

Frequency-agile UHF Large-diaphragm Cardioid Condenser Handheld Transmitter



Features

- Artist Elite® AE5400 large diaphragm cardioid condenser capsule with integral shock mount
- 996 selectable frequencies in either the 541.500–566.375 MHz or 655.500–680.375 MHz band
- 25 kHz frequency spacing makes it easier to find a clear, open frequency in crowded RF environments
- Two-stage pop filter to protect against “p” pops
- Dual output power selection to optimize battery life
- Digital Tone Lock™ squelch to identify the wireless transmitter to the receiver
- High efficiency dual companding system for flawless audio
- Function menu displayed in a backlit LCD window and controlled by internal touch switches
- Four namable user presets
- Operates on two AA batteries
- Battery fuel gauge LCD readout on the body of the microphone
- Power/mute lock provision
- Dual-color power/mute status indicator
- 18 dB audio input level adjustment
- Integral capsule 6 dB pad switch
- Rugged metal housing with integral antenna
- Supplied with a heavy-duty microphone stand clamp

Description

The AEW-T5400a cardioid condenser wireless handheld transmitter features the Artist Elite® AE5400 large diaphragm true condenser cardioid capsule based on the classic AT4050 studio microphone and provides accurate natural response. The capsule shall include internal shock mounts for low handling noise. An internal capsule 6 dB pad provides additional attenuation for extremely high-SPL sources. An integral two-stage pop filter within the rugged steel headcase protects against “p” pops and other breath plosives. All transmitter setup functions are menu-driven via soft-touch controls. To prevent accidental changes, the controls are covered by the transmitter’s handle case when not being used. A dual-color power/mute indicator LED provides visual indication of transmitter status.

Operating on two standard AA batteries, the transmitter features high- and low-level RF output settings. The low-level setting allows two additional hours of battery life while retaining a strong RF signal link. Each transmitter’s backlit LCD display presents a great deal of setup and operating information clearly and conveniently including: battery fuel remaining, mute, and operating frequency. A flashing “Lo-Batt” alert visually signals the battery life is almost depleted. Programmable power/mute locks limit the functioning of the transmitter’s power/mute button as desired for particular users and applications. To match the audio input level to the transmitter, a three-position audio input gain setting selected

through the function menu is provided. Four namable user presets allow for storage and recall of commonly used settings. The rugged ergonomic metal body housing with integral antenna will provide years of dependable operation. Each handheld transmitter includes a heavy-duty Quiet-Flex™ stand clamp and soft protective pouch.

Architect’s and Engineer’s Specifications

The frequency-agile FM wireless handheld transmitter utilizing a high quality large-diaphragm condenser cardioid element shall be a part of a wireless microphone system operating in the bands of 541.500–566.375 MHz or 655.500–680.375 MHz. The capsule shall be based on an Audio-Technica AT4050 studio microphone and provide accurate natural response. The capsule shall incorporate internal shock mounting and have a two-stage integral pop filter. It shall be capable of transmitting on any of 996 frequencies per band. A 6 dB internal capsule pad switch shall provide additional attenuation for high-SPL sound sources. A dual-color LED indicator shall illuminate green when the transmitter is turned on, and illuminate red when the transmitter is muted. A backlit LCD display shall be provided to show system configuration parameters, transmitter name, or frequency. A soft-touch mute/power control shall operate independently from the configuration controls. It shall be possible to electrically lock the transmitter mute/power function. The transmitter shall utilize a dual compander system to process high and low audio frequencies separately and shall incorporate a digital tone lock to identify the wireless transmitter to the wireless receiver. A digital communications protocol shall enable the transmitter to send operational function data to the receiver. The microphone shall have an audio input level adjustment range of up to 18 dB. All adjustments shall be via soft-touch controls and shall remain as set even if the transmitter loses power or the batteries are removed. The transmitter shall operate on two AA batteries and contain a hi/lo power selector. A battery fuel gauge shall be incorporated to indicate the status of the internal batteries. It shall be possible to store transmitter settings into one of four namable user presets for ease of recall. It shall have a metal housing with an internal antenna and plastic antenna end cap. The transmitter shall be supplied with a heavy-duty stand clamp and a soft protective pouch.

The condenser wireless handheld transmitter shall be an Audio-Technica AEW-T5400a or equivalent.

Specifications

RF power output	High: 35 mW; Low: 10 mW, nominal
Spurious emissions	Under federal regulations
Dynamic range	≥110 dB, A-weighted
Microphone element	Cardioid Condenser
Batteries	Two 1.5V AA alkaline (not included)
Current consumption	High: 185 mA; Low: 165 mA, typical
Battery life	Approximately 6 hours (High); 8 hours (Low), depending on battery type and use pattern
Dimensions	239.0 mm (9.41") long, 50.0 mm (1.97") diameter
Net weight	285 g (10.0 oz) (without batteries)
Accessories included	AT8456a Quiet-Flex™ stand clamp, pouch

In the interest of standards development, A.T.U.S. offers full details on its test methods to other industry professionals on request.

Specifications are subject to change without notice.



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