# RangerTrax© for Raveon Guide

Version 2020.10.17 – Updated to Radio Manager 7

**Overview**

**Setup and usage instructions for RangerTrax© with RAVEON© digital radios.**

**There are two parts: Radio settings and FIN/Raspberry settings.**

**Build Instructions**

**Steps for FIN:**

1. Load the “Raspberry Pi OS (32-bit) with desktop” as normal. No need to update or change anything. https://www.raspberrypi.org/downloads/raspberry-pi-os/
2. Set up Internet access via Ethernet or Wifi
3. Plug in a keyboard/mouse (alternately activate SSH)  
   Note: Using keyboard, the GUI will offer first time setup questions, these can be answered or use raspi-config after install.
4. Open a terminal window and do the following:

cd /home/pi  
wget https://github.com/rangertrax/firmware/raw/master/ravbuild.tz  
sudo tar xvf ravbuild.tz  
Edit /home/pi/finfiles/ customization files if needed.  
sh ravbuild.sh | tee build.log

Near the end, it will ask a few questions (the touch screen driver)

At the end, it should start raspi-config automatically:

* Change Password
* Change Hostname
* Turn on SSH,VNC (as needed)
* Set Locale to en\_US.UTF-8 UTF-8
* Set Timezone
* Change anything else as needed
* Select Reboot

After reboot, system should come up running the rtWEB browser GUI screens.

You can log in via SSH if necessary.

**Update AssetID**

AssetID must be updated in TWO locations:

1. In configuration file:

$ nano /etc/raveon.conf

ASSETID = “1234” # Change to 0001-9999

1. On Radio, change Unit ID set to same above.   
   (See Radio Settings)

Reboot to implement.

**Radio Settings**

1. **Download Radio Manager 7   
   http://www.raveon.com/Software/RadioManager7setup.zip**
2. **Install a VHF 151mhz antenna to Raveon**
3. **Power up the Raveon**
4. **Plug USB into PC**
5. **Start Rav Radio Manager**
6. **Set Serial Baud to 38400**
7. **Click Discover**
8. **Click Read Settings from Radio**
9. **Set Frequency on CHANNEL 1 Tx/RX (All units must match)**
10. **Set Unit ID (Asset ID) 0001-9999**
11. **Set Address Mode 0000 to receive ALL messages**
12. **Set Listen ID FFFF**
13. **Click Store Updates to Radio**
14. **Change PC Communications Baud Rate to 38400**
15. **DONE**

***NOTE: Radio must be in COMMAND mode to allow edits. You may have to retry above if not.***



