



Using Your New Watchdog Radar – 10 Steps from Start to Finish

You've just received a big box (or boxes) with the JAMAR Watchdog Radar and all the accessories that go with it. So right about now you're probably thinking, 'Where do I start?' Don't worry, that's what this guide is for. We'll take you from unpacking the equipment to producing reports in 10 easy steps.

● Step 1 – Unpacking and Checking Your Equipment

First, let's unpack everything and make sure you got everything you were supposed to get. With most orders there should be a single sheet of paper that shows the items that are part of your Watchdog Radar kit and the quantity of each item that you should have received. Check the contents of your box/boxes against this sheet. If anything is missing, let us know.



● Step 2 – Setting up Your Computer

To program the Watchdog Radar, and to download data from it, you'll use the STARnext software.

- If your kit includes a laptop, the STARnext software has been pre-installed for you.
- If you purchased the STARnext software, but are using your own PC, install the software using the Flash Drive provided.
- If you are using your own computer and already have STARnext, check to see that you are using the latest version and update it as necessary. The latest version of STARnext can be downloaded at www.jamartech.com/starnext-download

● Step 3 – Selecting an Installation Site

Now that we've unpacked everything and setup the computer, we're ready to select a site for doing some data collection. When choosing a site to install the Watchdog Radar, keep in mind that the Radar will need to be mounted to a pole (typically a utility pole) or tree, so the site will need to have one of these available for use.



For the best results, the installation SHOULD be: at a 45 degree angle to the flow of traffic. Six to ten feet back from the road. At least six feet above the ground. Where the far lane is no more than 50' away. Where traffic is free flowing.

The Watchdog Radar SHOULD NOT be installed: at an intersection. Near where vehicles are likely to park. Where the radar head is at an extreme angle. Where pedestrians are likely to be crossing. Where the Radar's "view" is obstructed.

● Step 4 – Installing the Watchdog Radar

Once a site has been selected, the Watchdog Radar can be easily mounted using the installation kit. For the most accurate results, install the mounting bracket at a 45 degree angle to the traffic.



Insert the pegs on the back of the Watchdog Radar's mounting bracket into the large holes of the pole mounting bracket and slide the Radar down to secure it in place.



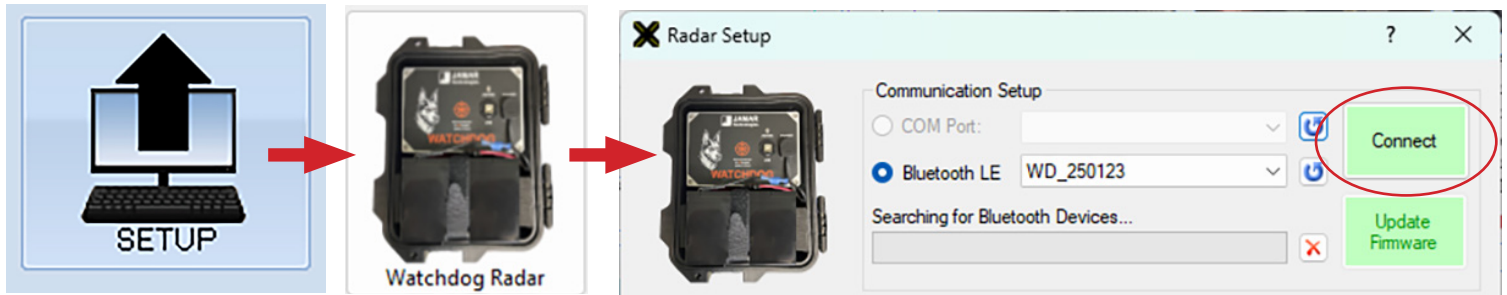
Depending on how high you mount the Watchdog Radar, you may need to tilt the unit so it is facing down into the traffic lane. This is done by adjusting the bracket on the back of the Radar. Loosen the top bolt on the bracket (there is one on each side) using the provided hex head allen wrench. Once loosened, the unit can be tilted down. The allen wrench can then be used to retighten the bracket. The maximum pitch the Watchdog can have is approximately 20 degrees.



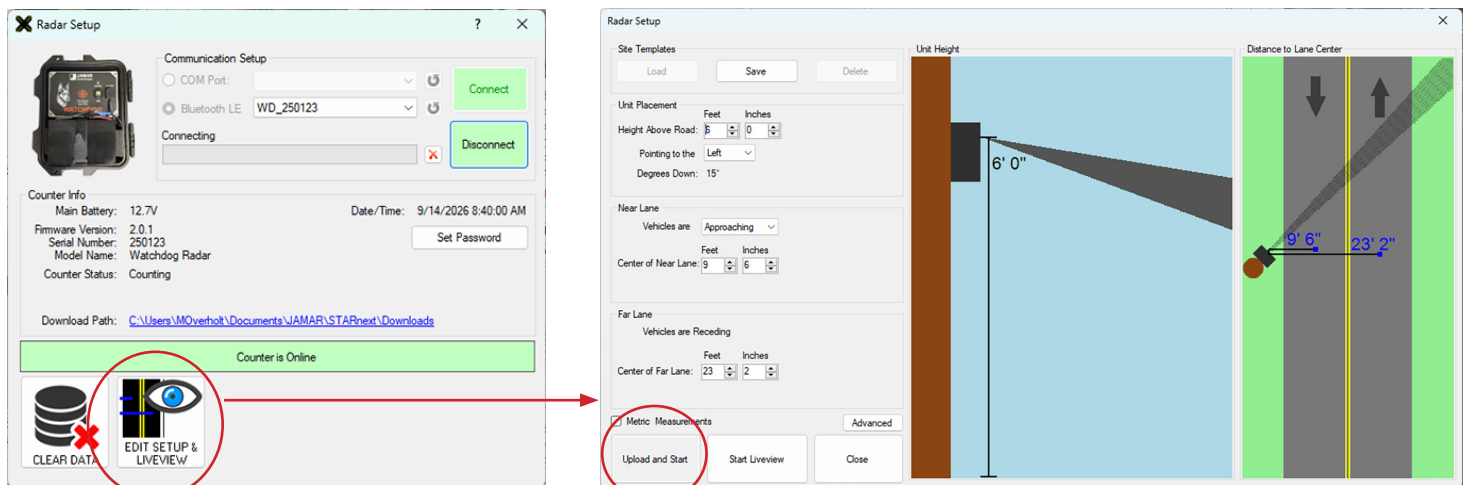
● Step 5 – Setting Up a Study: Programming the Watchdog Radar

Once the Watchdog Radar is installed, we're ready to program it to record data. Open the door of the Radar. If the battery is not already connected, connect it to the radar head to provide power.

Watchdog Radars have wireless Low Energy Bluetooth capability which allows you to connect without a hard wire USB connection. The STARnext software will automatically search for, and display, any units it finds powered on within its range. Note that there is no need to go through the 'Pairing' process as was common with units that used a Classic Bluetooth connection. If your laptop does not have Bluetooth you can use the USB cable as described in the full User's Manual.



Select **Setup** from the Quick Start menu, then the Watchdog Radar. Make sure you have the "Bluetooth LE" radio button selected and click the **Connect** button to have the STARnext software connect to the Watchdog Radar.



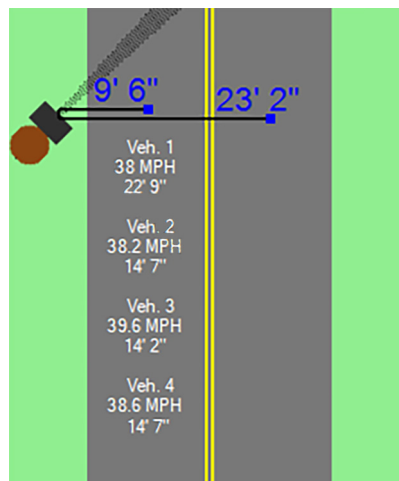
Once connected, click the *Edit Setup & LiveView* button.

Set distances for near and far lanes, as well as recorder head height. Make sure to tap 'Upload and Start' to begin the count.

● Step 6 – Checking Recorded Data in LiveView



Once the Radar is setup and recording, the LiveView should be used to check setup accuracy.



As vehicles pass the detection zone, the LiveView screen should show the speed and length of the vehicle.

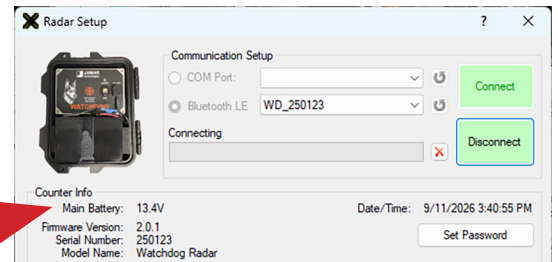
Troubleshooting - If LiveView is not showing vehicle data as vehicles pass the detection zone, check that the Radar has been aimed properly. The crosshairs printed on the face of the radar head should be aimed at a 45 degree angle to the road.

● Step 7 – Securing the Watchdog Radar and Monitoring Battery Life

Now that the Radar has been installed, programmed and checked for accuracy, we're ready to leave it to do its job of collecting data. Close the front door and latch it shut. Lock the unit into the mounting bracket, and lock the door latches, using the locks provided. If you wish to add further security to the installation, the chain that was provided with the Radar can be wrapped around the pole through the bracket area, then locked in place.

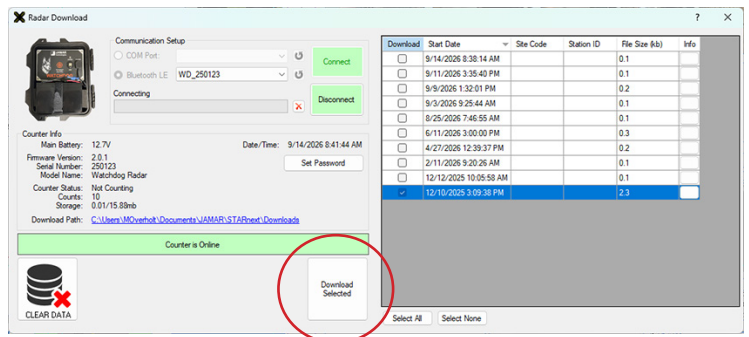


Your Watchdog Radar will record data for about two weeks on one fully charged (13.4v or higher) battery. If you will be collecting data for more than this, we recommend that you periodically monitor the charge on the battery to be sure that you get good data throughout the duration of your study. To do this, open the Watchdog Radar, connect the computer and connect to the Radar. The main battery voltage is displayed in the Watchdog Radar Setup screen, as shown here.

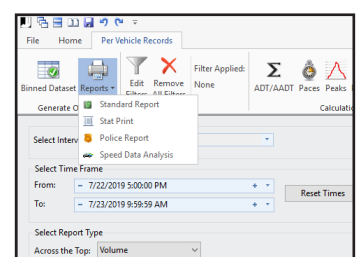


● Step 8 –Downloading Data from the Watchdog Radar to the Computer

Note: The Watchdog Radar can either be downloaded in the field to a laptop, or brought back into the office to download to a desktop.

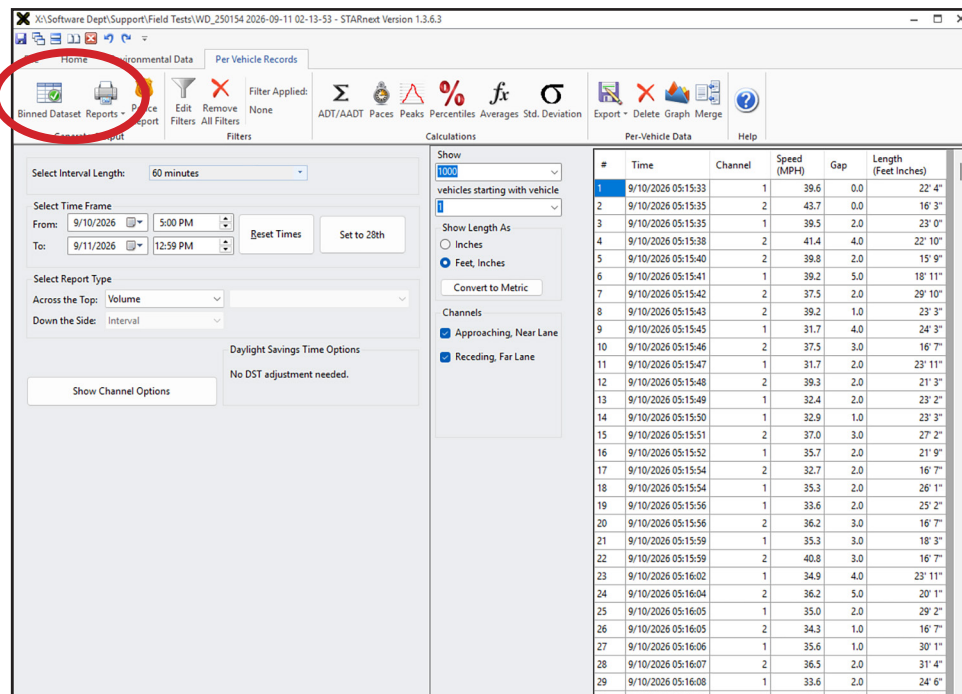


To download the data you have collected, select **Download** from the Quick Start menu, then the Watchdog Radar. Make sure you have the “Bluetooth LE” radio button selected and click the **Connect** button to have the STARnext software connect to the Watchdog Radar. Once connected, select the files you want to download and click the *Download Selected* button.



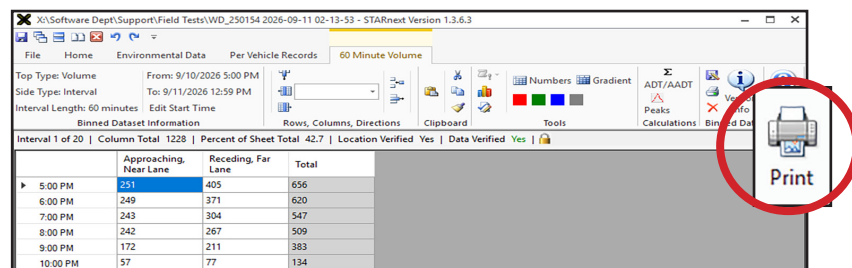
Once you download your count it will load to the Per Vehicle screen. From this screen you have several options including binned data set, or you can go right to the reports.

Step 9 – Processing Data



Once you have completed the download processing, the *Per Vehicle Records* tab will appear, as shown here. On this screen the important fields are *Select Interval Length* at the upper left (typically 15 or 60 minutes), and *Select Report Type*. The most common report types are volume, speed, length or gap for *Across the Top* with *Down the Side* set to Interval. When you are ready, click the *Binned Dataset* button at the upper left and you will be taken to your data.

Note that you can also go directly to a variety of reports by clicking the *Reports* button next to the *Binned Dataset* button. These include single page summary reports for Speed, Length Class and Volume.

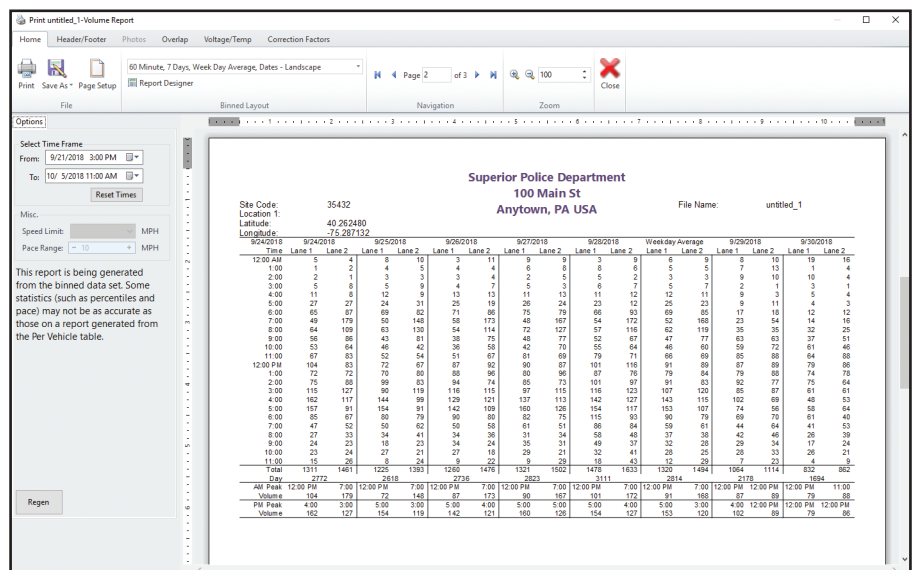


In this example we see simple volume data. The screen will look similar for speed, length or gap data. Our data is now collected, downloaded and processed. From here we can export data, merge data, compare counts or simply print a report with the *Print* button on the toolbar.

Step 10 – Printing Reports

Once you press the *Print* button the Print Preview window will appear, as shown here. The *Binned Layout* section on the ribbon toolbar allows you to pick from the various reports that are available for the type of data you have.

When you first process a file, the best way to familiarize yourself with these reports is to select one to see what the printed report will actually look like. We suggest going through all or at least several reports in this way, to see which one suits your needs closest. They all display the same data set, however, each one shows it in a different way.



The Print button on this screen will send the report to your printer. The Save As button allows you to save the report as a PDF.

This Quick Start guide covers the basics needed to get started with your Watchdog Radar. The full User's Manual can be downloaded at www.jamartech.com/manuals.