

U853A & U853AW

Cardioid Condenser Hanging Microphones

unipoint® microphones



Features

- Offers the convenience of battery or phantom power operation
- Uniform cardioid polar pattern with 120° acceptance angle
- Low-profile design with low-reflectance finish for minimum visibility
- Superior off-axis rejection for maximum gain before feedback
- UniGuard® RFI-shielding technology offers outstanding rejection of radio frequency interference (RFI)
- UniSteep® filter provides a steep low-frequency attenuation to minimize pickup of undesired ambient noise
- Available interchangeable elements permit angle of acceptance from 90° to 360°
- Steel hanger positions microphone over choirs, instrumental groups and theater stages
- Available in two colors: black (U853A) and white (U853AW)

Description

The U853A is a wide-range miniature condenser microphone with a cardioid polar pattern. It is designed for quality sound reinforcement, professional recording, television and other demanding sound pickup applications. The combination of small size and excellent response makes the microphone ideal for suspension over choirs, instrumental groups or theater stages.

The microphone 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.

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. Additional interchangeable elements with omnidirectional (360°), hypercardioid (100°) and UniLine® (90°) pickup patterns are available.

The microphone includes a 7.6 m (25') permanently attached miniature cable. Its free end connects to the provided AT8531 power module via a special TA3F-type connector designed to optimize RFI immunity. The output of the power module is a 3-pin XLRM-type connector.

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 pickup of low-frequency ambient noise.

The microphone comes equipped with a power module, a vinyl-coated steel hanger for positioning over a choir/orchestra/stage, a two-stage

foam windscreen, a $\frac{5}{8}$ "-27 stand adapter and a battery. The microphone is enclosed in a rugged housing with a low-reflectance black finish. It is also available with white housing, cable, hanger and windscreen as the U853AW.

Installation and Operation

The U853A 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.

A uniform 120° angle of acceptance provides well-balanced audio pickup. The microphone should be located forward of the front-most source, above the rear-most source, and "aimed" between them (Fig. 1). Increasing the height of the mic above the sources will tend to equalize sound levels between them, but may also increase background/reverberant sound pickup. When possible, the distance from the mic to the rear-most source should be no more than twice the distance to the front source, to maintain front-to-rear balance (Fig. 1).

Width of pickup is approximately three times the distance to the closest performer. If additional mics are needed for wide sources, they should be positioned apart laterally at least three times the distance to the front source, to avoid phase cancellation (Fig. 2).

To orient the microphone in the proper direction, twist the housing slightly in its wire holder. (Clockwise rotation moves the microphone to the right; counterclockwise rotation moves it to the left.)

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 provided two-stage foam windscreen simply slips over the head of the microphone, effectively reducing noise from wind or ventilation air currents.

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 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.

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.

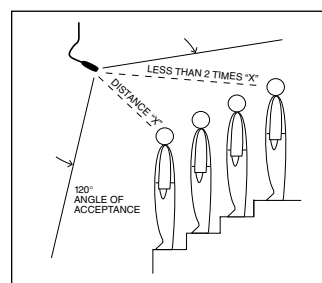


Figure 1

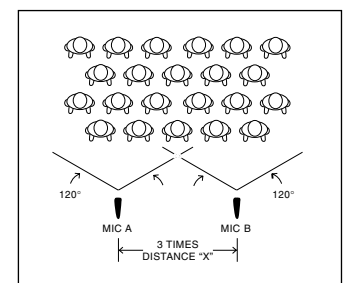


Figure 2

