

Installation Manual

2016 Edition v1.0

Formodels:

UNI-GR/70CV (prev GR/03) UNI-GR/90CV (prev GR/04) UNI-GR/110CV (prev GR/04A) UNI-GR/115CV (prev GR/05)





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Introduction

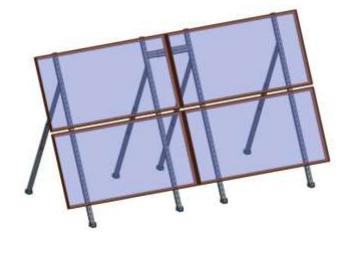
The Universal Ground\Roof Mount is a simple and universal mounting solution for small area solar photovoltaic (PV) needs. With its user-adjustable angle settings, the Ground\Roof Mount can support installations in a wide range of locations, as a standalone or multiple mounts intertied in rows. Quantities of panels supported vary by panel model widths.

Customer Support

Tamarack Solar makes every effort to ensure your mounting kit is easy to install. If you need assistance at any point with your installation or have suggestions on how we can improve your experience, call our customer support at

1-800-819-7236 or email us at info@tamaracksolar.com.





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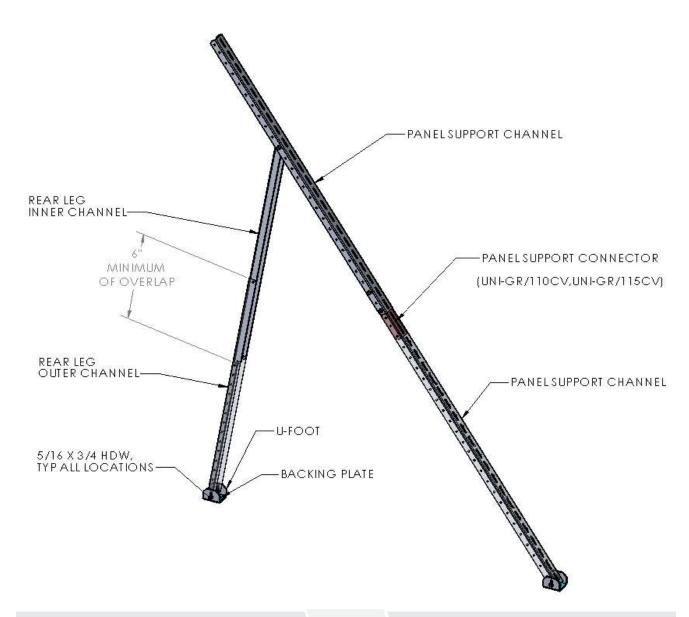


Tools Required

1/2" wrench\socket for 5/16 hex bolts and flange nuts, Torque to 132 inch Lbs. Dry, or 112 inch Lbs. lubricated.

Components List

The following parts are used across the 4 models of our channel Ground\Roof Mount including necessary hardware:



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Step 1. Determine foot spacing

- A. For the front to rear distance, loosely assemble the "A" frame section as shown on page 2, adjust the rear leg maintaining the minimum 6" overlap (or more) to support the panels at the desired angle to the sun and keeping the rear leg within 45° to 60° to the panel supports.
- B. For the side to side spacing it is equal to the center to center distance of the mounting holes on the PV module.

Step 2. Connect panel supports (UNI-GR/110CV,UNI-GR/115CV) (UNI-GR/70CV, UNI-GR/90CV skips to step 3)

C. Slide the 10" connector halfway into the end of the panel support and install the 5/16 hardware, repeat with the second panel support to achieve the overall panel support length.

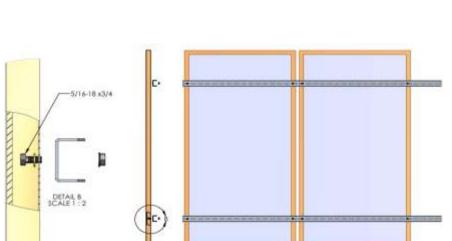
Step 3. Attaching PV modules to panel supports

- A. Lay the PV Modules face-down on a protected flat surface mounting hole side up.
- B. Lay the flat side of the panel supports across the panels keeping panels and supports parallel.
- C. Align mounting holes on the panels with the slots on the panel supports, allow Approximately 1/4" to 1" in between PV modules and leave available support length on the bottom

for ground clearance to allow for vegetation management.

D. Secure with 5/16 hardware

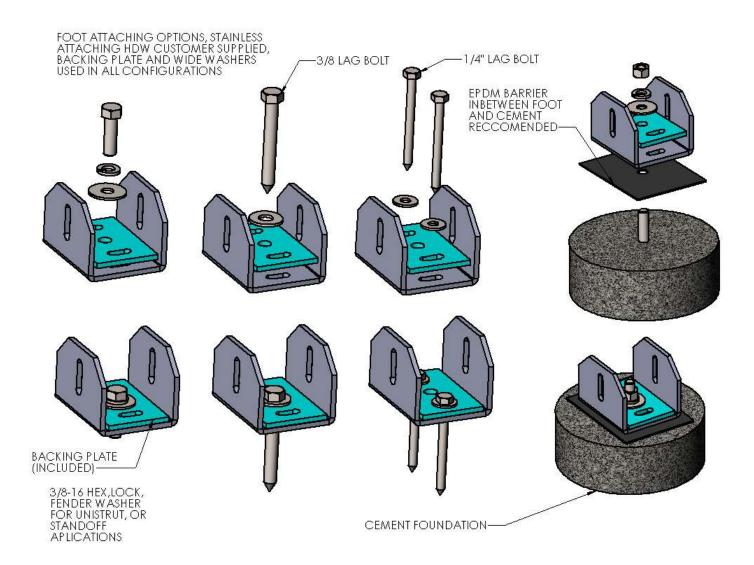
If your panels only have 1/4" clearance holes, order optional HDW kit PN# 29-5000-000, 1/4 x 3/4 (4set) Std Mod, per panel.



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Step 4. Foot attaching options

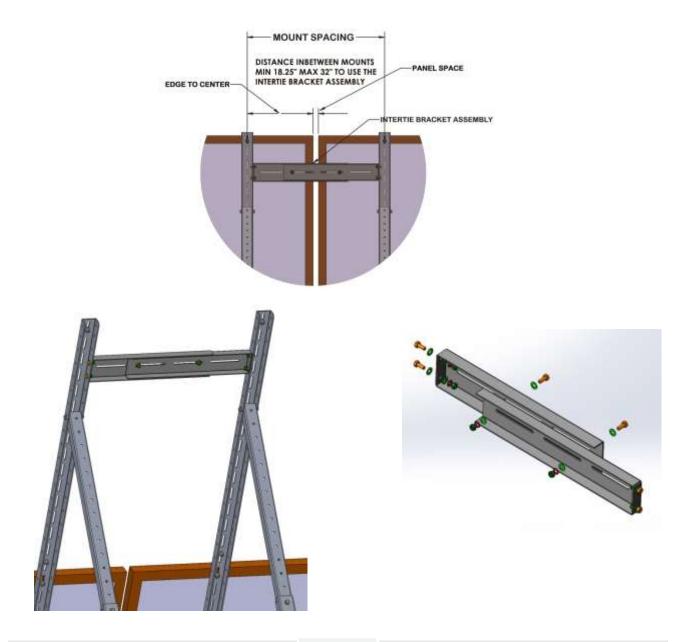


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Step 5. Multiple Mount Intertie Assembly Using (Optional Kit# 51-0520-002)

- A. Determine spacing between mounts, multiply times two, the distance from the edge of the panel to center of the mounting hole and add 1 inch.
- B. Install mounts and panels per previous steps.
- C. Install Intertie bracket assembly in between the mounts



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Installer Responsibility

The installer is solely responsible for:

- i. Complying with all applicable local or national building codes, including any that may supersede this manual;
- ii. Ensuring that Tamarack Solar and other products are appropriate for the particular installation and the installation environment;
- iii. Using only Tamarack Solar parts and installer-supplied parts as specified by Tamarack Solar. Substitution parts may void the warranty;
 - iv. Ensuring safe installation of all electrical aspects of the PV array; and
 - v. Ensuring correct and appropriate design parameters are used in determining the design loading used for the specific installation. Parameters, such as snow loading, wind speed, exposure and topographic factor should be confirmed with the local building official or a licensed professional engineer.

Warranty Information

Tamarack Solar warrants each Mounting Structure to be free from defects in materials and workmanship for ten (10) years from the date of first purchase ("Warranty Period"), when installed properly and used for the purpose for which it is designed, except for the finish, which shall be free from visible peeling, or cracking or chalking under normal atmospheric conditions for a period of three (3) years, from the earlier of 1) the date the installation of the Product is completed, or 2) 30 days after the purchase of the Product by the original Purchaser ("Finish Warranty"). The Finish Warranty does not apply to any foreign residue deposited on the finish. All installations in corrosive atmospheric conditions are excluded. The Finish Warranty is VOID if the practices specified by AAMA 609 & 610-02 – "Cleaning and Maintenance for Architecturally Finished Aluminum" (www.aamanet.org) are not followed by Purchaser for Tamarack Solar's aluminum based products.

The warranty covers the replacement cost of parts to repair the product to proper working condition. Transportation and incidental costs associated with warranty items are not reimbursable. The warranty does not cover normal wear, or damage resulting from misuse, abuse, improper installation, negligence, or accident. The warranty does not cover any defect that has not been reported in writing to Tamarack Solar within ten (10) days after discovery of such defect. Furthermore, it does not cover units that have been altered, modified or repaired without written authorization from the manufacturer or its authorized representative, or units used in a manner or for a purpose other than that specified by the manufacturer. Tamarack Solar's entire liability and Purchaser exclusive remedy, whether in contract, tort or otherwise, for any claim related to or arising out of breach of the warranty covering the Mounting Structures shall be correction of defects by repair, replacement, or credit, at Tamarack Solar's discretion. Refurbished Mounting Structures may be used to repair or replace the Mounting Structures.

Tamarack Solar shall have no liability for any injuries or damages to persons or property resulting from any cause, whatsoever, or any claims or demands brought against Tamarack Solar by Purchaser, any employee of Purchaser, client of Purchaser, end-user of the Product or other party, even if Tamarack Solar has been advised of the possibility of such claims or demands (collectively, "Third Party Claims"). This limitation applies to all materials provided by Tamarack Solar during and after the Warranty Period.

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