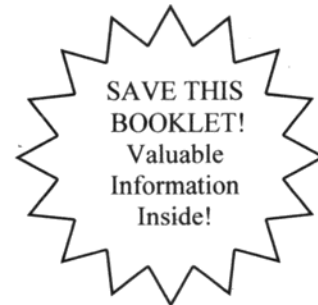


# Proton

## Commercial Base Station Antenna Assembly Instructions



PT99

## Assembly

Lay the Proton components out on a flat area and assemble as follows:

Thread the four sections together using the lock washers provided in the hardware package.

### Where To Mount The Antenna

It is very important to choose a proper location; you should be at least **9** feet above the ground or roof line and at least **24** feet away from any adjacent metal structures or objects. A TV tower or antenna mast is a good choice for mounting your antenna.



You can be **KILLED** if this antenna comes near electric power lines. **READ INSTRUCTIONS**

#### *Note:*

Special care should be taken to ensure safety. Make sure that you are a safe distance away from power lines or any other electrical sources.

### Preparing To Mount The Antenna

Make sure that the mast pipe is properly secured and that the "U" clamps will fit correctly around the mast pipe.

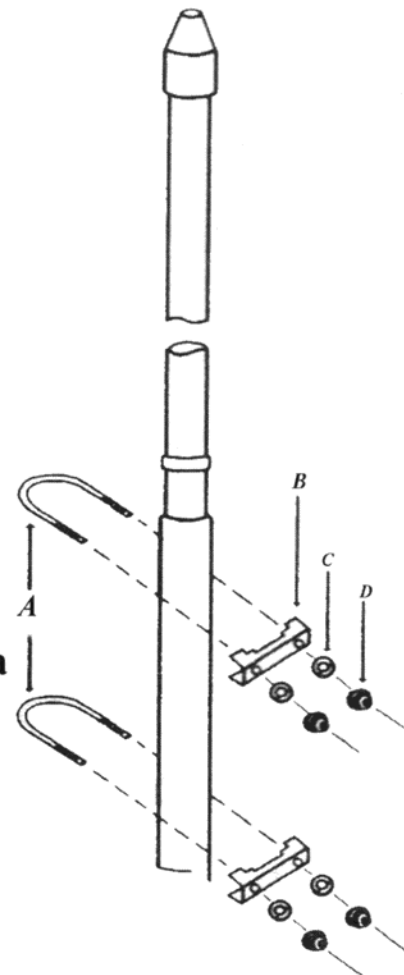


FIG. 1

## Antenna Installation

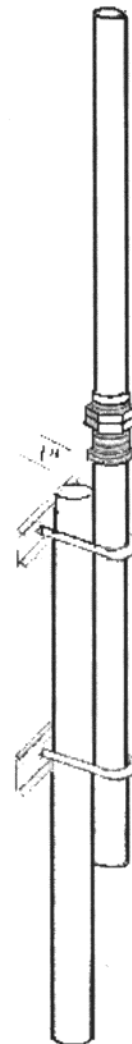
Using the hardware provided with the Proton, follow the instructions for mounting the antenna to the mast pipe:

1. Place the “U” bolts (A) around the aluminum base of the antenna and to the mounting mast pipe (FIG. 1).
2. Fit the mast clamps (B) through the “U” bolts, and using the lock washers (C) and nuts (D) provided, secure the antenna to the mast pipe (FIG.1).
3. Leave approx. a 1-inch margin between the top of the mast pipe and the top of the aluminum sleeve of the base section (FIG. 2)

**Note:**

Make sure that the antenna is secure to the mast pipe but do not over tighten.

Do not apply sealant at the bottom SO-239 connector. Simply snug the PL259 to the SO-239.



**FIG 2**

## **Antenna Operation and Tuning**

Each Proton is pre-tuned to the center of the 11 Meter Band from the factory. If further tuning is required use the following instructions.

\* Using an SWR Meter, check the SWR at the bottom, middle and top of the band.

\*If the SWR is lower at the bottom of the band, raise the tuning ring up to achieve the best SWR.

\* If the SWR is lower at the top of the band, lower the tuning rings to achieve the best SWR.

Note: Once you achieve the lowest SWR, lightly lock the two tuning rings together.

### ***Remember.....***

Raising the tuning rings raises the frequency and lowering the tuning rings lowers the frequency.

## Specifications

### Electrical Specs:

Maximum Power: 2000W PEP  
Gain DBI: 9.9  
SWR Range: 1.5:1  
Termination: SO-239

### Mechanical Specs:

Total Height: 18.6'  
Maximum Dia: 1.250"  
Weight: 5 lbs.

### PRODUCT RETURN

If it is necessary to return your antenna, please fill out this form to assure prompt service.

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Phone Number \_\_\_\_\_

Description of problem or complaint:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Date of Purchase \_\_\_\_\_

Dealer Name and Address:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Include a copy of your sales receipt. Ship freight prepaid (no C.O.D.s to:

**ProComm, Inc**  
**209 W. Grant**  
**Onarga, IL 60955**

## **TROUBLESHOOTING TIPS**

The following checklist may help solve problems if a good SWR cannot be achieved:

- \* You may want to re-read the assembly and the installation instructions to ensure proper operation

- \* Connections on the coax cable most often is the probable cause for poor SWR. Check the coax and connectors with a volt OHM meter or have your dealer perform a check.

- \* Excess coax cable cannot be coiled. It is best to measure carefully and use a proper length to extend from the transmitter to the antenna without excess cable or tension on the cable.

- \* Make sure that your SWR meter is connected and operating properly. Check the owners manual of your SWR meter.

- \* Check grounding at both the antenna and earth ground.

- \* The antenna must be at least 9 feet above the ground and a minimum of 24 feet away from other adjacent metal objects.

If you cannot correct these problems, please call ProComm for help **(1-877-331-5161)**.



### **90 Day Limited Warranty**

This product is warranted for 90 Days from the date of purchase. ProComm Inc. warrants that this antenna has been manufactured free from defects in design and workmanship. During this period, ProComm Inc. will repair or replace any defective part free of charge. This Warranty does not cover misuse, modifications, or damage caused from acts of God.

#### **NOTE**

ProComm Inc. is not responsible for damage to equipment or property or any consequential or accidental damages of any kind. Maximum liability shall not exceed the purchase price of this unit.

(Some states do not allow limitations on the length of implied warranty, or exclusions or limitations of incidental or consequential damages. The above limitations and exclusions may not apply to you.)

This warranty gives you specific legal rights. You may also have other rights which may vary from state to state.