MECHEER PM01-US

MECHEER Watt Meter Power Meter Plug User Manual

Model: PM01-US

1. INTRODUCTION

The MECHEER Watt Meter Power Meter Plug is designed to monitor the electricity usage of your home appliances. It provides detailed information on various electrical parameters, helping you understand and manage your power consumption. This manual will guide you through the setup, operation, and features of your new device.

2. IMPORTANT SAFETY WARNINGS AND NOTICES

Please read the following safety information carefully before using the device to ensure safe and proper operation.

- **DO NOT** use the device in a wet environment.
- **DO NOT** connect the power meter to a multi-plug outlet to measure multiple electrical appliances simultaneously. This can cause the total power to exceed the 1800W threshold and lead to a short circuit.
- The power of electrical appliances connected to the meter cannot exceed 1800W.

Important Notices:

- Consumption and time will **NOT** be measured and counted if your device is in standby or not working, or if the rated power of your device is smaller than 0.5 watts. However, energy consumption is always measured once the device is plugged in.
- The device saves electricity quantity, cost, electricity price, and cumulative time. It does **NOT** save current, voltage, power, or power factors.
- If the power meter displays "0" after being switched off and back on, it may be because the testing time was less than 1 hour, or the total kWh was less than 0.1 kWh, resulting in no data being saved.
- If there is an abnormal display or no response, reset the electric meter by pressing the RESET button.

3. PRODUCT OVERVIEW

The MECHEER Watt Meter features a clear LCD display and intuitive buttons for easy operation and data reading.

12:00

152.0

KWh

15 DAY

RESET

FUNCTION COST UP DOWN

Figure 3.1: Front view of the MECHEER Watt Meter Power Meter Plug, showing the LCD screen, function buttons, and power outlet.

Figure 3.2: Dimensions of the MECHEER Watt Meter Power Meter Plug, indicating its compact size for easy placement.

3.1 Components and Display

- **LCD Display:** Large 2.36 inch x 1.85 inch screen with backlight for clear visibility from 180° full wide viewing angles.

- **Function Button:** Cycles through different display modes.

- **COST Button:** Directly accesses Mode 7 (Price setting).

- **UP Button:** Used for adjusting settings and turning on backlight.

- **DOWN Button:** Used for adjusting settings and turning off backlight.

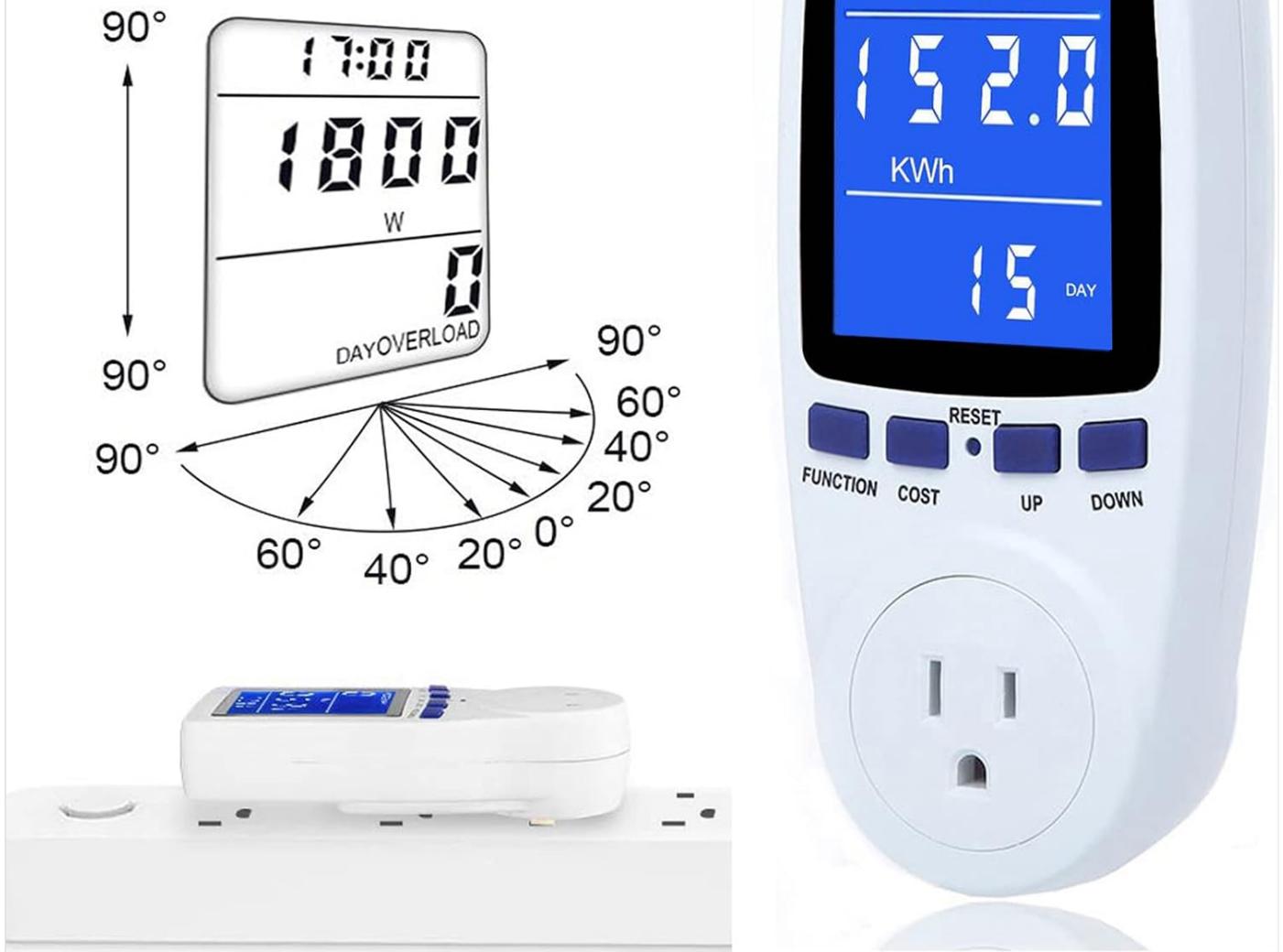- **RESET Button:** Resets all settings and data (requires a reset tool).

Figure 3.3: Illustration of the 180° full wide viewing angle of the meter's LCD display, ensuring clear readings from various positions.

4. INITIAL SETUP

To begin monitoring, simply plug the MECHEER Watt Meter into a standard wall outlet, then plug your appliance into the meter's outlet.

4.1 Setting Overload Protection

The default overload power is 3680W. It is recommended to adjust this to 1800W before use to match typical household circuit limits.

1. Press and hold the "FUNCTION" button for more than 3 seconds to enter the overload setting mode.
2. Use the "UP" and "DOWN" buttons to adjust the overload threshold (recommended 1800W).
3. Press the "FUNCTION" button again to save the setting and exit.

4.2 Setting Electricity Price (Mode 7)

To calculate electricity cost, you need to set your local electricity price per kWh.

1. Press the "COST" button to directly access Mode 7.

2. The price digits will flash. Use the "UP" and "DOWN" buttons to adjust the value.

3. Press the "COST" button again to move to the next digit or to save the setting.

5. OPERATING MODES

The power meter offers 7 display modes to show various monitoring parameters. Press the "FUNCTION" button to cycle through these modes.
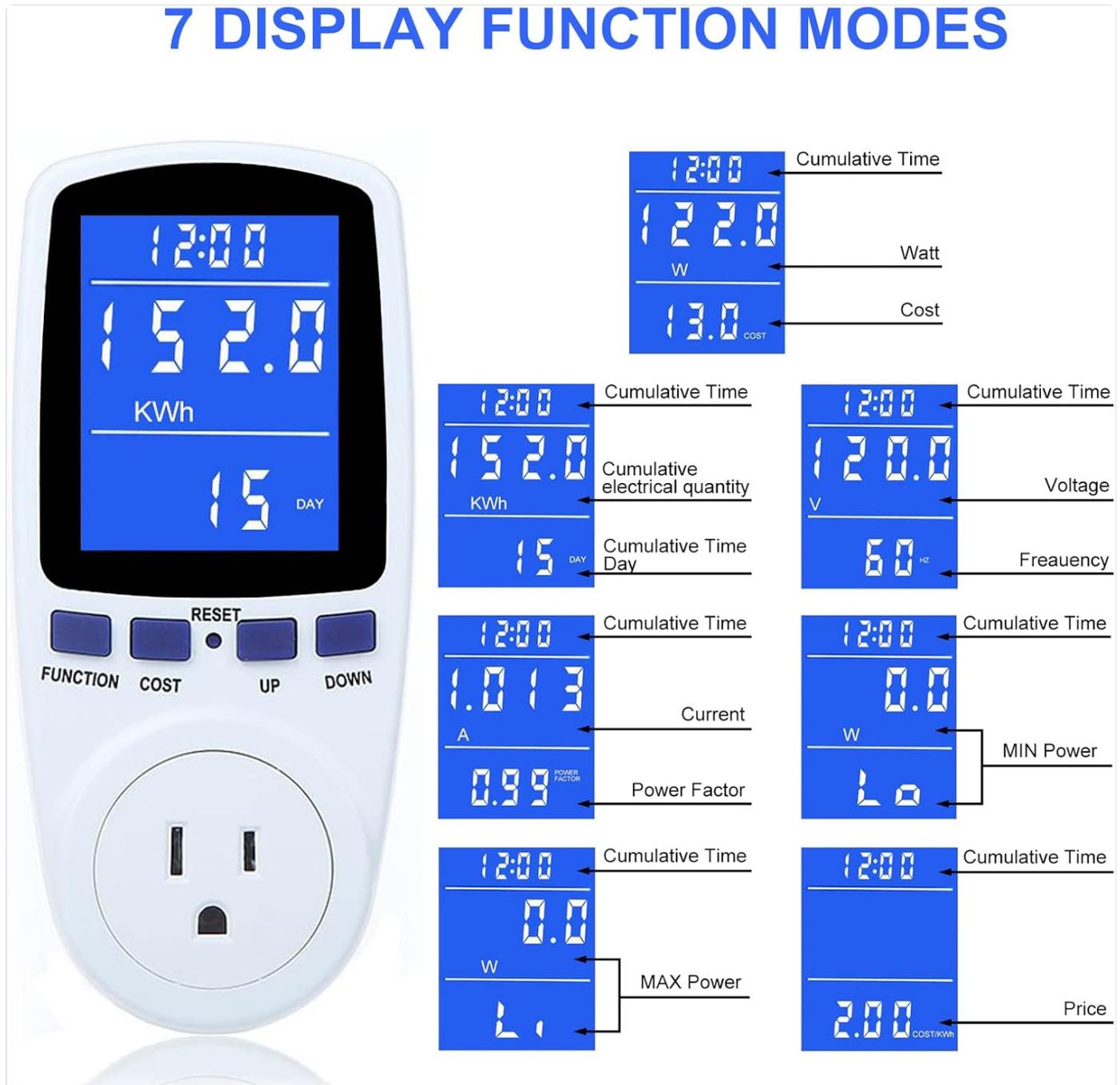

Figure 5.1: Visual representation of the seven distinct display modes available on the MECHEER Watt Meter, each showing different electrical parameters.

1. **Mode 1: Time / Watt / Cost Display**
   Shows cumulative time, current power consumption (Watts), and cumulative electricity cost.

2. **Mode 2: Time / Cumulative Electrical Quantity Display**

Displays cumulative time and total energy consumed (kWh).

3. **Mode 3: Time / Voltage / Frequency Display**
   Shows cumulative time, current voltage (V), and frequency (Hz).

4. **Mode 4: Time / Current / Power Factor Display**
   Displays cumulative time, current amperage (A), and power factor.

5. **Mode 5: Time / Minimum Power Display**
   Shows cumulative time and the lowest recorded power consumption (W).

6. **Mode 6: Time / Maximal Power Display**
   Displays cumulative time and the highest recorded power consumption (W).

7. **Mode 7: Time / Price Display**
   Shows cumulative time and the set electricity price per kWh. This mode is also used for setting the price.

6. ADJUSTABLE BACKLIGHT TIME

The meter's backlight can be adjusted to suit your preference, with five available options for duration.

Figure 6.1: Comparison of the meter's display with the backlight off (left) and backlight on (right), demonstrating improved visibility.

6.1 How to Set Backlight Time:

1. Press and hold the "UP" and "DOWN" buttons simultaneously for over 3 seconds to enter the backlight time setting. "bL-0" will be displayed and flash for 10 seconds.

2. Use the "UP" and "DOWN" buttons to select the desired backlight time option:

   - **bL-0:** 10 minutes
   - **bL-1:** 1 hour
   - **bL-2:** 4 hours
   - **bL-3:** 8 hours
   - **bL-4:** Always on

3. Press the "COST" button to save the backlight time settings.

You can manually turn off the backlight by pressing the "DOWN" button. Press any button to turn the backlight on again.

Figure 6.2: Display options for backlight duration, ranging from 10 minutes to always on.

7. OVERLOAD PROTECTION

The device features an overload protection function to prevent damage to the meter and connected appliances.

- If the power of the connected appliance exceeds the set overload threshold, the LCD will display "OVERLOAD" as a warning.
- All buttons will become unresponsive until the load power is reduced or removed.
- The default overload power is 3680W, adjustable from 0 to 3680W. It is generally recommended to set it to 1800W for typical home use.

Figure 7.1: The meter in use, demonstrating its function as an electricity monitor with overload display and data memory capabilities.

8. DATA MEMORY FUNCTION

The MECHEER Watt Meter is equipped with a data memory function to retain important consumption information.

- The meter will record your power consumption data even when removed from the socket or when appliances are disconnected.

- The last recorded data (electricity quantity, cost, electricity price, cumulative time) will be available when you use the device next time.

- This function also automatically saves data in case of a sudden power failure.

9. RESETTING THE DEVICE

There are two methods to reset the power meter:

9.1 Clearing Cumulative Data (Soft Reset)

This method clears cumulative data (electricity quantity, cumulative cost, cumulative time) while preserving the electricity price setting.

1. Press the "FUNCTION" and "UP" buttons simultaneously for over 3 seconds.

2. The cumulative data will be cleared.

9.2 Full Reset (Factory Reset)

This method resets all settings, including the electricity price, to their factory defaults.

1. Locate the small "RESET" button on the device (usually a small pinhole).

2. Use the provided reset tool (or a similar blunt object, avoid needles to prevent button damage) to press the RESET button.

3. All settings will be reset.

10. PRODUCT SPECIFICATIONS

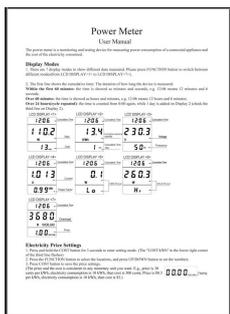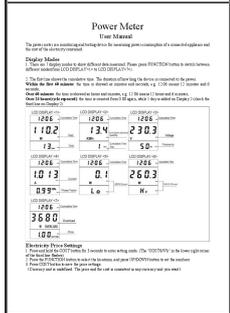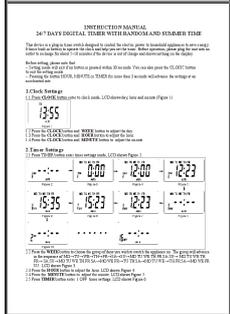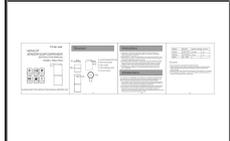| Feature	Specification
Brand	MECHEER
Model Number	PM01-US
Colour	White
Style	Digital
Power Source	Corded Electric
Min. Operating Voltage	12 Volts
Maximum Operating Voltage	120 Volts
Measurement Type	Ammeter
Certification	UL
Item Weight	220 g
Parcel Dimensions	16.6 x 8.5 x 7.7 cm

11. TROUBLESHOOTING

This section addresses common issues you might encounter with your MECHEER Watt Meter.

- **Abnormal Display or No Response:** If the screen shows unusual characters or the device is unresponsive, perform a full reset using the RESET button (refer to Section 9.2).

- **Display Shows "0" After Power Cycle:** If the meter displays "0" for cumulative data (kWh, cost, time) after being unplugged and re-plugged, it's likely because the monitoring period was less than 1 hour or the total energy consumption was less than 0.1 kWh. Data is only saved for longer periods or higher consumption.

- **"OVERLOAD" Message:** This indicates that the connected appliance's power consumption has exceeded the set overload threshold. Reduce the load or disconnect the appliance. The device will resume normal operation once the load is within limits.

- **Backlight Not Staying On:** Check your backlight time settings (refer to Section 6.1). Ensure it's set to your desired duration or "always on" (bL-4). You can also press any button to temporarily activate the backlight.

- **Inaccurate Low Power Readings:** For very low power devices (below 0.5W), the meter may not accurately measure consumption or time. This is normal behavior as specified in the notices.

12. WARRANTY AND SUPPORT

MECHEER is committed to providing high-quality products and customer satisfaction. If you encounter any issues or have questions regarding your Watt Meter Power Meter Plug, please contact MECHEER customer support for assistance. Refer to your purchase documentation for specific warranty terms and contact information.

Related Documents - PM01-US

	[Power Meter User Manual: Monitor Electricity Usage and Cost](#) Comprehensive user manual for the Power Meter, detailing its features for monitoring electricity consumption, calculating costs, managing overload protection, and adjusting settings for home appliances.
	[Power Meter User Manual - Monitor and Save Energy Costs](#) Comprehensive user manual for the Power Meter, detailing display modes, electricity price settings, overload protection, memory functions, and troubleshooting. Learn to monitor appliance power consumption and electricity costs effectively.
	[24/7 Days Digital Timer with Random and Summer Time Instruction Manual](#) Instruction manual for a 24/7 Days Digital Timer with Random and Summer Time functionality, detailing clock settings, timer programming, manual operation, random function, and warnings for household appliances.
	[Novilot Sensor Soap Dispenser Instruction Manual](#) Instruction manual for the Novilot Sensor Soap Dispenser, model MSD-PM01. This guide covers structure, operation, introductions, and precautions for the touchless foam dispenser.

Midea Washing Machine Service Manual CL-AM80-S17PSF/1201

Service manual for the Midea CL-AM80-S17PSF/1201 automatic washing machine, providing troubleshooting guides, error code explanations, disassembly instructions, and electrical parts testing procedures.