Setup Instructions

Using WiFi on a Raspberry Pi running Tournament Manager is considered to be a beta-quality feature at this time. By choosing to enable WiFi on your Raspberry Pi you recognize that this is not an officially supported feature. Ensure that any Raspberry Pis that you plan to use wirelessly have sufficient signal strength. We still recommend using a hard-wired ethernet cable when possible.

If you encounter questions or issues, please post a thread in the Tournament Manager section of VEXForum.com. Do not contact your REC Foundation Regional Support Manager for assistance.

*Please do not use this feature at an official event unless you are comfortable with the risks and tradeoffs.*

**NOTE:** The Raspberry Pi 3B+ is the only supported model at this time. Running the Pi wirelessly requires a 5GHz WiFi network and older Pi models do not support 5GHz. Also, the new 3A+ is not supported at this time but may be in a future update. This configuration will not permit a Raspberry Pi to connect to a 2.4GHz wireless network - the network must support 5GHz.

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**Step 1: Establish an ethernet connection to the Raspberry Pi**

In order to configure wireless support on the Raspberry Pi Tournament Manager image at this time, you must first connect the Pi using an ethernet connection so that it can be accessed by a computer. This can be done by plugging your Raspberry Pi into an ethernet network that your computer has access to. Alternatively, you can connect an ethernet cable directly between a computer and the Raspberry Pi device.

**NOTE:** We plan to implement configuration options in the future such that an ethernet connection will not be required to configure wireless support on the Pi.

**Step 2: Open the WiFi configuration page**

Connect power and an HDMI display to your Raspberry Pi if you haven’t already done so. Wait until the Pi has completely started. The Pi will display an IP address on its screen below the VEX Robotics logo.

Using a web browser on your computer, type in the following web address:

http://<Raspberry Pi IP Address>/wifi
For example, if your Raspberry Pi is displaying an address of 192.168.1.5, you would enter this address in your browser:

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http://192.168.1.5/wifi
```

The following configuration page will appear:

![WiFi Configuration](image)

**Step 3: Enter WiFi credentials**

Enter your WiFi SSID and passphrase into the configuration page and click “Save.” Note that this feature will only work with pre-shared passwords. WPA Enterprise/WPA2 Enterprise mode is not supported at this time.

Your WiFi configuration will be saved even if the Raspberry Pi is powered off. Thus, you can configure your Pis before deploying them around the venue if you choose.
Step 4: Verify configuration and signal strength

The Pi will attempt to connect to your wireless network as soon as you click Save. The WiFi configuration page will refresh periodically to show updated status. You can look in the Status area for the “Link Quality” parameter to get an understanding of your signal strength.

NOTE: The Pi will only show one IP address on the HDMI screen. If an ethernet connection is present and the Pi has received an IP address on that connection, it will be shown by default. The WIFI IP address will be shown only if an IP address is not available on the ethernet connection.