U853PMU/U853PMWU *UNILINE™ CONDENSER HANGING MICROPHONES*

unipoint®

- Designed for suspension over choirs, instrumental groups and theater stages
- Wall/ceiling plate power module permits permanent installation in standard metal U.S. single gang electrical box
- UniLine™ polar pattern provides narrow 90° acceptance angle
- Superior off-axis rejection for maximum gain before feedback
- UniGuard™ RFI-shielding technology offers outstanding rejection of radio frequency interference (RFI)
- UniSteep® filter provides a steep low-frequency attenuation to improve sound pickup without affecting voice quality
- Accepts interchangeable elements to permit angle of acceptance from 90° to 360°
- Low-profile design with low-reflectance finish for minimum visibility
- Available in two colors: black (U853PMU) and white (U853PMWU)

The U853PMU requires 11V to 52V phantom power for operation.

A uniform 90° angle of acceptance provides well-balanced audio pickup over a narrow area. The microphone should be located forward of the front-most source, above the rear-most source, and "aimed" between them (Fig.1). Increasing the height of the mic above the sources will tend to equalize sound levels between them, but may also increase background/reverberant sound pickup. When possible, the distance from the mic to the rear-most source should be no more than twice the distance to the front source, to maintain front-to-rear balance (Fig. 1).

Width of pickup is approximately 1.5 times the distance to the closest performer. If additional mics are needed for wide sources, they should be positioned apart laterally at least 1.5 times the distance to the front source, to avoid phase cancellation (Fig. 2).

To orient the microphone in the proper direction, twist the housing slightly in its wire holder. (Clockwise rotation moves the microphone to the right; counterclockwise rotation moves it to the left.)

The wall/ceiling plate power module comes supplied with a TB3M-type connector in place. Plug the microphone cable's TA3F connector into the wall/ceiling plate power module's TB3M-type connector. The power module features a white-finished standard electrical cover plate for easy, secure installation.

The AT8534 wall/ceiling plate power module is designed to be mounted in a standard metal U.S. single-gang electrical box. For safety and best performance, use the electrical box ***only*** for the AT8534; do not include any AC power conductors. (Also route the mic cable as far away from AC power cables as possible.)

NOTE: Audio-Technica has developed a special RFI-shielding mechanism, which is an integral part of the connectors in the UniPoint line. If you remove or replace the connector, you may adversely affect the unit's RFI immunity.

However, if you must change cable length, replace the TB3M-type connector on the wall/ceiling plate power module with the provided strain relief. Feed the small cable from the mic through the strain relief on the power module plate. Tie a loose knot in the cable at the desired length and push it down gently into the recess in the back of the strain relief to secure the microphone. Cut excess cable, strip the mic cable wires (Fig. 3) and attach them to their respective input terminals (Fig. 4).

Screw-terminal output connections of the AT8534 are the same as those of an XLR-type plug: shield to Terminal 1, balanced single and phantom power to Terminals 2 and 3. Output is phased so that positive acoustic pressure produces positive voltage at Terminal 2, in accordance with industry convention. ***Do not connect the output cable shield to the box.*** Double-check to make certain that all input and output leads have no bare wires or loose strands that could touch each other, the circuit board or the electrical box. Then attach the power module plate to the electrical box.

An integral 80 Hz high-pass UniSteep® filter provides easy switching from a flat frequency response to a low-end roll-off (switch located on circuit board). The roll-off position reduces the pickup of low-frequency ambient noise (such as traffic, air-handling systems, etc.), room reverberation and mechanically coupled vibrations.

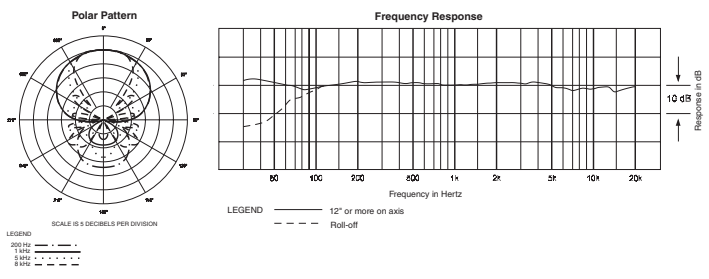
A 10 dB gain switch is provided for situations that demand extra sensitive pickup. The +10 position increases the microphone's overall output by 10 dB.

Avoid leaving the microphone in the open sun or in areas where temperatures exceed 110° F (43° C) for extended periods. Extremely high humidity should also be avoided.

U853PMU/U853PMWU SPECIFICATIONS†

ELEMENT	Fixed-charge back plate permanently polarized condenser
POLAR PATTERN	Line Cardioid
FREQUENCY RESPONSE	30-20,000 Hz
LOW FREQUENCY ROLL-OFF	80 Hz, 18 dB/octave
OPEN CIRCUIT SENSITIVITY	–35 dB (17.7 mV) re 1V at 1 Pa*
IMPEDANCE	200 ohms
MAXIMUM INPUT SOUND LEVEL	124 dB SPL, 1 kHz at 1% T.H.D.
DYNAMIC RANGE (typical)	102 dB, 1 kHz at Max SPL
SIGNAL-TO-NOISE RATIO[1]	72 dB, 1 kHz at 1 Pa*
PHANTOM POWER REQUIREMENTS	11-52V DC, 4 mA typical
SWITCHES	Flat, roll-off; 0 dB/+10 dB gain setting
WEIGHT	
MICROPHONE	1.1 oz (30 g)
POWER MODULE	3.4 oz (97 g)
DIMENSIONS	
MICROPHONE	6.14" (156.0 mm) long, 0.48" (12.2 mm) diameter
POWER MODULE	2.80" (71.0 mm) W x 4.55" (115.5 mm) H x 1.42" (36.0 mm) D
OUTPUT CONNECTOR (power module)	Screw terminals
CABLE	25' (7.6 m) long (permanently attached to microphone), 0.13" (3.2 mm) diameter, 2-conductor, shielded cable with TA3F-type connector
OPTIONAL INTERCHANGEABLE ELEMENTS	UE-C cardioid (120°); UE-H hypercardioid (100°); UE-O omnidirectional (360°)
ACCESSORIES FURNISHED	
U853PMU	AT8154 two-stage foam windscreen; AT8451 steel hanger
U853PMWU	AT8154(WH) two-stage foam windscreen; AT8451(WH) steel hanger
BOTH	AT8534 wall/ceiling plate power module; AT8438 5/8"-27 stand adapter

†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^2 = 10 microbars = 94 dB SPL
1 Typical, A-weighted, using Audio Precision System One.
Specifications are subject to change without notice.



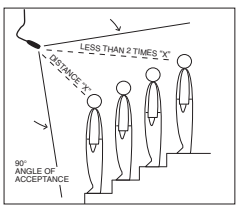


Figure 1

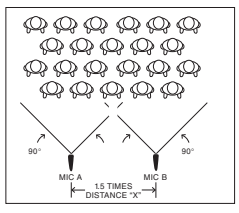


Figure 2

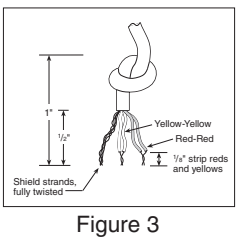


Figure 3

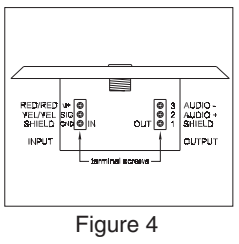


Figure 4

audio-technica®

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