Step 9 – Processing Data

X \\Sample File - Radar Data - STARneXt Version 1.2.2.11							- 0
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Home Vehicle Records							
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Binned Dataset Reports - Porce Edit Remove None ADT/AADT Paces Peak	s Percentiles Averages Std. Deviation	Export	Delete Graph Merge				
Generate Ground Filters	Calculations		Per-Vehicle Data	Help			
	Show				Cound		Leasth
Select Interval Length: 60 minutes	1000 ~	-	Time	Channel	(MPH)	Gap	(Feet Inches)
	vehicles starting with vehicle	1	3/14/2018 1:38:43 PM	1	39.0	12.0	13" 1"
Select Time Frame		2	3/14/2018 1:38:47 PM	2	38.0	16.0	40' 0"
From: 3/14/2018 🔍 1:00 PM 🖨	Show Length As	3	3/14/2018 1:38:52 PM	1	38.0	9.0	15' 5"
To: 3/28/2018 1:59 PM	O Inches	4	3/14/2018 1:38:57 PM	1	31.0	5.0	10' 6"
	Feet, Inches	5	3/14/2018 1:39:20 PM	2	16.0	33.0	1' 8"
Select Report Type		6	3/14/2018 1:39:26 PM	1	26.0	29.0	1' 8"
Across the Top: Volume V	Convert to Metric	7	3/14/2018 1:39:31 PM	2	30.0	11.0	12' 10"
Deven the Side Interval	Channels	8	3/14/2018 1:39:46 PM	1	33.0	20.0	1' 8"
Down the side.	Channel 1	9	3/14/2018 1:39:50 PM	2	29.0	19.0	13' 5"
Ayles Per Vehicle 2.00 Daylight Savings Time Options	Channel 2	10	3/14/2018 1:40:10 PM	2	36.0	20.0	14' 1"
No DST adjustment needed	Channel 2	11	3/14/2018 1:40:18 PM	1	35.0	32.0	13' 5"
Show Channel Ontions		12	3/14/2018 1:40:34 PM	1	40.0	16.0	11' 6"
Show channel options		13	3/14/2018 1:40:43 PM	2	34.0	33.0	27' 7"
		14	3/14/2018 1:40:46 PM	2	34.0	3.0	11' 2"
		15	3/14/2018 1:40:52 PM	2	37.0	6.0	15' 1"
		16	3/14/2018 1:41:27 PM	2	34.0	35.0	22' 8"
		17	3/14/2018 1:41:29 PM	2	36.0	2.0	19' 8"
		18	3/14/2018 1:41:41 PM	1	44.0	67.0	16' 1"
		19	3/14/2018 1:41:49 PM	1	36.0	8.0	11' 10"
		20	3/14/2018 1:41:55 PM	1	39.0	6.0	11' 6"
		21	3/14/2018 1:42:15 PM	2	41.0	46.0	16' 1"
		22	3/14/2018 1:42:23 PM	2	36.0	8.0	13' 1"
		23	3/14/2018 1:42:28 PM	1	36.0	33.0	1' 8"
		24	3/14/2018 1:42:29 PM	2	36.0	6.0	1' 4"
		25	3/14/2018 1:43:02 PM	2	35.0	33.0	14' 1"
		26	3/14/2018 1:43:39 PM	1	40.0	71.0	14' 1"
		27	3/14/2018 1:43:43 PM	2	37.0	41.0	13' 5"
		28	3/14/2018 1:43:44 PM	1	39.0	5.0	13' 1"
		29	3/14/2018 1:43:45 PM	1	36.0	1.0	17' 5"
		120	2/14/3010 1.42.47 DM	2	22.0	40	15:1"

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.

Print untitled_1-Volume Report	Voltage/Temp Correction Factors				- 0 ×
60 Minute, 7 Days, V	Week Døy Average, Døtes - Landscape 🔹	N 4 Page 2 of 3 > N	@ @ 100 € K		
File	Binned Layout	Navigation	Zoom		
tions	1 1 1 2	3 4	. 5 6 7		10
elect Time Frame om: 9/21/2018 3:00 PM • To: 10/ 5/2018 11:00 AM • Reset Times		Superi	or Police Department 100 Main St		
lisc.	Site Code: 35432 Location 1: Latitude: 40.26248	A	nytown, PA USA	File Name: un	itled_1
ace Ranges - 10 + MPH	Longitude: -75.28713 9/24/2018 9/24/2018 Time Lane 1 Lane 2	2 9/25/2018 9/26/2018 .ane1 Lane2 Lane1 Lane2 L	9/27/2018 9/28/2018 ane 1 Lane 2 Lane 1 Lane 2	Weekday Average 9/29/2018 Lane 1 Lane 2 Lane 1 Lane 2	9/30/2018 Lane 1 Lane 2
is report is being generated m the binned data set. Some titistic s(auch as percentiles and e) may not be as accurate as see on a report generated from \$ Per Vehicle table.	125.4.46 5 4 126.4.47 2 1 130.6 2 1 140.7 5 8 450.0 12 2 150.6 6 67 150.6 64 107 150.6 64 108 1100.7 65 66 120.7 75 66 120.7 75 66 120.7 75 66 120.7 75 66 120.7 75 66 120.7 75 66 120.7 75 66 120.7 75 66 150.7 75 76 160.0 110 117 160.0 117 110 160.0 117 1401 160.0 117 1401 170.0 170 170 160.0 117 1401 170.0 117		$\begin{array}{c c c c c c c c c c c c c c c c c c c $		$\begin{array}{c c c c c c c c c c c c c c c c c c c $

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 Black Cat Radar. The full User's Manual can be downloaded at www.jamartech.com/manuals. rev 1.2E



Using Your New Black Cat II Plus Radar – 10 Steps from Start to Finish

You've just received a big box (or boxes) with the JAMAR Black Cat II Plus Radar Recorder 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 Black Cat II Plus 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

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, keep in mind that the Black Cat 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 BC II+ 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 II Plus Radar

Once a site has been selected, the Black Cat II Plus 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.



bracket and slide the Radar down to secure it in place.



Depending on how high you mount the BC II+ 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 BC II+ can have is approximately 20 degrees



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.



Insert the pegs on the back of the Black Cat II Plus Radar's mounting bracket into the large holes of the pole mounting





Step 5 – Setting Up a Study: Programming the Black Cat

Once the Black Cat 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.

BC II Plus 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.



		Black Cat Radar Setup		? ×
			Communication Setup	Connect
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			● Bluetooth LE TM-2021069914 ✓ Ŭ	Disconnect
CETUD			Searching for Bluetooth Devices	
SETOP	Black Cat Radar	u u	× .	

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

ack Cat Radar Setup				?	×
	Communication S	etup			
	O COM Port:		~ Ŭ	Connect	ting
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Counter Info					
Main Battery: 13.2	Date/Time	e: 2/5/2008 1:23:44 PM			
Primary Firmware: 2.3.46 Detector Firmware: 2.5.4	upload you	ur lane measurements.			
Count Type: Counter Status: Not Co	punting	Start Count			
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				EDIT SETU LIVEVIE	JP &

Once connected, click the Edit Setup & LiveView button.

ladar Lane Setup					\frown		? ×
Site Templates				_/		Unit Height	Lane Measurements
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Near Lane Width:	12	\sim	0	~			<u>1'0"</u>
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Number of Lanes: 2	~			Unit	s: Imperial 🗸		
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Set distances for near and far lanes, as well as recorder head height. Make sure to tap 'Upload Site Geometry' to begin the count.

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 Black Cat and Monitoring Battery Life

Now that the Black Cat 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.



Step 8 –Downloading Data from the Black Cat to the Computer

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







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1090190_20211221_154500_0 DAT	2021090189_20211221_155327_0.0	AT	0		12/21/2021 3:53:27 PM	Vehicle by Vehicle		
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to Create Count. You will then be asked to name and save your file.