

GRIT Power Bank

The **GRIT Power Bank** is a 12VDC 20A centralized power supply unit designed to deliver reliable, system-integrated power to 12V devices across the GRIT ecosystem. It serves as the dedicated power source for GRIT peripheral devices including Gate Control, Air Quality, Dust Bin Sensor, Pressure Sensor, Latch, Solenoid Control, iR/RF Collector, and RFID devices.

The Power Bank communicates wirelessly with the GRIT Hub via the mesh network, enabling system-wide lock events that simultaneously cut power to all connected devices. Housed in a wall-mountable PLA enclosure, the unit features two outgoing power ports with push-down terminal jacks and a Red/Green LED status indicator — red indicates the unit is locked and no power is flowing to connected devices, while green indicates the unit is unlocked and power is active.

When powering Gate Control devices, we recommend connecting no more than 8 per Power Bank. This is a general guideline — actual capacity will vary based on the number of tools in simultaneous use, the physical size of the gates being driven, and the proximity of each gate to the main collector trunk. These factors directly affect amperage draw, both from individual Gate Control devices and from multiple gates changing state at the same time. Installations with heavy simultaneous usage, large gates, or long duct runs may require a lower device count per Power Bank to maintain reliable operation. Be sure to balance the overall device count between the two ports on the Power Bank.



1. Red/Green LED status indicator
2. 120v power cable
3. 12VDC output jacks
4. Housing bracket mounting holes

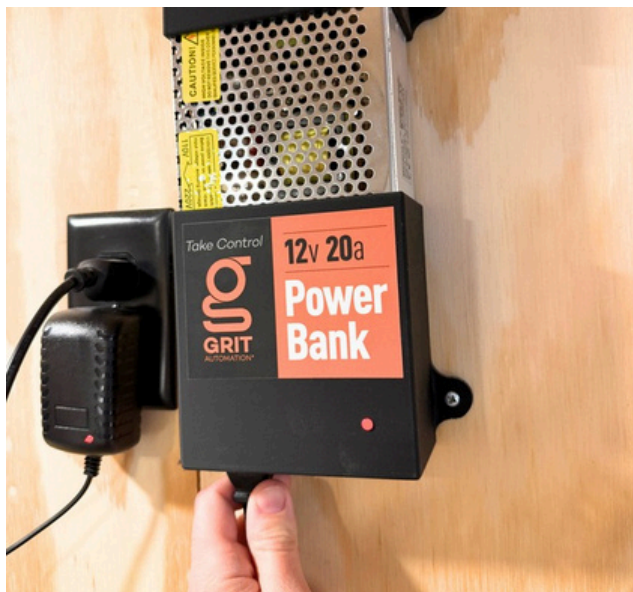
Installation and Configuration

The instructions to install and configure your Power Bank within the GRIT App are listed below.



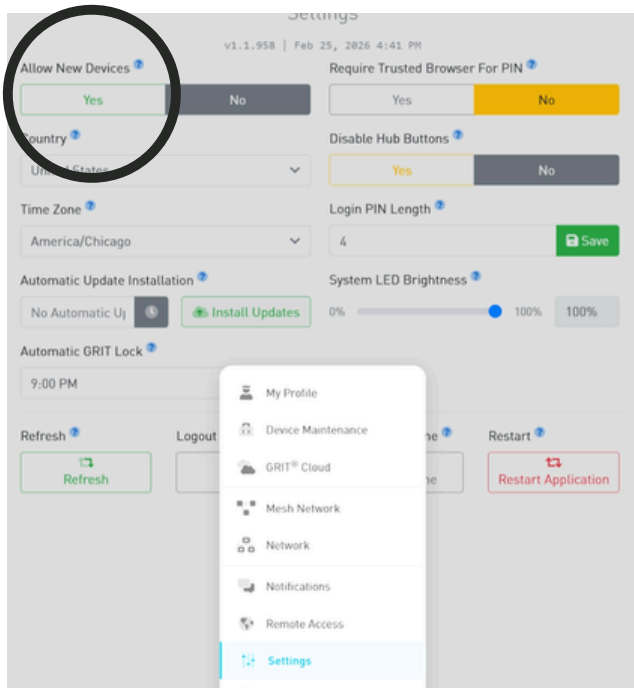
Step 1:

Choose a central location for the Power Bank, close to a 120v wall outlet, and mount to the wall.



Step 2:

Plug the provided power cord into the bottom of the Power Bank, then into the wall outlet.



Step 3:

With the device installed, Bind the Power Bank to the Hub.

Admin-->Settings-->Allow New Devices set to 'Yes'

or

Press the center, blue Bind button on the front of the Hub

***Important: Power will NOT FLOW from the Power Bank until the device is bound to its Hub.**



Step 4:

After running low-voltage wire to your devices, land the homeruns into the jacks for the Power Bank ports.

With DC power, polarity matters.

Positive (+) = **Red** on the jack

Negative (-) = **Black** on the jack

***The positive and negative landing sides may differ from the terminal sides on the Gate Control devices.**



Step 5:

To allow power to flow from the unit, you will need to make sure the Power Bank is 'Unlocked'.

The Red/Green LED indicator light will be:

Red when Locked

Green when Unlocked

Configuration

Devices-->Power Bank--> *select specific power bank to configure*

The screenshot shows the GRIT Powerbank configuration page. At the top, there is a navigation bar with a back arrow, the GRIT logo, and a trash icon. Below this, the page title is "Powerbank". The configuration fields are as follows:

- 1**: Powerbank Name field containing "Main".
- 2**: A "Show" button next to the Powerbank Name field.
- 3**: "Include In System Wide GRIT Lock" toggle set to "Yes".
- 4**: "Enable Power Supply" toggle set to "Yes".
- 5**: Group dropdown menu set to "Default".
- 6**: Temperature (°F) field showing "98.37".
- 7**: Channel (Amps) field showing "0.99".

At the bottom of the page, there is a navigation bar with icons for Home, Assets, Devices, GRIT Track (highlighted), Reports, and Admin.

1. Editable name field
2. Device power graph
3. Include in System Wide GRIT Lock setting would have the Power Bank Lock (cutting power to all associated devices) when 'Yes' is selected
4. Enable Power Supply unlocks the power bank when 'Yes' is selected
5. Editable device grouping
6. Temperature reading from the device's PCB to check that the unit is not being overloaded
7. Channel (Amps) shows the collective amperage draw from associated devices across the two ports