countSTICK User Guide

Congratulations on the purchase of your countSTICK, "The Tubeless Tube Counter." The countSTICK is unlike any other traffic volume counter on the market today, providing fast and safe installation without the need for any tubes crossing the street.

Chapter 1: Device Preparation

Fully Charge the countSTICK

Upon receipt of the countSTICK, fully charge your device to ensure proper functionality.

- Ensure the device is turned off by checking that the power button is in the off position, as shown in Figure 1.1.
- Plug the provided 3-pin charging cable into the charging port located on the bottom of the countSTICK (See Figure 1.1).
- The countSTICK fully charges from empty within 15-hrs resulting in a minimum of 65-hrs of runtime.
- An LED will illuminate while charging (See Figure 1.2). Once fully charged, this LED will turn off.
- Push the charge indication button (See Figure 1.2), located on the front of the device, to see the current battery level. A five LED array will illuminate while depressed showing the current charge.

Figure 1.1 – Charging Port

Figure 1.2 – Charging Indication

Chapter 2: Device Installation

Install the countSTICK

Install the countSTICK on a signpost or utility pole next to the roadway where data is to be collected.

- Use a zip tie or hose clamp to fasten the countSTICK to the pole/post. If using a hose clamp, be sure not to overtighten as this can damage the countSTICK.
- Mount the countSTICK camera lens three to six feet above the roadway surface.
- Rotate the camera perpendicular to the roadway for the best results.
- Avoid pointing the countSTICK at locations where busy sidewalks, driveways, other roads, etc., are visible in the background of the camera view. The Device is detecting all objects in its field of view and can overcount in these situations.

Figure 2.1 – Installation Example

Turn on the countSTICK

Start collecting vehicle data in minutes by simply turning on the countSTICK.

- Depress the button on the bottom of the countSTICK to power the device.
- The countSTICK will begin its boot up and calibration process which may take up to two minutes to complete.
- Once the boot up process is complete an LED on the front of the countSTICK (Figure 2.2) will flash every time a potential vehicle is detected. This means your device is collecting vehicle data.

Figure 2.2 – Vehicle Indication

Chapter 3: Device Pick-up

Pick-up the countSTICK

Once the study period has elapsed, retrieve the countSTICK from the field.
- Turn off the device by depressing the power button.
- Remove the countSTICK from the pole/post.

Chapter 4: Data Retrieval

Connect the USBC cable to the countSTICK

Vehicle data can be retrieved from the countSTICK by connecting the device to a computer using the following steps:
- Ensure the countstick is turned OFF.
- Connect the countSTICK to your computer using the provided USB cable (Figure 4.1).
- Once the vehicle detection LED illuminates, open a web browser and navigate to the countSTICK dashboard URL:
    - Type the countSTICK serial number followed by *".local/"* (i.e *cs100141.local/*) into the web browser and hit the Enter Key.
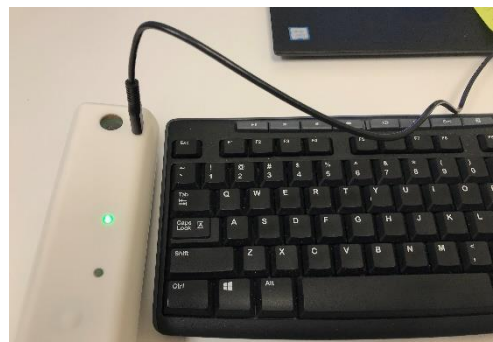

Figure 4.1 – Dashboard Connection

An additional RNDIS Ethernet driver may be required for the computer to detect your device. Contact SpackSolutions support for details if your device is not recognized.

Download the Study Data

The dashboard presents all of your completed studies for download.
- Studies will be listed with the newest study on top.
- Summary information for each study is provided in the report listing. This includes the total study volume, study period, duration, and a link to the count location.
    - If a GPS link was not successfully achieved during the study times will default to UTC and a warning message will be provided
- To generate a report select your desired bin size, using the dropdown menu, and click DOWNLOAD REPORT to download the .csv file to your desktop.
- The generated .csv report summarizes the volume by direction, for the desired bin length.
- Reports can be removed from the countSTICK dashboard by clicking MOVE TO ARCHIVE. This will remove the study from the summary list and the data will no longer be available for on-demad download.

Chapter 5: Using the powerBANK

The powerBANK External Battery Pack allows you to extend the recording time of your countCAM3 to over 100 hours.

Charging the powerBANK

- Plug the provided 3-pin charging cable into the charging port located on the bottom of the powerBANK.
- The powerBANK fully charges from empty within 15-hrs.
- An LED will illuminate while charging. Once fully charged, this LED will turn off.
- Push the charge indication button, located on the front of the device, to see the current battery level. A five LED array will illuminate while depressed showing the current charge. Some device's charge level indicator may blink when the device is charging. This is normal and will not impact the functionality of your device.

Installing the powerBANK

- Connect the powerBANK cable to the countSTICK and then the powerBANK. This will ensure the correct port is used on the powerBANK.
- Set up the countSTICK as discussed in Chapter 2.
- Once the countSTICK is installed use a hose clamp and locking bracket system to fasten the powerBANK to the signpost or utility pole above or below the countSTICK.
- Gently coil any excess cable around the device .

Boosters and powerBANKs must be installed on a fully charged to mostly charged countSTICK. This means if more than 50 hours of additional runtime is needed two powerBANKs should be installed at the start of the recording. It is possible to swap out boosters during a recording, but this should occur early in the recording process so that the countSTICK is still fully to mostly charged. If a powerBANK is installed on a countSTICK that is not sufficiently charged the booster will be unable to extend runtimes.

Chapter 6: Information and Support

Visit **www.SpackSolutions.com** for additional resources, including the Help Center (https://helpcenter.spacksolutions.com/knowledge/countstick-help-categories) where support documentation and setup videos can be found. If additional assistance is needed submit a Support Ticket (https://helpcenter.spacksolutions.com/knowledge/kb-tickets/new) and one of our product specialists will reach out to help.