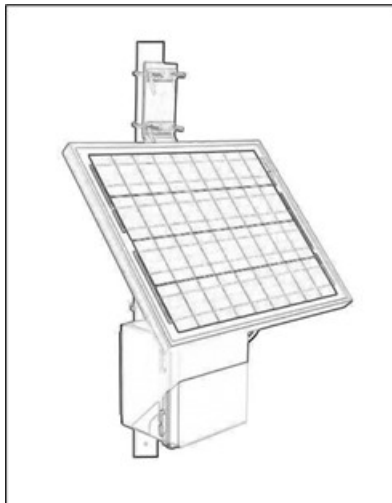


# Installation Guide: Solar Repeater Kit

## Components and Parts

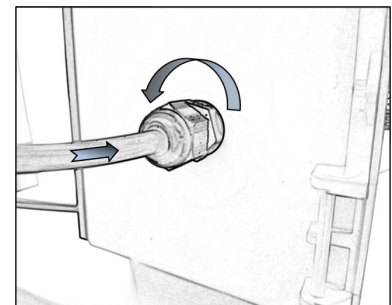
Item	Qty	Description
Solar Panel	1	NewPowa WaterProof SLIM 20W 12V Polycrystalline Solar Module W/ 3ft wire NPA20-12 SLIM
U-bolts	4	A pair of U-bolts are used to mount the panel to a 2 inch pole, the other pair to mount the Repeater unit to the pole just below the panel.
Universal Flat Mount Bracket	1	Use the Installation Manual and 2 U-bolts included in the box to mount the solar panel to a pole (or wall) as shown in the picture.
Repeater Unit	1	The Repeater unit contains the repeater electronics and the batteries, along with a water-resistant connector for the solar cable and a humidity reducing ventilation plug. Follow the instructions below to connect the solar panel to the board and plug the batteries in when installing.

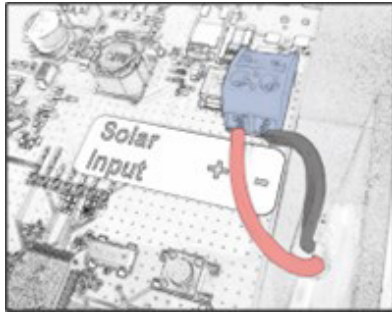
## Installation instructions



1. Open case and discard the shipping foam holding the battery in place.
2. Mount the solar panel to the mounting bracket using the 2 small aluminum plates and screws included in the bracket box.
3. Mount the solar panel/bracket combo to the pole using 2 of the included U-bolts.
4. It is ALWAYS best to mount the system as high off the ground as possible.
5. Using the remaining 2 U-bolts, attach the case to the pole underneath the solar panel to keep it in the shade.

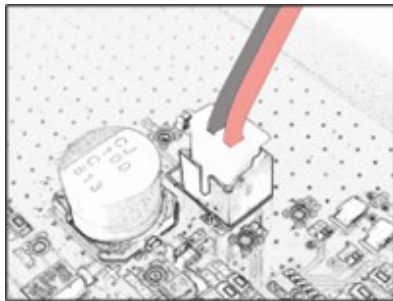
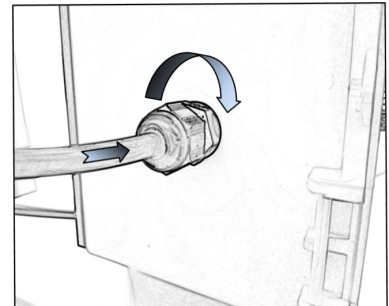
6. Unscrew (but don't remove) the lock nut on the cable pass-through piece and thread the solar panel cable through it and into the Repeater unit.





7. Using a small screwdriver, screw the solar panel wires to the blue connector on the board (Red to "+" and Black to "-"). Once the wires are secured, push the cable further into the case so that it tucks behind the board (into the empty space under the Repeater).
8. If you have sun or partial shade on the panel, you should see the two LEDs on the Repeater illuminate when you connect the solar panel.

9. Screw the lock nut tight to secure the cable in place and keep the case waterproof.



10. Plug in the battery connector. You will likely see a green LED near the plug illuminate. This indicates the battery is being charged by the sun.

11. At this step, you should definitely see the Power LED On. If there is no sun, the LED will be red. If there is sun, the power LED will be green.
12. Close the case. Use a zip tie or small water proof lock to secure the case. (Optional, not included)