

# 1400 Series UHF True Diversity Wireless Systems



- True Diversity reception with two independent RF sections for greatest reliability.
- Interference-resistant UHF band operation.
- Convenient detachable front-mount antennas.
- Rugged metal receiver housing.
- Balanced and unbalanced audio output jacks.
- Ground-lift switch and adjustable squelch.
- Two receivers can be mounted side-by-side in a single 19" rack space.
- Power-save switches on transmitters.
- ATW-T51 UniPak™ transmitter includes Super Hi-Z input that provides optimum load for guitar pickups.
- ATW-T52 handheld microphone/transmitter features Hi-ENERGY® dynamic element.

## **ATW-1451 UniPak™ Transmitter System includes:**

ATW-R14 Receiver and  
ATW-T51 Transmitter  
(Select a Wireless Essentials™  
microphone or cable to  
complete the system)

## **ATW-1452 Handheld Dynamic Microphone System includes:**

ATW-R14 Receiver and  
ATW-T52 Handheld  
Microphone/Transmitter



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## Specifications<sup>†</sup>

### Overall System

<b>Operating Frequency</b>	UHF band, 732 MHz to 746 MHz
<b>Frequency Stability</b>	± 0.005%
<b>Modulation Mode</b>	FM
<b>Maximum Deviation</b>	±15 kHz
<b>Operating Range</b>	200' minimum
<b>Operating Temperature Range</b>	40° F (4° C) to 110° F (43° C)
<b>Frequency Response</b>	100 Hz to 15 kHz

### ATW-R14 Receiver

<b>Receiving System</b>	Dual independent receivers, automatic-switching diversity reception
<b>Image Rejection</b>	45 dB minimum
<b>Signal-to-noise Ratio</b>	95 dB at 10 kHz deviation (IEC-weighted), maximum modulation 15 kHz
<b>Total Harmonic Distortion</b>	≤1% (10 kHz deviation at 1 kHz)
<b>Sensitivity</b>	≤20 µV for 60 dB S/N (IEC-weighted)
<b>Audio Output</b>	Unbalanced 280 mV (at 1 kHz, ±10 kHz deviation, 10k ohm load) Balanced 160 mV (at 1 kHz, ±10 kHz deviation, 10k ohm load)
<b>Output Connectors</b>	Unbalanced ¼" phone jack Balanced XLRM-type
<b>Power Supply</b>	12-18V DC, 500 mA
<b>Dimensions</b>	8.27" (210.0 mm) W x 1.93" (49.0 mm) H x 9.88" (251.0 mm) D
<b>Net Weight</b>	2.9 lbs. (1.3 kg)
<b>Accessories Included</b>	Two antennas, rack-mount adapters, AD1205A AC adapter

### ATW-T51 UniPak™ Transmitter

<b>RF Power Output</b>	50 mW Max
<b>Spurious Emissions</b>	Under federal regulations
<b>Dynamic Range</b>	≥90 dB
<b>Input Connections</b>	High impedance, low impedance, bias
<b>Battery (not included)</b>	9V (NEDA type 1604) alkaline
<b>Current Consumption</b>	50 mA typical
<b>Battery Life</b>	Approximately 8 hours in High position, approximately 10 hours in Low position
<b>Dimensions</b>	2.56" (65.0 mm) W x 4.33" (110.0 mm) H x 1.00" (25.4 mm) D
<b>Net Weight (without battery)</b>	3.2 oz (90 grams)

### ATW-T52 Handheld Transmitter

<b>RF Power Output</b>	50 mW Max
<b>Spurious Emissions</b>	Under federal regulations
<b>Dynamic Range</b>	≥90 dB
<b>Microphone Element</b>	Dynamic unidirectional
<b>Battery (not included)</b>	9V (NEDA type 1604) alkaline
<b>Current Consumption</b>	50 mA typical
<b>Battery Life</b>	Approximately 8 hours in High position, approximately 10 hours in Low position
<b>Dimensions</b>	9.53" (242.0 mm) long, 2.13" (54.0 mm) diameter
<b>Net Weight (without battery)</b>	12.3 oz (350 grams)
<b>Accessory Included</b>	AT8431 stand clamp

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

## Optional System Accessories

### Wireless Essentials™ Microphones and Cables

All *Wireless Essentials* are terminated for use with the ATW-T51 and other UniPak™ transmitters.

<b>AT829cW</b>	Miniature cardioid condenser lavalier microphone. Includes clothing clip and windscreen.
<b>MT830cW</b>	Subminiature omnidirectional condenser lavalier microphone. Includes clothing clip and windscreen.
<b>MT830cW-TH</b>	"Theater" model, same as MT830cW except beige color mic and cable for concealment.
<b>AT831cW</b>	Miniature cardioid condenser lavalier microphone. Includes clothing clip and windscreen.
<b>AT851cW</b>	Surface-mount wide-range hemi-cardioid condenser microphone.
<b>AT857AMLcW</b>	19" gooseneck cardioid microphone. Mounts to 5/8"-27 thread. Includes windscreen.
<b>AT889cW</b>	Headworn noise-canceling condenser microphone. Includes windscreen and cable clip.
<b>ATM35cW</b>	Cardioid condenser instrument microphone. Includes AT8418 clip-on instrument mount.
<b>ATM73cW</b>	Headworn cardioid condenser microphone. Includes windscreen.
<b>ATM75cW</b>	Headworn cardioid condenser microphone. Includes windscreens and cable clip.
<b>PRO 8HEcW</b>	Headworn hypercardioid dynamic microphone. Includes windscreen and cable clip.
<b>PRO 35xcW</b>	Cardioid condenser instrument microphone. Includes AT8418 clip-on instrument mount.

<b>AT-GCW</b>	Hi-Z instrument/guitar cable with ¼" phone plug.
<b>XLRW</b>	Connecting cable for UniPak transmitter with an XLR-type input connector, for Lo-Z microphones with XLRM-type output terminations.

### Receiver Accessories

<b>AT8628</b>	Mounting plate adapter allows rack-mounting two ATW-R14 receivers side-by-side in a single 19" rack space.
<b>ATW-A20</b>	Pair of UHF ground-plane antennas with 5/8"-27 thread for mounting to microphone stands, etc. Takes RF cables with BNC connectors, not included.
<b>ATW-D70</b>	UHF (728-750 MHz) active unity-gain antenna distribution system provides two "1-in, 4-out" RF channels; connects a pair of antennas to as many as four diversity receivers. Includes four DC interconnect cables to power up to four ATW-R14 receivers, eight RF output cables and two rack-mount adapters. Mounts in a single (1U) 19" rack space.

### Transmitter Accessories

<b>ATW-VP10</b>	Vinyl pouch with belt clip to hold UniPak transmitter.
<b>AT8114</b>	Foam windscreen for handheld transmitter.
<b>AT8141</b>	Water-resistant pouch for UniPak transmitter.
<b>AT8431</b>	Stand clamp for handheld transmitter, 5/8"-27 threads.

Visit our Web site @ [www.audio-technica.com](http://www.audio-technica.com) for extensive information on selecting and using wireless systems.



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