

## Ultraflex<sup>®</sup> System Transverter

### Installation & Operator Manual

***Ultraflex<sup>®</sup> System Must Be Professionally Installed.***

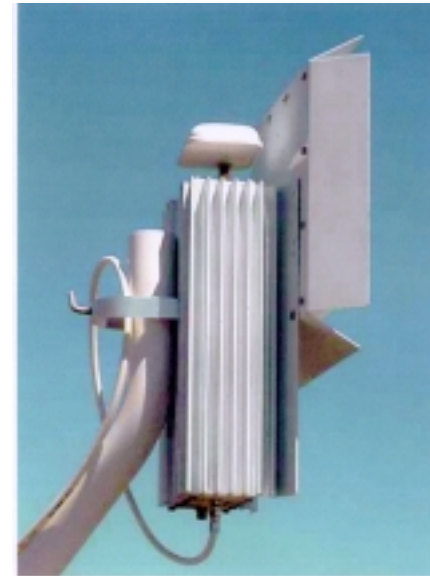


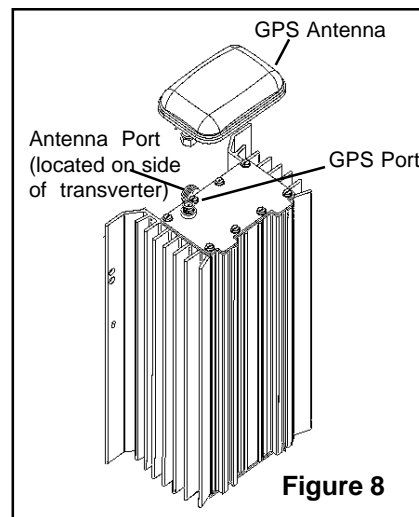
Photo shows Transverter installed with 18dBi Microceptor, Model QD-2450. Optional 18dBi (Model 18T-2127) and 24dBi (Model 26T-2127) available.

**Warning: Installation of Antenna near power lines is dangerous!**

**Type certified for operation under Part 21.909.**

## Ultraflex® Two-Way System Packing List

- (1) Response Antenna
  - Options
  - QD-2450
  - 18T-2127
  - 26T-2127
- (1) Transverter
- (1) Power Supply/Inserter
- (1) GPS Antenna
- (2) Transverter Mounting Brackets
  - #726055 for inch pipe
  - #726044 for 1-2 inch O.D. pipe
- (2) "L" Bolts #163155.2



10. Mount the Transverter on the mast by sliding the mounting brackets and "L" Bolts into the bracket channels on the backside of the Transverter. (See Figure 10.)

11. Connect the download cable to the input/output on the Transverter. (See Figure 9.)

### Response Antenna Options

- #1 QD-2450  
(2) #6 x 1/2" Stainless Screws

- #2 Model 26T-2127

#### FEED BOX

- (1) Feed assembly
- (1) Sub-reflector
- (1) #6 x 1/2" stainless screw
- (2) Stainless 1/4 x 20 hex nuts
- (2) Stainless lock washers
- (2) Stainless carriage bolts

#### REFLECTOR BOX

- (2) Reflector halves
- (2) Stainless U-bolts
- (2) Mast clamps
- (1) Mounting "L" shaped bracket
- (4) Keps nuts
- (4) #8-32 machine screws
- (6) Stainless 1/4 x 20 hex nuts
- (6) Stainless lock washers
- (2) Stainless carriage bolts
- (1) Stainless flat plate washer

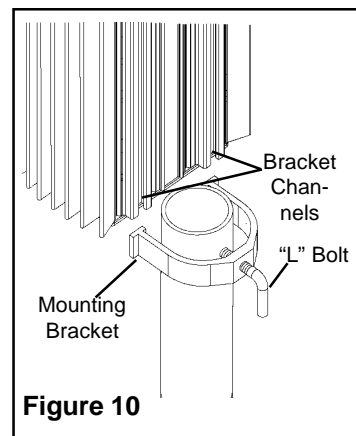
- #3 Model 18T-2127

#### FEED BOX

- (1) Feed assembly
- (1) Sub-reflector
- (1) #6 x 1/2" stainless screw
- (2) Stainless 1/4 x 20 x 1" carriage bolts
- (2) Stainless 1/4 x 20 Hex nuts
- (2) Stainless 1/4" lock washers

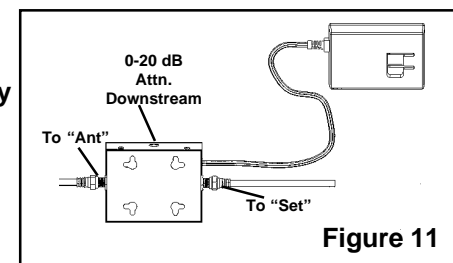
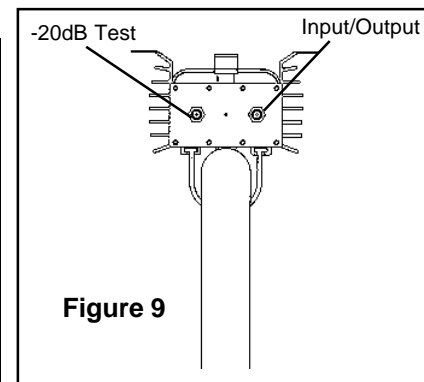
#### REFLECTOR BOX

- (1) Reflector
- (1) Mast clamp
- (1) Mounting "L" shaped bracket
- (1) Stainless U-bolt 1/4 x 20 x 2"
- (2) Stainless 1/4 x 20 Hex nuts
- (2) Stainless 1/4" lock washers
- (1) Stainless flat plate washer



12. Run the download to the PS-0200 power supply connector labeled "To Ant". (See Figure 11.)

13. Run a cable from the PS-0200 power supply connector labeled "To Set" to the set-top. (See Figure 11.)



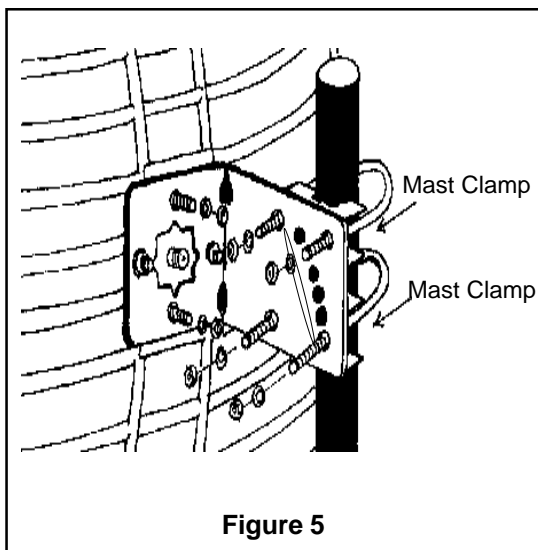


Figure 5

6. Attach the feed on the front with 2 carriage bolts. Secure on the back with the lockwashers and nuts. (See Figure 4.).
7. Place the 2 mast clamps on the 2 U-bolts. (See Figure 6). Fasten the U-bolts on the "L" bracket with the 4 lockwashers and nuts (See Figure 5).

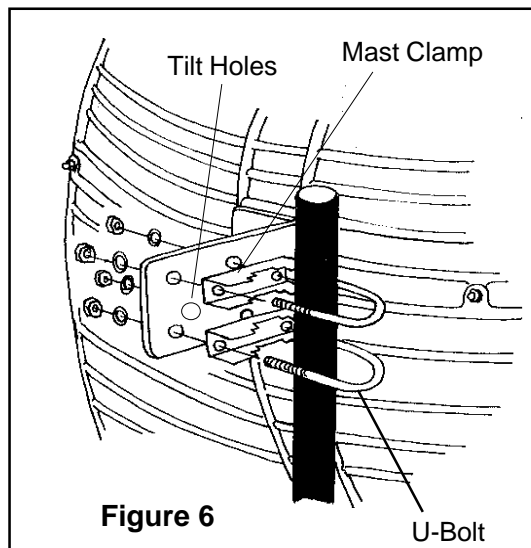


Figure 6

**NOTE:** By eliminating 1 mast clamp and U-bolt, the optional fixed tilt holes provide elevation in 10° increments. (Not recommended under high wind conditions.) (See Figure 6.)

Use the flat plate washer on the adjustable tilt slot to secure the antenna to the required elevation. (See Figure 7.)

8. Connect the GPS Antenna to the GPS port on the Transverter. (See Figure 8)
9. Connect the 26T-2127 antenna output to the antenna port on the side of the Transverter. (See Figure 8)

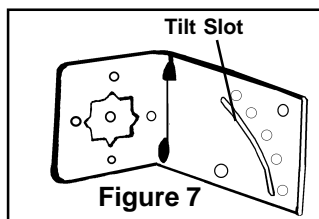


Figure 7

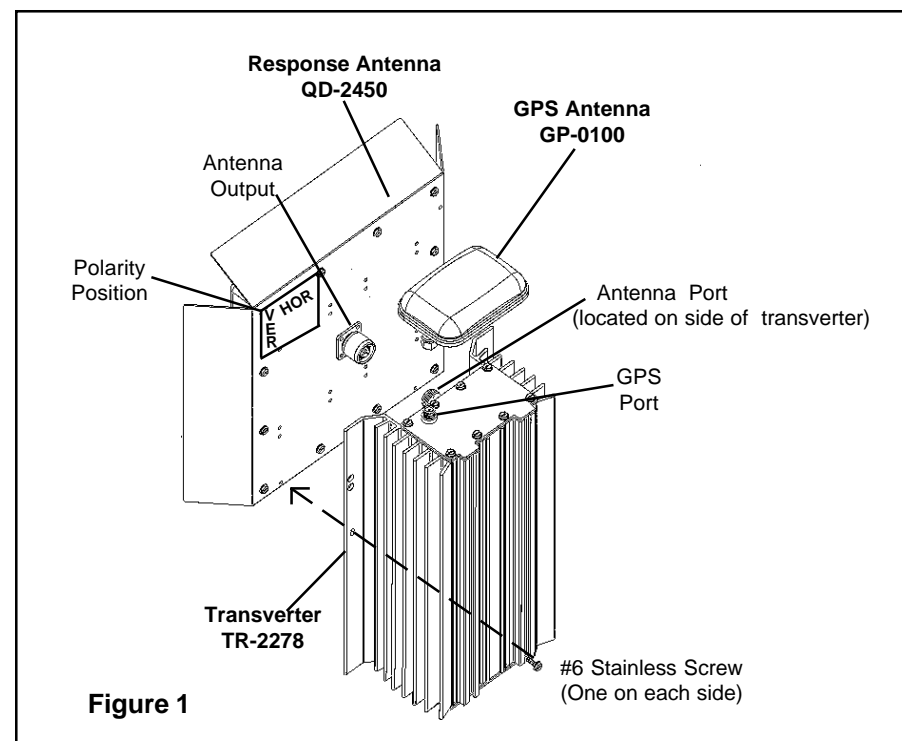


Figure 1

## INSTALLATION / ASSEMBLY with QD-2450 Response Antenna

1. Determine the polarity of the antenna. (See Figure 1.)

**NOTE:** See labeling on the back of the QD-2450 antenna for horizontal and vertical polarity positioning.

2. Connect the QD-2450 antenna output to the antenna port on the side of the Transverter. (See Figure 1.)
3. Secure the transverter and antenna connection with a #6 stainless screw on each side of the Transverter. (See Figure 1.)
4. Connect the GPS Antenna to the GPS port on the Transverter. (See Figure 1.)

**NOTE:** Warning! GPS Port Only - +5VDC output 0 VDC input maximum.

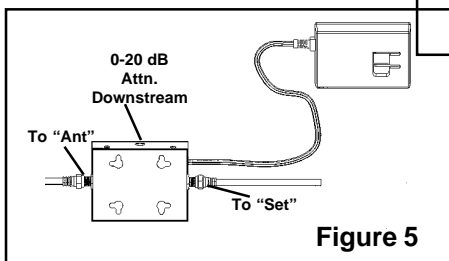
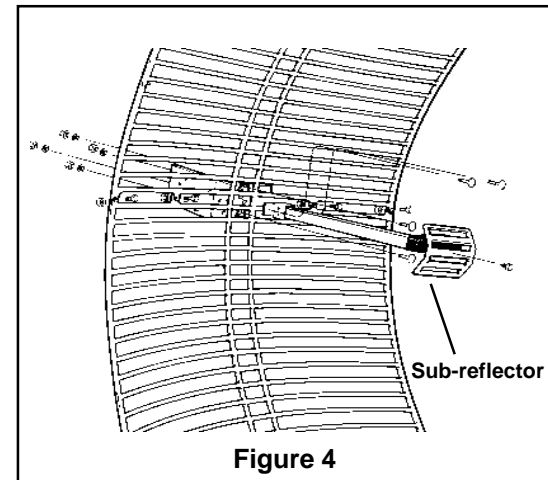
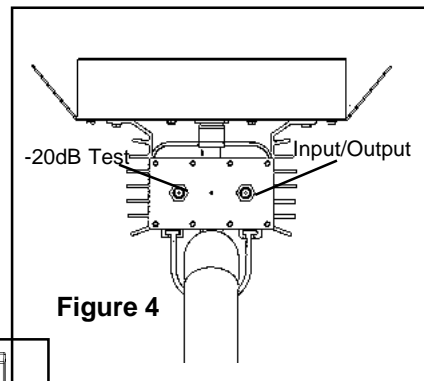
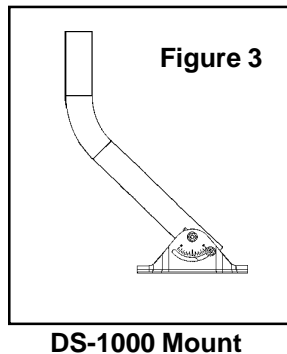
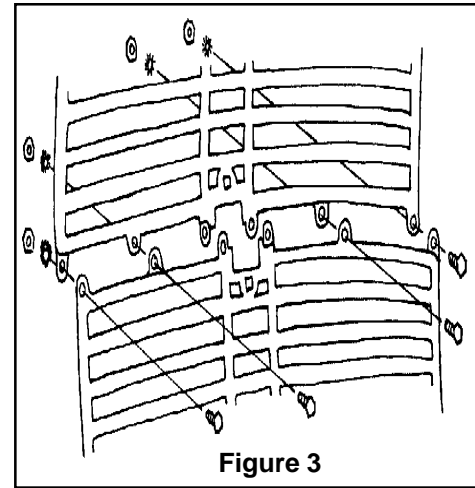
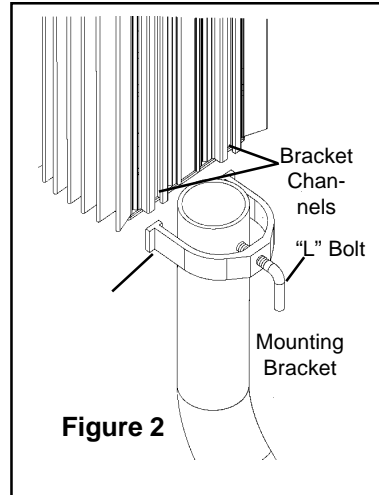
5. Slide the mounting brackets and “L” Bolts into the bracket channels on the backside of the Transverter. (See Figure 2.)

6. Mount the complete unit on a 1-2” O.D. mast or on Conifer’s optional DS-1000 mount assembly. (See Figure 3.)

7. Connect the download cable to the input/output on the Transverter. (See Figure 4.)

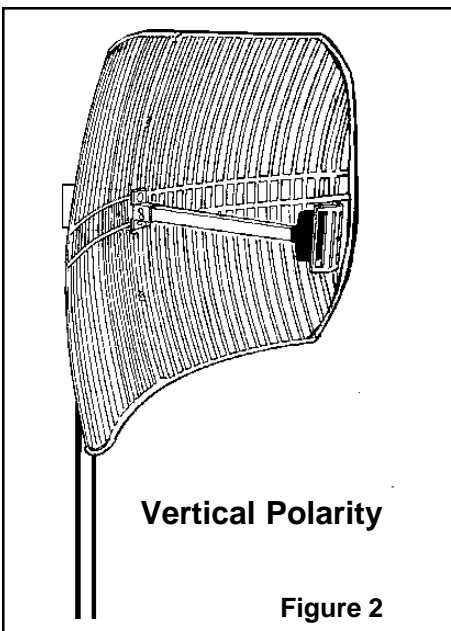
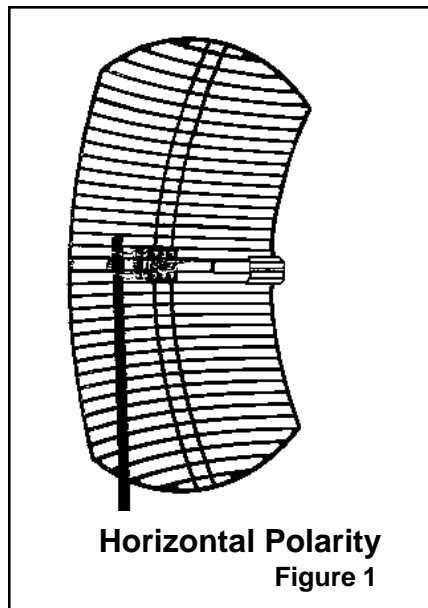
8. Run the download to the PS-0200 power supply connector labeled “To Ant”. (See Figure 5.)

9. Run a cable from the PS-0200 power supply connector labeled “To Set” to the set-top. (See Figure 5.)



4. Place the “L” bracket on the back of the antenna. Insert two carriage bolts from the front (figure 4) to attach. Secure on the back with the lock washers and nuts. (See Figure 5).
5. Re-check the dipole feed assembly for the proper polarity. (See Figures 1 & 2).

## INSTALLATION / ASSEMBLY with 26T-2127 Response Antenna



**Note:** Loosely tighten all hardware until completely assembled and then tighten securely.

1. Assemble the two halves inserting the 4 #8-32 machine screws through the front. Secure with the keps nuts on the back. (See Figure 3).
2. Place the sub-reflector on the front of the feed and secure with the #6 x 1/2" stainless screw. (See Figure 4).

### **Horizontal Polarity:**

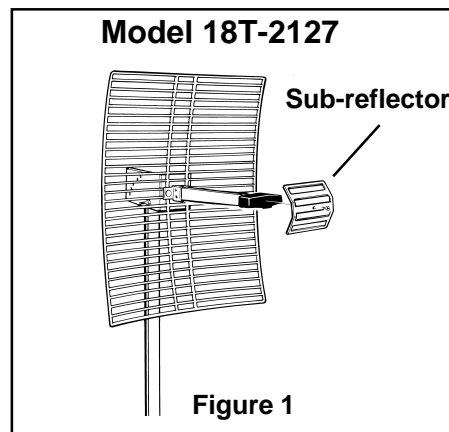
Refer to (figure 1) for proper feed alignment.

### **Vertical Polarity:**

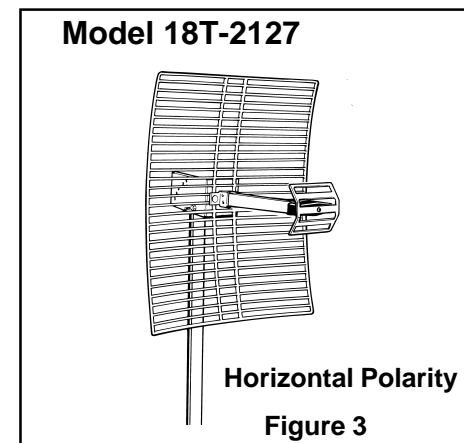
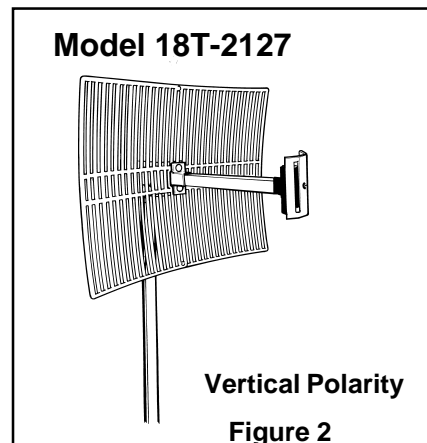
Refer to (figure 2) for proper feed alignment.

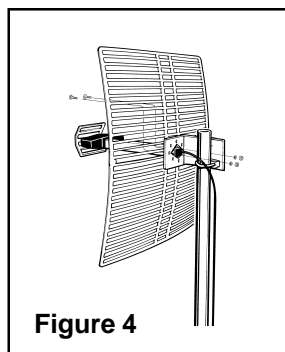
3. Determine the polarity of the antenna. (See Figures 1 & 2).

## INSTALLATION / ASSEMBLY with 18T-2127 Response Antenna



1. Place the sub-reflector on the front of the feed and secure with the #6 x 1/2" stainless screw. (See Figure 1).
2. Determine the polarity of the antenna. (See figures 2 & 3).



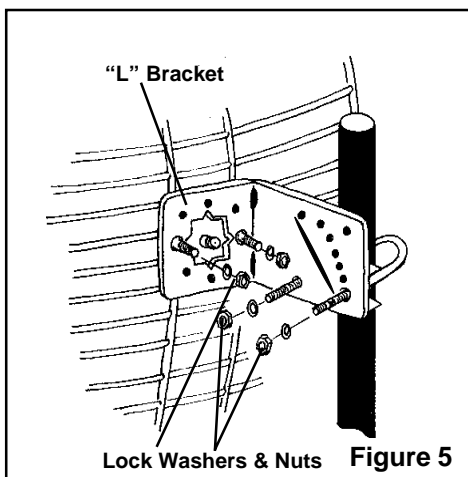


3. Place the "L" bracket on the back of the antenna. Secure the feed on the front with two carriage bolts. Secure the feed on the back with the lock washers and nuts. (See Figure 4).

4. Place the mast clamp on the U-bolt. (See Figure 6.) Fasten the U-bolt on the "L" bracket with 2 lockwashers and nuts. (See Figure 5).

**Note:** Fixed tilt holes provide antenna elevation up to 60° in 10° increments. (See Figure 6).

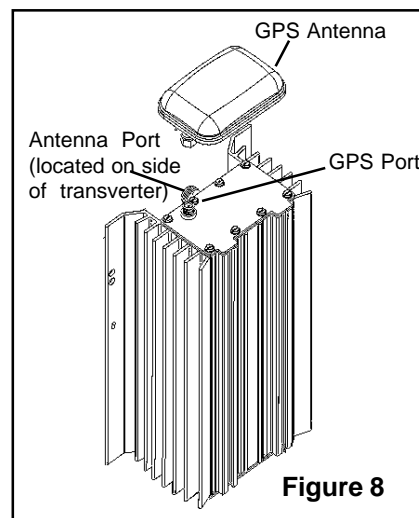
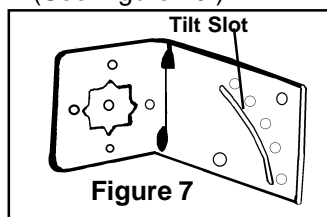
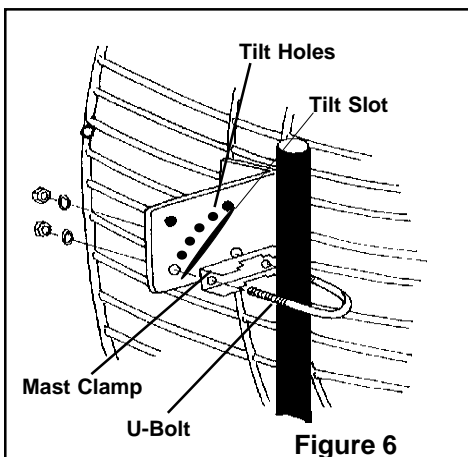
Use the flat plate washer on the adjustable tilt slot to secure the antenna to the required elevation. (See Figure 7)



5. Connect the GPS Antenna to the GPS port on the Transverter. (See Figure 8)

6. Connect the 18T-2127 antenna output to the antenna port on the side of the Transverter. (See Figure 8)

7. Mount the Transverter on the mast by sliding the mounting brackets and "L" Bolts into the bracket channels on the backside of the Transverter. (See Figure 10.)



8. Connect the download cable to the input/output on the Transverter. (See Figure 9.)

9. Run the download to the PS-0200 power supply connector labeled "To Ant". (See Figure 11.)

10. Run a cable from the PS-0200 power supply connector labeled "To Set" to the set-top. (See Figure 11.)

