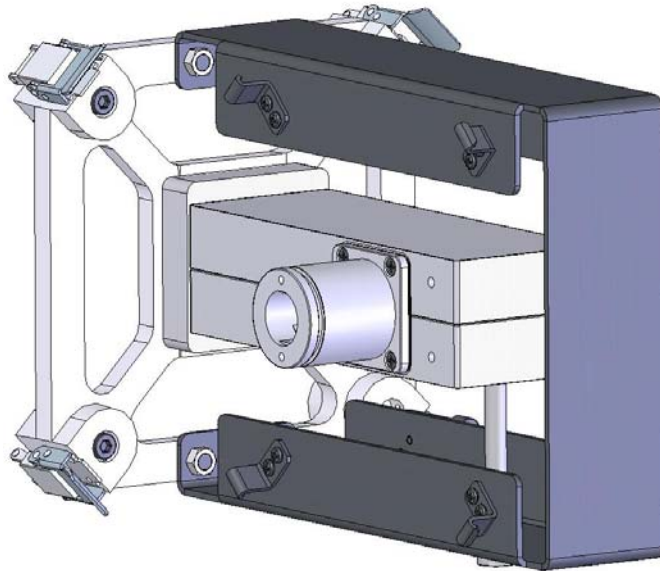




ORTHO-MODE COMBINER MODEL OMC-XX-HP

Installation Manual



Information

Regulatory Information

This product, when installed properly with an approved Outdoor Units (ODUs) is designed to meet the following standards and regulatory requirements.

- EN60950-1
- EN60950-22
- FCC Part 101
- EN 302 217-x

Warranty Information

This product is warranted for two years from date of purchase. Visit the Trango Systems Web site for a complete description of warranty coverage and limitations.

Contact Information

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SAFETY NOTICE

This instruction manual is intended to assist during the installation. All applicable local, national and international safety regulations and procedures must be followed and no part of this installation manual shall be considered to supercede those regulations. Trango Systems, Inc. does not accept responsibility for accidents resulting from not following safe working practices or any safety regulations.



Installing microwave transmission equipment can be dangerous. To avoid serious or fatal injury or damage to property, **all installation should be done by qualified personnel.**

1.0 Overview

Thank you for purchasing this ortho-mode combiner for your microwave transmission link installation. This product has been designed and manufactured to the highest standards and will provide years of trouble free service if installed correctly.

The combiner is designed for mounting two Outdoor Units (ODUs) directly to a parabolic dish antenna. One ODU will use the Horizontal polarization and the other ODU will utilize the Vertical Polarization, typically for XPIC or frequency + polarization diversity applications. The ODUs are latched onto the combiner and the combiner is then latched and bolted onto the antenna.

The insertion loss of the combiner is very low, which increases the system gain of the link compare to other forms of combiners. **This combiner is not designed for 1+1 hot standby applications since both ODUs cannot be on the same polarization.**

This Manual covers the following models:

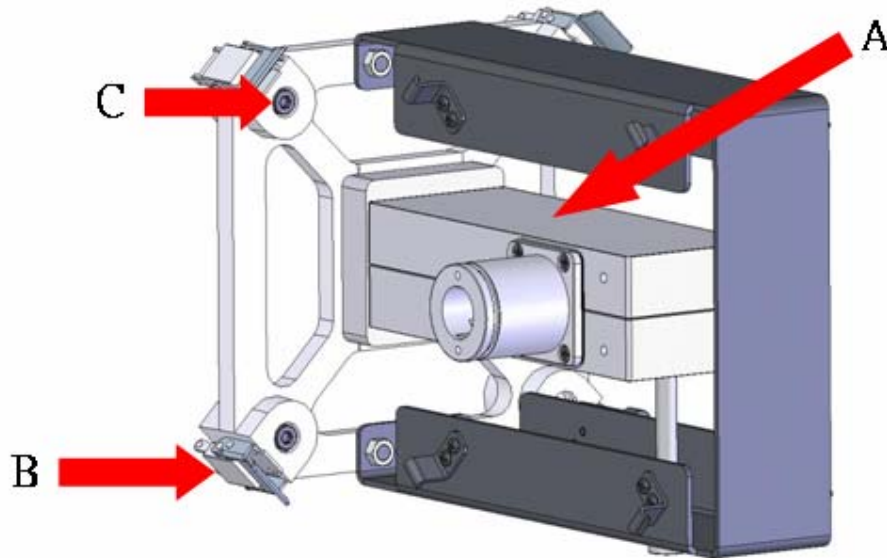
Model	Operating Frequency Range (GHz)
OMC-07-HP	7.1 to 7.7
OMC-08-HP	7.7 to 8.5
OMC-11-HP	10.7 to 11.7
OMC-13-HP	12.7 to 13.3
OMC-15-HP	14.4 to 15.4
OMC-18-HP	17.7 to 19.7
OMC-23-HP	21.2 to 23.65
OMC-38-HP	24.2 to 26.5

Compatibility: All OMC Ortho-mode combiners are compatible with the Trango ADxxG-S2 and ADxxG-R2 Antenna models and All ODUs utilizing the HP style direct mount latch system. Ensure that the ODU frequency band of operation matches the OMC frequency range as shown above.

2.0 Installation

PARTS ILLUSTRATION

The essential items for installing the ortho-mode combiner are shown below in Figure 1 and cataloged in the table below.



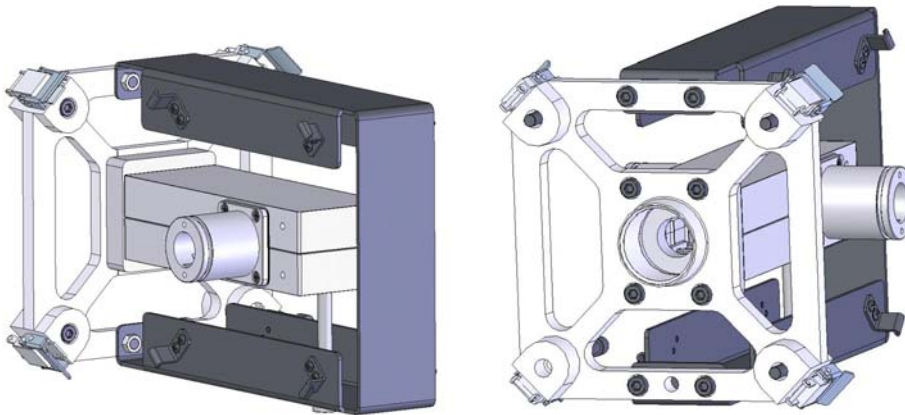
ID	DESCRIPTION	QTY
A	OMT body	1
B	Latches	4
C	M8 screws	4

- Required Tool: M8 offset hexagon key wrench

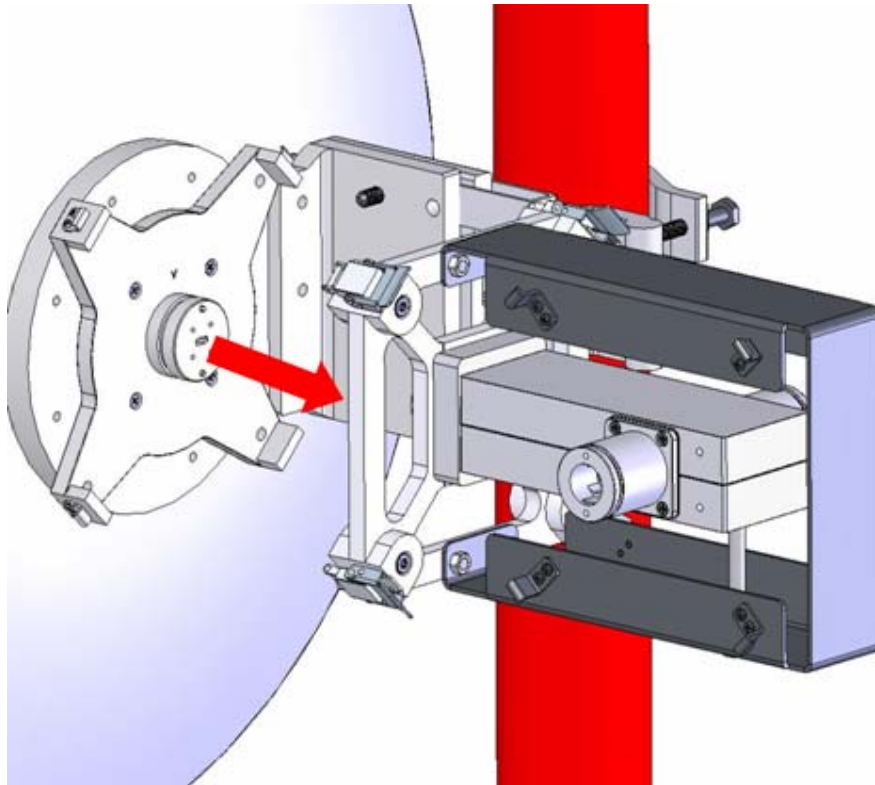
INSTALLATION


The subsequent assembly guide illustrates six steps for the orthogonal mode combiner installation. Operators should not break the rules during the procedures.

STEP 1 Before the installation, carefully remove all protective stickers from the OMT.

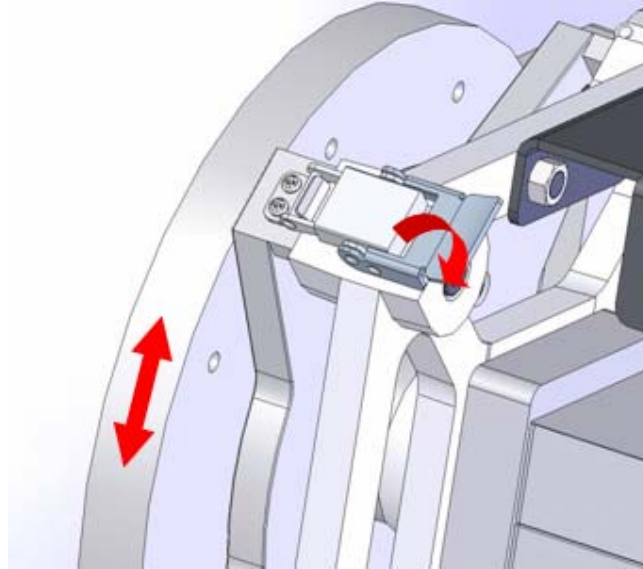


STEP 2 Put silicone grease all the way around the antenna adaptor O-ring on the antenna per the antenna installation instructions, then align the port of the antenna toward the common port of the OMT body. Insert the antenna adaptor into the OMT.

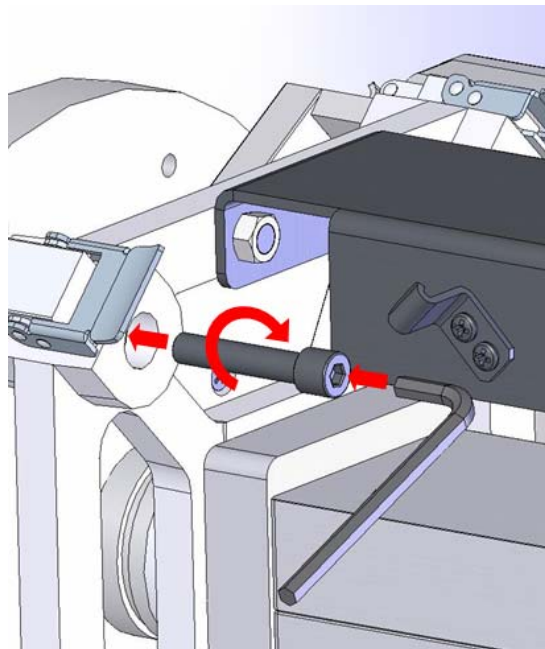


 Installers are required to secure both the antenna and orthogonal mode combiner during the entire installation procedures.

STEP 3 Gently rotate the combiner to align the latches on the combiner with the strikes on the antenna. Align and secure the four latches and make sure the OMT body is properly mounted

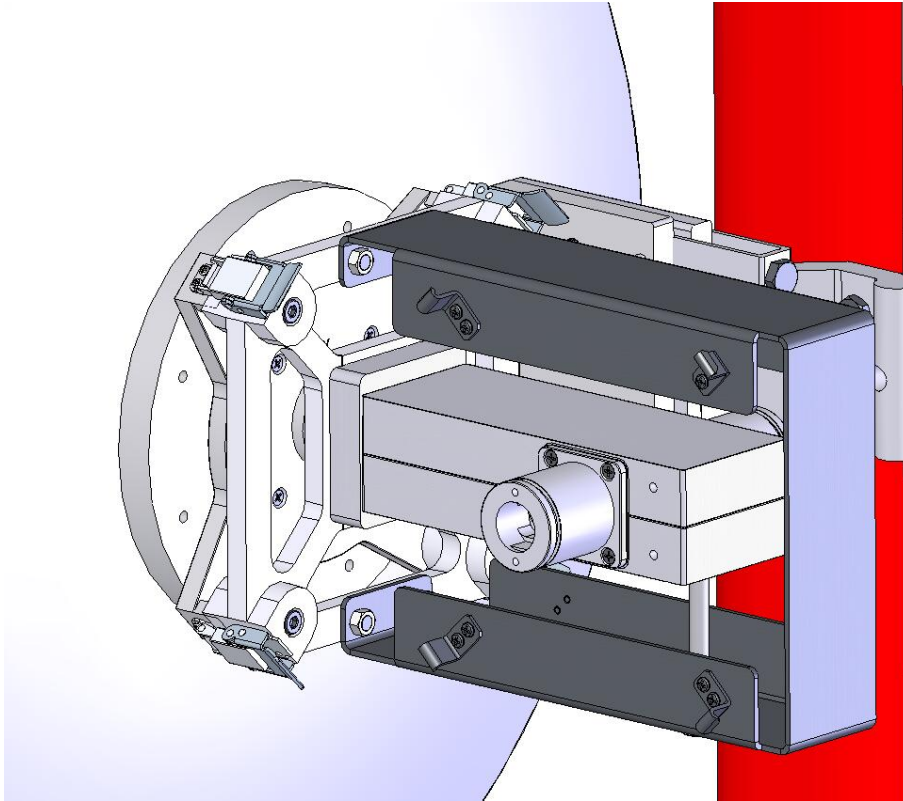



STEP 4 Tighten the four M8 screws into the antenna mounting plate by using the M8 offset hexagon key wrench.



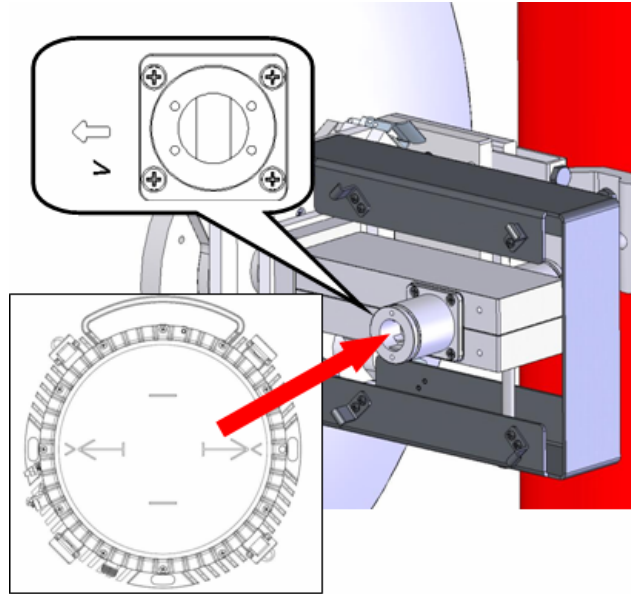
STEP 5

The OMT is now mounted securely on the antenna with latches and screws.

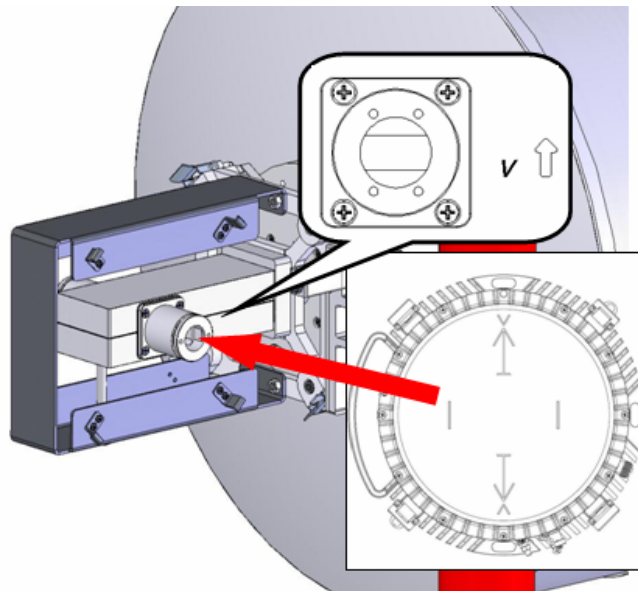


 Fasteners supplied have been carefully specified to perform a function in the mechanical assembly of the unit. Do not substitute the supplied parts for alternatives.

STEP 6 The procedures to mount the outdoor units (ODU) on the sides of OMT body are similar to the previous ones. Ensure that the polarization is correct by aligning the arrows indicating “V” polarization of the OMT with the arrows and “V” on the ODU.



Horizontal polarization



Vertical polarization