# WA-AMP2

Wideband Antenna Amplifier for Wireless Systems

Order # 712.035



Front View

## **FEATURES**

- Input/output BNC socket
- · Power on LED
- Adjustable amplification (5, 10, 15 dB)
- Supply via antenna cable or external power supply unit
- Compatible with all receivers and antenna splitters with a supply voltage of 8 - 9 V DC
- Alternative: external power supply (12 V, 350 mA)
- Power supply at the input for the operation with active antennas

Frequency response. . . . . . . . . . . . 470 – 1,000 MHz

- Simple mounting to microphone stands via integrated threaded adapters (3/8" or 5/8")
- Alternative: Mounting via two holes (ø 4 mm)

## **TECHNICAL SPECIFICATIONS**

RF connection. Input/output BNC socket Wave impedance.  $50~\Omega$  Input Intercept Point third order (IIP3). 22~dBm Amplification switchable in 3 stages. 5~dB, +10~dB, +15~dB Supply via antenna cable. 8~9 V DC, 75~mA Supply via external power supply unit 12~V DC, 350~mA Operating temperature range. 0~°C to +45~°C Dimensions (H x W x D). 108~x 98 x 30 mm Weight. 160~g

### **OPTIONAL ACCESSORIES**

WA-PSU 12/1 Power supply unit 12 V/1 A,

100 - 230 V, 50/60 Hz. . . . . Order # 712.051 TNC-BNC Adapter. . . . . . . Order # 475.203

### **APPLICATIONS**

The WA-AMP2 is an RF amplifier that compensates signal loss in the antenna cable. The amplifier operates in the UHF range between 470 and 1,000 MHz and can be used with all wireless systems with an antenna voltage of 8 - 9 V such as the TG 1000 beyerdynamic series. It is connected via BNC sockets.

At the antenna input the WA-AMP2 also supplies a supply voltage of 8 V DC to power active antennas or for a series connection of several WA-AMP2. The WA-AMP2 has an internal current limitation of 150 mA. It is to be noted that the total sum of power consumption of the WA-AMP2 of approx. 75 mA and the externally supplied devices does not exceed the limit of the supplying unit (receiver or antenna splitter).

As an alternative the WA-AMP2 can be supplied via an external power supply unit (not included in the delivery). In this way the maximum current of 150 mA for additional devices can be achieved in any case. In this case it is not necessary that the connected receiver/antenna splitter provides supply voltage.

In practice the WA-AMP2 amplifier is positioned as close as possible to the antenna. The setting of the amplification should be selected according to the type and length of the applied antenna cable. Only the minimum required amplification should be applied so that the receiver input is not overloaded.

When using one of beyerdynamic's recommended Aircell 7 antenna cable, we recommend the following values:

Amplification	Cable length
5 dB	up to 25 m
10 dB	up to 50 m
15 dB	up to 75 m

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