



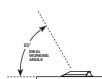
- Designed for surface-mount applications such as highquality sound reinforcement, conferencing, distance learning and other demanding sound pickup situations
- Ultra-quiet electronic switch can be set to any of three operating modes: "touch-on/touch-off," "touch-to-talk" and "touch-to-mute"
- External contact closure capability permits control of remote devices from microphone switch
- External LED control allows for accurate depiction of the live status of the microphone
- PivotPoint™ rotating output connector allows cable to exit from either the rear or the bottom of the microphone
- Small-diameter UniPoint capsule near boundary eliminates phase distortion and delivers clear, high-output performance
- UniGuard™ RFI-shielding technology offers outstanding rejection of radio frequency interference (RFI)
- 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 black finish for minimum visibility

The U891RC requires 11V to 52V phantom power for operation.

Supplied as a cardioid, the U891RC accepts interchangeable elements to permit selection of angle of acceptance from 100° to

The electronics in the microphone take up to 30 seconds to stabilize after power is applied; during this start-up period, some sonic disturbances may be heard upon switching if the system is "live."

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.



The U891RC features a touch-sensitive on/off switch, indicator LED and external contact closure ability for controlling remote devices. The touch switch can be configured for touch-on/touch-off, momentary on ("press to talk"), or momentary off ("press to mute"). Slide the switch marked "SW. FUNCTION" (located on

the bottom of the microphone) to the appropriate mode. The indicator LED and external contact closure follow the operation of the touch switch, when in the local mode.

For applications that require the microphone to remain active or always "on", regardless of the touch switch setting, a "Local/Remote/ LED Remote" control function is provided.

- When the switch marked "CONTROL" (located on the bottom of the microphone) is in the "Local" position, the touch switch controls the microphone's audio output, LED status and contact closure internally.
- When the "CONTROL" switch is in the "Remote" position, the microphone's audio output remains active or "on" all the time. The touch switch controls only the LED and contact closure.
- When the "CONTROL" switch is in the "LED remote" position, it allows remote control of the LED, for accurate depiction of the microphone's live status. The LED will remain "on" when driven logic high or open, and "off" when driven logic low or connected to ground. The microphone's audio output remains active or "on" all the time, and the contact closure follows the configuration of the touch switch

\*Refer to the table at the right for switch/LED/closure states.

Output is low impedance balanced. The signal appears across the red and yellow wires; audio ground is the shield connection. Output is phased so that positive acoustic pressure produces positive voltage on the yellow wire. The small-diameter black and blue wires are the contact closure. The white wire is the external LED control.

An integral 80 Hz high-pass 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

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.

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.

ELEMENT	Fixed-charge back plate permanently polarized condenser
POLAR PATTERN	Half-cardioid (cardioid in hemisphere above mounting surface)
FREQUENCY RESPONSE	30-20,000 Hz
LOW FREQUENCY ROLL-OFF	80 Hz, 18 dB/octave
OPEN CIRCUIT SENSITIVITY	-34 dB (19.9 mV) re 1V at 1 Pa*
IMPEDANCE	200 ohms
MAXIMUM INPUT SOUND LEVEL	130 dB SPL, 1 kHz at 1% T.H.D.
DYNAMIC RANGE (typical)	104 dB, 1 kHz at Max SPL
SIGNAL-TO-NOISE RATIO <sup>1</sup>	68 dB, 1 kHz at 1 Pa*
PHANTOM POWER REQUIREMENTS	11-52V DC, 4 mA typical
SWITCHES	Touch-sensitive control: on/off; Switch function: touch on/off, momentary on, momentary off; Control: local, remote, LED remote; Flat, roll-off
WEIGHT	9.4 oz (266 g)
DIMENSIONS	4.25" (108.0 mm) long, 3.31" (84.0 mm) maximum width, 0.91" (23.0 mm) height
OUTPUT CONNECTOR	TB5M-type
CABLE	25,0' (7.6 m) long, 0.13" (3.2 mm) diameter, 5-conductor shielded cable (2 conductors under shield; 3 control wires outside shield); TA5F-type connector at microphone end, output end stripped and tinned for connection to electronic device
OPTIONAL INTERCHANGEABLE ELEMENTS	UE-H hypercardioid (100°); UE-O omnidirectional (360°)
ACCESSORY FURNISHED	Soft protective pouch

†In the interest of standards development, A.T.U.S. offers full details on its test

Polar Pattern

					Response in dB
	50 100 2	00 500 1k	2k 5k	10k 20k	1
		Frequency in Hertz			
**	LEGEND 12" or	more on axis			
SCALE IS 5 DECIBELS PER DIVISION	Roll-of	f			
LEGEND					
200 Hz					

Frequency Response

SW Setting	Microphone Audio	LED	External Contact Closure
TOUCH ON/OFF	Follows touch- sensitive switch	Follows touch- sensitive switch	Follows touch- sensitive switch
MOM. ON	"On" when switch is pressed	"On" when switch is pressed	Closed when switch is pressed
MOM. OFF	"Off" when switch is pressed	"Off" when switch is pressed	Open when switch is pressed

CONTROL Switch in "Remote" Position				
SW Setting	Microphone Audio	LED	External Contact Closure	
TOUCH ON/OFF	Always "On"	Follows touch- sensitive switch	Follows touch- sensitive switch	
MOM. ON	Always "On"	"On" when switch is pressed	Closed when switch is pressed	
MOM. OFF	Always "On"	"Off" when switch	Open when switch	

SW Setting	Microphone Audio	LED	External Contact Closure
TOUCH ON/OFF	Always "On"	Remotely controlled	Follows touch- sensitive switch
MOM. ON	Always "On"	Remotely controlled	Closed when switch is pressed
MOM. OFF	Always "On"	Remotely controlled	Open when switch is pressed



methods to other industry professionals on request.

\*Typical, Pascal = 10 dynes/cm² = 10 microbars = 94 dB SPL

\*Typical, A-weighted, using Audio Precision System One.

Specifications are subject to change without notice.