U851RO

Omnidirectional Condenser Boundary Microphone

audio-technica

unipoint[®] microphones



Features

- PivotPoint[®] rotating output connector allows cable to exit from either the rear or the bottom of the microphone
- Small-diameter UniPoint omnidirectional capsule near boundary eliminates phase distortion and delivers clear, high-output performance
- Superior off-axis rejection for maximum gain before feedback
- UniGuard[®] RFI-shielding technology offers outstanding rejection of radio frequency interference (RFI)
- Self-contained electronics eliminate need for external power module
- UniSteep[®] filter provides a steep low-frequency attenuation to improve sound pickup without affecting voice quality
- Available interchangeable elements permit angle of acceptance from 100° to 360°
- Heavy die-cast case and non-slip silicon foam bottom pads minimize coupling of surface vibration to the microphone
- Low-profile design with low-reflectance finish for minimum visibility

U851RO Description

The U851RO is a wide-range condenser microphone with an omnidirectional polar pattern. It is designed for surface-mount applications such as high-quality sound reinforcement, conferencing, professional recording, television and other demanding sound pickup applications.

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

The microphone is equipped with UniGuard® RFI-shielding technology, which offers outstanding rejection of radio frequency interference (RFI).

The microphone's omnidirectional polar pattern provides a 360° angle of acceptance (omni in hemisphere above mounting surface). Additional interchangeable elements with cardioid (120°) and hypercardioid (100°) pickup patterns are available.

The microphone includes a 7.6 m (25') output cable terminating in special TA3F-type and XLRM-type connectors designed to optimize RFI immunity. The output of the microphone is a TB3M-type connector. The microphone is equipped with Audio-Technica's unique PivotPoint® rotating output connector.

A switch permits choice of flat response or low-frequency roll-off (via integral 80 Hz high-pass UniSteep® filter) to help control undesired ambient noise.

The microphone's heavy die-cast case and non-slip silicon foam bottom pads minimize coupling of surface vibration to the microphone. The microphone includes a soft protective pouch and features a lowreflectance black finish.

Installation and Operation

The U851RO requires 11V to 52V phantom power for operation.

Output is low impedance (Lo-Z) balanced. The signal appears across Pins 2 and 3; Pin 1 is ground (shield). Output phase is "Pin 2 hot"—positive acoustic pressure produces positive voltage at Pin 2.

The microphone should be placed on a flat, unobstructed mounting surface. The sound source should not be below the plane of the mounting surface.

An integral 80 Hz high-pass UniSteep® filter provides easy switching from a flat frequency response to a low-end roll-off. The roll-off position reduces the pickup of low-frequency ambient noise (such as traffic, airhandling systems, etc.), room reverberation and mechanically coupled vibrations. To engage the UniSteep® filter, slide the switch toward the "bent" line.

The microphone's PivotPoint[®] rotating output connector allows the cable to exit from either the rear or the bottom of the microphone without the need for tools or disassembly.

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.

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. Audio-Technica offers a crimp tool (ATCT) and RFI shields that enable you to shorten the cable and correctly reinstall the connector while maintaining the highest level of RFI immunity.

Note: Placing any object on a surface (such as a conference table) before its finish is fully cured may result in damage to the finish.

U851RO

To reduce the environmental impact of a multi-language printed document, product information is available online at www.audio-technica.com in a selection of languages.

Afin de réduire l'impact sur l'environnement de l'impression de plusieurs, les informations concernant les produits sont disponibles sur le site www.audio-technica.com dans une large sélection de langue.

Para reducir el impacto al medioambiente, y reducir la producción de documentos en varios leguajes, información de nuestros productos están disponibles en nuestra página del Internet: www.audio-technica.com.

Para reduzir o impacto ecológico de um documento impresso de várias linguas, a Audio-Technica providência as informações dos seus produtos em diversas linguas na www.audio-technica.com.

Per evitare l'impatto ambientale che la stampa di questo documento determinerebbe, le informazioni sui prodotti sono disponibili online in diverse lingue sul sito www.audio-technica.com.

Der Umwelt zuliebe finden Sie die Produktinformationen in deutscher Sprache und weiteren Sprachen auf unserer Homepage: www.audio-technica.com.

Om de gevolgen van een gedrukte meertalige handleiding op het milieu te verkleinen, is productinformatie in verschillende talen "on-line" beschikbaar op: www.audio-technica.com.

本公司基於環保理由將減少多語言文件印刷,陸續產品訊息可在www.audio-technica.com的官方網頁 上選擇語言與瀏灠。

本公司基于环保理由将减少多语言文件印刷,陆续产品信息可在www.audio-technica.com的官方网页 上选择语言与浏灠。

자원절약, 환경보호를 위해 국문 사용 설명서는 인쇄하지 않았습니다.

제품정보는 www.audio-technica.com 에서 원하는 언어 선택 후에 다운로드 받으실 수 있습니다.

Specifications	
Element	Fixed-charge back plate, permanently polarized condenser
Polar pattern	Omnidirectional in hemisphere above mounting surface
Frequency response	30-20,000 Hz
Low frequency roll-off	80 Hz, 18 dB/octave
Open circuit sensitivity	–31 dB (28.2 mV) re 1V at 1 Pa
Impedance	200 ohms
Maximum input sound level	132 dB SPL, 1 kHz at 1% T.H.D.
Dynamic range (typical)	111 dB, 1 kHz at Max SPL
Signal-to-noise ratio ¹	73 dB, 1 kHz at 1 Pa
Phantom power requirements	11-52V DC, 4 mA typical
Switch	Flat, roll-off
Weight	262 g (9.2 oz)
Dimensions	108.0 mm (4.25") maximum length, 84.0 mm (3.31") maximum width, 23.0 mm (0.91") maximum height
Output connector	TB3M-type
Cable	7.6 m (25.0') long, 3.2 mm (0.13") diameter, 2-conductor, shielded cable with TA3F-type and XLRM-type connectors
Optional interchangeable elements	UE-C cardioid (120°) UE-H hypercardioid (100°)
A	Cafe anatastica ascel

Accessory furnished Soft protective pouch

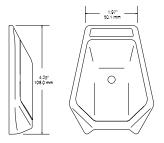
In the interest of standards development, A.T.U.S. offers full details on its test methods to other industry professionals on request.

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

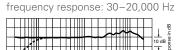
¹ Typical, A-weighted, using Audio Precision System One.

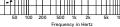
Specifications are subject to change without notice.



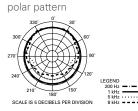








LEGEND 12" or more Roll-off





Audio-Technica U.S., Inc., 1221 Commerce Drive, Stow, Ohio 44224 Audio-Technica Limited, Old Lane, Leeds LS11 8AG England ©2010 Audio-Technica U.S., Inc. audio-technica.com