

# Elto EMA1 Power Meter Instructions

## Quick guide

This page contains the bare minimum information needed to set up and use the meter for its intended purpose - use it in sequential order. For more detail see the [user friendly guide](#). If you want to use the meter without any set up time at all, take a look at the [fast guide](#).

### 1. Before you start

Find out the "unit cost" per KWh from your electricity bill. If you don't know the unit cost assume an NZ average unit cost of NZ 25 cents per unit.

### 2. Set the power cost per unit

*Plug in the meter. The display will activate.*

1. Press the FUNC button repeatedly until the **VOLTac** symbol appears in the top right hand corner of the display.
2. Press and hold the FUNC button until the display changes to **COST/kwh**. (Type 1 - hold for five seconds)
3. Press the SET button to begin editing the cost per unit. The **SET** symbol will now appear in the top right hand corner of the display. Use the UP button to set each digit, use the SET button to move to the next digit. Examples: For a kwh unit price of 27 cents set \$0.27. For 10 cents set \$0.10. For 15 cents = \$0.15.
4. Now press SET to accept the position of the decimal point.
5. Next are the days of the week. Most users will be paying the same price every day of the week. If you are paying the same price every day of the week then press the UP button until "MO TU WE TH FR SA SU" appears in the display. Press the SET button when complete. Alternatively, set the desired days on which this price will apply.
6. Next is an option to set the time of day when this price is active. If your power company charges you just one price no matter what time of day it is then you can ignore this item. Otherwise use the UP and SET buttons until the desired activation time for this price is displayed.
7. Press the FUNC button to complete the price setting operation for Price 1.
8. If your power company charges a different price depending on the time of day or day of the week you can set an additional unit cost by pressing the FUNC button once again to reach Price 2 after completing the steps above.
9. If you have completed entering price information then wait 30 seconds until you are returned to display mode automatically. ([Type 1](#) - optionally hold the FUNC button for five seconds)

### 3. Set the correct clock time

If you set price information for less than a week or needed to input a second price in Step 7 above then you must set the correct clock time or the price will not be calculated correctly for the time of day and day of week. Other users may skip this step.

1. Press the FUNC button repeatedly until the CLOCK symbol appears in the bottom right hand corner of the display.
2. Use the UP button to toggle between 12/24hr time.

3. Press the SET button to begin setting the correct time. The SET symbol will now appear in the top right hand corner of the display. Use the UP button to select the current day of the week then use the SET button to confirm and move to the next digit.
4. When you have finished setting the correct time and day press the FUNC button once to return to data display mode.

## 4. Plug in and measure

Plug in your appliance and turn it on. From here you have several choices. You can get an instant reading of how many watts the appliance is using. You can get a reading of how many units of electricity your appliance has used since you turned it on. You can get the cost (total price) of electricity your appliance has used since you turned it on. Here are all the options:

Use the FUNC button to cycle through all display modes until reaching the desired display mode:

Indicator	Data displayed
<b>VOLTA</b> (default)	Real time line voltage, real time line frequency, day, time
<b>AMP</b>	Real time amp usage, real time power factor, day, time
<b>WATT</b>	Real time watt usage, real time power factor, day, time
<b>WATT MAX</b> ('Type 1' only)	Max. recorded line power (watts), time max line power recorded ('Type 1' only)
Kwh	Total recorded kilowatt hours
Total Price	Total price of recorded kilowatt hours, total on time of load.
Total Price1	Total price for Price 1 category only, total on time of load in Price 1 category
Total Price 2	Total price for Price 2 category only, total on time of load in Price 2 category

## 5. Clear recorded data

*After measuring power use for an appliance reset the counters before measuring the next appliance.*

To clear recorded data in the following categories: Kwh, Total Price, Total Price1, Total Price 2, WATT MAX

Press FUNC to view any category above then press and hold the FUNC button to clear all data in the categories above. '[Type 1](#)' - Press and hold FUNC for five seconds.

**Note:** *Users of meters with CO2 functions report the FUNC button does not clear recorded data in the CO2 and Kwh categories. Please comment below if you have a solution for this. Please comment below with your model number if your meter has this problem.*

To clear all data in memory including the current time and all program data

Use a ball point pen or similar item to press the MASTER CLEAR reset button for five seconds or longer. After releasing the MASTER CLEAR button, an LCD test pattern will be displayed to indicate the master reset function is complete.