

Midnight Blues[®]

MB1000L MB1000H Neodymium Dynamic Cardioid Microphones



Description

The MB1000 is a wide-range moving coil dynamic mic with a cardioid pickup pattern. It features a high-output neodymium magnet for maximum performance with all equipment.

The MB1000 is designed specifically for close-up vocal and instrumental use. A special internal shock mount system minimizes handling and case noise. The microphone also features the MagnaLock™ on/off switch for silent operation. The switch may be locked in the "on" position to prevent accidental turn-off during use.

The cardioid pickup pattern of the MB1000 is useful in reducing unwanted background noise and controlling feedback, especially when used extremely close. Miking instruments or vocalists at very close range also effectively reduces "leakage" from one performer to the next. Low-frequency noise is also reduced by a low-frequency roll-off of sounds more than one foot distant from the microphone.

The high-output neodymium design and low-mass diaphragm and voice coil assure excellent signal-to-noise ratios with microphone mixers, tape recorders, and other electronic inputs. The MB1000 is capable of undistorted output even in very intense sound fields.

Enclosed in a rugged die-cast housing, the MB1000 features a special, baked-on "Midnight Blues" finish. In addition to being attractive and comfortable to hold, this special finish further reduces handling noise and increases durability.

A multi-stage windscreen reduces wind noise and "popping" when performers work extremely close. The included microphone clamp permits mounting on any microphone stand with 5/8"-27 threads.

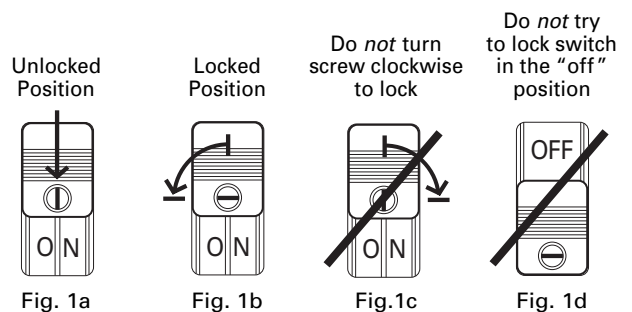
Operation and Maintenance

The MB1000 is available in low- and high-impedance versions. In both versions, the 3-pin microphone output connector mates with XLR-type cable connectors.

In the low-impedance MB1000L, the Lo-Z balanced signal appears across Pins 2 and 3, while the ground (shield) connection is Pin 1. Output is phased so that positive acoustic pressure produces positive voltage at Pin 2 in accordance with industry convention.

In the high-impedance MB1000H, the Hi-Z unbalanced output requires the use of a cable with XLR-type to 1/4" phone plug connectors. Pin 2 connection is to the 1/4" phone plug tip, and Pins 3 and 1 connect to ground. As with all high-impedance microphones, the use of cables longer than 20' is not recommended, since the added cable capacitance will create unacceptable high frequency losses and greater possibility of hum and noise pickup.

These Midnight Blues microphones utilize a MagnaLock on/off switch. This specially-designed switch operates silently and may be locked in the "on" position to prevent accidental turn-off during use. To lock, slide the switch up into the "on" position (Fig. 1a). Using a small flathead screwdriver, rotate the small screw in the center of the switch 90 degrees (1/4 turn) *counter-clockwise* (Fig. 1b). *Never force the screw.* When the screw slot position is horizontal ("across" the microphone body), the switch is locked. To unlock the switch, turn the screw 90 degrees *clockwise* until the screw slot position is again vertical (in line with the microphone body). *Never try to turn the switch more than 90 degrees or 1/4 rotation.* The switch may only be locked in the "on" position. Do not try to turn the screw when the switch is in the "off" position.



While every effort has been made to provide an extremely rugged microphone, reasonable care should be taken to avoid abuse. The microphone can withstand a wide range of temperatures and humidity without damage. Take care to keep foreign particles from entering the windscreen. If the microphone is exposed to an environment with small iron or steel filings (on a workbench, for example) these fine metal particles can accumulate on the diaphragm, reducing low-frequency response. Excessive accumulation of dirt on the windscreen will reduce high-frequency response.

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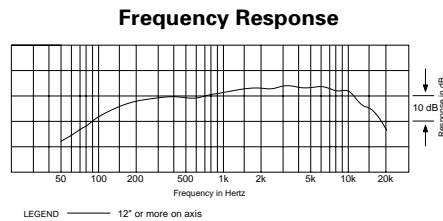
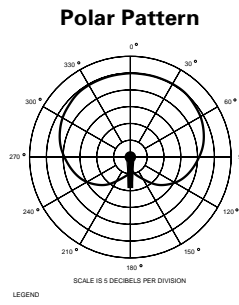
MB1000L MB1000H

SPECIFICATIONS[†]

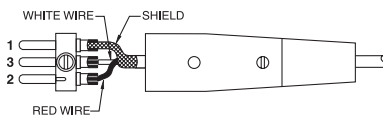
Element	Neodymium Dynamic
Polar Pattern	Cardioid (Unidirectional)
Frequency Response	70-15,000 Hz
Open Circuit Sensitivity	MB1000L: 3.5 mV (-49 dBV) at 1 Pa* MB1000H: 12.5 mV (-38 dBV) at 1 Pa*
Impedance	MB1000L: 500 ohms (Lo-Z) MB1000H: 10,000 ohms (Hi-Z)
Switch	MagnaLock™ on/off
Weight (less clamp)	MB1000L: 9.3 oz (264 grams) MB1000H: 9.6 oz (272 grams)
Dimensions	6.75" (171.5 mm) long, 2.16" (54.9 mm) head diameter, 1.38" to .87" (35.0 mm to 22.0 mm) tapered body diameter
Output Connector	Integral 3-pin XLRM-type
Accessory Furnished	Tapered slip-in stand clamp for 5/8"-27 threaded stands

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

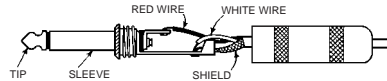
* 1 Pascal = 10 dynes/cm² = 10 microbars = 94 dB SPL



XLRM-type Plug Wiring Lo-Z Balanced



1/4" Phone Plug Wiring Lo-Z and Hi-Z Unbalanced



OPTIONAL ACCESSORIES

MBC15H 15' 2-conductor, shielded, vinyl-jacketed cable with XLRF-type connector at microphone end, 1/4" phone plug at equipment end.

MBC15L 15' 2-conductor, shielded, vinyl-jacketed cable with XLRF-type connector at microphone end, XLRM-type connector at equipment end.

AT8114 foam windscreen (slip-on).

CP8201 line matching transformer (Lo-Z to 50,000 ohms).

AT8202 adjustable in-line attenuator for use with balanced Lo-Z microphones.

AT8312 2-conductor, shielded, vinyl-jacketed, broadcast-type cable with XLRF-type connector at microphone end, 1/4" phone plug at equipment end. Available in 10', 20' & 25' lengths.

AT8314 2-conductor, shielded, vinyl-jacketed, broadcast-type cable with XLRF-type connector at microphone end, XLRM-type connector at equipment end. Available in 10', 20', 25', 30', 50' & 100' lengths.

AT8407 universal "clothes-pin" clamp fits both tapered and cylindrical microphones.

AT8410a shock mount for boom or stand operation. Universal "clothes-pin" clamp fits tapered and cylindrical microphones.

AT8415 low-profile shock mount for boom or stand operation.

One-Year Limited Warranty

Audio-Technica microphones and accessories purchased in the U.S.A. are warranted for one year from date of purchase by Audio-Technica U.S., Inc. (A.T.U.S.) to be free of defects in materials and workmanship. In event of such defect, product will be repaired promptly without charge or, at our option, replaced with a new product of equal or superior value if delivered to A.T.U.S. or an authorized service center prepaid, together with the sales slip or other proof of purchase date. **Prior approval from A.T.U.S. is required for return.** This warranty excludes defects due to normal wear, abuse, shipping damage, or failure to use product in accordance with instructions. This warranty is void in the event of unauthorized repair or modification.

For return approval and shipping information, contact the Service Department, Audio-Technica U.S., Inc., 1221 Commerce Drive, Stow, Ohio 44224.

Except to the extent precluded by applicable state law, **A.T.U.S. will have no liability for any consequential, incidental, or special damages; any warranty of merchantability or fitness for particular purpose expires when this warranty expires.**

This warranty gives you specific legal rights, and you may have other rights which vary from state to state.

Outside the U.S.A., please contact your local dealer for warranty details.



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