For Section 11, Wireless Microphones, use Quick Dial #: 91
WIRELESS MICROPHONES
AKG

WMS40 PRO
UHF Wireless Mic System

Drawing on the technology of the premium WMS 4000 and WMS 400 systems, the WMS 40 PRO system maximizes overall flexibility and application-specific focus. Components include handheld and body pack transmitters, head-worn, handheld and lavalier MicroMics. Systems are tailor-made for vocalists, musicians, lecturers, coaches, trainers, worship leaders – anyone who needs both clear communication and freedom of movement.

The WMS 40 PRO series includes three distinct ranges:

**WMS 40 PRO FLEXX Diversity** systems provide three selectable frequencies per frequency set, and can operate with up to nine inter-modulation free channels simultaneously. In addition, it’s true diversity receiver with balanced XLR and unbalanced 1/4” input jacks provide flexibility for all users.

**WMS 40 PRO Single** systems operate on fixed frequencies and can also be used in combination with several systems at a time. The receivers’ metal housing and 1/4” unbalanced input jack makes it perfect for individual performers and users.

**WMS 40 Pro Dual** systems provide two independent channels of the WMS 40 Pro series within a single metal chassis, thus offering greater value than single systems. Application-specific dual systems combine components such as head-worn handheld, and lavalier mics, which provides customizable performance.

All WMS40 PRO transmitters deliver 30 hours of trouble-free operation via a single AA battery. In addition, transmitters can be re-charged with the optional CU400 charging station which can accommodates two transmitters simultaneously.

RECEIVERS
All receivers are housed in an all-metal case and feature High Definition Audio Performance technology to ensure the legendary, realistic AKG sound and perfect audio transmission. They also offer multichannel capability for simultaneous use of up to seven channels (SR 40 Single/Dual) or nine channels (SR40 FLEXX).

**SR 40 FLEXX Only**
- Three selectable UHF frequencies for interference-free reception.
- Diversity reception for maximum transmission reliability even in difficult environments. Automatically selects the antenna providing the best signal.
- Adjustable squelch

**SR 40 DUAL Only**
Cost efficient alternative for operating two transmitters at the same time. Two receivers in a single case minimize space and cost.

**SR 40 SINGLE Only**
Single fixed frequency, the perfect solution for a single channel wireless system.

PT 40 FLEXX Bodypack and HT 40 FLEXX Handheld Transmitters
- Three selectable UHF frequencies for interference-free reception.
- Multichannel capability for simultaneous use of up to nine channels (maximum number of channel depends on local frequency plans).
- High Definition Audio Performance technology ensures the legendary, realistic AKG sound and perfect audio transmission.
- Transmitter operates for at least 30 hours off a single AA size battery, saving cost, maximizing dependability, and minimizing onstage stress.

PT 40 PRO Bodypack and HT 40 PRO Handheld Transmitters
- Miniature transmitters
- Single-battery powering
- Multichannel capability for simultaneous use of up to seven channels (maximum number of channel depends on local frequency plans).
- High Definition Audio Performance technology ensures the legendary, realistic AKG sound and perfect audio transmission.
- Transmitter operates for at least 30 hours off a single AA size battery, saving cost, maximizing dependability, and minimizing onstage stress.

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**CK 55 L**

Clip-On Microphone

A low-profile and almost inconspicuous cost efficient clip-on microphone for applications including houses of worship, lecturers, etc. The CK 55 L provides a natural, airy sound, with a slight rise above 10 kHz for added clarity. Its cardioid polar pattern and bass rolloff combine to suppress unwanted ambient noise. Connects to AKG bodypack transmitters via TA3 mini XLR connector.

**SO 40**

Snap-On Transmitter

Use professional wireless technology with your existing equipment. The SO 40 snap-on transmitter turns every dynamic microphone into a wireless one. Professional features include glass fiber reinforced miniature case, an input gain control for optimum matching to mic output level and a DC/DC converter for constant, transmission quality throughout battery life. To convert your mic to wireless, simply plug the SO 40 into the XLR connector on the mic.

**CU-400** Dual-Bay Battery Charger

Any wireless mic system depends on sufficiently charged batteries in all the transmitters. There is nothing more embarrassing than a transmitter dying in the middle of the show, or a voice fading as the transmitter battery dies. The dual-bay CU-400 puts an end to this kind of hassle. It can charge two batteries simultaneously to full capacity within an hour, and there is no risk of overcharging. Two LEDs on the front of the unit indicate when the unit is charging.

Place both the HT-40 and PT-40 transmitters directly into the unit for fast charging without having to remove the battery. The charger includes two "AA"-sized 1.2v high-current NiMh batteries that deliver 25% more power than standard rechargeable or alkaline batteries. The CU-400 fully charges the batteries either in the transmitters or just plugged into the bays in under 90 minutes. WMS-40 transmitters can run 8 hours on a full charge.

- Monitors battery voltages and temperatures during charging.
- Generates a flag signaling the end of the charging cycle upon reaching maximum capacity.
- Monitors all required safety parameters and will stop the charging cycle if one of more safety parameters are out of range.
- Quick charge transmitters in 1½ hours yielding up to 8 hours operating time.

**WMS40 PRO Systems**

- **MS40 FLEXX** Wireless Headworn System (AKW40PFHS40)
  SR40-FLEXX receiver and PT40-FLEXX body-pack transmitter with C444L head-worn microphone...........................................319.00

- **WSM40 FLEXX** Wireless Handheld System (AKW40PFHH40)
  SR40-FLEXX receiver and HT40-FLEXX handheld transmitter..............................299.00

- **WSM40 FLEX** Wireless Lavalier System (AKW40PL40)
  SR40-FLEXX receiver, PT40-FLEXX bodypack transmitter and CK55L lavalier........299.00

- **WMS40 Dual Wireless Headworn System** (AKW40PDHS)
  SR40 dual receiver and (2) PT40 Pro body-pack transmitters .........................................................349.00

- **WMS40 Single Wireless Headworn System** (AKW40PHS)
  SR40 single receiver, PT40 Pro body-pack transmitter and C444L headworn microphone ..................................................249.00

- **WMS40 Single Wireless Handheld System** (AKW40PHH)
  SR40 single receiver and HT40 Pro handheld transmitter.................................................................199.00

- **WMS40 Single Wireless Lavalier System** (AKW40PL)
  SR40 single receiver, PT40 Pro body-pack transmitter and CK55 lavalier mic.......199.00

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WMS400 Wideband UHF Wireless Microphone System

The WMS400 system is your best choice for any application calling for a solution that is more flexible than a simple plug-and-play system, yet easy to set up and operate. The WMS400 provides cost-efficient, high-performance solutions for situations where several radio mics will be used simultaneously. Up to 12 channels can be used simultaneously within the same sub band and even large systems will work smoothly in environments hostile to RF transmission.

The WMS 400 makes setting up a professional wireless system easier than ever before.

In Auto Setup mode, the receiver will scan the available bands, find an interference-free channel, and transmit the related frequency data to the assigned transmitter via infrared. This technique significantly reduces the time it takes to set up a multi-channel system. A Rehearsal function identifies dead spots, and a programmable display clearly indicates all important system parameters. Two color display backlighting warns of critical conditions from a distance.

SR 400 True Diversity Receiver

The SR 400 makes setup and operation easy. With simultaneous operation of up to 12 channels on each frequency band, you can be certain of smooth operation even in critical RF environments. You can set up even complex wireless systems using antenna splitters, power supply units and a whole range of high-performance external antennas.

◆ Auto Setup mode significantly reduces the time it takes to set up a multichannel system. The receiver scans the available bands, finds an interference-free channel, and transmits the related frequency data to the assigned transmitter via infrared.

◆ Rehearsal function (complete RF testing of all components) identifies dead spots.

◆ Level control (to adjust output) is recessed to prevent accidental readjustment.

◆ Infra-Red transmission of frequency settings ensures reliable transmitter programming.

◆ Two-color backlit LCD display gives you a function check at a glance.

◆ Status LEDs provide detailed information about important system parameters, such as audio level, diversity status, RF level, etc.

◆ Menu buttons facilitate easy programming.

◆ Half-rack width metal case for convenient rack installation.

Handheld and Bodypack Transmitters

The PT 400 and HT 400 are compact, high-performance transmitters with many innovative features to enhance both system reliability and user friendliness. The LCD display indicates all important system data at a glance, including the frequency selected from the factory presets (country, group, channel), transmitter battery capacity, a low battery capacity warning, as well as the current transmission mode. Once you have set a frequency on the receiver, an infrared transmission link will feed the related data to the assigned transmitter within seconds, making the setting up of large multi-channel systems child’s play.

PT 400 Bodypack Transmitter: Housed in a rugged case, the compact PT 400 has a 3-pin mini XLR input that allows you to connect a wide selection of microphones. Input gain control sets the gain of the audio input stage. A special jack lets you connect an optional external mute switch enabling users to mute the audio signal even if the transmitter is hidden in the clothes.

HT 400 Handheld Transmitter: The rugged HT 400 comes with a dynamic or condenser mic element. It has a noiseless ON-MUTE/PRG-OFF switch and status LED that add to the transmitter’s user-friendliness.

◆ Available with D 880 or C 900 microphone element

◆ Extremely rugged spring steel wire mesh cap protects the microphone transducer from damage in tough usage on stage.

PT 400 and HT 400 BOTH FEATURE

◆ Integrated charging contacts for convenient plug-in charging on the CU 400 charger.

◆ Interchangeable color code labels for marking transmitters by colors and lettering.

◆ Frequency and gain data is downloaded from the receiver via infra-red to their infra-red sensors, making setup incredibly easy.

◆ Backlit LCD display indicates the selected frequency or preset as well as the remaining battery capacity in hours.

◆ The transmitters can be powered by a single AA size alkaline or rechargeable battery.

◆ Soft-touch enamel finish reduces handling noise.
WIRELESS MICROPHONES

AKG

WMS400

Lavalier Mics
With mini XLR connectors for use with WMS bodypack transmitters.

C417L Omnidirectional Mic (AKC417L)
Affordable professional miniature condenser microphone. Its broadband, flat audio reproduction in an omnidirectional format is ideal for all types of applications. The sound is extremely open and natural, making it ideal for wireless use. Includes attachment clip, tie-pin, and windscreen.

CK-55L Cardioid Mic (AKCK55L)
The CK-55L is a low-profile, cost efficient clip-on mi for applications including lecturers, houses of worship, etc. It provides a natural sound, with a slight rise above 10kHz for added clarity. Its cardioid polar pattern and bass rolloff combine to suppress unwanted ambient noise. Includes clip and windscreen.

CK-77 WR/L Omnidirectional Mic
An extremely small omnidirectional lavalier mic, the premium CK-77 WR/L has a patented dual-diaphragm capsule designed specifically to protect the transducer from moisture and perspiration. The capsule uses two vertical diaphragms mounted back to back for suppression of cable noise. Includes attachment clip, tie-pin, and windscreen.

CK-97C/L Cardioid Mic (AKCK97CL)
Miniature cardioid capsule for minimum ambience pickup, the CK-97C/L is perfectly suited for “invisible” miking. Consistent cardioid pattern ensures good separation, minimum ambience pickup, and high gain before feedback in live sound applications. Comes complete with a windscreen, tie pin, hanger adapter, and lavalier clip.

C420/L Cardioid Headset Condenser Mic (AKC420L)
Ideal for vocalists, dancers, and aerobics instructors, the C420/L is a head-worn condenser mic with a wide dynamic range and full frequency response. Behind-the-neck steel headband and ear pieces are fully adjustable for a secure and comfortable fit. The cable exits from the rear of the headband. An external shock mount suppresses mechanical-noise rejection, and the miniature gooseneck offers precise positioning near your mouth.

C477WR/L (AKC477WRL)
Moisture-Resistant Omnidirectional Headworn Mic
Designed for working in the heat of the spotlight. Extremely small, it is the perfect choice for “hidden” use where absolute mobility and excellent audio are required. A sturdy metal headband ensures an exceptionally stable fit and provides increased output level, as it allows the mic to be placed very close to your mouth. The C477WR/L has an extremely small omnidirectional lavalier mic, with a dual-diaphragm capsule designed specifically to protect the transducer from moisture and perspiration. The capsule uses two vertical diaphragms mounted back to back for suppression of cable noise.

CU-400 Dual-Bay Battery Charger (AKCU400)
The dual-bay CU-400 can charge two batteries simultaneously to full capacity within an hour, without the risk of overcharging. Two LEDs on the front of the unit indicate when the unit is charging. Place both the HT-40 and PT-40 transmitters directly into the unit for fast charging without having to remove the battery. The charger includes two “AA”-sized 1.2v high-current NiMh batteries that deliver 25% more power than standard rechargeable or alkaline batteries.

◆ Monitors battery voltages and temperatures during charging, as well as all required safety parameters and will stop the charging cycle if one of more safety parameters are out of range
◆ Generates a flag signaling the end of the charging cycle upon reaching maximum capacity
◆ Quick charge transmitters in 1½ hours yielding up to 8 hours operating time

WMS400 Systems
All systems include the SR400 Diversity Receiver

WMS400 Wireless Lavalier Mic System (AK400PT407): With PT400 Transmitter and C407L Lavalier Mic.
WMS400 Wireless Headworn Mic System (AK400PT477): With PT400 Transmitter and C477L Headworn Mic.
WMS400 Wireless Handheld Mic System (AK400HTD880): HT400 Handheld Transmitter with D880M.
WMS400 Wireless Handheld Mic System (AK400HTC900): HT400 Handheld Transmitter with C900.

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WIRELESS MICROPHONES

AKG

WMS4000

UHF True Diversity Wireless Mic System

The WMS4000 is an advanced and innovative wireless systems for professional use. It offers an inspiring combination of sophisticated engineering, exceptional flexibility, surprising versatility, and maximum ease of use. The application range of the WMS4000 is almost unlimited, from fixed installations or mobile systems in architecturally difficult environments to broadcast work. In large-scale projects including worship center sound systems, theatrical productions, or stadium concerts, the WMS 4000 shows off its professional qualities.

The advanced backlit display on the transmitters as well as on the receiver indicates the selected Preset, remaining transmitter battery life, gain setting, or intermodulation-free frequencies. Transmitters provide a silent mode and a “hidden” pilot tone system for status monitoring. An Environment Scan function on the SR 4000 receiver finds interference frequencies within the RF environment. The Rehearsal function lets you track important system parameters during the soundcheck to avoid potential problems before the show.

The CU/BP 4000 battery powering system is controlled by the unique SBMS Smart Battery Management System. It permanently monitors battery status and prevents overcharging, while providing maximum safety and reliability. Choose from directional and omnidirectional antennas for every application.

FEATURES

SR 4000 True-Diversity Frequency-Agile UHF Receiver

The SR 4000 is a state-of-the-art, true diversity receiver that provides maximum ease of use and the most useful functions in its class. Many features of the SR 4000 were never before available or limited to extremely expensive systems. The accurate battery life readout is an invaluable advantage in live sound applications. The transmitter uses a pilot tone to transmit battery status data to the receiver that displays the remaining battery capacity in hours. The pilot tone decoder also detects and displays other important information including the current position of the MUTE switch on the transmitter. The integrated software not only permits automatic setup and frequency scanning but remote control and monitoring from a PC via a dedicated interface as well. Optional HUB 4000 and MCS 4000 Mission Control Software makes setting up and monitoring highly complex systems incredibly easy. A logic output allows remote control of specific functions on an external device, e.g., an automatic microphone mixer. Naturally, the SR 4000 operates in an extremely wide UHF band (30 MHz) and each frequency preset provides up to 24 intermodulation-free subchannels. Housed in a half-rack, all-metal case, the SR 4000 is the most compact, reliable, and powerful UHF receiver in its price bracket.

◆ The SR 4000 operates on a 30 MHz-wide UHF wide bandwidth containing preset inter-modulation-free frequencies and access to up to 1,200 switchable frequencies. Three separate 30 MHz channels may be selected for use in the U.S., offering a maximum of approximately 50 usable channels that are limited only to other external RF interference.
◆ Unique signal compression and expansion circuits provide a dynamic range greater than 112 dB.
◆ An output level switch allows the selection of three output levels at -30, 0, +6 dB for optimum system gain structure.
◆ Internal software features AutoSetup for inter-modulation free channel selection, Environment Scan for scanning of the unit’s RF range, and Rehearsal Mode selection for saving system data during rehearsal set-up. Settings like squelch threshold, carrier frequency selection and user’s name can be edited and stored in an easy menu structure.
◆ Programmable status indicators on the SR 4000 receiver include mute, audio level bar graph, RF level bar graph, and a 6 x 14 segment alphanumeric display and menu control. The unique, programmable Status Control Ring can display the most important system data at a glance.
◆ The large, backlit color display and a jog wheel make the SR 4000 easy to use and a programmable warning light indicates selectable critical conditions within the system.

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**PT 4000 Bodypack and HT 4000 Handheld UHF Transmitters**

Both the PT 4000 and the HT 4000 incorporate programmed, pre-matched, optimized frequency groups that allow for quick, easy frequency selection. Other features include backlit LCD displays for system status monitoring and a jog wheel for quick system setup and navigation. Encased in magnesium, the transmitters are light yet rugged. They offer an operating distance of up to 330’, with a system audio bandwidth from 35Hz to 20 kHz.

- The PT 4000 bodypack accepts mic and line-level input signals and has an adjustable input sensitivity. A lockable TA-3F mini-XLR connector is used for connecting AKG headset and lavalier mics. The PT 4000 also has a 2.5-mm jack connector for the optional RMS 4000 remote switch device.
- The HT 4000 allows for interchangeable mic and line-level input signals and has an adjustable input sensitivity. A lockable TA-3F mini-XLR connector is used for connecting AKG headset and lavalier mics. The HT 4000 also has a 2.5-mm jack connector for the optional RMS 4000 remote switch device.

**Common Features**

- Electronically lockable On/Off button and protruding mute switch are easily seen.
- LED indicates the system's operating status.
- Backlit display ensures easy setup and accurate status monitoring even in dark environments. Displays remaining battery life, Gain menu (choice of manual and automatic gain setting modes) and frequency presets.
- The HT 4000 and PT 4000 can be powered by 2 AA batteries or a BP 4000 rechargeable battery pack. Integrated charging contacts allow the optional BP4000 battery pack to be charged by the optional CU 4000 charger while still inside the transmitter.
- 'Silent' Mode lets you set system parameters, such as carrier frequency, gain, etc. — without transmitting an RF signal. This lets you set up a replacement transmitter behind the scene without disrupting a performance.
- They transmit a 30KHz pilot tone inside the radio signal to the receiver. This allows the pilot tone detection circuit of the receiver’s Tone Code Squelch (TCSQ) to determine whether there is an active transmitter inside the coverage area and then activate or mute the audio output without any noise.

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**WMS4000**

**CU 4000 Charger and BP 4000 Intelligent Battery Pack**

The CU 4000 has two charging bays to hold two HT 4000 or PT 4000 transmitters or BP 4000 battery packs. The CU 4000 can charge two battery packs simultaneously in one hour. A three-step LED display on the CU 4000 displays the charging status.

The CU 4000 is based on a trickle charge system with inflection point switch-off automation to prevent the battery pack from overcharging. It identifies possible battery memory problems and suggests starting an optional recovery cycle via a recovery button on the front panel. This function refreshes the BP 4000 battery pack by charging and discharging cycles to determine the actual capacity of the battery. The CU 4000 has a lockable DC connector on its rear panel that allows it to be powered by either an external DC adapter or by the optional PSU 4000 central power supply.

The BP 4000 quick-replacement battery pack features internal RAM to store charge/discharge process data and provides a database for optimizing charging parameters (Charge Balance Management). Data interface sends battery status information to the transmitter electronics for accurate capacity readout. Integrated temperature sensor protects the battery pack against overcharging and damage. Charge Balance Management makes sure that only as much energy is fed to the battery pack as had previously been drawn from it. A self-discharge counter ensures correct charging after the battery pack has been stored for a long time. The battery pack uses the integrated database and charger interface to set its own charging current.

**HUB 4000 Network Interface for WMS4000 Wireless System**

The HUB 4000 is the intelligent hardware interface between an WMS 4000 wireless system and a PC. No more cumbersome cabling. It concentrates the data flow of up to eight receivers and connects easily to any PC with an ethernet interface. Complex systems can use up to 16 4000s. With eight receivers per hub, you can operate up to 128 receivers from a single PC. Connection is via Ethernet cables with RJ-45 connectors, while the data is transmitted via IP protocol. In REHEARSAL mode, you can take the PC on the stage and monitor important data such as RF levels on site. This makes it incredibly easy to set up the most complex system and ensures maximum operating reliability.

The HUB 4000 includes MCS 4000 Mission Control software, which lets you to display the entire setup of a WMS system on screen and to edit all settings via mouse click. RF and audio levels, diversity activity, battery status, Mute/Off etc. are displayed in real time with important warning messages inserted. Set up the basic parameters of a complete system from the computer: remote control software puts Environment Scan, Auto Setup and Rehearsal Check at your fingertips. History recording stores the monitoring data of all channels in a log file to help with the setup and the analysis of completed system.
WIRELESS MICROPHONES
AKG

WMS400 / WMS4000 ACCESSORIES

WMS4000 Wireless Bodypack Systems
Includes SR4000 Receiver, PT4000 Bodypack Transmitter and . . .
- C477/WRL Omnidirectional Headset Mic: Black (AK4000477B) / Beige (AK4000477BE)
- C477/WRL Omnidirectional Lavalier Mic: Black (AK4000447)
- C444/L Cardioid Headset Mic: Black (AK4000444)
- C444/L Cardioid Lavalier Mic: Black (AK4000444)
- C97C/L Cardioid Lavalier Mic: Black (AK4000900)

WMS4000 Wireless Bodypack Systems
Includes SR4000 Receiver & HT4000 Handheld Transmitter with . . .
- CK77WR/L Omnidirectional Lavalier (AK400038277)
- CK77WR/L Omnidirectional Headset Mic (AK400077)
- CK77/WR Lavalier (AK4000880)
- CK97C/L Cardioid Lavalier (AK4000900)
- C417/L Cardioid Headset Mic (AK4000880)
- C417/L Cardioid Lavalier Mic (AK4000900)
- C420/L Cardioid Headset Mic (AK400037277)
- C420/L Cardioid Lavalier Mic (AK400037277)
- C55/L Cardioid Lavalier Mic (AK400037575)

WMS4000 Wireless Bodypack Systems
Includes SR4000 Receiver, PT4000 & HT4000 Transmitters with . . .
- D900WL1 Handheld and . . .
- C417/L Lavalier (AK4000880)
- C417/L Lavalier (AK4000880)
- C55/L Lavalier (AK4000880)
- C417/L Lavalier (AK4000880)
- C417/L Lavalier (AK4000880)

PS-4000 Multi-Coupler (AKPS4000)

The PS-4000 multi-coupler provides an antenna signal and DC power for up to four diversity wireless receivers. It has a wide-band antenna signal amplifier/divider with a 220 MHz-wide UHF bandwidth custom-tuned to all available WMS-4000 channels. Two additional BNC outputs are also available on the rear panel for cascading the diversity antenna signal to another multi-coupler. Up to three multi-couplers can be cascaded to supply antenna signal to 12 receivers from a single pair of antennas.

- The PS-4000 has several operation and failure status LEDs that allow monitoring of correct cable and antenna signal operation. A 10-position switch on the front panel of the PS-4000 will adjust for signal loss caused by cable length, thus providing reception optimization.
- Either a single DC adapter or an ASU-4000 central power supply unit can power the PS-4000. The PS-4000 is encased in all-metal chassis and is one standard rack unit high and one-half rack unit wide. When mounted it can be placed side-by-side with an SR-4000 receiver, another PS-4000 multi-coupler, an ASU-4000 and other WMS-4000 rack-mountable accessories.
- The PS-4000 uses three different external antenna options; the SRA1 passive directional, the SRA2 active directional and the RA-4000B active omnidirectional. When cable length between external antennas and PS-4000 exceed the maximum compensation setting an AB-4000 in line amplifier can be added to gain an additional 17dB of amplification.

AB-4000 Antenna Amplifier

The AB-4000 is an in-line antenna signal amplifier used to compensate for the signal loss from cable attenuation in large antenna networks. The amplifier comes with an ultra-linear rf amplifier circuit that offers up to 17dB of amplification and can be remotely powered by the PS 4000 or by an external AC adapter. Therefore it can be used with up to 90 meters (297') of RG58 cable or 220 meters (726') of RG213 cable. In total, two AB-4000's can be cascaded in series without increasing the noise of the wireless microphone system. To optimize the system's performance, the AB-4000 comes with a 10-position switch for compensation of the connected cable length. The antenna booster also is equipped with 2 BNC connectors and 1 power indicator LED. The splitter comes in a waterproof metal housing and therefore is even suitable for use outdoors.

AB-4000 Antenna Amplifier (AKAB4000).........................169.95

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RA 4000B Amplified Antenna (AKRA4000B)

An active omnidirectional antenna designed for the WMS-4000, the RA 4000B comes with a specially-tuned wideband UHF amplifier, perfectly matched to all WMS-4000 channels. The integrated ultra linear RF amplifier circuit can be remotely powered by the PS 4000 antenna splitter and offers approximately 17dB of amplification to compensate for the cable attenuation of up to 132’ of RG58 cable or 330’ of RG213 cable. If necessary, the SRA 2 can also be cascaded with the optional AB 4000 antenna amplifier to compensate for even more antenna cable length. The antenna provides a BNC connector for connecting an antenna cable .............................................. 124.50

SRA 1 Passive Directional Antenna

A passive UHF antenna with a hypercardioid polar pattern. The antenna design provides maximum on-axis gain of approximately 6dB, which is equivalent to increasing the transmitter’s radiated power by four times. The antenna provides a BNC connector for connecting an antenna cable ................. 206.50

SRA 2B Active Directional Antenna

Specially designed for the WMS 4000, the SRA 2B comes with custom-tuned wideband UHF tuning. The directional polar pattern offers approximately 70° of pickup with an on-axis amplification factor of approximately 6dB. It can typically overcome distances of up to 660’ on-axis, line-of-sight. The integrated ultra-linear RF amp circuit can be powered by the PS 4000 multi-coupler and offers amplification of approximately 17dB to compensate for cable attenuation of up to 132’ of RG58 cable or 330’ of RG213 cable. The SRA 2B can also be cascaded with the optional AB 4000 antenna amplifier for compensation of even greater antenna cable length. The antenna input utilizes BNC connectors for connecting the antenna cable .............................................. 309.95

ASU 4000 Antenna Supply Unit (AKASU4000)

An in-line power supply unit for use in large antenna networks to feed 12v DC into an antenna line. With the help of the ASU 4000, all connected AKG antenna network components such as the AB 4000, SRA 2B and RA 4000B can be remotely powered even if there is no power coming from the connected PS4000 multi-coupler (e.g. in distributed antenna networks using standard antenna combiners). The ASU 4000 is equipped with 2 BNC connectors, 1 power indicator LED as well as a DC input for connection of the AC adapter. The ASU 4000 is built into a waterproof metal housing and therefore is suitable for outdoor use ........................................................................ 159.95

PSU 4000 Central Power Supply Unit

The PSU-4000 is a central power supply unit for all WMS4000 system components. Use it to power up to twelve SR-4000 or SR-400 receivers plus antennas via 3 PS-4000 antenna splitters, or three CU-4000 chargers. Also powers the HPA-4000 headphone amplifier and HUB-4000 network concentrator........... 339.95

HPA 4000 Headphone Monitoring Amplifier

The HPA-4000 is a headphone amplifier with eight stereo line inputs and one stereo output. It allows you to monitor the output signal of any one of eight SR-4000 receivers on headphones. AKG offers suitable headphones for every application. You can use the HPA-4000 as a standalone unit or install it in a 19” rack using the supplied rack mounting kit................................. 437.50

ZAPD-21 Power and RF Splitter (AKZAPD218NC)

Antenna combiner for indoor and outdoor use, specifically, for near-field antenna setups with no preferred direction. Two inputs, 1 output. Reverse operation possible. BNC connectors .............. 103.50
2000 SERIES

10-Channel Frequency-Agile UHF True Diversity Wireless System

The innovative 2000 Series wireless delivers professional performance unheard of in its class. With this breakthrough series, Audio-Technica makes easy setup, automatic scanning and other advanced wireless features affordable as never before.

Featuring automatic frequency scanning, it finds and sets the best available channel at the touch of a button. For those using multiple wireless systems simultaneously, the 2000 Series offers another standout: any of its 10 channels may be used together—eliminating confusing frequency groups and other frequency-coordination problems.

ATW-R2100
True Diversity Receiver

- The ATW-R2100 is a rugged metal half-rack receiver with soft-touch controls and LCD display featuring RF and AF metering.
- Clear sound quality and rock-solid, dependable performance—up to 300’.
- Automatic frequency scanning finds an open channel at the touch of a button.
- All 10 user-switchable channels are compatible for easy use with multiple systems; no confusing frequency groups.
- True Diversity operation selects the better signal from the two receiver sections, reducing dropouts.
- Tone Lock tone squelch system fights interference.
- Balanced XLR and unbalanced 1/4” output jacks.
- AF level controls adjust audio output level of both output jacks (1/4" and XLR).
- Ground-lift switch disconnects the ground pin of the balanced output jack from the ground. This helps eliminate audible hum caused by ground loops between the sound system and receiver.
- Cord hook to keep the DC plug from pulling out accidentally.
- Includes two flexible UHF antennas, rack-mount adapters, and AC adapter.

ATW-T210
UniPak Transmitter

The ATW-T210 UniPak transmitter is a lightweight body pack microphone transmitter for the 2000 series. It operates on the same frequencies as the receiver and features a TA4 (mini 4-pin) input that is compatible with Audio-Technica “CW” lavaliers and head worn microphones. The UniPak operates up to 9 hours on two 1.5v AA batteries.

ATW-T220
UniPak Transmitter

The ATW-T220 is a lightweight handheld mic transmitter that operates on the same frequencies as the receiver. The transmitter features a features a PRO 41 cardioid capsule for maximum feedback rejection and consistent sound. The transmitter operates up to 9 hours on two 1.5v AA batteries.

2000 Series Systems

ATW-2110
UHF Body-Pack System (AUATW2110)
ATW-R2100 receiver and ATW-T210 UniPak transmitter. (Requires a lavalier or headworn mic to complete the system).

ATW-2120
UHF Handheld Mic System (AUATW2120)
ATW-R2100 receiver and ATW-T220 handheld cardioid dynamic microphone/transmitter.

Receiver Accessories

AEW-DA660D (AUAEDM660D)
UHF active unity-gain antenna distribution system (655-680 MHz)……………………569.95

ATW-A49 (AUATWA49)
Pair of UHF wide-band (440-900 MHz) directional LPDA antennas.………………252.50

AT8630 (AUAT8630)
Joining-plate kit mounts two ATW-R2100 receivers in one 19” rack space…………23.95
200-Channel Frequency-Agile UHF True Diversity Wireless System

Designed for a wide range of applications including live performance, regional touring companies, fixed installation, public address and places of worship, the 3000 Series operates in the UHF 600 MHz frequency band (655-680 MHz, TV channels 44-49) with 200 selectable frequencies and true diversity wireless technology. All components have soft-touch controls for quick, easy access to the most important functions during set-up and operation. An easy-to-read LCD information display in each unit provides convenient visual indications of settings and operation status.

**ATW-R310 True Diversity Receiver**
- The ATW-R310 offers 200 PLL-synthesized UHF frequencies, true diversity operation, advanced Digital Tone Lock Squelch, soft-touch controls with LCD information display and step-through menus (for setting preferences) to minimize set-up time.
- Automatic frequency scanning finds an open channel at the touch of a button for easy setup.
- Adjustable-slope high-pass filter (Off, 6dB, 12dB, or 18dB)
- Advanced Digital Tone Lock squelch system provides enhanced rejection of interference. The squelch level is adjustable from 15dB (default value) to 39dB in 6dB steps.
- Meter hold setting function permits the AF bar graph in the LCD window to capture and display the highest level audio modulation received from the transmitter — very useful during setup or sound check.
- Transmitter battery-life fuel gauge is shown on the receiver
- XLR-balanced and 1/4" unbalanced outputs
- All-metal housing for superior shielding, and a ground-lift switch
- Includes two flexible UHF antennas and rack-mount adapters
- Two receivers can be mounted side-by-side in a single 19" rack space

**ATW-T310 UniPak Transmitter**
- The versatile ATW-T310 offers a multi-function LCD display and soft-touch controls for easy set-up and operation.
- Low- and high-impedance inputs (with a bias connection) permit use with dynamic and condenser mics.
- In addition to its programmable functions, the ATW-T310 has a three-position sliding cover to limit access to controls as appropriate for the application and user.

Both transmitters have dual-power setting: select high for maximum range or low for extended battery life and are powered by two 1.5V AA batteries for 6-10 hours of operation.

**ATW-T341 Handheld Mic/Transmitter**
- Using the same cardioid dynamic capsule (specifically tailored for a more aggressive sound quality that keeps the vocals up-front in the mix) as ATs acclaimed Artist Elite AE4100 microphone, the ATW-T341 provides a focused vocal pickup while offering superior gain-before-feedback.
- Features rugged metal construction, soft-touch controls and a multi-function LCD display.

**3000 Series Systems**

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATW-3110a</td>
<td>UniPak Body-Pack System (ATW-3110a) + ATW-R3100 + ATW-T310 UniPak transmitter</td>
<td>$699.95</td>
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<tr>
<td>ATW-3141a</td>
<td>Handheld Mic System (ATW-3141a) + ATW-R3100 + ATW-T341 handheld cardioid dynamic microphone/ transmitter</td>
<td>$999.95</td>
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**Receiver Accessories**

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>AEW-DA550C</td>
<td>UHF active unity-gain antenna distribution system (340-565 MHz)</td>
<td>$569.95</td>
</tr>
<tr>
<td>AEW-DA660D</td>
<td>UHF active unity-gain antenna distribution system (655-680 MHz)</td>
<td>$569.95</td>
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</table>

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATW-A49</td>
<td>Pair of UHF wide-band (440-900 MHz) directional LPDA antennas</td>
<td>$252.50</td>
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<tr>
<td>AT8630</td>
<td>Joining-plate kit mounts two ATW-R310 receivers in one 19&quot; rack space</td>
<td>$23.95</td>
</tr>
</tbody>
</table>
4000 SERIES / 5000 SERIES

Frequency-Agile True Diversity UHF System

Building on the 3000 Series, the 4000 and 5000 Series wireless systems can suit the most demanding performance applications. Multiple receivers of both series can be linked, and both systems feature IntelliScan frequency selection and dual compander. All components can store up to five preset configurations, with customized “names” if desired. The heart of the 4000 and 5000 Series is their true diversity frequency-agile receivers. The half-rack AEW-R4100 and full-rack, dual-receiver AEW-R5200 offer two hundred selectable UHF channels in the range of 655.500 to 680.375 MHz (TV channels 44-49), with an operational range in excess of 300'.

• Receivers may be linked to form a complete system in which the built-in IntelliScan capability can automatically determine and set the best available frequencies on all linked receivers, minimizing interference and intermodulation. An AC pass-through system allows multiple receivers to be powered using only one outlet.

• Dual-band compander circuitry compresses and expands low- and high-frequency audio signals separately, minimizing artifacts such as pumping and amplifying and maximizing audio quality.

• Digital Tone Lock squelch system ignores RF that does not carry the wanted signal's unique signature. Concurrently, the digitally encoded tone also communicates transmitter data for receiver display.

• External mute switch jack to mute the system quickly and easily.

• The AEW-R5200 also includes Ethernet ports, enabling monitoring of system parameters via the supplied Mac or Windows software.

• To complement both the 4000 and 5000 Series receivers, five wireless transmitter options are available. All feature rugged, ergonomic metal bodies, programmable on/off/mute switching, and 10 mW/35 mW switchable RF power, and are compatible with both systems. Five user-programmable settings, plus a default setting, make these transmitters extremely versatile.

• The AEW-T1000 UniPak transmitter offers advanced features such as a recessed dual-impedance 4-pin locking connector, durable metal body, soft-touch controls with sliding cover, and an input level that is adjustable in 2db increments.

• Developed from AT’s Artist Elite line of wired mics, the handheld transmitters are specially optimized for wireless operation. Options include two condenser and two dynamic types.

• The AEW-T5400 and AEW-T3300 cardioid condenser mics boast superior clarity and realism, very low handling noise, and sturdy, die-cast construction. The cardioid AEW-T4100 and hypercardioid AEW-T6100 dynamic mics offer assertive sound, outstanding pop protection, and rugged construction.

4000 Series System Configurations

**UniPak Transmitter System:** Includes an AEW-R4100 receiver and an AEW-T1000 UniPak transmitter (AUAEW4110)..................Call

**Handheld Systems:** Includes AEW-R4100 Receiver and...
AEW-T3300 cardioid condenser mic/transmitter (AUAEW4230)........Call
AEW-T4100 cardioid dynamic mic/transmitter (AUAEW4240)........Call
AEW-T5400 cardioid condenser mic/transmitter (AUAEW4250).......Call
AEW-T6100 hypercardioid dynamic mic/transmitter (AUAEW4260) ....Call

**Dual Transmitter Systems:** Includes an AEW-R4100 Receiver, an AEW-T1000 UniPak Transmitter and an...
AEW-R4100 (AUAEW4313)......Call
AEW-T6100 (AUAEW4315)......Call

5000 Series System Configurations

**Dual UniPak Transmitter System:** Includes an AEW-R5200 Dual Receiver and two AEW-T1000 UniPak Transmitters (AUAEW5111)........Call

**Dual Handheld Systems**
Includes an AEW-R5200 Dual Receiver and...
Two AEW-T3300 condenser mic/transmitters (AUAEW5233)..........Call
Two AEW-T4100 dynamic mic/transmitters (AUAEW5244).........Call
Two AEW-T5400 condenser mic/transmitters (AUAEW5254).......Call
Two AEW-T6100 dynamic mic/transmitters (AUAEW5266).........Call

**Dual Transmitter Systems:** Includes an AEW-R5200 Dual Receiver, two AEW-T1000 UniPak Transmitters and...
Two AEW-T3300s (AUAEW5413)...Call
Two AEW-T5400s (AUAEW5415)...Call
Two AEW-T4100s (AUAEW5414)......Call
Two AEW-T6100s (AUAEW5416).....Call
Microphones for UniPak Body-Pack Transmitters

Pre-terminated with a HRS-type type connector for use with Audio-Technica wireless bodypacks, these mics allow you to “personalize” your wireless system for a specific application. Plus, you can interchange mics without having to purchase another wireless system or transmitter.

**AT829cW** (AUAT898CW)
Miniature cardioid condenser lavalier microphone. Includes clothing clip and windscrew. **154.50**

**MT830cW** (AUAT830CW)
Miniature omnidirectional condenser lavalier mic. Includes clothing clip and windscrew. **78.50**

**MT830cW-TH** (AUAT830CWTH)
“Theater” model, same as MT830cW except beige color mic and cable. **78.50**

**AT831cW** (AUAT831CW)
Miniature cardioid condenser lavalier mic. Includes clothing clip and windscrew. **79.95**

**AT889cW** (AUAT889CW)
Subminiature cardioid condenser lavalier mic. Includes clothing clip base, viper clip base, magnet clip base, three single and two double mic holders, two windscreens. **154.50**

**AT898cW** (AUAT898CW)
Headworn noise-canceling condenser microphone. Includes windscrew and cable clip. Rugged, moisture-resistant construction designed for aerobics instruction and other demanding applications. **157.50**

**AT899cW** (AUAT899CW)
An easily concealable subminiature omni-directional condenser lavalier mic. It includes the AT899AK accessory kit. **159.95**

**ATM73cW** (AUATM73CW)
Headworn cardioid condenser mic. Terminated with locking 4-pin connector. Includes windscrew. **117.95**

**ATM75cW** (AUATM75CW)
Headworn cardioid condenser mic. Terminated with locking 4-pin connector. **79.95**

**PRO 8HeCW** (AU8900ECKW)
Headworn hypercardioid dynamic microphone with a 55” cable. It includes a windscrew and a cable clip. **79.95**

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### True Diversity Receiver
- **AE 5000 Series**: AEW-R5200
- **AE 4000 Series**: AEW-R4100
- **3000 Series**: ATW-R310
- **2000 Series**: ATW-R2100

### Number Channels / System
- **AE 5000 Series**: 200
- **AE 4000 Series**: 200
- **3000 Series**: 200
- **2000 Series**: 10

### Intelliscan (Automatic System Channel Plan)
- **AE 5000 Series**: ✓
- **AE 4000 Series**: ✓
- **3000 Series**: ✓
- **2000 Series**: ✓

### TX Mute Indicator / Battery Status & System Alert Indicators
- **AE 5000 Series**: ✓✓✓
- **AE 4000 Series**: ✓✓✓
- **3000 Series**: ✓✓✓
- **2000 Series**: ✓✓✓

### Output
- **AE 5000 Series**: XLR, 1/4˝ TRS
- **AE 4000 Series**: XLR, 1/4˝ TS
- **3000 Series**: XLR, 1/4˝ TS
- **2000 Series**: XLR, 1/4˝ TS

### External Mute Contact Closure
- **AE 5000 Series**: ✓
- **AE 4000 Series**: ✓
- **3000 Series**: ✓
- **2000 Series**: ✓

### Power Supply Type
- **AE 5000 Series**: IEC
- **AE 4000 Series**: IEC
- **3000 Series**: 12v DC In-Line
- **2000 Series**: 12v DC In-Line

### Headphone Monitor Output
- **AE 5000 Series**: ✓✓✓
- **AE 4000 Series**: ✓✓✓
- **3000 Series**: ✓✓✓
- **2000 Series**: ✓✓✓

### Metal Case Construction
- **AE 5000 Series**: ✓✓✓
- **AE 4000 Series**: ✓✓✓
- **3000 Series**: ✓✓✓
- **2000 Series**: ✓✓✓

### Antenna Location (BNC Connections)
- **AE 5000 Series**: Rear/Front
- **AE 4000 Series**: Rear/Front
- **3000 Series**: Rear
- **2000 Series**: Rear

### Optional Powered Antennas
- **AE 5000 Series**: ✓✓✓
- **AE 4000 Series**: ✓✓✓
- **3000 Series**: ✓✓✓
- **2000 Series**: ✓✓✓

### Frequency Display/Mute Indication
- **AE 5000 Series**: ✓✓✓
- **AE 4000 Series**: ✓✓✓
- **3000 Series**: ✓✓✓
- **2000 Series**: ✓✓✓

### Configurable/Defeatable Power/Mute Switch
- **AE 5000 Series**: ✓✓✓
- **AE 4000 Series**: ✓✓✓
- **3000 Series**: ✓✓✓
- **2000 Series**: ✓✓✓

### Soft Touch Configuration
- **AE 5000 Series**: ✓✓✓
- **AE 4000 Series**: ✓✓✓
- **3000 Series**: ✓✓✓
- **2000 Series**: ✓✓✓

### Interchangeable Mic Elements (Handheld)
- **AE 5000 Series**: ✓✓✓
- **AE 4000 Series**: ✓✓✓
- **3000 Series**: ✓✓✓
- **2000 Series**: ✓✓✓

### Metal Case Construction
- **AE 5000 Series**: ✓✓✓
- **AE 4000 Series**: ✓✓✓
- **3000 Series**: ✓✓✓
- **2000 Series**: ✓✓✓

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WIRELESS MICROPHONES
AZDEN

VHF PERFORMANCE SERIES

VHF Wireless Systems

Designed for professional use, the Performance Series is available in a choice of 25 frequencies in the VHF band (174-216 MHz), for the ultimate in flexibility and versatility. With the ability to use up to 10 mics simultaneously, these systems are ideal for schools, bands and house of worship. Working range is 300’ under average conditions.

31 LT
Lavalier Bodypack Transmitter

◆ Choice of high quality plug-in omni or uni-directional electret condenser microphone
◆ Input level control for maximum flexibility
◆ Constructed of durable ABS housing
◆ 3-position power switch with standby for muting audio

EX-503
Lavalier Microphone

Omni-directional lavalier microphone. This electret condenser microphone requires a bias voltage of 5-9v DC which the 31LT transmitters provide.

200R Single Channel Receiver (AZ200R)
A "value" leader, the 200R is housed in a durable ABS case, with power on/off and volume control. Available in 25 frequencies, it gives you excellent RF performance at an attractive price. With Power (red) to Receiving (green) LEDs, and 1/4” output jack with volume adjustment ............................................................ 79.95

211R Single Channel Receiver (AZ211R)
Same features as the 200R except the 211R is housed in a metal case for better RF shielding. This results in excellent RF performance even under adverse conditions, and audio quality formerly associated with much more expensive equipment .......... 119.95

221R Discrete 2-Channel Receiver (AZ221R)
Designed to allow the use of two mics simultaneously, the 221R receiver has 2 complete receiver sets built into one case. With Power (red) to receiving (green) A & B LEDs, and two 1/4” output jacks with independent volume adjustments. Housed in a metal case for better RF shielding and excellent RF performance ................................................................. 199.95

311LT
Body-Pack/Lavalier Systems

200LT (AZ200LT)
Consists of 200R with 31LT and EX-503 .......... 156.50

211LT (AZ211LT)
Consists of 211R with 31LT and EX-503 .......... 179.95

221LT (AZ221LT)
Consists of 221R with two 31LT transmitters and two EX-503 lavalier mics .................................................. 349.95

311LT (AZ311LT)
Consists of 311DR with 31LT and EX-503 .......... 229.95

311LTH (AZ311LTH)
Consists of 311DRH with 31LT and EX-503 ....... 289.95

311DRH Half-Rack True Diversity Receiver (AZ311DRH)
The half-rack version of the popular 311DR, the 311DRH adds RF/Audio displays, On/Off switch, external squelch and rear mounted detachable antennas. One of two units can be rack mounted with either the HR-1 or HR-2 adapter kits, respectively .......... 219.95

311DR True Diversity Receiver (AZ311DR)
For the professional who needs "rock-steady" RF signal strength, less chance of drop-outs, and exceptional audio performance. With Power and A/B true diversity reception LEDs, 1/4” output jack, and volume adjustment ................................................................. 164.95

www.bhphotovideo.com
UHF DIVERSITY WIRELESS SYSTEM

51BT Bodypack Transmitter (AZ51BT)
Housed in a sleek modern case, the 51BT has 63 user-selectable channels, input level control, standby switch, Hirose 4-pin connector and metal belt clip. Available with a variety of lavalier and headset mics, or as instrument transmitter ................................................................. 149.95

51HT Handheld Mic Transmitter (AZ51HT)
Handheld with super-cardioid uni-directional mic element and 63 user-selectable channels. Uses 2AA alkaline batteries ..................................................................................................................... 179.95

51XT Plug-in Transmitter with Phantom Power (AZ51XT)
63 user-selectable UHF channels. Special “lockdown” XLR connector for secure grip allows you to use your favorite microphone with an XLR output. Features phantom power, adjustable input level control, power on/off and audio mute switches. LED AF Peak and Power indicators ................................................................. 199.95

Microphones for the 51BT Transmitter

ECM-44H (AZECM44H)
The popular Sony omni-directional lavalier mic works exceptionally well with the 51BT. An electret condenser microphone, it comes with a locking 4-pin Hirose connector ................................................................. 182.50

EX-503H (AZEX503H)
Omni-directional condenser lavalier microphone with locking 4-pin connector to fit the 51BT bodypack transmitter ................................................................. 39.95

EX-505UH (AZEX505UH)
Uni-directional condenser lavalier microphone with locking 4-pin connector to fit the 51BT bodypack transmitter ................................................................. 59.95

HS-9H (AZHS9H)
Multi-purpose omni-directional headset condenser microphone with a wired mini-jack (3.5mm) ......................................................................................... 52.95

HS-11H (AZHS11H)
High quality uni-directional vocal headset condenser microphone with locking 4-pin connector to fit the 51BT ................................................................. 79.95

HS-12H (AZHS12H)
High quality uni-directional vocal headset which has a gooseneck-adjustable mic and adjustable rear head-band for a more comfortable fit with locking 4-pin connector to fit the 51BT ................................................................. 89.95

UHF Broadcast Quality Wireless System
In today’s crowded RF world you need the ability to find clear channels and at the same time, to deliver rock-solid performance without interference. Available with 63 “onboard” user-selectable channels, Azden’s UHF Series transmitters and receivers let you quickly and easily find the clearest channels for superb performance at a very reasonable price. Consisting of three transmitters and three receivers, the UHF Series works in the 794-806 MHz band and incorporates crystal-controlled PLL-synthesized circuitry for drift-free reception. The receivers are all housed in heavy-duty die-cast chassis’ for better RF shielding and durability.

411UDR UHF Receiver
A crystal-controlled, PLL synthesized UHF receiver with 63 user-selectable channels in the 794-806MHz band. Up to 9 systems may be used simultaneously. It has both 1/4” and XLR output jacks and volume adjustment.

411LTS Rack Mounted/Table Mounted UHF Diversity Lavalier Microphone System (AZ411LTS): Includes 411UDR Receiver, 51BT Belt Pack Transmitter and Sony ECM-44H Lavalier Microphone ................................................................. 559.95

411XT Rack Mounted/Table Mounted UHF Diversity Plug-In System (AZ411XT): Includes 411UDR Receiver and 41XT Plug-In Transmitter ................................................................. 489.95

411HT Wireless UHF Handheld System (AZ411HT): Includes the 411UDR Diversity Receiver and 41HT Handheld Transmitter/Microphone ................................................................. 459.95

411LT Rack Mounted/Table Mounted UHF Diversity Lavalier Microphone System (AZ411LT): Includes 411UDR Receiver, 41BT Belt Pack Transmitter and EX-503H Lavalier Microphone ................................................................. 449.95
RE-2 Professional Wireless Mic System

Whether you’re lecturing at a corporate seminar or speaking in a house of worship, the RE-2 brings ease-of-use, clear sound, and clean channels to wireless. A third-generation wireless system, the RE-2 is affordable, professional, and designed for those who are serious about their sound. It takes frequency agility to a whole new level — professional power with previously unmatched simplicity. Be assured that there will be no interference, drop-outs, or compromised audio quality. Simply press the one touch Auto-ClearScan button and the receiver finds the clearest channel in seconds. Available with three different microphone elements to fit individual style and application.

RE-2 UHF Receiver

- One touch Auto-ClearScan finds the clearest channel in the clearest group in seconds.
- Programmable in 25kHz steps across 28 MHz operating bandwidth — 1112 possible frequencies so it will always find a clear channel.
- Backlit LCD displays the group, channel, frequency, transmitter battery level, diversity operation, and RF and audio signal level meters — professional systems twice the price don’t provide this much information.
- Balanced XLR audio output for mic or line level signals and a 1/4” line level jack for compatibility with any application.
- Fourth generation Posi-phase diversity and advanced audio circuits provide maximum range and professional sound quality.
- Detachable 1/4 wave antennas allow use with optional rackmount kits, antenna distributors and cables for permanent installations.

RE-2 UHF Bodypack Transmitter

- Cell phone style beltclip — Offers quick and easy attachment.
- Optional pouches available for use under costumes or vigorous applications like aerobics.
- A wide selection of lapel and headworn microphone accessories are available, so you can select the microphone suited to your application.

RE-2 Bodypack and Handheld Transmitters Both Feature

- Unique “smart” battery makes it impossible to put the battery in wrong. Great for quick changes on a dark stage.
- All the info you need at a glance — LCD displays group and channel, frequency, or battery level.
- Low battery LED tells you when to change the battery.
- On/Off button that also acts as a mute. Ideal for pauses in presentations and worship services. Disable it to prevent accidental turnoffs during a performance.

RE-2 UHF Handheld Transmitter

- Internal 1/2 wave antenna — Excellent range and it stays out of harms way
- Available with three different microphone elements — to custom fit the vocalist’s style and environment:
  - N/DYM 267a Dynamic element: Classic dynamic sound and performance in applications ranging from Rock and Roll to spoken word
  - RE-410 Condenser: Low handling noise, crisp condenser sound and off mic performance. Perfect for schools, houses of worship and any other multitasking application.
  - NDYM 767a Dynamic premium vocal microphone with VOB (Vocal-Optimized-Bass): Excellent sound and gain-before-feedback for high SPL stages

RE-2 PRO: Electro-Voice also offers individual systems of upgraded RE-2 components. The RE-2 PRO UHF Receiver steps up from the standard RE-2 receiver with rackmount capability and cables to mount the antenna on the front of the rack. The RE-2 PRO Bodypack Transmitter has a detachable 1/4-wave antenna, and is made of cast magnesium housing for even more durability. The RE-2 PRO Handheld Transmitter features Normal/High power transmission. Normal maximizes simultaneous systems and limits RF spillover into adjacent venues. High maximizes the range and coverage in tough environments. Also available with the RE-510, a premium condenser mic for the spoken word.
<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>OLM10</td>
<td>Omnidirectional dynamic lavalier mic with TA4F connection</td>
<td>$39.00</td>
</tr>
<tr>
<td>UML21</td>
<td>Unidirectional lapel microphone with TA4F connection</td>
<td>CALL</td>
</tr>
<tr>
<td>RE90TX</td>
<td>Premium omnidirectional lavalier mic with TA4F connection</td>
<td>CALL</td>
</tr>
<tr>
<td>RE92TX</td>
<td>Premium lapel unidirectional mic with TA4F connection</td>
<td>$199.00</td>
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<tr>
<td>HM2</td>
<td>Headworn cardioid condenser mic with TA4F. Swivel-adjust boom</td>
<td>$114.00</td>
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<tr>
<td>HM7</td>
<td>Touring grade headworn cardioid mic with TA4F connection</td>
<td>$149.00</td>
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<tr>
<td>RC-RE2</td>
<td>Hard shell, foam lined road case</td>
<td>$29.00</td>
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<tr>
<td>379</td>
<td>Charcoal windscreen pop filter for handheld mics</td>
<td>$19.95</td>
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<tr>
<td>HHCK</td>
<td>Handheld transmitter color kit</td>
<td>$14.00</td>
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<td>WP1000</td>
<td>Leather pouch with zipper closure for RE-2 bodypack transmitter</td>
<td>$45.00</td>
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<tr>
<td>RM-S</td>
<td>Single rackmount kit — for one RE-2 receiver</td>
<td>$40.50</td>
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<tr>
<td>RMS-TNC</td>
<td>Single rackmount kit with two FMC-K front mount antenna cables</td>
<td>$69.95</td>
</tr>
<tr>
<td>RM-D</td>
<td>Rackmount kit - double for two RE-2 receivers</td>
<td>$48.95</td>
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<tr>
<td>FMC-K</td>
<td>Four front mount antenna cables</td>
<td>$52.95</td>
</tr>
<tr>
<td>ANU-14</td>
<td>1/4-wave UHF antenna for wireless system. (668-746 MHz)</td>
<td>$34.95</td>
</tr>
<tr>
<td>FA-500</td>
<td>1/2-wave Rx antenna for wireless system. (680-870 MHz)</td>
<td>$49.00</td>
</tr>
<tr>
<td>AB-2</td>
<td>Universal front mount kit for 1/2-wave antennas, with 10' coax cable</td>
<td>$51.95</td>
</tr>
<tr>
<td>APD-4</td>
<td>UHF antenna/power distribution system (provides power and RF signals for 4 units). For use with RE-2/PRO</td>
<td>$399.00</td>
</tr>
<tr>
<td>TP-2</td>
<td>50 ohm TNC termination plug for use with APD-4</td>
<td>CALL</td>
</tr>
<tr>
<td>LPA-500</td>
<td>Directional log periodic antenna with mounting hardware and 10' coax</td>
<td>$239.00</td>
</tr>
<tr>
<td>CXU</td>
<td>Low-loss coax cable (available in 25, 50, 75 or 100' length) for use with remote mount antennas</td>
<td>CALL</td>
</tr>
</tbody>
</table>

### RE-2 UHF Wireless Bodpack Microphone Systems

<table>
<thead>
<tr>
<th>System Description</th>
<th>Price</th>
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</thead>
<tbody>
<tr>
<td>RE-2 Receiver, BPU-2 Beltpack Transmitter and RE97 Headworn Microphone (Brown)</td>
<td>CALL</td>
</tr>
<tr>
<td>RE-2 Receiver, BPU-2 Beltpack Transmitter, ULM21 Cardioid Lavalier and HTU2D-267a Handheld Transmitter (ELRE2COMBO)</td>
<td>CALL</td>
</tr>
<tr>
<td>RE-2 Receiver, HTU-2 Handheld Transmitter and RE410 Cardioid Capsule (ELRE2410)</td>
<td>CALL</td>
</tr>
<tr>
<td>RE-2 Receiver, BPU-2 Beltpack Transmitter and ULM21 Cardioid Lavalier (ELRE2L21)</td>
<td>CALL</td>
</tr>
<tr>
<td>RE2 Receiver, HTU-2 Handheld Transmitter and RES10 Microphone Head (ELRE2510)</td>
<td>CALL</td>
</tr>
<tr>
<td>RE2 Receiver, HTU-2 Handheld Transmitter and N/D767A Microphone Head (ELRE271)</td>
<td>CALL</td>
</tr>
<tr>
<td>RE-2 Receiver, HTU-2 Handheld Transmitter and N/D267 Cardioid Capsule (ELRE2N7)</td>
<td>CALL</td>
</tr>
<tr>
<td>RE-2 Receiver, BPU-2 Beltpack Transmitter and OLM10 Omnidirectional Lavalier (ELRE2L10)</td>
<td>CALL</td>
</tr>
</tbody>
</table>
Digital Hybrid Wireless (or 400 Series) is a revolutionary design that combines digital audio with an analog FM radio link to provide outstanding audio quality and the extended operating range of the finest analog wireless systems. The process eliminates a compandor and its artifacts, and preserves the RF spectral efficiency of the optimized FM radio link. The design also overcomes channel noise, digitally encoding the audio in the transmitter and decoding it in the receiver, yet still sending the encoded information via an analog FM wireless link. In other words it is a technique which can be accomplished only in the digital domain, even though the audio inputs and outputs are analog signals. Digital Hybrid Wireless sets the benchmark for high end wireless mic systems. Using a patented design that combines digital audio with an analog FM radio link, it offers the best of both worlds - the exceptional quality of digital audio and the extended range of the finest analog wireless systems. Ideal or events theater, television, or corporate video, 400 Series products are also compatible with Lectrosonic analog systems, and most analog systems from other manufacturers.

R400A Digital Hybrid Wireless Diversity Receiver

The R400A is a high performance, table-top, frequency synthesized UHF receiver with 256 user selectable frequencies, and proprietary audio processing for very low distortion and a superior S/N ratio. Compatible with all 400 Series Digital Hybrid transmitters, as well as 100/200 series analog transmitters, it features a powerful menu-driven LCD graphic display to view and alter settings. The LCD main window displays the pilot tone indicator, diversity antenna activity, RF and audio levels, operating frequency, transmitter frequency switch settings and transmitter battery status. Settings can be changed via the menu. A built-in RF spectrum analyzer conducts site surveys to find interference-free frequencies. It tunes the receiver across its 256 frequencies and records a marker on the LCD indicating the strength of any RF signals picked up. Within a minute, a display is generated showing the RF activity across the entire tuning range of the receiver. An area with little or no RF activity is then easy to locate and select.

SmartTune

- To find clear frequencies in RF-saturated environments, SmartTune scans all the frequencies available and tunes the receiver to the frequency with the lowest RF interference, significantly reducing setup time.

SmartDiversity

- Microporcessor controlled antenna phase combining keeps the receiver small, yet still able to deal with multi-path dropouts. SmartDiversity analyzes both the incoming RF level and the RF level’s rate of change to determine the optimum timing for phase switching, and the optimum antenna phase.

SmartNR

- To increase the effective dynamic range of the system, the R400A is equipped with a SmartNR (noise reduction) algorithm, which removes hiss without sacrificing high frequency response. Doesn’t affect desired high frequency signals having some coherence such as speech sibilance and tones.

SmartSquelch

- With conventional squelch designs, if you squelch too hard, audio may be lost; too little, and excessive noise may be heard; too rapidly, the audio is “choppy”; too sluggishly, and words or syllables are cut off. SmartSquelch overcomes these problems by:
  - Waiting for a complete word or syllable before squelching.
  - Assessing recent squelching history and RF signal strength.
  - Assessing audio content to determine available masking.
- By adjusting squelching, the R400A delivers acceptable audio quality from otherwise unusable signals.
400 SERIES—Digital Hybrid Wireless System

VENUE RECEIVER Digital Hybrid Wireless Diversity Receiver

A modular UHF design that operates with Digital Hybrid Wireless and analog transmitters. It consists of a Venue Receiver Master (VRM) and one to six plug-in receiver modules. The VRM includes an antenna multi-coupler, computer communications interface and the mechanical rack mounting for the receiver modules. The VR’s design offers a tremendous degree of flexibility. For example, each of the three pairs of receivers can be combined and used for ratio diversity or frequency diversity reception. Each individual receiver can be used by itself for phase switched diversity reception. Combinations of reception techniques can be used at the same time.

FEATURES

Three Diversity Modes
The receiver has three different diversity modes that can be selected:

SmartDiversity - a microprocessor controlled antenna phase switching in 180° increments to minimize dropouts caused by multi-path reflections. Each receiver outputs a single audio channel, so the overall system can provide up to six channels per Venue Receiver.

OptiBlend - a ratio diversity audio combining process that mixes the audio outputs from two adjacent modules in a ratio controlled by the relative RF signal levels at the receivers.

Frequency Diversity - automated redundancy process pairs two transmitters with two adjacent receiver modules. The RF signal level at each receiver is monitored and the audio component blended similar to ratio diversity. This virtually eliminates problems associated with transmitter failure.

Receiver Modules
Two different receiver modules are available. Both are triple conversion, frequency synthesized UHF receivers controlled by the DSP in the VRM.

VRS (Standard) - fixed bandwidth front end design that is an excellent value and well suited to all but the most congested RF environments.

VRT (Tracking) - same as the VRS module but with the addition of advanced frequency tracking front-end filters. Excellent for congested and hostile RF environments. The receiver modules and VRM allow quick installation or changing offering the ultimate flexibility in the studio or the field.

DSP-Based Pilot Tone
A DSP-generated ultrasonic pilot tone from the transmitter controls the receiver audio muting (squelch). Brief delays at turn-on and turn-off eliminate thumps, pops or other transients that can occur when the power is switched on/off. Pilot tone frequency is different for each of the 256 frequencies in the tuning range of a system. This eliminates squelch problems where a pilot tone signal can appear in the wrong receiver via intermodulation products. The DSP-generated pilot tone also eliminates the need for fragile crystals which allows the receiver to survive shocks and mishandling much better than older crystal-based pilot tone systems.

DSP Compatibility Modes
While the Venue Receiver sounds best when used in the Digital Hybrid Wireless mode, it also offers backward compatibility with the 100 and 200 Series and analog wireless transmitters from other manufacturers. The VR also ensures exact time alignment of the audio outputs in the event that digital and analog transmitters are used simultaneously. The compatibility mode is selected with the LCD interface or computer software. The compatibility modes are also independent between the receivers, so some channels can be used in the native hybrid mode while others might operate in an analog mode to work with other transmitters.

Controls and Monitoring
Setup options and adjustments can be made via the front panel LCD interface, or with an attached computer via the rear USB and RS-232 port. The LCD interface consists of six channel select switches, two selection and navigation switches and a pushbutton rotary encoder control. A computer or touch screen control system, can be connected for setup or continuous system monitoring via either the USB or serial port.

Front and Rear Panel
- The front panel provides an easy-to-use LCD interface for setup, and provisions for quick monitoring to assist in troubleshooting. In normal operation, the LCD shows RF and audio levels, diversity status, pilot tone status (where applicable) and transmitter battery status (when available) for all six receivers at the same time. Individual screens for each receiver are also available to provide additional information and setup adjustments. A headphone jack and level control is provided for individual channel monitoring.
- The rear panel provides six balanced audio outputs on standard XLR connectors, 50 ohm BNC antenna inputs, 50 ohm BNC antenna outputs from the built in zero-gain multicoupler, power jack with a locking connector, USB port and RS-232 serial port for the computer interface. It is powered from an external source at 10-18v DC, allowing the unit to operate from a wide variety of sources in stage, studio and mobile applications.
400 SERIES—Digital Hybrid Wireless System

LM & UM400

Digital Hybrid UHF Beltpack Transmitters

The LM and UM400 beltpack transmitters offer affordable Digital Hybrid Wireless technology while preserving superb performance and maximum flexibility. They feature 256 synthesized UHF frequencies, DSP based pilot-tone signal and multi-mode compatibility with different hybrid and analog receivers. Best performance is achieved when they are used with a hybrid receiver, however, the DSP also provides emulation of an analog compandor so they can be switched for use with 100 and 200 Series Lectro receivers.

◆ A 5-pin input jack accepts low impedance dynamic mics, electret lavalier mics and line level inputs. Input gain is adjustable over a 43 dB range to perfectly match the audio input level for optimum modulation, minimum distortion and maximum S/N ratio. Input levels are accurately indicated by two LEDs on the control panel.

◆ The input amplifier uses an ultra low noise op-amp for quiet operation. It is gain controlled with a wide range dual envelope input limiter which cleanly limits input signal peaks over 30 dB above full modulation.

◆ Audio is digitized (24-bit) then filtered. The signal is then encoded with a proprietary algorithm to produce an analog data signal for RF transmission. The RF transmission is an aggressively optimized FM system with ±75 kHz wide deviation for a high S/N ratio.

◆ Two 16-position rotary switches adjust the operation frequency of the transmitter over a 25.6 MHz bandwidth in 100 kHz step.

◆ Dual bicolor LEDs indicate four different levels (-20, -10, 0, +10dB) for accurate gain adjustment.

◆ 5-pin output jack for mic and line level signals

◆ Housings and belt-clips are machined aluminum, powder coated and laser engraved for ruggedness and legibility. The belt clip is removable for convenience.

◆ They are powered by a 9v battery (battery life is approx. 5 hours). The LM provides over 50 mW and the UM400 a full 100mW output for extended operating range.

◆ The UM400 (only) has an adjustable (from 35Hz to 150Hz) low frequency roll-off.

MM400B

Miniature Digital Hybrid UHF Water Resistant Transmitter

Very similar to the LM and UM400, the rugged and water resistant MM400B is powered by a single AA battery (4.5 hour battery life), yet provides full 100 mW output.

Same features as the LM & UM400 Except—

◆ Transmitter input is designed primarily for electret microphones, although modest line level signals can also be used.

◆ A watertight 2.5mm microphone plug includes a stainless steel sleeve and silicon tubing strain relief to prevent accidents.

◆ The two rotary switches located on the bottom to adjust the operation frequency are protected during use by an O-ring sealed door.

◆ An O-ring seal around the battery compartment cover prevents water or other liquids from entering. The waterproof Power On/Off switch further prevents moisture from entering the unit. This switch can also be programmed to mute the audio while leaving the unit powered.

◆ Low-frequency roll-off is set at 70Hz.

SM

Super Miniature Digital Hybrid UHF Transmitter

The ultra miniature SM sets the standard for size, power, reliability and functionality in a transmitter. A drop bigger than two AA batteries, the 100 mW SM packs all user controls onto an easy to operate control panel that includes an LCD, four membrane switches for adjusting operating frequency and modulation level, plus both modulation and power indicators.

Same features as the MM400B Except—

◆ The splash-proof SM housing is machined out of a single block of aluminum, which is then plated with a superhard, non-corrosive coating.

◆ Switching power supplies throughout the design allows nearly six hours of operation using a single AA lithium battery, or 4.5 hours with a rechargeable 2500 mAh NiMH battery. Even an alkaline AA will run for about 1.5 hour.

◆ Servo bias input on the standard 5-pin connector automatically adjusts for electret microphones.
WIRELESS MICROPHONES
LECTROSONICS

400 SERIES—DIGITAL HYBRID WIRELESS SYSTEM

UT400VM
Digital Hybrid Wireless Handheld Transmitter
A state-of-the-art, 100mW handheld transmitter incorporating many advanced features in order to give the user a wide range of possibilities for high-quality speech and vocal performance. The proprietary Varimic element allows custom tailoring of the microphone's frequency response, while a digitally-controlled input limiter ensures distortion-free audio over a very wide dynamic range. A stepped attenuator control gives the user a precise gain adjustment to match the microphone to each singer for optimum signal to noise performance.

M152 Series Lavalier Microphones
The M152 is a highly sensitive omni-directional microphone with a wide frequency response that accentuates the presence and character of the human voice. Frequency response is measured at 20Hz to 20kHz with a slight rise around 10kHz, resulting in a brighter, more “airy” response. A low frequency dip around 50Hz reduces noise caused by proximity effect and ambiance. The omni-directional polar pattern is less susceptible to handling and clothing noise, and provides a generous response at the direct and off-axis sections of the microphone capsule.

M152-5P:
High performance omnidirectional model with locking 5-pin (Switchcraft TA5F) plug. (Three-wire configuration.) Compatible with SM and UM series belt-pack transmitters. (Use MCASX to convert 5-pin plug to XLR jack used on Lectrosonics plug-on transmitters.

M152-MC:
High performance omnidirectional model with locking micro plug.

M152-SM5P:
High performance omnidirectional model with locking 5-pin (Switchcraft TA5F) plug and water resistant boot for SM transmitter.

M152-WP
High performance omnidirectional model with waterproof locking micro plug.

Optional Accessories
A500RA(xx)
UHF flexible whip antenna with Right-Angle BNC. Specify frequency block (last two digits (xx), for example: A500RA21, A500RA22, etc.)

SNA600
Collapsible dipole antenna adjustable from 550 to 800 MHz. Ideal when a full 360° receiving pattern is required.

ALP600
“Shark fin” LPDA Antenna provides directional pattern over 500 to 800 MHz range. Ideal for portable applications including temporary setups for field production. Not intended to be left outdoors permanently.

ARG
Coaxial cables for remote antennas in 2' (LARG2), 25' (LARG25) and 100' (LARG100) lengths. Cables include Velcro tie wraps.

RMPR400-2
Single-space rack conversion kit for dual R400A receivers. Includes extension cables for mounting antennas on front panel.

R400A Diversity Digital Hybrid Wireless Handheld Microphone Systems

R400A Diversity Receiver and UT400 Handheld Transmitter with AKG C5900 Hyper-Cardioid Head (LER400CS90) ................................................................. CALL
R400A Diversity Receiver and UT400VM Handheld Transmitter (LER400VM) ................................................................. CALL

R400A Diversity Receiver and UH400 Plug-In (LER400UH) ............... CALL
Add-On Wireless Handheld System for VR Modular Venue Receiver (LEACHHMC21): Includes a UT400VM Handheld Transmitter and a VRS Standard Receiver Module ................................................................. CALL

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AIRLINE 77

UHF Wireless System

Traditional wireless systems consist of belt-packs and wires that hinder the performer. Samson’s Airline 77 system features micro-technology transmitters—miniaturized transmitters with built-in microphones for the ultimate in convenience. With Airline 77 there are no belt-packs and no cables—real wireless, allowing the user complete freedom.

The Airline headset transmitter features the Samson Qe Fitness and Qv Vocal mic elements, which go around the back of the head rather than over the top. This allows the transmitter to be attached directly to the headband, completely unobtrusive, while being comfortable and secure during performances or exercise routines.

The AL1 presentation transmitter is about the size of a book of matches and has a built in condenser lavalier element so it can be clipped on and worn without any additional equipment. Tiny, the AL1 still has all power and mute switches, an input level control and a two-function red LED that indicates when the transmitter is on and transmitting. If you want to hide the transmitter you can plug the QL5 cardioid condenser lavalier mic into the mini jack, making the AL1 the world’s smallest belt-pack. An alligator clip allows it to be mounted on a lapel, pocket or belt. Or you can use the convenient lanyard to wear it around your neck. All of the Airline transmitters can be powered for up to 14 hours by a single AAA battery.

CR77 UHF RECEIVER

The CR77 true-diversity UHF receiver works flawlessly with both Airline 77 and Concert 77 UHF transmitters. A half-rack receiver, the CR77 features a front panel display with large multi-segment audio and RF level LED meters, and a large rotary volume knob for easy adjustment of audio output. Synthesized PLL frequency control circuitry keeps the signal locked and true while dual tuned molded antennas with LEDs monitor the true-diversity operation. The rear panel features balanced XLR and unbalanced 1/4-inch outputs allowing flexible connection options. Two CR77 receivers can be rack mounted together in a single 19” rack with optional adapter.

CONCERT 77 UHF Wireless System

The ideal solution ideal for any professional application, Concert77 is a UHF (Ultra High Frequency) system which translates to crystal clear operation with no interference, traditionally available on only the most expensive systems. The Concert77 system can be configured with the HT7 handheld transmitter available with Samson’s Q7 dynamic element, as well as the C05 hand-held condenser element. The CT7 belt-pack transmitter can be configured as a lavalier or headset. Both the CT7 and HT7 feature a 3-segment battery indicator, separate power and audio on/off switches, adjustable AF level (audio gain), and 12-hours of battery life on a single 9-volt battery.
AIRLINE 77 / CONCERT 77 SYSTEMS

**Airline 77 Systems**

**Presentation System** *(SAAL77PQL5)*: AL1 transmitter with built-in electret condenser mic, QL5 cardioid condenser lavalier mic, and CR77 receiver.

**Handheld System** *(SAAL77HH)*: AXI plug-in handheld transmitter, Q7 dynamic handheld mic, and CR77 receiver.

**Aerobics Headset System** *(SAAL77AHSSU)*: AH1/Qe transmitter with Samson Qe aerobics mic, windscreen, and CR77 receiver.

**Vocal Headset System** *(SAAL77VHSU)*: AH1/Qv transmitter with Samson Qv vocal mic, windscreen, and CR77 receiver.

**Concert 77 Systems**

**HANDHELD SYSTEMS**

**Concert 77 Handheld Wireless System** *(SAC77HH05U)*: HT7 handheld transmitter with Q55 mic head, CR77 receiver.

**HEADSET SYSTEMS**

**Headset System** *(SAC77HQEU)*: Includes CT7 body-pack transmitter with QE headset mic and CR77 receiver.

**HEADSET SYSTEMS**

**Handset System** *(SAC77HSQEU)*: Includes CT7 body-pack transmitter with QUE headset mic and CR77 receiver.

**HEADSET SYSTEMS**

**Handset System** *(SAC77HSHS5U)*: Includes CT7 body-pack transmitter with HS5 headset mic and CR77 receiver.

**LAVALIER SYSTEMS**

**Lavalier System** *(SAC77LQL1U)*: CT7 body-pack transmitter with QL1 lavalier mic, CR77 receiver.

**Lavalier System** *(SAC77LSQVU)*: CT7 body-pack transmitter with Q75 lavalier mic, CR77 receiver.

**Lavalier System** *(SAC77LBSQVU)*: CT7 body-pack transmitter with AT831 lavalier mic, CR77 receiver.

**Lavalier System** *(SAC77LLQVU)*: CT7 body-pack transmitter with LM5 lavalier mic, CR77 receiver.

**STAGE 5 • STAGE55**

**VHF Wireless Systems**

The Stage 5 and Stage 55 systems are affordable VHF systems that are ideal for schools, churches, or any other presentation application that requires an inexpensive but dependable system. Based on their respective SR5 (single antenna) or SR55 (dual antenna) Super Heterodyne VHF receivers, they offer great RF reception for interference-free performance. Featuring a half-rack VHF receiver design, the SR5 and SR55 both offer front-mounted tuned antenna(s), Tone Squelch control, XLR and 1/4” outputs, and easy to read battery, audio, and signal level meters. Systems are available in hand-held, lavalier and headset configurations.

**HANDHELD SYSTEMS**

**Stage 5 Handheld Wireless System**: Includes an ST5 handheld transmitter with a Q7 cardioid element, and an SR55 receiver.

**Stage 55 Handheld Wireless System**: Includes an HT5 handheld transmitter with a Q7 cardioid element, and an SR55 receiver.

**LAVALIER SYSTEMS**

**Stage 5 Lavalier Wireless System**: Includes an ST5 beltpack, an LMS5 lavalier mic, and an SR5 receiver.

**Stage 55 Lavalier Wireless System**: Includes an ST5 beltpack, an LMS5 lavalier mic, and an SR5 receiver.

**HEADSET SYSTEMS**

**Stage 5 Headset Wireless System**: Includes an ST5 beltpack, an HS5 headset mic, and an SR5 receiver.

**Stage 55 Headset Wireless System**: Includes an ST5 beltpack, an HS5 headset mic, and an SR5 receiver.

All Stage 5 and Stage 55 systems come with an AC power supply and a carry case.

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EVOLUTION WIRELESS G2 SERIES

UHF Diversity Wireless System

Designed from the ground up, the rugged Evolution Wireless G2 Series is constructed to survive the toughest performances — day after day. Available in four interchangeable series — the 100, 300, 500 and 550 Series — each system can be configured to fit the requirements of virtually every sound system or any other application. Each system is based on a compact, high performance, steel-construction UHF receiver, and comes with your choice of Evolution wireless handheld and bodypack transmitters. Whether for vocals, presentations, or wireless monitoring - there is a top-class system for every purpose. The 100 Series is an excellent choice for adding UHF wireless capabilities without sacrificing sound quality or ease of use, and is extraordinarily affordable. The 300 Series offers enhanced performance. The 500 and 550 (dual-channel) Series provide utterly professional performance, and are as comfortable on the stage of a national touring act as they are the conference table.

◆ System operates using switchable UHF frequency technology. 1440 digitally synthesized frequencies are instantly selectable in 25kHz increments, so it’s easy to pick a wireless channel that’s free of interference.

◆ Interference-free operation with the highest transmission reliability. Advanced diversity techniques receive the clearest signal at all times, as every receiver contains dual receiver circuits picking up signals independently as the performers move around the stage. Constantly comparing the two signals, the receivers select the stronger one at any instant for an audio output that’s solid and free of interference.

◆ Unique HDX compander technology delivers crystal-clear sound. A noise suppression system specifically developed for stage applications, HDX compander optimizes the mic’s dynamic range while minimizing unwanted modulation and transmission noise. The result is powerful, dynamic sound quality, equal to a good wired microphone.

◆ All transmitters feature a flashing low battery warning. 300 Series adds a real-time 4-step battery level display on the transmitter body, while the 500 Series also displays it on the off-stage receiver, so the sound engineer can keep an eye on power levels without interrupting the performance.

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◆ Designed to take hard knocks, each transmitter and receiver is protected by a rugged metal housing.

◆ At the touch of a button, Reset function (ideal for rental companies) allows for the system to be reset to its initial settings — ready for its next job.

◆ Intuitive user menu and large, easy-to-read backlit LED and LCD displays make it simple to set-up and use. Frequency, channels, sensitivity and other parameters can be viewed and adjusted in an instant. All components offer this same operating system, so as soon as you’re familiar with one product, you know how the rest of the range works.

Evolution Wireless G2 100 Series

Simply the most affordable way to get professional-caliber UHF wireless. The 100 Series offers four switchable presets (reprogrammable to any of the 1440 available frequencies), a true diversity receiver with variable-level unbalanced 1/4” and balanced XLR connectors for stable, high-quality transmission, and high-quality metal construction that can stand up to the rigors of life on the road. Makes any stage performance possible, from extreme rock to sensitive ballads, and performers and presenters of any kind.

◆ Eight preset banks with four pre-coordinatable frequencies plus a user bank with four user-defined settings for easily setting up multi-channel systems.

◆ Absolutely reliable transmission and extended range due to high (30mW) RF output power. Transmitters also offer 110dB S/N ratio for high input level before distortion.

◆ HDX compander for crystal-clear sound.

◆ Mute function for the transmitter.

◆ Bodypack transmitters are powered by two AA-size cells to ensure long operating time and stable RF performance. Feature “low battery” indicators as well.

◆ Pilot tone squelch for eliminating RF interference when transmitter is turned off.

◆ True diversity receivers for highest transmission reliability.

◆ Auto Scan function automatically searches for free channels.

◆ Receiver features user-friendly menu operation via large backlit LCD display.

◆ Lock function avoids accidental changing of settings.
Evolution Wireless G2 300 Series

For increased flexibility and power, the 300 Series steps up with enhanced RF and AF properties for vocals and presentations, eight switchable presets (reprogrammable to any of the 1440 available frequencies), peak-hold level and battery meter status indicators. In addition, an alphanumeric name can be assigned to the receiver. Systems come complete with rack adapter.

- The 300 Series has eight preset banks with eight pre-coordinated frequencies plus a user bank with eight user-defined settings for easily setting up multi-channel systems.
- Absolutely reliable transmission and extended range due to high RF output power.
- True diversity receivers for highest transmission reliability.
- Auto Scan function automatically searches for free channels. The advantage is, if several systems are used the matched frequency banks avoid interference.
- Transmitter and receiver with rugged metal housing.
- Pilot tone squelch eliminates RF interference when transmitter is turned off.
- Transmitter with backlit display (lights up when a button is pushed).
- Receiver features user-friendly menu operation via two-color backlit graphics display.
- Lock function avoids accidental changing of settings.
- Alphanumeric name can be assigned to the receiver.

Evolution 500 Series

Offering the ultimate in performance, the state-of-the-art 500 Series steps up with twenty switchable presets (reprogrammable to any of the 1440 available frequencies), assignable alphanumeric names for each of the 20 presets, adjustable headphone output on the receiver (for monitoring), four equalizer presets (High Boost, Low Cut/High Boost, Low Cut and Flat), and extensive metering including battery telephony. It also features an innovative Soundcheck mode, which allows an artist or engineer to perform their own on-stage level and RF-check. This enables them to check whether dropouts are occurring and immediately locate and act to correct them. Dropouts and their source are clearly signalled on the display.

- Transmitter has contacts for recharging the BA2015 rechargeable battery pack directly in the transmitter.
- HDX compander for crystal-clear sound.
- 4-step battery status display, also transmitter to receiver.
- Mute function for the transmitter.
- Includes GA-2 rack mount.

EM-550 Dual Channel RF Receiver

The EM550 dual-channel true-diversity RF receiver is designed for professional touring and installation applications where unwavering RF performance and rugged construction is mandatory. Incorporates an active antenna splitter, all metal frame with reinforcement, transformer-balanced outputs and headphone monitoring on the front panel.
SKM135/335/535
The wireless version of the Evolution e835 classic all-around performer. This mic is designed to complement any vocal style, delivering a punch output with a gentle presence boost. Cardioid pattern offers good signal isolation and feedback rejection. Robust metal construction and shock-mounted capsule minimize handling and impact noise.

SKM145/345/545
The wireless version of the Evolution e845 high-quality vocal dynamic microphone. Ruggedly constructed with a super-cardioid pick-up pattern for a higher signal output to cut through high on-stage volume. A full, warm tonal response is matched with an extended high frequency presence lift for clarity and projection. Consistent on/off axis and proximity response maintains the tonal balance when moving around. Full metal construction and extensive shock-mounting minimize handling and impact noise. A tough high performance stage microphone.

SKM165/365/565
The wireless version of the Evolution e865 condenser mic, the sound is marked by an exceptionally smooth, linear frequency response, capable of exceptionally detailed reproduction with the lowest possible levels of noise and distortion. A super-cardioid pick-up pattern handles high on-stage sound levels without feedback. Also well-suited for broadcast and presentation work. Full metal construction and sophisticated shock-mount suspension shield and protect the capsule for use in the most rigorous conditions.

SKM935
The wireless version of the Evolution e935 vocal microphone, the cardioid SKM935 handheld transmitter easily cuts through the mix, offering clarity and projection even with high ambient sound levels. A truly professional stage microphone, the SKM935 can be combined with the EM500G2 receiver as well as the EM550G2 dual receiver. The SKM 935 features nine frequency banks with up to 20 directly accessible presets each—ready for immediate use.

ME 2
Ideal for presentation and interview work, this compact lavalier design clips discretely onto any item of clothing. With an omni pick-up pattern it projects signals with a flat and extended frequency response for increased vocal intelligibility.

ME 3
A headset microphone of exceptional quality, the ME3 is designed for music and speech applications that require movement and close proximity signal reproduction. The headband is comfortable and immovable, enabling use during exertive dance or sports activities. Super-cardioid condenser design offers excellent feedback rejection.

ME 4
A high quality dynamic lavalier cardioid design—perfect for clear, effective signal projection even with high on-stage sound pressure. Provides levels of ambient signal and feedback rejection not associated with the use of a lavalier microphone. Ideal for presenters, vocalists and acoustic musicians.

SKP100/500
Designed for use with the Evolution G2 100 Series, the SKP100G2 is a plug-in transmitter that allows any standard dynamic mic with a 3-pin XLR to be used wireless. The transmitter provides up to 1440 tunable frequencies and 4 frequency presets.

Designed for use with the Evolution G2 500 Series, the SKP500G2 allows any standard dynamic or condenser microphone with a 3-pin XLR to be used as a wireless microphone. Provides up to 1440 tunable frequencies and 20 (max) frequency presets. Switchable +48V phantom power is available, allowing use with condenser microphones.

Both feature a comprehensive LCD that provides frequency and channel information as well as as battery life, usage time, signal status, mute status and more. Both are lightweight yet durable featuring a rugged, metal enclosure for rigorous use in the field, and are powered by 2x AA batteries or optional Sennheiser BA2015 accupack.
**EVOLUTION WIRELESS MICS**

### Evolution G2 100 Series

**Handheld and Lavalier Sets with EM100G2 Receiver, Power Supply and Antennas**

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### Evolution G2 300 Series

**Handheld and Lavalier Sets with EM300G2 Receiver, Power Supply and Antennas**

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<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>EW312G</td>
<td>(SEEW312G): With SK300G2 belt pack transmitter and ME-2 omni lavalier microphone</td>
<td>829.95</td>
</tr>
<tr>
<td>EW322G</td>
<td>(SEEW322G): With SK300G2 belt pack transmitter and ME-4 cardioid lavalier microphone</td>
<td>829.95</td>
</tr>
<tr>
<td>EW352G</td>
<td>(SEEW352G): With SK300G2 belt pack transmitter and ME-3 headworn mic</td>
<td>829.95</td>
</tr>
<tr>
<td>EW335G</td>
<td>(SEEW335G): With SKM335G2 handheld transmitter with a MD835 cardioid dynamic capsule</td>
<td>829.95</td>
</tr>
<tr>
<td>EW345G</td>
<td>(SEEW345G): With SKM345G2 handheld transmitter with MD845 dynamic supercardioid capsule</td>
<td>859.95</td>
</tr>
<tr>
<td>EW365G</td>
<td>(SEEW365G): With SKM365G2 handheld transmitter with MD865 condenser supercardioid capsule</td>
<td>8999.95</td>
</tr>
</tbody>
</table>

### Evolution G2 500 Series

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>EM500</td>
<td>(SEEEM500G2): True Diversity rackmount receiver</td>
<td>682.50</td>
</tr>
<tr>
<td>EM550</td>
<td>(SEEEM550G2): Dual Channel True Diversity receiver</td>
<td>2044.95</td>
</tr>
<tr>
<td>SK500</td>
<td>(SEEKS500G2): Bodypack Transmitter</td>
<td>439.95</td>
</tr>
<tr>
<td>SKP500</td>
<td>(SEEKSP500G2): Plug-on Transmitter</td>
<td>439.95</td>
</tr>
<tr>
<td>SKM535</td>
<td>(SEEKS5008352): Handheld Transmitter with an MD835 cardioid dynamic capsule</td>
<td>539.95</td>
</tr>
<tr>
<td>SKM545</td>
<td>(SEEKS5008452): Handheld transmitter with an MD845 dynamic supercardioid capsule</td>
<td>579.95</td>
</tr>
<tr>
<td>SKM565</td>
<td>(SEEKS5008652): Handheld transmitter with an MD865 condenser supercardioid capsule</td>
<td>622.50</td>
</tr>
<tr>
<td>SKM935</td>
<td>(SEEKS5009352) Handheld Transmitter for E935 condenser cardioid capsule</td>
<td>547.50</td>
</tr>
</tbody>
</table>

### Bodypack Package (SEEWS12MKE2)

- Consist of EM500 receiver, SK500 bodypack transmitter and MKE2-EW GOLD lavalier mic
- Includes EM500 receiver and SK500G2 belt pack transmitter
- Includes EM500 receiver and SKM535G2 handheld transmitter with a MD835 cardioid dynamic capsule
- Includes EM500 receiver and SKM565G2 handheld transmitter with MD865 condenser supercardioid capsule

### EW535 Handheld System (SEEWS35G2)

- Includes EM500 receiver and SKM535G2 handheld transmitter with a MD835 cardioid dynamic capsule
- Includes EM500 receiver and SKM565G2 handheld transmitter with MD865 condenser supercardioid capsule

### EW565 Handheld System (SEEWS65G2)

- Includes EM500 receiver and SKM565G2 handheld transmitter with MD865 condenser supercardioid capsule
- Includes EM500 receiver and SKM565G2 handheld transmitter with MD865 condenser supercardioid capsule

### freePORT Presentation Set

*The freePORT Presentation Set is a reliable, robust, and user-friendly wireless system. It gives you the high-quality audio you expect from Sennheiser as well as foolproof setup and operation at an impressively low price. It ensures maximum speech comprehensibility during lectures, presentations and theater performances. The system includes a bodypack transmitter, a diversity receiver and an inconspicuous clip-on microphone with an omni-directional pick-up pattern.*

- 4 switchable UHF frequencies for interference-free reception
- Absolutely safe transmission
- Receivers built in robust metal housing
- Diversity Technology for the highest reception quality
- Adjustable Squelch for undisturbed operation
- Dynamic processor for crystal-clear sound

### Freeport Set Options

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>FP35</td>
<td>freePORT (SEFP35) Wireless Handheld Mic System</td>
<td>CALL</td>
</tr>
<tr>
<td>FP12</td>
<td>freePORT (SEFP12) Wireless Presentation Mic System</td>
<td>CALL</td>
</tr>
</tbody>
</table>

**B&H Photo Video Pro Audio**

(212) 444-6605 • 1-800-947-9905 • Quick Dial 91
## EVOLUTION WIRELESS MIC ACCESSORIES

### Omnidirectional UHF Antenna (SEA1031U)
A passive, omni-directional transmitting and receiving antenna for G2 series rack-mount receivers or RF distribution amplifiers. The omni-directional RF pick-up enables use in applications where the transmitters are constantly in motion, and RF signal is generated from various directions within a room. Frequency range is 518-554 MHz.

### ASP-2 Passive Antenna RF Splitter and DC Distribution (SEASP2)
A passive 2x1:4 antenna splitter, the ASP-2 allows a single pair of antennas to feed up to four (EM100G2, EM300G2 or EM500G2) receivers simultaneously, reducing the number of antennas and cables required. It also distributes the DC supply of the optional NT-120 AC adapter up to four receivers. By combining two ASP-2 splitters, an 8-channel system can be operated with only two antennas. The rear panel features standard BNC connections for adapting antenna cable. The ASP-2 can be rackmounted using the optional GA-2 rack mount hardware.

### AB2 Antenna Booster
Antenna boosters compensate for the attenuation that occurs when antenna splitters are used, and increase signal levels to the receiver. The AB2 is a high-quality frequency-selective booster that provides 10dB gain to improve RF signal strength when operating several receivers with a single pair of antennas via the ASP-2 passive antenna splitter. With the AB2, all RF signals within the frequency window are amplified while RF signals on other frequencies are attenuated. In order to compensate for possible signal losses due to long antenna cables, up to two AB2 can be connected in the antenna cable line: one AB2 is directly connected to the antenna (e.g. A1031U Omnidirectional UHF antenna), the second is connected to the ASP2 antenna splitter.

### Rack Mount Kit (SEGA2)
19" rack mount kit for mounting one or two Evolution Wireless G2 rackmountable devices side-by-side.

### Foam-Lined Carrying Case (SECC2EW)
Custom cut foam interior accommodates G2 series wireless microphone systems. Molded carrying handle.

### ASP-2 NT-1 Passive Antenna RF Splitter and DC Distribution with Power Supply (SEASP2NT1)
Includes both an ASP-2 Passive Antenna RF Splitter and DC Distribution and a 120v NT-120 AC adapter.

### AM-2 Antenna Front Mount Kit (SEAM2)
This set of BNC cables allows the antenna to connect to the front of the Rack Mount Kit when used with receivers or transmitters in a 19" mounting arrangement, moving them from their usual rear position. This enables easier access and installation when rack mounting.

### NT-120 AC Adapter (SENT120)
AC adapter for use with the ASP-2 Antenna Splitter and L2015G2 quick battery charger.

### Directional Transmitting Antenna (SEA2003UHF)
Wideband passive directional antenna for G2 series rack-mount receivers or RF distribution amplifiers. The omni-directional RF pick-up enables use in applications where the transmitters are constantly in motion, and RF signal is generated from various directions within a room. Frequency range is 518-554 MHz.

### BA2015G2 Rechargeable Battery Pack (SEBA2015G2)
An ACCUPACK rechargeable battery pack for the EW G2 bodypack transmitters. It contains two rechargeable NiMH cells and is used in place of AA batteries. It features an integrated sensor which indicates the battery status and monitors temperature during recharging. The matching charger recharges the batteries either directly or - for the 300 Series and above - while they are still inside the bodypack transmitter/receiver. Requires the L2015G2 quick charger.

### L2015G2 Quick Charger (SEL2015G2)
Automatically recharges two BA2015G2 battery packs. The packs are either inserted directly into the charger or remain in the bodypack transmitters. Requires the NT-120 AC adapter.

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<table>
<thead>
<tr>
<th>Product Name</th>
<th>Model Number</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASP-2 Passive Antenna RF Splitter and DC Distribution</td>
<td>SEASP2</td>
<td>A passive 2x1:4 antenna splitter</td>
<td>419.95</td>
</tr>
<tr>
<td>AB2 Antenna Booster</td>
<td>SEAB2A</td>
<td>With 518-554 MHz frequency range</td>
<td>185.95</td>
</tr>
<tr>
<td>AB2 Antenna Booster</td>
<td>SEAB2B</td>
<td>With 626-662 MHz frequency range</td>
<td>173.50</td>
</tr>
<tr>
<td>AB2 Antenna Booster</td>
<td>SEAB2C</td>
<td>With 740-776 MHz frequency range</td>
<td>173.50</td>
</tr>
<tr>
<td>Rack Mount Kit</td>
<td>SEGA2</td>
<td>For mounting one or two Evolution Wireless G2 rackmountable devices side-by-side</td>
<td>42.95</td>
</tr>
<tr>
<td>Foam-Lined Carrying Case</td>
<td>SECC2EW</td>
<td>Custom cut foam interior accommodates G2 series wireless microphone systems. Molded carrying handle</td>
<td>53.95</td>
</tr>
<tr>
<td>AM-2 Antenna Front Mount Kit</td>
<td>SEAM2</td>
<td>This set of BNC cables allows the antenna to connect to the front of the Rack Mount Kit</td>
<td>133.95</td>
</tr>
<tr>
<td>NT-120 AC Adapter</td>
<td>SENT120</td>
<td>AC adapter for use with the ASP-2 Antenna Splitter and L2015G2 quick battery charger</td>
<td>CALL</td>
</tr>
<tr>
<td>BA2015G2 Rechargeable Battery Pack</td>
<td>SEBA2015G2</td>
<td>An ACCUPACK rechargeable battery pack for the EW G2 bodypack transmitters</td>
<td>68.95</td>
</tr>
<tr>
<td>L2015G2 Quick Charger</td>
<td>SEL2015G2</td>
<td>Automatically recharges two BA2015G2 battery packs. The packs are either inserted directly into the charger or remain in the bodypack transmitters. Requires the NT-120 AC adapter</td>
<td>133.95</td>
</tr>
</tbody>
</table>
UHF Diversity Wireless Mic Systems

It’s never been easier to go wireless and sound like a pro. Whether for vocal or speech, PGX/Performance Gear Wireless brings the superior sound of Shure, together with innovative setup features in easy-to-use packages. Offered in UHF bandwidths and durably constructed they give you the reliability and flexibility you need, at a price you can afford. They feature Shure’s patented Audio Reference Companding for crystal-clear sound beyond the limits of conventional wireless technology. Every PGX system features Shure’s proprietary, microprocessor-controlled Predictive Diversity reception and full frequency agility across an 18MHz bandwidth. Up to nine systems can be operated simultaneously per band, with the option of operating 12 systems by using multiple frequency bands. For added convenience, each system also includes a carrying case.

**FEATURES**

**PGX1 Bodypack and PGX2 Handheld Transmitters**

Designed to meet the needs of presenters, the PGX1 bodypack transmitter can be used with headworn or lavalier microphones, while the PGX2 handheld transmitter feature a selection of award-winning vocal mics.

- Automatic Transmitter Setup.
- Multi-function LED Indicator (power, lockout, mute, low battery).
- -10db pad.
- 8 hours continuous use on two AA batteries.
- 18MHz operating range.

**PGX4 Diversity Receiver**

The microprocessor-controlled diversity PGX4 receiver makes wireless setup a snap. Press one button and the receiver scans for an available frequency. Press another button and the transmitter syncs to that same frequency. Now the system is ready for use.

- Automatic Frequency Selection locates a clear channel instantly.
- Automatic Transmitter Setup uses an infrared link to sync the transmitter and receiver.
- 90 selectable frequencies.
- 1/4 wave antennas.
- Channel display LED.
- XLR balanced and 1/4" unbalanced outputs.
- Audio peak indicator flashes red when the input signal approaches clipping levels.

**Lavalier Systems**

- **PGX14/85 (SHPGX1485)** Includes WL185 lavalier mic with clip, PGX1 bodypack transmitter with belt clip, PGX4 Diversity receiver and carrying case ....449.00
- **PGX14/93 (SHPGX1493)** Includes WL93 lavalier mic with clip, PGX1 bodypack transmitter with belt clip, PGX4 Diversity receiver and carrying case ........Call

**Handheld Systems**

- **PGX24/PG58 (SHPGX24PG58)** Includes PGX2 handheld transmitter with PG58 cardioid mic head, stand clip, PGX4 Diversity receiver and carrying case........Call
- **PGX24/SM58 (SHPGX24SM58)** Includes PGX2 handheld transmitter with SM58 cardioid mic head, stand clip, PGX4 Diversity receiver and carrying case........Call
- **PGX24/BETA58 (SHPGX24B58)** Includes PGX2 handheld transmitter with Beta 58 cardioid mic head, stand clip, PGX4 Diversity receiver and carrying case........Call

**Headworn System**

- **PGX14/WH20 (SHPGX14WH20)** Includes WH20TQG headset mic, PGX1 Bodypack Transmitter with beltclip, PGX4 Diversity receiver and a carrying case .................................................Call

**Audio Reference Companding:** Companding is the process of compressing the audio signal prior to transmission and expanding it after reception. All pro audio wireless needs companding to deliver a wide dynamic range (greater than 100dB). By employing a more efficient companding scheme, the Shure system improves wireless sound quality. Shure’s Audio Reference Companding is a level-dependent companding scheme. Instead of companding across the entire dynamic range like most wireless systems (causing a whooshing audio artifact known as “breathing”), companding only occurs at high audio levels. These levels are high enough to make the companding artifacts inaudible. The result is that it sounds more like a wired microphone, with less noise and greater dynamic range than other wireless systems. No artifacts, lower noise floor, clearer sound at all audio levels.

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SLX SERIES

UHF Wireless Systems

Ideally suited for installed sound applications such as houses of worship, corporate boardrooms and lecture halls, the SLX Wireless System delivers superior audio quality in an easy-to-use and quickly configurable package. Offering Shure’s patented Audio Reference Companding technology, along with an innovative setup complete with automatic synchronization, SLX supports up to 20 compatible systems (area dependent). The system’s stellar sound is founded on Shure’s patented Audio Reference Companding, a technology which brings more transmission clarity and dynamic range to wireless systems than ever imagined with traditional technologies. On an operational level, the system employs features that make setup almost effortless. Utilizing Auto Frequency Selection and Auto Transmitter Setup, the system scans the wireless landscape and identifies a clear channel instantly. Then, guided by an infrared link, at the touch of a button the transmitter automatically syncs with the receiver. With over 960 operating frequencies across 24 MHz of UHF bandwidth, you can quickly and easily set up to 20 systems in a given location (area dependent).

FEATURES

SLX4 Diversity Receiver

The rugged metal SLX4 Wireless receiver utilizes diversity technology to improve reception and minimize dropouts. The receiver is outfitted with rack-mount hardware, detachable 1/4-wave antennas, a backlit LCD display, 1/4” and XLR output connectors, frequency and power lockouts, an in-line power supply, and a rear-panel volume control. The multi-function LCD displays group, channel, frequency, transmitter battery strength, and locked/unlocked status.

- Automatic Transmitter Setup and Frequency Selection
- 960 Selectable frequencies across 24 MHz bandwidth
- Microprocessor-controlled diversity
- RF presence LED, 5-segment audio meter indicates strength of incoming audio signal.
- Sync Ready Indicator illuminates when frequencies of receiver and transmitter are synchronized
- Rack-mount hardware included (short rack ear, long rack ear, link bar to mount to similar receiver, extension cables and connectors for front-mounting antennas, 8 rack ear screws, 4 rack mount screws with washers, 2 antenna hole plugs).
- Includes protective bumpers with 8 screws, 2 AA batteries, power supply and 2 1/4 wave antennas

SLX1 Bodypack and SLX2 Handheld Transmitters

The SLX1 and SLX2 transmitters offer a choice of Shure’s legendary microphones, a timed backlit LCD, frequency and power lockouts, a 300’ operating range, and operation on just two AA batteries for eight hours of continuous use. The bodypack transmitter works with headworn and lavalier mics, the handheld transmitters are offered with SM58, SM86, Beta 58A, Beta 87A, and Beta 87C capsules.

- Backlit LCD with timeout feature
- Frequency and power lockout
- 3-segment battery fuel gauge
- 2 AA batteries provide 8 hours continuous use
- Transmitters are housed in tough molded ABS case.
- 300’ operating range with 30 mW maximum RF transmitter output
- The SLX2 has two gain settings. Choose a setting appropriate for vocal volume and for the performing environment: 0dB for quiet to normal vocal performance, −10dB for loud vocal performance.
- The SLX1 has three gain settings. For a microphone (higher amplification) and two for a guitar.
- The SLX1 weighs 3 oz., the SLX2 weighs 10 oz.
**Handheld Systems**

*Include SLX4 Diversity Receiver and a choice of Handheld Mic Transmitter...*

- **SLX24/58 (SHSLX2458)** Includes SLX2 transmitter and SM58 microphone cartridge ............................................. Call
- **SLX24/86 (SHSLX2486)** Includes SLX2 transmitter and SM86 microphone cartridge ............................................. Call
- **SLX24/BETA58 (SHSLX24B58)** Includes SLX2 transmitter and BETA58 microphone cartridge ............................................. Call
- **SLX24/BETA87A (SHSLX24B87A)** Includes SLX2 transmitter and BETA87A microphone cartridge ............................................. Call
- **SLX24/BETA87C (SHSLX24B87C)** Includes SLX2 transmitter and BETA 87C mic cartridge – adds warmth to the frequency response preferred by in-ear users ..................................................... Call

**Lavalier and Headworn Systems**

*Includes an SLX4 Diversity Receiver, SLX1 Bodypack Transmitter and a Lavalier Mic *

- **SLX14/93 (SHSLX1493)** With WL93 miniature omnidirectional condenser lavalier mic ............................................. Call
- **SLX14/84 (SHSLX1484)** With WL184 premium supercardioid condenser lavalier mic ............................................. Call
- **SLX14/85 (SHSLX1485)** With WL185 premium cardioid condenser lavalier mic ............................................. Call
- **SLX14/WH30 (SHSLX14WH30)** With WH30TQG, a rugged headset mic ............................................. Call

**Combo Systems**

- **SLX124/85/SM58 (SHSLX124WH30)** Includes SLX4 Diversity receiver, SLX1 bodypack transmitter with WL185 lavalier mic and SLX2 handheld transmitter with SM58 mic cartridge ..................................................... Call

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**Optional Accessories**

**UA221 Passive Antenna Splitter/Combiner Kit (SHUA221)**

The UA221 includes two adapters that can be used as one-input, two-output or two-input, one-output passive antenna splitter/combiners for the SLX4 receiver. The UA221 Kit lets you split an incoming signal into two outgoing signals or combine two incoming signals into one signal. Designed for use with the UA820A 1/2 wave antennas, and UA825/850 50ohm low loss antenna cable. Each kit includes two UA221 Splitter/Combiners, four coaxial cables, and attaching hardware ..................................................... **119.95**

**UA844 UHF Antenna and Power Distribution System (SHUA844US)**

The UA844 is a UHF antenna distribution system that allows the expansion of wireless mic systems by splitting one pair of antennas to multiple receivers. It also amplifies RF signals to compensate for insertion loss that results from splitting signal power to multiple outputs. One UA844 system can support up to four wireless receivers. Multiple UA844 systems can be used in a tiered configuration until the maximum number of compatible frequencies is reached ............................................. **344.95**

**UA505 Remote Mount Antenna Kit (SHUA505)**

Remote antenna mounting bracket kit lets you mount a 1/2 wave receiver antenna away from the receiver or equipment rack. Includes one mounting bracket, a bulkhead adapter nut. Mounting hardware not included ................................................................. **27.50**

**UA820 (SHUA820); 1/2 Wave Antennas ................................................................. **37.95**

**UA825 Remote Antenna Extension Cable (SHUA825); (BNC-BNC, RG8X/U type), 25' ...... **48.50

**UA850 Remote Antenna Extension Cable (SHUA850); (BNC-BNC, RG8X/U type), 50' ...... **85.95

**UA830 Active Remote Antenna Kit (SHUA830WB)**

A low-noise, in-line antenna amplifier, the UA830 is designed for remote-mounting antennas to an SLX4 receiver in a large installation, effectively shortening the distance from the transmitters. When an antenna is remote-mounted, the UA830 amplifies the received radio signals to compensate for insertion loss in the coax cable. A gain selector switch adjusts for longer lengths of coaxial cable (3dB for under 25’; 10dB for over 25’).

Mountable on supplied desk/wall-mount or on a microphone stand ............................................. **139.95**

**UA870 Active Directional Antenna (SHUA870WB)**

The UA870 is an active UHF wireless directional antenna featuring a log periodic dipole array. Compared to an omnidirectional 1/2-wave antenna, the UA870’s cardioid pattern offers enhanced reception of the desired coverage area and greater rejection of RF signals outside the coverage area. On-board amp offers 3 or 10dB gain to compensate for cable signal loss. 12v DC power is provided by the SLX4 or UA844. The UA870 can be mounted on a mic stand, suspended from the ceiling, or mounted to a wall using the integrated swivel adapter bracket. It is also weather resistant for use outdoors. For best diversity performance, use two UA870 antennas ..................................................... **239.95**

**WA610 Carrying Case (SHWA610)**

Universal hard carrying case for SLX 1/2 Rack Wireless Systems ..................................................... **78.95**
ULX STANDARD / ULX PROFESSIONAL

Professional UHF Wireless Systems

Affordable systems designed for live performance and system integration applications, the ULX Standard and ULX Professional UHF Wireless Systems feature Shure’s world-renowned audio and proprietary Automatic Frequency Selection circuitry, an innovation which simplifies system set-up by automatically scanning a user’s environment for open frequencies. Over 30 system configurations available with a variety of handheld, headworn, and lavalier microphone options.

The ULX Standard is designed for touring performers who have multiple wireless system users, want quick setups between gigs, and want the security of less signal interference and dropouts. The ULX Professional with advanced controls and displays is designed for professional sound installers who require programmable and lockable front panel settings, rely on advanced LCDs, and need a rack-mounted metal-chassis system.

FEATURES

ULX1 Bodypack Transmitter

The ULX1 body-pack transmitter is lightweight and portable, and features a belt-clip. This body-pack transmitter also features over 1400 user selectable UHF frequencies, while a comprehensive LCD displays group and channel information and more. An input attenuation switch allows 0dB and 20dB output. Adjustable audio gain control is provided and the transmitter boasts 8-9 hour battery life on a single 9v battery.

ULX2 Handheld Transmitter

Like the body-pack transmitter, the ULX-2 provides 1400 user selectable frequencies, a comprehensive LCD display provides channel and frequency information, battery life and more. The ULX-2 is powered with a standard 9v alkaline battery (included).

ULX/S4 Standard and ULX/P4 Professional Diversity Receivers

Frequency-agile receivers, they offer up to 1440 selectable frequencies organized into pre-programmed compatible groups. This enables you to quickly set-up and operate up to 20 compatible systems simultaneously (area dependent). ULX receivers also include Shure’s Predictive Diversity circuitry which virtually eliminates RF drop-out, as well as an easy-to-read, multi-function LCD display for monitoring group/channel selection, battery level, and TV channel.

The ULX Professional steps up with group scan function (the ability to scan all frequency groups to locate the one with the maximum number of compatible frequencies), frequency and volume lockouts, advanced front panel controls, RF signal strength indicators, remote mountable 1/2 wave antennas, and an extruded metal chassis.

- Automatic Frequency Selection scans for open channels—provides a straight shot to a clear channel—allowing for fast setup.
- Multi-function LCD display indicates group and channel setting, current UHF TV channel and remaining transmitter battery power.
- LED indicators confirm RF reception and level, as as transmitter audio level.
- Durably constructed 1/2-rack plastic chassis.
- Detachable 1/4-wave antennas allows front mount capability.

ULX/P4 Step-up Features:

- Lockout settings (frequency and volume) protect from accidental changes.
- Easy to use LCD interface and advanced front panel controls.
- Removable 1/2-wave antennas allow optimum antenna placement for enhanced reception.
- Ruggedly constructed 1/2-rack metal chassis with supplied rackmount hardware.
ULX STANDARD / ULX PROFESSIONAL

**Standard Systems with ULX/S4 Receiver**

- **Headworn Mic Systems**
  - ULX1 transmitter and WH30TQG cardioid condenser headworn mic (SHULXS1430)
  - ULX1 transmitter and WL50 sub-miniature omni-directional mic (SHULXS1450)
  - ULX1 transmitter and WL51B miniature cardioid mic (SHULXS1451)
  - ULX1 transmitter and WL93 omni directional mic (SHULXS1493)
  - ULX1 transmitter and WL183 omni directional mic (SHULXS1483)
  - ULX1 transmitter and WL184 supercardioid mic (SHULXS1484)
  - ULX1 transmitter and WL185 cardioid mic (SHULXS1485)

- **Lavalier Systems**
  - ULX1 transmitter and WLS50 sub-miniature omni-directional mic (SHULXS1450)
  - ULX1 transmitter and WLS1B miniature cardioid mic (SHULXS1451)
  - ULX1 transmitter and WL93 omni directional mic (SHULXS1493)
  - ULX1 transmitter and WL183 omni directional mic (SHULXS1483)
  - ULX1 transmitter and WL184 supercardioid mic (SHULXS1484)
  - ULX1 transmitter and WL185 cardioid mic (SHULXS1485)

- **Handheld Systems**
  - ULX2 transmitter and SM58 cardioid dynamic mic (SHULXP2458)
  - ULX2 transmitter and SM86 cardioid condenser mic (SHULXP2486)
  - ULX2 transmitter and Beta 87C supercardioid condenser mic (SHULXP2488A)

- **Combo Systems**
  - ULX2 handheld transmitter with SM58 Mic head, ULX1 bodypack transmitter with WL185 omni directional mic (SHULXS12485)

**Professional Systems with ULX/P4 Receiver**

- **Lavalier and Headworn Systems**
  - ULX1 transmitter and WLS50 sub-miniature omni-directional mic (SHULXP1450)
  - ULX1 transmitter and WLS1B miniature cardioid mic (SHULXP1451)
  - ULX1 transmitter and WL183 omni-directional lavalier mic (SHULXP1483)
  - ULX1 transmitter and WL184 supercardioid lavalier mic (SHULXP1484)
  - ULX1 transmitter and WL185 cardioid lavalier mic (SHULXP1485)
  - ULX1 transmitter and WH30TQG cardioid condenser headworn mic (SHULXP1430)

- **Handheld Systems**
  - ULX2 transmitter and SM58 cardioid dynamic mic (SHULXP2458)
  - ULX2 transmitter and SM86 cardioid condenser mic (SHULXP2486)
  - ULX2 transmitter and Beta 87C supercardioid condenser mic (SHULXP2488A)

**Optional Wideband Accessories**

- UA440 Front Mount Antenna Rackmount Kit (SHUA440): With (4) BNC to BNC Coaxial and (4) Bulkhead Adapters.......................... 94.50
- UA505 Remote Antenna Mounting Bracket Kit (SHUA505): Lets you mount a 1/2 wave receiver antenna away from the receiver or the equipment rack .......................... 27.50
- UA506 Rackmount Kit (SHUA506): For one ULX receiver .................................. 29.95
- UA507 Rackmount Kit (SHUA507): For two ULX receivers .................................. 29.95
- UA830WB Active Remote Antenna Kit (SHUA830WB) ........................................ 139.95
- UA844 UHF Antenna and Power Distribution System (SHUA844US) ............ 344.95
- UA870WB UHF Wideband Active Directional Antenna (SHUA870WB) ........... 239.95
- WA610 Universal Hard Carrying Case (SHWA610) ......................................... 78.95

**Combo and Dual Professional Systems**

- Two ULXP4 Receivers, ULX2 Handheld Transmitter with SM87 Mic Head and ULX1 Beltpack Transmitter (SHULXP12487) ........................................ 929.00
- Two ULXP4 Receivers, ULX2 Handheld Transmitter with Beta 87 Mic Head and ULX1 Beltpack Transmitter (SHULXP12485) .................................. 829.00
- Two ULXP4 Receivers, ULX2 Handheld Transmitter with SM87 Mic Head and ULX1 Beltpack Transmitter (SHULXP1248A) .......................... 789.95
- Two ULXP4 Receivers, ULX2 Handheld Transmitter with Beta 87 Mic Head and ULX1 Beltpack Transmitter (SHULXP1248C) .......................... 869.00
- Two ULXP4 Receivers and two ULX2 Handheld Transmitters with SM87 Microphone Heads (SHULXP2458) ........................................ 859.00
- Two ULXP4 Receivers and two ULX2 Handheld Transmitters with SM87 Microphone Heads (SHULXP2486) ........................................ 839.00
- Two ULXP4 Receivers and two ULX2 Handheld Transmitters with Beta 87C Microphone Heads (SHULXP2488A) .......................... 929.95
- Two ULXP4 Receivers and two ULX2 Handheld Transmitters with Beta 87C Microphone Heads (SHULXP2488C) .......................... 929.95

*(SHULXS2458)
*(SHULXS24B87)
*(SHULXS2487)
*(SHULXS2486)
*(SHULXS2483)
*(SHULXS2480)
*(SHULXS2488)
*(SHULXS24B58)
*(SHULXS24B8C)
*(SHULXS24D87)
*(SHULXS24D8C)
WIRELESS MICROPHONES

SHURE

UHF-R WIRELESS SYSTEMS

Premium Wireless Technology

Offering you more productivity, more reliability and more control, UHF-R takes wireless to a completely new level while helping you master the complexities of large-scale wireless installations. With 2400 selectable frequencies across 60 MHz of bandwidth, UHF-R allows up to 40 preset compatible systems to be operated per band, and up to 108 systems can be put to work using multiple bands. Complementing this expanded window of operation is Shure’s Advanced Track Tuning Filtering Technology, which shifts onboard RF filtering within selected frequencies to maximize compatibility and maximize isolation from interference.

You can rely on UHF-R for consistently reliable performance. All UHF-R components are engineered to withstand abuse. UHF-R automates setup and control operations to save you time and effort on even the most complex networked installations. Innovations include networked Automatic Frequency Selection with group scan, infrared automatic transmitter sync and smart menu-driven system operation for fast setup and intuitive operation. Also included with all UHF-R systems is Shure’s Wireless Workbench software, which provides comprehensive PC management of all system parameters plus a real-time view of your complete networked environment.

UHF-R systems have a working range of 500’ under typical conditions. Any Shure headworn or lavalier mic can be used with the UR1 bodypack transmitter.

FEATURES

◆ Sounding more like a hardwired system than a wireless, UHF-R draws its crystal-clear audio characteristics from Shure’s patented Audio Reference Companding circuitry. Using a variable companding ratio that automatically responds to audio levels, Audio Reference Companding eliminates wireless artifacts and increases dynamic range far beyond the capabilities of conventional wireless systems.
◆ Automatic frequency selection scans the RF environment to find the best group and channel settings for a particular installation:
  — Group Scan: finds the group with the most open channels, then sets all networked receivers to channels in that group.
  — Channel Scan: finds the first open channel in the currently selected group and sets the receiver to that channel.
◆ Automatic Transmitter Sync automatically transfers the group and channel settings from a receiver to a transmitter. You can also program other transmitter settings on a receiver and transfer those settings too.
◆ Audio Gain Structure (use these settings to adjust audio gain throughout the system):
  — Sensitivity: A 25dB range of gain adjustment at the bodypack transmitter input.
  — Transmitter Gain: A 30dB range of audio gain adjustment within the transmitter (affects audio level at the receiver, as indicated by the Audio LEDS.)
  — Output Level: 32dB of attenuation at the receiver output, plus a mute setting.
  — Mic/Line switch: -30dB pad for matching audio levels at the receiver XLR output.
◆ You can lock the receiver and transmitters so settings can’t be changed. Power switch can also be disabled, so that the transmitter remains on if the power switch is accidentally toggled during a performance.
◆ Receivers have an RJ-45 port on the back for connecting to other receivers over an Ethernet network. Networking receivers lets you automatically set channels for all the receivers with a single group scan command. You can also control and monitor all networked receivers via the bundled Shure Wireless Workbench PC software.
◆ Workbench software includes useful tools for installing and managing multiple wireless systems. Install the software on your computer and connect it to a network of receivers to monitor and control receivers and transmitters throughout the network.
UR1 Bodypack Transmitter
The low-profile, UR1 body-pack is a compact transmitter that is compatible with any Shure headworn, lavalier or instrument mic, or the WA302 instrument cable. It has a removable bodypack antenna, and is made of durable, lightweight magnesium construction. It weighs only 3.25 oz.

UR1 and UR2 Transmitters Both Feature
◆ Switchable RF power (10/50mW or 10/100mW, regionally dependent)
◆ Frequency and power lockout
◆ Bit-mapped backlit LCD display provides clear access and control for all integral system functions
◆ They run on 2 AA batteries for up to 8 hours of continuous use
◆ Infrared automatic transmitter sync

UR2 Handheld Transmitters
Equipped with a bit-mapped LCD display providing access and control to all integral system functions, the UR2 handheld transmitter features frequency and power lockout, and is available with a full line of Shure capsules including the SM58, SM86, SM87, Beta 58, Beta 87A, and Beta 87C. Made of all-metal die-cast construction.

UR4S/UR4D Wireless Diversity Receivers
Available in both single and dual receiver designs, the UR4S and UR4D wireless diversity receivers feature a flash memory capable of storing six 60-channel custom frequency groups, AMX and Crestron compatibility, USB and Ethernet network control and monitoring, and can be customized with an extensive range of accessories including an antenna/power distribution system, passive antenna splitter kit, and active or passive directional wideband antennas. They also feature programmable multi-function LCD, tone key squelch, mic/line switch, full rack design, internal power supply, headphone jack, rugged metal chassis, and switchable 120/220 power supply. They include front mount antenna cables and accessories.

Audio Reference Companding: The Basics
◆ What does it do? Improves wireless sound quality.
◆ What is it? A more efficient companding scheme.
◆ What is companding? Companding is the process of compressing the audio signal prior to transmission and expanding it after reception. All pro audio wireless needs companding to deliver a wide dynamic range (greater than 100dB).
◆ How does it work? Audio Reference Companding is a level-dependent companding scheme. Instead of companding across the entire dynamic range like most wireless systems (causing a whooshing audio artifact known as “breathing”), companding only occurs at high audio levels. These levels are high enough to make the companding artifacts inaudible.
◆ Why is it better? Sounds more like a wired mic with less noise and greater dynamic range than other wireless systems. No artifacts, lower noise floor, clearer sound at all audio levels.
◆ Specific attributes of Audio Reference Companding that the listener will notice are:
   – No “breathing” noise
   – Lower noise floor
   – More headroom - won’t clip as easily
   – Clearer sound at all audio levels

Audio Reference Companding: The Basics

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UHF-R WIRELESS WORKBENCH SOFTWARE

Advanced Network Control and Operation

For those who require network control, Shure's Wireless Workbench software is included with UHF-R systems to offer complete PC management of networked wireless systems. Wireless Workbench is advanced software that streamlines wireless system management and provides full PC control of all vital system parameters. With Wireless Workbench, you have a real-time view and a comprehensive tool for remote monitoring and control of individual and networked receivers.

Comprehensive Infrared Sync
Automatically syncs frequencies, custom groups, lockouts and power settings between transmitters and receivers; provides PC control of transmitter/receiver sync parameters.

Custom Frequency Group Creation
Lets you customize and save frequency groups for specific locations.

Ethernet and USB Compatibility
No additional equipment required to connect to network hub.

Band Limiting Feature
Allows the user to view custom frequency band parameters to align with any country or regional RF guidelines that might conflict with the available bandwidth.

Frequency Compatibility Calculator Wizard
Scans the RF environment to assess all networked hardware and recommends frequencies for all specified wireless systems.

Frequency Selection Wizard
Automatically scans and selects open frequencies for all networked UHF-R receivers.

UHF-R System Accessories

UA845 Antenna/Power Distribution System (SHUA845US)
An amplified, UHF Antenna Distribution System designed to expand a wireless microphone system by splitting one pair of antennas to multiple Shure UHF-R wireless receivers. It also amplifies RF signals to compensate for insertion loss due to splitting signal power to multiple output connectors. Each UA845 allows up to four receivers to use the same antennas. CASCADE connectors allow connections to a fifth receiver or a second UA845. There are also power connectors for powering Shure UHF and UC Wireless systems .................................. 719.95

UA830 Active Remote Antenna Kit (SHUA830WB)
A low-noise, in-line antenna amplifier for remote-mounting antennas to an SLX4 receiver in a large installation, effectively shortening the distance from the transmitters. When an antenna is remote-mounted, the UA830 amplifies the received radio signals to compensate for insertion loss in the coax cable. A gain selector switch adjusts for longer lengths of coaxial cable (3dB for under 25', 10dB for over 25'). Mountable on supplied desk/wall-mount or on a mic stand ............................................ 139.95

UA221 Passive Antenna Splitter/Combiner Kit (SHUA221)
The UA221 Kit lets you split an incoming signal into two outgoing signals or combine two incoming signals into one signal ............................................ 19.95

UA870 Active Directional Antenna (SHUA870WB)
The UA870 is an active UHF wireless directional antenna featuring a log periodic dipole array. Compared to an omnidirectional 1/2-wave antenna, the UA870WB's cardioid pattern offers enhanced reception of the desired coverage area and greater rejection of RF signals outside the coverage area. On-board amp offers 3 or 10 dB gain to compensate for cable signal loss. 12v DC power is provided by the SLX4 or UA844. The UA870 can be mounted on a mic stand, suspended from the ceiling, or mounted to a wall using the integrated swivel adapter bracket. It is also weather resistant for use outdoors. For best diversity performance, use two UA870 antennas ................................. 239.95

UHF-R WIRELESS WORKBENCH SOFTWARE

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Frequency Selection Wizard
Automatically scans and selects open frequencies for all networked UHF-R receivers.
UHF-R WIRELESS MICROPHONES

UHF-R Wireless Mic Systems

UHF-R Professional Diversity Wireless Mic System (SM58)
Includes a UR4D single diversity receiver and a UR2 handheld transmitter with a Beta 87A head

UHF-R Professional Diversity Wireless Mic System (SM86)
Includes a UR4D single diversity receiver and a UR2 handheld transmitter with SM86 head

UHF-R Professional Diversity Wireless Mic System (Beta 58)
Includes a UR4D single diversity receiver and a UR2 handheld transmitter with Beta 58 head

UHF-R Professional Diversity Wireless Mic System (Beta 87C)
Includes a UR4D single diversity receiver and a UR2 handheld transmitter with Beta 87C head

UHF-R Professional Diversity Wireless Mic System (Beta 87A)
Includes a UR4D single diversity receiver and a UR2 handheld transmitter with Beta 87A head

UHF-R Dual Wireless Mic Systems

UHF-R Professional Dual Wireless Mic System (SM58)
Includes a UR4D dual diversity receiver and (2) UR2 handheld transmitters with Beta 87A heads

UHF-R Professional Dual Wireless Mic System (SM86)
Includes a UR4D dual diversity receiver and (2) UR2 handheld transmitters with SM86 heads

UHF-R Professional Dual Wireless Mic System (Beta 58)
Includes a UR4D dual diversity receiver and (2) UR2 handheld transmitters with Beta 58 heads

UHF-R Professional Dual Wireless Mic System (Beta 87C)
Includes a UR4D dual diversity receiver and (2) UR2 handheld transmitters with Beta 87C heads

UHF-R Professional Dual Wireless Mic System (Beta 87A)
Includes a UR4D dual diversity receiver and (2) UR2 handheld transmitters with Beta 87A heads

UHF-R Wireless Mic Combo Systems

UHF-R Professional Diversity Wireless Microphone Combo System (SM58)
Includes: UR4D Dual Diversity Receiver, UR2 Handheld Transmitter with Beta 78A Head and UR1 Body-Pack Transmitter

UHF-R Professional Diversity Wireless Microphone Combo System (SM86)
Includes: UR4D Dual Diversity Receiver, UR2 Handheld Transmitter with SM86 Head and UR1 Body-Pack Transmitter

UHF-R Professional Diversity Wireless Microphone Combo System (Beta 58)
Includes: UR4D Dual Diversity Receiver, UR2 Handheld Transmitter with Beta 58 Head and UR1 Body-Pack Transmitter

UHF-R Professional Diversity Wireless Microphone Combo System (Beta 87C)
Includes: UR4D Dual Diversity Receiver, UR2 Handheld Transmitter with Beta 87C Head and UR1 Body-Pack Transmitter

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WIRELESS MICROPHONES
SONY

UWP SERIES
Low-Cost UHF Synthesized Wireless Microphone System

Most low-cost wireless systems usually lack in transmission stability and have noise problems that are overlooked. The ideal solution for budget-conscious users seeking rock-solid transmission, the UWP Series incorporates sophisticated wireless technologies including PLL-synthesized system, space-diversity reception and a tone squelch function. Whether for low-cost PA, theater or presentation applications, the UWP Series delivers the convenience of non-compromised wireless microphone operation at a very affordable price. The UWP Series consists of a lavalier/bodypack transmitter, a wireless handheld mic, plug-in transmitter, a portable tuner, a half-rack-size tuner, and a tuner module. They are available in turnkey packages, each comprising a microphone, transmitter and tuner, for a ready-to-go system straight out of the box. Each package has been carefully compiled to address almost any application—from video production and A/V presentations, to live performance and electronic news gathering.

FEATURES
- PLL Synthesized System used in the transmitters and tuners, achieves solid transmission and reception by using a stable carrier signal to avoid interference with other frequency channels and to allow the selection of a preferred channel from multiple frequencies (188 selectable frequencies).
- Space Diversity Reception System—used in all UWP tuners – reduces signal dropout to a minimum. Achieves stable reception by using dual-antenna inputs/reception circuits that receive signals over two different paths and automatically select the stronger RF signal for output.
- The antennas of the portable and half-rack-size tuners each allow for angle adjustments, which helps to further eliminate signal dropout.
- Tone Squelch Circuitry prevents the output of unwanted signals or noise from other signal transmissions in the air, as well as the RF noise and popping noise that occur when the transmitter is powered on or off.
- Allows simultaneous operation of up to 16 wireless mics. Optimum combinations of practically tested, intermodulation-free frequencies (stored in the UWP tuners) simplifies the task of system setup.

Bodypack Transmitter
- Compact and lightweight design.
- 3.5mm, 3-pole mini-jack input connector with lock mechanism.
- Includes belt clip.
- Supplied lavalier is a uni-directional, electret-condenser mic with a windscreen and mic clip.

Bodypack and Handheld Transmitter
Both Feature
- Selectable RF-output level: 5 mW for simultaneous multi-channel operation; 30 mW for long-distance transmission
- Attenuator function allows adjustment of the mic-input level to suit each user’s voice
- Six hours operation on two AA batteries
- LCD screen displays the operating channel number and its frequency in MHz, attenuator level, RF-output level (High/Low), audio-input and RF-output status, transmitter- battery status and accumulated operating time

Handheld Microphone
- Uni-directional, dynamic mic capsule
- Internal antenna design
- Supplied with a microphone holder and a screw adapter
Plug-on Transmitter: The UTX-P1 plug-on transmitter converts a wired microphone to a wireless microphone via an XLR connector. This brings the convenience of uncompromised wireless microphone operation at a very affordable price. Designed for use with the UWP Series wireless tuners, the UTX-P1 is extremely durable and is well balanced for use with dynamic microphones. It accepts line-level audio input signal as well.

- Operates over a wide 24MHz frequency band within the range of 758MHz to 782MHz
- 50 mW RF power output for stable and long-distance transmission
- Mic/Line input level switchable

TUNERS (RECEIVERS)

**URX-R1 Half 19” Rack-Size Tuner**

The URX-R1 is a space diversity reception system for stable RF reception. It is equipped with both XLR (balanced) and 1/4” phone (unbalanced) output connectors. The output level on the XLR-type connector can be switched between mic and line levels.

- LCD screen displays the operating channel number and its frequency in MHz, plus the audio output status and RF-input level.
- Stereo headphone jack with monitor volume-control on the front panel.
- A channel search function automatically seeks and selects the same RF signal frequency as set on the UWP transmitter.
- Angle-adjustable antennas to help eliminate signal dropout.
- RF squelch function virtually eliminates ambient noise and unwanted signals from other wireless microphone systems.
- A green LED indicator illuminates when RF-input signals are correctly received.
- Supplied with an AC/DC adapter.

**URX-M1 Tuner Module**

The URX-M1 is a compact, plug-in diversity tuner module with space diversity reception system for stable RF reception.

- Up to two modules can be installed into a Sony mixer/amplifier (SRP-X700P or SRP-X351P), while up to six modules can be installed in the Sony MB-806A tuner base unit.
- An LCD screen displays the operating channel number and its frequency in MHz, plus the audio-output status and RF-input level.
- RF squelch function virtually eliminates ambient noise and unwanted signals from other wireless microphone systems.
- A green LED indicator illuminates when RF-input signals are appropriately received.

**Lavalier Systems**

Each system includes a lavalier mic supplied with a windscreen and mic holder clip, and a bodypack transmitter supplied with a belt clip.

**UWP-S1**

Includes unidirectional lavalier mic with windscreen and mic-holder clip, bodypack transmitter and half rack-size tuner.

- Suitable for use in PA systems.
- The half-rack-size tuner is supplied with an AC/DC adapter.

**UWP-X1**

Consists of a unidirectional lavalier mic with a windscreen and mic-holder clip, bodypack transmitter and tuner module.

- Suitable for use in PA systems.

**Handheld Systems**

Each system includes a handheld microphone supplied with mic holder and screw adapter.

**UWP-S2**

Consists of a handheld microphone with a mic holder and half rack-size tuner.

- Suitable for use in PA systems.
- The half-rack-size tuner is supplied with an AC/DC adapter.

**UWP-X2**

Consists of a handheld microphone with a mic holder clip and tuner module receiver.

- Suitable for use in PA systems.
WIRELESS MICROPHONES

UHF Synthesized Wireless Microphone System

An affordable system with superb audio quality and easy handling, Sony’s UHF Synthesized Wireless Microphone System is widely recognized as the outstanding wireless mic system for professional applications. Operating in the 800 MHz UHF band range and equipped with a PLL (Phase Locked Loop) system, each of the components provide up to 94 channels, space diversity reception and LCD indicators. Reliable and sophisticated circuit technology assure low noise, wide dynamic range, and extremely stable signal transmission and reception.

PLL Synthesized System
A PLL (Phase Locked Loop) synthesized system controls the transmission and reception frequencies of the system. Employed in transmitters and receivers, PLL provided highly stable, selectable frequencies to be generated in increments of 125 kHz. Choose from 94 frequencies on A-series models and from 188 frequencies on B-series models.

Space Diversity Reception System
A space diversity reception system is used to eliminate noise and signal dropouts, thus ensuring stable reception. Dual antenna inputs and reception circuits incorporated in the diversity system receive signals over two different paths and select the stronger signal as the output. This switching operation is undetectable on the audio output of the receivers. Also provides stable reception and cleaner audio when working at extended operating distances.

Consistent RF Power Output
DC-DC convert circuit built into the power supply section of microphones/transmitters provides consistent output power over the life of the batteries.

Pre-Programmed Frequency Groups
Wireless channels are conveniently preset in the CPU of each tuner for use in a multi-channel operation at one location. These are optimum combinations of calculated and practically tested intermodulation-free frequencies. These frequencies are arranged in groups, with each group pre-programmed to allow inter-modulation free operation. The use of preset channels makes it easy to choose the correct frequencies for multi-channel operation, and unlike random selection of channels, prevents interference such as beat noise in multi-channel operation and guarantees better unit isolation.

Tone Squelch Circuitry
To ensure accurate audio reproduction, the system is equipped with tone squelch circuitry control. Here’s how it works: The wireless microphone transmitters transmit a 32 kHz tone signal along with the program audio signal. In the receivers, a squelch circuit is present, and the program signal is only output when the tone signal has been correctly received. This squelch feature is designed to eliminate undesired signals and noise from other equipment and eliminates RF noise and popping when the transmitter is powered off.

Informative, Easy-to-Read LCD
Receivers and transmitters feature a built-in, easy-to-read LCD, which provides extensive status information. Receivers display the diversity RF and AF signal strength, frequency and channel groups chosen, and battery status of the transmitter. Transmitters display AF input level, and RF output, battery status, current channel number, selected frequency, input attenuation setting, and accumulated battery operating time.

Remote Battery Alarm
Monitor the battery reserves of handheld, body pack and plug-on transmitters. Remaining battery life is indicated on both the transmitter and receiver, with another indication one hour before the battery goes dead. On the receiver, the battery indicator on the LCD and LED displays also flash, helping to avoid the chance of battery failure at a critical moment.

Memory Back-Up
Each unit has a convenient memory back-up capability. When the Power switch is turned on, the previous channel setting is automatically recalled and displayed.
Beltpack Transmitter (SOWRT822B62)
The WRT-822B provides stable RF performance and high audio quality in a sturdy yet lightweight ergonomic package. It is suitable for use with any Sony lavalier microphone, making it ideal for presentation work.

- Compact, lightweight, magnesium alloy body - only 2 1/2" x 4 1/8" x 1 1/18".
- Easy-to-read LCD shows channel number, attenuator, RF and AF condition, battery status and accumulated operating time.
- Audio attenuation setting from 0 dB to -21 dB in 3 dB steps.
- 20mW RF output power.
- Eight hours continuous operation with 2 AA batteries.
- Low-battery alarm transmitted to compatible receivers.
- Includes low profile 1/4 wave length wire antenna and leather case.

LAVALIER MICROPHONES

ECM-44BC Omni-Directional Mic
The ECM-44BC makes the exceptional quality of Sony’s electret condenser microphones available for budget conscious productions, and a variety of sound reinforcement requirements, such as lectures and demonstrations. Measuring 0.59 x 0.34", the ECM-44BC reduces the visual distraction to the audience. The ECM-44BC can be depended upon for clean, bright, yet natural reproduction.

- Superior sound quality.
- Extremely durable black finish.
- Professional Locking 4-pin bayonet connector.
- It has a frequency response of 40Hz to 1kHz.
- Microphone head measures 0.59 x 0.34”; weighs just .07 oz.
- Supplied with a single horizontal type holder clip, urethane wind screen, and case.

ECM-77BC Omni-Directional Mic
Designed for professional broadcast, sound reinforcement and recording applications, the ECM-77BC has a miniature profile that allows it to be easily concealed in performance and broadcast situations. It provides a wide frequency response of 40Hz - 20kHz that enables it to accurately reproduce audio signal from a wide variety of sources. The omni-directional pattern provides even sensitivity and frequency response at the direct and off-axis sections of the microphone capsule.

- It has a frequency response of 40Hz to 20kHz.
- Microphone head measures .05 x .25”; weighs just .05 oz.
- Supplied with two holder clips (single/horizontal and single/vertical type), a metal-mesh wind screen, and a mic case.

ECM-166BC Uni-Directional Mic
The ECM-166BC is a uni-directional electret condenser lavalier mic that features a 100Hz to 10kHz frequency response, a 3.9’ cable and a 4-pin (SMC9-4P) connector for use with the WRT-822 beltpack transmitter. It is resistant to howling by rejecting indirect sound, and is ideal for institutional uses and sound contracting applications such as speeches, lectures and conferences. Extremely durable black finish.

- It has a frequency response of 100Hz to 10kHz.
- Microphone head measures 1/2” x 15/16”; weighs approximately .12 oz.
- Supplied with a urethane wind screen and a holder clip.

ECM-88BC Uni-Directional Mic
The ECM 88BC is an ultra-miniature mic with a rectangular dual-diaphragm mechanism that contributes to a significant reduction in handling noise. It features a 4-pin Hirose connection for use with the WRT-822 beltpack transmitter. The capsule is 0.14 x 0.14 x 0.66", allowing natural-looking concealment on stage or camera.

- Flat and wide frequency response of 20Hz to 20kHz.
- Water-resistant design assures durability from the elements and sweat.
- Supplied with a horizontal clip, a vertical clip, a urethane windscreen and a carrying case.

ECM-44BC (SOECM44BC) ................................................... 99.95
ECM-77BC (SOECM77BC) ............................................. 259.95
ECM-166BC (SOECM166BC) ........................................ 99.95
ECM-88BC (SOECM88BC) ............................................. 339.95

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WRT-847B UHF Synthesized Transmitter Unit

The WRT-847 UHF Synthesized Transmitter Unit accepts a variety of optional microphone capsules, providing a choice of characteristics to suit a range of different applications. (One head is required for it to function). The CU-F780, CU-G780 and CU-E700 capsules are designed for vocal and speech applications in broadcasting, live music performances and concert halls. Each features PLL frequency synthesized circuitry for highly stable operation and an easy-to-read LCD screen.

◆ Audio compander time constant is switchable to suit different capsules
◆ Selectable RF output level: 10 mW for simultaneous multi-channel operation and 50 mW for long working distance
◆ Audio gain and attenuation setting from +9 dB to -12 dB in 3 dB steps
◆ Lockable power switch to avoid accidental power off
◆ Battery status information is transmitted to the receiver and shown on an LCD for additional assurance of continuous operation
◆ Two AA-size alkaline batteries provide up to eight hours of continuous operation
◆ Easy-to-read LCD with back light indicates extensive information on operating conditions such as channel number, wireless channel frequency in MHz, audio input level, compander time constant, battery status and accumulated battery operating time.

CU-F780 Dynamic Supercardioid Mic Capsule

◆ Ideal for vocal applications including live music performance
◆ Dynamic element for extreme durability and high SPL handling
◆ Super cardioid polar pattern minimizes off-axis pickup and feedback
◆ Uses the same high quality edgewise winding Copper Clad Aluminum Wire voice coil used in the acclaimed F-780 wired mic.
◆ Wide 50 Hz to 18 kHz frequency response
◆ Built-in windscreen
◆ Dimensions: ø 51 x 90 mm (6.3 oz)

CU-G780 Dynamic Cardioid Mic Capsule

◆ Ideal for live vocal applications, especially those requiring increased immunity to feedback
◆ Dynamic element for extreme durability and high SPL handling
◆ Super cardioid polar pattern minimizes off-axis pickup and feedback
◆ Copes with high sound pressure level vocals providing outstanding feedback rejection
◆ Wide 50 Hz to 20 kHz frequency response
◆ Built-in windscreen
◆ Dimensions: ø 51 x 90 mm (6.3 oz)

CU-E700 Supercardioid Condenser Capsule

◆ Designed for critical vocal and speech applications
◆ Super cardioid polar pattern minimizes off-axis pickup and sensitivity to acoustic feedback
◆ Built-in windscreen
◆ Electret element for smooth, clear sound, excellent transient response
◆ Wide frequency response (50 Hz to 18 kHz) for natural sound reproduction
◆ Max. SPL: 150 dB
◆ Dimensions: ø 51 x 98 mm (6.0 oz)

WRT-807A

◆ High sound quality for vocals - powerful, crisp and clean sound as well as presence in the low end and mid frequency range.
◆ Dynamic microphone capsule, same as used in the Sony F-780 professional vocal microphone.
◆ LCD for display of channels, attenuator and accumulated hours.
◆ Up to 5 hours of continuous use with a single AA battery.
◆ Battery alarm transmitted to compatible receivers.
◆ Newly-developed lockable power switch to prevent accidental operation.

WRT-808A UHF Plug-In Transmitter with XLR Connector

◆ RF power output: 10mW.
◆ Plug-In transmitter works with any dynamic microphone with an XLR connector.
◆ 94-channel frequency agile.
◆ Battery level indicator.
◆ Level control.

◆ AF/Peak indicator shows condition of audio input level.
◆ Low-Battery alarm works with compatible receivers.
◆ Up to 4 hours continuous operation with two AA alkaline batteries.
◆ Variable input attenuation, 0dB to 50dB.
**HANDHELD TRANSMITTERS**

**WRT-867A/X**

- Dynamic microphone capsule with supercardioid polar pattern.
- Resilient body structure for extremely high quality sound.
- Uni-directional dynamic mic capsule incorporates a high quality edge wise winding voice coil with lightweight CCAW (copper clad aluminum wire) and AlNiCo magnet for powerful, crisp and clear sound as well as presence in the middle and high frequency range.
- Four hours of continuous operation at 10 mW RF output level with one AA battery.
- Channel select switches, audio attenuator switch and an LCD indicator inside the body to help prevent accidental operation.

<table>
<thead>
<tr>
<th>WRT-807A</th>
<th>WRT-808A</th>
<th>WRT-867A/X</th>
</tr>
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<tbody>
<tr>
<td><strong>Carrier Frequency</strong></td>
<td>770 MHz to 782 MHz (64) 782 MHz to 794 MHz (66) 794 MHz to 806 MHz (68)</td>
<td>770 MHz to 782 MHz (64) 782 MHz to 794 MHz (66) 794 MHz to 806 MHz (68)</td>
</tr>
<tr>
<td><strong>RF Power Output (50Ω)</strong></td>
<td>10mW (50 Ω load)</td>
<td>10mW (50 Ω load)</td>
</tr>
<tr>
<td><strong>Antenna</strong></td>
<td>1/4 wave length wire antenna</td>
<td>Internal antenna</td>
</tr>
<tr>
<td><strong>Frequency Response</strong></td>
<td>50Hz to 15kHz</td>
<td>70Hz to 15kHz</td>
</tr>
<tr>
<td><strong>Signal-to-Noise Ratio</strong></td>
<td>&gt; 60 dB</td>
<td>&gt; 60 dB</td>
</tr>
<tr>
<td><strong>Attenuator Range (pad)</strong></td>
<td>21dB, variable in 3 dB steps</td>
<td>0 dB to 50 dB (continuous)</td>
</tr>
<tr>
<td><strong>Max. Input SPL</strong></td>
<td>151 dB SPL (1 kHz)</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Directivity</strong></td>
<td>Uni-directional</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Battery Life</strong></td>
<td>Approx. 5 hours; (1) AA</td>
<td>Approx. 4 hours; (2) AA</td>
</tr>
<tr>
<td><strong>Dimensions</strong></td>
<td>2½ x 9¼”</td>
<td>1½ x 1½ x ¼”</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>15.5 oz.</td>
<td>6.18 oz.</td>
</tr>
<tr>
<td><strong>Supplied Accessories</strong></td>
<td>Mic holder, Metal screw adapter</td>
<td>Soft case</td>
</tr>
</tbody>
</table>

**MB-806A and WRU-806B**

**Tuner Base Unit and UHF Synthesized Tuner Unit**

The MB-806A is a tuner base unit featuring slots for six WRU-806B diversity receiver modules, with an internal antenna divider for six channels of diversity operation in a single rack space. Using the optional WD-820A Antenna Divider, you can go even further, with up to 12 wireless mics operating simultaneously on a single pair of AN-820A active antennas! The MB-806A also features a convenient autochannel assignment function. Once an operating group is set on one of the installed WRU-806B receiver, channels within the same group are automatically assigned, and unusable channels for the additional receivers will be automatically detected and skipped. This enables instant and automatic multi-channel setting of the entire rack of receivers.

- Modular 19” rack mount tuner frame (1RU)
- Six XLR-balanced output connectors plus an XLR balanced mix output
- Selectable mic/line (-58dBm/-20dBm) output level switch
- Accommodates up to 6 WRU-806B diversity receiver modules for up to six simultaneous channels of operation. With the optional WD-820A Antenna Divider, up to 3 systems (18 mics) can be operated simultaneously

**WRU-806B**

**UHF Tuner Module**

MB-806A (SOMB806A) WRU-806B (SOWRU806B)

(212) 444-6605 • 1-800-947-9905 • Quick Dial 91
Incorporating cutting-edge wireless microphone technology, the MB-8N Tuner Base Unit together with the WRU-8N UHF Synthesized Tuner Unit set new standards for performance, flexibility and functionality in a wireless mic system. Although only 1U high, the MB-8N tuner base unit accommodates up to four WRU-8N tuner units, and it includes a built-in antenna divider making it easy to daisy-chain up to four of these base units to form a 16-channel system. The WRU-8N offers exceptional standards of RF performance. It features space diversity reception, and a wide dynamic range with low levels of noise and distortion. But what sets this system apart from any other, is the level of remote operation and monitoring the MB-8N/WRU-8N combination provides. Over standard Ethernet connections, a complete system can be set up and controlled from a PC using the supplied GUI software. This includes the store and recall of different channel configurations, a feature that is particularly useful for location use and equipment rental organizations. A separate audio monitoring feature is included to allow the individual outputs of the tuner units to be checked.

**MB-8N Tuner Base Unit**

- Easy to install in both fixed and mobile applications, the MB-8N Base houses up to four WRU-8N tuner units in a compact 1U high, 19” rack mountable design. This allows flexibility in expanding the number of wireless channels in a system according to budgetary and operational needs.
- Using the controls and LCD on the MB-8N’s front panel, users can quickly generate and store channel names for each WRU-8N Tuner Unit installed. Since the stored names can be recalled to the LCD panel, operators can immediately verify the sound source assigned to a given unit. Additional controls include output level (mic/line selectable), variable RF squelch level for each tuner unit, antenna attenuator value, and power to the AN-820A UHF Antennas connected to the MB-8N.
- The MB-8N has a built-in antenna divider, allowing four units to be daisy-chained without the need of an external divider. Since each tuner base unit accommodates up to four tuners, a 16-channel system is easy to configure (requires 16 tuner modules).
- With the use of the optional Sony WD-880A Antenna Divider, simultaneous operation on up to 42 channels is possible. This combined with the pre-programmed channel plans, makes it easy to build a high-quality, sophisticated, multi-channel wireless system.
- Headphone monitor jack and level control are located on the MB-8N front pane. Output can be selected to monitor the sound from individual WRU-8N tuner units or the mixed sound from all installed units.

**WRU-8N Tuner Unit(s)**

- Wide dynamic range ensures that the WRU-8N can provide optimum reception of signals from current and future Sony wireless mics and transmitters.
- The three technologies used in the WRU-8N — PLL frequency synthesized system, pre-programmed frequency groups and Space Diversity Reception System — result in extremely stable RF reception, a vital factor for any wireless microphone system.
- Each tuner has a jog dial for quickly choosing channel/group number settings as well as as LCD panel and LED indicators for information on operating conditions.
- LCD indicates the operating channel group and frequency, and has four-segment displays of AF output and RF input levels, while the LEDs indicate RF input and AF output status and the battery reserve of the transmitter. A red LED starts flashing one hour before the transmitter’s battery will run out.
**Computer-Based Control**

For added operational convenience, the MB-8N/WRU-8N system allows computer-based remote control. To provide straightforward and intuitive operation, the MB-8N and installed WRU-8N units can be set up, controlled and monitored from a PC interfaced via a simple Ethernet connection and running the supplied software. Full monitoring of operating status in one window. The GUI simultaneously displays the status of up to 16-channels in one window, which can be switched to a 25-channel or 49-channel display. Both a quick reference to each tuner’s reception status and that of the entire configuration are displayed on left side, while details of the channel status are displayed on the right side. Through a simple drag-and-drop operation, the operator can designate the channels to appear on the right side for access to an extensive range of operating controls and information which includes the channel name, selected channel group/frequency, tone squelch status, noise squelch status, RF squelch level, AF/RF input levels and transmitters battery alarm. The AF level is indicated in steps of approximately 2.5 dB, while the RF level is indicated in steps of approximately 5 dB. The GUI also allows the control of all other settings available on the MB-8N Base Unit. The pre-programmed channel frequencies can also be selected from this GUI. This is especially useful for complex multi-channel operations, since operators can adjust frequencies while simultaneously viewing all channels. Once the appropriate frequencies are selected, the setup can be stored as a file. This is extremely useful, since the setup for a particular multi-channel system can be easily re-established by loading the appropriate file.

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**WD-820A UHF Antenna Divider**

- Four diversity distribution output connectors for distributing the RF input signal from up to three MB-806A tuners.
- Two pair of antenna input connectors for connection of up to four AN-820A antennas– allowing expansion of the operating area.
- Cascade three WD-820A’s to control up to 19 channels.

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**WD-880A UHF Antenna Divider/Channel Multiplier**

- Expands simultaneous operation from 19 channels to up to 42 channels.
- Incorporates RF bandpass filtering technology for stability and reliability.
- Supplies 9 or 12v power to the AN-820A.

**AN-820A UHF Antenna**

The AN-820A incorporates an amplifier to compensate for signal deterioration caused by cable transmission and distribution.
- Unique and inconspicuous design allows installation on a wall or in a mic stand with the supplied adapter.
- LED indication for installation check.
- Powered by the MB-806A or the WD-820A via coax cable.

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SRP-X500P
All-in-One Digital A/V Powered Mixer

An cost-effective, all-in-one digital A/V powered mixer for smooth multimedia presentations, the SRP-X500 is the ideal choice for use in small to mid-scale presentation systems — from conference rooms, corporate boardrooms and classrooms to houses of worship. Within its compact chassis the SRP-X500P has seven major presentation devices — including an RGB/video switcher, audio mixer, wireless tuner slots, sound processor, and digital power amplifier. For smooth control over presentations, the easy-to-use front-panel layout provides instant access controls for compatible Sony DVD players, projectors and PCs. Plus, the built-in digital mixer offers important DSP functions, including a feedback reducer and EQ for high-quality audio. Eliminating complicated operations, cumbersome installation procedures, and complex adjustments of A/V parameters for optimized visuals and sound, the SRP-X500P is an efficient A/V presentation system for conveying your messages as effectively as possible.

**FEATURES**

**All-in-One Design**
- SRP-X500P incorporates the functionality of seven presentation devices (RGB switcher, video switcher, wireless tuner base unit, audio mixer, power amplifier, feedback reducer, EQ) in a compact 3U high, 19" rack-mountable chassis, enabling modern presentations using a wide variety of A/V sources. Reduces cost, time-consuming wiring and adjustments.
- Can accommodate two optional wireless tuner units, selectable from the Sony UWP-X series or the WRU-806A/806B, making it simple to establish a high quality wireless microphone system for the presentation.
- Setting up audio parameters of a presentation system can be a difficult task, especially to deliver high-clarity audio to all areas of the venue. The SRP-X500P offers nine factory default system settings in its memory, enabling more efficient audio adjustment.
- Speaker system configurations are also included in these settings, allowing quick setup of the audio system by recalling the one best suited for the venue.
- In addition to composite and component video inputs, it supports computer RGB input and output, both of which accommodate up to SXGA resolution. For audio there are four microphone inputs and two stereo line inputs are available, each which can be freely assigned to the four audio outputs.
- Sound processing functions including Auto Gain Control (AGC), equalizer, compressor and feedback reducer, bring professional sound quality into multimedia presentations. Each mic input channel integrates a digital feedback reduction function. At the touch of a button, the audio frequency in which howling is likely to occur, is detected and suppressed, reducing unwanted microphone feedback.
- The SRP-X500P is equipped with a four-channel digital power amplifier that can be switched between high and low impedance modes to suit various room types.
- For system setup and operation from a PC, the SRP-X500P is supplied with the Windows-based SRP-X500P Manager software. From its easy to use GUI, operators can control detailed settings such as the equalizer, AGC, and compressor, before the presentation.

**Comprehensive Remote Control**
For integrated control of the presentation system the SRP-X500P offers a variety of control interfaces — to control peripheral equipment or to be controlled from an external control system. These include RS-232, Control S and Parallel ports. An optional RM-AV3000 Series Wireless Remote also provides basic control functions for both the SRP-X500P and connected projector.

**RS-232C Remote Control of the SRP-X500P:**
Various settings of the SRP-X500P can be altered from a PC running the supplied SRP-X500P Manager. Third-party system controllers can also be connected to this port to control the SRP-X500P.

**Remote Control of Peripheral Equipment From the SRP-X500P**
- **RS-232C (PROJECTOR CONTROL):** For remote control of Power ON/STANDBY and input selection of Sony projectors.
- **Control S (PROJECTOR CONTROL):** For remote control of Power ON/STANDBY and input selection of the Sony VPL-PX15.

**Remote Control of Peripheral Devices from an External Parallel Interface Box:**
For remote control of peripheral devices such as video screens (up/down), window curtains (open/close), and lighting (on/off).

**Wireless Control of the SRP-X500P or Peripheral Equipments**
Using the optional RM-AV3000 Series Remote Commander, frequently accessed operations of the SRP-X500P and connected projector can be wirelessly controlled:
- **SRP-X500P (AV/RGB selection, Master volume adjustment, Master volume muting)**
- **Projector (Power ON/STANDBY)**
**Digital Powered Mixer**

Designed for the modern presentation system, the SRP-X700P has the ability to process material from a wide range of sources including microphones, video, audio, DVD and PC graphics. In fact, it provides the functionality of up to seven traditional presentation devices in a compact, 3U high rack-mounting chassis. And by utilizing digital processing and control technology, the SRP-X700P combines an impressive set of features with high quality processing and simple operation.

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**6x1 Multimedia Switcher**

The SRP-X700P handles a wide variety of sources such as wire/wireless microphones, PC graphics, DVD playback and surround sound audio, and has a ‘six into one’ switcher that allows all the different material to be routed to the presentation system.

- Six picture inputs: 3-RGB/component, 3-composite/S Video.
- Six audio inputs: 4 stereo and 2 surround sound (5.1 format).
- High resolution component signal processing, including 480p or 1080i.
- High-performance switching, with a 150MHz frequency response for RGB signals (1280 x 1024 pixels, SXGA).

**Integrated Machine Control and Automation Control Interfacing**

The SRP-X700P has extensive machine control capabilities with four CRTL-S control ports for wired machine control, as well as parallel and RS-232C ports for extensive control from professional presentation controllers.

- RS-232C port allows for remote control of Sony projector and plasma monitor.
- USB, RS-232C and parallel input ports for remote control from an external PC (or other control systems).
- Control-S ports allow for remote operation of Sony VCRs, CD and DVD players, Minidisc recorders and projectors.

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**Bundled Software for Improved System Efficiency**

The SRP-X700P is supplied with two PC applications (SRP-X700P Manager and User Control Panel). The X700P Manager is a ‘set and forget’ application, supplied to allow the unit to be fully configured during installation and provides a complete set of control GUIs. The User Control Panel provides a simple control GUI for real time presenter control. Additionally, the unit’s 20 internal Scene memories, four of which can be recalled from front panel buttons or the user control panel, allow an instant reset all of the internal processing, so downtime is minimized between operating modes.

- 6-mono and 2-stereo channels audio mixing with processing to maximize sound quality
  - Can mix and process 6-mono (4 mic, 2 mic/line) and 2-stereo (a stereo line and the 5.1/stereo line input of the switcher) inputs signals to 10 outputs (8 general purpose outputs and a stereo record output).
  - Comprehensive audio processing including EQ, dynamics, routing and delay, allows the audio signals to be maximized and provides tools for correcting for room acoustics.
- Two additional tools allow ‘professional quality audio’ processing to be setup at the touch of a button:
  - ‘Feedback Reducer’ analyzes and ‘nulls out’ potential howl round frequencies.
  - ‘Automix’ function allows the SRP-X700P to analyze, in real time, the incoming signals and make adjustments to maintain the quality of the output.
- 24-bit/48 kHz A/D -D/A conversion
- Multiple operating modes with 10 outputs and the on board stereo power amplifier
- A routing function allows the SRP-X700P to offer many different operating modes to support surround sound matrix switching or ‘Zoned’ speaker configurations. In addition, the on board 150W stereo power amplifier can be switched between high and low impedance modes.
- Power rating 200w + 200w (4 ohms), 150w + 150w (8ohms), Max 150w (70v Line)
SAFE-1000 UHF

Encrypted Wireless Mic System

Who's listening to your conversation? While the wonders of wireless technology bring freedom to communication, your conversations are available to whoever wants to listen.

Until now......

With their S.A.F.E.-1000 (Secure Audio Frequency Encryption) system, Telex brings airtight security to wireless. Based on technology adapted from Telex’s intercom used by the NFL, the S.A.F.E.-1000 system is ideal for the transmission of restricted or classified information over a wireless system. A scanner cannot intercept encrypted conversation when you’re on a S.A.F.E.-1000 system, unlike other brands of wireless microphones. Each and every matched S.A.F.E.-1000 system comes with its own unique security code. Not even another S.A.F.E.-1000 receiver can intercept your transmission. S.A.F.E.-1000 offers powerful features like Advanced ClearScan automatic channel selections, 950 possible channels, and factory preset groups and channels that allow up to 16 simultaneous systems in one band. These tools make setting up a boardroom with 10 systems quick and easy.

SAFE-1000 Receiver

The SAFE-1000 receiver features 950 selectable UHF channels, programmable in 25kHz steps. The receiver is rack mountable with the included rack mount hardware. Microphone level and line level outputs are provided via XLR-male balanced, and 1/4" phone-female unbalanced connections. A comprehensive back-lit LCD display provides group & channel, diversity, label, squelch, audio signal level and RF strength information.

SAFE-1000 - Encrypted UHF Lavalier Microphone Systems

Lavalier System (TES1000L)
Includes SAFE-WT bodypack transmitter, ELM-225 omnidirectional lavalier mic, SAFE-1000 receiver, and rackmount hardware.

Handheld System (TES1000HD)
Includes SAFE-HD handheld transmitter with ND/767 super-cardioid mic head, SAFE-1000 receiver, and rackmount hardware.

Combo System (TES1000HL)
Includes SAFE-WT bodypack transmitter, ELM-225 omnidirectional lavalier mic, SAFE-HD handheld transmitter with ND/767 super-cardioid mic head, SAFE-1000 receiver, and rackmount hardware.

RC-510 Mic Capsule (TERC510)
Featuring the EV RE-510 electret mic cartridge, the RC-510 is designed to mount on the SAFE-HD handheld transmitter. The super-cardioid pattern is effective in suppressing feedback in highly ambient environments. Ideal for vocal capturing in performance applications.

UAD-4 UHF Narrow Band UHF Antenna Combiner / Splitter System (TEUAD4)
A 4-channel diversity antenna signal and power distribution system for SAFE-1000 receivers. It distributes conditioned RF input signals to up to 4 receivers simultaneously. In addition, the UAD-4 distributes power to these receivers, eliminating excess power cable and antennas.
Wireless Microphone System

Backed by a 5-year warranty, the Password series combines cutting edge wireless technology with user benefits such as fast setup, simple operation, and reliable performance. Systems are frequency-agile with 64 user-selectable channels in the UHF band (692 - 722 MHz) with simultaneous operation of up to sixteen systems. The WT-4800 True Diversity receiver has an on-board scanner and three squelch types, carrier, noise and tone-key, to ensure quiet, interference-free operation. It also features antenna loop outputs for antenna distribution for up to two additional receivers and a convenient Mix-In jack for connecting the audio output of a second WT-4800 or other source. Receiver options include rack-mount kits for single or dual WT-4800 mounting in only one 19" rack space, the WD-4800 Antenna Distributor and the YW-4500 Remote Antenna.

Password transmitter options include the WM-4200 handheld mic and the WM-4300 lavalier mic with bodypack. Both offer ten hours of operation from one 9v battery, low battery indicator and adjustable sensitivity. The WM-4300 bodypack also has a recessed on/off switch to prevent accidental shut-off, a mini-XLR jack for alternative mic elements and rotatable lapel and bodypack clips for versatile mounting.

**Password Systems**

- **Password H System**
  - WT-4800 Receiver, WM-4200 Handheld mic, MB-WT3 Rack Kit

- **Password L System**
  - WT-4800 Receiver, WM-4300 Lapel mic, MB-WT3 Rack Kit

- **Password LO System**
  - WT-4800 Receiver, WM-4300 Omni Lavalier Mic, MB-WT3 Rack Kit

- **Password B System**
  - WT-4800 Receiver, WM-4300B Body pack transmitter, MB-WT3 Rack Kit

- **Password HL System**
  - WT-4800 Receiver, WM-4200 Handheld mic, WM-4300 Lavalier Mic, MB-WT3 Rack Kit

**Password Accessories**

- MB-WT3 Rackmount Kit for one WT-4800
- WD-4800 Antenna Distributor for up to 4 WT-4800s
- MB-WT4 Rackmount Kit for two WT-4800's
- YW-4500 Remote Antenna

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**WM-4200 Handheld Mic**
- 64-channel Frequency-Agile
- Optimized for speech and vocals/singing
- Dynamic mic element
- Unidirectional, cardioid pattern
- Low handling noise
- 10 hours continuous operation on one 9v battery
- Low battery indicator
- Includes mic clip and carrying pouch

**WM-4300 Lavalier Mic with Bodypack Transmitter**
- 64-channel Frequency-Agile
- Electret Condenser Mic Element
- Unidirectional, Cardioid Pattern
- Adjustable input sensitivity
- 10 hours continuous operation on one 9v battery
- Low battery indicator
- Recessed On/Off Switch
- Mini-XLR (TA-4F compatible) connector
- Rotating bodypack and lapel clips
- Includes mic clip and carrying pouch

**WT-4800 True Diversity Receiver**
- Output volume control
- On-board scanner
- True diversity reception
- Includes two detachable antennas
- Squelch types (Carrier, Noise and Tone-Key)
- Antenna loop outputs

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