

Mounting a Unit into a Cabinet

Title	Mounting a Unit into a Cabinet
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Purpose

This work instruction defines the process for installing a Magna-Power product into a cabinet, especially a Magna-Power cabinet.

Tools Required

The following tools will be required to complete the instructions listed below:

- Screwdriver
- Jack or crane equipment to hold the unit at the appropriate level
- Mounting hardware (quantities and sizes may vary)
 - Mounting Brackets
 - Hardware
 - #10-32 Phillips pan machine screws
 - #10-32 Phillips pan type F self-tap screws
 - #10 medium split lock washers
 - #10 flat washers
 - #10 nylon washers

Instructions

1. Prepare hardware for installation

- Your Magna-Power product will come with an accessory box filled with hardware appropriate for that device. Depending on its size, it will have more or fewer mounting holes and brackets. The brackets may be differently sized as well.
- In general, the hardware is intended for the different mounting locations as follows:
 - #10-32 Phillips pan type F self-tap screw → #10 nylon washer → device front panel → cabinet front rail
 - #10-32 Phillips pan machine screw → #10 medium split lock washer → #10 flat washer → mounting bracket → device side panel
 - #10-32 Phillips pan type F self-tap screw → #10 medium split lock washer → #10 flat washer → mounting bracket → cabinet rear rail
- Remove all panels that may impede the installation of the product(s). This may include front, side, and rear panels.

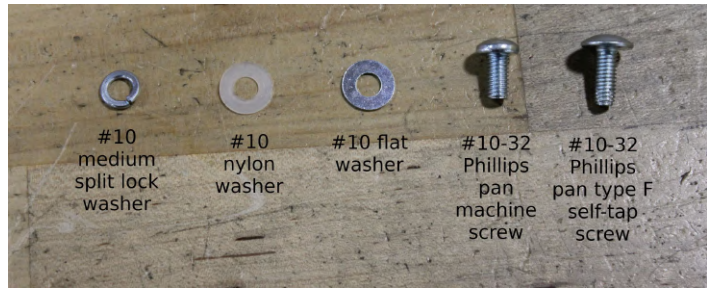


Figure 1. Typical hardware that would come in the hardware kit. Note the grooves at the end of the type-F screw threads.



Figure 2. Depending on the size of the unit, your product will include one or more of these mounting brackets. Note the folded rear tab on the left of the brackets.

2. Install the front panel mounting holes to the front of the enclosure

- Use the lifting equipment to position the unit at the desired height.
- For each hole, use:
 - #10-32 Phillips pan type-F screw
 - #10 nylon washer



Figure 3. Install hardware to the front panel first. The nylon washers are barely visible in this image.

3. Install the mounting brackets on the sides of the power supply

- Position the brackets so that they may be supported by the rear rail of the cabinet. The folded tab should be facing towards the rear of the device.
- Install them using the appropriate number of sets of the following: screw → lock washer → washer.
 - Do not fully tighten the screws until the rear screws are installed.



In Magna-Power CAB models, screws will be installed in the first and third holes back from the tab.



Figure 4. Note that the top unit is attached with one "single" mounting bracket, and the bottom unit is installed with two of them. Different models may use the "double" mounting bracket instead.

4. Attach the assembled unit to the rear vertical rail

- Use #10-32 1/2" Phillips pan type F self-tap screws, medium split lock washers, and flat washers to affix to the vertical rail.
 - You may now fully tighten the side panel screws to the mounting bracket.



Do not remove the lifting equipment until the unit is fully installed.



Figure 5. Tightening this hardware will draw the mounting bracket into the vertical rail. Once the rear hardware is fully installed, tighten the screws in the side panels.

5. Connect cabinet electronics

- Connect the 37-pin d-sub cable to the main unit.
 - If there are multiple products in this cabinet, this is usually the unit at the top. Turning the unit ON with the black PWR switch will activate the cabinet fans.
- Connect fan power to 2 phases of the AC input. There should only be 2 loose wires for this connection, and the phases to which they are connected doesn't matter.

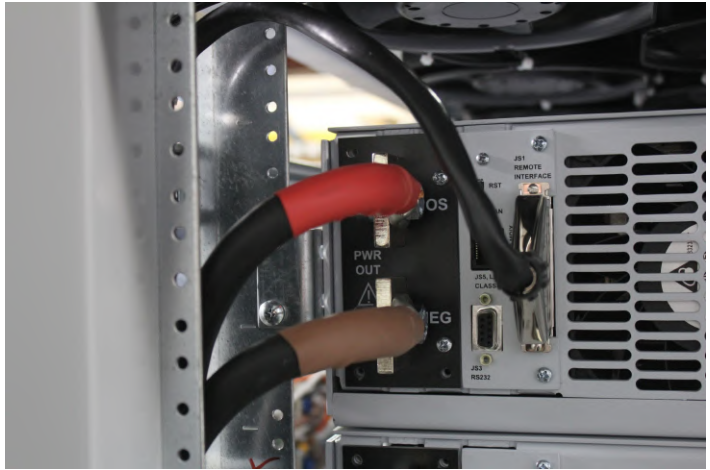


Figure 6. Install the 37-pin connector to JS1 of the main unit. You can now access these pins through the empty "MASTER" slot of the integrated UID47.



Figure 7. Typically, the two phases for fan power will be connected to channels A and B.

