



Using Your New Black Cat II Radar Recorder – 9 Steps from Start to Finish

You've just received a big box (or boxes) with the JAMAR Black Cat Radar Recorder II 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 9 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 Black Cat II Radar Recorder 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 Black Cat Radar, and to download data from it, you'll use a computer running the STARnext software.

- If your kit includes a laptop, the STARnext software has been pre-installed for you and you can skip to Step 3.
- If you purchased the STARnext software, but are using your own computer, install the software using the software 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 Black Cat Radar Recorder, keep in mind that the Recorder 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 Black Cat 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 Black Cat Radar Recorder

Once a site has been selected, the Black Cat Radar Recorder 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 Black Cat Radar Recorder's mounting bracket into the large holes of the pole mounting bracket and slide the Black Cat Radar Recorder down to secure it in place.

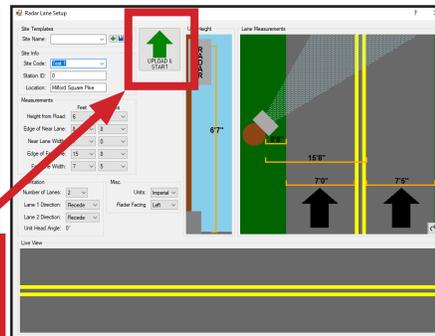
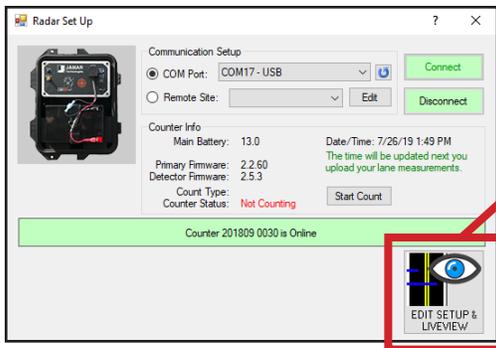
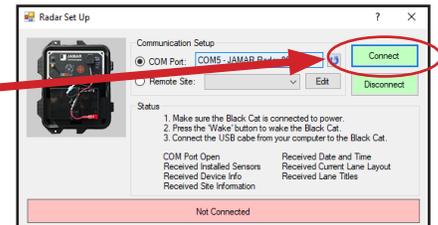
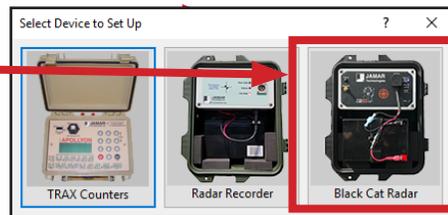


Step 5 – Setting Up a Study: Programming the Radar Recorder



Now that we have the Black Cat II Radar installed, we're ready to program it to record data. Open the door of the Recorder and connect the battery to the radar head to provide power. Once the recorder is powered on, connect your computer to it using the cable that came with your equipment, press the **"View"** button to wake up the unit. You can also use the built-in Bluetooth connection to connect wirelessly (see Bluetooth Quick Start Guide). Once connected, start the STARnext software on your tablet or laptop.

Select **Setup** from the Quick Start menu, then the Black Cat II Radar Recorder on the right. Make sure you have the proper Com port selected and click the **Connect** button to have the STARnext software connect to the Radar Recorder.



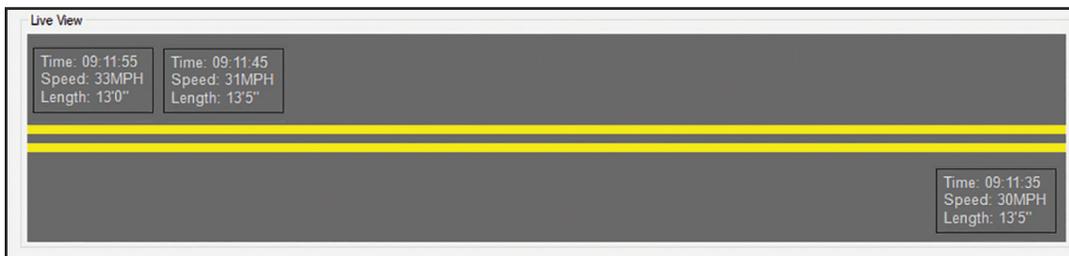
Set distances for the lane edges and widths, as well as recorder head height and lane direction. Tap **Upload and Start** when done.

When you press the **"Upload and Start"** button a message will show that **"Settings Uploaded and Count Started"**. Click **OK**. Your study has now begun and you're recording data.



Step 6 – Checking Recorded Data in LiveView

Once the Recorder is setup and recording, the View Real Time utility should be used to check setup accuracy.



As vehicles pass the detection zone...

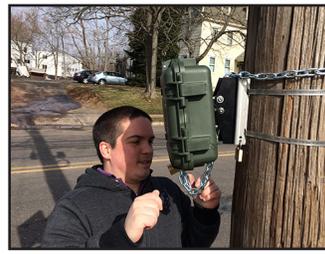
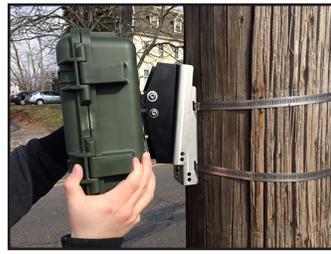
...the Real Time View screen should show the speed and length of the vehicles as they pass by.

Troubleshooting

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

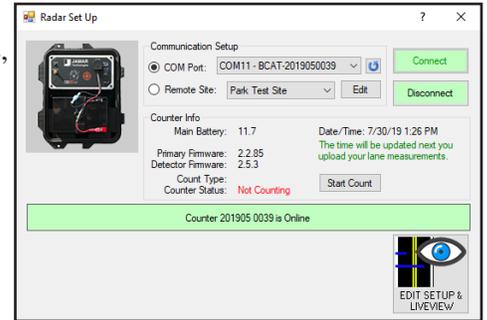
● Step 7 – Securing the Radar Recorder and Monitoring Battery Life

Now that the Recorder 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 recorder can be wrapped around the pole through the bracket area, then locked in place.



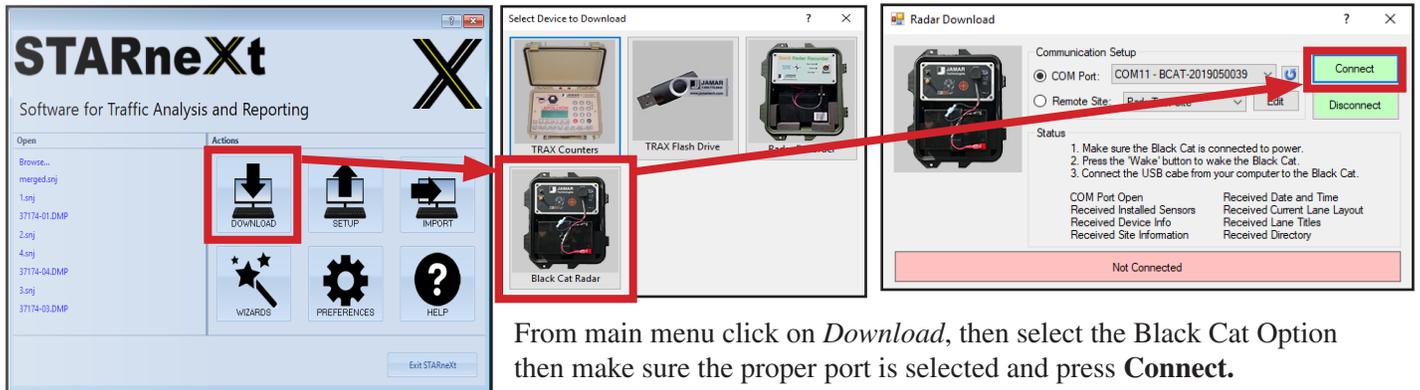
Your Radar Recorder will record data for about 6 days on a fully charged (13.2v or higher) battery. If you will be collecting data for more than a few days at a time, we recommend that you periodically monitor the charge on the battery to be sure that you get good data throughout the duration of your study. To do this, open the Recorder, connect the computer and connect to the Radar Recorder. The main battery voltage is displayed in the Radar Recorder Setup screen, as shown here.

Replace and recharge your battery once the voltage falls below 11.5 volts.

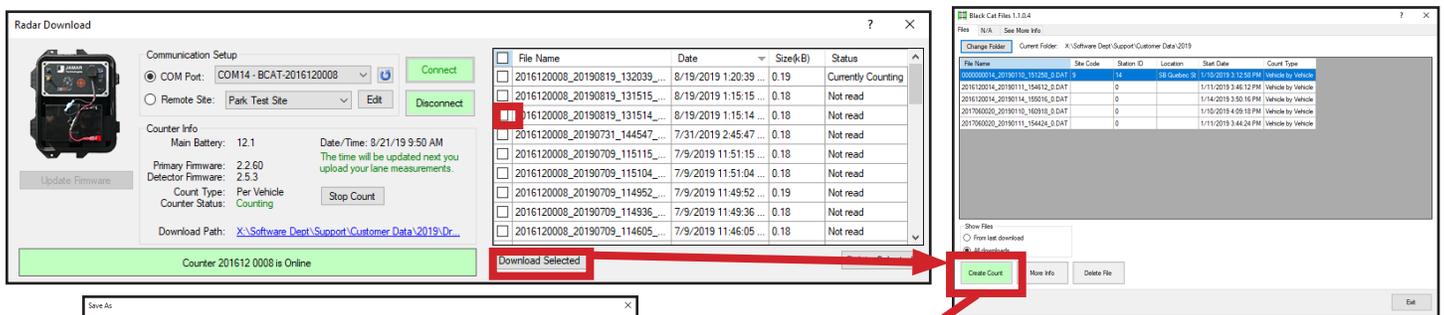


● Step 8 – Downloading Data from the Radar Recorder to the Computer

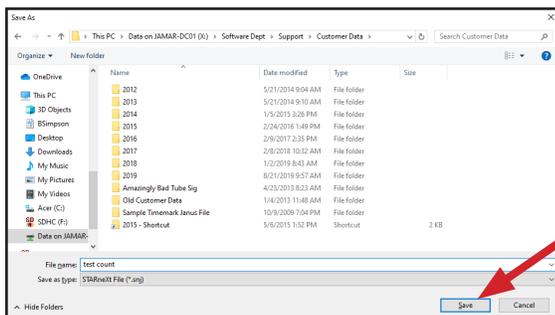
Note: The Radar Recorder can either be downloaded in the field to a laptop, or brought back into the office to download to a desktop.



From main menu click on *Download*, then select the Black Cat Option then make sure the proper port is selected and press **Connect**.

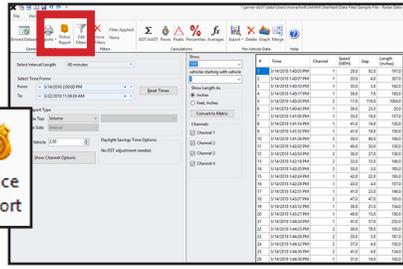


Once the download completes you will want to select your traffic count(s) from the list and press *Download Selected*. On the following screen you will select to *Create Count*. You will then be asked to name and save your file.

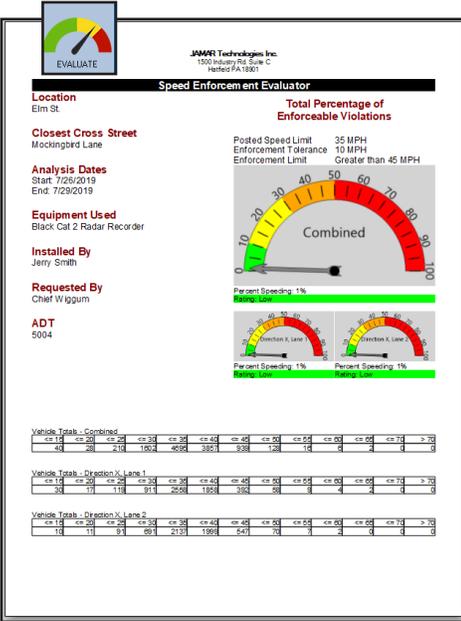


Step 9 – Producing Reports

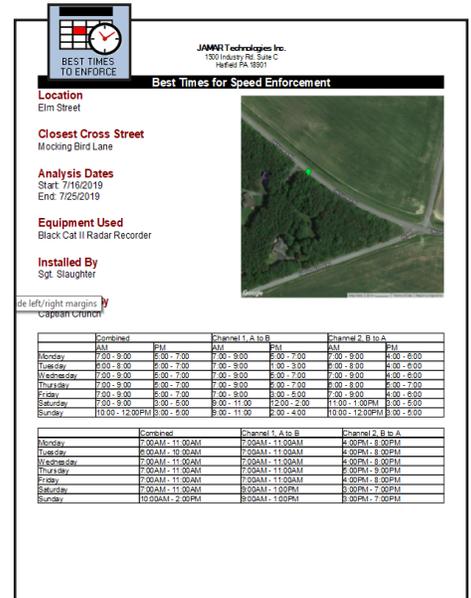
If you have collected your data in the recommended Per Vehicle format, once your study opens you'll see the Per Vehicle window. To produce reports from your data, click the button labelled *Police Reports* and the Police Reports screen will appear.



There are a number of PD reports to select from such as the Data Summary and the Enforcement Scheduler. The other buttons will produce reports as discussed below.



The **Speed Enforcement Evaluator** is a one-page report that concisely displays whether or not a speeding problem exists, based on the percentage of enforceable violations. The report makes for an excellent hand-out at public meetings and is *highly* customizable.

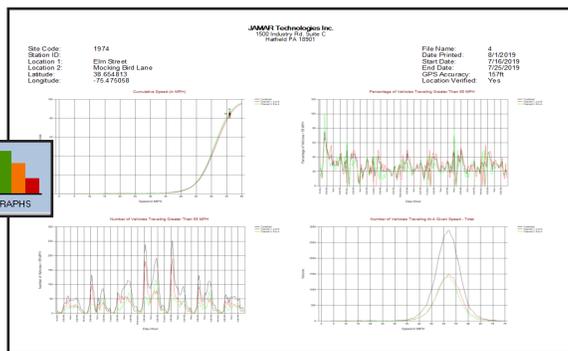
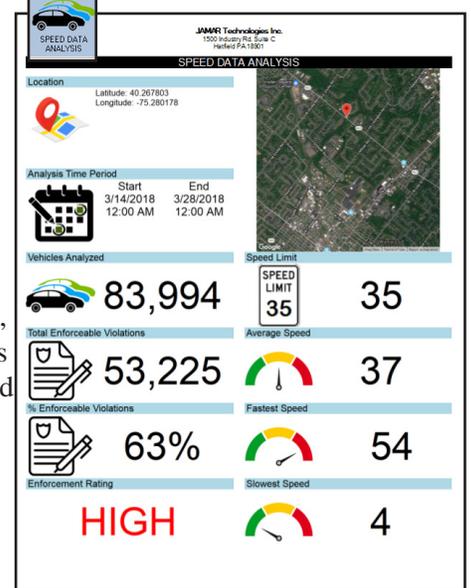


Designed to make scheduling enforcement more effective, the **Best Times for Enforcement** report details what times of the day have the largest number of enforceable violations.

Time	< 20	>= 20 < 30	>= 30 < 40	>= 40 < 50	>= 50 < 60	>= 60 < 70	>= 70 < 80	>= 80 < 90	>= 90 < 100	> 100	Total
12:00 AM	0	0	0	0	0	0	0	0	0	0	0
1:00 AM	0	0	0	0	0	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0	0	0	0
10:00 AM	0	0	0	0	0	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	0
2:00 PM	0	0	0	0	0	0	0	0	0	0	0
3:00 PM	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0	0	0	0	0	0
11:00 PM	0	0	0	0	0	0	0	0	0	0	0
12:00 AM	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0

The **Tabular Reports** option gives you another way to show your speed data. You have the option of **One Line Summary**, **One Day Per Line** or **Hourly Data**.

The **Speed Data Analysis Report** gives you a clear and concise overview of the count showing values like **Total Vehicles counted**, **Average Speed** as well as fastest and slowest vehicles.



The **Graphs** selection gives you access to a variety of graphs that display vehicle speed and vehicle length info in different formats. Hit the *Print* button to print them all.