LineLight Crosswalk Installation Manual: Solar Panel & Motion Radar

(Crosswalk Application Example)

The purpose of this document is to give step by step instructions to install a crosswalk with motion radar and road studs powered by solar energy.

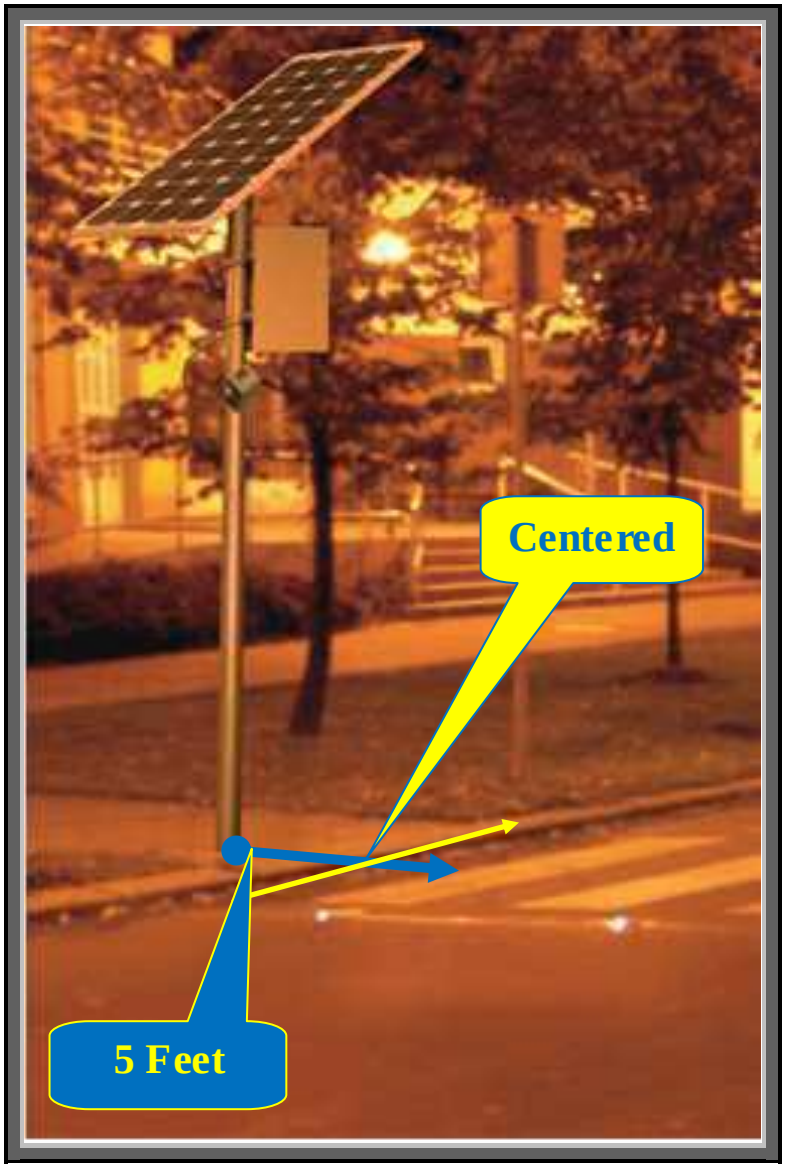
Major Components Parts List

- LineLight R1/2 road studs*
- Motion Radar
- Solar Kit: including:
  - Battery
  - solar panel
  - solar panel pole (2 3/8 inches diameter x 13 feet in height)
  - charge regulator
  - battery housing box

Please follow the below step-by-step installation instructions. If any questions arise during installation, please contact technical support at **888.333.SOLAR** or contact@solarpathusa.com

For the instructions on the installation of the LineLight R1-R2 road studs, please see the **LineLight R1/2 installation manual*

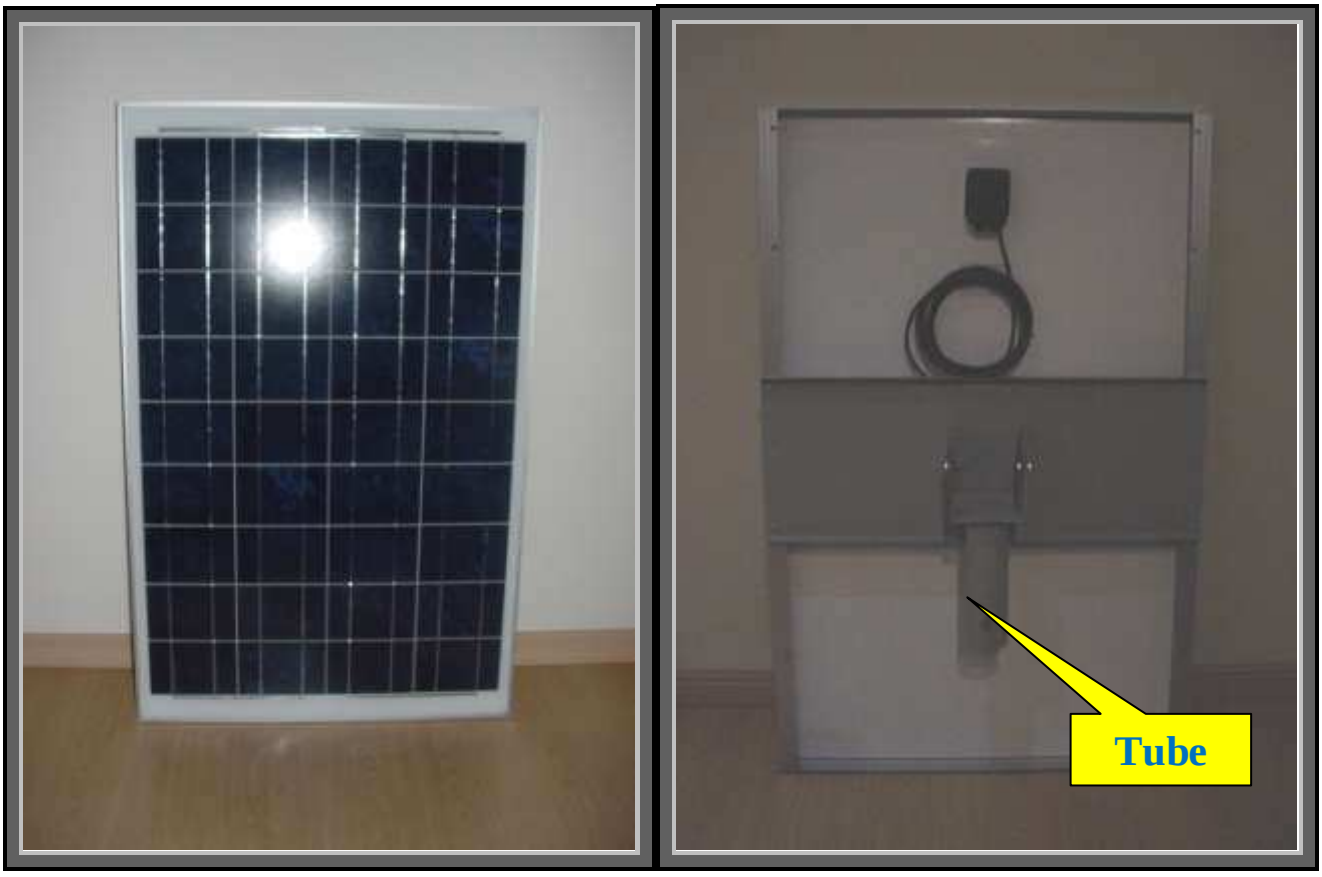
Step 1



Step 1

Install the pole approximately 5 feet from the curb and centered at the middle of the crosswalk.

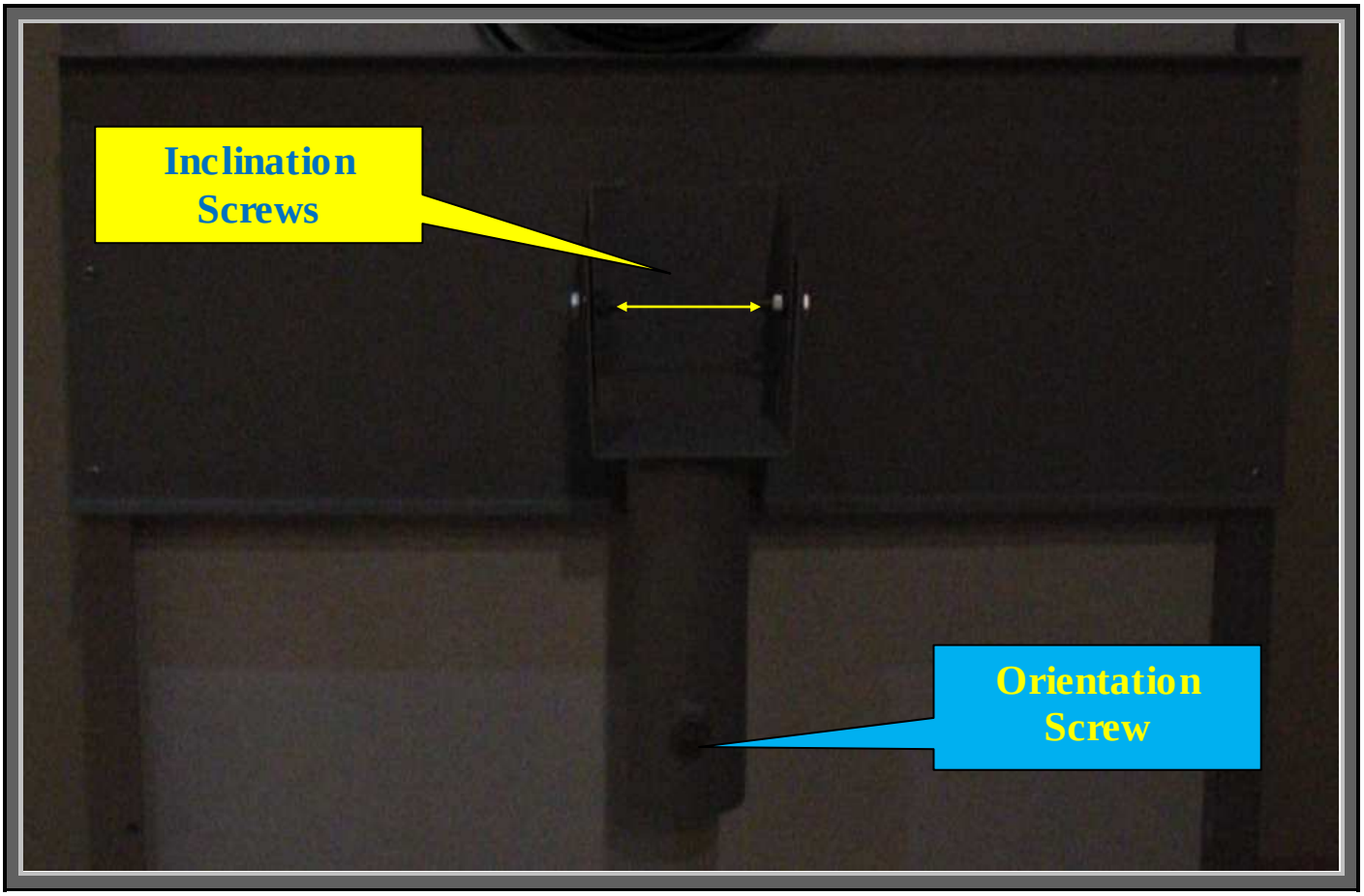
Step 2 A



Step 2 (A)

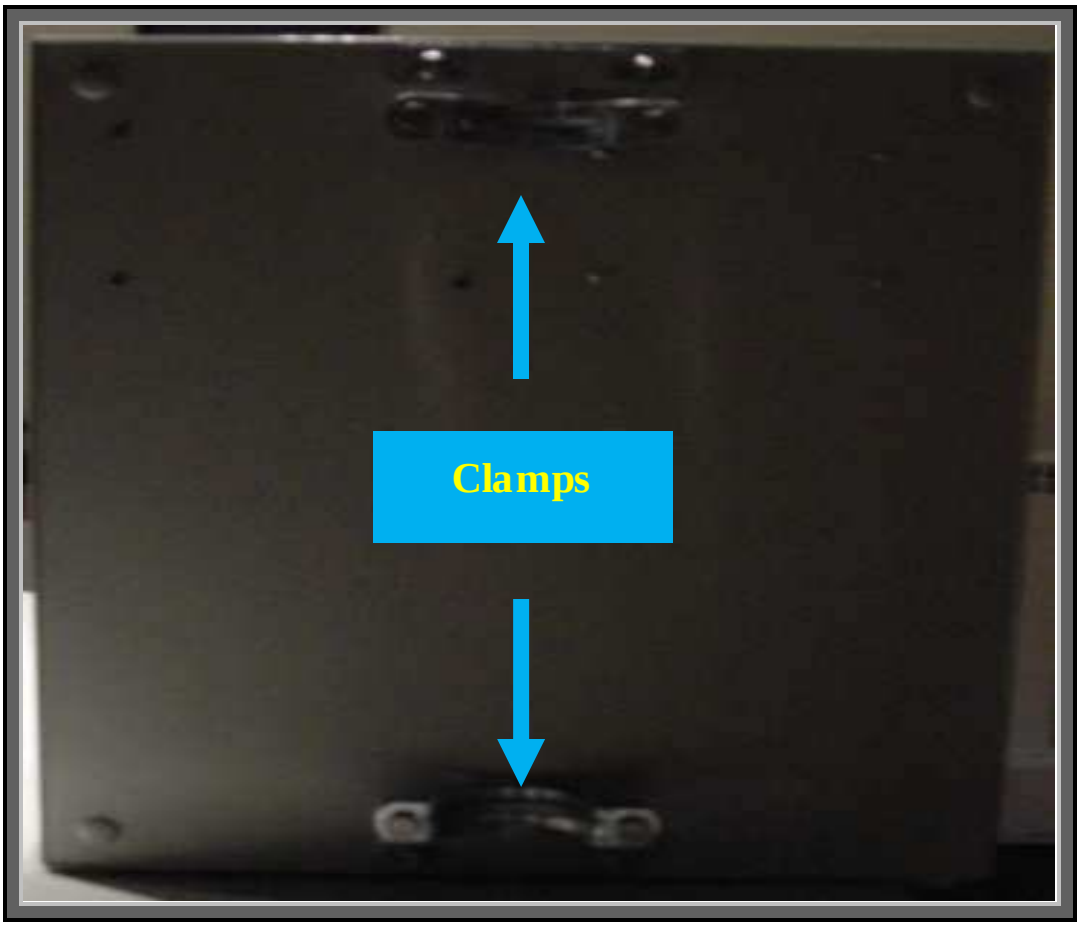
Take the solar panel with the structure and place it on the top of the pole. The pole must be inside of the small tube that is in the back of the structure.

Step 2 B



Step 2 (B)

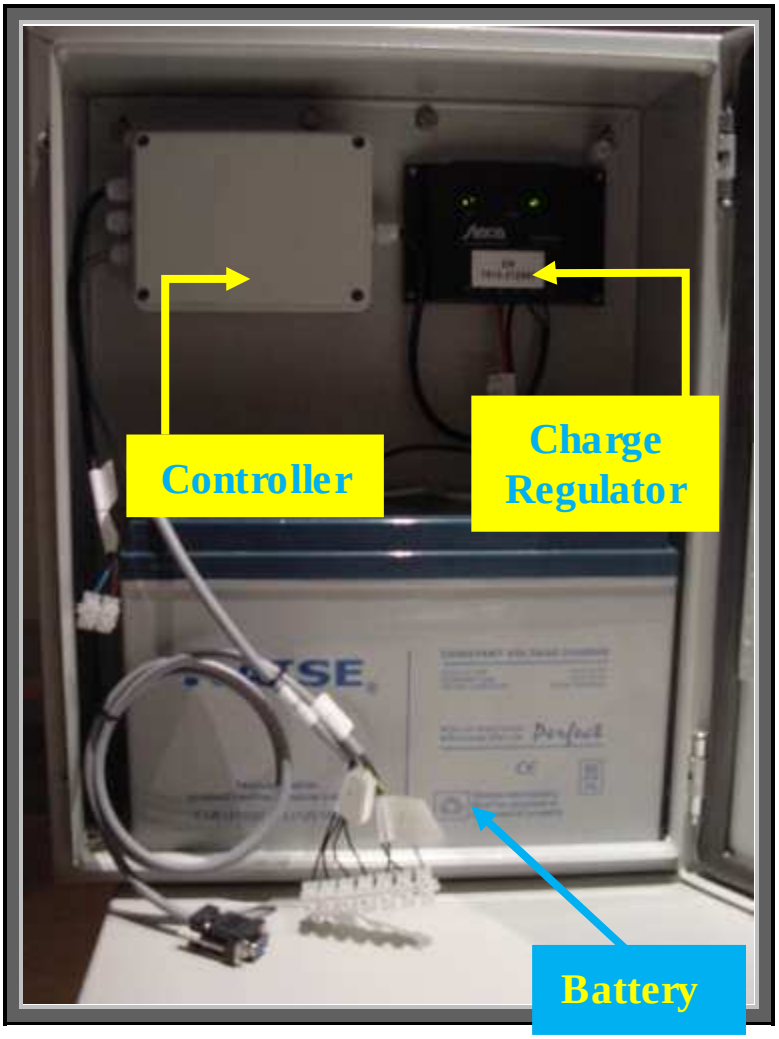
When you have the pole inside of the tube, you next need to adjust the solar panel to the South with a 45º degrees inclination (more or less). Last, secure the panel in place with the 3 screws that are shown in the picture.



Step 3

Having attached the solar panel to the pole, you next need to attach the housing box to the pole as seen in the picture. Take the clamps out of the back of the box and fasten the box to the pole. For security purposes, make sure the box is at the maximum height on the pole.

Step 4

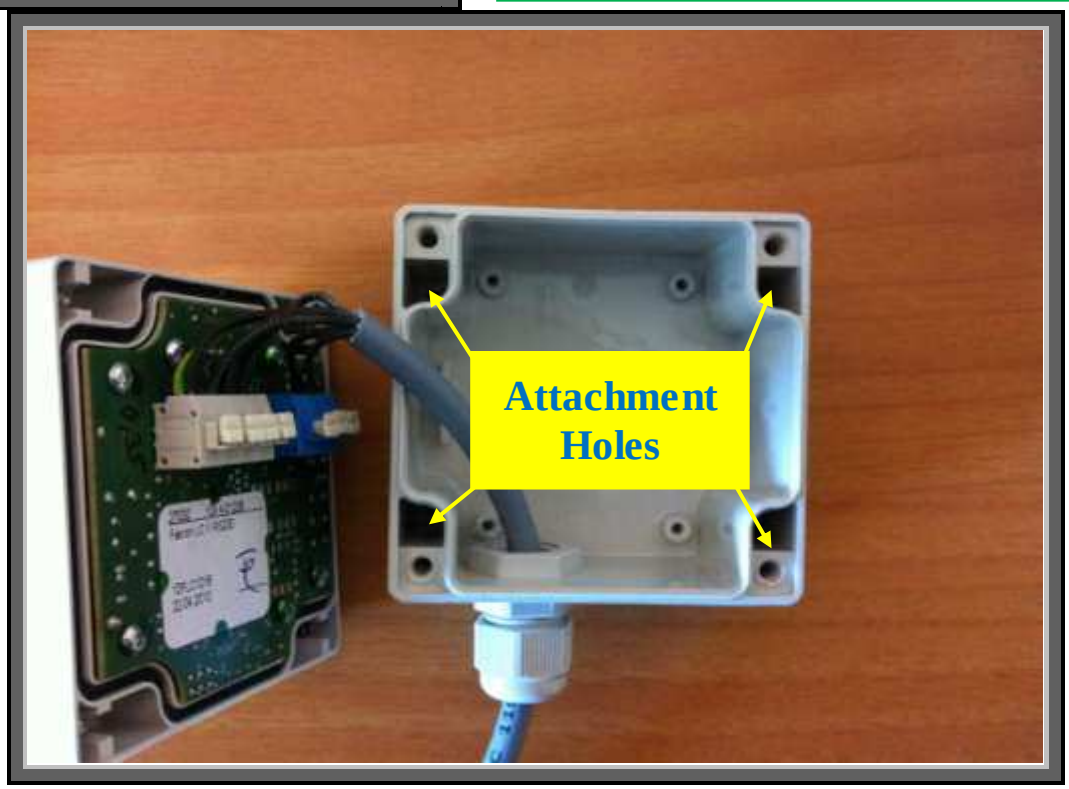


Step 4

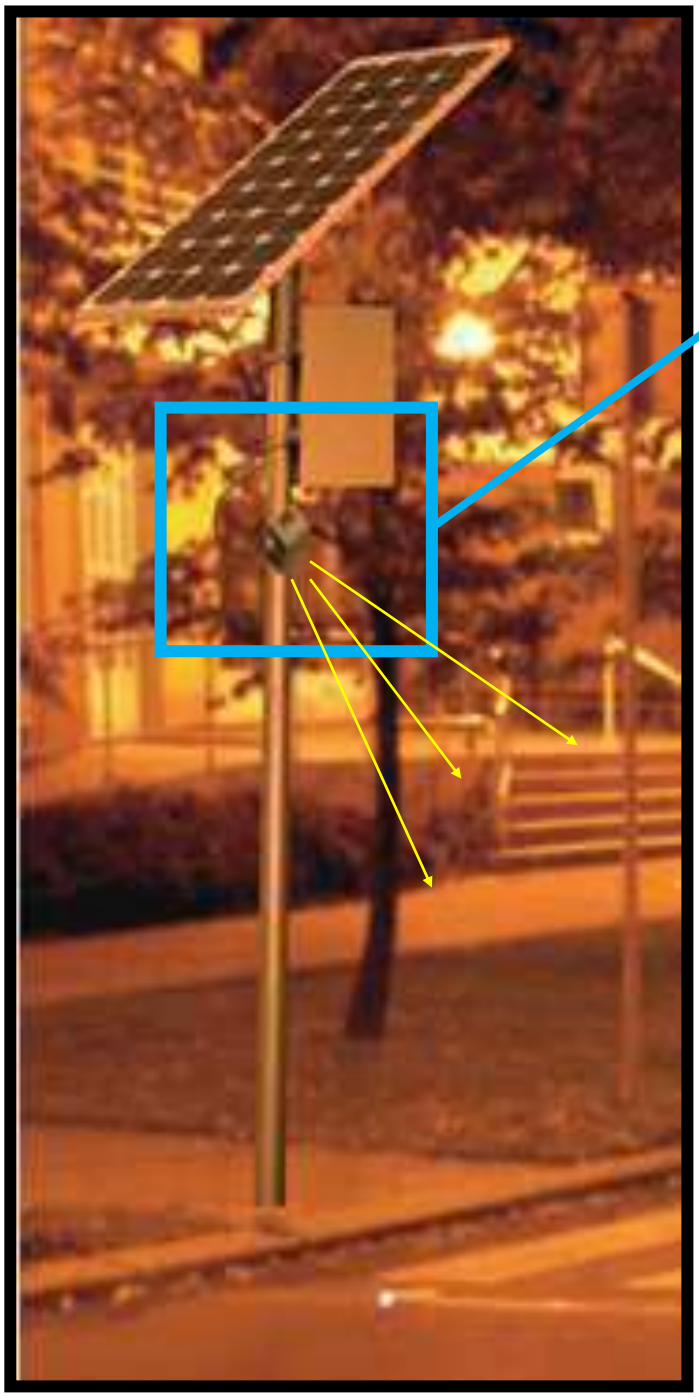
Place the battery inside of the box using caution due to its weight. It should look like the above picture. In the box you will have one charge regulator, one controller, the battery and several cables. Next, you must connect the 2 wires of the charge regulator to the battery. Connect the red wire to the positive terminal (+) and the black wire to the negative terminal (-). Now you should see 2 Green or yellow LEDs illuminate.

Step 5 A

At the bottom of the box you have 4 glands to pass through the solar panel cable, the radar cable and the road studs cable. If you open the radar box you will find four holes to attach the radar with the 4 screws that were sent.



Step 5 B



Step 5 B

For the radar cable, you need to first attach the radar to the pole, orienting the sensor to the crosswalk as seen in the picture.

Step 6

Step 6

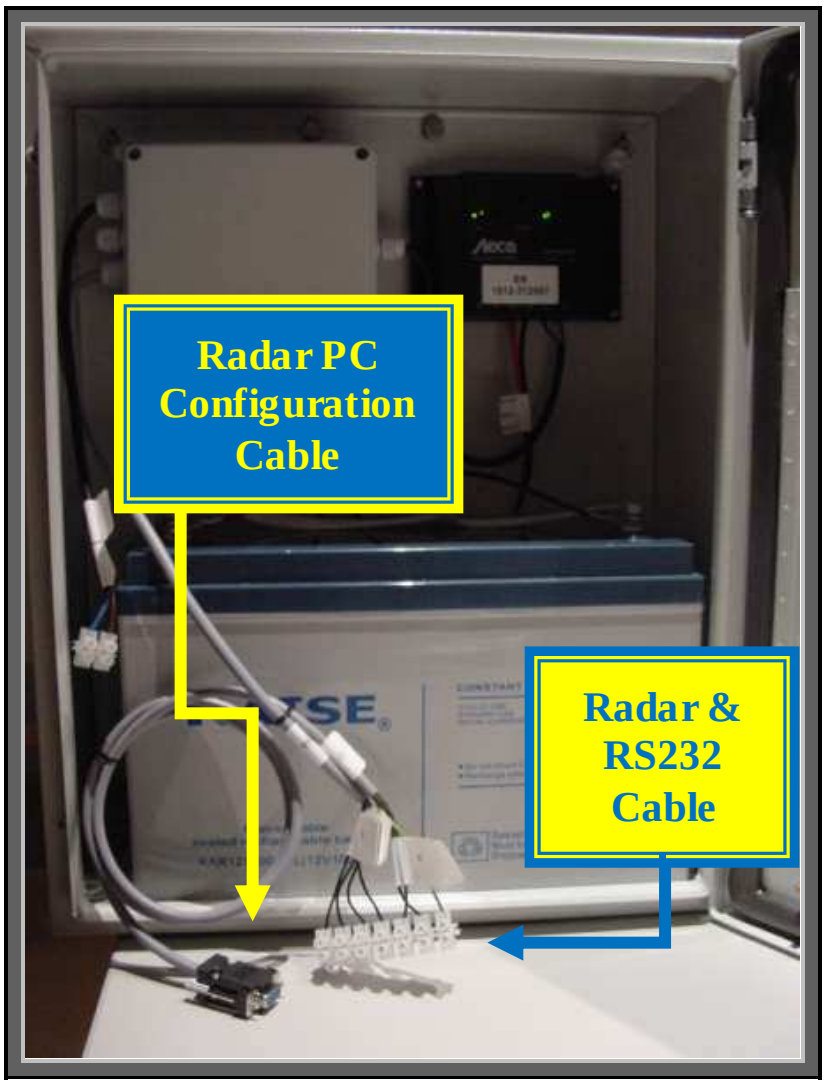
When you have all the cables inside the box, you need to start the connecting the cable. First, connect the solar panel cable to the charge regulator. Next, connect the brown wire of the solar panel into the positive terminal (+) of the charge regulator. Then, connect the blue wire of the solar panel into the negative terminal (-).

Step 7

Step 7

Now you can connect the road studs cable into the output controller cable for the R1 or R2. Connect the blue wire of one cable with the other and the same for the brown wire

Step 8



Step 8

Lastly, you need to connect the Radar cable to the RS232 communication cable that you can see in the above picture. The radar cable has 7 wires numbered from 1 to 6 and one green/yellow wire. Connect these wires to the cable that goes to controller and to the RS232 communication cable. When connecting the two cables, **make sure to match them number with number and color with color.**

At this point, the radar PC configuration cable is only necessary to configure some internal parameters of the radar and is not essential for operation.

Step 9

Step 9

Finally, be sure to double check the radar system for proper orientation. The R1/R2 units should begin to flash anytime the radar detects a pedestrian on the crosswalk,.

Congratulations! Your system is now fully functional and ready to operate.