INSTRUCTION MANUAL MS-8H120

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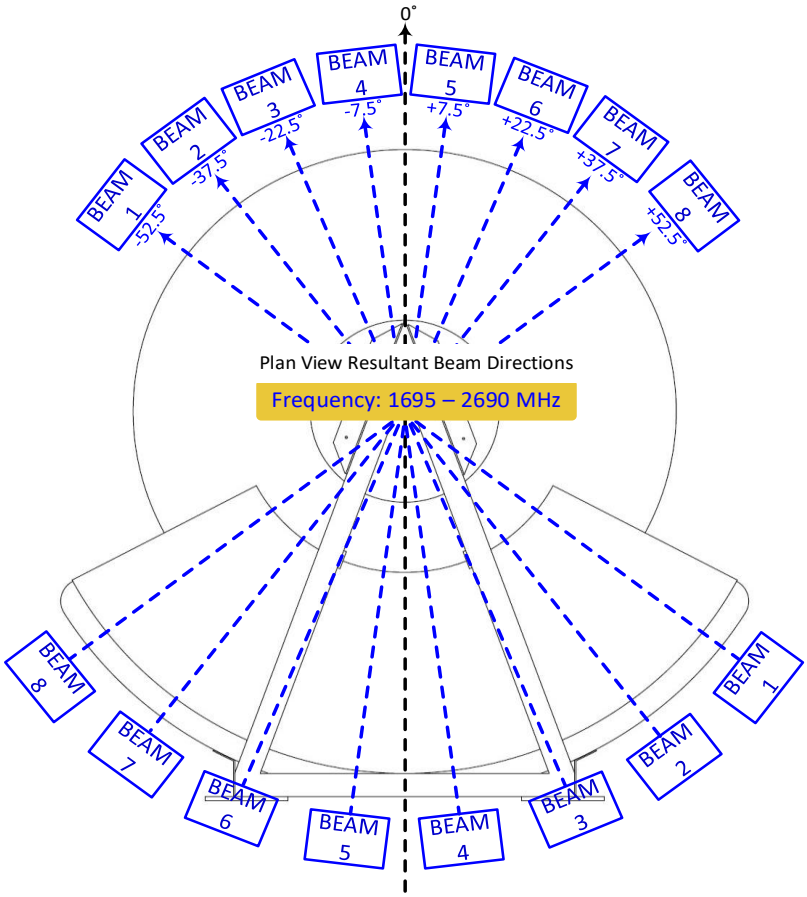
Revision History:

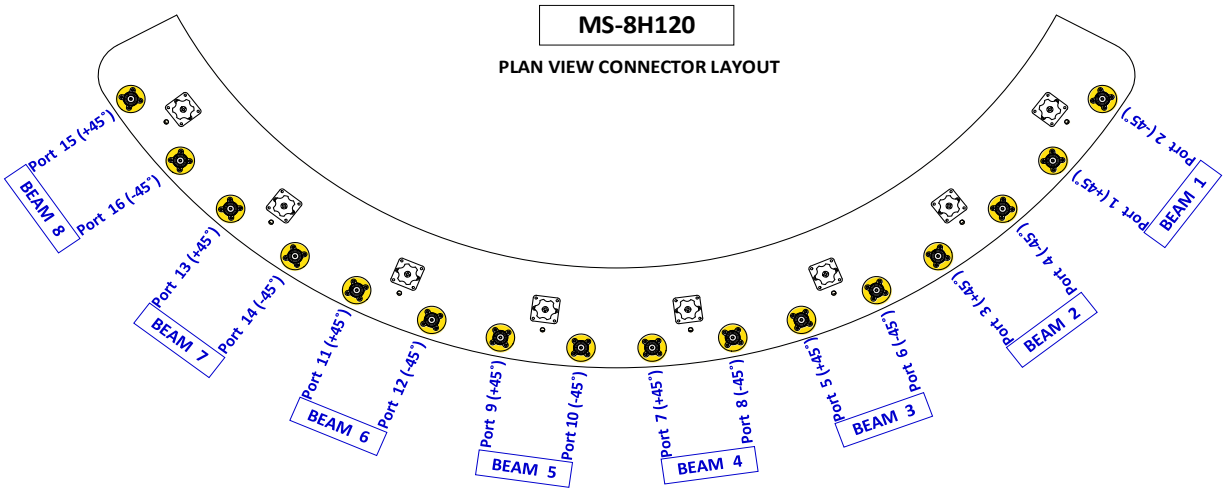
Date	Description	Rev by	Rev nos
09-May-24	Add Manual Tilt Adjustment & Optional RET Installation/Replacement Process	Ray	1

1.00 BEAMS & CONNECTORS:

1.10 Plan View Resultant Beam Direction



1.20 Plan View Connector Layout

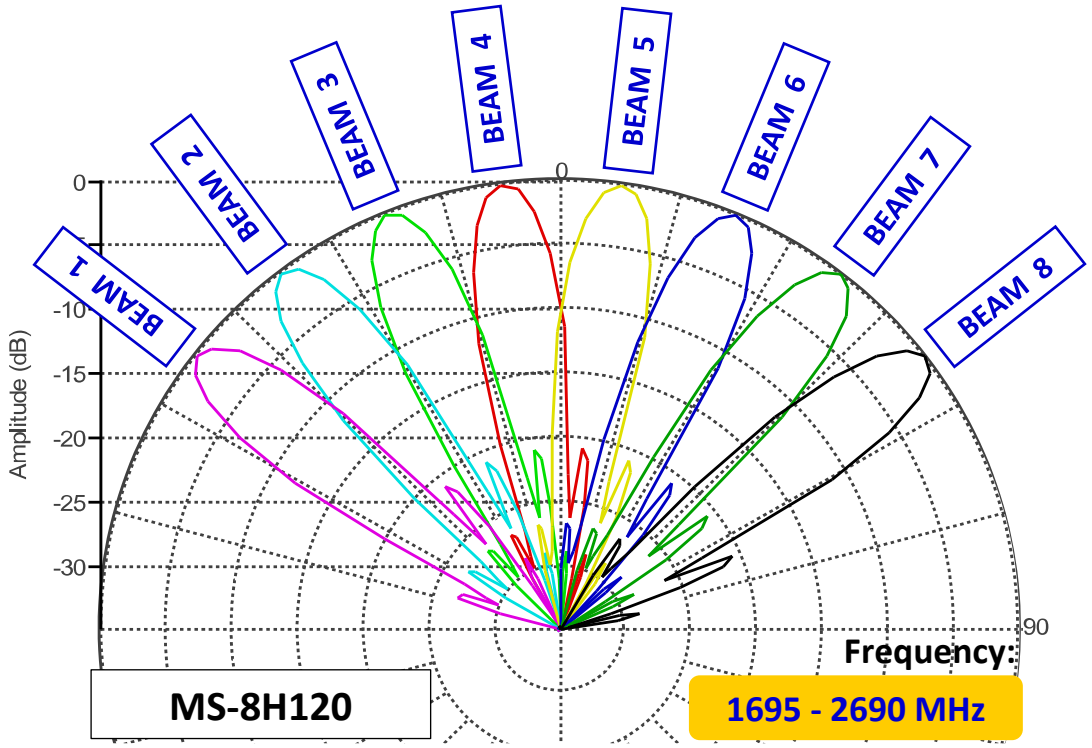


1.30 Connector Ports Table

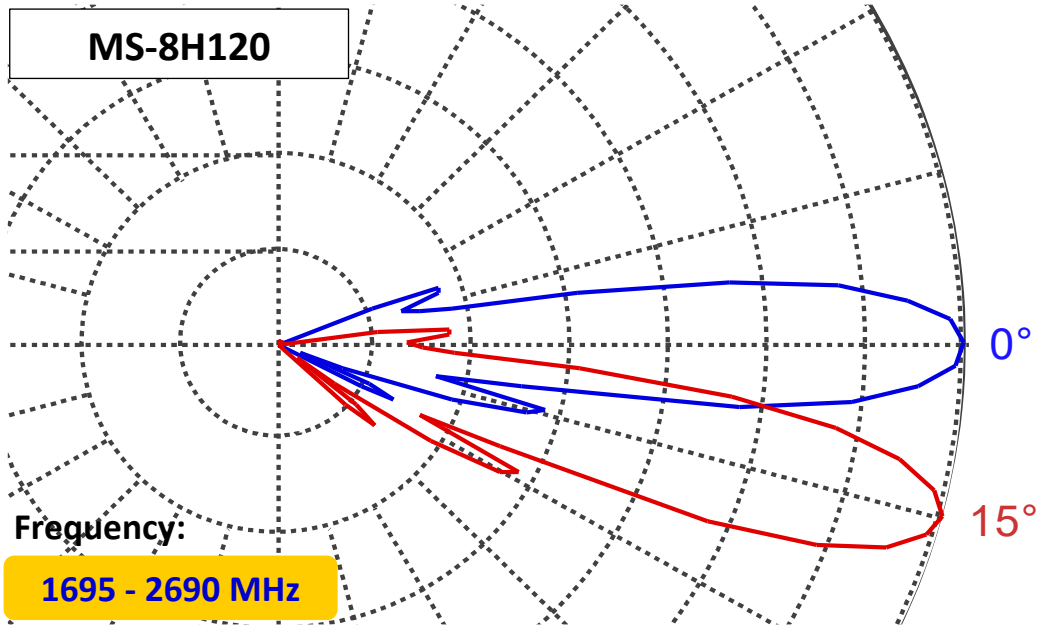
BEAM 8		BEAM 7		BEAM 6		BEAM 5		BEAM 4		BEAM 3		BEAM 2		BEAM 1	
PORT 15 (+45°)	PORT 16 (-45°)	PORT 13 (+45°)	PORT 14 (-45°)	PORT 11 (+45°)	PORT 12 (-45°)	PORT 9 (+45°)	PORT 10 (-45°)	PORT 7 (+45°)	PORT 8 (-45°)	PORT 5 (+45°)	PORT 6 (-45°)	PORT 3 (+45°)	PORT 4 (-45°)	PORT 1 (+45°)	PORT 2 (-45°)

2.00 PATTERN DIAGRAM

2.10 Horizontal Beam Pattern

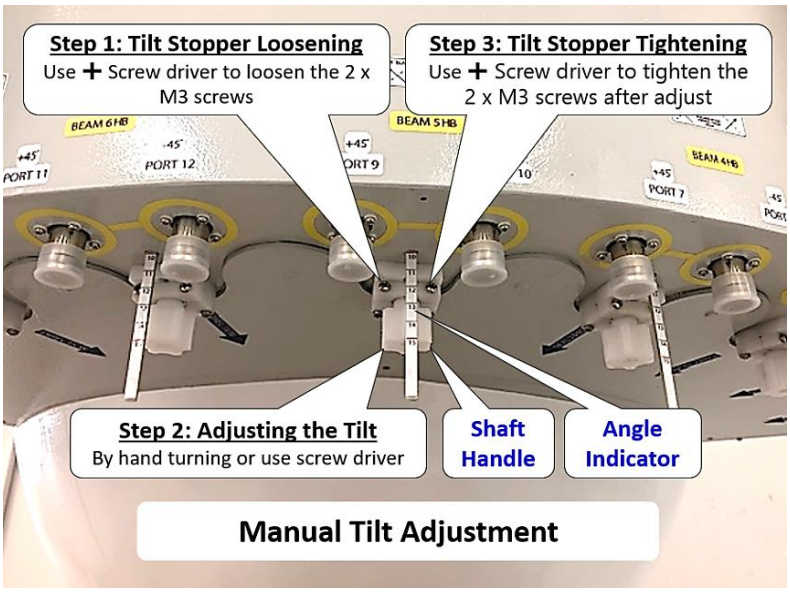


2.20 Vertical Beam Pattern



3.00 MANUAL TILT ADJUSTMENT

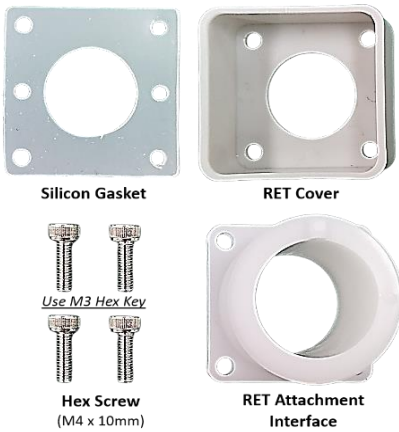
Tilt Adjustment Steps
Step 1: Tilt Stopper Loosening.
Step 2: Adjusting the Tilt.
Step 3: Tilt Stopper Tightening.



4.00 "S" RET ACTUATOR INSTALLATIONS / REPLACEMNT PROCESS (Optional)

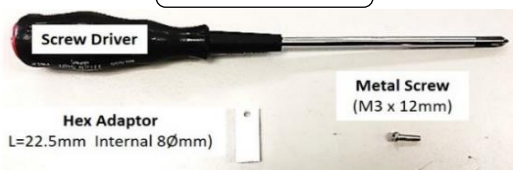
4.10 "S" RET Actuator Materials & Tools

RET Attachment Interface Kits

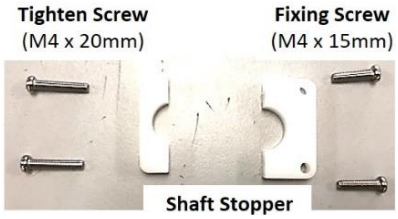


RET Attachment Interface (Sub-Assy)

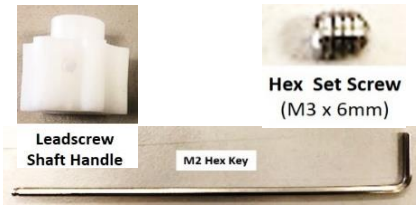
Hex Adaptor



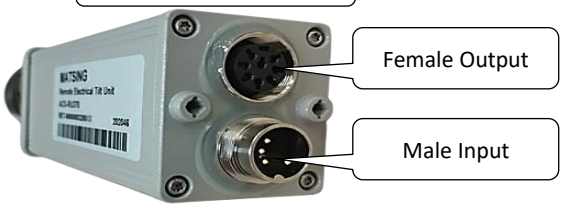
Shaft Stopper



Shaft Handle



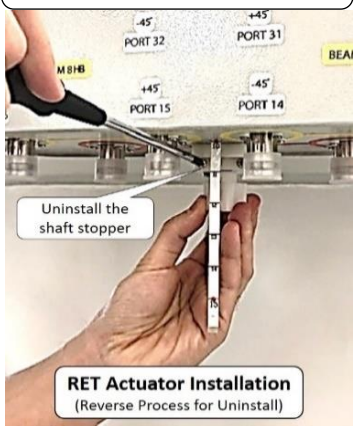
"S" RET Actuator



RET AISG Daisy Chain Cable

4.20 Installation / Replacement Process (Reverse Process for Uninstallation)

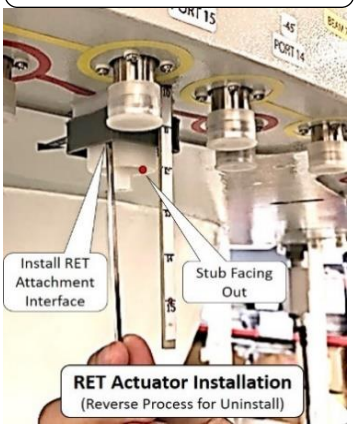
Step 1: Uninstall the shaft stopper



Step 2: Uninstall the shaft Handle

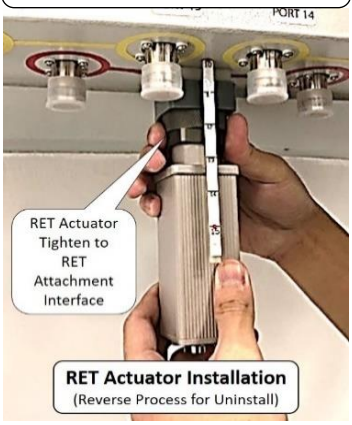
Step 3: Install the Hex adaptor and screw it on

Step 4: Install the RET attachment interface



Step 5: RET Actuator stub gap facing out

Step 6: RET Tighten to attachment interface



Step 7: Screw and tighten AISG Daisy Chain Cable

ADVICE:

***** Replace the AISG Daisy Chain Cable if is faulty.***

***** Same caution apply***

Step 7 CAUTION

1. Do not apply any rotation force to the cable
2. Carefully align same direction to the keyway before insertion.
3. Insert direct (not angular) until well fully seated before turning.
4. Once both thread is fit can start slowly turning.
5. Tighten the AISG connector by hand only.
6. If use torque wrench do not exceed 1.1 Nm (0.8 ft if) torque.

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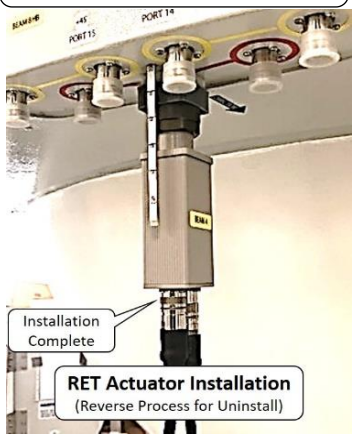
Step 8: RET Actuator installation complete.



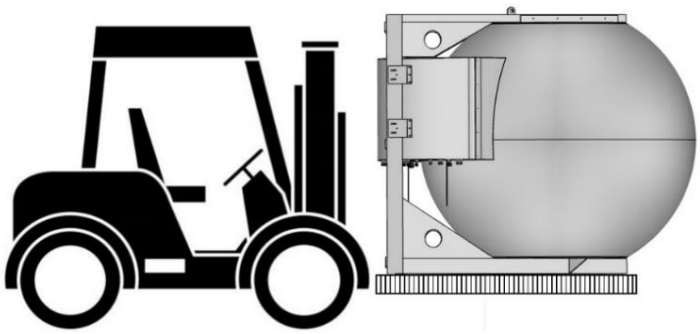
Repeat the same process for other actuator installation.

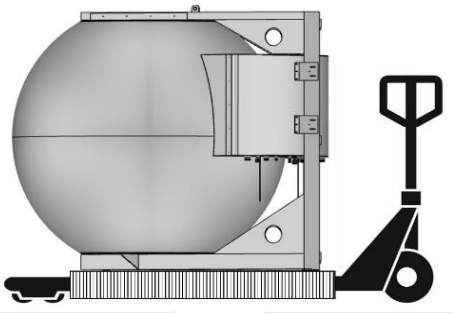
5.00 TRANSPORTATION / INSTALLATION

5.10 Transportation (From Point to Point)

Strictly comply to the Local authority and regulatory on Workplace Safety and Health Control and Measure when moving and transportation of large or heavy equipment, appropriate material handling machine should be use.

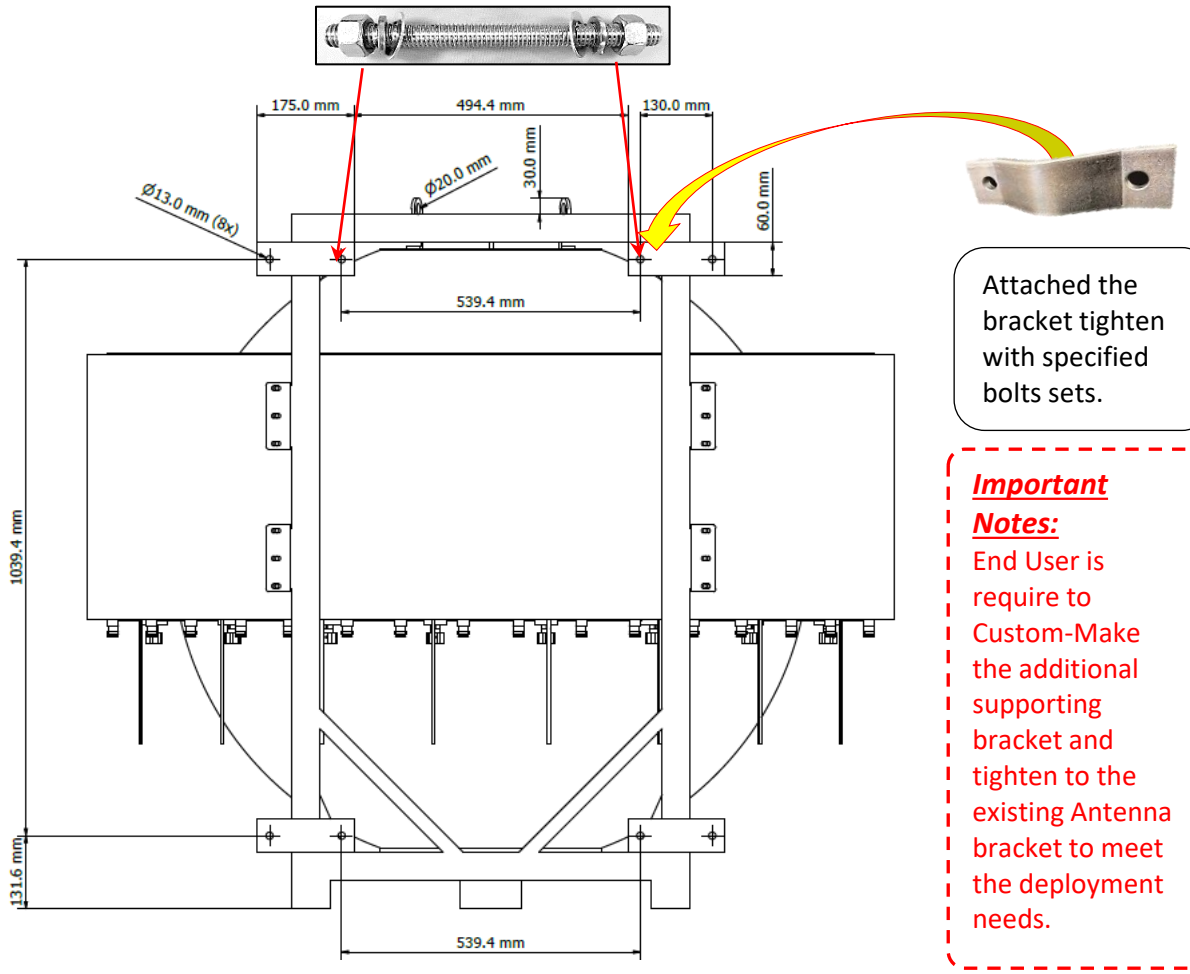
(Risk Assessment apply for Forklift or Pallet Truck Lifting)





5.20 Bracket Mounting

Item	Lens Size	Holes Size	Bracket Qty	Bolt & Nuts Sets
1	120cm	Ø13mm x 8	4	M12 x 20cm = 8 Sets



Attached the bracket tighten with specified bolts sets.

Important Notes:
End User is require to Custom-Make the additional supporting bracket and tighten to the existing Antenna bracket to meet the deployment needs.

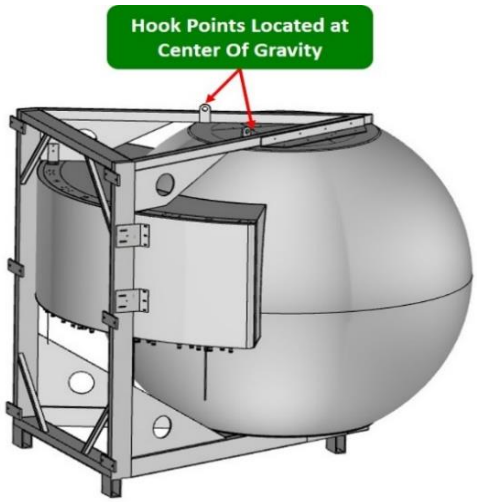
5.30 Installation using a crane

Strictly comply to the local authority and regulatory on Workplace Safety and Health Control and Measure when performing lifting of large or heavy equipment, appropriate material handling machine should be used and only certified personnel should perform the task.

(Risk Assessment requirement applies for both Up-Lifting and Down-Lifting.)

5.31 Lifting the Antenna

The antenna has 2 hook points installed on the top frame (located slightly behind the center of the sphere). These hooks are designed at the center of gravity point of the antenna. A cable, rope can be securely fastened to the hooks and the antenna can be lifted using a crane as pictured below.

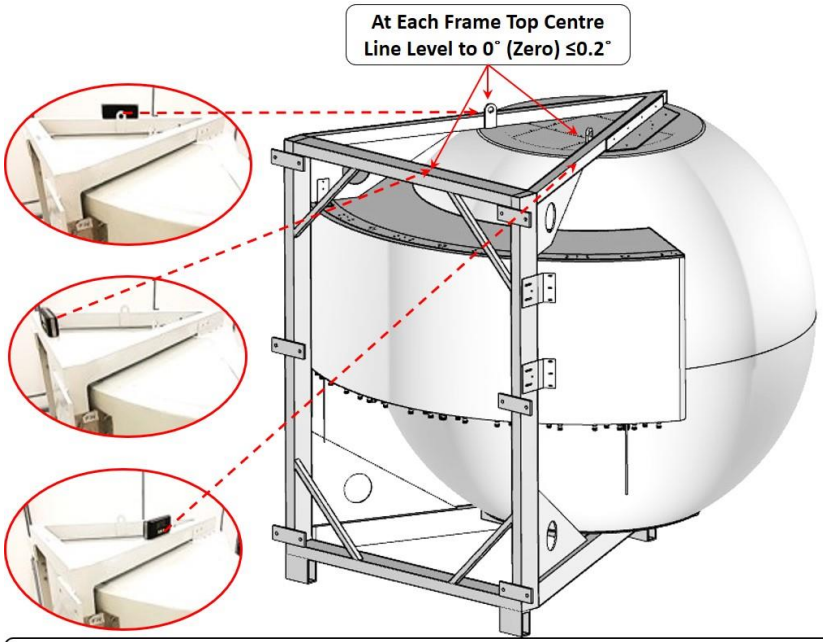


5.40 Antenna Installation

With reference to "**Bracket Mounting" Procedure**, End user is required to Custom-Make the additional supporting bracket and tighten it to the existing Antenna bracket to meet the deployment needs.

5.41 Antenna Leveling

After the Antenna is mounted to the bracket, it is required to be adjusted to 0˚ (Zero Degree) with ≤0.2˚ on 3 sides of the frame top level.(Rear, Right & Left=As shown in picture)



ANTENNA LEVELING ADJUSTMENT (AFTER INSTALLATION)

5.42 Digital Level Gauge Calibration

5.43 Adjustment Requirement

ANTENNA LEVELING ACCEPTED

REQUIRE ADJUSTMENT