

Antenna Combiner



Features

- **Broadband UHF operation (440-865 MHz range)**
- **Combines the signals of up to four wireless in-ear monitor transmitters into one antenna**
- **Centralized power supply with ability to power four individual transmitters**
- **Maintains clean signals with low distortion**
- **Includes hardware for front-mounting the antenna for improved performance**
- **Includes adapters to allow the unit to be mounted into a single rack space**

Description

The Audio-Technica MCB4 Antenna Combiner allows the signals of up to four M3 Wireless In-Ear Monitor stereo transmitters to be combined onto a single transmitting antenna, reducing rack clutter.

A wide-band unit that operates over the 440–865 MHz range, the MCB4 is designed to complement Audio-Technica M3 Wireless In-Ear Monitor Systems. It is also suitable for many other in-ear wireless systems (with external BNC antenna connections) operating within the 440 to 865 MHz range.

The MCB4 provides one output and four isolated transmitter inputs. All RF connectors are BNC-type.

Four jacks on the rear panel (controlled by the unit's power switch) provide 12V DC (center positive) to power as many as four transmitters operating on 12 volts at up to 600 mA each. Included with the unit are four DC cables appropriate for use with M3T (or like-powered) transmitters. The 12-volt supplies for powering transmitters are short-circuit protected.

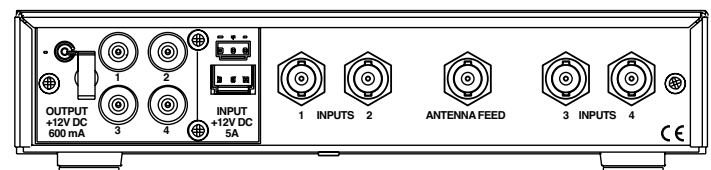
The unit features all-metal construction for extreme durability and protection from radio frequency interference. Occupying one vertical space, the half-rack sized unit offers flexibility in sharing rack space with another MCB4 unit (with use of Audio-Technica AT8630 Joining-plate Kit), or front mount antenna connection using the included rack ears and hardware which permit attachment in a standard 19" audio equipment rack. The antenna may be mounted on the front of the long rack ear.

Architect's and Engineer's Specifications

The Audio-Technica MCB4 Antenna Combiner shall be designed to allow the signals of up to four Wireless In-Ear Monitor stereo transmitters to be combined onto a single transmitting antenna. The unit shall operate over the 440–865 MHz range, and shall be designed to complement Audio-Technica M3 Wireless In-Ear Monitor Systems. It shall also be suitable for many other in-ear wireless systems (with external BNC antenna connections) operating within the 440 to 865 MHz range.

The unit shall provide one output and four isolated transmitter inputs. All RF connectors shall be BNC-type. Four jacks on the rear panel shall provide 12V DC to power as many as four transmitters operating on 12 volts at up to 600 mA each. Included with the unit shall be four DC cables appropriate for use with M3T (or like-powered) transmitters. The 12-volt supplies for powering transmitters shall be short-circuit protected. The unit shall feature all-metal construction for extreme durability and protection from radio frequency interference.

The Audio-Technica MCB4 is specified.



Specifications

Bandwidth	440–865 MHz
VSWR	< 1.7:1 (within specified bandwidth)
System Gain (per channel)	0 dB typical (within specified bandwidth)
Impedance	50 ohms typical (within specified bandwidth)
Termination type	BNC Female (5 total)
Maximum RF Input Power	+20 dBm or 100 mW
Third Order Intercept Point	Greater than 25 dBm
Power supply	Desktop switching power supply rated at 5A @ 12V DC or 60 Watts. Input Voltage 100-240V AC via detachable IEC 320/C14 cable. Output is provided on an over-molded 3-pin Molex-style termination
Dimensions (Base unit only)	210.0 mm (8.27") W x 46 mm (1.80") H x 176.0 mm (6.93") D (one rack space)
Weight	1.0 kg (2.2 lbs.)
Accessories included	IEC 320/C14 power cable (for power supply); 5–22" RF (BNC to BNC) cables; 4-DC power cables; Rack kit for front-mounting antennas and adaptation to a 19" rack

In the interest of standards development, A.T.U.S. offers full details on its test methods to other industry professionals on request.

Specifications are subject to change without notice.



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