



Installation Instructions (029-04858-0000 Rev. B)

March, 2019

Portable DFB 20W SOLAR KIT

Rev A	Release 2017
Rev B	Release March 2019, AP

1 Description

The 20W solar kit provides power for a TrafficCalm portable LED Driver Feed Back display system using the energy of the sun. Display operating endurance obtained will vary with installation location and conditions, battery condition, weather conditions, and display settings.

1.1 Specifications

Box contents:

Qty 1 Solar Panel with integrated charging circuit

Qty 1 Extended U Channel Sign-Side Bracket

Qty 1 Installation Manual

Solar Panel Specifications:

Polycrystalline 20W, 12V, (Pmax 17.2V, 1.16A)

Solar Charger Specifications:

Morning Star SunSaver 20

20A rated input (solar panel)

Regulation Voltage 14.1V

Regulation method is PWM

Maximum Solar Voltage 30V

2 Installation Requirements

This section describes the components, tools, and information you must have available before installing TrafficCalm 20W Solar Kit.

2.1 Equipment Requirements

In addition to the Driver Feedback Sign to be installed, you will need the following suggested items if you intend to follow these directions:

- Assorted hand tools, including a torx driver
- Socket set and drive handle

2.2 Installation of Solar Panel

NOTE: It is the installer's responsibility to ensure that this installation complies with local and national codes.

Install the included extended u-channel sign bracket-

1. Remove the existing u-channel sign-side bracket by removing four torx bolts holding it to the sign

2. Reuse the four bolts to mount the extended bracket to the sign, ensure the extension is ABOVE the sign

Mount the Solar Panel to the extended bracket

1. Bolt the panel to the bracket using supplied bolts

3 Connection to Portable DFB

The 20W solar kit comes with the solar charger and battery pre-wired and weather-sealed to ensure reliability. There is a single cable to connect to the portable DFB sign. The cable utilizes the same port as the included AC charger. Simply route the cable to the port and plug it in. It is critical to secure the screw-tight fitting to ensure complete connection.



Figure 1. Solar Panel Assembly with output cable and mounting bracket attached

4 Notes on Operation

The solar panel kit (particularly the included bracket) are intended to compliment the portability of the sign's original design. However, this may produce less than ideal solar panel aiming. It is important to note that this inherent to the intended use of the system, and that off-post charging WILL be required in almost all installations. If off-post charging is not desirable it is highly advised that another DFB solution be utilized