

# Shield Quick Start Guide



Thank you for purchasing an **All Traffic Solutions Shield Radar Speed Sign**. This Quick Start Guide will show you how to install, power up, and configure your new sign.



**NOTE:** If your purchase includes the Integrated Solar option, please refer to either the *ATS 3 Trailer with Integrated Solar Setup Guide* or *Pole Mounting Signs with Integrated Solar Option* that came with your sign and available on [www.alltrafficsolutions.com/support](http://www.alltrafficsolutions.com/support).

## Before you begin

If you have a TrafficCloud subscription, the first thing you'll need to get started using your Shield is to create a data collection Site in TrafficCloud. Each Site is configured with a speed limit and the direction of moving traffic. They provide a way to keep traffic data organized for reporting purposes. If necessary, you can also perform Site setup after you install your Shield at a physical location. See "Creating a Site" in *Getting Started with TrafficCloud and Shield*.

If you don't have a TrafficCloud subscription, you have several other options for Site and sign setup, as described in [Step 4: Configuring the Shield locally on the next page](#).

## Step 1: Unpacking the equipment

Upon receiving your new Shield, check to ensure that you have all of the items ordered. If you notice any damage or missing items, contact ATS [Technical Customer Support](#) immediately.

Remove the Shield, batteries, charger, and other optional equipment from the boxes.

If your Shield includes batteries, they should be fully charged before deployment, as explained in [Step 2: Charging the batteries on the next page](#). Shield signs can accommodate up to two lithium batteries internally. Although only one battery is required, two batteries are recommended to increase average sign runtime. Without a solar panel, continuous runtime with two batteries is typically between 7 and 10 days.

For all steps involving batteries, repeat for the second battery as necessary.

### To remove the batteries:

- Place the Shield face down on a flat surface and remove the mounting bracket by unlocking the lock with the supplied key and lifting up on the bottom of the bracket. Then pull to remove.
- Next, remove the battery compartment cover by removing the thumb screws. Set the key, bracket, and thumb screws aside.
- Slide the battery or batteries out of the battery compartment, as shown in [\[Figure 1\] below](#).
- Disconnect the connectors, as shown in [\[Figure 2\] below](#).



*[Figure 1] Slide the battery*



*[Figure 2] Disconnect/connect*

## Step 2: Charging the batteries

If your Shield includes batteries, it arrives with the batteries partially charged and they need to be fully charged before deployment.



**WARNING: RISK OF ELECTRIC SHOCK AND DAMAGE TO EQUIPMENT** The charger is not intended for outdoor use. Only charge and store the batteries in a controlled environment.

- A. Connect a battery to the charger.
- B. Plug the charger cable into a power outlet. The light on the charger displays red while charging and changes to green when charging is nearly complete. A charge can take up to 7 hours for the 12V 11.5 Ah LFP battery and 11 hours for the 12V 16.5Ah LFP batteries supplied with the sign.
- C. When the indicator on the battery charger turns green, repeat for the second battery if applicable, and then proceed to the next step.
- D. Disconnect the battery from the charger.

## Step 3: Installing the charged batteries

Follow these steps to install the charged batteries.



**CAUTION:** Use only the **SHORT (3/8"-length)** thumb screws to fasten the battery covers. Do **NOT** use the longer (3/4"-length) thumb screws supplied for the Your Speed faceplate, as they are too long and can cause damage to your sign.

- A. Place the Shield face down on a flat surface and remove the mounting bracket and battery cover.
- B. Connect the battery wiring harness to the connector inside the battery compartment, as shown in [\[Figure 2\] on the previous page](#).
- C. Tuck the connector into the space in the top of the battery compartment.
- D. Holding the connector in place, slide the battery into the compartment.
- E. Replace the cover and fasten it down using the **SHORT (3/8"-length)** thumb screws.

## Step 4: Configuring the Shield locally

**If you have a TrafficCloud subscription**, you should use this step only to power on your Shield, and instead configure the Shield online, setting the sign display options, creating messages, and setting up alerts, and assigning a Site. It's best to perform sign setup in advance, so that your traffic data is captured in TrafficCloud immediately. See the *Getting Started with TrafficCloud* guide for your sign.

**If you don't have a TrafficCloud subscription**, you can do any of the following (see details next page) to perform initial Shield configuration locally, either at your office or after the sign is mounted at the roadside.

### Use the Shield mode buttons

- » You can configure the Shield using the **Speed Limit** and **Display Mode** buttons.

### Use the TrafficCloud Mobile app for Android

- » You can configure the Shield locally using the **TrafficCloud Mobile app** for Android over a Bluetooth connection.

### Use TrafficCloud Sign Manager

- » You can also configure the Shield locally using **TrafficCloud Sign Manager for Windows** over the included USB connection or optional Bluetooth.



**NOTE:** Before attempting a Bluetooth connection, make sure the option was purchased for your equipment.

### To power up the Shield:

» Power up the Shield by pressing the **Power** button on the back, inside the mounting channel.

The Shield will go through start-up and self-check sequences. Once the self-check is complete, the sign is fully operational. A green LED on the top-left corner flashes every 10 seconds to indicate when the sign is powered on.

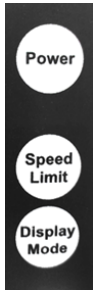
### To set up the Shield using the onboard buttons:

- Press the **Speed Limit** button until the desired value displays. The first button press displays the current speed limit.
- Verify or set the display mode on the Shield. The default is **Constant** for the Shield.
- To change the mode, press the **Display Mode** (or **Display Settings**) button until the desired mode displays on the sign.

For details about sign modes, see "Shield Display Modes" on the next page.



**NOTE:** To reduce the risk of tampering, the buttons deactivate five minutes after you power on the sign. To reactivate them, press the **Power** button, wait a few seconds, and press it again.

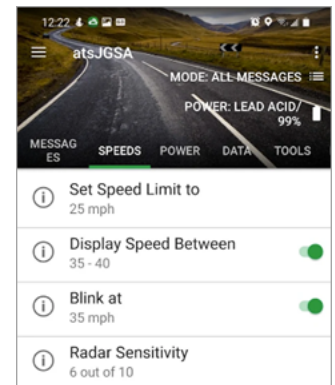


### To configure the Shield using the TrafficCloud Mobile app for Android:

If you purchased an Android tablet from us, the TrafficCloud Mobile app has been pre-installed. If you have your own Android device, you can purchase a TrafficCloud Mobile perpetual license from ATS and then download the app from the [Google Play Store](#). Using the app you can control a wide range of tasks, such as downloading traffic data, setting the speed limit and display mode, creating Sites, and checking battery power.

To connect with the app, do the following:

- Sign into the **TrafficCloud Mobile app** on your Android device using your TrafficCloud credentials.
- Scan for your Shield. You can connect to any ATS device registered to your account within Bluetooth range. Only one connection is permitted at a time.
- Use the Bluetooth pairing code "ATS" to connect to your Shield.

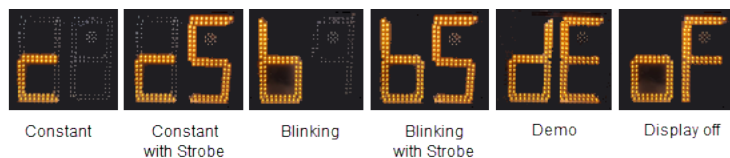


### To configure the Shield using TrafficCloud Sign Manager for Windows:

- First, for **TrafficCloud Sign Manager for Windows** installation details, please see the *TrafficCloud Start-Up Instructions* included with your shipment and available from our Technical Customer Support page at <https://www.alltrafficsolutions.com/support/>. For details about using TrafficCloud Sign Manager for Windows, in the application, click **Help > Software User's Manual**.
- Then, do one of the following:
  - Plug the supplied USB-A-to-mini B cable into the back of the sign and then into your computer. The mini-B port is located above the buttons inside the sign's mounting channel, or
  - Connect to the Shield over the optional Bluetooth connection (use pairing code "ATS"). Once the device is paired, run TrafficCloud Sign Manager and select Bluetooth under the **Connection** menu.

## Shield Display Modes

Here are the sign modes available with the Shield if you use the **Display Mode** button on the sign:



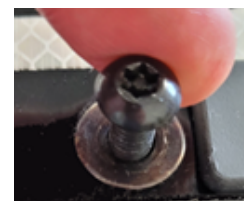
Shield modes	Description
<b>c</b>	<b>Constant:</b> The Shield continuously displays vehicle speeds as each vehicle passes, changing the speed display as the vehicle speed changes. Constant is the default (recommended) setting.
<b>cS</b>	<b>Constant with strobe:</b> The same as constant, however vehicles exceeding the Speed Limit set in the sign by 1 mph (or 1 kph) trigger the Violator Alert strobe (if equipped). TrafficCloud subscribers typically set the strobe option to 10-15 mph (16 to 24 kph) above the Speed Limit set in the sign.
<b>b</b>	<b>Blinking:</b> The Shield blinks slowly, displaying changing speeds as the vehicle passes. TrafficCloud subscribers typically set the blink option to 10 mph (16 kph) above the Speed Limit set in the sign.
<b>bS</b>	<b>Blinking with strobe:</b> The Shield blinks constantly, and the Violator Alert strobe (if equipped) flashes when the sign detects a vehicle exceeding the Speed Limit by 1 mph (or 1 kph). TrafficCloud subscribers can set the blinking and strobe options separately, with blinking typically set at 10 mph (16 kph) above the speed limit, and the strobe at 10-15 mph (16 to 24 kph) above the Speed Limit set in the sign.
<b>dE</b>	<b>Demo:</b> The Shield displays a simulation of vehicle approach speeds, from higher to lower, temporarily ignoring actual traffic readings.
<b>oF</b>	<b>Display Off:</b> The Shield collects traffic and status data, but the display is turned off. This mode, also referred to as "stealth mode", is recommended for performing traffic studies at a Site.

## Step 5: Installing the Your Speed sign attachment

To save packing space, the Your Speed sign attachment ships in the transport position.

To set the sign attachment in the deployed position:

- Remove the 3/4" (19 mm) Torx bolts (wrench included) and washers from the Your Speed sign attachment and set them aside. If there is no concern about tampering, you can use the long thumb screws in place of the Torx bolts.
- Reposition the Your Speed sign attachment above the Shield display.
- Place a washer over each hole in the sign bracket and push the Torx bolts through the holes in the Your Speed sign attachment and the brackets and frame, as shown.
- Reinstall the fasteners to finish installing the Your Speed sign attachment.



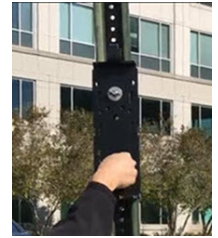
## Step 6: Mounting the Shield

Use the instructions in this step for details about mounting the Shield.

### To install the Shield mounting bracket:

- A. If you are mounting the Shield on a round pole, thread two stainless steel banding straps (not included) through the sign mounting bracket, and then tighten the bracket and straps around the pole. Thread the ends of each banding strap together and then tighten them onto the pole.
- B. If you are mounting the Shield on a U-shaped or square pole, bolt the sign mounting bracket to the pole using the supplied carriage bolts or U bolts and wing nuts.

The wing nuts will be concealed inside the back of the sign to prevent tampering.



### To mount the Shield:

Before you mount the Shield, make sure it's turned on. See [Step 4: Configuring the Shield locally on page 2](#).

- A. Set the top channel on the back of the Shield onto the tab at the top of the mounting bracket.
- B. Rotate the Shield down until it's flush with the bracket.
- C. Push the locking pin up to lock the Shield into place.



## Contacting Technical Customer Support

For support for your All Traffic Solutions products,

- » visit the Technical Customer Support page at <https://www.alltrafficsolutions.com/support/>,
- » send email to [support@alltrafficsolutions.com](mailto:support@alltrafficsolutions.com), or
- » call 1-866-366-6602, Option 2 anytime between 8:00 a.m. and 6:00 p.m. Eastern Time, Monday to Friday.

### Technical documentation and training

If you have a TrafficCloud subscription, please visit our **ATS Start-Up Guides** page at <https://www.alltrafficsolutions.com/get-started/> for links to the most recent versions of our technical documentation, including the *Getting Started with TrafficCloud* series. If you don't have a subscription, please visit the Technical Customer Support page.

Please contact Technical Customer Support to discuss your TrafficCloud training options. For online training resources, please visit our **TrafficCloud Training Videos Hub** at <https://flow.alltrafficsolutions.com/hub-training-video-trafficcloud-0-0-0-0>.

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