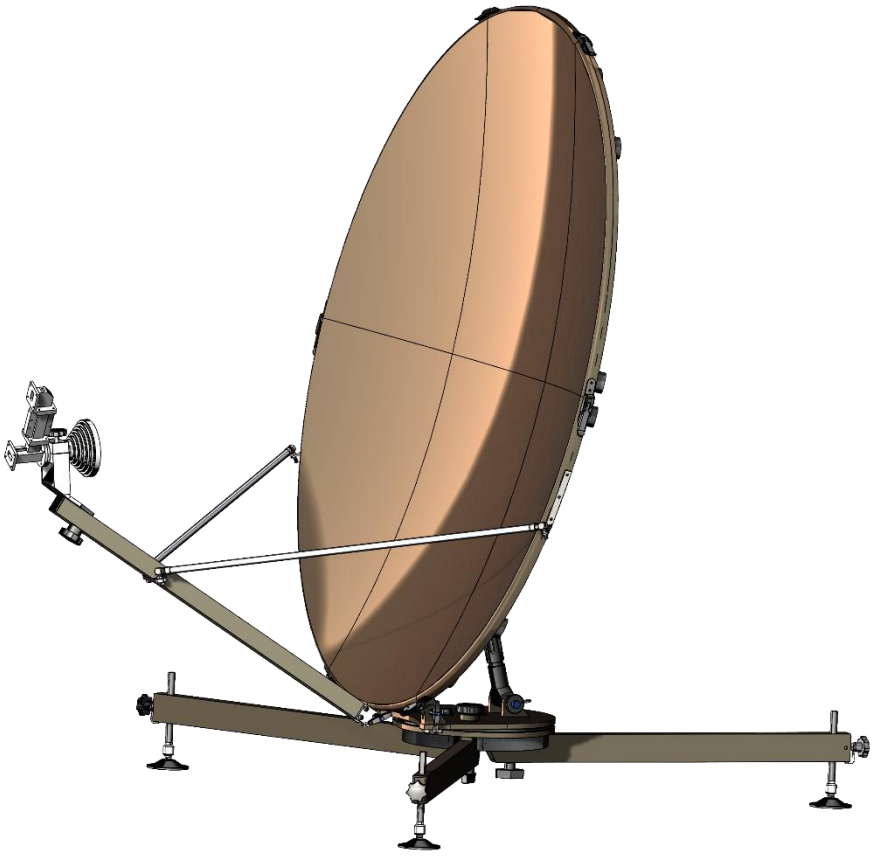
CHALLENGER COMMUNICATIONS

ASSEMBLY MANUAL

CHA-12B

1.2m Quick-Deploy Antenna System with Low-Profile Mount



LIMITED TWELVE (12) MONTH WARRANTY

This CHALLENGER COMMUNICATIONS, L.L.C. ("CHALLENGER") equipment is warranted to be free from defects in material and workmanship under normal use and service. CHALLENGER shall repair or replace defective equipment, at no charge, or at its option, refund the purchase price, if the equipment is returned to CHALLENGER not more than twelve (12) months after shipment. Removal or reinstallation of equipment and its transportation shall not be at cost of CHALLENGER except CHALLENGER shall return repaired or replaced equipment freight prepaid.

This Warranty shall not apply to equipment which has been repaired or altered in any way so as to affect its stability or durability, or which has been subject to misuse, negligence or accident. This Warranty does not cover equipment which has been impaired by severe weather conditions such as excessive wind, ice, storms, lightning, or other natural occurrences over which CHALLENGER has no control, and this Warranty shall not apply to equipment which has been operated or installed other than in accordance with the instructions furnished by CHALLENGER.

Claimants under this Warranty shall present their claims along with the defective equipment to CHALLENGER immediately upon failure. Noncompliance with any part of this claim procedure may invalidate this warranty in whole or in part.

THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER AGREEMENTS AND WARRANTIES, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE IS LIMITED IN DURATION TO THE DURATION OF THIS WARRANTY. CHALLENGER DOES NOT AUTHORIZE ANY PERSON TO ASSUME FOR IT THE OBLIGATIONS CONTAINED IN THIS WARRANTY AND CHALLENGER COMMUNICATIONS, L.L.C. NEITHER ASSUMES NOR AUTHORIZES ANY REPRESENTATIVE OR OTHER PERSON TO ASSUME FOR IT ANY OTHER LIABILITY IN CONNECTION WITH THE EQUIPMENT DELIVERED OR PROVIDED.

IN NO EVENT SHALL CHALLENGER BE LIABLE FOR ANY LOSS OF PROFITS, LOSS OF USE, INTERRUPTION OF BUSINESS, OR INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES OF ANY KIND.

In no event shall CHALLENGER be liable for damages in an amount greater than the purchase price of the equipment.

Some states do not allow limitations on how long an implied warranty lasts or allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you.

CHALLENGER has the right to void the warranty when the antenna is installed by someone other than a certified installer.

PRODUCT SERIAL NUMBER:_____

DATE PURCHASED:_____

Challenger Communications, L.L.C.
704 N Clark St
Albion, Michigan 49224

United States
+1 (517) 680-0125
info@challengercommunications.com
www.ChallengerCommunications.com

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INTRODUCTION

This is a deployable antenna system that comes carefully packed in two (2) portable case. It is a precision instrument that will provide many years of reliable service if assembled and handled with proper care.

Become familiar with these instructions before attempting to work with this antenna system. Completely unpack all the components and identify each one to know its function and purpose.

MECHANICAL SYSTEM DESCRIPTION

BACKPACK

The antenna is provided in two (2) carrying cases measuring approximately 33.5 x 20.5 x 14.5 inches each and weigh approximately 45 pounds (base bag), and 53 pounds (reflector and feed bag). The each backpack case has the added feature of roller wheels for easy handling where applicable.

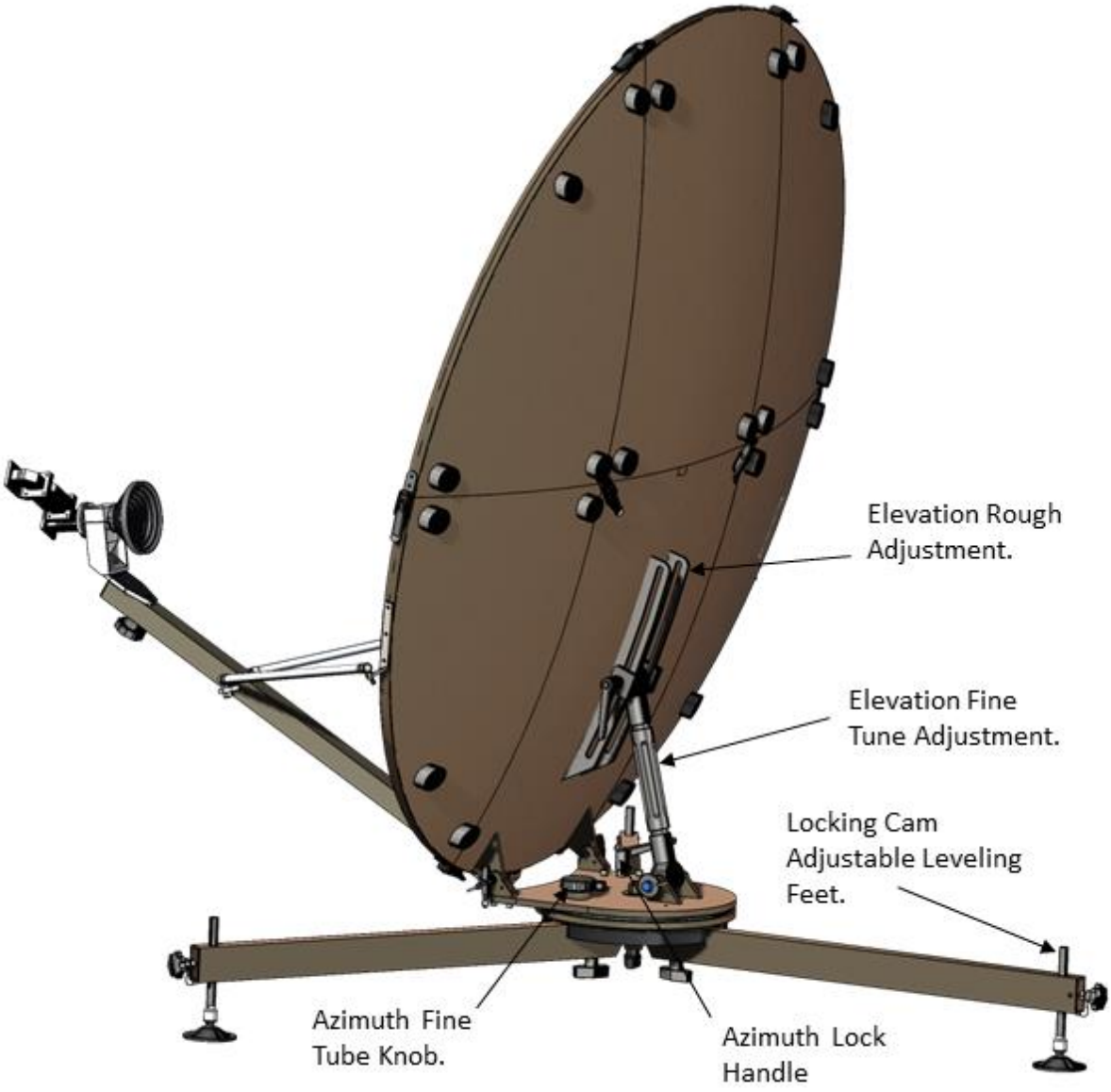
AZ-EL ANTENNA BASE

The Antenna Base is comprised of three (3) detachable legs that have adjustable feet for rough leveling of the assembly, and an Azimuth bearing mount assembly that the reflector attaches to using a simple "insert and turn" design. The elevation adjustment is accomplished using a turnbuckle that can be rough adjusted in slotted ribs on the back of the reflector, then fine adjusted by turning the body of the threaded turnbuckle. Azimuth adjustment is accomplished by using a turn knob that moves the antenna in a controlled means in the azimuth plane until the RF signal is peaked. A locking handle mechanism is engaged to lock the desired location.

1.2M REFLECTOR

The Reflector is comprised of six (6) panels that interlock using dowels, and latches to secure the panels together into an accurate assembly. Be sure to follow the assembly procedure to properly interlock the panels. The Feed system is precisely held in place using side struts with ball snaps to the main feed tube. The Feed assembly detaches easily using one ¼ turn knob.

SYSTEM OVERVIEW

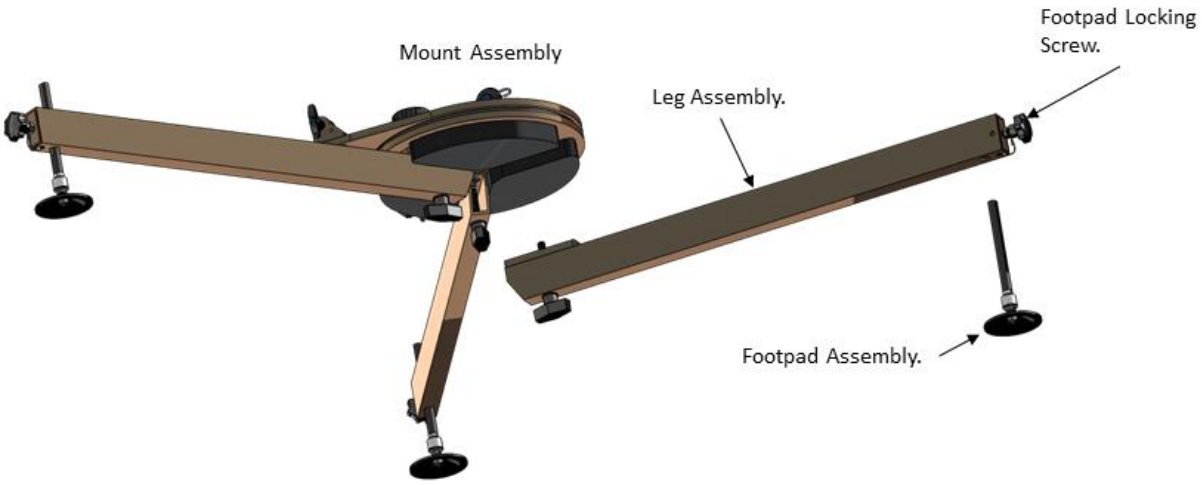


MOUNT ASSEMBLY

1. Slide the three (3) Footpad Assemblies into each of the three (3) Leg Assemblies as shown. The flatted side of the pin faces the locking screw. Simply turn the screw to lock the pin at the desired height.

2. Insert the Leg Assemblies onto the bottom side of the Mount Assembly as shown by aligning the dowels and tightening the threaded fasteners.

3. Roughly level the Mount Assembly using the level bubble as a reference by readjusting the Feet Assemblies per step 1.

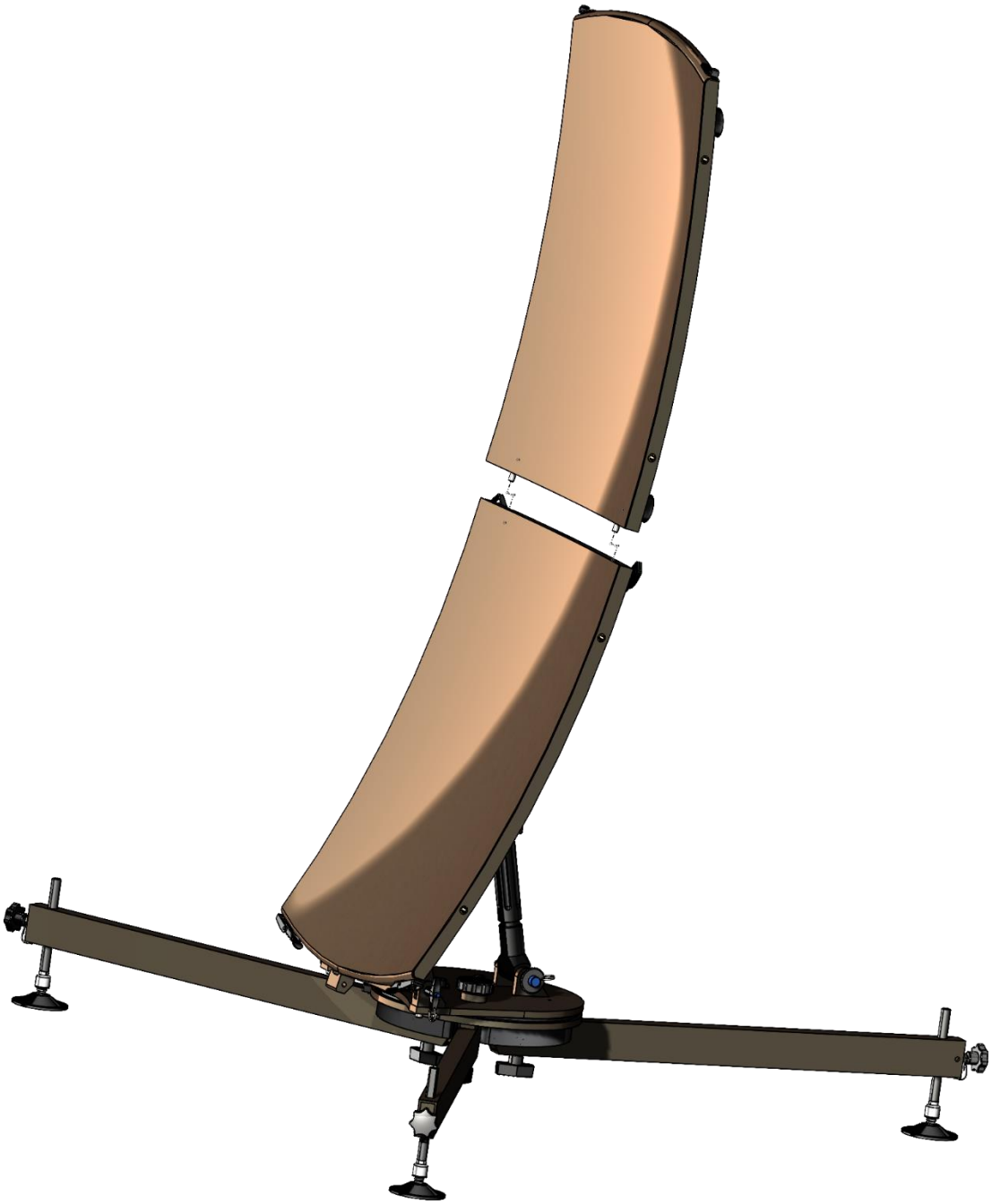


REFLECTOR ASSEMBLY

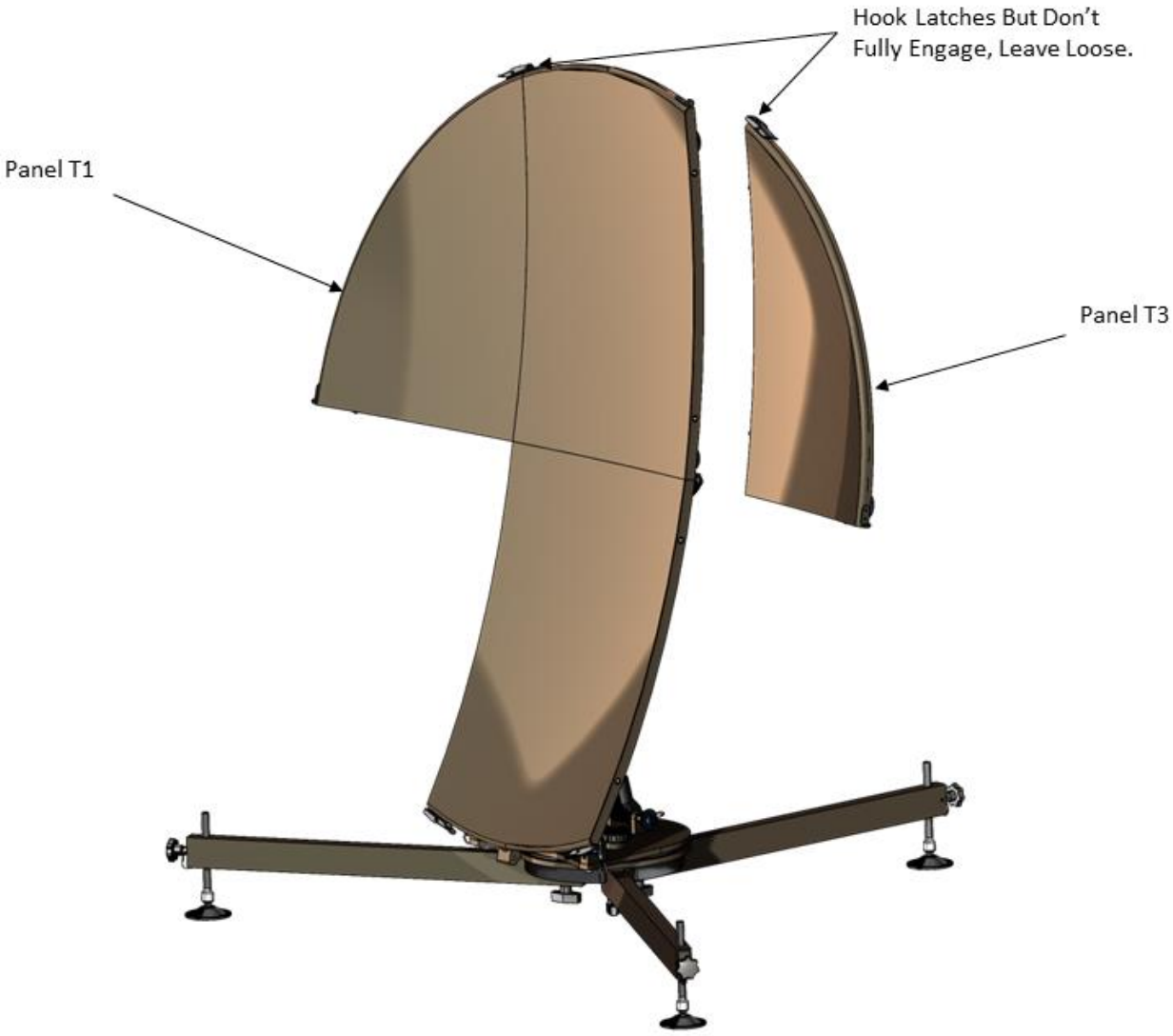
1. Starting with panel B2, guide the mounting tabs on the bottom of the panel into the receiving brackets of the Mount Assembly, taking care to align the holes. Engage the pins. With the indicator line of the knob aligned pointing to the Elevation Turnbuckle, pivot the panel assembly aligning the turnbuckle to the mounting holes. Engage pin. The panel assembly is now fully locked to the mount assembly.

2. Adjust the elevation to approximately 30 degrees for the installation of the remaining five (5) panels. (Elevation scale is on back of panel B2 near Turnbuckle.)

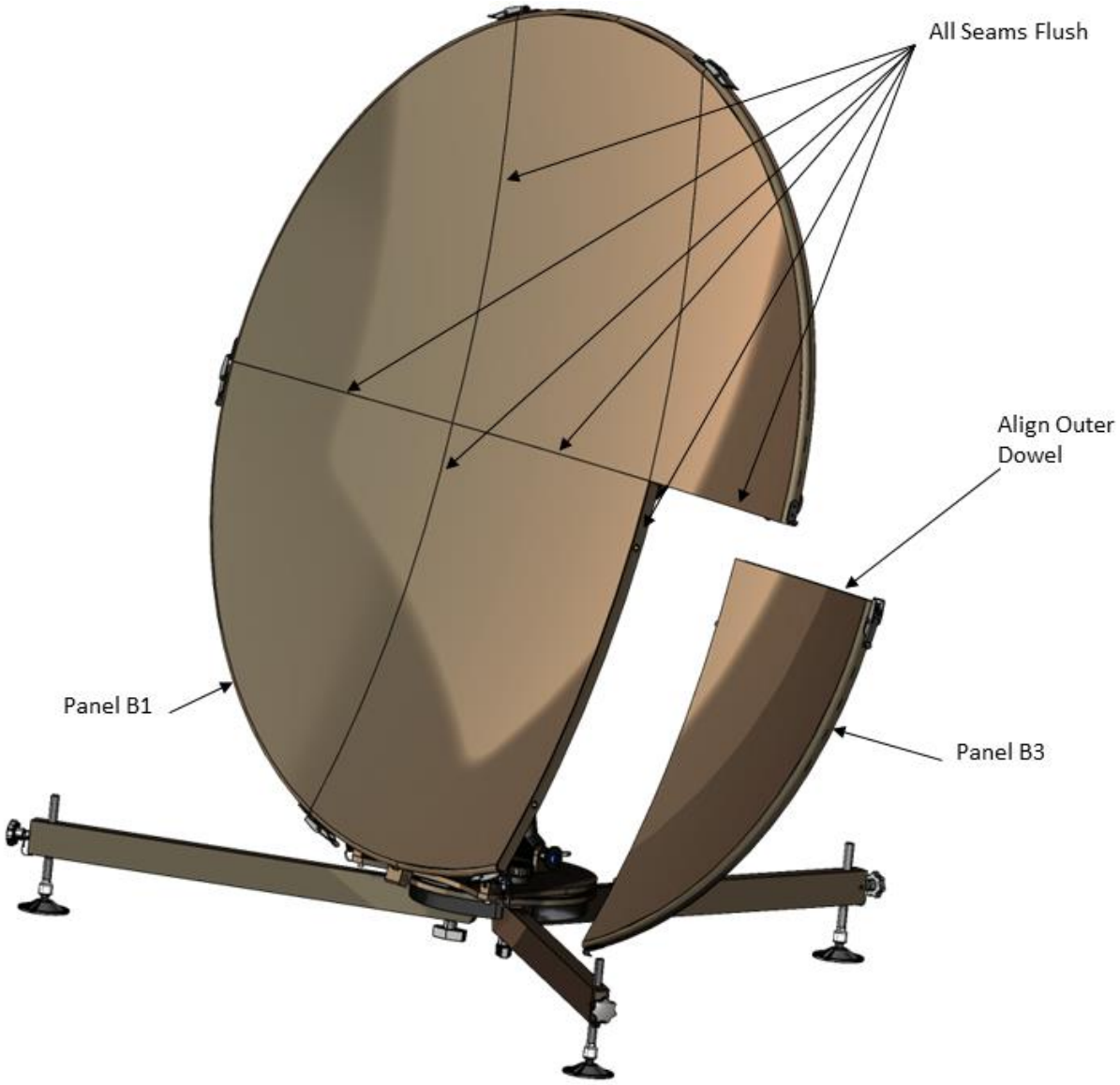
3. Install panel T2 by simply guiding it into position as shown onto the alignment dowels. The panel will stay in place. The seam between panels should appear flush.



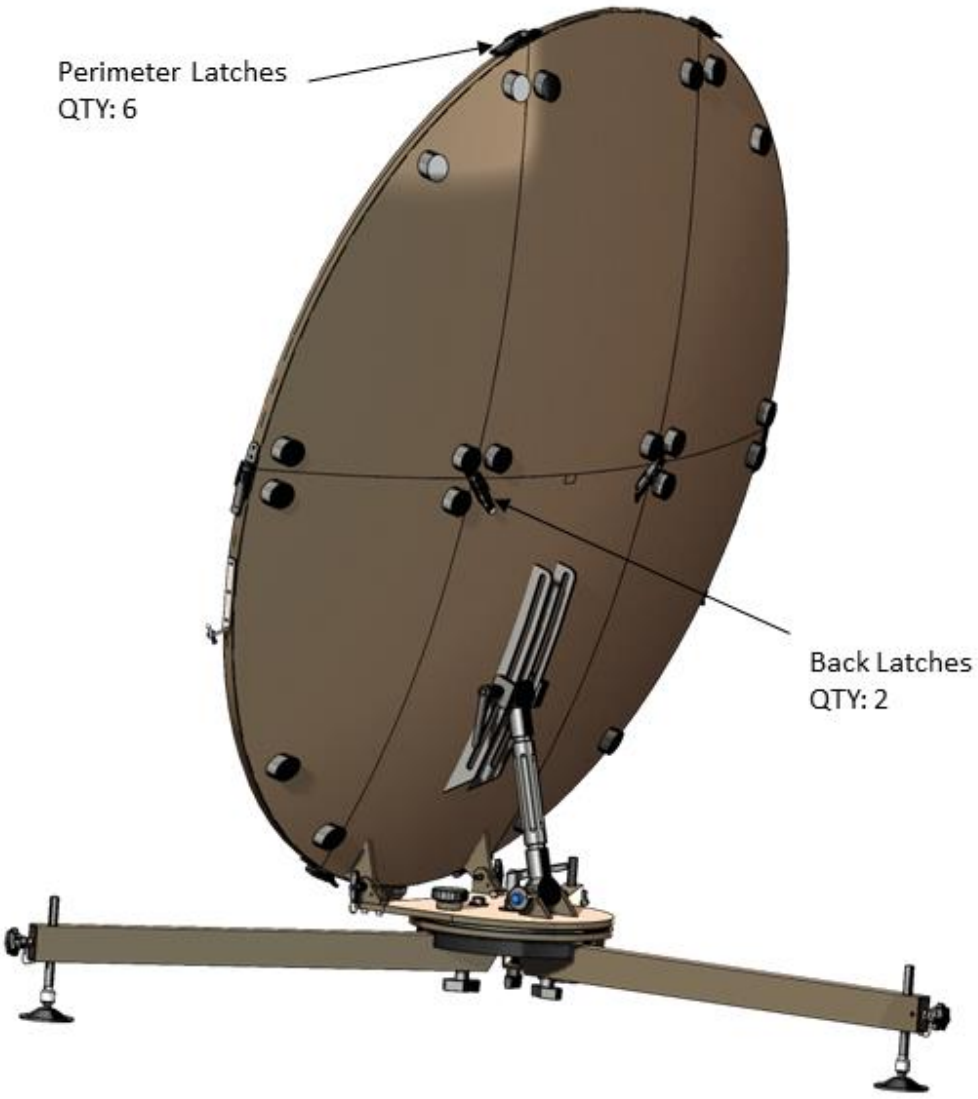
4. Install Panels T1 and T3 using same procedure as in step 3. Engage latches but do not fully close, panel will stay in place.



5. Install panel B1 and B3 using the same procedure as in step 3. Panels B1 and B3 will need to be held slightly back and aligned simultaneously with their respective upper panel and its alignment dowel.

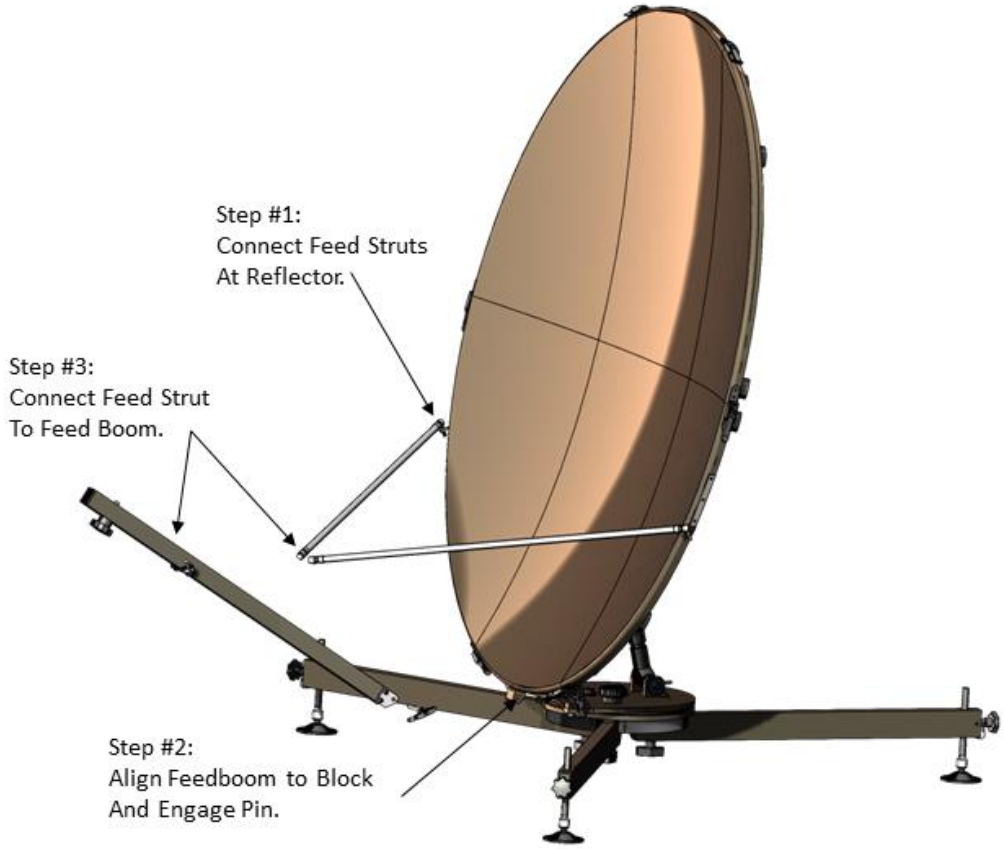


6. After confirming that all panels appear flush, fasten the two (2) latches on the back of the dish, then fasten the six (6) remaining perimeter latches.



FEEDBOOM ASSEMBLY

1. Connect Feed Struts to the sides of the reflector, lay them so they are facing outward from the reflector.

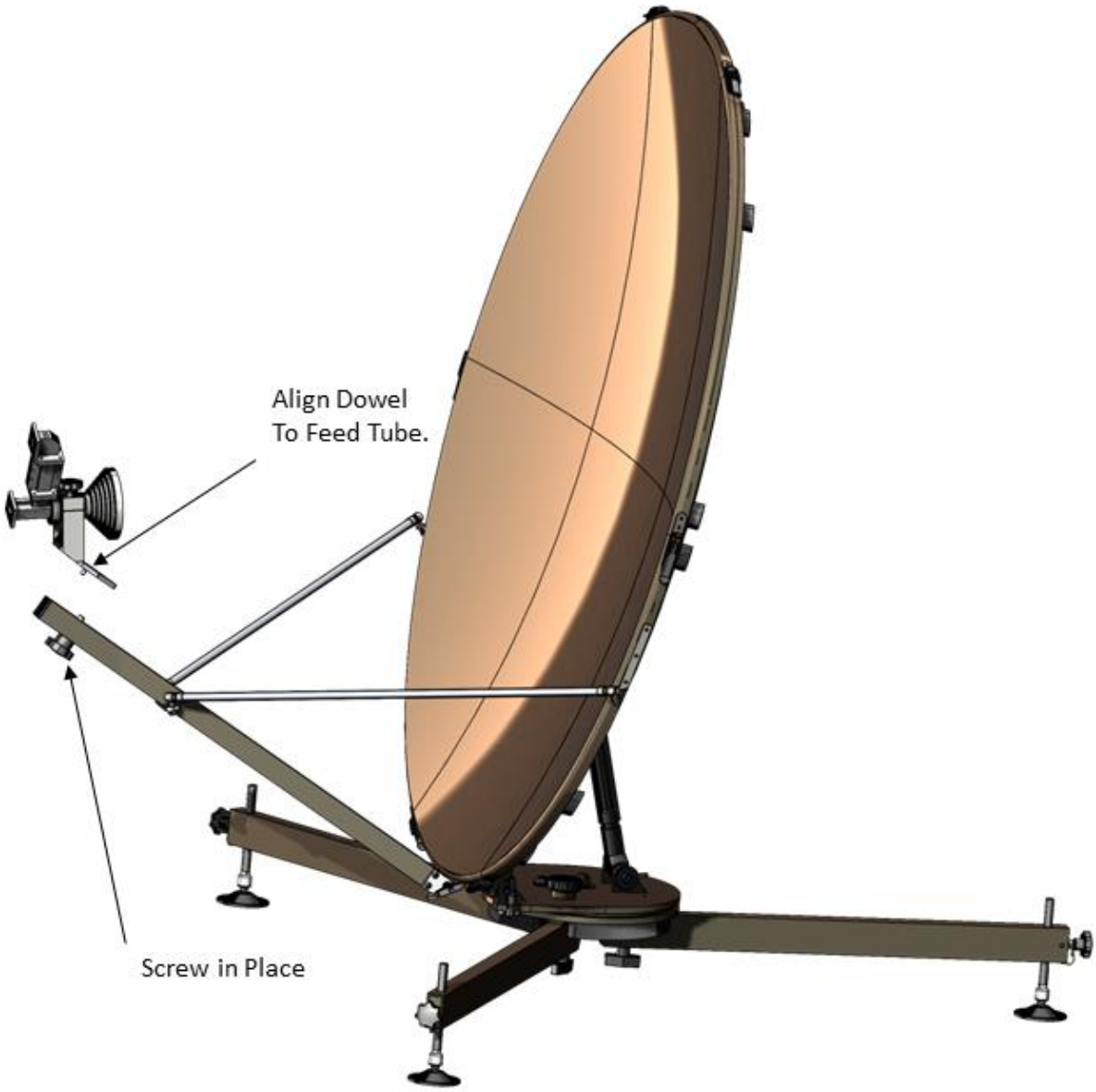


2. Align Feedboom to mounting block located on bottom of panel B2, engage pin.

3. Connect Feed Struts to Feedboom.

FEED ASSEMBLY

1. Rotate Indicator knob so it is pointing to the feedboom. (Knob parallel to feedboom.) Insert completely and rotate knob 90 degrees in either direction.



ASSEMBLY IS NOW COMPLETE

Antenna System can acquire signal once RF connections are complete.