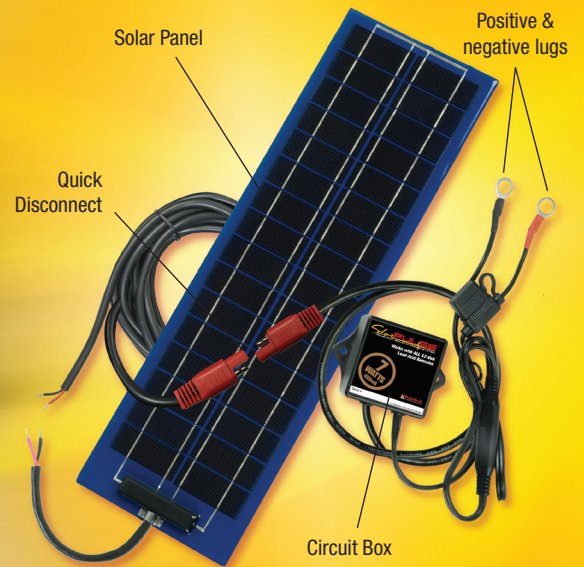


# INSTALLATION MANUAL For Model 735X613 12V ERV UNIT



## Getting Started

### What SolarPulse Can Do For You

SolarPulse is one of the most effective methods available for keeping your emergency/rescue vehicles and other 12-volt lead-acid batteries charged. Besides charging, it also uses our patented Pulse Technology® to remove and prevent the buildup of lead-sulfate deposits on your battery plates.

By keeping the plates clean, your battery recharges faster, accepts a full charge and releases all its stored energy.

### Installing SolarPulse

The 12V ERV 7-watt SolarPulse unit has four components:

- Solar Panel with unterminated wires for simple installation w/o connector removal
- Circuit Box housing our exclusive Pulse Technology
- Positive and Negative Lugs for connecting to the battery
- Solar Panel with quick disconnect for easier installation

Installation is quick and easy. Just follow the steps inside.

**WARNING:** Because of the possibility of personal injury, always use extreme caution when working with batteries.

## Warranty and Warnings

### 10-Year Limited Warranty

**What Does This Warranty Cover?** The warranty covers any defects in workmanship or materials in the circuit board in the SolarPulse™ product under normal use and service. **How Long Does The Coverage Last?** This warranty runs for ten (10) years from the date of purchase. **What Will PulseTech Do?** PulseTech will, at its option, replace or repair any defective circuit board with a new or rebuilt circuit board at no charge. **What Does This Warranty Not Cover?** This warranty does not cover any parts other than the circuit board. In addition, PulseTech will not be responsible under this warranty if PulseTech determines that (1) upon examination that the circuit board failure was (A) caused by misuse, neglect, accident, alteration, or abnormal condition of operating or handling (including the failure to install the product in accordance with PulseTech's instructions and observe the warnings on the product and the instruction manual), or other conditions beyond the control of PulseTech or (B) damaged in transit to PulseTech, or (2) the owner is not the original purchaser that purchased the product through an authorized PulseTech dealer or distributor. **IN NO EVENT SHALL PULSETECH BE LIABLE FOR ANY DIRECT, SPECIAL, INDIRECT, CONSEQUENTIAL, INCIDENTAL, PUNITIVE OR EXEMPLARY DAMAGES, EXPENSES, LOST SAVINGS OR LOST PROFITS OR ANY OTHER DAMAGES OF ANY KIND FROM ANY BREACH OF THIS WARRANTY OR OTHERWISE.** Some states, provinces or countries do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation may not apply to you. **How To Get Service?** Send the product postage prepaid with proof of purchase (sales receipt) within the warranty period to the authorized reseller where the product was purchased or contact PulseTech directly by calling (800) 580-7554. **How Does State, Province or Country Law Apply?** This warranty gives you specific legal rights, and you may also have other rights which vary from state to state, province to province or country to country.

**THIS WARRANTY IS THE SOLE AND EXCLUSIVE REMEDY AND IS IN LIEU OF ALL OTHER WARRANTIES EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY FOR FITNESS FOR A PARTICULAR PURPOSE.**

## Specifications

**Max Charge Current:** 450 mA

**Maximum Output Voltage:** 16.5 V dc

**Solar Panel Dimensions:** 16" L x 4.93" W x 0.25" H

**Circuit Box Dimensions:** 3.25" L x 2.25" W x 1.5" H

**Panel to bare end:** 1.5'

**Lug Cable Length:** 3'

**Bare End to Circuit Box:** 15.5'

**LED (Red) STEADY ON – Charger is receiving proper voltage from solar panel and unit is pulsing and charging. Red LED fades in partial sunlight.**

U.S. Patent Nos. 7,834,592B2, 8,269,466B2 and 8,269,465B2

### WARNING

The pulsating dc current produced by this product may interfere with the correct operation of some electronic devices when the unit is placed near the antenna. In order to ensure no interference, the circuit box should be placed away from the antenna.

### BASIC CLEANING & MAINTENANCE

- Be sure to keep the solar panel clean of dirt and dust so that it has optimum access to sunlight.
- The circuit box has no moving parts so maintenance is unnecessary.
- Periodically check to make sure the positive and negative wires are securely fastened to the battery terminals.



## INSTALLATION INSTRUCTIONS



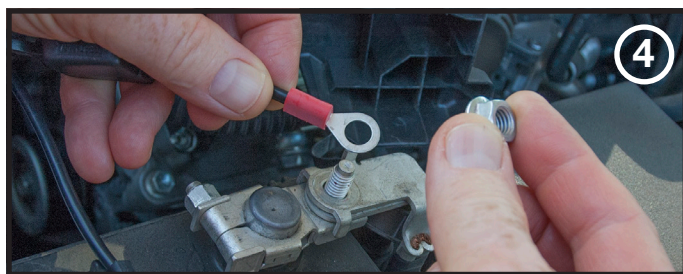
The circuit box can be mounted using any of the following methods: Two round-head screws, industrial adhesive, heavy-duty dual lock or double-sided tape (not included). After cleaning the install area, mount the box close to the battery so that the lugs can reach the terminals. **DO NOT** attach it to the battery itself. Also make sure the box is located in a location where it won't be disturbed and the LED is visible.



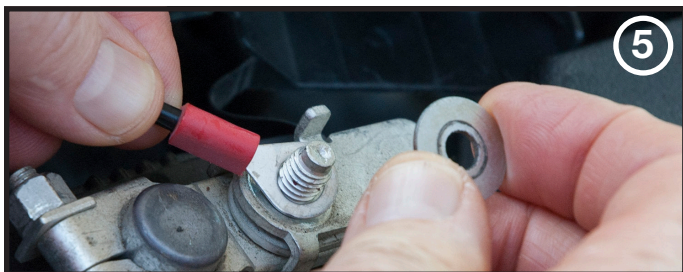
If needed, use plastic cable ties (not included) to secure the circuit box wires to the battery cable or other secure area near the battery. This will keep the wires from being damaged or interfering with any moving engine parts.



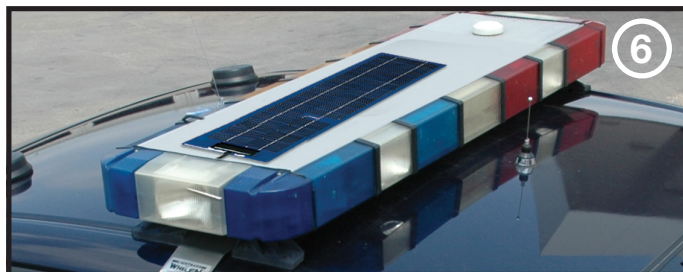
Circuit box includes an LED on top. LED will light when lugs are attached to the battery terminals and solar panel is installed and receiving sunlight. It shines steady in full sunlight and fades in partial sunlight.



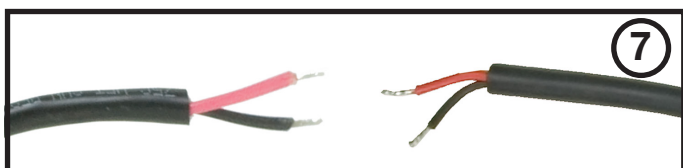
Connect the positive (+) wire to the positive (+) battery terminal. After removing the nut from the bolt securing the battery clamp to the positive terminal, slip the round metal lug at the end of the positive red SolarPulse wire onto the bolt until it sits next to the clamp.



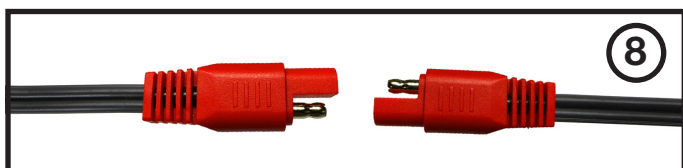
Slip a round washer (not included) onto the bolt until it sits next to the lug. Replace the nut onto the bolt and tighten it until it secures the lug and washer against the clamp. Do not over tighten. Repeat steps 4-5 above to connect the negative (-) black SolarPulse wire to the negative (-) battery terminal.



Mount the solar panel using any of the following methods: Four round-head screws, industrial adhesive, heavy-duty dual lock or double-sided tape (not included). It should be mounted where it will have direct sunlight.



If you wish to remove excess wiring between the solar panel and circuit box, they can be cut and spliced together. If you wish to extend the length of the solar panel wires, they can be spliced with up to 10-feet of the same gauge wire as the model you are installing. **NOTE: Only the wires between the solar panel and the circuit box can be spliced. DO NOT splice the wires between the circuit box and battery.**



Feed the solar panel cable through any existing opening in the vehicle or equipment into the battery compartment. Connect the quick disconnect plugs on the solar panel and the circuit box cables.

*The SolarPulse unit is now ready. Once the panel is exposed to sunlight, SolarPulse will begin charging your battery and preventing/removing the buildup of lead-sulfate deposits on the battery plates.*

**WARNING:** Any solvents that may be harmful to plastic should not be used on or near the unit.

**WARNING:** Do not hold the positive and negative lugs at the same time while the unit is active (receiving sunlight). It may cause a slight electric shock.



**PulseTech**<sup>®</sup>  
PRODUCTS CORPORATION

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