UPM
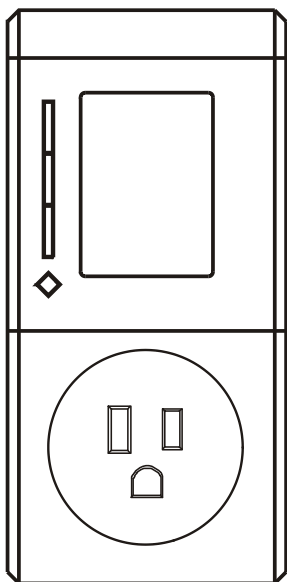
OWNERS MANUAL

Congratulations on your purchase of a UPM energy meter. Please take the time to read and understand this manual so you can begin to enjoy the energy saving benefits this product has to offer.
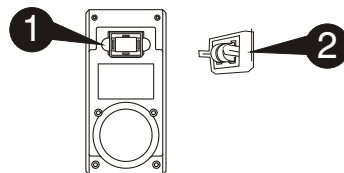
FEATURES

- Overload warning
- Energy monitor and energy consumption tracking
- Maximum current and wattage readings
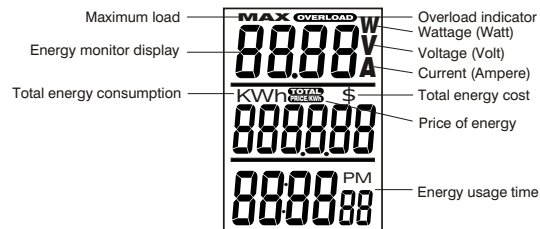- Energy cost calculation
- Energy usage time

EM100
electronic energy meter

GETTING STARTED

1. remove the battery cover from the back of the unit
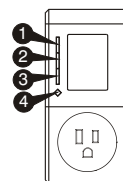2. place 2 button cell batteries between terminals observing proper polarity then replace cover

battery installation

display

- Maximum load
- Energy monitor display
- Total energy consumption
- Overload indicator
- Wattage (Watt)
- Voltage (Volt)
- Current (Ampere)
- Total energy cost
- Price of energy
- Energy usage time

1. ↑ - scrolls through line voltage, line current, max current, wattage, max wattage and overload warning mode
2. ↓ - scrolls through total energy, total cost, and energy price mode
3. **OVERLOAD** - overload set
4. **PRICE** - price set

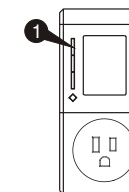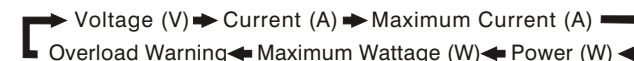### button placement

ENERGY MONITOR

TOP PORTION OF LCD DISPLAY

1. Press ↑ to view the line voltage, line current, max current, wattage and max wattage readings; displayed in the top portion of the LCD

- Line Voltage - voltage (V)
- Line Current - current (A)
- Max Current - max current (A)
- Wattage - real power (W) where power = voltage x current x power factor
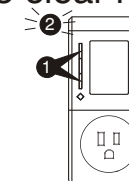- Max Wattage - maximum wattage (W)

* Modes are arranged in a circular pattern:
Top portion of the LCD

Voltage (V) → Current (A) → Maximum Current (A) → Power (W) → Maximum Wattage (W) → Overload Warning

to clear max load

1. Press and hold ↑ and **OVERLOAD** together for 3 seconds to clear max current and max wattage readings
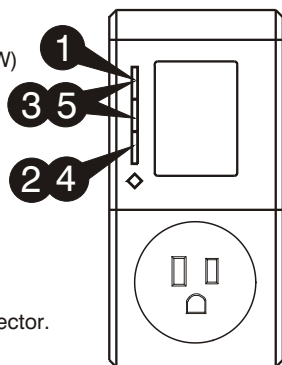2. Beep indicates that max current and max wattage readings are cleared

OVERLOAD WARNING

TOP PORTION OF LCD DISPLAY

The overload warning function allows you to safeguard against exceeding a preset load capacity. The 'overload' indicator will flash and the alarm will sound continuously to warn you in the case of an overload.

setting the overload parameter

1. Select overload warning mode using ↑
2. Press **OVERLOAD**
3. Toggle between overload in wattage (W) or current (A) using ↑ or ↓
4. Press **OVERLOAD**
5. Adjust the desired parameter value using ↑ or ↓. Press **OVERLOAD** to set each digit.
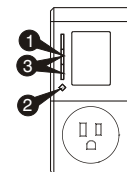
* ATTENTION:
This energy meter is NOT a surge protector.

ENERGY CONSUMPTION AND COST

MIDDLE PORTION OF LCD DISPLAY

The price setting function allows you to input the electrical rate in $/kWh to calculate the total cost of energy consumption.
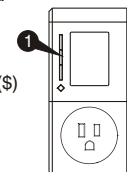
setting the price of energy

1. Select energy price mode using ↓
2. Press **PRICE**
3. Adjust the value using ↑ or ↓. Press **PRICE** to set each digit.

total energy used and total cost

1. Press ↓ to view total energy used and total cost incurred

- Total Energy - Total accumulated energy used by the load (kWh)
- Total Cost - Total accumulated energy cost incurred by the load ($) based on the user-set price ($/kWh) and total energy (kWh)

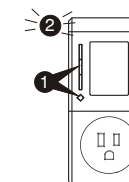* Modes are arranged in a circular pattern:
Middle portion of the LCD

Total Energy (kWh) → Total Cost ($) → Energy Price ($/kWh)

ENERGY USAGE TIME

BOTTOM PORTION OF LCD DISPLAY

The bottom portion of the LCD display keeps track of the accumulated energy usage time - "power on" time.

to clear energy usage time/total energy used

1. Press and hold ↓ and **PRICE** together for 3 seconds to clear energy usage time and total energy used (kWh)
2. Beep indicates that energy usage time and total energy used are cleared

TECHNICAL SPECIFICATIONS

Ratings: 120 V AC, 15 A
Max Load: 1800 W