

WDMI-35 Wi-Fi/DCC Loco Interface Module Getting Started

WDMI-35 Installation

This document is online at <http://www.wifitrax.com/appNotes/quickStart/WDMI-35-Quick-Start.pdf>. Please see our website for information on our limited warranty.

Package Contents

1 x WDMI-35 Module in Static Shielding Bag
Getting Started: WDMI-35 Installation (this document)

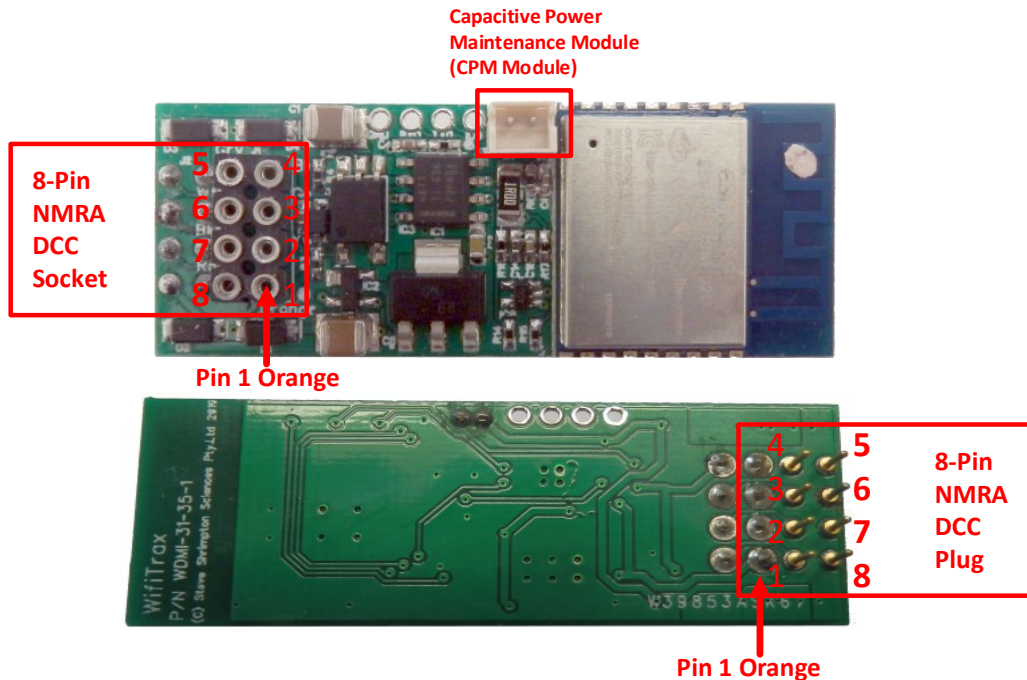


Figure 1. WDMI-35 Connections

Pin	Wire Color	Function
1	Orange	Motor +
2	Yellow	Rear Light
3	Green	Unused
4	Black	Track -
5	Gray	Motor -
6	White	Head Light
7	Blue	Common
8	Red	Track +

Table 1 Standard NMRA 8-pin Connector Pin Definitions

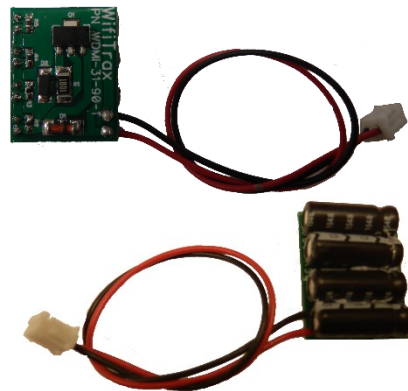


Figure 2 CPM-10 Optional Power Maintenance Module

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

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Installation Instructions

The WDMI-35 should be mounted within a locomotive with the 8-Pin NMRA DCC plug inserted into the corresponding DCC-Ready 8-pin socket on the locomotive's circuit board. Any DCC decoder with an NMRA 8-pin plug may then be inserted into the 8-Pin NMRA Socket on the WDMI-35. For smoother running you can insert the 2-pin plug of our CPM-10 (sold separately) into the 2-pin CPM Socket on the WDMI-35. The CPM-10 will provide up to 5 seconds of running over dirty track, dead frogs etc.

- (1) Remove the shell from your locomotive and carefully check the location of everything inside the locomotive including where the optional CPM-10 module will be placed.
- (2) Insert the plug on the base of your WDMI-35 module into the 8-pin DCC-Ready socket on your locomotive's circuit board. Be sure to insert the module such that pin 1 goes into the pin-1 socket. See Figure 1. Be sure the underside of the WDMI-35 does not touch any metal objects on the locomotive circuit board. If necessary use a layer of electrical tape under the WDMI-35 between it and the locomotive circuit board or any protruding components.
- (3) Insert the 8-pin plug of your DCC decoder into the 8-pin NMRA DCC Socket on the WDMI-35. Be sure that the orange lead of the harness or pin 1 goes into the pin-1 socket. See Figure 1.
- (4) If required, insert the 2-pin plug of your CPM-10 module into the CPM Module 2-pin socket on the WDMI-35. The plug and socket are designed to only be inserted the correct way around. **Do not force the plug into the socket the wrong way around!**
- (5) Ensure that all modules are in their place and nothing is shorting. You can mount the CPM-10 with blue-tack or adhesive mounting tape. Any loose wires can be fixed in tidy positions with blue tack or similar to avoid getting pinched when you replace the plastic shell.

Setup and Operating Instructions

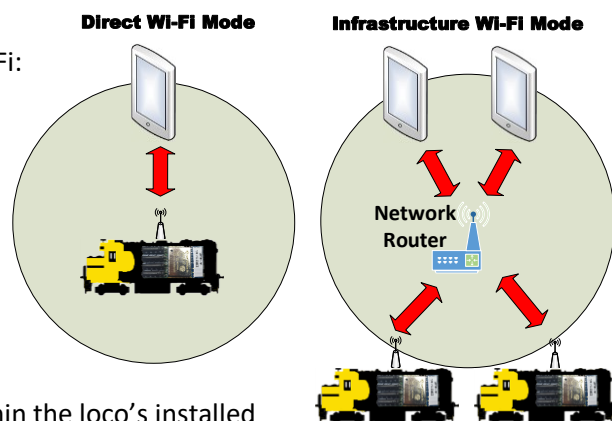
The WDMI-35 can be set up and operated from our free Loco Operator App for Windows and Android. Loco Operator Version 3.2 (Beta 2) or greater is required.

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 WDMI-35 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 WDMI-35. 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.



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Installing Loco Operator - Loco Operator 3

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

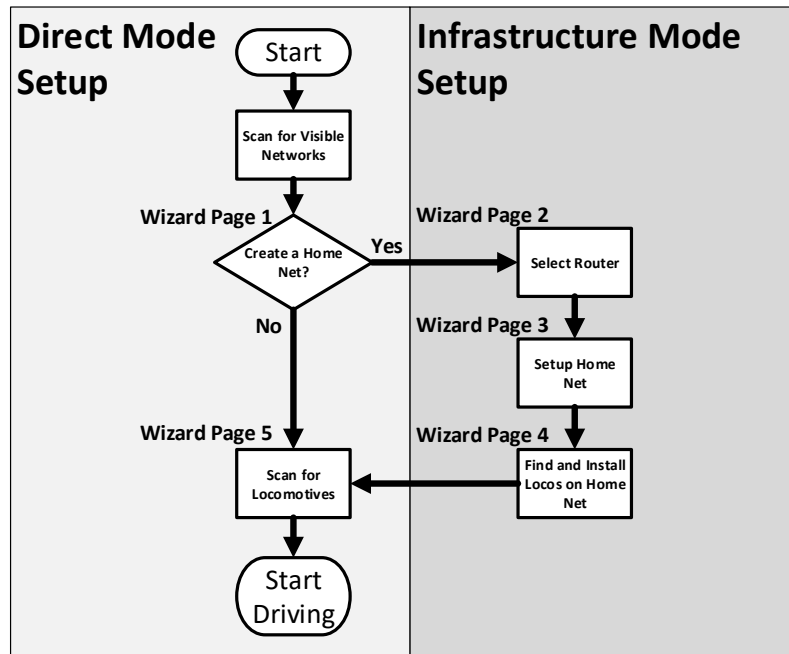
- (1) Go to either the Windows Store or the Google Play Store according to whether you have a Windows or Android computer or tablet. Search for Loco Operator 3. Alternatively go to our website, use the Products menu to go to the Loco Operator page, find Loco Operator 3 and click on “DOWNLOAD FROM WINDOWS 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 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>

Designed and made in Australia from globally sourced components