



- Offers the convenience of battery or phantom power operation
- Rugged design and construction for reliable performance
- UniSteep® filter provides a steep low-frequency attenuation to improve sound pickup without affecting voice quality

## Operation and Maintenance

The AT8531 requires 11V to 52V phantom power or a 1.5V AA battery for operation. A battery need not be in place for phantom power operation.

To install the battery, remove the cap from the top of the power module. Insert a fresh 1.5V AA battery (“+” end toward the cap release button), then reassemble the power module. For longest battery life, the switch should remain off except when the microphone is in use. Alkaline batteries are recommended for longest life. Remove the battery during long-term storage.

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.

To avoid phase cancellation and poor sound, all mic cables must be wired consistently: Pin 1-to-Pin 1, etc.

A 3-position switch in the power module permits choice of off, on/flat response, or on/low-roll-off (via integral 80 Hz high-pass UniSteep® filter). The roll-off position reduces the microphones sensitivity to popping in close vocal use. It also 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. To turn the microphone on without engaging the UniSteep® filter, slide the switch toward the flat line.

## Architect’s and Engineer’s Specifications

The microphone shall have a 1.8 m (6') permanently attached miniature cable terminating in a TA3F-type output connector. The output connector shall connect to a TB3M-type jack on the included power module. The power module shall house the battery, and shall contain a switch that permits choice of off, on/flat response or on/low-roll-off (80 Hz). The output of the power module shall be a 3-pin XLRM-type connector.

**Specifications**

<b>Low frequency roll-off</b>	80 Hz, 18 dB/octave
<b>Open circuit sensitivity</b>	Phantom: -44 dB (6.3 mV) re 1V at 1 Pa Battery: -46 dB (5.0 mV) re 1V at 1 Pa
<b>Impedance</b>	Phantom: 200 ohms Battery: 270 ohms
<b>Phantom power requirements</b>	11-52V DC, 2 mA typical
<b>Battery type</b>	1.5V AA/UM3
<b>Battery current / life</b>	0.4 mA / 1200 hours typical (alkaline)
<b>Switch</b>	Off, on-flat, on-roll-off
<b>Weight</b>	Power module: 139 g (4.9 oz)
<b>Dimensions</b>	Power module: 84.0 mm (3.31") H x 63.0 mm (2.48") W x 22.0 mm (0.87") D
<b>Output connector</b>	Power module: Integral 3-pin XLRM-type