

WAP-80 Installation

This document is online at <http://www.wifitrax.com/appNotes/quickStart/WAP-80-Quick-Start.pdf>. Please see our website for information on our limited warranty.

Package Contents

1 x WAP-80 Module
1 x Mounting Kit (4 screws, 4 spacers, 4 nuts, 4 washers)
Getting Started: WAP-80 Installation (this document)

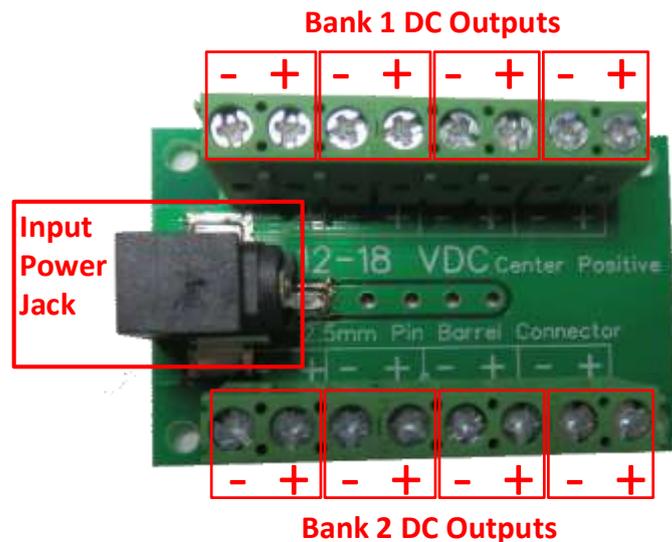


Figure 1. WAP-80 Connections

This product is not a toy. Keep away from children. It is not suitable for use by persons under 14 years of age. It is intended for voltages below 25 Volts used in model trains. On no account connect directly to mains voltages. Use only with a mains adapter providing 12-18 Volts.

Installation Instructions

- (1) The WAP-80 module is simply a means of taking the output from a mains adapter and making it available at 8 pairs of screw terminals. It is intended to allow just one mains adapter to provide low voltage power to up to eight WifiTrax Wi-Fi Layout Modules. It is suitable for use with the following WifiTrax modules and others requiring 12-18 Volts DC power.
WFS-46, WFS-86, WFG-80, WFG-160, WFP-40, WUFP-40
- (2) Obtain a suitable mains adapter, for example the PA15-43-1 15V 4.3A Power Adapter sold by WifiTrax. Alternatively, you can obtain a suitable power adapter from many electronic distributors. The CUI Model SD165-15-U is ideal. Be careful to use a power adapter with the correct size power jack. If you use the wrong size, the power may be unreliable or the connector may not go into the jack socket. Do not force it! The correct connector is a Barrel Plug, 2.5mm I.D x 5.5mm O.D, x 9.5mm long.
- (3) Determine the set of WifiTrax Wi-fi Layout modules you are using that are conveniently close together so that they can use the same power supply. For example, you might have a station with 12 switches (turnouts), 4 power blocks, yard lights, station lights and 3 double light signals. In this case you might use a WFS-86 and a WFS-46 for the switch machines, a WFP-40 for the track power and a WFG-80 for the lights and signals.

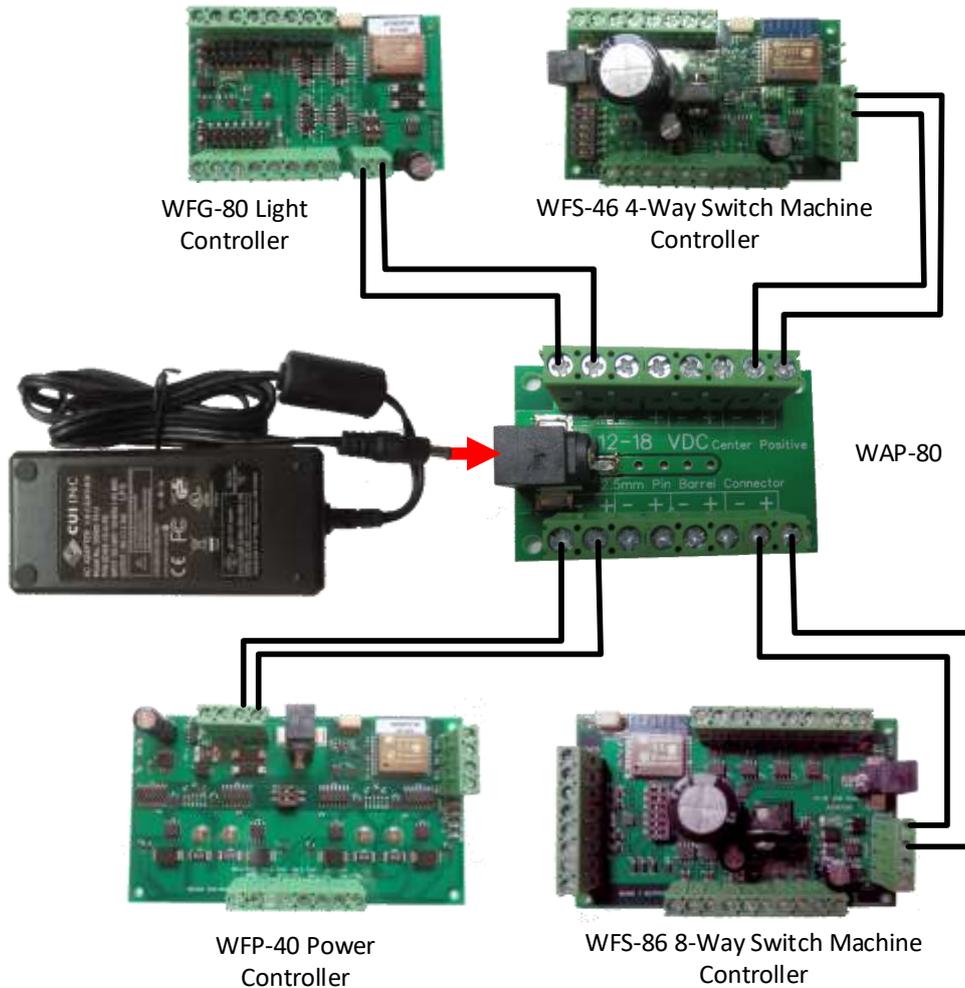


Figure 2. Typical WAP-80 Usage Connections

- (4) Check the current requirements of each module and make sure that the sum can be accommodated by your chosen mains adapter.

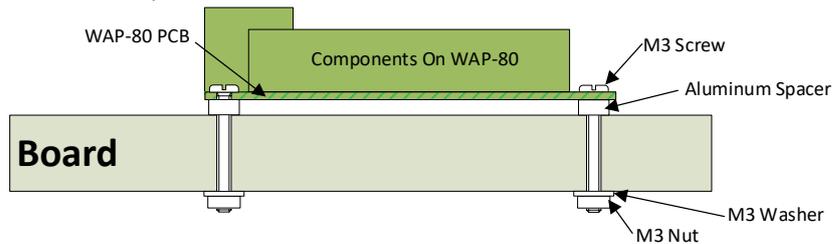


Figure 3 Mounting Suggestion

- (5) Mount all of the modules in a suitable location and mount the WAP-80 nearby using the four M3 metric screws, nuts and spacers provided. Note that the screws or spacers may contact the power connections, so mount the screws on an insulating baseboard or fascia board.
- (6) Connect pairs of power wires - black and red insulated (13 x 0.12mm stranded as a minimum) between the outputs of the WAP-80 and the power inputs of your controller modules Figure 2 shows the example mentioned earlier. **Double check that you have connected them to the correct screw terminals on the Wi-Fi Layout Controller Modules. Some modules may be damaged if power is connected incorrectly!**
- (7) Connect your mains adapter to the power jack on the WAP-80 and when you are ready turn on its power.