



Thank you for purchasing an All Traffic Solutions Shield Radar Speed Sign. This Quick Start Guide will show you how to set up, power, and configure your new sign. If you have a TrafficCloud subscription, you can log on to TrafficCloud to set up your signs remotely. Non-subscribers can complete sign setup locally. See *Step 4: Configure the Shield locally* on the next page.



[Figure 1] Shield 15 Radar Speed Sign

Step 1: Unpack the equipment

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

Batteries should be fully charged before deployment. Shield Radar Speed Signs can accommodate up to two 16Ah lithium batteries internally. Although only one battery is required, two batteries are recommended to extend the run time of the sign, on average from 7 to 10 days.

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

To remove the batteries:

- A. Place the Shield Radar Speed Signs 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 mounting bracket.



[Figure 2] Slide the battery



[Figure 3] Disconnect/connect the battery

- B. Next, remove the battery compartment cover by removing the thumb screws. Set the key, bracket, and thumb screws aside.
- C. Slide the battery out of the battery compartment, as shown in [Figure 2] above.
- D. Disconnect the connectors, as shown in [Figure 3] above.

Step 2: Charge the batteries

The Shield arrives with the batteries partially charged and needs 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. Plug the battery into the supplied charger cable.
- 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 10Ah LFP battery and 11 hours for the 12V 16Ah 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.

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

Step 4: Configure the Shield locally

If you have a TrafficCloud subscription, you should use this step only to power on your Shield, and instead configure the sign online, setting the sign display options 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 Web subscription or the TrafficCloud Mobile app for Android (over Bluetooth), you can configure your sign using the **Speed Limit** and **Display Mode** buttons, and TrafficCloud Sign Manager for Windows, connecting over the supplied USB A-to-mini B cable or over Bluetooth. The mini-B port is located above the buttons inside the mounting channel for Shields, SpeedAlert 18s, and InstAlert 18s, and inside the back of the sign for the SpeedAlert 24s and InstAlert 24s. For Bluetooth pairing, use code "ATS".



To configure the sign locally:

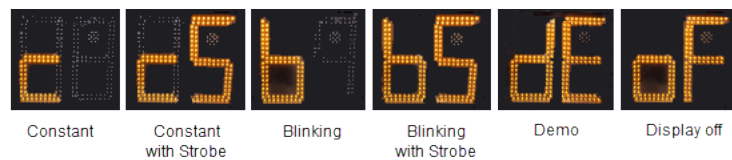
- A. Turn the sign on by pressing the **Power** button on the back, inside the mounting channel.
The Shield will go through start-up and self-check sequences. Once the self-check is complete, the sign is fully operational. A green LED on the top-left corner flashes every 10 seconds to indicate when the sign is powered on.
- B. Set the speed limit by pressing the **Speed Limit** button until the desired value displays. The first press displays the current speed limit.
- C. Verify or set the display mode on the Shield. The default is **Constant** for the Shield.
- D. To change the mode, press the **Display Mode** (or **Display Settings**) button until the desired mode displays on the sign. For details about display modes, see the applicable figures and table below for your sign.



NOTE: To reduce the risk of tampering, the buttons deactivate five minutes after you power on the sign. To reactivate them, long press the **Power** button again.

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
c	Constant: 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.
cS	Constant with strobe: The same as constant, however vehicles exceeding the Speed Limit set in the sign by 1 mph (or kph) trigger the Violator Alert strobe (if equipped). TrafficCloud subscribers typically set the strobe option to 10-15 mph above the Speed Limit set in the sign.
b	Blinking: The Shield blinks slowly, displaying changing speeds as the vehicle passes. TrafficCloud subscribers typically set the blink option to 10 mph above the Speed Limit set in the sign.
bS	Blinking with strobe: 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 kph). TrafficCloud subscribers can set the blinking and strobe options separately, with blinking typically set at 10 mph above the speed limit, and the strobe at 10-15 mph above the Speed Limit set in the sign.
dE	Demo: The Shield displays a simulation of vehicle approach speeds, from higher to lower, temporarily ignoring actual traffic readings.
oF	Display Off: 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: Install 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" torx bolts (wrench included) and washers from the Your Speed sign and set them aside. If there is no concern about tampering, you can use the 3/4" long thumb screws in place of the torx bolts.
- Reposition the Your Speed sign above the display.
- Place a washer over each hole in the sign bracket and push the torx bolts through the holes in the Your Speed sign and the Shield brackets and frame, as shown in the example at right.
- Reinstall the fasteners to finish installing the Your Speed sign.



Step 6: Mount the Shield

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

To install the sign mounting bracket:

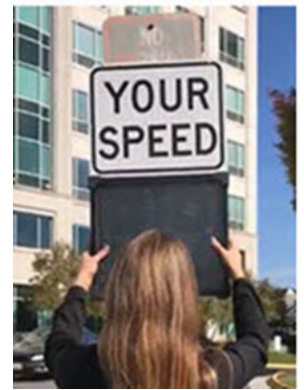
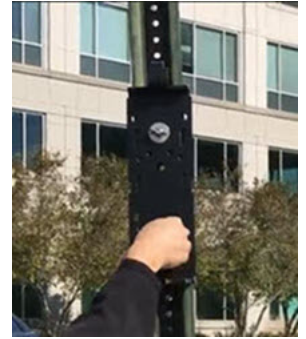
- A. If you are mounting the sign on a round pole, thread two stainless steel banding straps (not included) through the sign mounting bracket, and then tighten the bracket and straps around the pole. Thread the ends of the banding straps together and then tighten them onto the pole.
- B. If you are mounting the sign 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 secured inside the back of the sign to prevent tampering.

To mount the sign:

Before you mount the sign, make sure that it's turned on. See *Step 4: Configure the Shield locally* on page 2.

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



Getting help

We're here to help! If you have any concerns while using your new sign, please feel free to call our customer success specialists at 1-800-366-6602, option 2, or email us at support@alltrafficsolutions.com. For additional setup documentation, TrafficCloud subscribers should refer to the applicable *Getting Started with TrafficCloud* guide (click the **Getting Started Guides** link on your TrafficCloud **Help** menu). Non-subscribers should refer to *Step 4: Configure the Shield locally* on page 2.