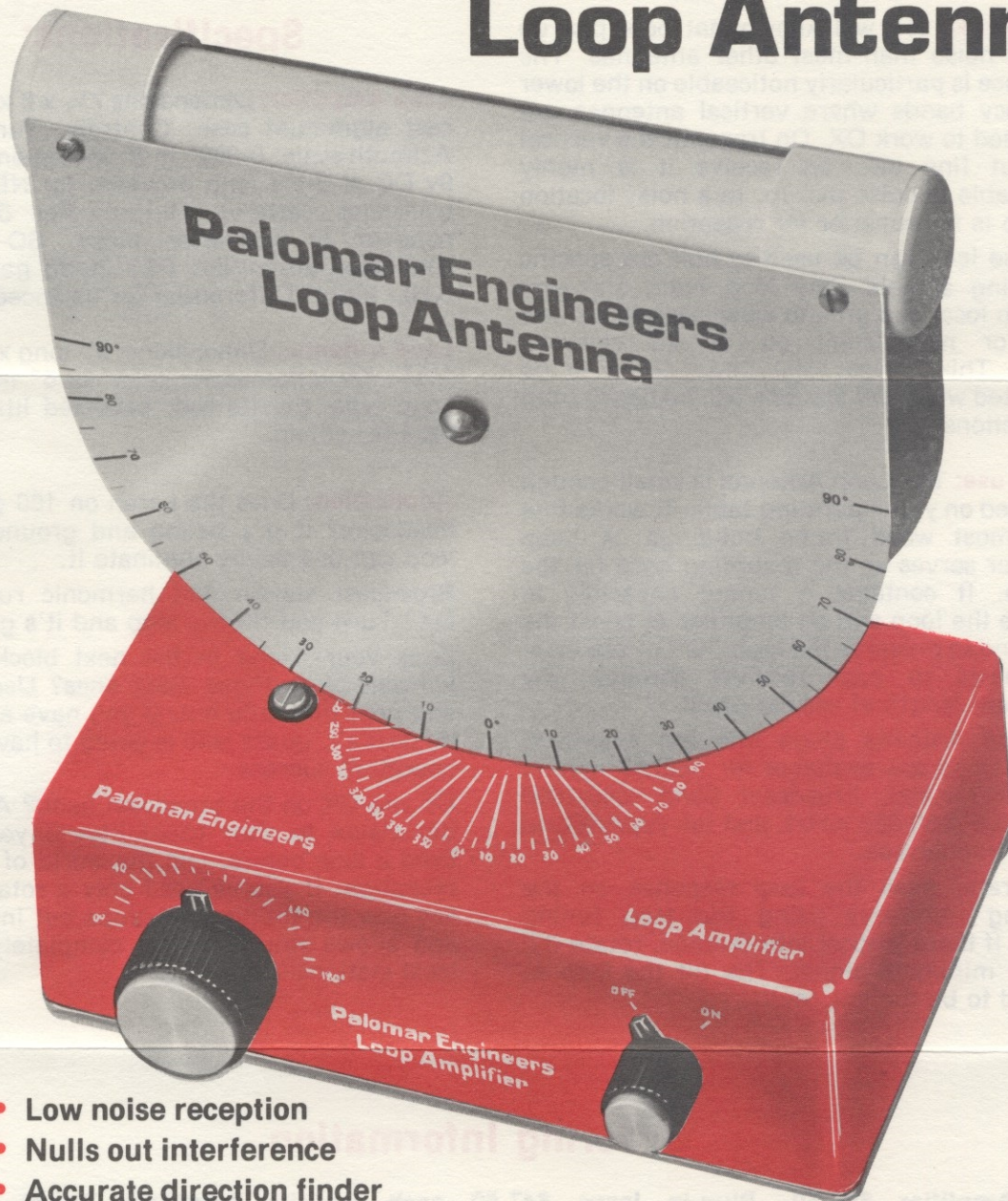


# Palomar Engineers

## Loop Antenna



- Low noise reception
- Nulls out interference
- Accurate direction finder
- Rotates 360° in azimuth. Tilts  $\pm 90^\circ$  in elevation.
- Superb nulls
- Loop amplifier connects to your receiver or to your VLF converter.
- Plug-in loops available for:
  - 1600-5000 KHz [160/80 meter amateur bands]
  - 550-1600 KHz [Broadcast Band]
  - 150-550 KHz [VLF, 1750 meter band]
  - 40-150 KHz [WWVB, Loran]
  - 10-40 KHz [Omega]

New! 5-15 MHz Loop  
Antenna (Model HF-1)

# LOOP ANTENNA

## Operational Features

**How it works:** It is well known that loops pick up far less noise than most other antennas. The difference is particularly noticeable on the lower frequency bands where vertical antennas are often used to work DX. On transmit the vertical gets out fine but, on receive it is highly susceptible to noise pickup. In a noisy location the loop is far superior for reception.

Also, the loop can be used to null out specific interfering signals. The loop nulls are very sharp on local and ground wave signals but are broad or nonexistent on distant skywave signals. This allows local interference to be eliminated while DX stations can be heard from all directions.

**Easy to use:** The Loop Antenna is small enough to be used on your operating table. It works fine inside most wood frame buildings. A Loop Amplifier serves as the mounting base for the antenna. It contains a tuning capacitor to resonate the loop and an amplifier to boost the signal and to preserve the high "Q" of the loop. It connects to your receiver through any convenient length of coaxial cable.

The Loop Antenna plugs into the amplifier. Plug-in loops are available for 160/80 meters (1600-5000 KHz), broadcast band (550-1600 KHz), VLF (150-550 KHz), and for WWVB and Omega frequencies.

To operate, peak the loop response on the operating frequency using the loop tuning control. If there is local interference, rotate the loop for minimum signal. The tilt the loop as required to be the best null.

## Specifications:

**Loop Amplifier:** Dimensions 7¼ x 6 x 2¼". Die cast aluminum case. Controls: Tune, on-off. Azimuth scale: 0-360° in 5° increments. Power: 9v DC at 3-ma (clip provided for NEDA 1603 transistor battery). Output: For 50-75 ohm receiver or converter input. SO-239 UHF connector. Amplifier: FET 20-db gain 10-5000 KHz. Input: Differential for balanced loop.

**Loop Antenna:** Dimensions: 8' long x 6' high x 1½". Elevation scale: ±90° in 5° increments. Loop type: Ferrite rod, balanced litz winding, Faraday shield.

**Application.** Does the Loran on 160 give you a headache? If it's strong and groundwave the loop can practically eliminate it.

Broadcast station 2nd harmonic ruining your DX? Turn and tilt the loop and it's gone.

Does your friend in the next block with his kilowatt block those weak ones? Use the loop and hear him fade out. If you have a loop, and he doesn't, guess who is going to have the best operating success.

Do you DX on the broadcast band? Add a new dimension to your capability. If you haven't used a loop before, join the world of low noise reception. If you've used only a rotating loop, see how the tilting loop drops out interference and allows you to almost completely null out local stations.

## Ordering Information

Loop Amplifier \$67.50, Plug-in loops \$47.50 each [specify frequency band]. Add \$3 shipping/handling in U.S. and Canada. California residents add sales tax

ORDER YOURS NOW!

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