

PRO 1a

CARDIOID MOVING COIL DYNAMIC MICROPHONE

Pro Series

M I C R O P H O N E S



Description

The Audio-Technica Model PRO 1a is a moving coil dynamic microphone designed specifically for close-up vocal and instrumental use. Despite its modest cost, the PRO 1a offers unusually smooth response and uniform off-axis rejection of unwanted sound from its cardioid (unidirectional) pickup pattern. Extra care in design and construction ensures dependable long life and consistent high quality. The PRO 1a features an unbalanced (single conductor plus shield) universal impedance output for direct plug-in to most amplifiers and mixers.

The cardioid pickup pattern of the PRO 1a 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.

When used close-up, as designed, bass response of the PRO 1a increases because of proximity effect. This characteristic adds a mellow sound to both voice and instruments. The low frequency response of the PRO 1a has been carefully selected to provide the ideal range of proximity effect when used at close range by vocalists.

The relatively high sensitivity of the PRO 1a is the result of a low-mass diaphragm and voice coil assembly operating in a high efficiency

magnetic circuit. This assures excellent signal-to-noise ratios with microphone mixers, tape recorders, and other inputs. The PRO 1a is capable of undistorted output even in rather intense sound fields. In some cases, however, an attenuator may be required between the microphone and the amplifier input to avoid overloading sensitive input stages.

The Model PRO 1a is enclosed in a rugged body with a low-reflectance matte finish. A 2-stage ball-type screen reduces wind noise and "popping" when performers work extremely close. The microphone is also equipped with a slip-in microphone clamp. An on-off switch is also provided. The shielded, single-conductor cable is permanently attached to the microphone and a standard $\frac{1}{4}$ " phone plug with built-in strain relief is included.

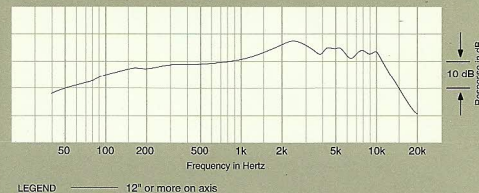
Operation and Maintenance

The output of the Audio-Technica PRO 1a is 8,000 ohms unbalanced. The standard $\frac{1}{4}$ " phone plug is designed to plug directly into the microphone input of any mixer, amplifier or other electronic device.

If a replacement plug is necessary, note that the outer shield should be attached to the sleeve portion of the plug, while the inner conductor goes to the tip of the connector (see wiring diagram on the other side). In agreement with industry standard practice, positive air pressure on the diaphragm produces a positive voltage at the plug tip.

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. Care should be observed to keep foreign particles from entering the windscreen. If exposed to an environment with small iron or steel fillings (on a workbench, for example) these fine metal particles can accumulate on the diaphragm and reduce low frequency response. Excessive accumulation of dirt on the windscreen will reduce high frequency response.

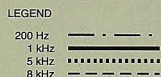
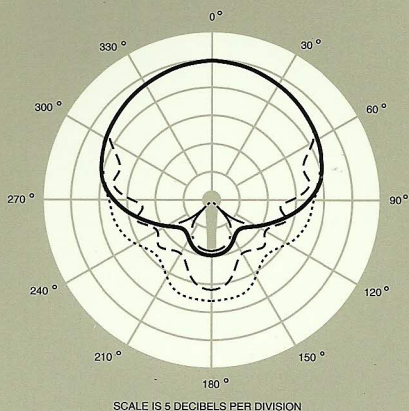
Frequency Response



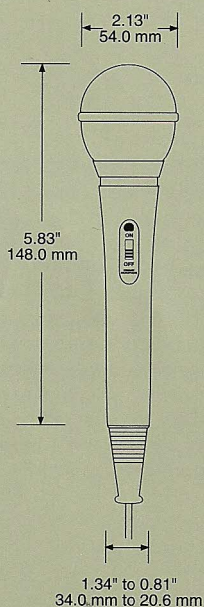
audio-technica®

PRO 1a

Polar Pattern



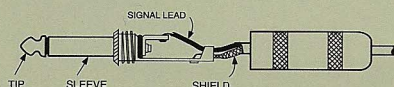
Dimensions



PRO 1a SPECIFICATIONS†

Element	Moving Coil Dynamic
Polar Pattern	Cardioid (Unidirectional)
Frequency Response	80-12,000 Hz
Open Circuit Sensitivity	-44 dB (6.3 mV) re 1V at 1 Pa*
Impedance	8,000 ohms
Weight (without cable)	5.1 oz (145 grams)
Dimensions	5.83" (148.0 mm) long, 2.13" (54.0 mm) head diameter 1.34" to 0.81" (34.0 mm to 20.6 mm) tapered body diameter
Cable	16.5' (5 m) single-conductor, shielded, vinyl-jacketed, with 1/4" phone plug on output end
Accessories Furnished	Slip-in clamp

1/4" Phone Plug Wiring



† 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

Optional Accessories:

Model AT8114 foam windscreen (slip-on).

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

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

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.



AUDIO-TECHNICA U.S., INC., 1221 Commerce Drive, Stow, Ohio 44224

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