On the "Connect to Server" screen, tap the module's SNXXXXXXX server where XXXXXXXX is its serial number.

The green LED should begin to flash. Now tap "Select" and on the "Select/Release Loco" screen, select DCC Address and use the keypad to type the DCC address of your locomotive.

Tap "Acquire". The Throttle screen returns and you can begin driving.

### Getting More out of your WDMI-37

Please consult the full manual for information about the great features available. For example, you can:

- Use the WDMI-37 web pages to set up your locomotive roster (one loco) with a custom name so that you can easily select it on your iPhone or Android. You'll also be able to set each function button to show the correct text for the locomotive and decoder.
- Use the Home Net option. That way you can leave you phone or tablet connected to your home network. When you power up your locomotive, your phone or tablet will connect to its WiThrottle server much more quickly.
- Drive more than one train while connecting to this module or a WFD-60 gateway module.
- Access the WDMI-37 Manual at
   <u>http://www.wifitrax.com/manuals/WDMI-37/WDMI-37-Manual.pdf</u>

## More Information

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

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.

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

## WifiTrax <u>www.wifitrax.com</u>



WDMI-37 Getting Started Guide

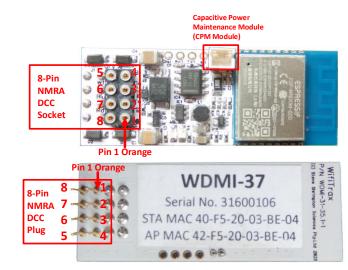
This document is online at

http://www.wifitrax.com/appNotes/quickStart/WDMI-37-Quick-Start.pdf. Please consult the full WDMI-37 manual for much more detail at http://www.wifitrax.com/manuals/WDMI-37/WDMI-37-Manual.pdf

#### Package Contents

1 x WDMI-37 Module in Static Shielding Bag, this document.

# WDMI-37 Wi-Fi/DCC Interface Module



#### Figure 1. WDMI-37 Connections



Figure 2 CPM-10 Optional Power Maintenance Module

WifiTrax Model Science www.wifitrax.com

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

### What does WDMI-37 Wi-Fi/DCC Interface Module do?

The WDMI-37 may be mounted in an HO or other small locomotive that has a NMRA-standard 8-pin DCC Ready socket. It provides an ability to control a NMRA-compatible DCC decoder over a Wi-Fi network. The 8pin socket on the top of the module accepts an 8-pin NMRA-Standard DCC plug attached to a decoder.

- You can drive the loco using a smart phone or tablet as a hand-held throttle provided it has Wi-Fi capability and you have installed one of the recommended apps in Table 1
- You can use the simple Web Page driving app generated by the module in almost any browser running on a smart phone or tablet.
- You can drive a loco using a TCS UWT-100 Universal Wi-Fi Throttle.
- You can operate the loco using a regular DCC Command Station/booster via the track.
- You can drive more than one loco using the Rail Mesh scanning feature either with or without an extra WFD-60 module.

If you have been using an app on your phone to drive trains, via a computer running JMRI, you can now bypass JMRI and connect your phone directly to the WDMI-37.

#### You don't need to install JMRI to use the WDMI-37

You will probably get a better experience using the WiThrottle or Engine Driver apps or the TCS UWT-100, but the "Drive" web page provides a simple way to control your loco. Always remember to connect to the module's network first (you can avoid this later using the Home-Net option).

#### Using WiThrottle on an iPad or iPhone

Install the WiThrottle app. Make sure you are connected to the module's wftrx\_WDMI37\_1\_XXXXXXX\_7 network. Open the WiThrottle app. You should see the "Select Server" screen. Tap on the SNXXXXXXX server where XXXXXXXX is your module's serial number.



The green LED should flash on your module. On the Address screen in WiThrottle, tap "Keypad" and type the DCC address of your locomotive, then tap "Set".

Go to the Throttle screen by tapping "Throttle" at the bottom left and begin driving.

#### Using Engine Driver on an Android Tablet or Phone

Install the Engine Driver app. Make sure you are connected to the module's wftrx\_WDMI37\_1\_XXXXXX\_7 network. Open the Engine Driver app.



WifiTrax Model Science www.wifitrax.com

C			۵	۲		
WDMI-37 Loco Edit						
Back						
Road#115						
115						
8 Save						
	115	115	Road#115 115	Road#115 115	Road#115 115	

(4) Now tap Drive option. You will see the screen below. This is a basic handheld throttle that will enable you to drive in forward and reverse as well as test the DCC functions.

WDMI-32 Drive ← → C △	.cco x +	00.100.71 (mm							
WDMI-32 D									
Back									
Forward	DCC Step:	0	Stop						
<<	<	>	>>						
Lights	F1	F2	F3						
F4	F5	F6	F7						
F8	F9	F10	F11						
F12	F13	F14	F15						
F16	F17	F18	F19						

(5) The drive page can be used to control your locomotive's speed direction and DCC functions. Tap Forward to toggle the direction.

Use the slider to control the speed. Alternatively tap >> to increase the speed by ten DCC steps or > to increase by just one step. Tap << to reduce the speed by ten DCC steps or < to reduce the speed by one DCC step. Tap any of the function buttons to change their value.

## Installation Instructions

The WDMI-37 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-37. 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-37. The CPM-10 will provide up to 5 seconds of running over dirty track, dead frogs etc.

- 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-37 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-37 does not touch any metal objects on the locomotive circuit board. If necessary, use a layer of electrical tape under the WDMI-37 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-37. 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-37. The plug and socket are designed to only be inserted the correct way around. <u>Do not force</u> <u>the plug into the socket the wrong way around!</u> The plug and socket are high quality but rather delicate. When inserting the plug, be careful not to push the terminals out of the plug and do not pull on the leads.
- (5) Ensure that all modules are in 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.

## Choosing and Installing your App

App Name	Author	Get From:	System	Comments
WiThrottle	Brett	Apple Store	Apple IOS	Can access
	Hoffman			web pages.
Engine	Steve	Google Play	Android	Can access
Driver	Todd	Store		web pages.
Train	Drew	Microsoft Store	Windows 10	
Throttle	Hoffman			
Web	Chrome,	Already	Apple IOS,	Configuration
Browser	Safari,	installed or	Windows,	and simple
	Edge	search for	Android	running of
	etc.	download.		trains.

Table 2 Recommended Apps that work with the WDMI-37

## Testing and Configuring your WDMI-37

You can test and configure the module using its web pages which are accessible from any browser on IOS, Android or Windows. **First you must connect your phone or tablet to the Wi-Fi network provided by the module**.

### Connecting using an Apple IOS Phone or Tablet

(1) Tap the Settings icon on your iPhone or iPad



(2) Tap Wi-Fi on the left-hand menu. Under "Other Networks" on the right, the list should include one like wftrx\_WDMI37\_1\_XXXXXXX\_7, where XXXXXXXX is the serial number of your unit that appears on its label. Tap that Wi-Fi Network and wait for it to connect. A blue check mark should appear when connected.

### Connecting using Android

(1) Press the Home button and tap the Settings icon:



(2) Tap "Connections" or "WLAN", then Wi-Fi and tap the module's wftrx\_WDMI37\_1\_XXXXXXX\_7 network as above.

## Connecting using Windows

On your Windows 10 desktop or laptop, click the networks icon in the system tray and select the wftrx\_WDMI37\_1\_XXXXXXX\_7 network described above. Wait for it to connect.

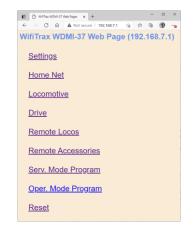
## Using the Web Pages

(1) Once you are connected to the module's network, open a browser such as Safari, Chrome or Edge and type the following in the URL bar followed by the Enter or Go key:

#### 192.168.7.1

This is the IP Address of the WDMI-37 web pages when you are connected to its wftrx\_WDMI37\_1\_XXXXXX\_7 network.

(2) You will see the Main Menu page as below:



(3) To test drive the locomotive, you do not need to install an app., but you must first set the DCC Address of the locomotive in the module. Make sure your locomotive with the WDMI-37 installed is powered up and has a known DCC address. Then tap "Locomotive" and type the correct DCC Address of the locomotive you are using in the DCC Address field and tap "Save". Tap "Back" again if needed to return to the main menu.

WifiTrax Model Science www.wifitrax.com

