

# Midnight Blues<sup>®</sup>

## MB3000L Neodymium Dynamic Cardioid Microphone



### Description

The MB3000L 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 MB3000L is specifically designed for use in high-quality recording and sound reinforcement applications to meet the needs of professional musicians and sound engineers. Extended frequency response, high sensitivity and extremely fast transient response meet the demands of high-quality vocal and instrumental pickup.

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 MB3000L 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 MB3000L is capable of undistorted output even in very intense sound fields.

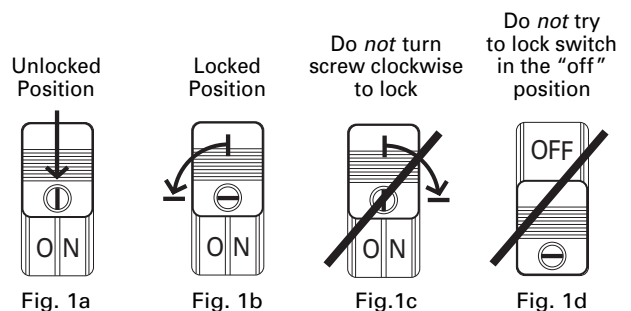
Enclosed in a rugged die-cast housing, the MB3000L features a special, baked-on "Midnight Blues" finish. In addition to being attractive and comfortable to hold, this special finish further reduces handling noise and increases durability.

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  $\frac{5}{8}$ "-27 threads. A foam-lined carrying case is provided to protect the microphone during transport and storage.

### Operation and Maintenance

Output of the MB3000L is low impedance balanced. The professional 3-pin microphone output connector mates with XLRF-type cable connectors. The 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.

The MB3000L utilizes 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 flat-head screwdriver, rotate the small screw in the center of the switch 90 degrees ( $\frac{1}{4}$  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  $\frac{1}{4}$  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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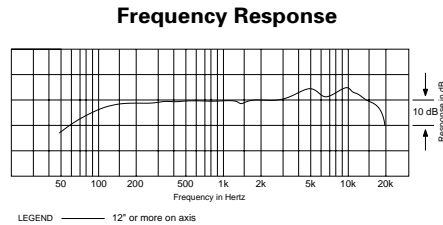
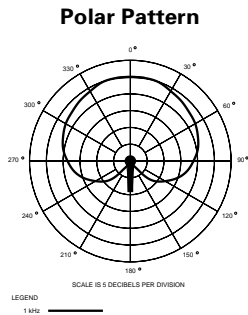
## MB3000L

### SPECIFICATIONS†

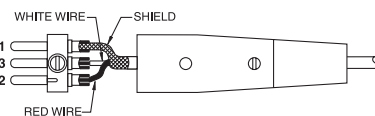
<b>Element</b>	Neodymium Dynamic
<b>Polar Pattern</b>	Cardioid (Unidirectional)
<b>Frequency Response</b>	50-16,000 Hz
<b>Open Circuit Sensitivity</b>	2.5 mV (-52 dBV) at 1 Pa*
<b>Impedance</b>	250 ohms
<b>Switch</b>	MagnaLock™ on/off
<b>Weight (less clamp)</b>	12.0 oz (340 grams)
<b>Dimensions</b>	7.10" (180.3 mm) long, 2.16" (54.9 mm) head diameter, 1.38" to .87" (35.0 mm to 22.0 mm) tapered body diameter
<b>Output Connector</b>	Integral 3-pin XLRM-type
<b>Accessories Furnished</b>	Tapered slip-in stand clamp for 5/8"-27 threaded stands; protective foam carrying case

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

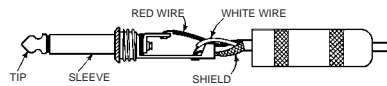
\* 1 Pascal = 10 dynes/cm<sup>2</sup> = 10 microbars = 94 dB SPL



### XLRM-type Plug Wiring Low Impedance Balanced



### 1/4" Phone Plug Wiring Low Impedance 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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