



PA-351 Active Antenna

Includes Probe and Control unit

INSTRUCTIONS

3-30 MHz ACTIVE ANTENNA

Palomar Engineers Model PA-351 active antenna is in two parts: 1) The probe and 2) The control unit. A 10 m (30 ft) coaxial cable is supplied to connect the two parts. Also supplied is a short cable to connect the control unit to the radio.

A source of 15-v DC is required to power the system. Palomar model PS-90 adapter can be used to operate the antenna from 115-v AC.

INSTALLATION

For best results the probe should be mounted outside the building away from sources of man-made electrical noise. Most buildings have, in their walls, power wires that may radiate noise. There may be wire mesh or other building materials that reduce or block radio waves. Thus it is usually very helpful to place the probe outside these walls. The probe is very small and often can be placed so it is not noticeable. This allows it to be used even where outside antennas are not allowed.

If the probe cannot be placed outside, it can be used as an indoor active antenna. In a metal building placement at a window gives best signal strength. In wood frame buildings placing the probe near the receiver is acceptable. The control unit should be at the receiver.

A mounting bracket for outdoor mounting of the probe is supplied. This should be placed around the probe body. Use screws or bolts to hold the probe snugly to the mounting surface.

After positioning the probe and the control unit connect them together with the 30 ft. coaxial cable. Any excess cable can be coiled and placed out of the way. Additional lengths of cable can be added if it is desired to locate the probe further away from the control box. The antenna will operate perfectly with cable lengths up to 80 m (250 ft).

Next connect the short cable from the control box RECEIVER terminal to the radio. The center wire goes to the radio's antenna terminal; the other wire to the ground terminal.

15-v DC must be applied to the control unit's rear panel socket. The mating connector is supplied. The center terminal is + and the shell is -. The supply need not be regulated; current drain is about 30 ma. The Palomar PS-90 AC adapter can be plugged into the socket to work the antenna from 115-v AC.

OPERATION

To turn on the antenna push the front panel switch. The LED lamp should light. The signal level from the antenna will be about the same as from a 30 m (100 ft) longwire. Some stations will be louder, some weaker, depending on the polarity of the received wave.

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