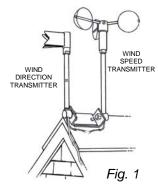
Installing the Cape Cod® Wind Direction Indicator

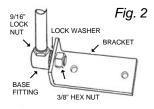
PLEASE READ CAREFULLY BEFORE STARTING INSTALLATION. Anyone with a ladder and a few hand tools can easily do the job in an hour or two. If you prefer not to install the instrument yourself, a handyman or electrician can do it for you. Regardless of who does the installation, *the owner should become familiar with these instructions*. Incorrect installation or misuse will shorten the life of the product, impair its performance, and void the warranty.

The *Cape Cod* [®] **Wind Direction Indicator** consists of a small transmitter outdoors connected by a cable to the indicator dial indoors. The wind direction is indicated by the illumination of compass points on the dial. The instrument uses 1/12th of a watt of 110 volt A.C. household power through the special plug provided.



Install this instrument and the *Cape Cod* ® Wind Speed Indicator at the same time, if you have both, to take advantage of several simplifications in the combined installation (Fig. 1).

- 1. Place the L-shaped mounting bracket on the transmitter base fitting, between the 3/8" hex nut and the lock washer (Fig. 2).
- 2. Using the lag screws, mount the transmitter on *top* of the ridge (not on the rake board) on the highest roof peak, a couple of inches in from the end, where a free flow of wind will be obtained from all directions (Fig. 3). The mounting bracket can be adjusted to accommodate any roof pitch. The 1" lag screws provided are for



wooden ridge boards; longer 2"x½' lag screws are needed for asphalt shingle ridge caps. (The mounting bracket can be superimposed over that of the wind **speed** indicator, aligning the two lag screw holes, for a simpler and more compact roof installation; Fig. 1.) The transmitter can be mounted on a chimney, if necessary, using lead screw anchors.

<u>Do not mount the wind direction transmitter on a TV antenna or pipe mast</u>: vibration of the mast interferes with the transmitter's operation and reduces its life expectancy.

With a small spirit level, adjust the mounting fittings so that the transmitter is vertical, then securely tighten the 3/8" hex nut. The transmitter *must* be vertical for proper operation. Loosen the thin 9/16" lock nut at the bottom of the pipe and rotate the pipe until the "X" mark on it faces exactly north, then gently retighten the lock nut (Fig. 3).

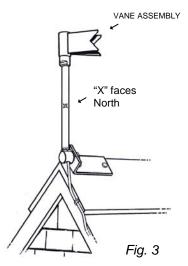
(The twisted pair of gray wires exposed at the base of the direction transmitter are spares that can be used to wire the wind **speed** indicator, to save running a separate lead-in wire.)

<u>Always keep the transmitter upright</u>, with its vane assembly in place, when out in the weather to prevent water from entering the switching mechanism.

3. Run the 50' coil of cable down the trim of the building to the point on the outside wall opposite the indoor location chosen for the dial, being sure to staple the cable down every foot or so using the insulated staples provided. Where stapling is not feasible, such as over metal or masonry, anchor the cable with dabs of silicone rubber.

<u>Anchor the cable well!</u> If it can flex or chafe, it will fail; properly secured, it will last a lifetime.

This special 11-conductor, color-coded, combination cable is not sold by stores. Additional lengths can be obtained from the manufactory (address below) for 36ϕ per foot, plus shipping (and the 5% sales tax in Massachusetts). Splice on the extra cable with solder and tape, matching color to color, and staple it down carefully, using insulated staples.



- 4. Drill a ¼" hole in the wall, from indoors out, slanting downward, directly behind the proposed dial location. Bring the cable indoors through the hole and connect each colored wire to the corresponding color-coded terminal clip on the back of the dial. (*Note: The wind direction circuit uses only 9 of the 11 wires in the cable. The twisted pair of gray wires is not needed for the wind direction indicator; it is a spare pair that can be used to wire the Cape Cod ® Wind Speed Indicator, if desired.)* Excess cable can be left within the wall, or cut off and saved.
- 5. The power supply connection can be made in one of two different ways ("A" or "B" below), depending on the distance to an available outlet and the ease of concealing the power wires. The Black wire in the 11-conductor cable is the "common" wire: power is brought into the circuit from the special plug, through the attached 2-conductor power cord, into the black wire.

<u>CAUTION</u>: <u>Use only the SPECIAL PLUG provided</u> (it contains current-limiting resistors) to avoid an overload and serious damage to the instrument.

- A. If there is an outlet near the dial and the power cord can be concealed in the wall, fish the power cord inside the wall from the outlet to the hole behind the dial. Strip ½" of insulation from the two power cord wires and connect them as directed on the back of the dial. Insert the special plug into the outlet. In method A, the "*BLACK*" terminal clip holds two wires: the Black and one of the gray power leads from the plug.
- B. If there is no outlet near the dial, or if it would be difficult to conceal the power cord in the wall, locate another indoor outlet that is near any point along the 11-conductor cable coming down from the roof (e.g., in the attic). (The power cord can be lengthened, if necessary, by splicing on a piece of lamp cord or similar wire.) Run the power cord from the outlet to the nearest point on the cable, indoors or out. At that point, carefully slit the gray jacket of the cable lengthwise with a razor knife, and separate the Black wire from the cable. Cut the Black wire, creating two Black wire ends. Strip ¹/₄" of insulation off each of these two Black ends and from the ends of the two gray power cord wires. With solder and tape, splice one of the Black ends to either power cord wire, and the other Black end to the other power cord wire. At the back of the dial, *remove the Black wire from the "BLACK" terminal and connect it to the "POWER" terminal instead.* Insert the special plug into the outlet. In method B, the "*BLACK*" terminal clip is *not* used.
- 6. Behind the dial, push any extra cable back into the wall and fasten the dial to the wall with the 3 brass wood screws. For sheet rock and plaster walls use small wall anchors available from your local hardware store. Outdoors, staple down any slack in the cable. Form a small "drip loop" in the cable by running it down an inch or two below the hole before it enters the wall. Seal the hole outside with silicone rubber or caulking compound.

This instrument requires **no** lubrication or other maintenance. If repair or replacement parts are ever needed, mail the part of the instrument requiring attention, accompanied by your correspondence, to the manufactory at the address below (do not return to the dealer). Include your street address for prompt return by U.P.S.

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