

## Frequency-agile UHF Plug-on Transmitter



### Features

- 3-pin XLR-type connector with locking collar
- 12V DC phantom power operates condenser microphones
- Dual RF power output selection to optimize battery life
- 996 frequencies (25 kHz steps) in either the 541.500–566.375 MHz or 655.500–680.375 MHz band
- Operates on two AA batteries
- Battery fuel gauge on the body of the transmitter
- Backlit LCD function display
- Dual color power/mute LED
- Soft-touch controls
- Power/Mute lock provision with sliding cover
- 24 dB audio input level adjustment
- Digital Tone Lock™ to identify the wireless transmitter to the receiver
- Rugged metal housing with captive battery compartment door
- Compatible with 3000 and 1800 Series wireless systems

### Description

The 1800 Series frequency-agile true diversity UHF wireless systems provide a new standard for audio and RF performance with user-friendly features and flawless operation for camera-mount and special remote applications. The systems provide the audio quality, range and reliability necessary for the most demanding requirements of today's video and audio systems.

The ATW-T1802 plug-on transmitter is designed to convert a dynamic or condenser microphone to wireless operation. The transmitter features a 3-pin XLR-type connector with locking ring for secure attachment. Integral 12V DC phantom power will allow the transmitter to power condenser microphones. 24 dB of gain adjustment enables the transmitter to work with a wide variety of microphones and signal sources. All transmitter setup functions are menu-driven via soft-touch controls. To prevent accidental changes, the controls are covered by a sliding door when not being used.

Operating using two standard AA batteries, the transmitter features a high- and low-level RF output setting. The low-level setting allows two additional hours of battery life while retaining a strong RF signal link. Soft-touch controls provide convenient access to a variety of functions including RF power, audio input level, power/mute locks and frequency selection. The 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 transmitter's power/mute button as desired for particular users and applications. A two-color (red/green) status LED indicates power-on or mute. To match the audio input level to the transmitter, a five-position audio input gain setting selected through

the function menu is provided. The transmitter housing is made of metal with an integral antenna and captive battery door.

Additionally, the frequency configuration used in the 1800 Series components allows them to be interchangeable with the Audio-Technica 3000 Series components.

### Architect's and Engineer's Specifications

The frequency-agile FM wireless plug-on transmitter with locking 3-pin XLRF-type connector 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. It shall be designed to convert a dynamic or condenser microphone to wireless operation. It shall be capable of transmitting on any of 996 PLL-synthesized frequencies (adjustable in 25 kHz steps) per band and shall be compatible with Audio-Technica 3000 Series or 1800 Series receivers. The transmitter shall transmit a digital Tone Lock™ signal that allows the receiver to un-mute. A dual color LED indicator shall illuminate "green" when the transmitter is turned on and "red" when the transmitter is muted. The transmitter shall have an audio input level adjustment range of 24 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. A sliding door shall cover the setup controls when not in use. The transmitter shall operate on two AA batteries and contain a Hi/Lo power selector. The transmitter shall be equipped with a backlit LCD screen used to show operating frequency and programming status. A battery fuel gauge shall be incorporated into the display to indicate the status of the internal batteries. The transmitter shall provide 12V DC to power condenser microphones. The transmitter housing shall be metal with integral antenna and captive battery door.

The wireless plug-on transmitter shall be an Audio-Technica ATW-T1802 or equivalent.

### Specifications

RF power output	High: 30 mW; Low: 10 mW, nominal
Spurious emissions	Under federal regulations
Dynamic range	>105 dB, A-weighted
Input connections	3-pin locking XLRF-type
Microphone power	Provides power to condenser microphones rated to operate on 12V phantom power or less
Batteries	Two 1.5V AA alkaline (not included)
Current consumption	High: 180 mA; Low: 160 mA, typical
Battery life	Approximately 6 hours (High); 8 hours (Low), depending on battery type and use pattern
Dimensions	40.0 mm (1.57") x 111.0 mm (4.37") x 40.0 mm (1.57")
Net weight	199 g (7.0 oz) (without batteries)

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.



Audio-Technica U.S., Inc., 1221 Commerce Drive, Stow, Ohio 44224  
 Audio-Technica Limited, Old Lane, Leeds LS11 8AG England  
 ©2010 Audio-Technica U.S., Inc. audio-technica.com

0001-0041-01