Factory Reset

You can factory reset the module by pressing and holding down the Factory Reset button until the Green LED flashes. The module will then reset.

Getting More out of your WFD-44

Access the WFD-44 Manual at http://www.wifitrax.com/manuals/WFD-44/WFD-44-Manual.pdf

More Information

Other resources:
http://www.wifitrax.com/appNotes/howToArticles.html

WifiTrax products are made in Australia using globally-sourced components and services. Check our website for warranty information.

This product is not a toy. Keep away from children. It is not suitable for use by persons under 14 years of age.
Warning: This product contains chemicals known to the state of California to cause cancer, birth defects or other reproductive harm.

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WFD-44 Getting Started Guide

This document is online at http://www.wifitrax.com/appNotes/quickStart/WFD-44-Quick-Start.pdf. Please consult the full WFD-44 manual for much more detail at http://www.wifitrax.com/manuals/WFD-44/WFD-44-Manual.pdf

Package Contents
1 x WFD-44 Module in Static Shielding Bag, this document, mounting Kit

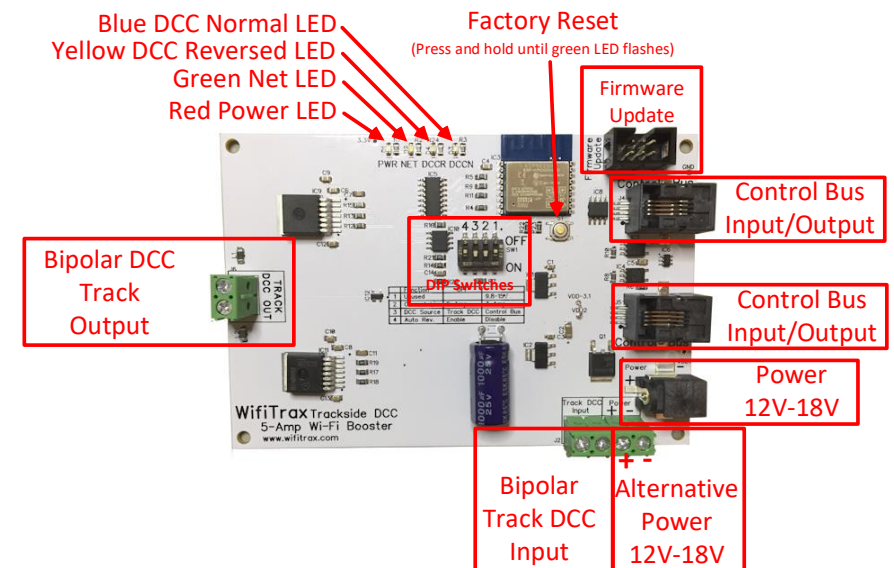# WFD-44 5 Amp Wi-Fi/DCC Trackside Fixed Volts Booster with Auto-Reverse

Figure 1. WFD-44 Connections

What does WFD-44 Wi-Fi/DCC Trackside Command Station/Booster do?

The WFD-44 Wi-Fi/DCC Booster is a 5 Amp/3 Amp DCC Booster that receives a DCC signal from a DCC Command Station and delivers DCC Track Power to a Power District consisting of a section of track isolated by a gap in both rails. Here is a summary of its features:

- 5 Amp continuous capability
- Fixed DCC Output Voltage determined by power adapter voltage
- 3 Amp or 5 Amp Overcurrent Protection
- Input from Track DCC or DCC Control Bus
- Auto-reversing for return loops, wye etc.
- Wi-Fi Monitoring of Status and approximate current load

LED Indicators

Red LED: Lights as soon as power is applied to the module.

Blue LED: Lights when the module receives a valid DCC input and is supplying DCC to its track outputs. Flashes quickly when an over-current or short condition is detected.

Amber LED: Lights instead of the blue when the Track Output is reversed.

Green LED: Flashes when Wi-Fi traffic occurs. Lights continuously when module is connected to a home network router.

Getting Started

If this is your first purchase of a WFD-44, you have various options to connect it to your layout:

- Connect the control bus of your existing DCC Command Station to the WFD-44 as in Figure 2, or

(4) Once your device has connected to the WFD-44 Wi-Fi, open a browser such as Google Chrome and type the IP Address of the module:
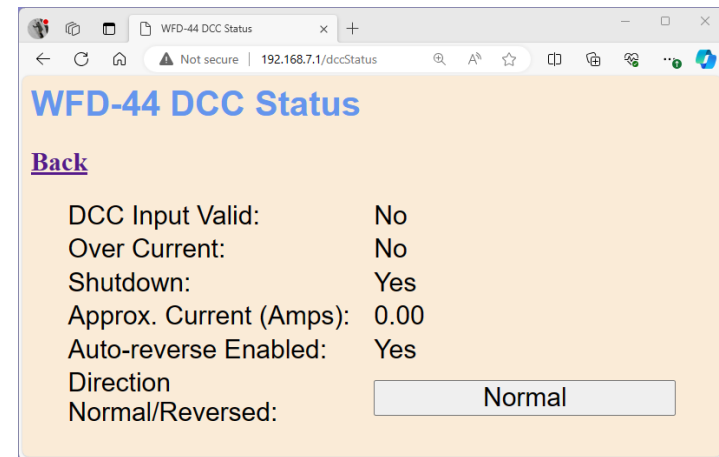
192.168.7.1

(5) The main menu is displayed as below.
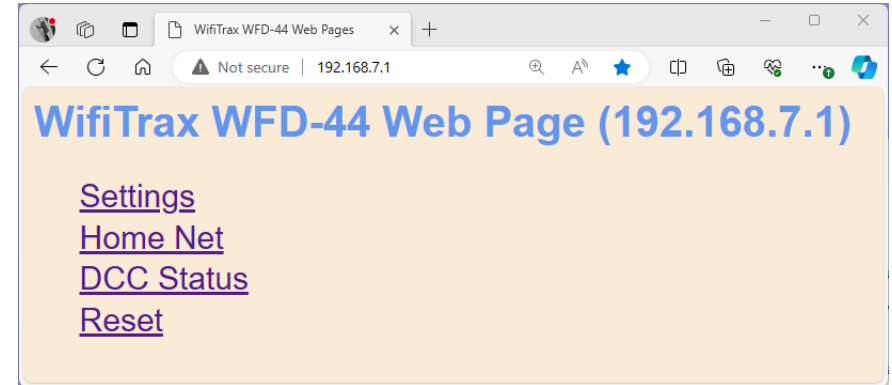
Click on any of the menu items to make changes to the configuration of the WFD-44 module. The details of the Settings and other pages are described in the WFD-44 Manual.

As an example, the DCC Status page is shown below:

Using The Wi-Fi Features of WFD-44

The WFD-44 displays a web page containing a menu of features. This web site is internally generated and does not need a connection to the internet.

To connect to the WFD-44 web page using Android follow these steps:

(1) Press the Home button and tap the settings icon on your Android phone or tablet:

(2) Find the Wi-Fi option. On Android 7, you tap Connections on the left, then Wi-Fi on the right.
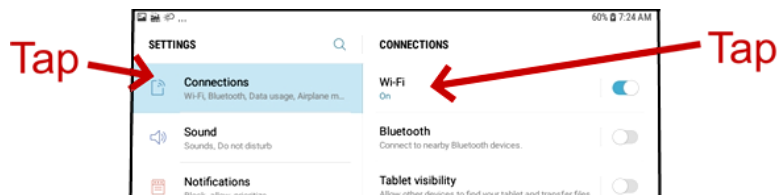
(3) You see a list of available Wi-Fi Connections on the right. Look for one like wftrx_WFD44_1_XXXXXXXX_7, where XXXXXXXX is the serial number of your unit that appears on its label. Tap on that – no password is required – and wait for it to connect.
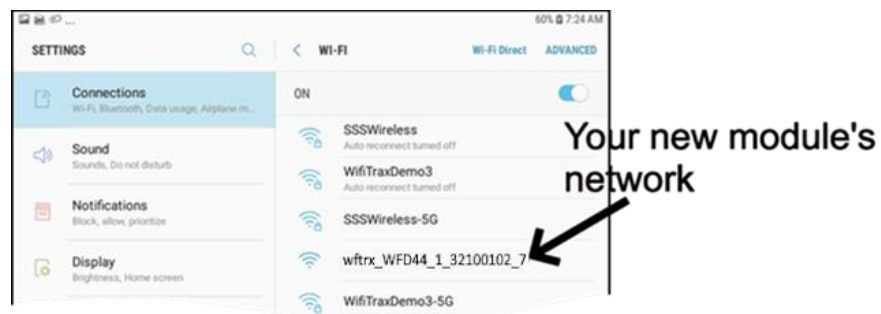
- Use the track DCC (bipolar DCC) output from your existing command station/booster to your WFD-44 as in Figure 3. You then connect its track outputs to a new DCC Power District.
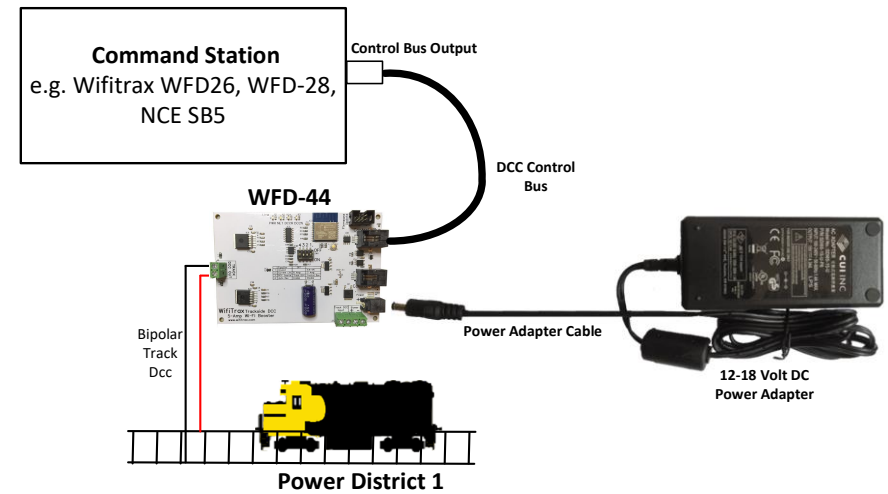
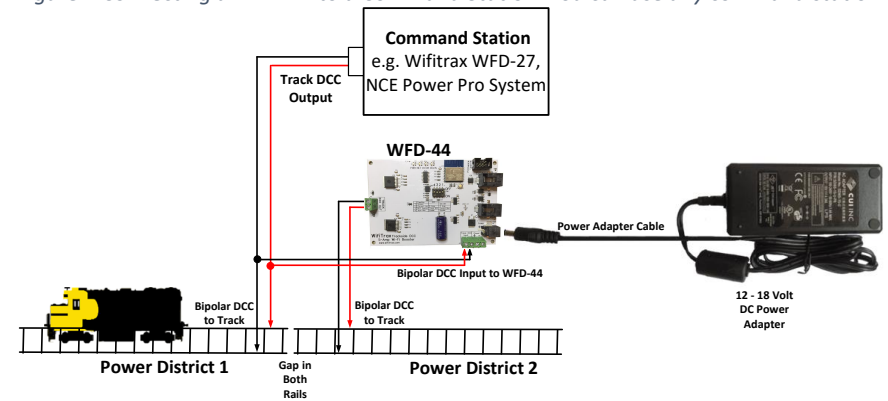*Figure 2 Connecting a WFD-44 to a Command Station. You can use any command station*

Figure 3 Connecting a WFD-44 to a Command Station/Booster. You can use the output of any booster.

Switch	Function	Setting	Remarks
1	Not Used	On	Not applicable
1	Not Used	Off	Not applicable
2	Overcurrent Shutdown	On	3 Amp Shutdown
2	Overcurrent Shutdown	Off	6 Amp Shutdown
3	DCC Input Source	On	Control Bus Input
3	DCC Input Source	Off	Bipolar Track DCC Input
4	Auto Reverse Enable	On	Auto Reverse Disabled
4	Auto Reverse Enable	Off	Auto Reverse Enabled

Table 1 WFD-44 DIP Switch Settings for Simple Single Power District Operation

Installation Instructions

(1) Connect your WFD-44 according to either Figure 2 or Figure 3. You can use Wifitrax or any manufacturer's compatible product to provide DCC as you wish. The Wifitrax WFD-26, 27 or 28 are ideal. Just remember to distinguish between Control Bus inputs and Bipolar Track DCC inputs.

(2) Set the DIP switches on your WFD-44 according to your requirements as in Table 1.

- Choose a suitable Power Adapter. A 15V DC output is ideal as the track voltage will then be around 14V.
- Set the Over-Current Shutdown to 3 Amp or 6 Amp.

- Select the DCC Input Source to Control Bus or Bipolar Track DCC according to whether you are wired as in Figure 2 or Figure 3.

- Select either Auto-Reverse Enable or Disable. If you disable Auto-Reverse you need to make sure any existing Power Districts are wired with the same polarity as the WFD-44. Do not enable Auto-Reverse in two adjacent Power Districts supplied by WFD-44 or they will both try to reverse and defeat each other.

(3) Connect a suitable Power Adapter to your WFD-44. A 15V DC output is ideal as the track voltage will then be around 14V. Remember that the Power Adapter voltage determines the track voltage. The track voltage is usually about 1V less than the Power Adapter voltage. **Do not exceed the maximum DCC voltage for the decoders on your layout.**

(4) Turn on your command station and WFD-44 Booster. The Red LED should light immediately followed by either the blue or amber. The green will only light when you use the Wi-Fi features of your booster.