

BUILDING YOUR WIND "T"

*Build this simple, sturdy mounting
for your wind instruments*

The Wind "T"

This wind "T" is a simple mount for your anemometer and wind vane. The wind "T" can mount directly on a 1-1/2" schedule 40 PVC pipe, or on a metal pipe when used with the appropriate adapter.

Check (✓) the Parts List

Before you start construction match the parts that came in your kit with the parts list below. If any parts are missing, call us at 1-800-683-KITS. We will mail a replacement part immediately, along with our profuse apologies.

- (2) 1-1/2" schedule 40 PVC elbows
- (1) 1-1/2" schedule 40 PVC "T"
- (2) 1-1/2" schedule 40 PVC pipe, 6" long
- (1) 1-1/2" schedule 40 PVC pipe, 5" long
- (1) #8-32 by 2-1/2" stainless steel machine screw
- (2) #8 stainless steel lock washers
- (1) #8-32 stainless steel hex nut
- (1) nylon cable tie

Also available from Fascinating Electronics (not included in the anemometer kit):

- CAB-ANWV100, anemometer and wind vane cable with modular plug, 6 conductor, 100 feet long, with 3/64", 3/32", 3/16" heatshrink.

Also required (not included in the kit):

- clear PVC cement

The wind "T" will mount on a 1-1/2" schedule 40 PVC pipe (not included in kit). Since plastic pipe is somewhat flexible, we recommend that you use a four foot or shorter PVC pipe for the mounting pole. If you need a longer mounting pole to clear obstructions at your site, you can use a metal pipe with an adapter.

Assembly

- Following the directions on the can of PVC cement**, glue the 6" pipes into the opposing arms of the "T" fitting.
- Glue the elbows on the 6" pipes. As you slide each elbow on, press the assembly flat against a table top to assure that the elbow and the "T" fitting are in line. It is very important that the elbows not be twisted out of line with the "T" fitting. **Caution: PVC cement sets very quickly.**
- Glue the 5" anemometer and wind vane vertical pipes to the elbows. The anemometer pipe is included with this kit. The wind vane pipe (drilled for the potentiometer mounting bracket) comes with the wind vane

kit. Do **not** glue the anemometer and wind vane stationary caps to the vertical pipes! These are to be a press-fit so that you will have access into these instruments should repair be necessary.

- Run the anemometer and wind vane cable through the "T" fitting and out the anemometer vertical pipe (the pipe without the holes for the potentiometer mounting bracket). There is a 3" section of the cable that has the silver jacket stripped from the wire. Separate the white and black wires from the the others, and cut these two wires at the end of the stripped section away from the wind "T". This leaves the white and black wires connected to the long section of cable, going back to the meteorological station. The magnetic switch in the anemometer will connect to the white and black wires.
- Leaving the stripped section of wire exposed, route the remaining length of cable back through the wind "T" and out the other arm. The wind vane potentiometer will connect to this end of the cable.
- Slip a #8 internal tooth lock washer on the 2-1/2" long #8-32 machine screw, and thread the screw through the hole in the "T", about 3/4 of the length of the screw. Make a small loop in the cable and secure the loop with the nylon cable tie. Slip the loop over the #8-32 machine screw, and thread it the remaining distance through the "T". This provides strain relief for the cable. Slip another lock washer on and thread on a #8-32 hex nut. Tighten securely.

Install the wind instruments on the "T" following the instructions enclosed with each.

Installation

The wind instruments must obviously be located away from obstructions that would block the wind. One set of these instruments was installed at the top of an eighty foot tall Douglas Fir tree! But it is not usually necessary to go to that extreme. Mounted on a six foot post away from trees and buildings in a field, or on a three foot pole strapped to a chimney may work well in your location. If you are not comfortable working on your roof, you might call in a local contractor who installs and services TV antennas.

If you live in an area where lightning or strong electrical activity in the atmosphere is common, site your wind "T" conservatively. Don't make it the best target around. And for best protection, unplug your wind instruments before the electrical activity comes near. ■

WIND "T"

