

# U891Rx & U891RWx

 audio-technica

Cardioid Condenser Boundary Microphones with Switch

uniPoint® microphones



## Features

- **Activation switch can be set to any of three operating modes: “press-on/press-off,” “press-to-talk” and “press-to-mute”**
- **PivotPoint® rotating output connector allows cable to exit from either the rear or the bottom of the microphone**
- **Small-diameter UniPoint cardioid 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 silicone foam bottom pads minimize coupling of surface vibration to the microphone**
- **Low-profile design with low-reflectance finish for minimum visibility**
- **Available in two colors: black (U891Rx) and white (U891RWx)**

## Description

The U891Rx is a wide-range condenser microphone with a cardioid polar pattern. It is designed for surface-mount applications such as high-quality sound reinforcement, conferencing, professional recording, and other demanding sound pickup applications.

The microphone features an activation switch that can be set (via a switch on the bottom of the microphone) to any of three operating modes: “press-on/press-off,” “press-to-talk” and “press-to-mute.”

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 cardioid polar pattern provides a 120° angle of acceptance (cardioid in hemisphere above mounting surface). Additional interchangeable elements with omnidirectional (360°) 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.

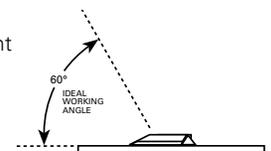
The microphone’s heavy die-cast case and non-slip silicone foam bottom pads minimize coupling of surface vibration to the microphone. The microphone includes a soft protective pouch and features a low-reflectance black finish. It is also available in white as the U891RWx.

## Installation and Operation

The U891Rx 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, with the front of the microphone facing the sound source. The sound source should not be below, or higher than 60° above, the plane of the mounting surface.



An activation switch on the microphone offers three choices of switching modes. The SW. FUNCTION switch located on the bottom of the microphone selects the desired mode. TOUCH ON/OFF: Press the on/off switch once to turn the microphone on; press again to turn off. MOM. ON (momentary on): Microphone is on only while the switch is being pressed (“press to talk”). MOM. OFF (momentary off): Microphone is off only while the switch is being pressed (“press to mute”). The red LED on the top of the unit indicates when the microphone is “on.”

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, air-handling 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.

# U891Rx & U891RWx

To reduce the environmental impact of a multi-language printed document, product information is available online at [www.audio-technica.com](http://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](http://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](http://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](http://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](http://www.audio-technica.com).

Der Umwelt zuliebe finden Sie die Produktinformationen in deutscher Sprache und weiteren Sprachen auf unserer Homepage: [www.audio-technica.com](http://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](http://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](http://www.audio-technica.com) 的官方網頁上選擇語言與瀏覽。

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](http://www.audio-technica.com) 的官方網頁上選擇語言與瀏覽。

자원절약, 환경보호를 위해 국문 사용 설명서는 인쇄하지 않았습니다. 제품정보는 [www.audio-technica.com](http://www.audio-technica.com) 에서 원하는 언어 선택 후에 다운로드 받으실 수 있습니다.

## Specifications

<b>Element</b>	Fixed-charge back plate, permanently polarized condenser
<b>Polar pattern</b>	Half-cardioid (cardioid in hemisphere above mounting surface)
<b>Frequency response</b>	30-20,000 Hz
<b>Low frequency roll-off</b>	80 Hz, 18 dB/octave
<b>Open circuit sensitivity</b>	-34 dB (19.9 mV) re 1V at 1 Pa
<b>Impedance</b>	200 ohms
<b>Maximum input sound level</b>	130 dB SPL, 1 kHz at 1% T.H.D.
<b>Dynamic range (typical)</b>	104 dB, 1 kHz at Max SPL
<b>Signal-to-noise ratio<sup>1</sup></b>	68 dB, 1 kHz at 1 Pa
<b>Phantom power requirements</b>	11-52V DC, 4 mA typical
<b>Switches</b>	Activation: on/off; Switch function: press on/off, momentary on, momentary off; Flat, roll-off
<b>Weight</b>	264 g (9.3 oz)
<b>Dimensions</b>	108.0 mm (4.25") maximum length, 84.0 mm (3.31") maximum width, 23.0 mm (0.91") maximum height
<b>Output connector</b>	TB3M-type
<b>Cable</b>	7.6 m (25.0') long, 3.2 mm (0.13") diameter, 2-conductor, shielded cable with TA3F-type and XLRM-type connectors
<b>Optional interchangeable elements</b>	UE-O omnidirectional (360°) UE-H hypercardioid (100°)
<b>Accessory furnished</b>	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.

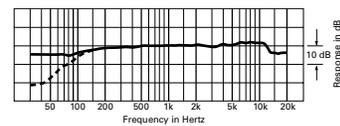
1 Pascal = 10 dynes/cm<sup>2</sup> = 10 microbars = 94 dB SPL

<sup>1</sup> Typical, A-weighted, using Audio Precision System One.

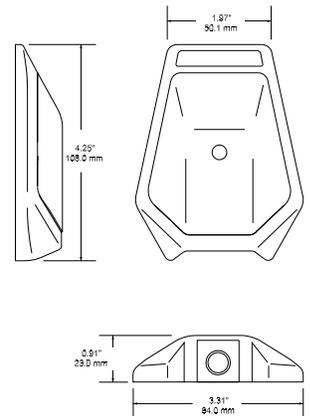
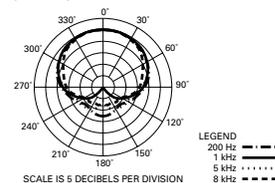
Specifications are subject to change without notice.



frequency response: 30–20,000 Hz



polar pattern



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](http://audio-technica.com)