

audio-technica *always listening*

WHY?

Recent advances in the quality and sophistication of professional live-sound systems have been nothing short of revolutionary. Tours, clubs, broadcast events, corporate facilities and worship venues sound better than ever, utilizing better system design and better components in the audio chain.

That's why Audio-Technica has been partnering with industry professionals on the front line of this revolution – the top touring companies, award show designers, FOH and monitor engineers, audio consultants and artists – to learn what it takes to make the best-sounding, most reliable and consistent microphones for the live-sound industry.

We listened carefully. Then we applied this knowledge to the creation of the Artist Elite[®] line of high-performance microphones and wireless systems. Our ultimate design goal was this: Each model must extend the performance of a sound system, not limit it.

The result is THE NEW STANDARD IN LIVE AUDIO



IST ELITE

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CONDENSER VOCAL MICROPHONES

AE5400 CARDIOID CONDENSER MICROPHONE

THE ULTIMATE VOCAL PERFORMANCE INSTRUMENT

Pristine sound quality demanded by the most discriminating microphone user

Large-diaphragm element and true condenser design

Superior anti-shock engineering ensures low handling noise and quiet performance

Excellent protection against plosives and sibilance without compromising high-frequency clarity

Robust design for enduring dependability on the road

Includes AT8470 Quiet-Flex[™] stand clamp

AE3300 CARDIOID CONDENSER MICROPHONE EXCEPTIONAL PERFORMANCE

FOR EXCEPTIONAL PERFORMERS

Exacting detail, brilliant clarity and uncolored realism

Well-tempered polar pattern with outstanding rejection qualities

Superior anti-shock engineering ensures low handling noise and quiet performance

Excellent protection against plosives and sibilance without compromising high-frequency clarity

Robust design for enduring dependability on the road

Includes AT8470 Quiet-Flex[™] stand clamp

- 1 For ultimate protection against vocal plosives, the hardened-steel outer grille is lined with fine steel mesh and a layer of open-cell foam. A foam disk positioned on top of the element assembly provides the final layer of "pop" protection.
- 2 Stainless-steel capsule enclosure protects element assembly.
- 3 Micromesh screen over the side-entry ports provides optimum resistance, exercising precise control over the time at which off-axis signals arrive at the diaphragm-for a precise polar pattern configuration.
- High-quality condenser elements proven in the world's finest recording studios: AE5400: The same large-diaphragm element used in the AT4050. AE3300: The same element used in the legendary AT4033.
- 5 Upper rubber bushing isolates capsule assembly from handle, serving as a shock mount to minimize handling noise.
- 6 The upper shock-mount assembly is made from machined stainless steel, and provides a high-mass resonance-dampening mount between the capsule and handle. Inside the assembly, rubber isolation bushings help prevent handling noise from reaching the capsule.
- 7 Solid-construction insulator/attachment point provides electrically insulated, secure 3-screw mounting of PCB to shock mount assembly.
- 8 Capsule is connected to the PCB by a flexible cable with a multi-pin locking connector to provide a secure, reliable and field-durable connection.
- 9 High-quality double-sided PCB uses surface-mount componentry. Extensive grounding plane and attention to "best-practice" grounding methods minimize electrical noise.
- 10 Switches (10 dB pad, HPF) are double-protected from moisture by solid plastic covers and foam moisture seals.
- 11 Custom transformer improves performance specifications by isolating against noise and RF interference, and providing excellent saturation characteristics that contribute to smooth linear sound quality.
- 12 Vibration-dampening material adhered to the inside of the handle shell minimizes handling noise.
- 13 Gold-plated XLRM-type connector provides corrosion-resistant contacts and is solidly attached to PCB for maximum electrical integrity.
- 14 Handle shell is heavy-duty die-cast construction with distinctive Artist Elite flat side for comfortable, balanced feel.









ELEMENT	AE5400 AE3300	Externally polarized (DC bias) condenser Electret condenser
POLAR PATTERN		Cardioid
FREQUENCY RESPONSE	AE5400 AE3300	20-20,000 Hz 30-18,000 Hz
LOW FREQUENCY ROLL-OFF		80 Hz, 12 dB/octave
OPEN CIRCUIT SENSITIVITY	AE5400 AE3300	-40 dB (10.0 mV) re 1V at 1 Pa* -42 dB (7.9 mV) re 1V at 1 Pa*
IMPEDANCE		150 ohms
MAXIMUM INPUT SOUND LEVEL		147 dB SPL, 1 kHz at 1% T.H.D. 157 dB SPL with 10 dB pad (nominal)
NOISE1	AE5400 AE3300	14 dB SPL 19 dB SPL
DYNAMIC RANGE (typical)	AE5400 AE3300	133 dB, 1 kHz at Max SPL 128 dB, 1 kHz at Max SPL
SIGNAL-TO-NOISE RATIO ¹	AE5400 AE3300	80 dB, 1 kHz at 1 Pa* 75 dB, 1 kHz at 1 Pa*
PHANTOM POWER REQUIREMENTS	AE5400 AE3300	11-52V DC, 4 mA typical 11-52V DC, 3 mA typical
SWITCHES		High-pass filter; 10 dB pad
WEIGHT (less accessories)	AE5400 AE3300	11.6 oz (330 g) 10.6 oz (300 g)
DIMENSIONS		7.05" (179.0 mm) long, 1.97" (50.0 mm) head diameter, 1.30" to 0.87" (33.0 mm to 22.0 mm) tapered body diameter
OUTPUT CONNECTOR		Integral 3-pin XLRM-type
ACCESSORIES FURNISHED		AT8470 Quiet-Flex [™] stand clamp for ⁶ /s ⁼ -27 threaded stands; ⁵ /s ⁼ -27 to ³ /s ⁼ -16 threaded adapter; soft protective pouch

AE5400 FREQUENCY RESPONSE



AE5400 POLAR PATTERN



AE3300 FREQUENCY RESPONSE



AE3300 POLAR PATTERN





AT8470 Quiet-Flex™ stand clamp (included)

200 Hz 1 542 5 542 8 542

DYNAMIC VOCAL MICROPHONES

AE6100 Hypercardioid dynamic microphone

ASSERTIVE SOUND FOR THE UNCOMPROMISING VOCALIST

Great presence with excellent monitor cut High output, fast transients and clean articulation Maximum feedback rejection Superior anti-shock engineering for low handling noise Outstanding pop protection Tough, durable, resilient – built for the road Includes AT8470 Quiet-Flex™ stand clamp

AE4100 CARDIOID DYNAMIC MICROPHONE

DESTINED TO BE THE NEXT CLASSIC

Aggressive sound that stays up-front in the mix

Optimized for the stage with excellent isolation properties

Superior anti-shock engineering for low handling noise

Outstanding pop protection

Tough, durable, resilient – built for the road

Includes AT8470 Quiet-Flex[™] stand clamp



- 1 For ultimate protection against vocal plosives, the hardened-steel outer grille is lined with fine steel mesh and a layer of open-cell foam. A foam disk positioned on top of the element assembly provides the final layer of "pop" protection.
- 2 Two layers of resistive mesh form multiple densities over the side-entry ports, exercising precise control over the time at which off-axis signals arrive at the diaphragm. Strict quality assurance ensures flawless consistency and application of the mesh for a flawless polar pattern.
- 3 The element assembly is sealed to the back cavity to ensure a consistent and correctly tuned resonant chamber, resulting in consistent microphone sound characteristics.
- 4 The upper shock-mount assembly is made from machined stainless steel, and provides a high-mass resonance-dampening mount between the element/cavity and handle. Inside the assembly, rubber isolation bushings help prevent handling noise from reaching the element and back-cavity assemblies.
- 5 Upper rubber bushing provides additional isolation between back-cavity assembly and upper shock mount.
- 6 Tuned to a specific element type, the back-cavity assembly provides an acoustic chamber that remains constant among models using the same element, ensuring optimal, consistent performance.
- 7 The back-cavity assembly "floats" inside the handle shell, providing exceptional isolation from handling noise.
- 8 Vibration-dampening material adhered to the interior of the handle shell minimizes handling noise.
- 9 Lower rubber isolation bushing minimizes contact between back-cavity assembly and handle shell.
- **10** Wires exit the back cavity via a sealed opening, preventing air leakage into the cavity and maintaining cavity tuning.
- **11** Gold-plated XLRM connector provides corrosion-resistant contacts. A ground contact spring tab maintains electrical ground (shield) continuity between handle shell and XLR connector.
- 12 Handle shell is heavy-duty die-cast construction with distinctive Artist Elite flat side for comfortable, balanced feel.







ELEMENT		Dynamic
POLAR PATTERN	AE6100 AE4100	Hypercardioid Cardioid
FREQUENCY RESPONSE	AE6100 AE4100	60-15,000 Hz 90-18,000 Hz
OPEN CIRCUIT SENSITIVITY		–55 dB (1.7 mV) re 1V at 1 Pa*
IMPEDANCE		250 ohms
WEIGHT (less accessories)		10.9 oz (310 g)
DIMENSIONS		6.97" (177.0 mm) long, 1.89" (48.0 mm) head diameter, 1.30" to 0.87" (33.0 mm to 22.0 mm) tapered body diameter
OUTPUT CONNECTOR		Integral 3-pin XLRM-type
ACCESSORIES FURNISHED		AT8470 Quiet-Flex™ stand clamp for %/*-27 threaded stands;



AE6100 POLAR PATTERN



AE4100 FREQUENCY RESPONSE



AE4100 POLAR PATTERN





AT8470 Quiet-Flex™ stand clamp (included)

DUAL-ELEMENT INSTRUMENT MICROPHONE

AE2500 DUAL-ELEMENT CARDIOID MICROPHONE

THE ULTIMATE KICK-DRUM MIC

Revolutionary dual-element design represents a groundbreaking transducer achievement

Two elements (condenser and dynamic) are enclosed in a single housing

Dynamic element delivers the aggressive attack of the beater while the condenser captures the round tonalities of the shell

Elements are positioned in a perfect phase relationship, something practically unachievable with two separate microphones

Robust design for enduring dependability on the road

Integral 80 Hz HPF switch and 10 dB pad

Includes the new AT8471 isolation clamp

- 1 Custom designed to provide complementary performance, separate condenser and dynamic elements are precisely positioned to provide optimal wide-range sound reproduction.
- 2 Two layers of resistive mesh form multiple densities over the dynamic element's side-entry ports, exercising precise control over the time at which off-axis signals arrive at the diaphragm.
- 3 Condenser diaphragm is optimally tensioned and aged for long-term consistency and stability.
- 4 Stainless-steel capsule enclosure protects condenser element assembly for ultimate durability.
- 5 Nickel-plated capsule base assembly provides maximum RF shielding.
- 6 Switches (10 dB pad, HPF) are double-protected from moisture by solid plastic covers and foam moisture seals.
- Gold-plated 5-pin XLRM-type output connector provides corrosionresistant contacts.
- 8 Dual-shielded cable connects to the mic with a 5-pin XLRF-type connector and splits to two 3-pin XLRM-type output connectors for separate control over each element.





ELEMENTS		Condenser, Dynamic
POLAR PATTERN		Cardioid
FREQUENCY RESPONSE	Condenser Dynamic	20-17,000 Hz 30-10,000 Hz
LOW FREQUENCY ROLL-OFF		80 Hz, 12 dB/octave
OPEN CIRCUIT SENSITIVITY	Condenser Dynamic	–51 dB (2.8 mV) re 1V at 1 Pa* –54 dB (1.9 mV) re 1V at 1 Pa*
IMPEDANCE	Condenser Dynamic	100 ohms 600 ohms
MAXIMUM INPUT SOUND LEVEL	Condenser	148 dB SPL, 1 kHz at 1% T.H.D. 158 dB SPL, with 10 dB pad (nominal)
DYNAMIC RANGE (typical)	Condenser	124 dB, 1 kHz at Max SPL
SIGNAL-TO-NOISE RATIO ¹	Condenser	70 dB, 1 kHz at 1 Pa*
PHANTOM POWER REQUIREMENTS	Condenser	11-52V DC, 3 mA typical
SWITCHES	Condenser	High-pass filter; 10 dB pad (nominal)
WEIGHT (less cable)		13.8 oz (390 g)
DIMENSIONS		6.50" (165.0 mm) long, 2.17" (55.0 mm) maximum diameter
OUTPUT CONNECTOR		Integral 5-pin XLRM-type
CABLE		16.5' (5 m) dual-shielded, 8-conductor cable, 5-pin XLRF-type connector at microphone, two 3-pin XLRM-type output connectors
ACCESSORIES FURNISHED		AT8471 isolation clamp for ⁵ /«"-27 threaded stands; ⁵ /«"-27 to ³ /«"-16 threaded adapter; soft protective pouch

200 Hz 1 kHz 5 kHz 8 kHz

AE2500 CONDENSER FREQUENCY RESPONSE



AE2500 CONDENSER POLAR PATTERN



AE2500 DYNAMIC FREQUENCY RESPONSE



AE2500 DYNAMIC POLAR PATTERN



AT8471 isolation clamp (included)



AT8459 dual swivel mount (sold separately)



CONDENSER INSTRUMENT MICROPHONES





ACCIO-ECCIVICE

ELEMENT	Fixed-charge back plate permanently polarized condenser
POLAR PATTERN	Cardioid
FREQUENCY RESPONSE	20-20,000 Hz
LOW FREQUENCY ROLL-OFF	80 Hz, 12 dB/octave
OPEN CIRCUIT SENSITIVITY	-43 dB (7.0 mV) re 1V at 1 Pa*
IMPEDANCE	100 ohms
MAXIMUM INPUT SOUND LEVEL	148 dB SPL, 1 kHz at 1% T.H.D. 158 dB SPL with 10 dB pad (nominal)
NOISE1	11 dB SPL
DYNAMIC RANGE (typical)	137 dB, 1 kHz at Max SPL
SIGNAL-TO-NOISE RATIO ¹	83 dB, 1 kHz at 1 Pa*
PHANTOM POWER REQUIREMENTS	11-52V DC, 3 mA typical
SWITCHES	High-pass filter; 10 dB pad
WEIGHT (less accessories)	6.0 oz (170 grams)
DIMENSIONS	4.55" (115.5 mm) long, 1.89" (48.0 mm) maximum diameter
OUTPUT CONNECTOR	Integral 3-pin XLRM-type
ACCESSORIES FURNISHED	AT8471 isolation clamp for $^{6}/_{6}^{-27}$ threaded stands; $^{6}/_{6}^{-27}$ to $^{3}/_{6}^{-16}$ threaded adapter; soft protective pouch

AE3000 CARDIOID CONDENSER MICROPHONE

SUPREME PERFORMANCE AT EXTREME SPLs

Excels in high-SPL applications such as guitar cabinets, toms, snare, timpani and overheads

Large-diaphragm capsule combines with the open architecture of the headcase to provide an extremely accurate and open sound

Low-profile side-address design with tapered grille allows optimal positioning of element vis-à-vis sound source

Robust design for enduring dependability on the road

Integral switched 80 Hz HPF and 10 dB pad

Includes the new AT8471 isolation clamp



AE3000 POLAR PATTERN





isolation clamp (included)



AT8459 dual swivel mount (sold separately)

200 Hz 1 K64z 8 K64z

A 10





ELEMENT	Fixed-charge back plate permanently polarized condenser
POLAR PATTERN	Cardioid
FREQUENCY RESPONSE	20-20,000 Hz
LOW FREQUENCY ROLL-OFF	80 Hz, 12 dB/octave
OPEN CIRCUIT SENSITIVITY	-36 dB (15.8 mV) re 1V at 1 Pa*
IMPEDANCE	150 ohms
MAXIMUM INPUT SOUND LEVEL	148 dB SPL, 1 kHz at 1% T.H.D. 158 dB SPL with 10 dB pad (nominal)
NOISE ¹	11 dB SPL
DYNAMIC RANGE (typical)	137 dB, 1 kHz at Max SPL
SIGNAL-TO-NOISE RATIO	83 dB, 1 kHz at 1 Pa*
PHANTOM POWER REQUIREMENTS	11-52V DC, 3.2 mA typical
SWITCHES	High-pass filter; 10 dB pad
WEIGHT (less accessories)	5.0 oz (143 g)
DIMENSIONS	5.85" (148.5 mm) long, 1.02" (26.0 mm) maximum diameter
OUTPUT CONNECTOR	Integral 3-pin XLRM-type
ACCESSORIES FURNISHED	AT8471 isolation clamp for $^{\rm 5}/\rm{s}^*-27$ threaded stands; $^{\rm 5}/\rm{s}^*-27$ to $^{\rm 3}/\rm{s}^*-16$ threaded adapter; AT8136 windscreen,

soft protective pouch

AE5100 CARDIOID CONDENSER MICROPHONE

THE DEFINITIVE LIVE-SOUND INSTRUMENT MIC

Uncompromising sound quality for overheads, percussion, acoustic guitar, strings and other acoustic instruments

Large-diaphragm capsule delivers accurate, uncolored and extremely natural response

Low-profile design permits innovative placement options previously unattainable with a large-diaphragm condenser

Robust design for enduring dependability on the road

Integral switched 80 Hz HPF and 10 dB pad

Includes the new AT8471 isolation clamp



AE5100 POLAR PATTERN





AT8471 isolation clamp (included)



AT8459 dual swivel mount (sold separately)

200 Hz 1 KHz 5 KHz 8 KHz

FREQUENCY-AGILE TRUE DIVERSITY UHF WIRELESS SYSTEMS

5000SERIES

Two independent receiver channels in a single housing

200 selectable UHF channels and True Diversity reception for interference-resistant operation

Link and coordinate multiple AEW receivers via included data cable and/or built-in Ethernet computer interface

IntelliScan™ feature automatically finds and sets best available frequencies on both channels and all linked receivers

Advanced digital Tone Lock™ squelch effectively blocks stray RF; the digitally encoded tone also communicates transmitter data to the receiver for display

Dual Compander circuitry processes high and low audio frequencies separately for unmatched sound quality

All AEW components store up to five preset configurations, with user-definable "names" if desired

Transmitter battery "fuel gauge" with low-battery warning displays on receiver

Available in two frequency bands: 541.500–566.375 MHz (TV channels 25–30) and 655.500–680.375 MHz (TV channels 44–49)

On-board Ethernet interface for monitoring and controlling system parameters with included software

AEW-R5200 Dual Receiver





On-board Ethernet interface and included software on CD permit monitoring and controlling system parameters and operation from an associated computer

- Metal full-rack receiver chassis with reinforced mounting ears and rear rack mount capability
- 2 Headphone jack and level control on front panel provides monitoring of receiver outputs
- 3 Alert indicator lights to highlight: No RF signal received from transmitter Weak RF received Transmitter is muted Transmitter's audio modulation is near clipping Transmitter battery is low Receiver is in the Function Edit mode
- 4 Included cables and connectors permit attaching antennas at the front panel
- 5 Selectable +12V DC on antenna input jacks to power inline RF devices
- $\mathbf{6}_{-1/4^{''}}$ external mute switch jack allows user to mute the system quickly and easily
- 7 Two isolated and balanced audio outputs on each channel (XLR and 1/4") permit simultaneous feeds to two different inputs
- 8 AF output attenuator adjusts audio level (0 dB, -6 dB or -12 dB) of both audio output jacks
- 9 Ground lift switch disconnects the ground pin of the associated balanced output jacks from ground
- 10 Ethernet connection provides full communication and monitor/control by an associated computer
- 11 AEW receivers can be interconnected using Link In/Out jacks and included link cables
- 12 AC pass-through allows daisy-chain AC hookup with included IEC jumper cables
- 13 AC power input with IEC-type connector for 100V to 240V AC, 50/60 Hz source (no adjustment for mains voltage/frequency is needed)



5000SERIES ERIES

OVERALL SYSTEM UHF OPERATING FREQUENCY Band C: 541.500-566.375 MHz; Band D: 655.500-680.375 MHz NUMBER OF CHANNELS 200 total per band FREQUENCY STABILITY MODULATION MODE FΜ NORMAL DEVIATION ±5 kHz **OPERATING RANGE** 300' typical **OPERATING TEMPERATURE RANGE** FREQUENCY RESPONSE 70 Hz to 15 kHz AEW-R5200 DUAL RECEIVER RECEIVING SYSTEM Dual independent RF sections, automatic-switching diversity IMAGE REJECTION 60 dB typical 115 dB at 40 kHz deviation (IEC-weighted), 75 kHz maximum modulation SIGNAL-TO-NOISE RATIO TOTAL HARMONIC DISTORTION ≤1% (10 kHz deviation at 1 kHz) SENSITIVITY INTERMEDIATE FREQUENCY 65.75 MHz, 10.7 MHz AUDIO OUTPUT (ATTN switch at "0") 25 mV (at 1 kHz, ± 5 kHz deviation, 10k ohm load) 50 mV (at 1 kHz, ± 5 kHz deviation, 10k ohm load) Both outputs are transformer isolated and balanced MICROPHONE AUDIO OUTPUT ATTENUATOR (ATTN) Three-position switch: 0/-6/-12 dB OUTPUT CONNECTORS MICROPHONE (balanced) INSTRUMENT (balanced) XLRM-type ¼" (6.3 mm) TRS phone jack EXTERNAL MUTE 1/4" (6.3 mm) TS unbalanced phone jack, each channel **HEADPHONE OUTPUT** //* (6.3 mm) TRS ("stereo") phone jack 10 mW + 10 mW at 1 kHz, ±5 kHz deviation into 32 ohms; maximum output, 220 mW + 220 mW into 32 ohms; CONNECTOR POWER OUTPUT headphones switchable between Channel 1 and Channel 2 ANTENNA TERMINAL VOLTAGE DC 10V-12V, 20 mA (BNC-type jack) COMPUTER INTERFACE TYPE CONNECTOR PROPRIETARY SOFTWARE Supplied on CD-ROM POWER SUPPLY 100-240V AC 50/60 Hz; 15W 100–240V AC 50/60 Hz; 5A maximum PASS-THROUGH AC POWER OUTLET DIMENSIONS 18.98" (482.0 mm) W x 1.74" (44.0 mm) H x 10.85" (275.5 mm) D NET WEIGHT (without accessories) 8.8 lbs (4.0 kg) ACCESSORIES INCLUDED Detachable IEC-type AC power cable; two flexible UHF half-wave antennas; link cable; IEC-type AC pass-through cable; front-mount antenna cables and connectors; CD-ROM with computer control interface software;

AEW-TB44 transmitter bag (photo on page 17)

SYSTEM CONFIGURATIONS

AEW-5111 UHF Wireless Dual-UniPak™ Transmitter System AEW-R5200 receiver and two AEW-T1000 UniPak™ transmitters

- AEW-5233 UHF Wireless Dual-Handheld Condenser Microphone System AEW-R5200 receiver and two AEW-T3300 cardioid condenser microphone/transmitters
- AEW-5244 UHF Wireless Dual-Handheld Dynamic Microphone System AEW-R5200 receiver and two AEW-T4100 cardioid dynamic microphone/transmitters AEW-5255 UHF Wireless Dual-Handheld Condenser Microphone System
- R5200 receiver and two AEW-T5400 cardioid condenser microphone/transmitters
- AEW-5266 UHF Wireless Dual-Handheld Dynamic Microphone System AEW-R5200 receiver and two AEW-T6100 hypercardioid dynamic microphone/transmitters

- AEW-5313 UHF Wireless Dual-Transmitter System AEW-R5200 receiver, AEW-T1000 UniPak™ transmitter, and AEW-T3300 cardioid condenser microphone/transmitter

AEW-5314 UHF Wireless Dual-Transmitter System AEW-R5200 receiver, AEW-T1000 UniPak™ transmitter, and AEW-T4100 cardioid dynamic microphone/transmitter

- AEW-5315 UHF Wireless Dual-Transmitter System AEW-R5200 receiver, AEW-T1000 UniPak™ transmitter, and AEW-T5400 cardioid condenser microphone/transmitter AEW-5316 UHF Wireless Dual-Transmitter System AEW-R5200 receiver, AEW-T1000 UniPak™ transmitter, and AEW-T6100 hypercardioid dynamic microphone/transmitter
- AEW-5413 UHF Wireless Dual-UniPak™ and Dual-Handheld Condenser System AEW-R5200 receiver, two AEW-T1000 UniPak™ transmitters, and two AEW-T3300 cardioid condenser microphone/transmitters
- AEW-5414 UHF Wireless Dual-UniPak™ and Dual-Handheld Dynamic System
- AEW-R5200 receiver, two AEW-T1000 UniPak™ transmitters, and two AEW-T4100 cardioid dynamic microphone/transmitters AEW-5415 UHF Wireless Dual-UniPak™ and Dual-Handheld Condenser System AEW-R5200 receiver, two AEW-T1000 UniPak™ transmitters, and two AEW-T5400 cardioid condenser microphone/transmitters
- AEW-5416 UHF Wireless Dual-UniPak™ and Dual-Handheld Dynamic System AEW-R5200 receiver, two AEW-T1000 UniPak™ transmitters, and two AEW-T6100 hypercardioid dynamic microphone/transmitters

FREQUENCY-AGILE TRUE DIVERSITY UHF WIRELESS SYSTEMS

4000SERIES

200 selectable UHF channels and True Diversity reception for interference-resistant operation

Link and coordinate multiple AEW receivers via included data cables; also link to 5000SERIES receiver

IntelliScan™ feature automatically finds and sets best available frequencies on all linked receivers

Advanced digital Tone Lock™ squelch effectively blocks stray RF; the digitally encoded tone also communicates transmitter data to the receiver for display

Dual Compander circuitry processes high and low audio frequencies separately for unmatched sound quality

Available in two frequency bands: 541.500–566.375 MHz (TV channels 25–30) and 655.500–680.375 MHz (TV channels 44–49)

All AEW components store up to five preset configurations, with user-definable "names" if desired

Transmitter battery "fuel gauge" with low-battery warning displays on receiver

(back)



1 Metal half-rack receiver chassis with mounting hardware

AEW-R4100 Receiver

- 2 Headphone jack and level control on front panel provides monitoring of receiver output
- **3** Alert indicator lights to highlight:
 - No RF signal received from transmitter Weak RF received Transmitter is muted Transmitter's audio modulation is near clipping
 - Transmitter battery is low Receiver is in the Function Edit mode
- 4 High-visibility white-on-blue LCD information display
- 5 Selectable +12V DC on antenna input jacks to power inline RF devices
- 6 Two isolated audio outputs on each channel (balanced XLR and unbalanced 1/4") permit simultaneous feeds to two different inputs
- 7 AF output attenuator adjusts audio level (0 dB, -6 dB or -12 dB) of both audio output jacks
- 8 Ground lift switch disconnects the ground pin of the balanced output jack from ground
- AEW receivers can be interconnected using Link In/Out jacks and included link cables
- 10 AC power input with IEC-type connector for 100V to 240V AC, 50/60 Hz source (no adjustment for mains voltage/frequency is needed)

4000 SERIES ERIES

OVERALL SYSTEM

UHF OPERATING FREQUENCY	Band C: 541.500–566.375 MHz; Band D: 655.500–680.375 MHz
NUMBER OF CHANNELS	200 total per band
FREQUENCY STABILITY	±0.005%, Phase Lock Loop frequency control
MODULATION MODE	FM
NORMAL DEVIATION	±5 kHz
OPERATING RANGE	300' typical
OPERATING TEMPERATURE RANGE	41° F (5° C) to 113° F (45° C)
FREQUENCY RESPONSE	70 Hz to 15 kHz

AEW-R4100 RECEIVER

RECEIVING SYSTEM	Dual independent RF sections, automatic-switching diversity
IMAGE REJECTION	60 dB typical
SIGNAL-TO-NOISE RATIO	115 dB at 40 kHz deviation (IEC-weighted), 75 kHz maximum modulation
TOTAL HARMONIC DISTORTION	≤1% (10 kHz deviation at 1 kHz)
SENSITIVITY	20 dBµV (S/N 70 dB at 5 kHz deviation, IEC-weighted)
INTERMEDIATE FREQUENCY	65.75 MHz, 10.7 MHz
AUDIO OUTPUT (ATTN switch at "0") MICROPHONE INSTRUMENT	25 mV (at 1 kHz, ±5 kHz deviation, 10k ohm load) 50 mV (at 1 kHz, ±5 kHz deviation, 10k ohm load)
AUDIO OUTPUT ATTENUATOR (ATTN)	Three-position switch: 0/–6/–12 dB
OUTPUT CONNECTORS MICROPHONE (balanced) INSTRUMENT (unbalanced)	XLRM-type ∦₄* (6.3 mm) TS phone jack
HEADPHONE OUTPUT CONNECTOR POWER OUTPUT	//₌" (6.3 mm) TRS ("stereo") phone jack 10 mW + 10 mW at 1 kHz, ±5 kHz deviation into 32 ohms; maximum output, 220 mW + 220 mW into 32 ohms
ANTENNA TERMINAL VOLTAGE	DC 10V–12V, 20 mA (BNC-type jack)
POWER SUPPLY	100–240V AC 50/60 Hz; 8W
DIMENSIONS	8.31" (211.0 mm) W x 1.74" (44.0 mm) H x 9.26" (235.0 mm) D
NET WEIGHT (without accessories)	3.8 lbs (1.7 kg)
ACCESSORIES INCLUDED	Detachable IEC-type AC power cable; two flexible UHF half-wave antennas;

SYSTEM CONFIGURATIONS

AEW-4110 UHF Wireless UniPak™ Transmitter System *AEW-R4100 receiver and AEW-T1000 UniPak™ transmitter*

AEW-4230 UHF Wireless Handheld Condenser Microphone System AEW-R4100 receiver and AEW-T3300 cardioid condenser microphone/transmitter

AEW-4240 UHF Wireless Handheld Dynamic Microphone System *AEW-R4100 receiver and AEW-T4100 cardioid dynamic microphone/transmitter*

AEW-4250 UHF Wireless Handheld Condenser Microphone System *AEW-R4100 receiver and AEW-T5400 cardioid condenser microphone/transmitter*

AEW-4260 UHF Wireless Handheld Dynamic Microphone System AEW-R4100 receiver and AEW-T6100 hypercardioid dynamic microphone/transmitter

AEW-4313 UHF Wireless Dual-Transmitter System AEW-R4100 receiver, AEW-T1000 UniPak™ transmitter, and AEW-T3300 cardioid condenser microphone/transmitter

AEW-4314 UHF Wireless Dual-Transmitter System AEW-R4100 receiver, AEW-T1000 UniPak™ transmitter, and AEW-T4100 cardioid dynamic microphone/transmitter

AEW-4315 UHF Wireless Dual-Transmitter System AEW-R4100 receiver, AEW-T1000 UniPak™ transmitter, and AEW-T5400 cardioid condenser microphone/transmitter

AEW-4316 UHF Wireless Dual-Transmitter System AEW-R4100 receiver, AEW-T1000 UniPak™ transmitter, and AEW-T6100 hypercardioid dynamic microphone/transmitter

WIRELESS TRANSMITTERS

AEW-T3300 CARDIOID CONDENSER TRANSMITTER

AEW-T5400 CARDIOID CONDENSER TRANSMITTER

High-quality condenser elements proven in the world's finest recording studios: AEW-T3300: The same element as in the legendary AT4033 AEW-T5400: The same large-diaphragm element as in the AT4050

Programmable features include frequency selection, RF power and audio input level settings, Power/Mute locking preferences, and up to five custom presets with "naming" capability

Rugged, ergonomic metal bodies, soft-touch controls, and 10 mW/35 mW switchable RF power

Battery condition "fuel gauge" with low-battery warning

Operates on two 1.5V AA batteries

AEW-T4100 CARDIOID DYNAMIC TRANSMITTER

AEW-T6100 Hypercardioid dynamic transmitter

High-quality dynamic elements proven on the world's largest stages: AEW-T4100: The same element used in the AE4100 AEW-T6100: The same element used in the AE6100

Programmable features include frequency selection, RF power and audio input level settings, Power/Mute locking preferences, and up to five custom presets with "naming" capability

Rugged, ergonomic metal bodies, soft-touch controls, and 10 mW/35 mW switchable RF power

Battery condition "fuel gauge" with low-battery warning

Operates on two 1.5V AA batteries











Programmable features include frequency selection, input selection, 10 mW/35 mW RF power and audio input level settings, Power/Mute locking preferences, and up to five custom presets with "naming" capability

Battery condition "fuel gauge" with low-battery warning

Low- and high-impedance inputs plus a bias connection, for use with dynamic and electret condenser microphones, as well as Hi-Z instrument pickups

Rugged, ergonomic metal housing; includes field-replaceable helical and flexible-wire antennas

Three-position sliding cover limits access to controls as desired: full access, Power/Mute button only, or no access





Operates on two 1.5V AA batteries

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TRANSMITTERS

AEW-T1000 UniPak[™] TRANSMITTER

RF POWER OUTPUT	High: 35 mW; Low: 10 mW, nominal
SPURIOUS EMISSIONS	Under federal regulations
DYNAMIC RANGE	
MICROPHONE INSTRUMENT	≥110 dB, A-weighted ≥100 dB, A-weighted
INPUT CONNECTIONS	High impedance, low impedance, bias
BATTERIES (not included)	Two 1.5V AA alkaline
CURRENT CONSUMPTION	High: 185 mA; Low:165 mA, typical
BATTERY LIFE	Approximately 8 hours (High); 10 hours (Low), depending on battery type and use pattern
DIMENSIONS	2.60" (66.0 mm) W x 3.43" (87.0 mm) H x 0.94" (24.0 mm) D
NET WEIGHT (without batteries)	4.4 oz (125 g)

AEW-T3300, AEW-T4100, AEW-T5400, AEW-T6100 HANDHELD TRANSMITTERS

RF POWER OUTPUT	High: 35 mW; Low: 10 mW, nominal
SPURIOUS EMISSIONS	Under federal regulations
DYNAMIC RANGE	≥110 dB, A-weighted
MICROPHONE ELEMENT	
AEW-T3300 AEW-T4100 AEW-T5400 AEW-T6100	Cardioid Condenser Cardioid Dynamic Cardioid Condenser Hypercardioid Dynamic
BATTERIES (not included)	Two 1.5V AA alkaline
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	
AEW-T3300, AEW-T5400 AEW-T4100, AEW-T6100	9.41" (239.0 mm) long, 1.97" (50.0 mm) maximum diameter 9.33" (237.0 mm) long, 1.89" (48.0 mm) maximum diameter
NET WEIGHT (without batteries)	
AEW-T3300 AEW-T4100 AEW-T5400 AEW-T5100	9.5 oz (270 g) 9.7 oz (276 g) 10.0 oz (285 g) 9.7 oz (275 g)

ACCESSORY INCLUDED

AT8456a Quiet-Flex™ stand clamp



AEW I D44 TRANSMITTER BAG (Included with all **5000**SERIES systems, also available as a separate accessory)

WIRELESS ACCESSORIES



AT8456a Ouiet-Flex[™] STAND CLAMP FOR WIRELESS HANDHELD TRANSMITTER

AT8628a JOINING PLATE FOR AEW-R4100 RECEIVERS

AEW-TB44 TRANSMITTER BAG



AEW-TB44

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WIRELESS ESSENTIALS®

For use with all Audio-Technica UniPak[™] Wireless systems

LAVALIER MICROPHONES

AT831cW MINIATURE CARDIOID CONDENSER LAVALIER MICROPHONE

AT899cW SUBMINIATURE OMNIDIRECTIONAL CONDENSER LAVALIER MICROPHONE

AT899cW-TH BEIGE VERSION OF AT899cW

MT830cW MINIATURE OMNIDIRECTIONAL CONDENSER LAVALIER MICROPHONE

MT830cW-TH BEIGE VERSION OF MT830cW

HEADWORN MICROPHONES

AT889cW HEADWORN NOISE-CANCELING CONDENSER MICROPHONE

ATM73cW HEADWORN CARDIOID CONDENSER MICROPHONE

ATM75cW HEADWORN CARDIOID CONDENSER MICROPHONE

PRO 8HEcW HEADWORN HYPERCARDIOID DYNAMIC MICROPHONE

INSTRUMENT MICROPHONES

ATM35cW CARDIOID CONDENSER INSTRUMENT MICROPHONE

PRO 35xcW CARDIOID CONDENSER INSTRUMENT MICROPHONE

INSTALLED SOUND MICROPHONES

AT851cW HEMI-CARDIOID CONDENSER BOUNDARY MICROPHONE

AT857AMLcW 19" CARDIOID CONDENSER GOOSENECK MICROPHONE

CABLES

AT-GCW Hi-Z INSTRUMENT/GUITAR CABLE WITH 1/4" PHONE PLUG

XLRW

CONNECTING CABLE FOR UniPak TRANSMITTER WITH AN XLRF-TYPE INPUT CONNECTOR, FOR LO-Z MICROPHONES WITH XLRM-TYPE OUTPUT TERMINATIONS



AT831cW

AT899cW



MT830cW

AT889cW

ATM35cW



AT851cW



AT-GCW

XLRW

ATM75cW

PRO 8HEcW

PRO 35xcW



AT857AMLcW





Specifications Legend

[†] In the interest of standards development, A.T.U.S. offers

full details on its test methods to other industry professionals on request.

* 1 Pascal = 10 dynes/cm² = 10 microbars = 94 dB SPL

¹ Typical, A-weighted, using Audio Precision System One.

Specifications are subject to change without notice.





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