# Integrated Solar Option Quick Start Guide – *Trailer mounted*

The Integrated Solar Option for your All Traffic Solutions sign is a great choice for lightweight, continuous operation. All of the components of the solar charging system, with the exception of the panel, have been incorporated inside the sign for a convenient and compact design. This guide will show you how to perform system setup.

## The system

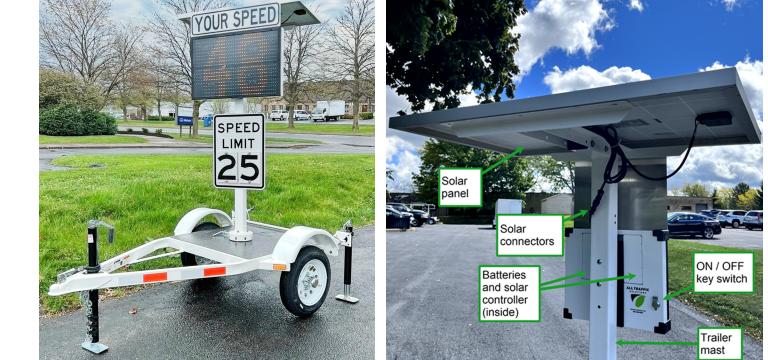
The Integrated Solar Option consists of these main parts: the solar panel, either a SpeedAlert Radar Message Sign, Shield Radar Sign, or an InstAlert Message Sign with an integrated solar controller, one or two lithium batteries, depending on your order, a key switch for power, and an optional external AC charger. The solar controller and batteries are installed securely inside the battery compartments of the sign.

[Figure 1] ATS 3 Trailer and SA 18 with Integrated [Figure 2] Integrated Solar components (trailer mounted) Solar

The solar controller receives the power from the solar panel and conditions it for charging the batteries. The integrated solar option has been designed for use with lithium batteries only and sized appropriately for use with the solar panel provided with your sign.

In the integrated solar option, typically two batteries are connected directly together, forming the equivalent of a single large, balanced battery. It is not recommended to remove or charge them individually. In the case of the Shield 12, only one battery is included, and the other compartment is used for the solar controller.

Trailer-mounted signs with the integrated solar option feature a keyed ON/OFF switch, which provides secure power control without the need to unmount the sign to access the power push-button located inside the mounting bracket channel. In trailer-mounted signs, the power button inside the mounting channel is disabled. See *Turning on the sign* on the next page.





#### Turning on the sign

Use the key switch to turn on the sign. Lift up the cover and use the barrel-style key to turn on power. The vertical key position is OFF and horizontal is ON, as shown at right.

#### If you need to recharge the sign

Under normal use, the sign's batteries should be fully maintained by the solar panel. However, if the batteries do become depleted, it's best to turn the sign off and leave it in full Sun until it's recharged. Alternatively, you can use the optional charger (see *[Figure 3] below*) to recharge the batteries more quickly. To use the charger, take the trailer or sign into a protected environment, plug the charger into a standard 120-VAC outlet, and connect the charging end to the sign's solar connector cable.



# WARNING: RISK OF ELECTRIC SHOCK AND EQUIPMENT DAMAGE: The charger is not intended for outdoor use. Only charge the system in a protected environment, such as a garage.

The charger may take a couple of minutes to recognize the batteries, due to the presence of the solar controller. Do not be alarmed if it does not start charging right away.

Depending on the size of the batteries it may take up to 24 hours to fully charge the batteries.



[Figure 3] Battery charger and integrated solar adapter

### Getting help

We are here to help! If you have any concerns while using your new system, please feel free to call our customer success specialists at 1-800-366-6602, option 2, or email us at <a href="support@altrafficsolutions.com">support@altrafficsolutions.com</a>.