INSTALLATION INSTRUCTIONS

EM-MTR11001
THICK PANEL, RIGHT ANGLE, NMO, 3/4" HOLE MOUNT
FOR RG-58/U and LOW LOSS 195 TYPE CABLES

Congratulations on your selection of another quality antenna product from E/M Wave. E/M Wave is committed to continually provide the greatest antenna VALUE for your wireless applications.

1. Parts: Verify all parts are included (See Figure 1 and 4).

a. Threaded Mount Body
b. Hex Jam Nut
c. Bottom Dust Cap (not Shown)
d. Crimp Sleeve
e. Lock Washer
f. NMO Mount Nut
g. O-Ring (Not Shown)
h. Centering Washer

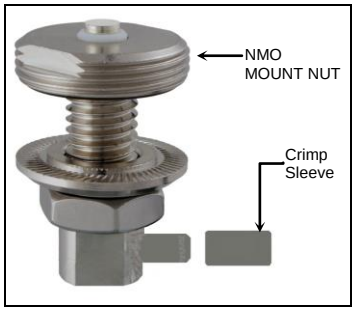

Figure 1

2. Tools:

a. Electric Drill and a ¾" (19.05 mm) Hole Saw or Punch
b. Open End Wrenches: 12mm, 19mm and Adjustable
c. Cable Stripping, Soldering and Crimping Tools
d. Screwdriver, Standard Slotted Head Type
e. Ruler or Gage for cable strip verification

3. Pre-Installation:

a. Verify proper mount location by referring to the selected antenna model instruction sheet. **NOTE:** The Thick Roof Mount installs from the bottom side of the panel surface.

b. The EM-MTR11001 mount is designed for installation to a flat panel or vehicle body surface with thickness in the range of 3/32" (2.3 mm) to 1/2" (12.7 mm).

c. The EM-MTR11001 is designed for standard RG-58 and 195 low loss type cable types.

4. Strip and Attach Cable (not included):

a. Cut cable to desired length. Strip one end of the cable according to dimensions in Figure 2. **NOTE:** Cable Stripping and Crimp Die dimensions are specified as "inch (mm)" units.

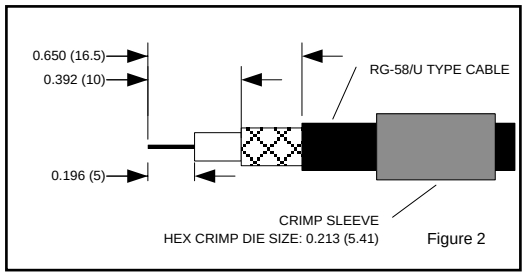

Figure 2

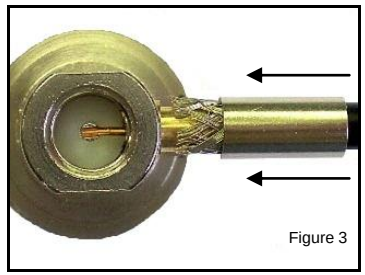
Figure 3

b. Slide the Crimp Sleeve over the end of the cable and away from the stripped end.

c. Gently flair the braid away from the dielectric and carefully insert the stripped cable end in through the side entry cable port of the Mount Body. Carefully align the center conductor into the cross slot of the center pin and continue to insert the cable until completely seated as shown in Figure 3.

d. Slide Crimp sleeve over the braid (Figure 3) until completely covering the braid and seated against the Threaded Mount Body. Crimp the sleeve using a standard 0.213" (5.41mm) hex die. If shrink tube attached, slide shrink tube over crimped sleeve and apply heat.

e. Apply solder between the center conductor and center pin. Verify proper wetting.

f. Using a standard slotted head screwdriver, attach Bottom Dust Cap to the Threaded Mount Body by threading the cap until completely seated. Proceed to Step 5.

5. Installation:

a. Remove the NMO Mount Nut from the Threaded Body. Thread the Hex Jam Nut completely toward the bottom end of the Threaded Body. Place the Lock Washer first, followed by the Centering Washer onto the Threaded Body. **Note**: The Lock Washer should be located between the Hex Jam Nut and the Centering Washer. See Figure 4.

b. Drill or Punch a ¾" (19.05 mm) hole through the panel surface.

c. Insert the Threaded Mount Body from the bottom side of the ¾" hole.

d. From the top side, firmly thread and torque the NMO Mount Nut to the Threaded Mount Body. **Important:** Verify O-Ring is properly located within O-Ring groove in NMO Mount Nut. Using an adjustable wrench from above the mounting surface and a 12mm open end wrench from below the mounting surface, securely fasten NMO Mount Nut to the Threaded Mount Body with firm torque. NMO Mount Nut is properly seated, when Contact Pin and Dielectric Insulator are exposed as shown in Figure 5.

e. The Thick Panel Mount assembly should remain "free floating" inside the ¾" hole, at this point of the installation.

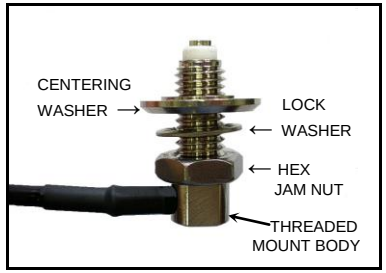

Figure 4

f. From the bottom side, align the assembly within the hole and begin to thread the Hex Jam Nut upward while aligning the Centering Washer into the hole. Using only hand torque, continue threading Hex Jam Nut until the entire assembly is verified to align and seat firmly within both sides or surfaces of the hole.

g. Firmly hold the Threaded Mount Body from rotation using a 12mm wrench, while slowly threading the Hex Jam Nut into place using a 19mm wrench. Apply firm torque to the Hex Jam Nut, until Centering Washer applies firm clamping pressure, affixing the entire assembly to the panel.

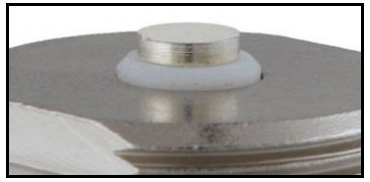
Figure 5

h. Torque the Hex Jam Nut until the O-Ring (top side surface) is verified to be completely seated against the top panel surface. Verify the Thick Panel Mount is firmly secured to the panel.

i. Route, cut and strip open end of Cable.

j. Attach connector (sold separately).