MIPRO Wireless

ANTENNA DIVIDER SYSTEM

AD-20 VHF Antenna Divider System for VHF Receivers

The **AD-20** is a professional **VHF Antenna Divider System** designed to allow up to four VHF diversity receivers to operate from a single pair of antennas, greatly reducing antenna clutter in multi-system installations. When combined with an **AD-20A Extension Antenna Kit** and an **AD-20B Antenna Booster**, the AD-20 Antenna Divider provides optimal signal reception with minimal dropouts or interference.

The **AD-20** features the latest in low noise and wide dynamic range components, plus advanced circuitry designed to eliminate the spurious interference found in multiple system usage. System output gain for the AD-20 is equal to 1. The antenna-input connector can be installed directly to the interior antenna or connected to an optional AD-20A extension antenna. The input antenna connector provides power for an optional AD-20B antenna booster.

The **AD-20B** kit consists of a pair of receiving signal boosters operating between 160~250MHz which offer 11dB of gain to compensate for antenna cable loss or for when extra range is required. They will noticeably improve the S/N ratio, increasing the operating range and stability of received signals.

The **AD-20A** utilizes a 1/4-wavelength single pole ground-plane antenna optimized for the 160~250MHz frequency band. It will perform uniformly throughout the receiving band without modifying the antenna length and reflects side-band signals similar to a band-pass filter. The antenna impedance is 50 Ω and can be matched with any 50 Ω coaxial antenna cable. The ground-plane antenna allows stable reception without spurious emissions. The AD-20A kit contains 2 antennas and a pair of MS10 antenna mounts for securing the AD-20A to a wall or ceiling.

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AD-20 Specifications:

- Frequency Range: VHF 160~250 MHz ± 3dB
- Third Order Intercept: + 35.5dB
- Noise Figure: 6 dB (center band)
- Input/Output Gain: +1dB (center band)
- Output Port Isolation: 16dB minimum
- Connector: TNC type female
- Power Supply: DC 12~18V
- Current Drain: 148 mA
- Dimensions: 19” (482mm) L x 7.5” (190mm) W x 1.7” (44mm) H
- Weight: 4.9 lbs. (2.2 kg)

AD-20A Specifications:

- Band Width (-3dB): 160~250MHz
- Impedance: 50Ω
- Connector: TNC plug male
- Dimensions: 28” (710mm) L x 22” (560mm) diameter

AD-20B Specifications:

- Band Width: VHF 160~250MHz
- Maximum Input Level: < +20dB
- Noise Figure: < 2.2dB (band center)
- Gain: +11dB (band center)
- Input VSWR: ≤ 1.6
- Output VSWR: ≤ 1.5
- Power Supply: 12V DC, regulated
- Current Drain: 80mA
- Dimensions: 3.9” (100mm) L x 1.1” (28mm) diameter
- Weight: 3.9 oz (110g)