



AT8657/LED Flush-mount Microphone Socket with LED Ring and Touch Switch



Features

- Flush-mount microphone socket for the ES945/ES947 or any phantom-powered gooseneck microphone with a 3-pin XLRM-type output and a base diameter no greater than 21 mm
- Mounts unobtrusively in tabletops
- Switch logic output permits control of remote devices from built-in capacitance switch
- Integral, phantom-powered, Green/Red LED indicator ring
- Operates on 24-48V DC phantom power
- 3-pin XLRF-type connector for microphone, 5-pin XLRM-type connector for output
- Lock tab in socket case automatically locks microphone in place, holding it there until tab is manually released by user
- Isolators provide mechanical dampening of mounting-surface vibration
- Low-profile design with low-reflectance black finish for minimum visibility

Description

The AT8657/LED flush-mount microphone socket features a capacitive-type touch-sensitive switch, Green/Red LED indicator ring, switch logic output for controlling remote devices and a lock tab to hold microphone in place. The socket is equipped with a three-pin XLRF-type in, and a five-pin XLRM-type output connector.

The AT8657/LED requires 24-48V DC phantom power for operation. The electronics in the socket 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 touch-sensitive switch can be used to trigger an external device.

The lock tab, located in the socket case, automatically engages when microphone is inserted, securely holding it in place until tab is manually released by user.

The output of the socket is a 5-pin XLRM-type connector.

Isolators are included with the unit for mechanical isolation from the mounting surface. A retaining ring is also included for use with gooseneck microphones. The socket is enclosed in a heavy-duty die-cast case. The low-profile housing has a low-reflectance black finish.

Installation and Operation

The AT8657/LED requires 24-48V DC 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. Switch logic output appears between pins 1 and 4. LED logic input appears between pins 1 and 5.

The microphone socket should be installed on a flat, unobstructed mounting surface.

The AT8657/LED should be mounted to a tabletop using the included isolators in order to dampen surface vibration. To mount the socket with the isolators, a 35 mm (1 3/8") hole is recommended. Place the isolators on either side of the hole to achieve mechanical isolation from the mounting surface.

Use the retaining ring to hold a gooseneck microphone securely in the socket. Insert the microphone and plug it into the three-pin XLRF-type input, then slip the rubber isolator and retaining ring over the microphone and screw it in place at the microphone's base using included screws. Note: The retaining ring and gooseneck isolator are used only with gooseneck microphones.

The AT8657/LED's capacitive-type touch-sensitive switch allows the user to trigger a function on an external device: Switch logic output is High (+5V DC) when pressed. Low (0V DC) when not pressed.

The LED indicator ring lights green when logic high (+5V DC) and red when logic low (0V DC).

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

Architect's and Engineer's Specifications

The unit shall be a flush-mount microphone socket for the ES945/ES947 or any phantom-powered gooseneck with a 3-pin XLRM-type output and a base diameter no greater than 21 mm. The socket housing shall incorporate a capacitive-type touch-sensitive switch with logic output. The socket shall be equipped with a Green/Red LED indicator ring. It shall operate from an external 24-48V DC phantom power source. The unit shall offer a 3-pin XLRF-type input connector and a 5-pin XLRM-type connector for audio and control function. The socket shall incorporate a lock tab, accessible through an opening in the socket case, that automatically locks the microphone in place upon insertion. The tab must be manually released in order to remove microphone from socket. The unit shall have a maximum width of 55.0 mm (2.17") and an overall length of 130.6 mm (5.14"). Weight of the socket, less microphone, shall be 165 g (5.8 oz).

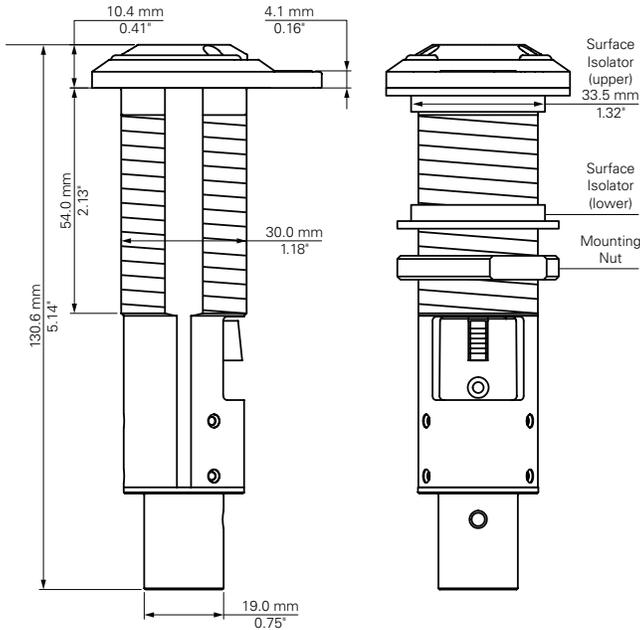
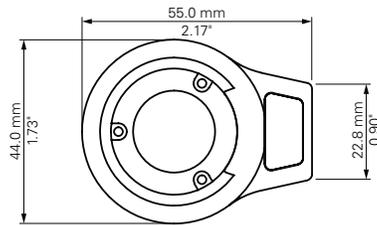
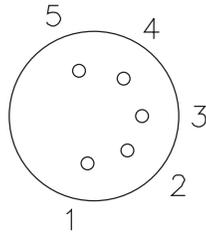
The socket shall include one pair surface isolators, a gooseneck retaining ring and isolator, mounting nut, and three screws. Finish shall be low-reflectance black.

The Audio-Technica AT8657/LED is specified.

AT8657/LED

Pin-out Configuration

| | Function |
|-------|--------------|
| Pin 1 | Ground |
| Pin 2 | Audio + |
| Pin 3 | Audio - |
| Pin 4 | Switch Logic |
| Pin 5 | LED Input |



Specifications

| | |
|----------------------------|---|
| Output Impedance | 360 Ohms |
| Switch Logic | High (+5V DC) when pressed; Low (0V DC) when not pressed |
| I/O Voltage | -0.5V to 5.5V |
| LED Input | Green when high (+5V DC), Red when low (0V DC), TTL compatible |
| Maximum Input Voltage | -0.5V to 5.5V |
| Phantom Power Requirements | 24-48V DC, 4 mA typical |
| Switches | Touch-sensitive control: momentary |
| Weight | 165 g (5.8 oz) |
| Dimensions | 130.64 mm (5.14") long, 55.0 mm (2.17") maximum width |
| Input connector | 3-pin XLR ^F -type |
| Output connector | 5-pin XLR ^M -type |
| Accessories furnished | One pair surface isolators; gooseneck retaining ring & isolator; mounting nut; screws (3) |

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.



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0001-0296-02