Version: 12	PAGE 2 of 2

DISPLAY BACKLIGHT

Press and hold [] button to turn on the backlight constantly.

HIGH / LOW TEMPERATURE ALARM SETTING (EXTERNAL SENSOR ONLY)

1. Press & hold [] button for about 2 seconds, the HIGH icon will be displayed and the figure would be flashed.
2. Press [$^{\circ}\text{C}/^{\circ}\text{F}$] button to set the alarm high limit.
3. Press [] button once more and the LOW icon will be flashing.
4. Press [$^{\circ}\text{C}/^{\circ}\text{F}$] button to set the alarm low limit.
5. Press [] again to finish the setting.
6. During limits setting, holding [$^{\circ}\text{C}/^{\circ}\text{F}$] button will advance the value automatically.
7. If the external sensor reading is out of the set limits then the alarm will sound and the alarm icon [AL] will be flashing.

ALARM ON / OFF

1. Press [] button will switch on the alarm and the icon [AL] will be displayed.
2. Press [] again will switch off the alarm and the icon [AL] will be disappeared.

ERROR SYMBOLS

Symbol	Description	Action required
	Low battery voltage	Replace the battery with a same type new one
LLL	1) Sensor open circuit 2) The reading is out of low range (-50°C)	1) Return the thermometer for repair 2) Keep the measurement above low Range
HHH	1) Sensor short circuit 2) The reading is out of high range (70°C)	1) Return the thermometer for repair 2) Keep the measurement below high range