

# True Diversity **VHF** Wireless Microphone System



## ATW-222 Handheld Microphone System

Audio-Technica's Freeway® 220 Series Wireless System provides proven performance for artists and presenters in a variety of settings. The heart of this rugged True Diversity VHF system is the ATW-R220 receiver, which comprises two independent receiver sections in a single housing. True Diversity operation selects the better signal from the two receiver sections, reducing dropouts and interference while increasing system reliability. Other professional features include balanced and unbalanced outputs, ground lift, adjustable squelch and two detachable antennas. The ATW-T202 handheld microphone/transmitter features a unidirectional dynamic element for feedback rejection and dependable performance, as well as a battery-condition indicator and adjustable gain control.

- True Diversity operation selects the better signal from two separate receiver sections for maximum system reliability
- Rugged metal receiver housing ensures durable performance on the road
- Receiver includes two detachable telescoping antennas
- Available in three traveling VHF frequencies that can be used simultaneously anywhere in the U.S. and Canada
- Balanced XLR and unbalanced 1/4" output jacks enable use with a wide variety of audio gear
- High-low battery-save transmitter switch for cost-saving operation
- Ground-lift switch helps eliminate audible hum caused by ground loops between the sound system and receiver
- Adjustable squelch helps control interference from stray RF
- ATW-T202 handheld microphone/transmitter features a rugged dynamic unidirectional element for maximum feedback rejection and lasting dependability

## Specifications†

### Overall System

Operating Frequency	VHF high band, 169 MHz to 172 MHz
Frequency Stability	±0.005%
Modulation Mode	FM
Maximum Deviation	±15 kHz
Operating Range	300' minimum
Operating Temperature Range	40° F (4° C) to 110° F (43° C)
Frequency Response	80 Hz to 13 kHz

### Handheld Transmitter

RF Power Output (typical)	10 mW in High position, 2 mW in Low position
Dynamic Range	≥90 dB, A-weighted
Microphone Element	Dynamic unidirectional
Battery (not included)	9V battery (NEDA type 1604) alkaline
Battery Life	Approximately 15 hours in High position Approximately 20 hours in Low position
Accessory Included	AT8456a stand clamp

### Receiver

Receiving System	Dual independent receivers, automatic-switching diversity reception
Image Rejection	50 dB minimum
Signal-to-noise Ratio	80 dB at 10 kHz deviation (IEC-weighted), maximum modulation 15 kHz
Total Harmonic Distortion	≤1% (10 kHz deviation at 1 kHz)
Sensitivity	20 dBµV for 60 dB S/N (IEC-weighted)
Audio Output	Unbalanced: 350 mV (at 1 kHz ±10 kHz deviation, 100k ohm load) Balanced: 220 mV (at 1 kHz ±10 kHz deviation, 100k ohm load)
Output Connectors	Unbalanced: 1/4" TS ("mono") phone jack Balanced: XLRM-type
Power Supply	120V AC 60 Hz, 12V DC, 500 mA, center positive, with external DC supply
Dimensions	8.27" (210.0 mm) W x 1.93" (49.0 mm) H x 8.86" (225.0 mm) D
Weight	2.6 oz (1.2 kg)
Accessories Included	AC adapter; two antennas



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† 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.