Now you should go to the WFD-60 Remote Accessories Screen in Figure 1 so you can see the status of each channel on your WFO-85.

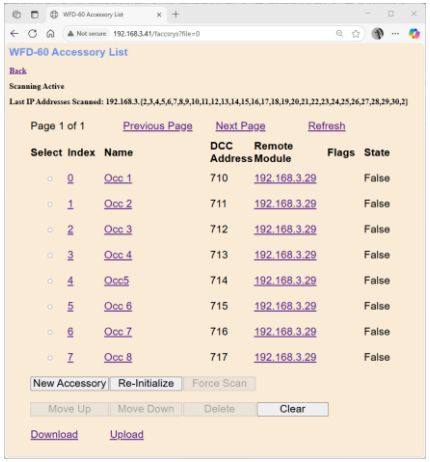
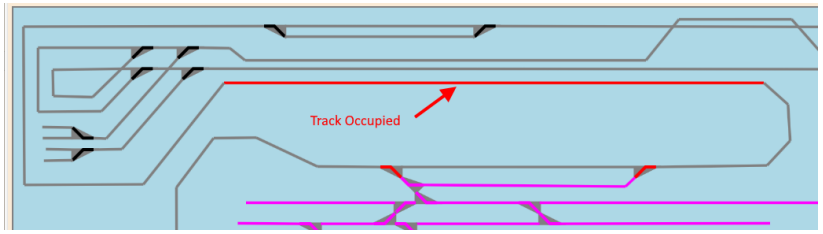


Figure 1 The Remote Accessories Screen showing the Status of each Channel on your WFO-85

You now need to study the WFD-60 manual to find out how to set up Panels that allow track occupation to be viewed graphically on a diagram of all or part of your layout such as the portion of a complex panel shown below.



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.

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WFO-85 Getting Started Guide

This document is online at http://www.wifitrax.com/appNotes/quickStart/WFO-85-Quick-Start.pdf. Please consult the full WFO-85 manual for much more detail at http://www.wifitrax.com/manuals/WFO-Series/WFO-Series-Manual.pdf
And the WFD-60 at http://wifitrax.com/manuals/WFD-60/WFD-60-Manual.pdf

Package Contents

1 x WFO-85 Module in Static Shielding Bag, this document, mounting Kit

WFO-85 8-Way Contact-Closure Detector

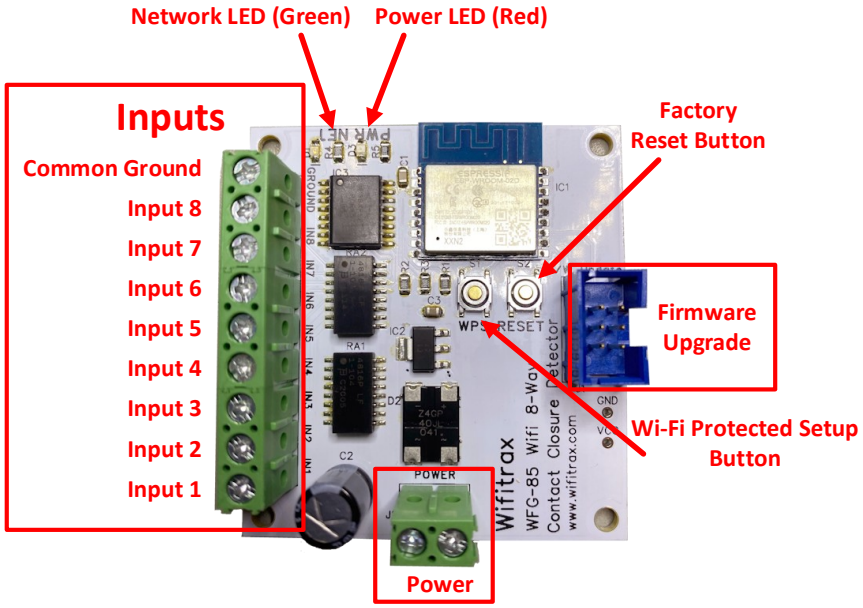

Figure 2 WFO-85 Connections

The WFO-85 provides 8 input channels that may each be activated by connecting one of the channels to the common ground. This may occur:

(1) By the use of a relay such as a reed switch activated by some event such as occupation of a given section of track,
(2) A push button on a physical control panel of some kind,
(3) An input from another electronic module whose output appears as the closure of a contact. An example is the Wifitrax WFO-16 DCC Occupation Detector.

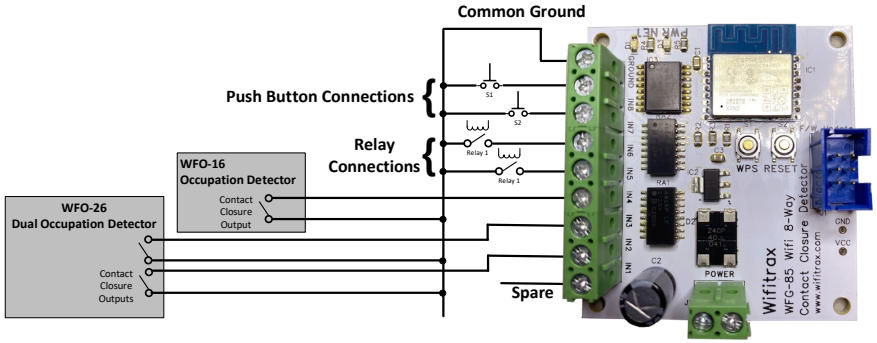

Figure 6

Figure 3. Examples of Connections to the WFO-85 Module

Some examples of connections to the WFO-85 inputs are shown in Figure 3:

The inputs 7 and 8 are connected via push-button switches to the common ground.

Inputs 5 and 6 are connected via relays to the common ground.

Input 4 comes from a Wifitrax WFO-16 single channel occupation detector that has a contact-closure output. When DCC current flows through the WFO-16 track connections, to indicate a loco is present, its output contacts close, activating Input 4.

Inputs 2 and 3 are connected to the contact closure outputs of a WFO-26 that has two DCC track occupation sensor inputs.

Input 1 is left unconnected and is spare.

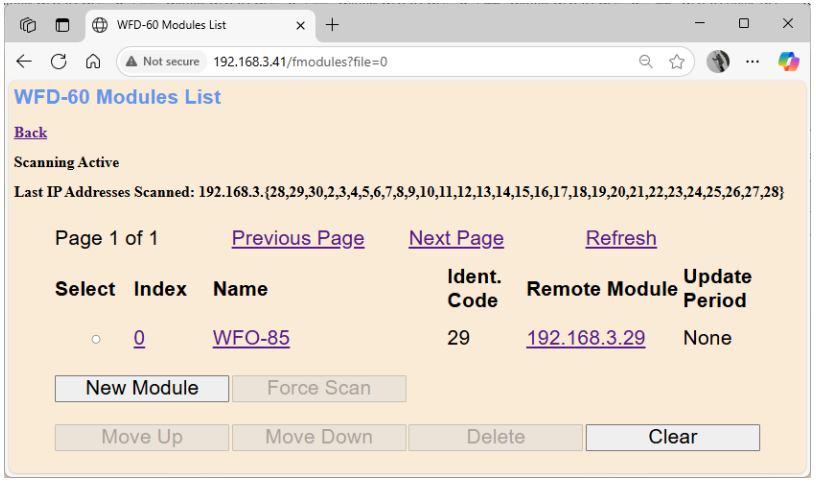

Figure 4 The Accessory Modules Screen on the WFD-60 Showing the Discovery of your WFO-85 at IP Address 192.168.3.29

After waiting for scanning to complete, the Accessory Modules screen lists your WFO-85. Once your new module has been found, go back to the settings screen in Figure 6 and uncheck the Rail Mesh Scanning Enabled option. Make sure the Accessory Status Scanning is enabled and click save.

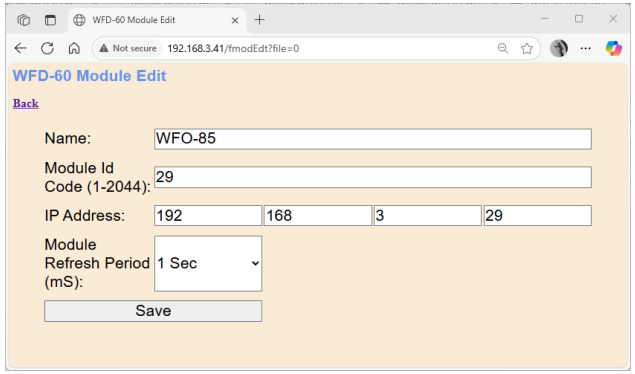

Figure 5 The Accessory Module Edit Screen. Here you can set the module refresh period.

Go back to the Accessory modules screen in Figure 4 and click the hyperlink shown as the WFO-85 name. This will display the Module Edit screen in Figure 5 for that module. Set the Module Refresh Period to a suitable value such as one second.

Using your WFO-85 with your WFD-60 Layout Controller

Only a brief introduction to the WFD-60 is given below. Please consult the WFD-60 manual for all the detail. http://www.wifitrax.com/manuals/WFD-60/WFD-60-Manual.pdf

The WFD-60 module in its Layout Controller function scans a portion of the IP Addresses on your home network to detect Wifitrax Layout Controller modules such as Switch Machine Controllers, Lighting Controllers and Occupation Sensors such as the WFO-85. To make sure this happens, you must, of course make sure your WFD-60 is on the same Wi-Fi network as your WFO-85 and that scanning is enabled. Please consult the WFD-60 Manual to find out how to do this.

When you have your WFD-60 on your home network, check that Rail Mesh Scanning is enabled as in Figure 6. Also check the first and last scan addresses. Note that Accessory Status Scanning cannot be enabled at the same time as Rail Mesh Scanning, but you will need to enable it later.

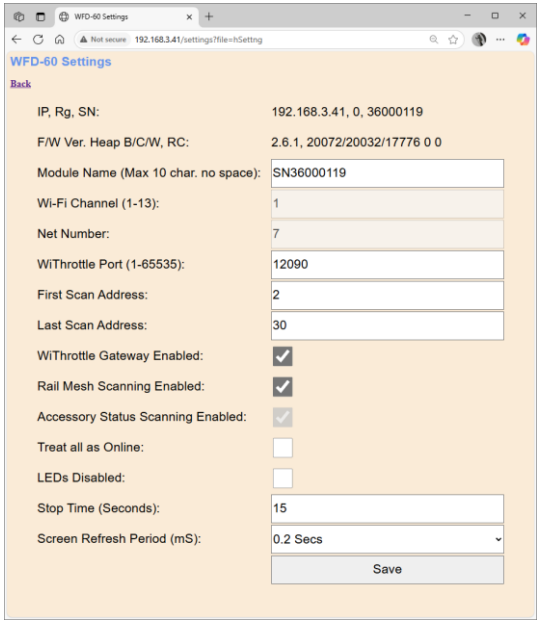

Figure 6 The WFD-60 Settings Page

Again on the WFD-60 access the Accessory Modules screen as Figure 4.

Connecting WFO-85 to your Home Network

The WFO-85 must be connected to your Wi-Fi home router to be of any use since its output are only accessible by Wi-Fi, through polling by a device such as the WFD-60 Layout Controller. Polling means that the WFD-60 regularly questions the WFO-85 via Wi-Fi to determine the status of all its inputs. The WFD-60 then uses this to display information in some way on one of its panels that you, as the layout owner, create. This is explained thoroughly in the WFD-60 manual. http://wifitrax.com/manuals/WFD-60/WFD-60-Manual.pdf

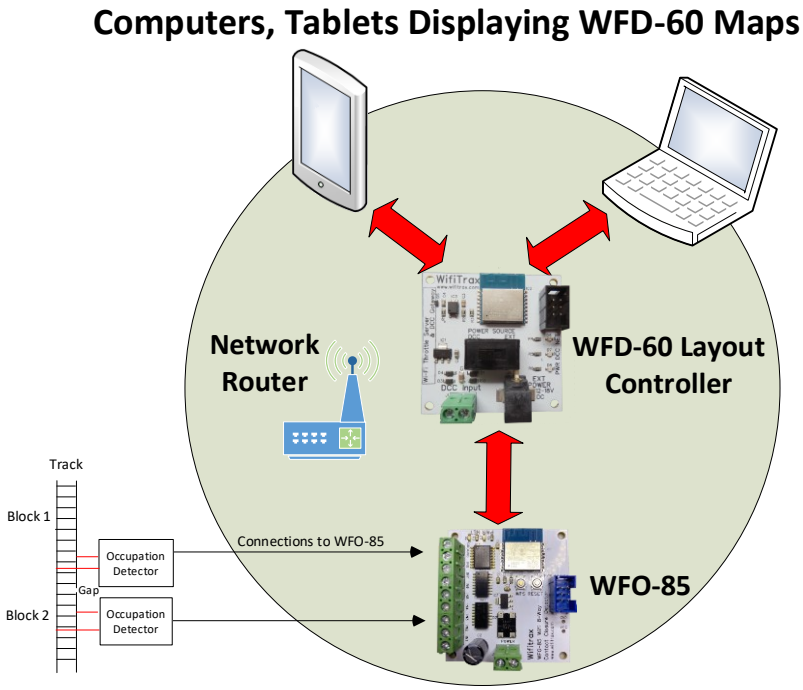

Figure 7 The WFO-85 in its Place on your Home Network

Connecting Using WPS

The easiest way to connect the WFO-85 to your home router's Wi-Fi Network is by using the WFS (Wi-Fi Protected Setup) button on your router and on the WFO-85.

To use WPS, first power up your WFO-85, then find the WPS button on your router and press it. The router should flash a light to indicate that it is ready for a WPS connection to its Wi-Fi network. The exact way this happens depends on your router. Some routers may use an installed app or their admin web page to initiate WPS.

Now press the WPS button on the WFO-85, just once. The Green LED should light up, then flash a few times before lighting continuously to indicate connection to your router's network.

Connecting Manually

If your router does not have WPS or for some reason it does not work, you can connect manually. First you must connect to the WFO-85's own Wi-Fi access point so you can access its web pages that allow setup.

Connecting to WFO-85 Access Point 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_WFO85_1_XXXXXXXX_7, where XXXXXXXX is the serial number of your unit that appears on its label. Tap that Wi-Fi Network. **You must always connect to this Network to access the WFO-85 web pages** until you operate in home-net mode. No password is required.

Connecting to WFO-85 Access Point using Android

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

(2) Tap Connections, then Wi-Fi and select the module's network as above.

Connecting to WFO-85 Access Point using Windows

On your Windows 10 desktop or laptop, click the networks icon in the system tray and select the network described above.

Connecting the WFO-85 Manually to your Home Network

(1) Once your device is connected to the WFO-85 Wi-Fi Access Point, open a browser and type the IP Address "192.168.7.1" into the place where you would type a URL such as www.google.com.

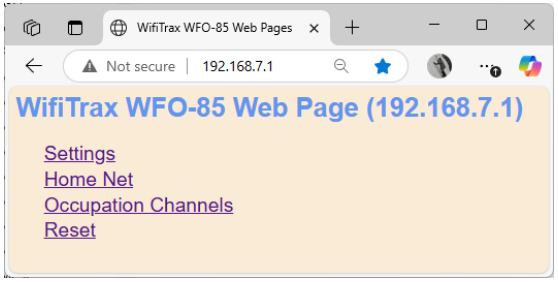

Figure 8 The WFO-85 Main Menu

(2) You should now see the WFO-85 Main Menu as Figure 8. Tap the Home Net Option which displays the Home Net screen as Figure 9.

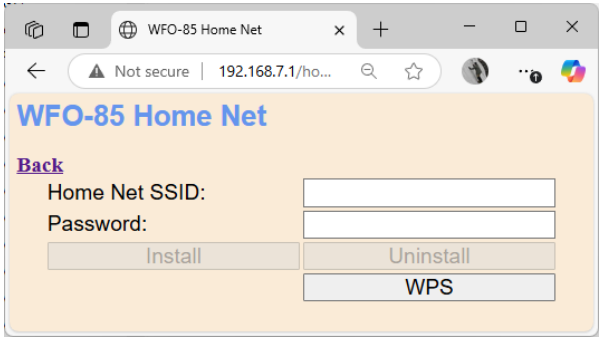

Figure 9 The Home Network Screen for the WFO-85

(3) Now type the SSID of your router and its password in the box below the SSID. Be careful since both SSIDs and Passwords are case sensitive. Take care not to include an unwanted leading or trailing space character.

(4) Click the Install button. The LEDs will now flash a few times and then the green LED will light continuously to indicate successful connection to your home network.

Now that the WFO-85 is connected to your home router's network, you can start using your WFD-60 Layout Controller to make use of it.