

1 YEAR
WARRANTY

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UWTC-RPT-ANT-900 **High Gain Antenna Mounting Kit**



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Section 1 - Introduction

Please read this manual completely before installing and operating the repeater and high gain antennas. It is important to read and follow all notes, cautions, warnings and safety precautions before operating your high gain antennas. More information may be found in the UWTC-RPT1 Wireless Repeater Manual (M4938).

1.1 Precautions

- This device is not designed for use in any medical or nuclear applications.
- Do not operate this device in flammable or explosive environments.
- Never operate with a power source other than the one recommended in this manual.
- Do not operate this device outside of the recommended use outlined in the manual.
- Never use your UWTC-RPT1 Wireless Repeater as a portable device. Your unit has been designed to be operated in a permanent installation only.

NOTE:

There are no user serviceable parts inside your device. Attempting to repair or service your unit may void your warranty.

NOTE:

All installations should be performed by a trained professional.

1.2 Items Included

- 1 915 MHz High Gain Antenna
- 2 Mounting Brackets (with hexagon head screw attached)
- 2 Mounting Clamps
- 4 Washers
- 4 Large Round Spacers
- 4 Small Round Spacers
- 1 Antenna Adapter
- 1 Cable (10')

1.3 High Gain Antenna Accessories

Your high gain antenna kit is offered with an additional cable designed to make connecting the antennas easier:

UWTC-RPT-CABLE-25 25 ft. cable

Section 2 - General Description

The Omega UWTC-RPT-ANT-900 is a high gain antenna kit for your UWTC-RPT1 Wireless Repeater. The antenna increases the transmitting range of the repeater from 1.8 miles (2.9 km), up to 3 miles (4.8 km) with one high gain antenna, or up to 5 miles (8 km) with two high gain antennas.

NOTE:

When using one high gain antenna, the high gain antenna must be placed on the wireless receiver only.

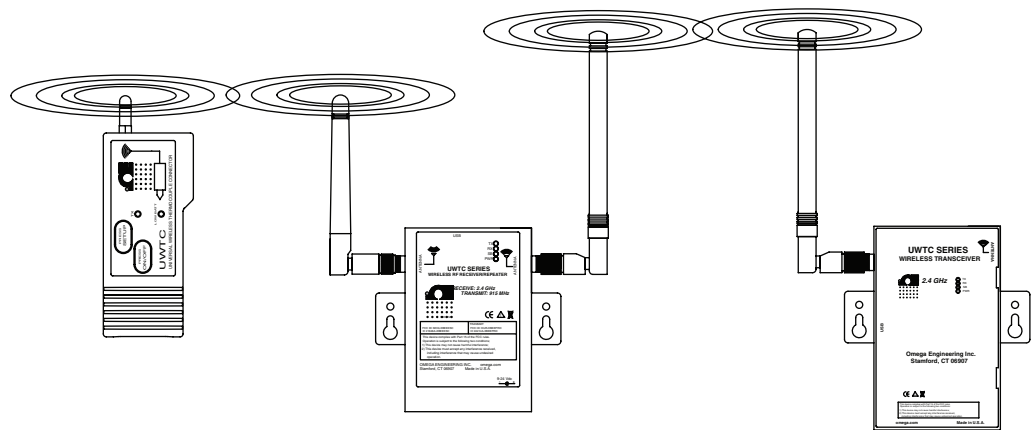


Figure 2-1. Repeater System With Standard Antennas

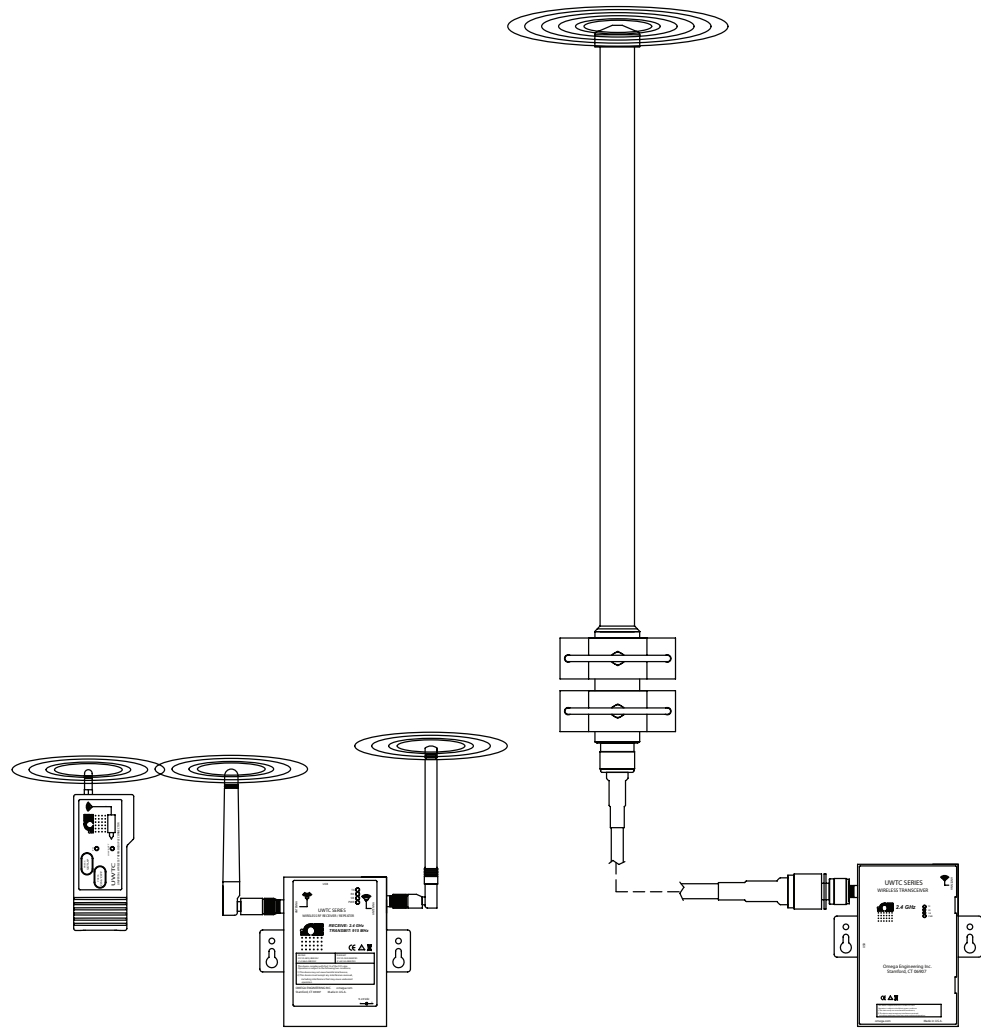


Figure 2-2. Repeater System With High Gain Antenna On Receiver Only

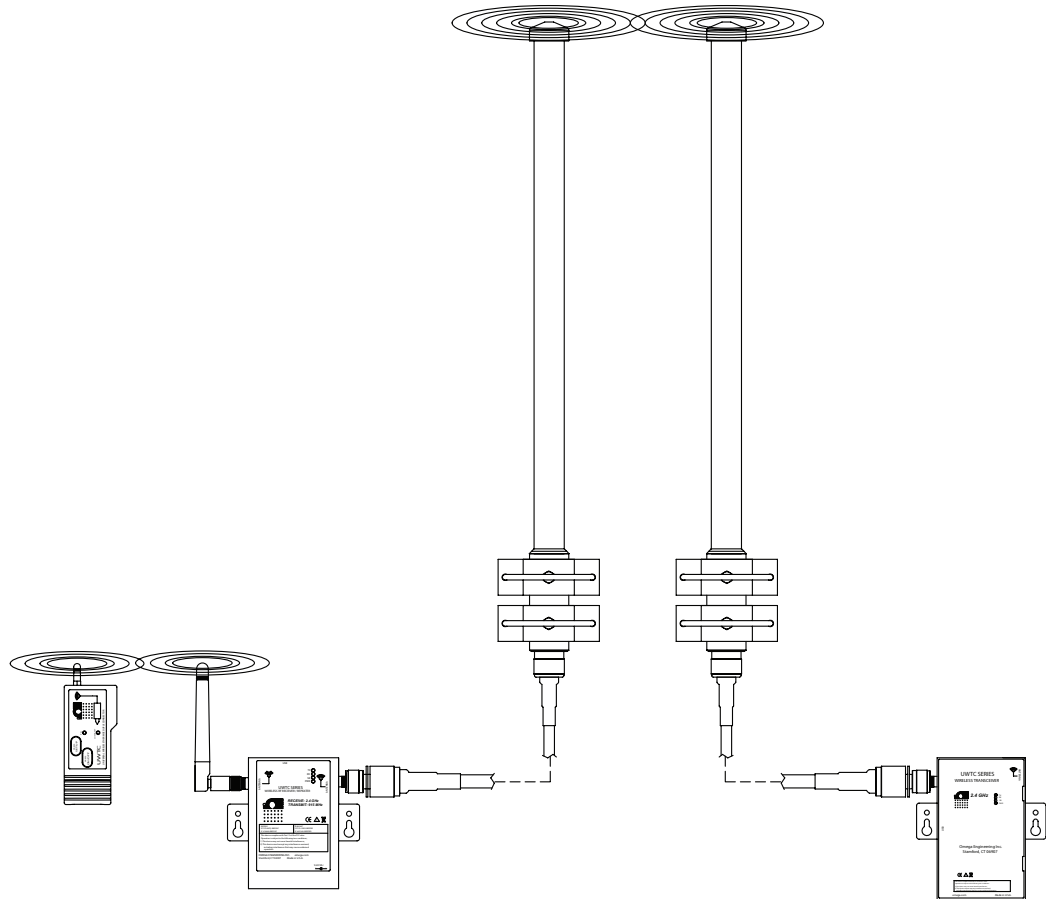


Figure 2-3. Repeater System With High Gain Antennas On Both Receiver and Repeater

Section 3 - Assembly Instructions

To form a proper High Gain system, you must either install the high gain antenna on:

- a. your UWTC-REC1-915 receiver, or
- b. on both your UWTC-RPT1-915 repeater and UWTC-REC1-915 receiver.

NOTE:

When using two high gain antennas: on the repeater, be sure to replace the antenna on the TRANSMITTING side of your repeater with the high gain antenna (as seen in Figure 2-3).

- Remove the standard antenna from either
 - a. the UWTC-REC1-915 receiver, or
 - b. both the UWTC-REC1-915 receiver and the transmitting side of the UWTC-RPT1-915 repeater.
- Connect your high gain antenna to the devices, using the antenna adapter and cable, as shown in Figure 3-1.

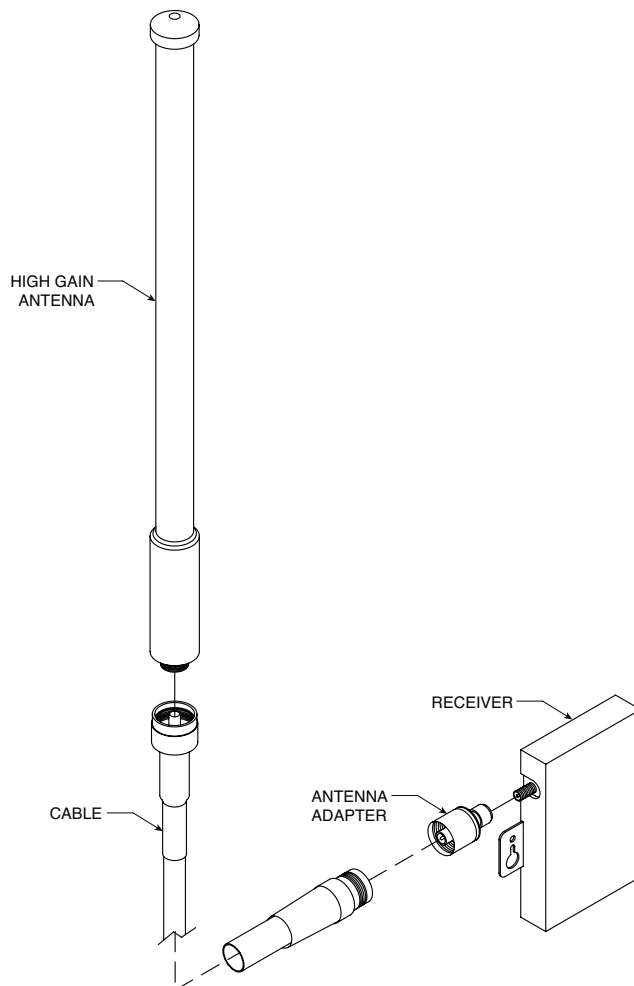


Figure 3-1. High Gain Antenna To Device Connection

- Mount your antenna to a pole with an FM2 mounting kit. See Figure 3-2.

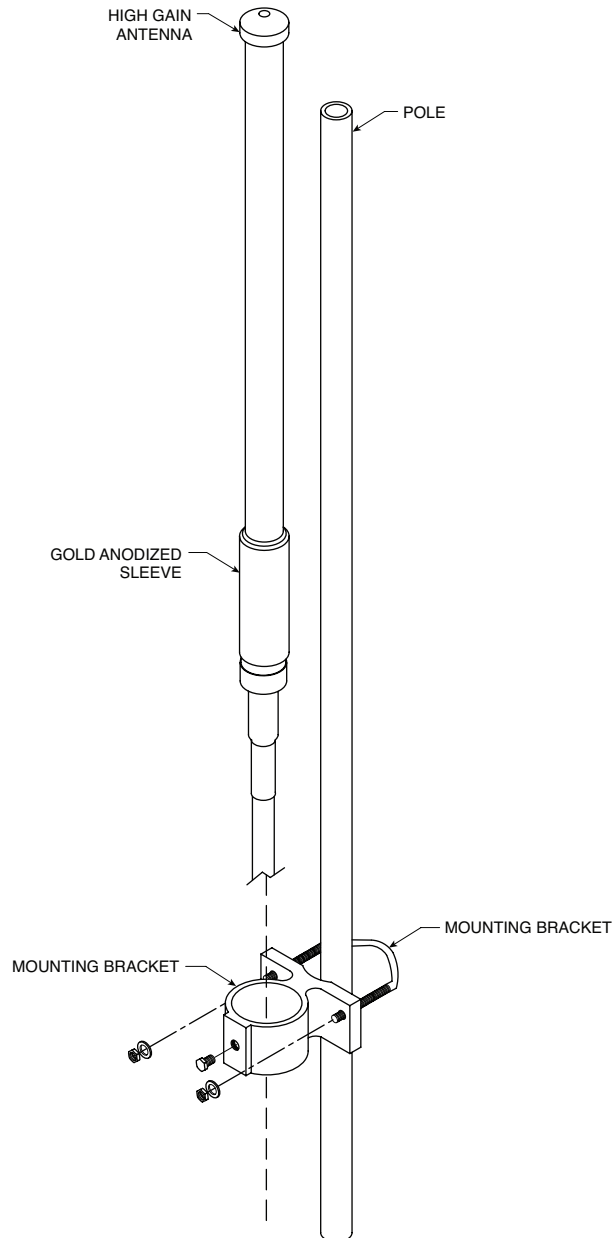


Figure 3-2. Mounting Kit Connection

- Be sure to place the mounting clamps on the gold anodized sleeves of your high gain antennas. **DO NOT** place the clamp on the fiberglass portion.
- During positioning of your antenna be sure that the gold anodized sleeve clears any obstructions (i.e. masts, tower section, etc.).

NOTE:

Do not cover the drain holes on the bottom of the antenna as they provide drainage for moisture.

Your complete system should resemble Figure 2-2.

Section 4 - Antenna Operation

Your new high gain antenna system operates just as the standard UWTC-RPT1 Repeater System, with the only exception being that your signal range has increased.

For information on operating your wireless repeater, refer to the UWTC-RPT1 Wireless Repeater Manual (M4938).

Section 4 - Specifications

High Gain Antenna Specifications

Frequency Range:	902-928 MHz
Tuned Frequency:	915 MHz
Gain:	3 dBD
Signal Line-of-Sight Range:	One high gain antenna: up to 3 miles (4.8 km) Two high gain antennas: up to 5 miles (8.0 km)

Physical Specifications

Length:	25 inches
Weight:	0.84 lb. (0.38 kg)
Max. Power:	100 Watts

For Repeater specifications, see the Repeater manual, M4938.



NOTES:

WARRANTY/DISCLAIMER

OMEGA ENGINEERING, INC. warrants this unit to be free of defects in materials and workmanship for a period of **13 months** from date of purchase. OMEGA's WARRANTY adds an additional one (1) month grace period to the normal **one (1) year product warranty** to cover handling and shipping time. This ensures that OMEGA's customers receive maximum coverage on each product.

If the unit malfunctions, it must be returned to the factory for evaluation. OMEGA's Customer Service Department will issue an Authorized Return (AR) number immediately upon phone or written request. Upon examination by OMEGA, if the unit is found to be defective, it will be repaired or replaced at no charge. OMEGA's WARRANTY does not apply to defects resulting from any action of the purchaser, including but not limited to mishandling, improper interfacing, operation outside of design limits, improper repair, or unauthorized modification. This WARRANTY is VOID if the unit shows evidence of having been tampered with or shows evidence of having been damaged as a result of excessive corrosion; or current, heat, moisture or vibration; improper specification; misapplication; misuse or other operating conditions outside of OMEGA's control. Components in which wear is not warranted, include but are not limited to contact points, fuses, and triacs.

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The purchaser is responsible for shipping charges, freight, insurance and proper packaging to prevent breakage in transit.

FOR **WARRANTY** RETURNS, please have the following information available BEFORE contacting OMEGA:

1. Purchase Order number under which the product was PURCHASED,
2. Model and serial number of the product under warranty, and
3. Repair instructions and/or specific problems relative to the product.

FOR **NON-WARRANTY** REPAIRS, consult OMEGA for current repair charges. Have the following information available BEFORE contacting OMEGA:

1. Purchase Order number to cover the COST of the repair,
2. Model and serial number of the product, and
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