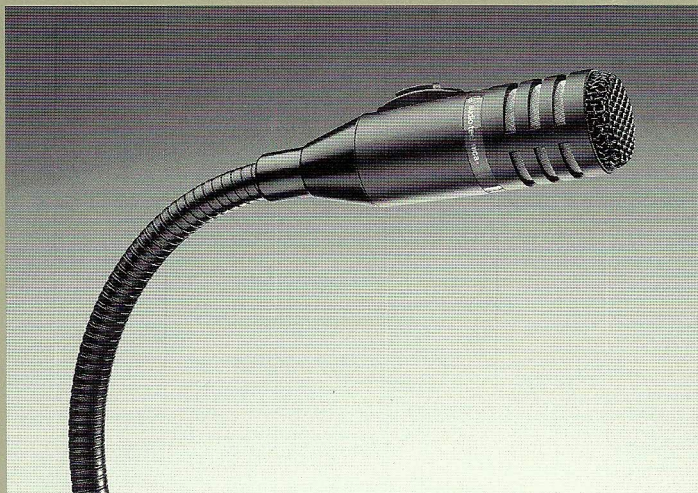


# PRO 11

## UNIDIRECTIONAL DYNAMIC CONSOLE MICROPHONE

# Pro Series

M I C R O P H O N E S



### Description

The PRO 11 is a moving coil dynamic microphone with a unidirectional polar pattern. Designed for use as a quality talk-back microphone, it provides excellent intelligibility and dependable performance in entertainment, commercial and industrial voice applications. The PRO 11 features a conveniently-located on/off switch, balanced low-impedance output, and an integral 3-pin professional connector that plugs directly into a panel jack or microphone cable.

The unidirectional polar pattern of the PRO 11 is more sensitive to sound originating directly in front of the element than to sounds coming from the sides or rear. Unidirectional microphones are useful in controlling feedback and reducing pickup of unwanted sounds such as audience or machine noise, excess reverberation, etc. They also allow greater microphone-to-user distance with equal noise, compared to an omnidirectional microphone.

The PRO 11 is enclosed in a rugged housing with a low-reflectance finish. A protective screen reduces wind noise and "popping" when users work extremely close, while internal construction reduces handling and shock noise.

### Operation and Maintenance

Output is low impedance balanced. The XLRM-type output connector mates with XLRF-type panel jacks. 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 PRO 11 can also be used with professional microphone cables. For balanced low-impedance inputs, AT8314 cable (or equal) is recommended. An accompanying drawing shows the wiring used at the equipment end of this cable.

For unbalanced low-impedance inputs, AT8312 cable (or equal) is recommended. A 1/4" phone plug is wired to the equipment end of the AT8312 cable.

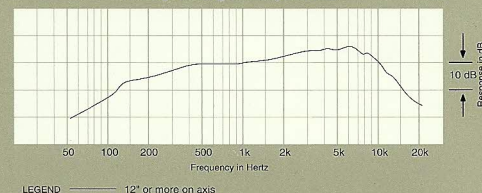
For a high-impedance input, use AT8314 cable (or equal). Plug this cable into a CP8201 line matching transformer which has an integral 1/4" phone plug for connecting directly to the Hi-Z amplifier input. Locating the transformer at the equipment input minimizes pickup of noise and hum, typical problems experienced with long high-impedance lines. Use of the CP8305 Hi-Z transformer cable is also recommended.

The flexible gooseneck is easy to manipulate for proper positioning. Heavily lubricated, it operates smoothly and quietly. Should the unit become noisy with prolonged use, apply a light machine oil directly on the gooseneck area affected.

The relatively high sensitivity of the PRO 11 assures useful output and an excellent match to most mixer, tape recorder and amplifier inputs. It will provide undistorted output even in intense sound fields. In some cases, however, an attenuator such as the Audio-Technica AT8202 may be required between the microphone and preamplifier to avoid overloading sensitive input stages.

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.

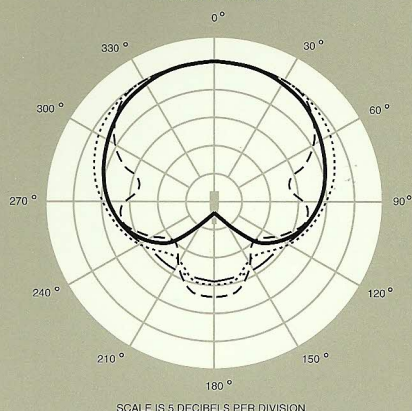
Frequency Response





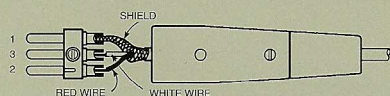
# PRO 11

Polar Pattern

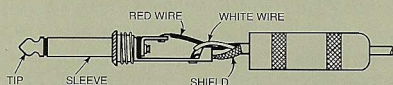


LEGEND  
200 Hz ———  
1 kHz - - - - -  
5 kHz .....  
8 kHz - . - . -

**XLRM-Type Plug Wiring  
Low Impedance Balanced**



**1/4" Phone Plug Wiring  
Low Impedance Unbalanced**



## PRO 11 SPECIFICATIONS†

Element .....	Dynamic
Polar Pattern .....	Unidirectional
Frequency Response .....	150-13,000 Hz
Open Circuit Sensitivity .....	-55 dB (1.7 mV) re 1V at 1 Pa*
Impedance .....	500 ohms
Switch .....	Press on/press off
Weight .....	9.9 oz (280 grams)
Dimensions .....	17.52" (445.0 mm) long, 1.14" (29.0 mm) head diameter, 0.75" (19.0 mm) base diameter
Output Connector .....	Integral 3-pin XLRM-type

† 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

## Optional Accessories:

AT8136 large foam windscreen.

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

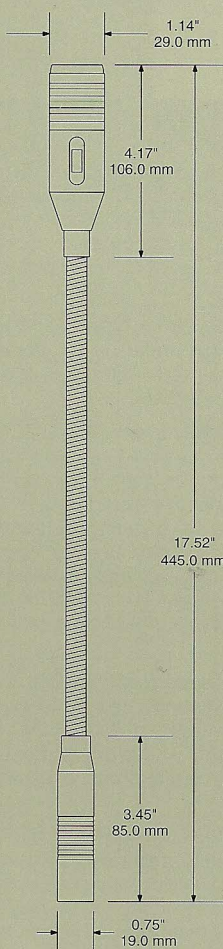
AT8202 adjustable in-line attenuator for use with balanced Lo-Z microphones.

CP8305 16.5' (5 m) 2-conductor, shielded, vinyl-jacketed, broadcast-type cable with XLRF-type connector at microphone end and Lo- to Hi-Z transformer with 1/4" phone plug at output end.

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.

Dimensions



## 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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