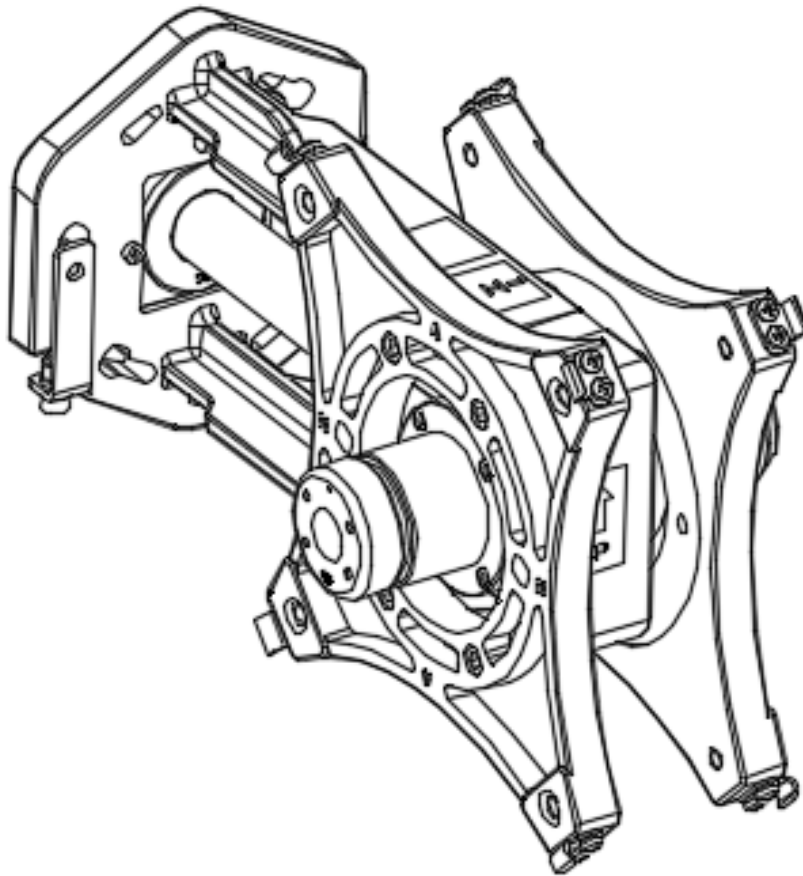





Installation Instructions

For OMC-XX-HP-S2 Direct Mount Ortho-Mode Combiner



Remarks: Before installation, please read instructions carefully.

-  This instruction booklet covers the installation of Direct Mount Ortho-mode combiner onto a model ADXX-XX-S2 Antenna. Ask your sales representative about using this combiner with other antenna models.
-  Installation, maintenance and removal of the combiner should be carried out by qualified experienced personnel, preferably on the ground before tower installation.
-  To guarantee performance, the combiner should be inspected at least once a year by qualified personnel.

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1. Requirement of Installation

1.1 Overview

This Ortho-mode combiner (OMC) can be only mounted to a model ADXX-XX-S2 antenna. The antenna has 6 tapped holes for attachment of the OMC, and the transition provided with the antenna must be removed prior to installing the OMC. It is highly recommended that all installation be done on the ground for safety reasons and to prevent potential damage or lost parts. All O-rings must be properly seated to prevent moisture from entering the OMC or antenna.

1.2 Tools Required for Installation

5mm L-Spanner (Used for Screw M6)

1.3 Fastener Torque

Please use the following torque values during installation

Recommended Torque

NO.	Fastener Size	Torque (N·m)
1	M3	0.6
2	M4	1.3
3	M5	3
4	M6	5
5	M10	28

Figure 1.1 Torque Table

2. Open the Package and Identify Parts

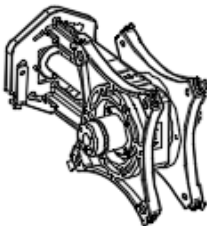
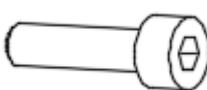




<p>1.OMC (1 set)</p> 	<p>2. M6*35 Allen screw (6 pcs)</p> 	<p>4.Allen key (2pcs) 6W-13G,S=5 (1pcs), S=3 (1pcs) Or 15G-38G,S=5(1pcs), S=2.5 (1pcs)</p> 
<p>5. Silicone Lubricant (1 tube)</p>  <p>7. Installation Manual (1 copy)</p>	<p>3.Flat washer ϕ 6 (2 pcs)</p>  <p>6.Finger-cot (1set)</p> 	

Fig 2.1 Parts List

3. Prepare the Antenna for Mounting OMC

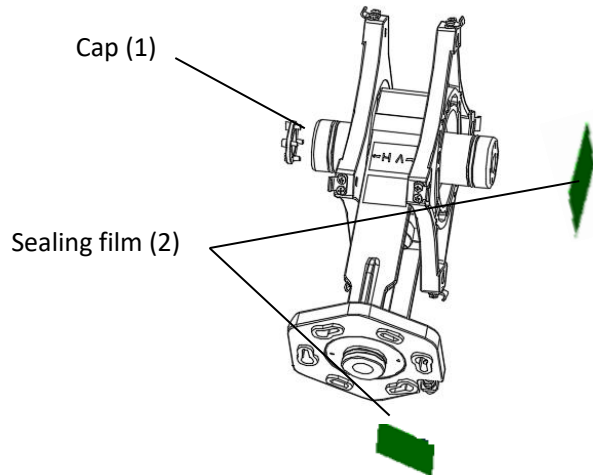


Figure 3.1 – Remove Sealing Film and H port Cap

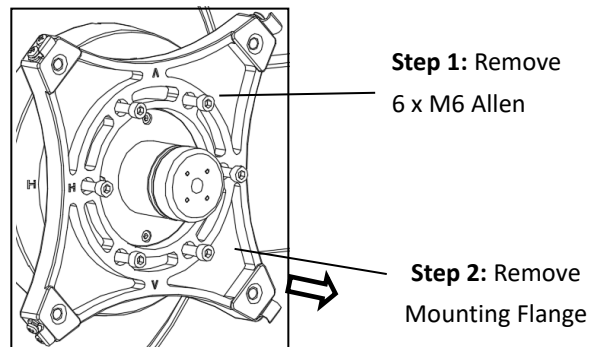


Figure 3.2 – Remove Flange

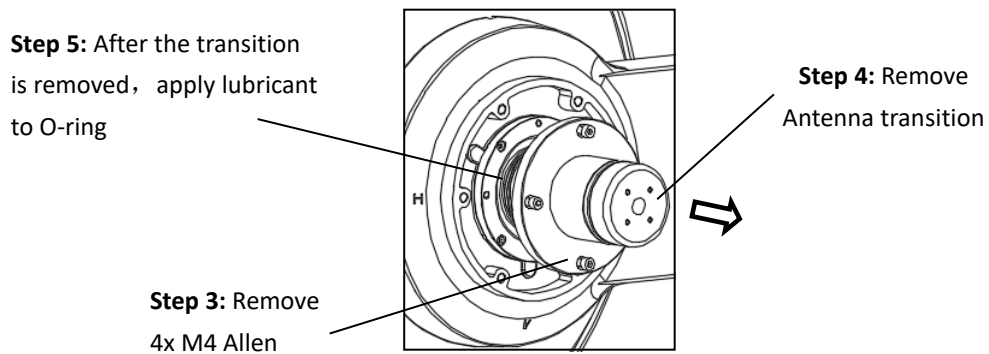


Figure 3.3 – For 15-38 GHz Antenna ONLY

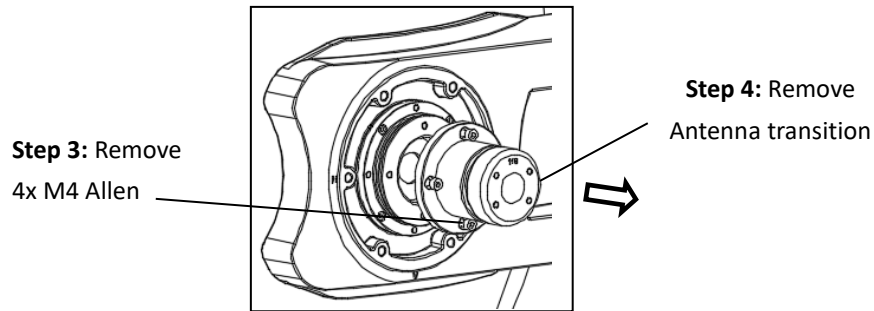


Figure 3.4 - For 6-13 GHz Antenna ONLY

- 3.1 Remove the Sealing film on V port and antenna port, and metal cap on the H port (if H polarization radio is being installed). See **Figure 3.1**
- 3.2 Remove the Mounting Flange first by removing 6 M6 bolts using the 5 mm L-spanner, then the single polarization antenna already on the antenna by removing the 4 M4 bolts (Adapter) using a 3 mm L-spanner. These parts will not be needed after the OMC is installed. See **Figs 3.2, 3.3, and 3.4**

4. Mount Ortho-mode Combiner (OMC) to Antenna

4.1 Install the OMC to the back of the antenna. Make sure the silicone O-rings at the interface to the antenna are lubricated. Make sure that the “UP” label is oriented such that when the antenna is installed on the tower the “UP” label will be pointing to the sky.

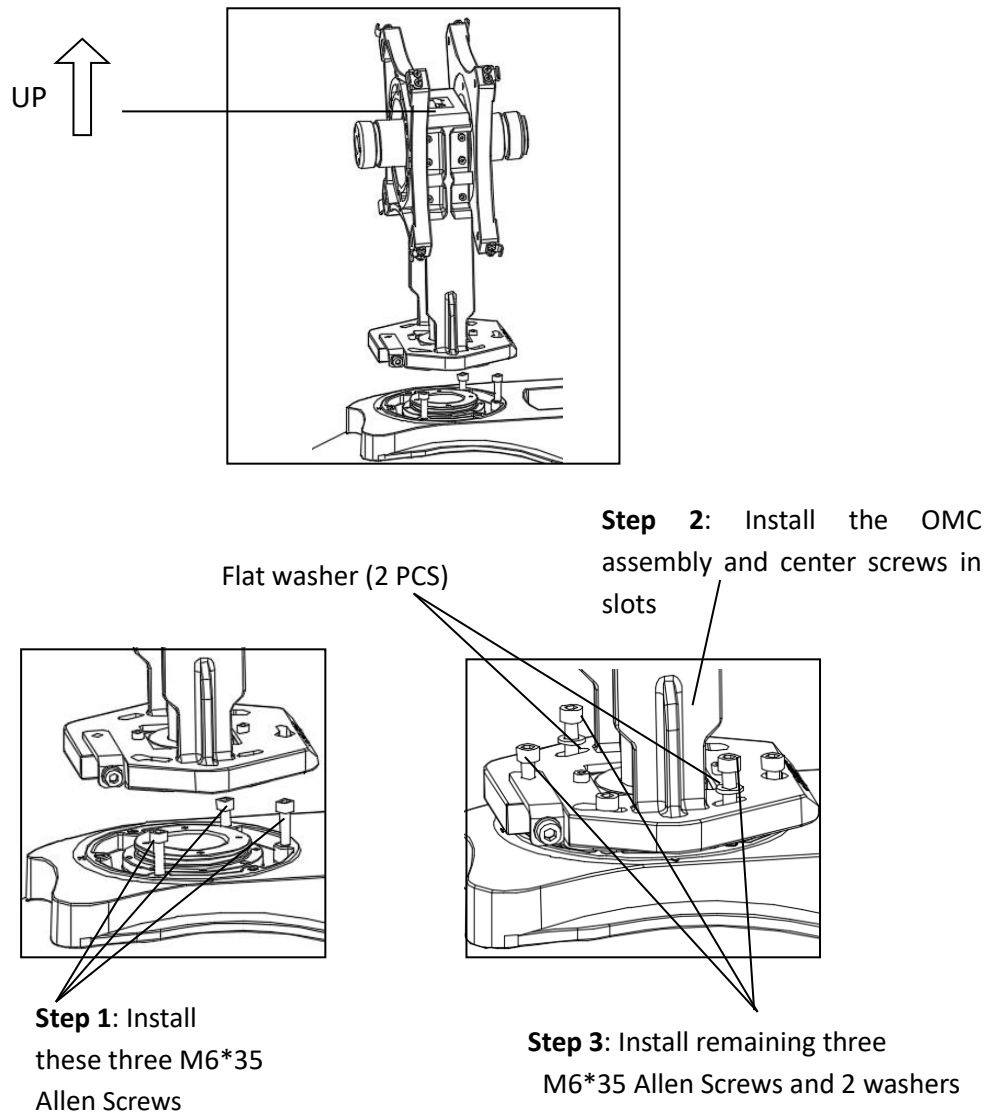


Figure 4.1 Install OMC to Antenna

- 4.2 Cross Polarization XPD adjustment. Make sure that both ends of link have horizontally level OMC to maximize the cross polarization discrimination.

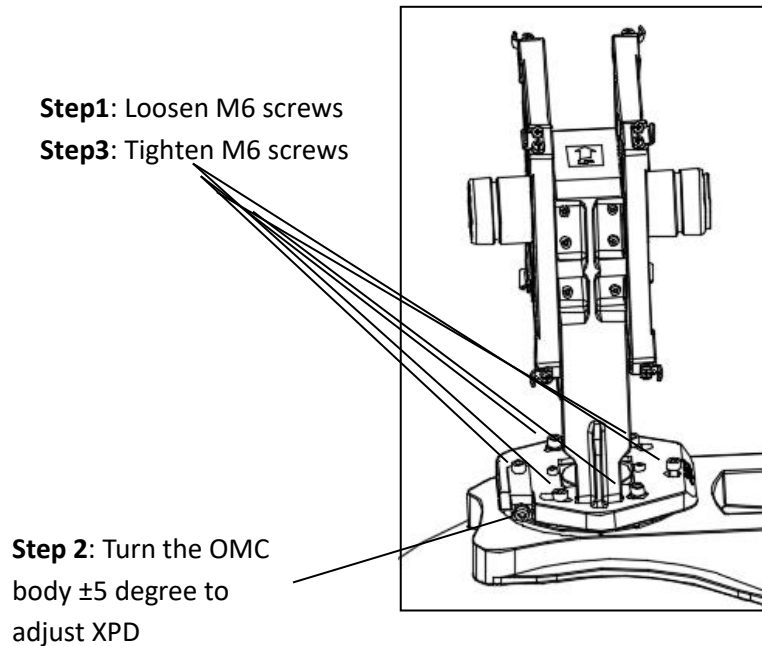


Figure 4.2 XDP adjustment

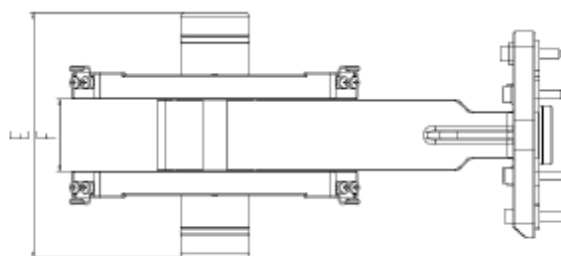
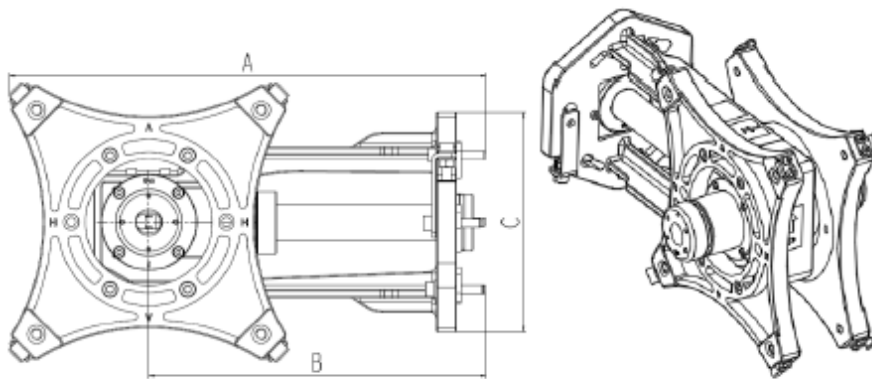
- 4.1 ODUs may now be mounted on the OMC. Ensure that the polarization of the ODU or radio matched the OMC polarization or severe signal loss can occur.

NOTE: For PXG2 AIR radios mounted on the OMC horizontal polarization port, make sure to change the radio polarization before installation so that both radios will have the heat sink fins running vertically and all access ports facing downward. Trango does not support PXG2 AIR radios mounted sideways.

5. Part Numbers and Dimensions

Below is a table of the Direct mount OMC part numbers showing supported Radios and ODUs, and dimensional data for the OMC. All Radios attached to the OMC must be single polarization Radios. For PXG2 AIR-X (Dual Polarization) radios, the Dual Polarization (DPMC) combiner must be used.

Trango Part Number	Frequency Range (GHz)	ODU Type
OMC-6-HP-S2-2	5.925 -7.125	HP2, HP3, AIR
OMC-8-HP-S2	7.125-8.5	HP, HP1, HP2, HP3, AIR
OMC-11-HP-S2	10.7-11.7	HP, HP1, HP2, HP3, AIR
OMC-13-HP-S2	12.75-13.25	HP, HP1, HP2, HP3, AIR
OMC-15-HP-S2	14.4-15.35	HP, HP1, HP2, HP3, AIR
OMC-18-HP-S2	17.1-19.7	HP, HP1, HP2, HP3, AIR
OMC-23-HP-S2	21.1-23.6	HP, HP1, HP2, HP3, AIR
OMC-26-HP-S2	24.25-26.5	HP, HP1, HP2, HP3, AIR
OMC-28-HP-S2	27.5-29.5	HP, HP1, HP2, HP3, AIR
OMC-32-HP-S2	31.8-33.4	HP, HP1, HP2, HP3, AIR
OMC-38-HP-S2	37.0-40.0	HP, HP1, HP2, HP3, AIR



OMC DIMENSIONS (mm)	
A	338
B	239
C	155
E	166
F	49