



Using Your New TRAX Pinnacle – 9 Steps from Start to Finish

You've just received a big box (or boxes) with the JAMAR TRAX Pinnacle 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 packing slip that shows the items that are part of your TRAX Pinnacle kit and the quantity of each item that you should have received. Check the contents of your box(es) against this sheet. If anything is missing, let us know.

● Step 2 – Setting up Your Computer

To process data from the Pinnacle, you'll need a computer running the STARnext software version 1.2 or later.

- If you purchased the STARnext software, install the software using the flash drive provided.
- If you 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 & Layout

Now that we've unpacked everything and setup the computer, we're ready to select a site for doing some data collection.

For best results, the Pinnacle should be installed:

- On a stretch of road that is straight, where there are no obstructions and traffic is free flowing.

The Pinnacle should not be installed:

- At an intersection.
- Near where vehicles are likely to park.
- On a curve or with the tubes at an angle to the road.

Which tube layout you select determines what type of data you can get. Note that layouts L5, L6, L10, L11 and L12 can provide volume, speed, class and gap data. The remaining layouts provide only volume data.

● Step 4 – Installing Road Tubes

Once a site has been selected, the road tubes can be installed, as shown below. If your layout uses two equal length tubes, make sure that each tube's total length is within one inch of each other. If using a long tube/short tube setup, make sure that the short tube is exactly one lane width shorter than the long tube.

CAUTION

Observe proper safety precautions while in or near the roadway.



Put End Plug in the end of tube.



Secure the tube to the far side of the road.



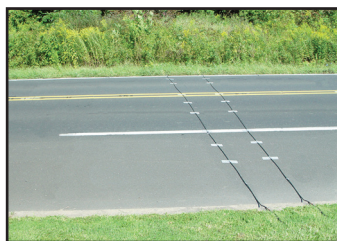
Pull the tube across the road.



Tape the tube down with mastic tape at multiple spots.



Measure proper distance* to second tube (if used).



Tape down the second tube as you did with the first.



Connect the tubes to the Pinnacle ports.

The key to success with road tubes is accuracy. Make sure that you measure your tube distances in several places. Take extra care to make sure your tubes are straight across the road and parallel with each other. As vehicles drive over your tubes, make sure that the tubes are not moving at all. Do not be stingy with the Mastic tape – using more tape is cheaper than a recount. For more details, a video of tube installation is available at www.jamartech.com/tutorials.

*Note that the most common tube spacing is 2 feet (24 inches).

● Step 5 – Beginning a Count: Setting up the TRAX Pinnacle

Now that we have the tubes on the road, we need to begin a study on the Pinnacle. To do this, lift the Pinnacle's lid and turn it on by pressing the Power (Tab) key. Next, follow the steps below by using the DO and TAB keys.

COUNT USB UTILS :0
Bat:3.6v :0
Count:00 7104K :0
15:21:58 02/13/21 :0

1: Select *Count* and press DO.

YES NO EXIT
Include GPS Data?
Press DO to select

2: If you want your count to include GPS info, select Yes.

BASIC VOLUME ONLY
TUBES EXIT
Basic Data
Press DO to select

3: Select count type and press DO. We generally recommend *BASIC* data.

L1 L2 L3 L4 L5 **L6** L7
L8 L9 10 11 12 13 14
L1: Two Channel Vol.
A,B

4: Select the layout you installed in the field and press DO.

YES **NO** EXIT
Enter Site Code
Press DO to select

5: Select if you want to use a Site Code or not, then press DO.

START STAT
EXIT
Press DO to Start

6: We are now set to begin the count. Select *Start*, press DO and the Pinnacle will begin recording vehicles.

● Step 6 – Checking that the TRAX Pinnacle is collecting data correctly

Now that the Pinnacle is recording, we can make sure it is actually recording vehicles by watching the Count Status screens. There are seven different status screens you can scroll through by pressing the TAB button. Press the TAB button until you see the LiveView status screen shown below.

Channel #
Vehicle Class
Gap in Seconds
Vehicle Speed

LiveView

CH1 AX:5 #V: 000056
CLS: 09 35 MPH B>A
GAP: 15 9.7 4.7
23.5 4.7

of Axles
of Vehicles in Study
Direction Tubes Hit
Axle Spacing

The LiveView status screen that's available during a count allows you to confirm that everything has been set up correctly. As a vehicle crosses the tubes, the Pinnacle will display the vehicle's classification and speed, allowing you to verify that the vehicle you saw was what was recorded. In the example shown to the left, a class 9 truck has gone over the tubes going 35 mph. Additional information such as the number of axles, axle spacings, and time gap from previous vehicle are also provided.

● Step 7 – Downloading Data from the TRAX Pinnacle

Once you have collected all the data you want with your Pinnacle, that data can be downloaded either directly to a computer using a USB cable, or to a USB Memory stick. The following two sections describe both of these procedures.

Note: You cannot download a count that is still recording. You must end the count in order to download it. When you want to end a count, simply turn the Pinnacle off by pressing the POWER key and holding it down for 5-6 seconds. This shuts the Pinnacle down and stores the count file in memory. Turn the Pinnacle back on to download your data.

Downloading to USB Memory Stick

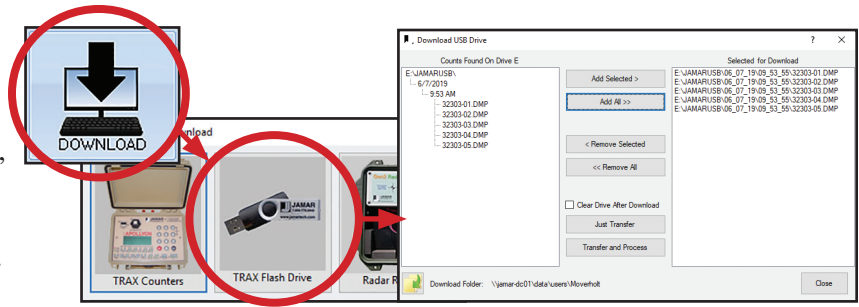
Insert a USB Memory Stick into the USB Memory Port on the Pinnacle. Then, on the Main Menu, select *USB* then select *Download*. The Pinnacle will begin sending the data to the memory stick.

COUNT **USB** UTILS :0
Bat:3.6v :0
Count:01 7104K :0
15:21:58 02/13/21 :0

DOWNLOAD EXIT
v3.66
Write ALL counts to
the USB Flash Drive



Once the data is on the memory stick, you can move it to your computer. Plug the stick into your computer, then start STARnext. Once in STARnext, select *Download* from the Quick Start, then TRAX Flash Drive. Select the file you want to process then click *Transfer and Process* button to transfer the data from the stick to the computer. Once the download completes, jump to Step 8.



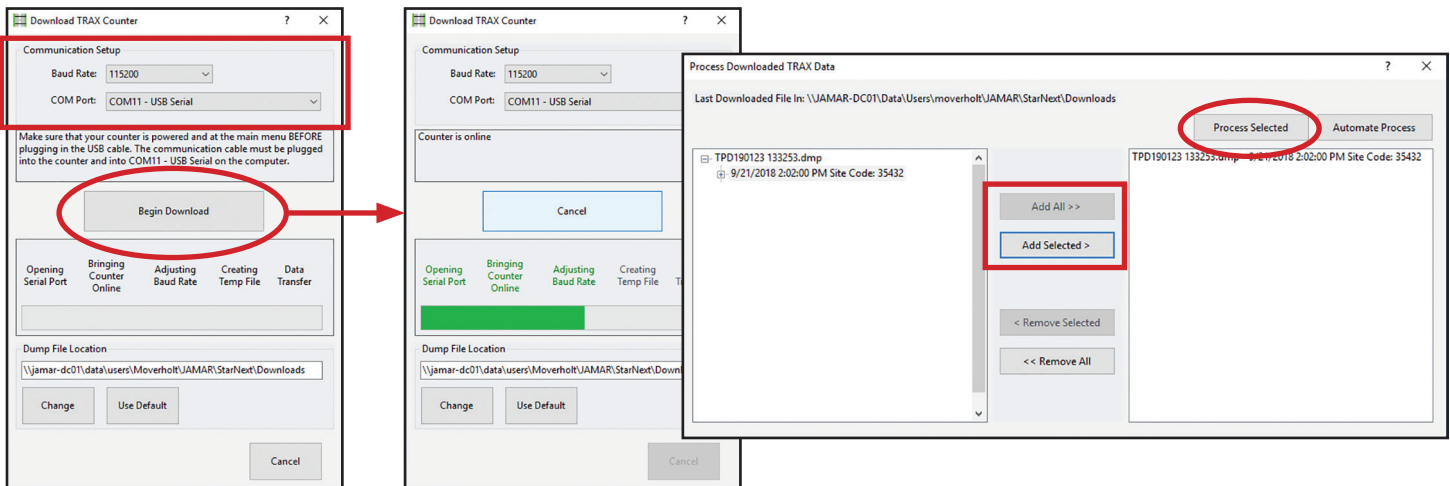
Downloading directly to a computer with a USB Cable

The TRAX Pinnacle can directly download to a computer using a USB cable. Plug one end of the USB cable into the Pinnacle's USB Download Port and the other end into your computer.

Note that the first time you plug the Pinnacle into your computer, Windows will detect this new device and you will get a window for the *Found New Hardware Wizard*. **Do not ignore this window.** This will walk you through installing the drivers that allow STARnext and your Pinnacle to communicate.

If your computer has Internet access, select the *Install the software automatically* option and the driver installation should begin. **Please note that the driver is in two parts.** Do not be surprised when the installation finishes and then immediately appears again. Run through it this second time as well. If you run into a problem, instructions for installation of the drivers can be found at www.jamartech.com/usb-drivers-pinnacle.

Once the Pinnacle is connect to the computer (and the drivers are installed), it's time to start STARnext. Select *Download* from the Quick Start, then select *TRAX Counters*. You will then see the *Download TRAX Counter* screen appear.

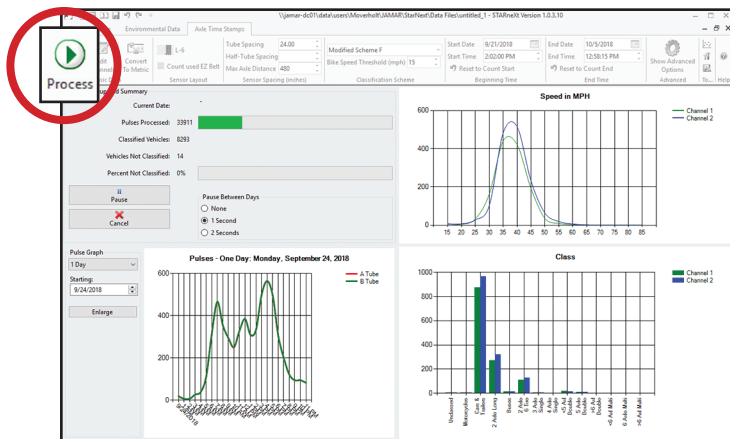


On the download screen you can leave the Baud Rate at the top setting of 115200.

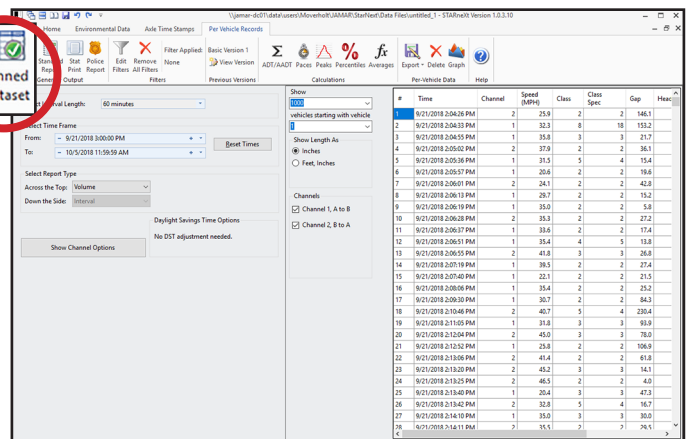
You will need to set the com port to the one assigned during the driver installation. If you are unsure which com port to use, an easy trick is to check what com ports are listed when the Pinnacle is plugged in and turned on, then unplug the Pinnacle and look to see what com port disappeared. When you plug the Pinnacle back in, that same port should reappear. That is the port you want to select.

When the port and baud rate are set, and the TRAX is turned on and at the main menu, hit *Begin Download*. You will see the connection messages turn to green and a green progress bar will cross the screen. Once the download is complete, the *Process Downloaded TRAX Data* screen will appear. Select the data you want to process from the left window and move then to the right window with the *Add All* or *Add Selected* buttons. Once you have selected the data you want, click the *Process Selected* button. Your data will be processed and the file will appear on the screen.

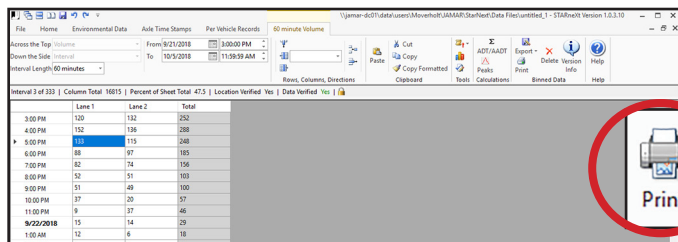
Step 8 – Processing Data



Once you have completed the download processing, your data file will appear on the screen. If you have used the recommend 'Basic' data mode, the screen will look like the one above. The *Axle Time Stamps* tab has many options and settings on it, however most of these are used for troubleshooting data issues. If you have no reason to think you have a problem, then all you needs to do on this screen is hit the *Process* button at the top left.



After processing the axle time stamps, the *Per Vehicle Records* tab will appear, as shown above. 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, class 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.

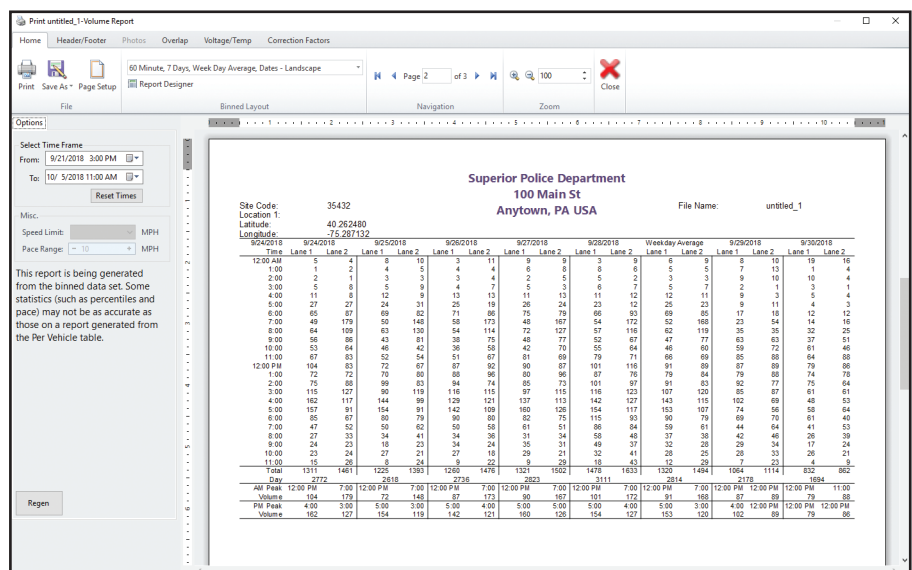


In this example we see simple volume data. The screen will look similar for speed, class or gap data. Our data is now collected, downloaded and processed. From here we can export data, merge data, compare counts or simply print a report with the *Print* button on the toolbar.

Step 9 – 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 TRAX Pinnacle.
The full User's Manual can be downloaded at www.jamartech.com/manuals.*