Grow

Tech

PowerMate (Node/AP) User Manual

Product Description

PowerMate Node and PowerMate AP are versatile smart controllers designed to help you manage a variety of tasks efficiently and effortlessly. PowerMate Node connects to your home WiFi network, while PowerMate AP acts as an access point. Both devices allow you to set up and adjust schedules remotely using a user-friendly dashboard. With customizable settings, these devices can be adapted to numerous use cases, such as irrigation, lighting, or appliance control.

Setting Up Your PowerMate Node

To begin using your PowerMate Node, follow these simple steps:

1. Connect the USB cable to a power source.
2. Connect the 240V power cable to a 240V power socket.
3. Search for a WiFi network named "PowerMateXXX" and connect to it.
4. Open your internet browser and enter http://192.168.4.1/.
5. Click on "Select WiFi network."
6. Locate your home WiFi network, then enter its name and password.
7. Click "Submit."
8. PowerMate Node will restart and connect to your home WiFi network.
9. Open your internet browser again and enter the IP address to access the dashboard.
10. Click on "Set Start Day / Time" and select the days, times, and frequency to supply power.
11. Click "Submit" to save your settings.

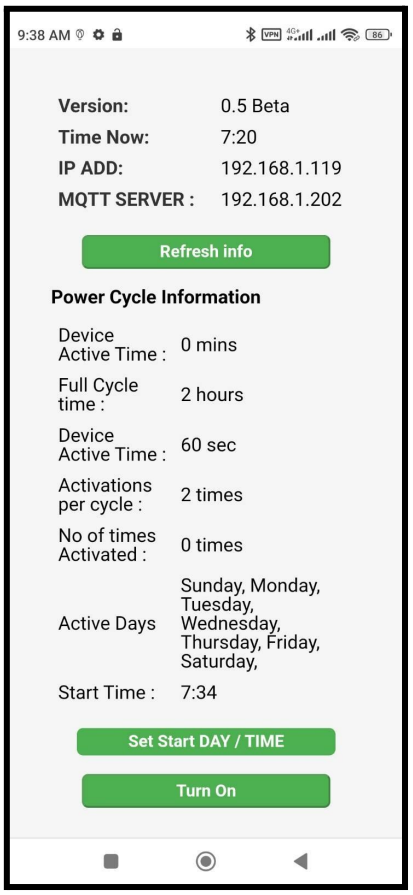
Setting Up Your PowerMate AP

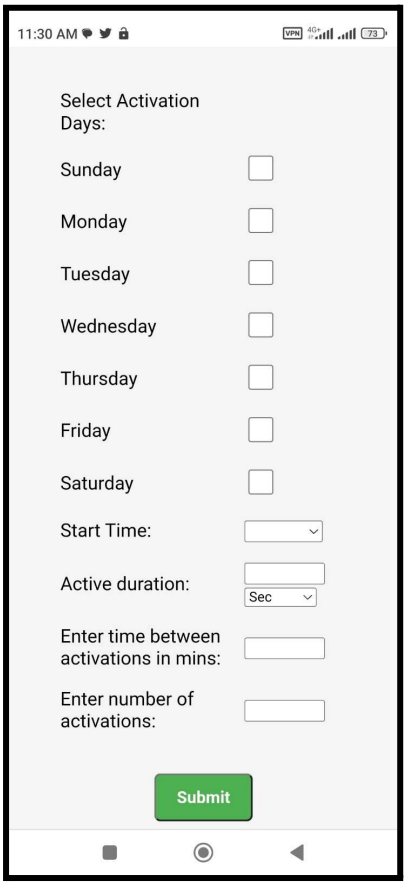
To begin using your PowerMate AP, follow these simple steps:

1. Connect the USB cable to a power source.
2. Connect the 240V power cable to a 240V power socket.
3. Search for a WiFi network named "PowerMateXXX" and connect to it.
4. Open your internet browser and enter http://192.168.4.1/.
5. Click on "Set Clock" and input the current date and time. (This step is required only once.)
6. Click on "Dashboard," then "Set Start Date / Time" and select days, times, and frequency.
7. Click "Submit" to save your settings.

Note: Ensure you choose the appropriate days and times to switch on / off supply power to your device.

PowerMate Dashboard





The dashboard allows real time viewing of the following parameters

Firmware Version: The firmware version indicates the specific version of software embedded in the hardware device. It's important for device functionality and compatibility.

Time Now: Time Now displays the current time from the device's internal clock. It helps in synchronising and logging events.

IP ADD: IP Address (IP ADD) is a unique numerical label assigned to a device connected to a network, which allows it to communicate with other devices.

MQTT Server: MQTT Server is the broker in MQTT communication protocol, which facilitates message exchange between devices in an IoT network.

Device Active Time: Device Active Time represents the total duration for which the device has been actively operating since the last reset or startup.

Full Cycle Time: Full Cycle Time denotes the total time taken to complete one cycle of the device's operation, including both active and inactive states.

Activations per Cycle: Activations per Cycle is the number of times the device is activated within one operational cycle. It's useful for understanding usage patterns.

No of Times Activated: Number of Times Activated is the total count of how many times the device has been activated since it was first put into operation.

Active Days: Active Days represents the number of days the device has been active since its first use. It can be used for maintenance scheduling.

Start Time: Start Time indicates the time when the device was last activated or started its current operational cycle. It's useful for tracking and logging purposes.

Advanced Features

MQTT

In the context of Powermate, the integration of MQTT (Message Queuing Telemetry Transport) protocol plays a key role in delivering an interactive and efficient user experience. This lightweight messaging system allows Powermate to seamlessly communicate with HomeAssistant, facilitating real-time updates and efficient data transmission while conserving network bandwidth. This feature enables you, the user, to remotely operate Powermate through HomeAssistant, enhancing its versatility. The practical application of MQTT in Powermate turns your regular environment into a smart one, providing you with an added layer of convenience and productivity, right at your fingertips.

Frequently Asked Questions

1. What is the difference between PowerMate Node and PowerMate AP? PowerMate Node connects to your existing home WiFi network, while PowerMate AP serves as an access point, creating its own WiFi network.
2. How can I reset my PowerMate device to factory settings? (Provide specific instructions for your product on how to perform a factory reset.)
3. Can I use multiple PowerMate devices in my home or property? Yes, you can use multiple PowerMate devices to manage different tasks or areas.
4. How do I update the firmware on my PowerMate device? (Include instructions on how to check for and install firmware updates for your product.)
5. Can I control my PowerMate device remotely? Yes, once the PowerMate Node or PowerMate AP is connected to a WiFi network, you can access and manage the device remotely using the dashboard.
6. What is the maximum distance between the PowerMate device and the WiFi router or access point? (Include information on the recommended maximum distance for a stable connection between your product and the WiFi source.)
7. Can I use PowerMate devices outdoors? (PowerMate is housed in a water resistant case so can be safely used outdoors. That said the device should always be i the shade and not in direct sun)
8. What should I do if I'm experiencing connectivity issues with my PowerMate device? Check the device is powered on, go to your phone’s “ Saved WiFi networks” and delete the WiFi Network called “ PowerMate “
   Turn off and on the Wifi connection on the device you are connecting from.
9. Is PowerMate compatible with Home Assistant : Yes PowerMate is fully compatible and an automation script for adding a switch is available on our github page.

10. What should I do if my PowerMate device is not turning on or functioning properly? First, ensure that both the USB cable and the 240V power cable are securely connected to their respective power sources. If the issue persists, try disconnecting and reconnecting the cables, or check for any visible damage. If the problem continues, consult the troubleshooting section of the user manual or contact customer support for further assistance.
11. Why is the dashboard showing out of date information? The dashboard info can be refreshed by clicking the "refresh info" button.