

REED Model R5090 Power Meter

1. Warning

- ⚠ This manual includes important safety and instrument maintenance information.
- ⚠ Please read each part of this manual carefully before use. Any misunderstanding of the information in this manual may lead to physical injury and/or product damage.
- ⚠ Conforms to UL STD.61010-1, 610 Certified to CSA STD.C22.2 NO.61010-1, 61010-2-030; Certified to CSA STD.C22.2 NO.61010-1, 61010-2-030
- ⚠ CAT II 150V Safety Rating

	Do not discard this product as unclassified municipal waste, put it into a recycle bin for disposal.
	EU certification related information
	This symbol signifies the product complies with both USA and Canada requirements.

2. Safety instructions

- Do not use if product is damaged.
- In the event of any abnormal operation, please do not use this power meter. Keep this power meter away from explosive gases, vapor and dust environments.
- The load power of electrical appliance of this product should not exceed its rated power of 1800W or a maximum current of 15A. When running under a full load, it is recommended not to exceed a 1 hour of continuous use.

3. Features and Specifications

The R5090 is an easy-to-use power meter that accurately measures power consumption of household appliances. Simply set the local utility rate in Kilowatt-hours (KWh) and connect an appliance to start tracking cost. The R5090 can be used to verify power quality by monitoring voltage, frequency and power factor.

- Calculates the operating costs of household appliances
- Displays 8 important units of measure (voltage, current, watts, frequency, power factor, energy used (kWh), total cost and elapsed time)
- Over-current warning function
- Easy-to-read, dual LCD display
- Built-in battery backup
- Conforms to UL and CSA standards

Measuring Ranges

Voltage	100 to 150VAC (60Hz)
Current	0 to 15A
Power	0 to 1800W
Power Factor	0 to 1.00
Frequency	45 to 65Hz

Logging Ranges

Energy	0 to 9999kWh
Cost	\$0 to \$9999
Total Time	0min to 9999days
Display	Dual LCD
Display Update	1 time/sec.
Overrange Indicator	Yes
Power Supply	1 x 3V (CR2)
Overvoltage Category	CAT. II 150V

Product Certifications

CE, ETL, Conforms to UL STD.61010-1, 61010-2-030; Certified to CSA STD. C22.2 NO.61010-1, 61010-2-030
 Storage Temperature 14 to 140°F (-10 to 60°C)
 Operating Humidity Range 10-90%
 Dimensions 5.1 x 2.6 x 1.5" (130 x 65 x 37mm)
 Weight 1.9 oz (155g)

4. Display interface

The dual LCD display area provides two readings. The upper reading is the main display area and can be viewed by pressing the "MODEL" key. The lower reading is a secondary display area and can be viewed by pressing the "COST" button.

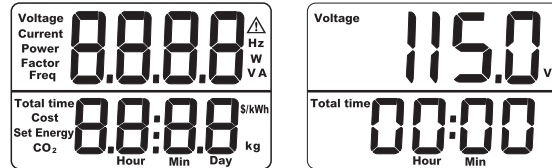


Figure 1 Full Display Image

5. Detailed key function introduction



Figure 2

The "COST" button cycles through each function in the upper display. For example, "Total time", "Cost", "Set", "Energy" and "C02".

The "MODEL" button, cycles through each function in the lower display. For example, "Voltage", "Current", "Power", "Power Factor" and "Freq".

The "SET" button cycles through the corresponding model via the "COST" button. Press the "SET" button to enter one of two cost models ("kWh" or "C02"). After selecting the desired cost model press the "+" button to increase the selected digit. To move on to the next value press the "SET", and save data by holding "SET" once all values have been entered.

The "+" button has three main functions, the first is to increase the number of digits, increasing one digit with each press, 0-9 cycle (as mentioned above). The second is the reset function; reset the Energy, Cost or the emission load of C02 by holding it down. The "+" button is also used to power on the unit when power is off.

6. Operation and use

Plug the power meter into a household receptacle and it will automatically start.

Select the desired function by pressing the "MODEL" button. Return to the default function ("Voltage") by holding the "MODEL" button.

If the unit has been in use for less than 1 day, only "Hour and Min" will be displayed, see Figure 2; Check elapsed time by pressing "+", see Figure 3. If the time accumulated exceeds 1 day, it will be displayed in the form of "Day, Hour and Min".

7. C02 Cost Model

Switch to the "C02" cost model by pressing the "COST" button. Once the CO2 parameter is visible press and hold the "SET" button, and adjust values by pressing the "+" button. When the desired value has been set, save the data by holding the "SET" button. (See Figure 15 to Figure 16)

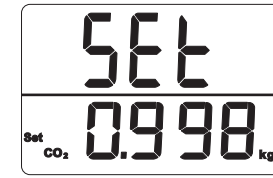


Figure 15

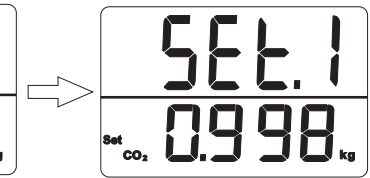


Figure 16

8. kWh Cost Model

Switch to "kWh" cost model by pressing the "COST" button. Once the kWh parameter is visible press and hold the "SET" button, and adjust values by pressing the "+" button. When the desired value has been set, save the data by holding the "SET" button. (See Figure 17 to Figure 18)



Figure 17

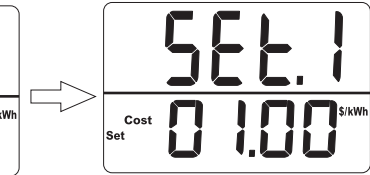
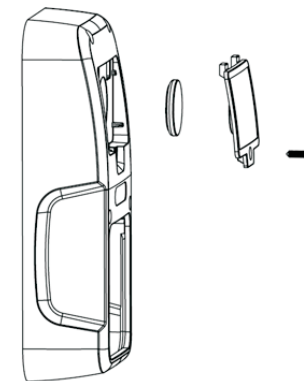


Figure 18

9. Battery Replacement

Please ensure the meter has been disconnected from power prior to replacing battery. Remove the battery cover with a screwdriver.

Once the cover has been removed, replace the battery cell and tighten the cover back on. See the following figure for detailed steps:



ation) on this or any other REED product
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REED Instruments

1-877-849-2127 | info@reedinstruments.com | www.reedinstruments.com