



Roof / Wall / Ground Mount Assembly Instructions



Universal RV Rails

- A. **ALUMINUM RAILS:** UNIVERSAL T-SLOT ALUMINUM EXTRUSION OR PUNCHED ALUMINUM ANGLE – 2 PLACES

- B. **MOUNTING FEET:** 6061 – T6 ALUMINUM ANGLE BRACKETS – 4 PLACES

COMPONENTS FOR THIS MOUNT

(2) Aluminum Rails

(4) Mounting Feet

Hardware

Per each two panel mount:

13 – 5/8" X 1/4" stainless steel bolts

13 – 1/4" stainless steel flange nuts

4 for feet to rail

8 for two panels to rails

1 extra

NOTE: You will need to purchase whatever fasteners are appropriate for attaching the mount to your particular roof or other mounting surface.

INSTALLATION NOTES

In the northern hemisphere, this mount should be oriented so the panels face as close to due south as possible. In the southern hemisphere, facing north.

This mount is made to attach to a roof, side wall, or flat horizontal surface. If the mount is to be attached to a roof, lag bolts may be used if at least 4" of the 5/16" lag bolts on each mounting foot are screwed into a solid wood member. For side wall installations, the upper mounting feet must be attached with bolts that go completely through the wall or if 5/16" lags are used, they should be screwed into at least 3" of solid wood, e.g. into a 2" X 6" wall stud. If mounted to the ground, it must be similarly fastened to a concrete foundation, or wood deck.

When mounting on a roof top it is desirable to install the panels near the ridgeline. For optimum southern exposure this ridge should run east – west.

ASSEMBLY INSTRUCTIONS

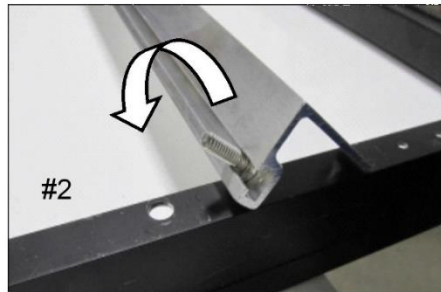
If you have someone to help you lift the assembled mount into place, go ahead and fasten the panels onto the rails before installation. Bolt the first panel onto the two T-Slot rails placing it on the end of the rails marked TOP. Use the mounting holes on your panels which will allow you to have the best access to the wiring junction boxes on the back. Attach this first panel with the stainless bolts provided, finger tighten only. Attach the next panel below the first. There should be approximately 1/4" between panels.

Square up the panels so the sides are straight, then tighten the bolts with a wrench.

Lift the whole unit into place and attach with lags or bolts.

If you are working alone or the installation is somewhat awkward, you may want to install the mount first and then add the modules at the end.

INSTRUCTIONS FOR ATTACHING SOLAR PANEL TO MOUNTING RAILS



For T-Slot Rails: Lay T-Slot rails across the short axis of the panel as shown in Photo #1.

Slide stainless bolts into T-slot of rail and position so they are opposite to the mounting holes on the frame of the panel as shown in Photo #2.



Then roll the rails over so the bolts slip into the holes on the panel frame. Place the flange nut on your finger with the flange UP and thread onto the bolt from underneath as shown in Photo #3. Finger tighten.

For Pre-Punched Angle Rails: Attach panel rails to solar module across the width of the panel as in Photo #4. Make sure the part of the rail with the punched slots "toes-out" toward the ends of the panel. Insert the bolts in the holes provided from underneath facing out (Photo #5) and tighten on the flange nut. It is important that the flange nut bears against the rail and not the panel frame, Photo #6.



