

CARDIOID CONDENSER BOUNDARY MICROPHONE with Local or Remote Switching



ES961RC is a wide-range condenser microphone with cardioid polar pattern. It is designed for surface-mounted applications such as high-quality sound reinforcement, conferencing, professional recording, television and other demanding sound pickup situations.

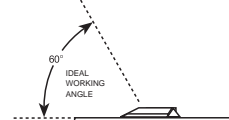
The microphone features an ultraquiet electronic touch switch, programmable external contact closure and LED indicator. The electronic touch switch can be set to any of three operating modes: "touch-on/touch-off," "touch-to-talk" and "touch-to-mute". The microphone's external contact closure capability permits control of remote devices. The contact closure can also be configured to operate independently of the microphone element for applications that require a constant signal from the element. A recessed switch on the bottom of the microphone allows selection of local or remote operation. (In remote operation, the LED and electronic touch switch operate independently of the microphone.) A third position on this switch enables the LED to be controlled from an external source.

The ES961RC is equipped with UniGuard® RFI-shielding technology, which offers outstanding rejection of radio frequency interference (RFI). The microphone is RoHS compliant – free from all substances specified in the EU directive on hazardous substances.

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

The ES961RC is supplied with a 7.6 m output cable terminating in TA5F-type at the microphone end. The equipment end is unterminated stripped and tinned pigtails. This allows the installer flexibility in interfacing with a variety of equipment. The microphone is equipped with Audio-Technica's unique PivotPoint® rotating output connector that allows the cable to exit from either the rear or the bottom of the microphone without the need for tools or disassembly.

The microphone can be powered from any 11V to 52V DC phantom power source. A recessed 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 ES961RC is equipped with a low-reflectance black finish.



The ES961RC 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.

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. To reduce the pickup of low frequency ambient noise, slide the "Low Cut" switch to toward the "bent" line.

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

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.

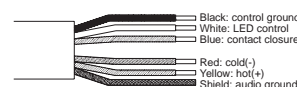
- When the switch marked "CONTROL" (located on the bottom of the microphone) is in the "Local" position, the touch switch controls the microphone's audio output, LED status and contact closure internally.
- When the "CONTROL" switch is in the "Remote" position, the microphone's audio output remains active 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 in the right side for switch/LED/closure states.

SPECIFICATIONS

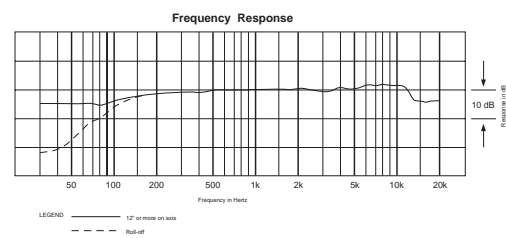
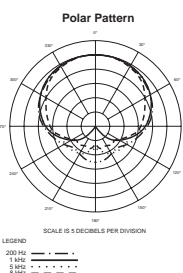
ELEMENT	Fixed-charge back plate permanently polarized condenser
POLAR PATTERN	Half-cardioid (cardioid in hemisphere above mounting surface)
FREQUENCY RESPONSE	30-20,000 Hz
LOW-FREQUENCY ROLL-OFF	80 Hz, 18 dB/octave
OPEN CIRCUIT SENSITIVITY	-34 dB (19.9 mV) re 1V at 1 Pa
IMPEDANCE	200 ohms
MAXIMUM INPUT 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	68 dB, 1 kHz at 1Pa
SWITCHES	Touch-sensitive control: on/off; Switch function: touch on/off, momentary on, momentary off; Control: local, remote, LED remote; Flat, roll-off
PHANTOM POWER REQUIREMENTS	11-52V DC, 3 mA typical
WEIGHT	266 g
DIMENSIONS	108.0 mm - long 84.0 mm - maximum width, 23.0 mm - height
OUTPUT CONNECTOR	TB5M-type
CABLE	7.6 m long, 3.2 mm diameter, 5-conductor, shielded cable with TA5F-type connector and stripped end
ACCESSORIES FURNISHED	Soft protective pouch
OPTIONAL INTERCHANGEABLE ELEMENTS	UE-O omnidirectional (360°) UE-H hypercardioid (100°)

Mic Output:



Optional Accessories:

AT8506 four-channel 48V phantom power supply (AC powered).
AT8668 quick-mount plug-in microphone desk stand.
AT8801/EU single-channel 48V phantom power supply (AC powered).



CONTROL Switch in "Local" Position

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 is pressed	Open when switch is pressed

CONTROL Switch in "LED Remote" Position

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

心形指向性平面会议话筒 带本地及遥控开关



ES961RC 是一枚阔频宽的电容式心形指向性平面话筒，设计于平面放置应用，提供高质量收音、会议、专业录音、电视广播等高要求的收音应用。

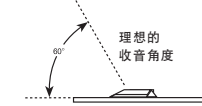
话筒提供超宁静的电子开关，可控制话筒收音的操作，并能以话筒开上的LED显示状态。可设定话筒的轻触式电子开关操作于三种模式：“反复按下开关”、“按下讲话”、“按下哑音”。电子开关亦可设定于连接外置器材，并能以话筒上的开关作遥距控制。LED显示灯亦可设定显示外置器材控制的实际收音状态。

ES961RC 配备有 UniGuard® - 射频干扰 (RFI)屏蔽技术，提供杰出的防止射频干扰能力，避免收音时受到如手提电话等的干扰。话筒亦符合RoHS规格，在构造上不含有欧盟禁用的危害性物质。

话筒的心形指向性提供120°的收音角度(平面上的心形半圆)，并可选配其他适合的收音头配合实际的应用，包括全指向性360°、超心形指向性100°。

ES961RC 提供有 7.6 m 长的 TA5F 端子连接线，另一端为空接线，可作长距离连接到其他器材上。而话筒并配置独有的PivotPoint® 转动式输出连接头，可因应需要把输出连接线设置为话筒背后或话筒底部输出。

内置的供电模组使用直流11V 至52V 幻象供电工作。而外壳底部的一个隐藏的小型开关 UniSteep®，可设定 80 Hz 高通滤波及平直响应。而以压铸铸造的坚固外壳及话筒底部的防滑砂泡棉，可减低桌面震动对话筒的影响，并涂上黑色不反光涂层。



话筒应放置在平面上，及没有阻碍物的环境使用。音源应在话筒的前方发声，理想的收音角度应在平面至60°高度之内。

低阻抗的平衡音频输出，音频信号以红色和和黄色的空接线输出，而光身屏蔽线则为地线(音频)连接。输出相位将以正相位电平设于黄色的空接线上。黑色和蓝色空接线为外接开关控制，而白色空接线为LED显示灯外接控制。

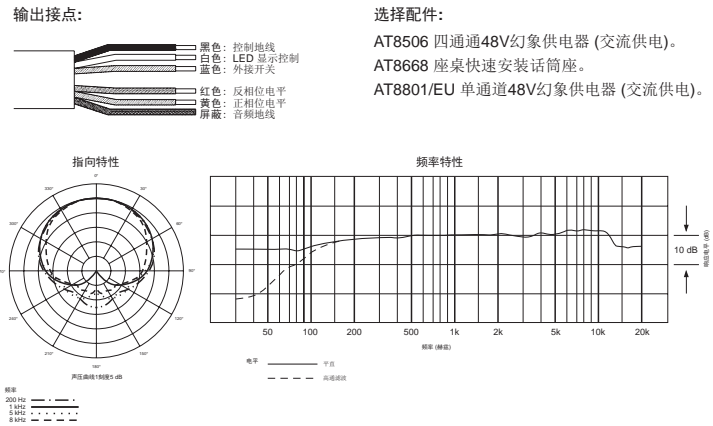
内置高质量高通滤波电路，可轻易由平直的频率响应，开启为于80 Hz以下衰减的收音效果，高通滤波器可减低话筒在近距离讲话收音时的喷气声，并可减低收音环境中低频噪声(如外间汽车引擎声，空调系统的风声等)，房间中的回声及机械性的震动声。

把话筒暴露于高温中可能导致输出电平逐渐及永久性减弱，应避免将话筒留在日晒的地方或长时间置于温度超过43°C的地方，而极高湿度也应避免。

ES961RC的遥距开关控制，可把轻触开关应用在外置遥控的其他器材，而话筒保持在开启状态。底部设有 "Local / Remote / LED Remote" 控制选择。

- 当控制选择设定在 "Local" 时，轻触开关同时控制话筒音频输出、LED显示灯及内部开关。
- 当控制选择设定在 "Remote" 时，话筒音频输出会保持在开启状态，轻触开关只同时控制LED显示灯及外接开关。
- 当控制选择设定在 "LED Remote" 时，话筒音频输出会保持在开启状态，轻触开关只控制外接开关。而LED显示灯则由外部所控制，输入高电位时将会亮起；输入低电位时则会熄灭。

技术指标	
收音头	固定充电背板，静电型电容式
指向特性	半心形单指向性
频率响应	30-20,000 Hz
高通滤波	80 Hz, 18 dB/octave
开通灵敏度	-34 dB (19.9 mV) 以 1V 于 1 Pa
输出阻抗	200 欧姆
最大承受声压	130 dB 声压, 1 kHz 于 1% T.H.D.
动态范围 (典型)	104 dB, 1 kHz 于最高声压
讯噪比	68 dB, 1 kHz 于 1Pa
开关	轻触开关，开关功能选择(反复按下开关、按下开关、按下哑音)，控制开关(本地、遥控、LED遥控)平直，高通滤波
幻象供电	直流 11-52V DC, 耗电 3 mA 典型
重量	266 克
外形尺寸	108.0 mm - 长, 84.0 mm - 最大宽度, 23.0 mm - 高
输出连接器	内置式TB5M卡农公头
连接线	7.6m 长, 3.2 mm 直径连接线, 5蕊线屏蔽电线, 以 TA5F 插头至连空接线口
附属品	软质保护袋
可转换收音头	UE-O 全方向指向 (360°) UE-H 超心形指向 (100°)



控制选择设于 "Local" 位置			
轻触开关功能	话筒音频输出	LED灯号	外接控制开关状态
TOUCH ON/OFF	跟随轻触按键反复开关	跟随轻触按键反复开关	跟随轻触按键反复开关
MOM. ON	按下时保持开启收音	按下时保持亮起	按下时保持导通
MOM. OFF	按下时保持关闭	按下时保持熄灭	按下时保持断路

控制选择设于 "Remote" 位置			
轻触开关功能	话筒音频输出	LED灯号	外接控制开关状态
TOUCH ON/OFF	保持开启收音	跟随轻触按键反复开关	跟随轻触按键反复开关
MOM. ON	保持开启收音	按下时保持亮起	按下时保持导通
MOM. OFF	保持开启收音	按下时保持熄灭	按下时保持断路

控制选择设于 "LED Remote" 位置			
轻触开关功能	话筒音频输出	LED灯号	外接控制开关状态
TOUCH ON/OFF	保持开启收音	由外部控制	跟随轻触按键反复开关
MOM. ON	保持开启收音	由外部控制	按下时保持导通
MOM. OFF	保持开启收音	由外部控制	按下时保持断路