

WFD-25 Installation

This document is online at <http://www.wifitrx.com/appNotes/quickStart/WFD-25-Quick-Start.pdf>. Please see our website for information on our limited warranty.

Package Contents

- 1 x WFD-25 Module in Static Shielding Bag
- Getting Started: WFD-25 Installation (this document)
- Mounting Kit

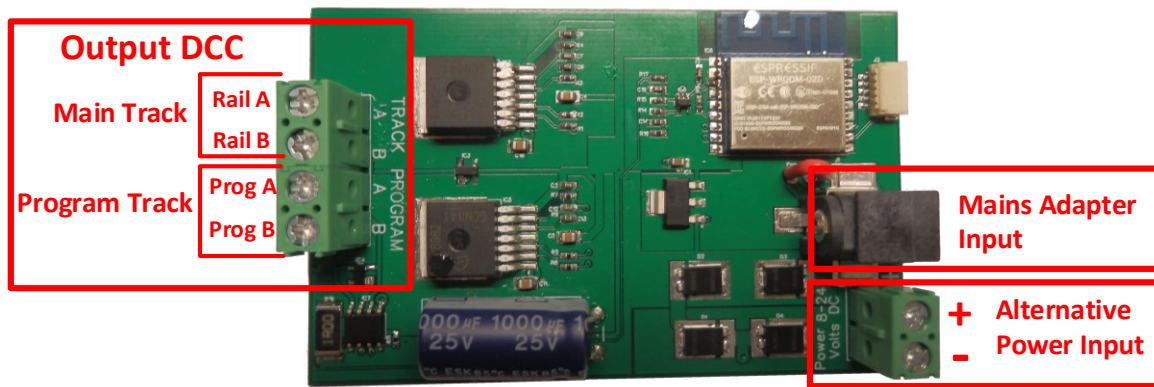


Figure 1. WFD-25 Connections

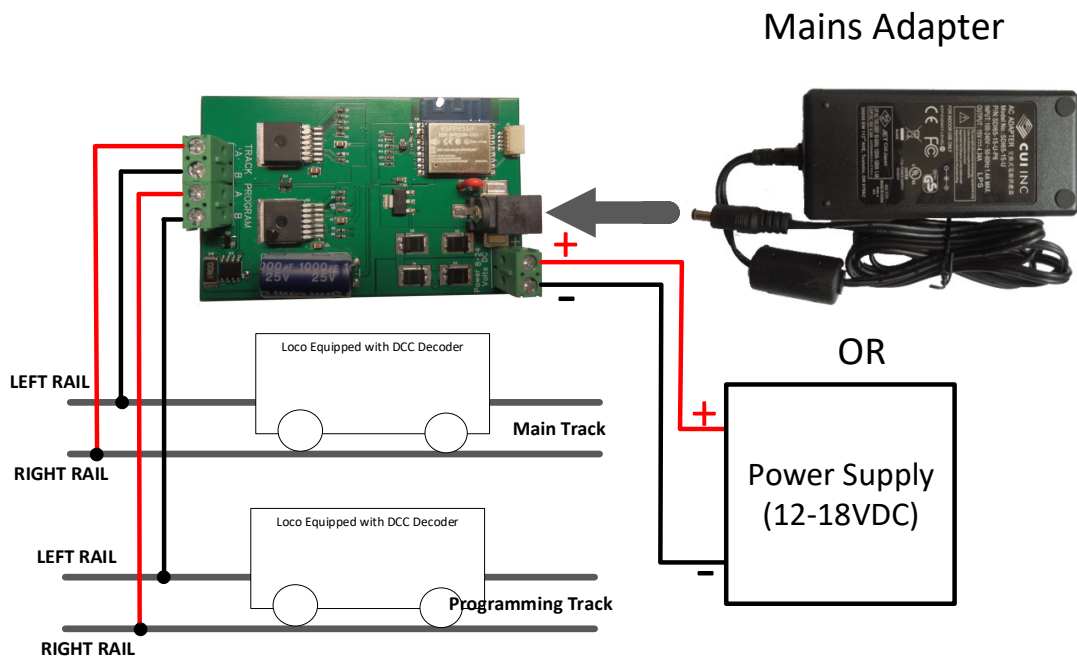


Figure 2. Connections to Power Supply and Decoder when mounted trackside

This product is not a toy. Keep away from children. It is not suitable for use by persons under 14 years of age.

Installation Instructions

The WFD-25 should be mounted on your layout with the DCC Outputs connected to the track. It provides an ability to control up to 16 NMRA compatible DCC decoders over a Wi-Fi network. The DCC out connector provides NMRA compatible DCC power/track signals exactly as you would find on track supplied by an NMRA standard booster driven from a DCC Command Controller. Two outputs are provided, a high-power (4 Amp) output intended to drive the main track and a low-power (1 Amp) output intended to drive a programming track.

Trackside Mounting

- (1) The WFD-25 module is intended to receive power either from a mains adapter plugged into the Mains Adapter Input shown on Figure 1 or as an alternative from a DC power supply from 12 to 18 Volts connected to the Alternative Power Input in Figure 1. When a mains adapter is used, the Alternative Power Input terminals become power outputs which may be used to power other Wi-Fi Layout controllers. The WFD-25 is actually fitted with a full-wave rectifier so it will still operate if the power connections are reversed. However, it's a good idea to follow the convention shown in the figures.
- (2) Connect the Output DCC connections to the main and programming tracks as in as shown in Figure 2. The WFD-25 does not include auto-reverse, so if locomotives will be driven from the main track to the programming track, these tracks must be wired with the same polarity otherwise the drivers will shutdown when the locomotive causes a short by bridging the gap.

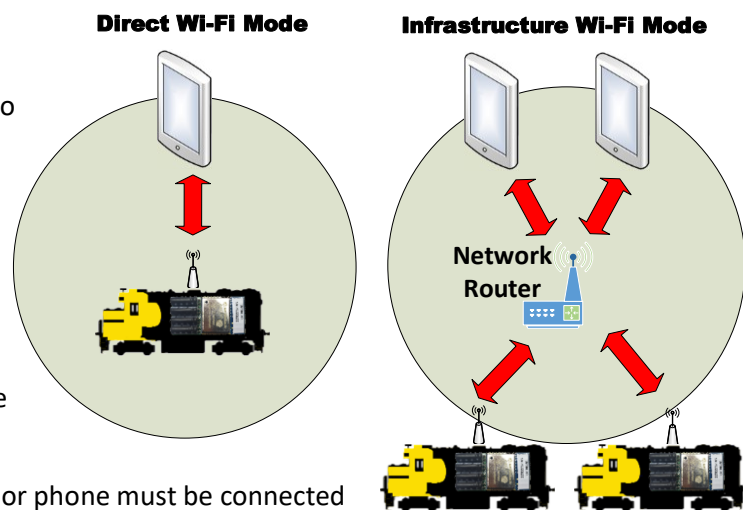
Setup and Operating Instructions

The WFD-25 can be set up and operated from our free Loco Operator 3 App for Windows and Android.

Wi-Fi - Direct and Infrastructure Modes

There are two ways of driving your loco over Wi-Fi: Direct Mode and Infrastructure Mode.

When you set up your first installation of WFD-25 the Install Wizard gives you two choices in the way that you configure your Wi-Fi operation of locomotives, Direct Mode or Infrastructure Mode.



In direct mode, your computer, tablet or phone must be connected to the Wi-Fi Access Point within the loco's installed WFD-25. In this mode, you can only operate one locomotive controller with each installation of Loco Operator on a computer, tablet or phone. In Infrastructure Mode, the locomotive and your computer, tablet or phone all connect as *Wi-Fi Stations* to your Home Network Router – your Home Net. You can then build a full model railroad network with many locos, switch machines, computers, tablets and phones. You can drive two locos with each installation of Loco Operator, you can run multi-unit consists and you can control switch machines and power. If you start in Direct Mode, you can later use the Loco Operator Install Wizard to convert to Infrastructure Mode which generally works best. Sometimes you may not want to use a router – such as in a Garden Railway – and stay in Direct Mode.

Installing Loco Operator - Loco Operator 3

These instructions cover both Windows 10 and Android. Follow the steps below according to your device.

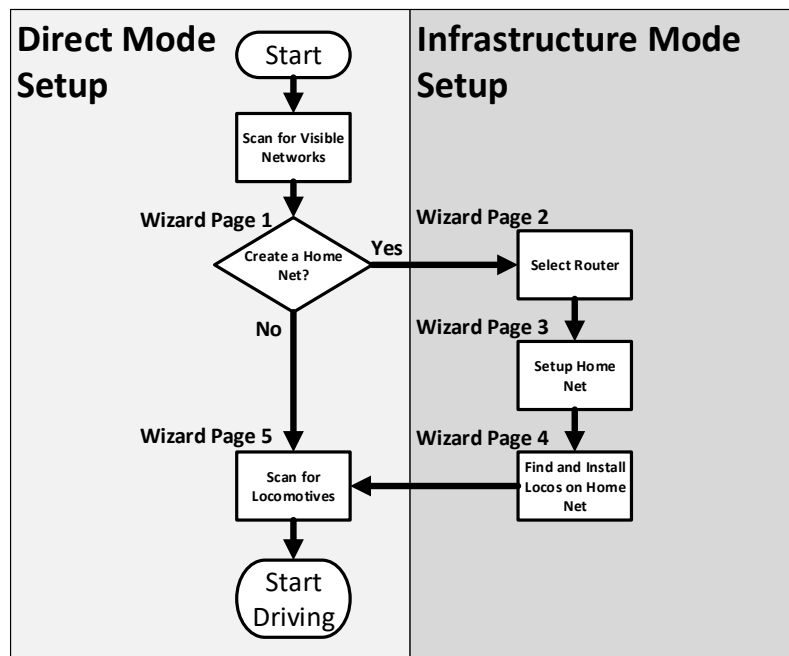
- (1) Go to either the Windows Store or the Google Play Store according to whether you have a Windows or Android computer or tablet. Search for Loco Operator 3. Alternatively go to our website, use the Products menu to go to the Loco Operator page, FIND Loco Operator 3 and click on “DOWNLOAD FROM WINDOWS APP STORE” or “DOWNLOAD FROM GOOGLE PLAY STORE” according to your device.
- (2) Follow the instructions on the Store Page to get and install the app on your device.

Running Loco Operator for the First Time

- (1) For easy set-up, have your first WifiTrax-controller, whether in a locomotive or mounted trackside, powered up on your layout before you run Loco Operator for the first time.
- (2) Android Only: When the app starts for the first time you may be asked to accept that the app will access files and the device location. You must accept these, then the screen goes black for a few seconds. Wait for the Install Wizard to appear.

This is standard Android behavior. Be advised that Loco Operator absolutely does not access your pictures, any personal files or any files other than those it generates and no data is uploaded to the internet. Also, the need to access your location is required to work with Wi-Fi. Loco operator does automatically connect your computer to the Wi-Fi access points of WifiTrax modules that you have installed and to your Home Network transparently, without prompting. When you have finished driving trains, you may have to reconnect to your home network to access the internet or other devices such as your printer.

- (3) If this is the first time you have run Loco Operator, you will automatically be taken to the Settings page and the Install Wizard will run.
- (4) The Install Wizard will start. The steps in the Wizard are explained on each screen. The flow chart here should be helpful. It is much easier to start in Direct Mode by saying No to the Home Net option. You can convert to Infrastructure mode later using the Wizard.



More Information

<http://www.wifitrax.com/appNotes/WiFi-DCC.pdf>

<http://www.wifitrax.com/appNotes/howToArticles.html>