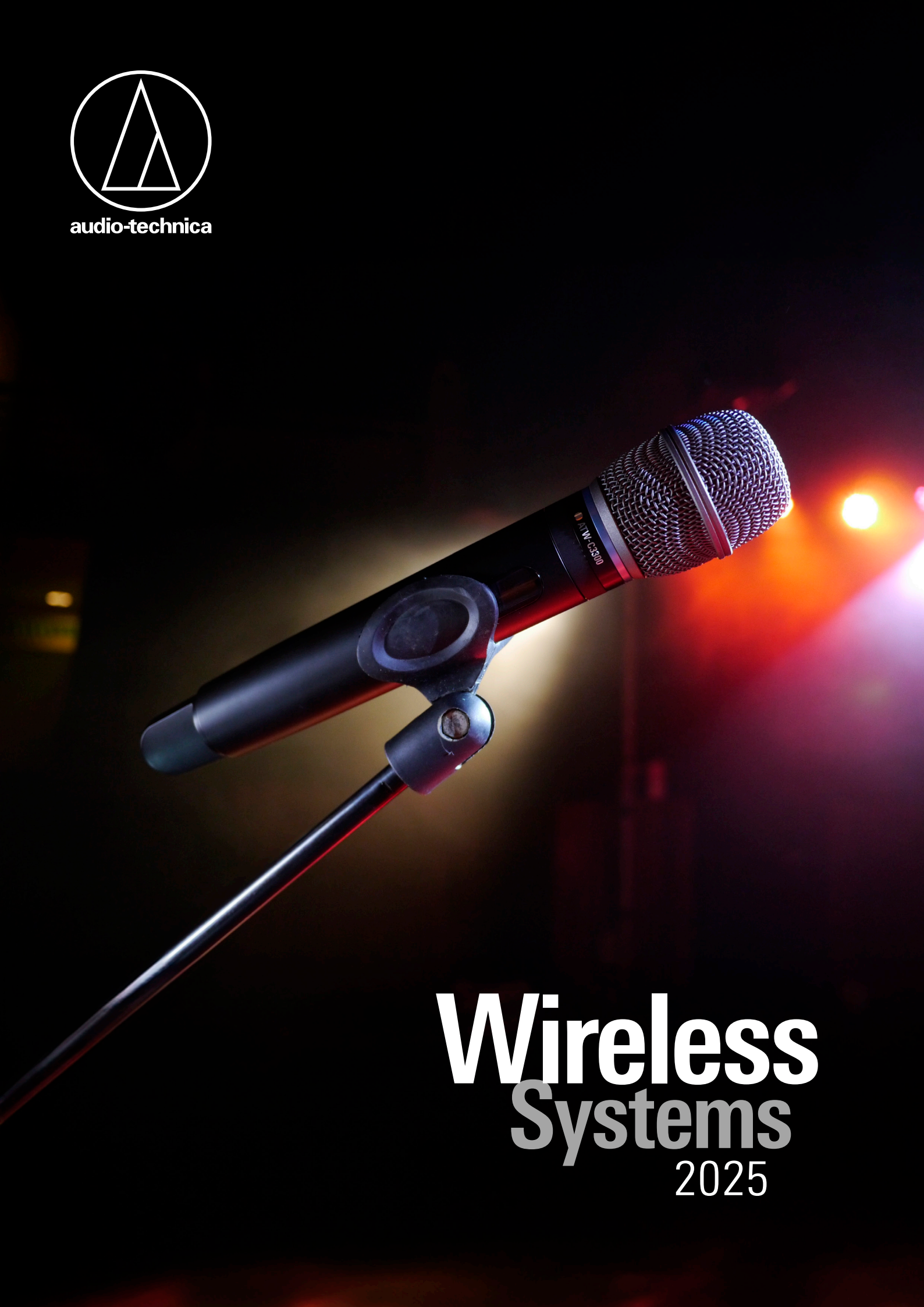
audio-technica



Wireless Systems

2025



Wireless Systems

WIRELESS **INTRODUCTION**

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WIRELESS **APPLICATIONS**

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ES Wireless Application 32

/ Interchangeable Microphone Capsules (IMC)





/ Cardioid Condenser
ATW-C5400



/ Cardioid Condenser
ATW-C3300



/ Hypercardioid Dynamic
ATW-C6100



/ Cardioid Dynamic
ATW-C4100



/ Cardioid Condenser
ATW-C710



/ Cardioid Dynamic
ATW-C510



/ Hyperardioid Dynamic
ATW-C990



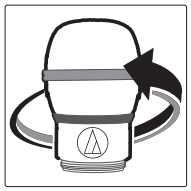
/ Handheld Transmitter Body
ATW-T5202



/ Handheld Transmitter Body
ATW-T3202



/ Handheld Transmitter Body
ATW-DT3102



/ Handheld Transmitter Body
ESW-T4102

Interchangeable Microphone Capsules compatible with all Audio-Technica handheld transmitters with the interchangeable head option.

All interchangeable microphone capsules can be used with **ATW-T5202, ATW-T3202, ATW-DT3102** and **ESW-T4102** handheld transmitters. Its industry-standard thread allows use with other compatible handheld transmitters.

Condenser microphone capsules **ATW-C5400** and **ATW-C3300.** An heritage from the world acclaimed studio microphones **AT4050** and **AT4033.**





Same sound characteristics as the renowned **AT4050** studio microphone offering extreme clarity and realism.

/ Interchangeable Cardioid Condenser Microphone Capsule
ATW-C5400





Same element as the classic **AT4033a** studio microphone offering extreme clarity and realism.

/ Interchangeable Cardioid Condenser Microphone Capsule
ATW-C3300

Clean, Crisp and Accurate

Transparent uppers/mids and rich low-end qualities are combined with advanced acoustic engineering for extensive performance abilities and a clean, crisp and accurate sound reproduction, even at high SPLs.

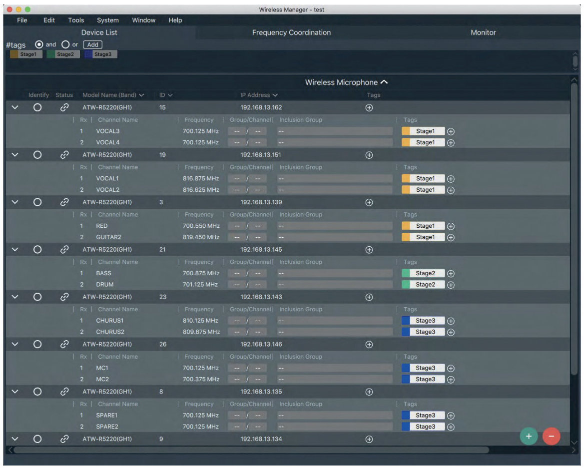
Warm and Flattering Sound

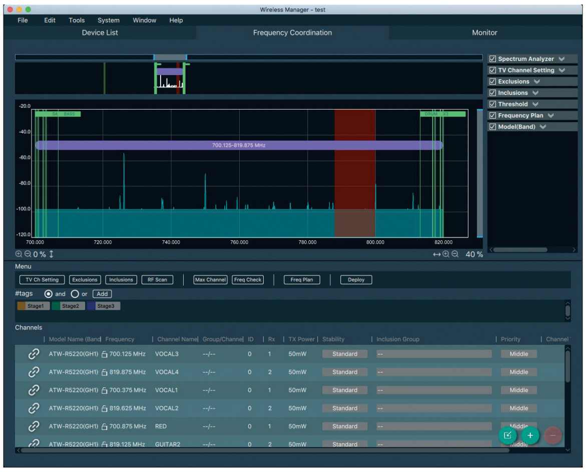
The AT4033a produces a warm and flattering sound that brings the versatility of a dynamic microphone, as well as the transparency and detail of a high-end capacitor model for a vintage effect.


ATW-C710
ATW-C4100
ATW-C510
ATW-C3300
ATW-C5400
ATW-C6100

Everything under control

The Wireless Manager software supports the setup, control, and monitoring of compatible Audio-Technica wireless devices. The software allows you to determine device settings, make and coordinate frequency plans while offline, and configure import settings whilst connected to wireless systems via network connection. When linked to a compatible receiver, you can scan the RF environment, monitor connected devices, and view the system log.





WIRELESS SYSTEMS / FREQUENCY

Audio-Technica - Frequency bands versus wireless series

Frequency from	470	478	486	494	502	510	518	526	534	542	550	558	566	574	582	590	598	606	614	622	630	638	646	654	662	670	678	686	694	702	710	718	726	734	742	750	758	766	774	782	790	791	821	823	832	862	863	1880	2400
> to	478	486	494	502	510	518	526	534	542	550	558	566	574	582	590	598	606	614	622	630	638	646	654	662	670	678	686	694	702	710	718	726	734	742	750	758	766	774	782	790	791	821	823	832	862	863	865	1900	2483
TV Channel	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	X	LTE	X	Duplex gap	LTE	X	70	DECT	ISM
Engineered Sound® Wireless																																																**1.9 GHz**	
3000 Digital Series	**DE2E** 470.125 - 529.975 MHz							**EE1E** 530.000 - 589.975 MHz										**FF1E** 606.000 - 665.975 MHz																																	
3000 Series	**DE2** 470.125 - 529.975 MHz							**EE1** 530.000 - 589.975 MHz								**EF1** 590.000 - 649.975 MHz							**FG1** 650.000 - 699.875 MHz																										
3000 Series Network receiver	**DE2** 470.125 - 529.975 MHz							**EE1** 530.000 - 589.975 MHz								**EF1** 590.000 - 649.975 MHz							**FG1** 650.000 - 699.875 MHz																										
3000 Series IEM	**DF2** 470.125 to 607.875 MHz																																																
														EG2 580.000 to 713.850 MHz																																					
2000 Series			**I-band** 487.125 - 506.500 MHz															**U-band** 606.500 - 631.000 MHz						**D-band** 656.125 - 678.500 MHz																									
System 20 Pro																																																	**2.4 GHz**

Note that some frequency bands might not be available in country or region in which you live, or could come with a limited tuning bandwidth/transmitting power due to local regulations.



/ DECT Wireless System (ESW)

Engineered Sound® Wireless



/ Digital UHF Wireless Microphone System

3000 Digital Series



/ Frequency-Agile True Diversity UHF

3000 Series



/ Wireless In-Ear Monitor System

3000 Series IEM



/ Frequency-Agile True Diversity UHF

2000 Series



/ Digital Wireless System

System 20 Pro

	Performance					Live Sound				Install			Broadcast & Production			
	Operating range	Indoor range	Outdoor range	Rec. Channel Count	Analog / Digital	Hobby music	Prof. music	Rental company	Theater	School / house of worship /	Corporate / hotel conference room	Large venues / Stadium	Broadcast studio	ENG	Live sport	Film & Location sound
Engineered Sound Wireless	100 m	●●●●	●	> 40	D					○○○	○○○	○○○	○○		○○	
3000 Digital Series	120 m	●●●●	●●●●	> 40	D	○	○○	○○	○○	○○○	○○○	○○○	○○		○○	○○
3000 Series	100 m	●●●●	●●●●	40	A	○○	○○○	○○○	○○○	○○	○○○	○○○	○		○○○	○○
3000 Series IEM	90 m	●●●●	●●●●	> 40	A	○○	○○○	○○○	○○○	○○	○	○○○	○○	○○*	○○○	○○
2000 Series	100 m	●●●●	●●●●	30	A	○○	○	○○	○○	○○○	○○○	○				
System 20 Pro	60 m	●●●	●	20	D	○○	○○	○		○○	○○○					

** Should be combined with 3000 Series*



Engineered Sound® Wireless

DECT Wireless System (ESW)

High Channel Count

Select from standard mode (Up to 96 channels) to minimize latency, and HD mode (Up to 192 channels) to maximize the number of channels.

Best-in-Class Battery Life

Internal batteries offer all-day operation on full charge, as well as rapid recharge ability in as little as 2 hours.

Secure Communications

Stay confident that your communications will remain safe and secure with AES256 encryption support.

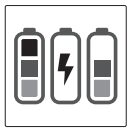


Dante®


Network


Interchangeable Capsules


cH-Connector


Charging contacts



front



back



The Engineered Sound Wireless System is available in two configurations:

/ 8ch Receiver
ESW-R4180DAN (Dante™)
ESW-R4180LK (AT-Link)

/ Body-Pack Transmitter
ESW-T4101



/ Desk Stand Transmitter
ESW-T4107



/ Boundary Microphone Transmitter
ESW-T4106

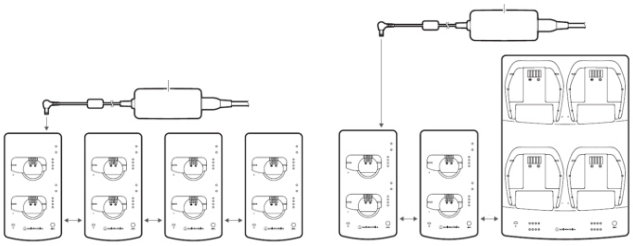




/ Handheld Transmitter
ESW-T4102/C510

/ for up to 8 transmitters with one power supply

Cascade recharging stations





/ Two-Bay Charging Station
ESW-CHG4

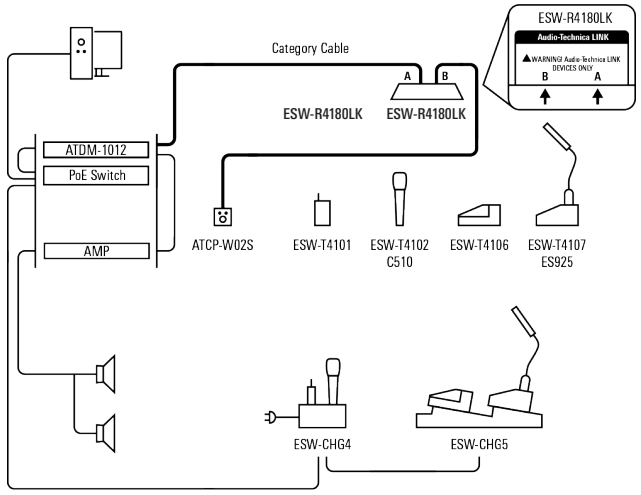


/ Four-Bay Charging Station
ESW-CHG5

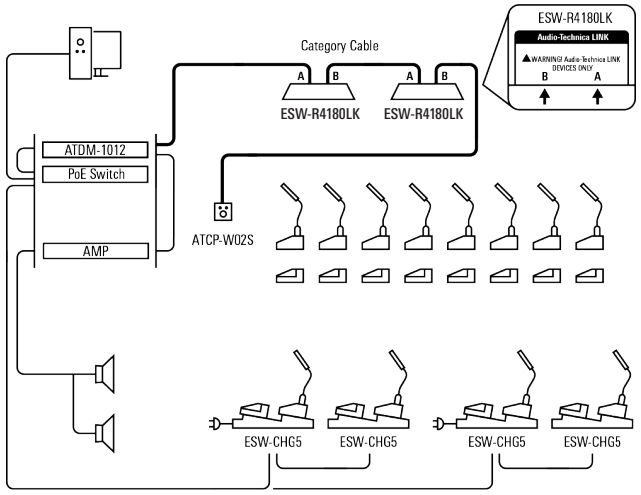


/ Power Supply Unit for ESW-CHG4 and ESW-CHG5
AD-SA1230XA

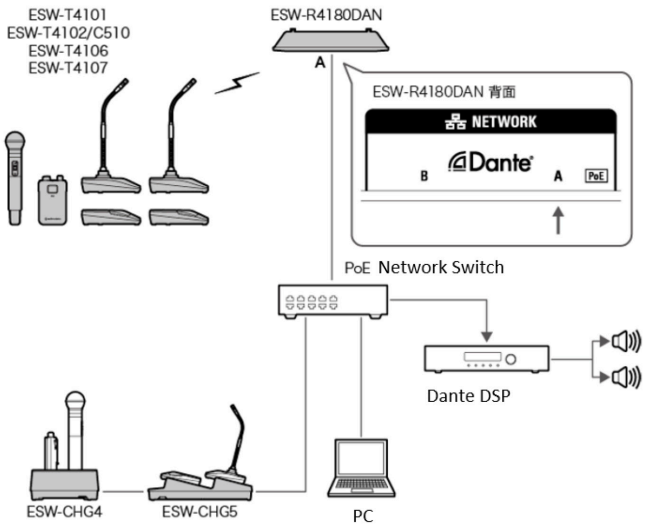
ESW-R4180LK (only one unit connected)
8 channel maximun per unit



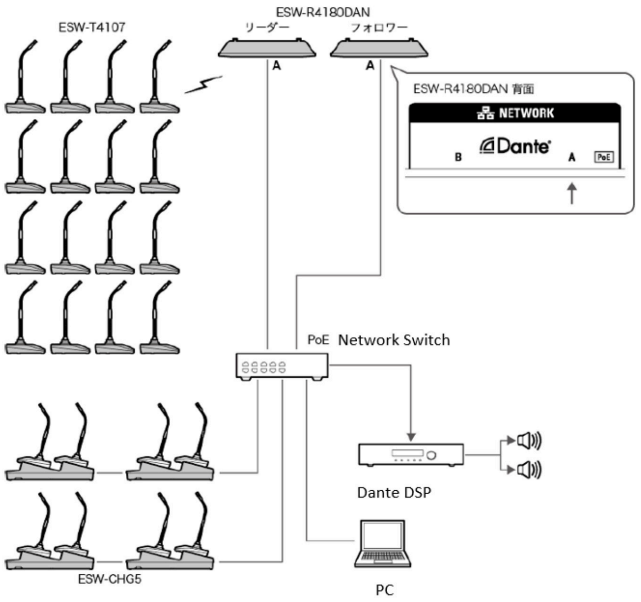
ESW-R4180LK (multiple units connected)
16 channel maximun with 2 receivers



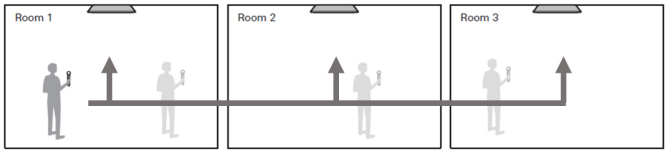
ESW-R4180DAN (only one unit connected)
8 channel maximun per unit



ESW-R4180DAN (multiple units connected)
16 channel maximun with 2 receivers



Multi-hall complex / Exhibition centre



Roaming function allows transmitters to switch between multiple receivers (Dante™).

Engineered Sound® Wireless

Operating Frequencies	1,880 to 1,900 MHz (Europe)
Operating Range	Max. 100 m (with RF Power set to Mid)
Dynamic Range	> 105 dB (A-weighted), typical
Total Harmonic Distortion	< 1.0%
Maximum Simultaneous Use (recommended)	Standard: 96 channels; HD mode: 192 channels
Receiving System	True diversity
Latency	Standard: 16.7 ms typ.; HD mode: 24.0 ms typ.
Audio Sampling Rate	24 bits, 48 kHz
Encryption System	AES256
RF Output Power	Max: 250mW, High: 100 mW, Mid: 30 mW, Low: 10 mW, Min: 2 mW (switchable)

ESW-R4180DAN

Modulation Mode	A-field: π / 2-BPSK; B-field: π / 8-8PSK
RF Sensitivity	< -90 dBm
Network	Dante: 1 Gbps; IP Control: 100 Mbps
I/O Connector	Network/Dante: RJ-45
Power Consumption	4.8 W

ESW-T4101

Frequency Response (internal microphone)	20 to 20,000 Hz
Modulation Mode	A-field: π / 2-BPSK; B-field: π / 4-QPSK
Input Connection	Four pin screw-down cH-connector
Battery	Lithium-ion battery LI-220 (included)
Battery Life	25 hours
Dimensions	56 mm x 23.5 mm x 90 mm (W x D x H)
Weight (with battery)	112.3 g

ESW-T4102

Modulation Mode	60 to 16,000 Hz
Microphone Capsule	108 dB or higher (A-weighted), typical
Battery	Cardioid, condenser
Battery Life	Following federal and national regulations
Dimensions	±40 kHz (THD:10%)
Weight (with battery)	1.0 % or less (at 1 kHz, -20 kHz deviation)

ESW-T4106

Frequency Response	Omnidirectional: 20 to 18,000 Hz; Cardioid: 20 to 18,000 Hz
Modulation Mode	A-field: π / 2-BPSK; B-field: π / 4-QPSK
Microphone Polar Pattern	Cardioid, Omnidirectional (selectable)
Battery	Lithium-ion battery LI-220 (included)
Battery Life	22 hours
Charging Time (USB)	Approx. 2 hours 40 minutes
USB Charging Connector	USB Type-C (USB 3.0)
Dimensions	90.5 mm x 129.4 mm x 31.9 mm (W x D x H)
Weight (with battery)	500 g

ESW-T4107

Modulation Mode	A-field: π / 2-BPSK; B-field: π / 4-QPSK
Microphone	ES Series modular gooseneck microphone-compatible
Battery	Lithium-ion battery LI-220 (included)
Battery Life	17 hours
Charging Time (USB)	Approx. 2 hours 40 minutes
USB Charging Connector	USB Type-C (USB 3.0)
Dimensions	90.5 mm x 129.4 mm x 47.4 mm (W x D x H)
Weight (with battery)	535 g

ESW-R4180LK

Modulation mode	A-field: π/2-BPSK B-field: π/8-8PSK
RF sensitivity	< -90 dBm
Network interface	Audio-Technica LINK: 100 Mbps
I/O connector	Audio-Technica LINK: RJ-45
Power consumption	2.4 W
Power requirement	+48 V DC (Audio-Technica LINK)
Operating temperature range	-10°C to +50°C
Dimensions	228.6 mm × 228.6 mm × 43.5 mm (W×D×H
Weight (without accessories)	620 g
Included accessories	Mounting bracket

ESW-CG5

Power Supply	12 V DC, 3 A
Charging Output	Charging 1 to 4 transmitters: 4.2 V DC, 1.5 A Charging 5 to 6 transmitters: 4.2 V DC, 1.1 A Charging 7 to 8 transmitters: 4.2 V DC, 0.7 A
Consumption	Charging 4 transmitters: 30.6 W
Charging Time (ESW-T4106 / ESW-T4107)	1 to 4 transmitters: 100%-2h00 / 50%-0h50 5 to 6 transmitters: 100%-2h50 / 50%-1h10 7 to 8 transmitters: 100%-3h40 / 50%-1h40
Network Interface	IP: 100 Mbps
Operating Temperatures	0°C to 40°C
Dimensions	209.9 × 303.9 × 65.4 mm (L × W × H)
Weight	866 g
Included Accessories	Link cable, link plate, plate screws
Sold Separately	AC Adapter (AD-SA1230XA), AC cord

ESW-CHG4

Power Supply	12 V DC, 3 A
Charging Output	Charging 1 to 4 transmitters: 4.2 V DC, 1.5 A Charging 5 to 6 transmitters: 4.2 V DC, 1.1 A Charging 7 to 8 transmitters: 4.2 V DC, 0.7 A
Consumption	Charging 2 transmitters: 15.6 W 4 chained stations/8 transmitters: 30.6 W
Charging Time (ESW-T4101)	1 to 4 transmitters: 100%-2h00 / 50%-0h50 5 to 6 transmitters: 100%-2h50 / 50%-1h10 7 to 8 transmitters: 100%-3h40 / 50%-1h40
Charging Time (ESW-T4102)	1 to 4 transmitters: 100%-3h00 / 50%-1h20 5 to 6 transmitters: 100%-4h10 / 50%-1h40 7 to 8 transmitters: 100%-5h20 / 50%-2h20
Network Interface	IP: 100 Mbps
Operating Temperatures	0°C to 40°C
Dimensions	95 × 180 × 78.5 mm (L × W × H)
Weight	532 g
Included Accessories	Link cable, link plate, plate screws, microphone suspension adapter
Sold Separately	AC/DC Adapter (AD-SA1230XA), power cord

(1) Depending on environmental conditions.



3000 Digital Series

Digital UHF Wireless Microphone System

Uncompromising high-quality sound

In addition to 24-bit / 48 kHz digital processing, the 3000 Digital Series features a wide 120 dB dynamic range. Our proprietary audio codec technology accurately represents high frequencies, making the system well suited for use with musical instruments, as well as voices.

60 MHz tuning range

Features an extremely wide 60 MHz UHF tuning bandwidth for maximum versatility in an increasingly congested RF environment.

Dante™ output

The ATW-DR3120DAN features Dante™, providing a low-latency, high-performance network audio solution which is easy to implement, use and extend.

Cost & Space Saving

Up to five receivers can be cascaded together meaning no antenna distributor is required. Without the need for antenna distributors, the entire rack space can be slimmed down, reducing upstart, operating and travel costs. .

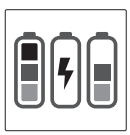


Dante®


Network


Interchangeable Capsules


cH-Connector


Charging contacts



front



back

/ Dual-Channel Receiver
ATW-DR3120DAN



cH-style screw-down 4-pin connector for secure connection to A-T's cH-style lavalier and headworn microphones, or cables.

/ Body-Pack Transmitter
ATW-DT3101



/ Interchangeable Microphone Capsules (IMC)
(see page 4)



/ Handheld Transmitter Body
ATW-DT3102

3000 Digital Series

Operating Frequencies	Band DE2E: 470.125 to 529.975 MHz Band EE1E: 530.000 to 589.975 MHz Band FF1E: 606.000 to 665.975 MHzz
Minimum Frequency Step	25 kHz
Modulation Mode	e microphone element used
Operating Range	120 m
Total Harmonic Distortion	0.1% or less (at 1 kHz, –20 dBFS)

ATW-DR3120DAN Dual-Channel Receiver

Receiving System	True diversity
Image Rejection	70 dB
RF Sensitivity	–98 dBm (10–5 BER)
Maximum Output Level	18 dBV (Line), –12 dBV (Mic)
Antenna Input	BNC-type, 50 ohms
Antenna Power	12 VDC, 150 mA (combined)
Power Supply	100 to 240 VAC (50/60 Hz)
Dimensions	483 mm × 385 mm × 44 mm (W × D × H)
Weight	Approx. 4.1 kg

ATW-DT3101 Body-Pack Transmitter

RF Power Output	High: 20 mW, Mid: 10 mW, Low: 2 mW
Dynamic Range	Mic input: 120 dB or higher, A-weighted, typical Inst input: 108 dB or higher, A-weighted, typical
Battery Type	Two alkaline or nickel-metal hydride 1.5 V AA batteries
Battery Life	Nickel-metal hydride 1.5 V AA batteries: Approx. 7 hours (1900 mAh High), Approx. 9 hours (2500 mAh High); Alkaline 1.5 V AA batteries: Approx. 6 hours (High)
Dimensions	64 mm × 23 mm × 82 mm (W × D × H)
Input Connections	Four pin locking connector
Weight	Approx. 105 g

ATW-DT3102 Handheld Transmitter Body

RF Power Output	High: 20 mW, Mid: 10 mW, Low: 2 mW
Dynamic Range	120 dB or higher, A-weighted, typical
Battery Type	Two alkaline or nickel-metal hydride 1.5 V AA batteries
Battery Life	Nickel-metal hydride 1.5 V AA batteries: Approx. 7 hours (1900 mAh High), approx. 9 hours (2500 mAh High); Alkaline 1.5 V AA batteries: Approx. 6 hours (High)
Dimensions	193 mm × 37 mm (without microphone capsule)
Weight	Approx. 205 g



3000 Series

Frequency-Agile True Diversity UHF Wireless Systems

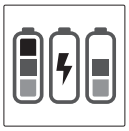
60 MHz tuning bandwidth

The 3000 Series systems are available in several different frequency bands, and each features a wide 60 MHz tuning range. This allows the user to set up systems with high channel counts, whilst offering the flexibility to tune to open spectrum wherever you travel. Frequencies can be easily scanned and selected on the receiver and then synced with the transmitter via IR sync functionality.

Backup frequency button

Unique multifunction button on the handheld and body-pack transmitters can be used to switch to a backup frequency (on both transmitter and receiver) should interference be encountered.


Network


Charging contacts


Interchangeable Capsules


cH-Connector



front



back

/ Receiver
ATW-R3210



back

/ Network-Enabled Receiver
ATW-R3210N



cH-style screw-down 4-pin connector for secure connection to A-T's cH-style lavalier and headworn microphones, or cables.

/ Body-Pack Transmitter
ATW-T3201



/ Interchangeable Microphone Capsules (IMC)
(see page 4)



/ Handheld Transmitter Body
ATW-T3202





One power supply feeds up to five chargers

Up to five docks can be connected to one power supply (AD-SA1230XA - available separately) to charge a maximum of ten transmitters (per link one AT8687 is required - available separately).

Monitoring and controlling

The ATW-CHG3N networked version of the charging dock allows users to monitor the charging status of all transmitters in the linked docks (per link one AT8687 is required - available separately).
Only the first dock must be an ATW-CHG3N, all linked docks (up to four) must be ATW-CHG3.

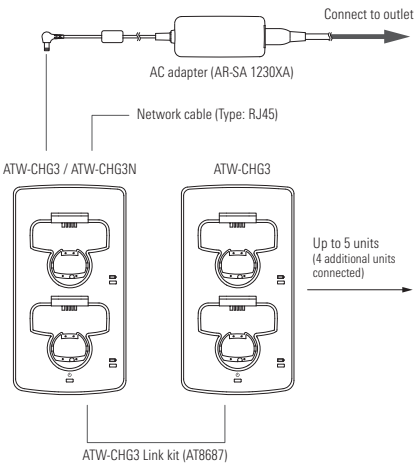
Protection against misuse

The dock automatically shuts off if alkaline or damaged batteries are detected in the transmitters.



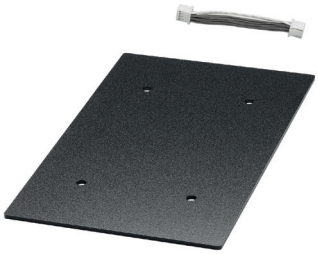
/ Two-Bay Charging Station
ATW-CHG3a

/ Two-Bay Networked Charging Station
ATW-CHG3Na





/ Power Supply Unit for ATW-CHG3
AD-SA1230XA



/ Link Kit for ATW-CHG3
AT8687

ATW-CHG3 Charging Station

Charging Time	Approx. 6.5 hours (1,900 mAh rechargeable battery)
Power Supply	DC12V 3.0A
Power Consumption	4.9W (when 2 transmitters are charging) 27.4W (CHG3x5) (5 units are connected and 10 transmitters are charging)
Weight	400 g
Accessories	Separately available - AC adapter (AD-SA1230XA), ATW-CHG3 Link kit (AT8687)



/ 3000 Series -
Body-pack System
ATW-3211



/ 3000 Series -
Handheld System with ATW-C510
ATW-3212/C510º



/ 3000 Series -
Handheld System with ATW-C710
ATW-3212/C710

3000 Series

Operating Frequencies	Band DE2: 470.125 to 529.975 MHz Band EE1: 530.000 to 589.975 MHz Band EF1: 590.000 to 649.975 MHz Band FG1: 650.000 to 699.875 MHz Band HH3: 821.100 to 831.900 MHz and 863.100 to 864.900 MHz
Minimum Frequency Step	25 kHz
Modulation Mode	FM
Operating Range	100 m

ATW-R3210/ATW-R3210N

Receiving System	True diversity
Image Rejection	60 dB nominal
Sensitivity	20 dBµV at 60 dBA S/N ratio (50 ohms termination)
Maximum Output Level	XLR, balanced, +14 dBV 6.3 mm (1/4"), unbalanced: +8 dBV (ATW-R3210 only)
Antenna Input	BNC-type, 50 ohms 12 V DC, 160 mA (combined)

ATW-T3201

Frequency Response	31 to 15,500 Hz
Dynamic Range	Mic input: 115 dB or higher (A-weighted), typical Inst input: 112 dB or higher (A-weighted), typical
Input Connection	cH-style screw-down 4-pin connector
Spurious Emissions	Following federal and national regulations
Maximum Deviation	±38 kHz (THD:10%)
Total Harmonic Distortion	1.0 % or less (at 1 kHz, ±17.5 kHz deviation)
RF Power Output	High: 30 mW, Low: 10 mW (switchable), at 50 ohms
Battery Life	High: 8 hours, Low: 9 hours (alkaline) High: 9 hours, Low: 9.5 hours (Ni-MH 1900mAh)
Dimensions	64 mm x 82 mm x 23 mm (W x D x H)
Net Weight	Approx. 102 g

ATW-T3202

Frequency Response	25 to 16,700 Hz (Depending on attached microphone element)
Dynamic Range	115 dB or higher (A-weighted), typical
Microphone Element	Interchangeable industry standard thread
Spurious Emissions	Following federal and national regulations
Maximum Deviation	±36 kHz (THD:10%)
Total Harmonic Distortion	1.0 % or less (at 1 kHz, ±17.5 kHz deviation)
RF Power Output	High: 30 mW, Low: 10 mW (switchable), at 50 ohms
Battery Life	High: 8 hours, Low: 9 hours (alkaline) High: 9 hours, Low: 9.5 hours (Ni-MH 1900mAh)
Dimensions	193 mm long, 37 mm maximum diameter
Net Weight	200 g



3000 Series IEM

3000 Series Wireless In-Ear Monitor System

138MHz tuning bandwidth

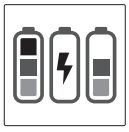
The 3000 Series IEM systems are available in two different frequency bands, and each features a wide 138 MHz tuning range. This allows the user to set up systems with high channel counts, whilst offering the flexibility to tune to open spectrum wherever you travel.

Pro in-ear monitors are part of the package

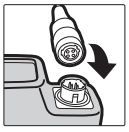
The 3000 Series Wireless IEM comes with the ATH-E40 in-ear monitor headphones for professional performance right out of the box.

Stay in control

Audio-Technica's Wireless Manager software provides a powerful, easy-to-use network tool for setting up, controlling and monitoring the IEM system. Frequencies can be easily scanned on the receiver and then synced with the transmitter via IR sync functionality to create frequency plans..



Charging contacts



cW-Connector



Network



front



back

/ Stereo Transmitter
ATW-T3205



cH-style screw-down
4-pin connector for secure
connection

/ Stereo Receiver
ATW-R3250



/ Dynamic In-Ear Headphones
ATH-E40



/ Two-Bay Charging Station
ATW-CHG3a

/ Two-Bay Networked Charging Station
ATW-CHG3Na

3000 Series IEM

Operating Frequencies	DF2: 470.125 to 607.875 MHz; EG2: 580.000 to 713.850 MHz
Minimum Frequency Step	25 kHz
Modulation Mode	FM
Nominal/Peak Deviation	±34 kHz nominal / ±45 kHz peak
Frequency Response	40 Hz to 14,100 Hz
Stereo Separation	75 dB
Operating Range	90 m
Dynamic Range	>90 dB, A-weighted, typical
Total Harmonic Distortion	<0.2% (at 1 kHz, +4dBu input)

ATW-T3205

RF Output Power	High: 50 mW, Low: 10 mW (switchable) at 50 ohms
Input Connection	XLR-F type×2
Maximum Input Level	XLR-F type: +24 dBu (at 0 dB sensitivity)
Output Connection	6.3 mm (1/4") TRS×2
Network	100BASE-T
Network Port	RJ-45
Power Supply	100 to 240 V AC (50/60 Hz) to 12V DC 1 A (center positive) switched mode external power supply
Antenna Output	BNC-type, 50 ohms
Dimensions	210 mm ×191 mm ×43.4 mm (W×D×H)
Weight	1,100 g

ATW-R3250

Receiving System	Antenna diversity *Audio output cable performs as a secondary antenna to ensure stable RF performance.*
Image Rejection	>80 dB, typical
RF Sensitivity	20 dBuV at 60 dBA S/N ratio (50 ohms termination)
Headphone Output Jack	3.5 mm (1/8") TRS stereo mini-jack
Headphone Output	40 mW (at 12 ohms)
Antenna Input	SMA type, 50 ohms
Dimensions	64 mm ×23 mm ×82 mm (W×D×H)
Weight	102 g (without batteries)
Battery Current/Life	4 to 6 hours (alkaline); 5 to 7 hours (Ni-MH, 1900 mAh); 11 to 13 hours (Lithium)
Battery Type	3 V DC (two 1.5 V AA) (not included)



2000 Series

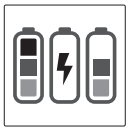
Frequency-Agile True Diversity UHF Wireless Systems

Easy to use

Easy setup, automatic scanning and other advanced wireless features - affordable as never before.
Though the 2000b system is designed for professional use, the user does not need special training to operate it. Once unboxed, it's ready to roll! Standard automatic frequency scanning finds and sets the best available channel at the touch of a button. Using multiple wireless systems simultaneously, as any of its 10 preset channels can be used together.

12V antenna power

The ATW-R2100c receiver delivers a bias voltage of 12V / 60mA from each BNC antenna input, enabling the use of antenna boosters or other active components.



Charging contacts



cW-Connector



front



back

/ Receiver
ATW-R2100c



/ Handheld Transmitter
ATW-T220c



Locking 4-pin microphone connector for use with Audio-Technica cW-style wireless body-pack transmitters.

/ Body-pack Transmitter
ATW-T210c



/ Two-Bay Recharging Station
ATW-CHG2



/ 2000 Series - Body-pack System
ATW-2110c



/ 2000 Series - Handheld System
ATW-2120b

2000 Series

Operating Frequencies	I Band: 487.125 to 506.500 MHz U Band: 606.500 to 631.000 MHz D Band: 656.125 to 678.500 MHz F Band: 854.900 to 864.900 MHz
Max. Number of Channels	10
Modulation Mode	FM
Operating Range	100 m

ATW-R2100c

Receiving System	True diversity
Image Rejection	55 dB nominal, 50 dB minimum
Sensitivity	20dBµV (S/N 60dB at 5 kHz deviation, IEC-weighted)
Maximum Output Level	XLR, balanced, +14 dBV - 6.3 mm (1/4), unbalanced: +8 dBV
Antenna Input	BNC-type, 50 ohms 12 V DC, 60 mA (each)

ATW-T210c

Frequency Response	100 to 15,500 Hz
Dynamic Range	110 dB or higher (A-weighted), typical
Input Connection	cW-style lock-down 4-pin connector
Spurious Emissions	Following federal and national regulations
Maximum Deviation	±40 kHz (THD:10%)
Total Harmonic Distortion	1.0 % or less (at 1 kHz, ±17.5 kHz deviation)
RF Power Output	High: 30 mW, Low: 10 mW (switchable)
Battery Life	High: 7 hours, Low: 9 hours (alkaline)
Dimensions	66 mm × 92 mm × 23 mm (W × D × H)
Net Weight	Approx. 81 g

ATW-T220c

Frequency Response	100 to 15,000 Hz
Dynamic Range	110 dB or higher (A-weighted), typical
Microphone Element	Cardioid, dynamic
Spurious Emissions	Following federal and national regulations
Maximum Deviation	±40 kHz (THD:10%)
Total Harmonic Distortion	1.0 % or less (at 1 kHz, ±20 kHz deviation)
RF Power Output	High: 30 mW, Low: 10 mW (switchable)
Battery Life	High: 7 hours, Low: 9 hours (alkaline)
Dimensions	232 mm long, 48 mm maximum diameter
Net Weight	252 g

System 20 PRO

Digital Wireless System



2.4 GHz
Frequency

cW-Connector

A New Level of Functionality and Convenience

When we launched the System 10 PRO rack-mount receiver we took 2.4 GHz wireless microphone systems to a new level of functionality and convenience. Now, with the System 20 PRO we take it even further, offering a self-managing, plug-and-play 2.4 GHz system that's scalable to 20 channels and delivers the same dependable, high-quality audio – regardless of where you set it up. Designed for hassle-free deployment, the system overcomes many challenges of conventional wireless microphones, such as frequency coordination, complex intermodulation calculations, and remote antenna cabling.

Easy Installation

Capable of receiving up to four transmitters, the system's ATW-R1440 receiver makes installation a breeze. Receiver units can remain docked in the half-rack chassis or be mounted remotely (up to 328 feet away) via Ethernet cable for added versatility. Up to five chassis can be linked using the included RJ12 cable, creating a stable, multichannel system with the simultaneous use of up to 20 channels. But the user is always free to choose the most effective operation mode for a given situation: Standard mode (10 channels) to minimise latency or HD mode (20 channels) to maximise channel count.



Seamless Setup

Seamless setup and management are controlled via Audio-Technica's Wireless Manager software, which is capable of managing multiple UHF, 2.4 GHz and DECT wireless systems from a single screen. In addition, AES128 encryption comes standard, providing security and reliable operation. The transmitters included in each system are paired and ready to use out of the box, and offer all-day operation on a full charge.



/ Handheld Microphone Transmitter
ATW-T1402



front

/ 4-Channel Receiver
ATW-R1440



/ Desk Stand Transmitter
ATW-T1407



/ Body-Pack Transmitter
ATW-T1401

Locking 4-pin microphone connector for use with Audio-Technica cW-style wireless body-pack transmitters.



/ Boundary Microphone Transmitter
ATW-T1406

Overall System Specifications

Specification	Details
Operating frequencies	2402 - 2480MHz
Dynamic range	120dB (A-weighted) typical
Total harmonic distortion	< 0.05% typical
Operating range	60m (Open environment with no interfering signals)
System Frequency Response	20 to 20000Hz (Varies depending on the microphone to be installed)
Delay	Standard: 2.8ms, HD mode: 6.7ms
Audio sampling frequency	Standard: 24bit/48kHz, HD mode: 24bit/48kHz
Encryption method	AES128
Max. simultaneous use	Standard: 10 channels, HD mode: 20 channels (Depends on the region and environment)

ATW-T1401

Specification	Details
Modulation mode	GFSK
RF output	10mW EIRP
RF sensitivity	-90dBm typical
Whip antenna	True diversity
Input connection	Four pin locking connector: Pin 1: GND, Pin 2: INST INPUT, Pin 3: MIC INPUT, Pin 4: DC BIAS +10V
Battery	DC3V (2 AA batteries)
Operating temperature	5°C to +40°C
Battery Life	AA alkaline batteries: Approx. 15 hours, AA nickel-hydrogen batteries: Approx. 14 hours and 30 minutes, AA lithium batteries: Approx. 29 hours (Varies depending on usage conditions)
Dimensions	63.7mm x 22.7mm x 107.4mm (W x D x H)
Weight	80g (without batteries)

ATW-T1402

Specification	Details
Modulation mode	GFSK
RF output	10mW EIRP
RF sensitivity	-90dBm typical
Whip antenna	True diversity
Microphone type	Dynamic type
Microphone Directional Characteristics	Hypercardioid
Battery	DC3V (2 AA batteries)
Operating temperature	5°C to +40°C
Battery Life	AA alkaline batteries: Approx. 18 hours, AA nickel-hydrogen batteries: Approx. 16 hours and 30 minutes, AA lithium batteries: Approx. 35 hours (Varies depending on usage conditions)
Dimensions	265.0mm x 53.7mm
Weight	300g
Included accessory	Microphone holder AT8456a, Conversion screw adapter (3/8 - 5/8)

ATW-T1406

Specification	Details
Modulation mode	GFSK
RF output	10mW EIRP
RF sensitivity	-90dBm typical
Whip antenna	True diversity
Maximum input sound pressure level	139dB SPL
Microphone type	Capacitor type
Microphone Directional Characteristics	Cardioid
Operating temperature	5°C to +40°C
Built-in battery	3.7V lithium-ion battery (5.5Wh 1460mAh)
Battery Life	Approx. 12 hours (Varies depending on usage conditions)
Charging time	Approx. 3 hours and 10 minutes (Varies depending on usage conditions)
USB Charging Port	USB Type-C (USB 2.0)
Dimensions	90.5mm x 129.4mm x 31.9mm (W x D x H)
Weight	510g (including battery)
Included accessory	USB power adapter, Blade tip for USB power adapter, USB cable (1.5 m)

ATW-T1407

Specification	Details
Modulation mode	GFSK
RF output	10mW EIRP
RF sensitivity	-90dBm typical
Whip antenna	True diversity
Microphone	Gooseneck microphone support
Phantom power supply	DC24V
Operating temperature	5°C to +40°C
Built-in battery	3.7V lithium-ion battery (5.5Wh 1460mAh)
Battery Life	Without LED: Approx. 12 hours, With LED: Approx. 8 hours (Varies depending on usage conditions)
Charging time	Approx. 3 hours and 10 minutes (Varies depending on usage conditions)
USB Charging Port	USB Type-C (USB 2.0)
Dimensions	90.5mm x 129.4mm x 47.6mm (W x D x H)
Weight	490g (including battery)
Included accessory	USB power adapter, Blade tip for USB power adapter, USB cable (1.5 m)

Connected Accessory			ATW-A49a	ATW-A410P	ATW-B80WB	ATW-SC410	ATW-DA49a
Current Requirement			0 mA	60mA	60mA	0 mA	0 mA
Used wireless system		Current per antenna input @12V					
AT-One	**ATW-R1**	100 mA	+	1 pair	1 pair	+	+
2000 Series	**ATW-R2100**	60 mA	+	1 pair	1 pair	+	+
3000 Series	**ATW-R3210**	80 mA	+	1 pair	1 pair	+	+
System 20	All receiver	-	-	-	-	-	-
Distribution amplifier	**ATW-DA49A**	250 mA	+	2 pair (**)	4 pair	+	See application 6

(**) You would require to use a pair of ATW-SC410 to connect 2 pairs of antennas.
Please use the above table to determine the maximum numbers of active componets in the antenna cable run.
Example: AT-One (100 mA per antenna cable run) could drive 1 pair of ATW-B80WB boosters and 1 pair of ATW-SC410 splitter. (60 mA + 0 mA = 60 mA).
Example: ATW-DA49a (250 mA per antenna cable run) could drive 2 pairs of ATW-A49a (0 mA), 2 pairs of ATW-B80WB boosters (2x 60mA per antenna run) and 1 pair of ATW-SC410 (0 mA): Total 2x 120 mA.

ATW-DA49a

UHF Antenna Distribution Systems



Durability

The ATW-DA49a provides a high OIP3 (+ 32 dBm) for maximum protection against intermodulation.

Specifications	ATW-DA49a
Antenna Power (optional)	12V DC, 250 mA (combined)
Current Consumption	200 mA ± 50 mA at 12 V DC
Gain	+1.0dB typical (within specified bandwidth)
Input	2 x 1 inputs
OIP3	+32dBm typical (within specified bandwidth)
Output	2 x 4 outputs + 1 cascade output - BNC Female
Operating Bandwidth	470-990 MHz
Power Supply	100-240V AC (50/60 Hz) to 12V DC 1A (centre positive) switched mode external power supply

/ UHF Passive Splitter/Combiner

ATW-SC410



Specifications	ATW-SC410
Description	UHF Passive Splitter/Combiner
Frequency Range	470 to 990 MHz
Impedance	50 ohms
High Frequency Transmission Loss	2 dB (typical)
Current Pass Through	420 mA
Connections	BNC-J x 3
Dimensions	100 mm × 99.8 mm × 30 mm (W × D × H)
Weight	204 g



/ UHF Wide-Band Directional LPDA Antennas (pair)

ATW-A49a

Specifications	ATW-A49a
Antenna Type	Log Periodic Dipole Array (LPDA)
Operating Bandwidth	470 – 950 MHz
Gain	6 dBi typical*
Impedance	50 ohms typical*
VSWR	≤ 1.7*
Polar Pattern	100°, 3 dB beam width
Polarization	Vertical (when mounted vertically)
Number of Elements	9
Maximum Power Input	Not specified (intended as receive antenna only)
Termination Type	Fixed right-angle BNC female Connector is positioned to minimize cable strain
Weight	316 g each
Dimensions	268 mm L x 285 mm H x 30 mm D
Material	Copper-clad epoxy fiberglass



/ UHF Powered Wideband Antenna (single)

ATW-A410P

Specifications	ATW-A410P
Gain	-10 dB / 0 dB / +6 dB / +12 dB
OIP3	> 30 dBm typical (within specified bandwidth)
Termination Type	BNC-J
Operating Bandwidth	470-990 MHz
Operating Temperature Range	-10°C to 50°C
Dimensions	175 x 175 x 50 mm (without bracket)
Weight	390 g (without bracket)
Accessories	Mounting bracket, screws
Impedance	50 ohms typical (within specified bandwidth)
Power Consumption	60mA



/ In-Line RF booster 470-990MHz 6dB / 12dB (pair)

ATW-B80WB

Specifications	ATW-B80WB
Connections	BNC-J (IN), BNC-J (OUT)
Power Supply	DC 12 V
Frequency Range	470 - 990 MHz
Impedance	50 ohms
Power Consumption	60mA
Gain High	+12 dB Red, +6 dB Green



RF Antenna Cables	Length
AC90 (pair)	0.9 m
AC300	3 m
AC600	6 m
AC1000	10 m
AC2000	20 m
AC4000	40 m

/ Antenna Front-Mount Kit
ATW-AF1

For ATW-DA49a





/ Receiver Unit Wall-Mount Holder
AT8690

For System 20 PRO, ATW-RU13



/ Universal Joining Plate for AT 9.5" devices
AT8631

For ATW-R3210, ATW-R3210N, ATW-R2100b, ATW-R1300, ATW-R1310, ATW-R1320 and other AT 9.5" devices

/ 3.5 mm - XLR Cable (ATW-R1700)
AT8350



/ Camera Shoe Dual Mount
AT8691

For System 20, ATW-R1700



/ 9,5" devices only -
ATW-RM1b

Rack-mount Hardware Kit



/ Antenna Front-Mount Kit
ATW-AF2

19"/1RU RXs: ATW-R5220, ATW-DR3120



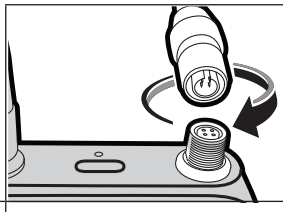
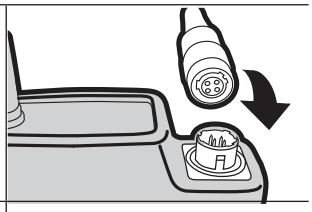
/ Dual Rack-Mount Kit
AT8677

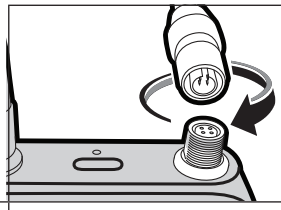
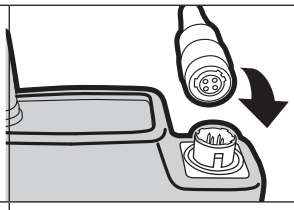
For AT-One, ATW-R1

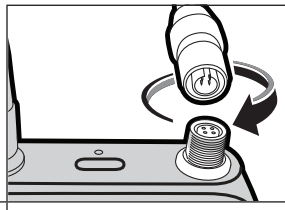
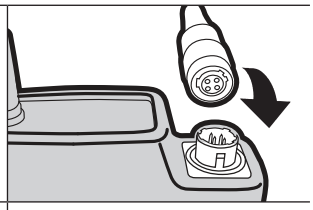


/ 3.5 mm - 3.5 mm Cable (ATW-R1700)
AT8349



		cH-Version	cW-Version
			
	/ Subminiature Omnidirectional Condenser Headworn Microphone	**BP892xcH & BP892xcH-TH**	**BP892xcW & BP892xcW-TH**
	/ Subminiature Cardioid Condenser Headworn Microphone	**BP894xcH & BP894xcH-TH**	**BP894xcW & BP894xcW-TH**
	/ Subminiature Cardioid Condenser Lavalier Microphone	**BP898cH**	**BP898cW**
	/ Subminiature Omnidirectional Condenser Lavalier Microphone	**BP899cH & BP899cH-TH**	**BP899cW & BP899cW-TH**
	/ Cardioid Condenser Headworn Microphone	**ATM73cH**	**ATM73cW**
	/ Cardioid Condenser Headworn Microphone	**ATM75cH**	**ATM75cW**
	/ Hypercardioid Dynamic Headworn Microphone	**PRO8HEcH**	**PRO8HEcW**
	/ Cardioid Condenser Headworn Microphone	**PRO9cH**	**PRO9cW**
	/ Omnidirectional Condenser Headworn Microphone	**PRO92cH & PRO92cH-TH**	**PRO92cW & PRO92cW-TH**

		cH-Version	cW-Version
			
	/ Miniature Cardioid Condenser Lavalier Microphone	**AT831cH**	**AT831cW**
	/ Miniature Omnidirectional Condenser Lavalier Microphone	**AT803cH**	**AT803cW**
	/ Cardioid Condenser Lavalier Microphone	**AT829cH**	**AT829cW**
	/ Omnidirectional Condenser Lavalier Microphone		**MT838cW**
	/ Omnidirectional Condenser Lavalier Microphone	**MT830cH**	**MT830cW**
	/ Omnidirectional Condenser Lavalier Microphone		**ATR35cW**

		cH-Version	cW-Version
			
	/ Cardioid Condenser Instrument Microphone w/ Universal Clip-on Mounting System	**ATM350UcH**	**ATM350UcW**
	/ Cardioid Condenser Clip-on Instrument Microphone	**PRO35cH**	**PRO35cW**
	/ Professional Guitar Input Cable	**AT-GcH PRO**	**AT-GcW PRO**
	/ Professional Guitar Input Cable Angled	**AT-GRcH PRO**	**AT-GRcW PRO**
	/ Guitar Input Cable	**AT-GcH**	**AT-GcW**
	/ Microphone Input Cable	**XLRcH**	**XLRW**
	/ Adapter Cable cW-mics to cH-beltpack TXs	**AT-cWcH**	

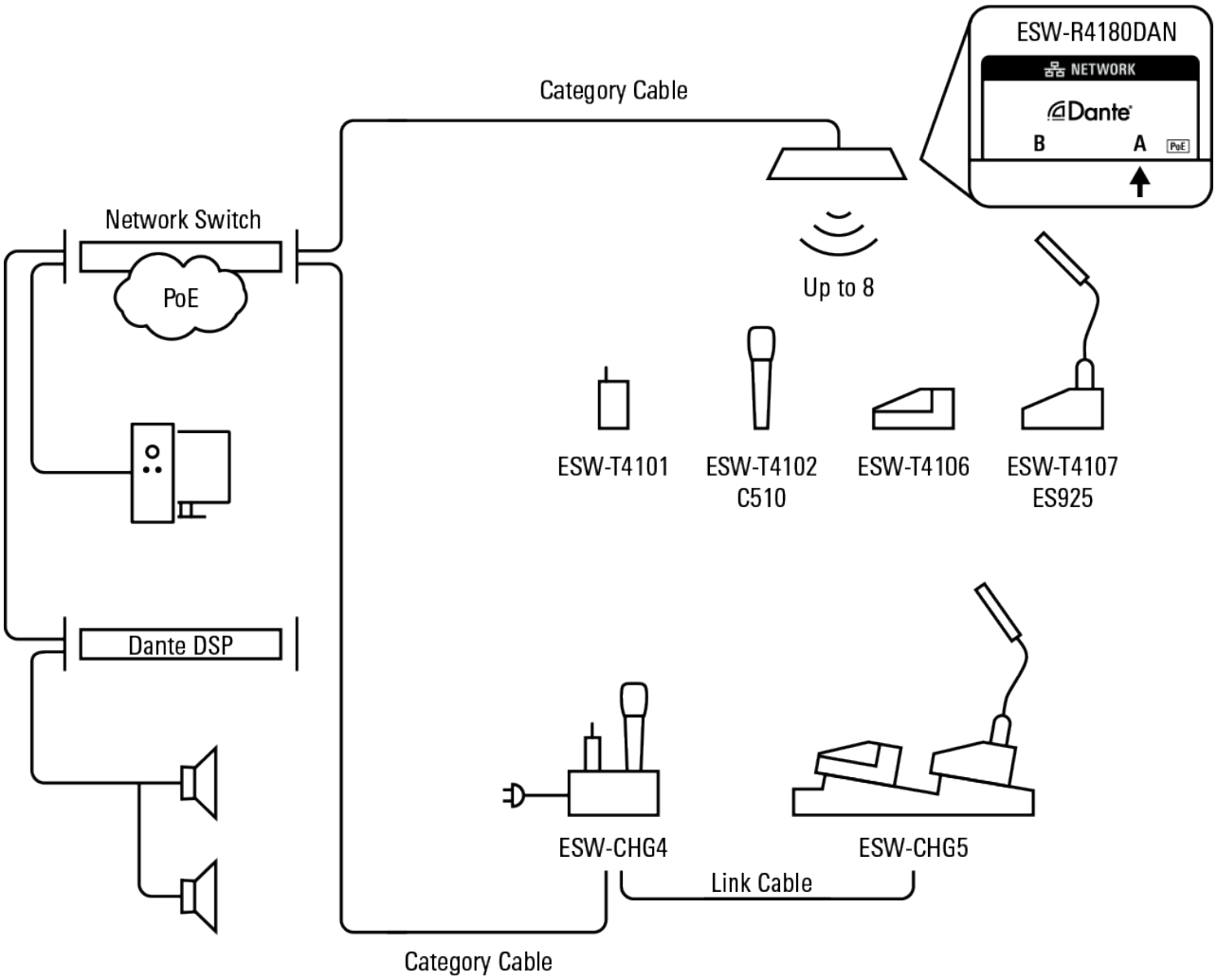
Up to 8-Channels per Receiver
Small to Medium Conference Room Use

Any combination of up to 8 handheld, body-pack, desk stand, or boundary transmitters may be used simultaneously with a single ESW-R4180DAN receiver. Simply connect a receiver via Cat 5e cable to a PoE network switch. To further simplify cable management, 8 bays of transmitter charging may be powered off of one AC adapter and connected via one Cat 5e cable for monitoring.



Product table

Quantity	Code	Description	Notes
1	**ESW-R4180DAN**	8ch Receiver	
1-8	**ESW-T4101**	Body-Pack Transmitter	Any combination of transmitters
1-8	**ESW-T4102/C510**	Handheld Transmitter	Any combination of transmitters
1-8	**ESW-T4106**	Boundary Microphone Transmitter	Any combination of transmitters
1-8	**ESW-T4107**	Desk Stand Transmitter	Any combination of transmitters
1-8	**ES925**	Gooseneck Microphone	Use with ESW-T4107
1-4	**ESW-CHG4**	Two-Bay Charging Station	
1-2	**ESW-CHG5**	Four-Bay Charging Station	


ESW-R4180DAN
NETWORK
Dante
B
A
PoE
Category Cable
Network Switch
PoE
Up to 8
ESW-T4101
ESW-T4102
C510
ESW-T4106
ESW-T4107
ES925
Dante DSP
ESW-CHG4
ESW-CHG5
Link Cable
Category Cable

Up to 192 Channels of ES Wireless
Large Conference Room Use

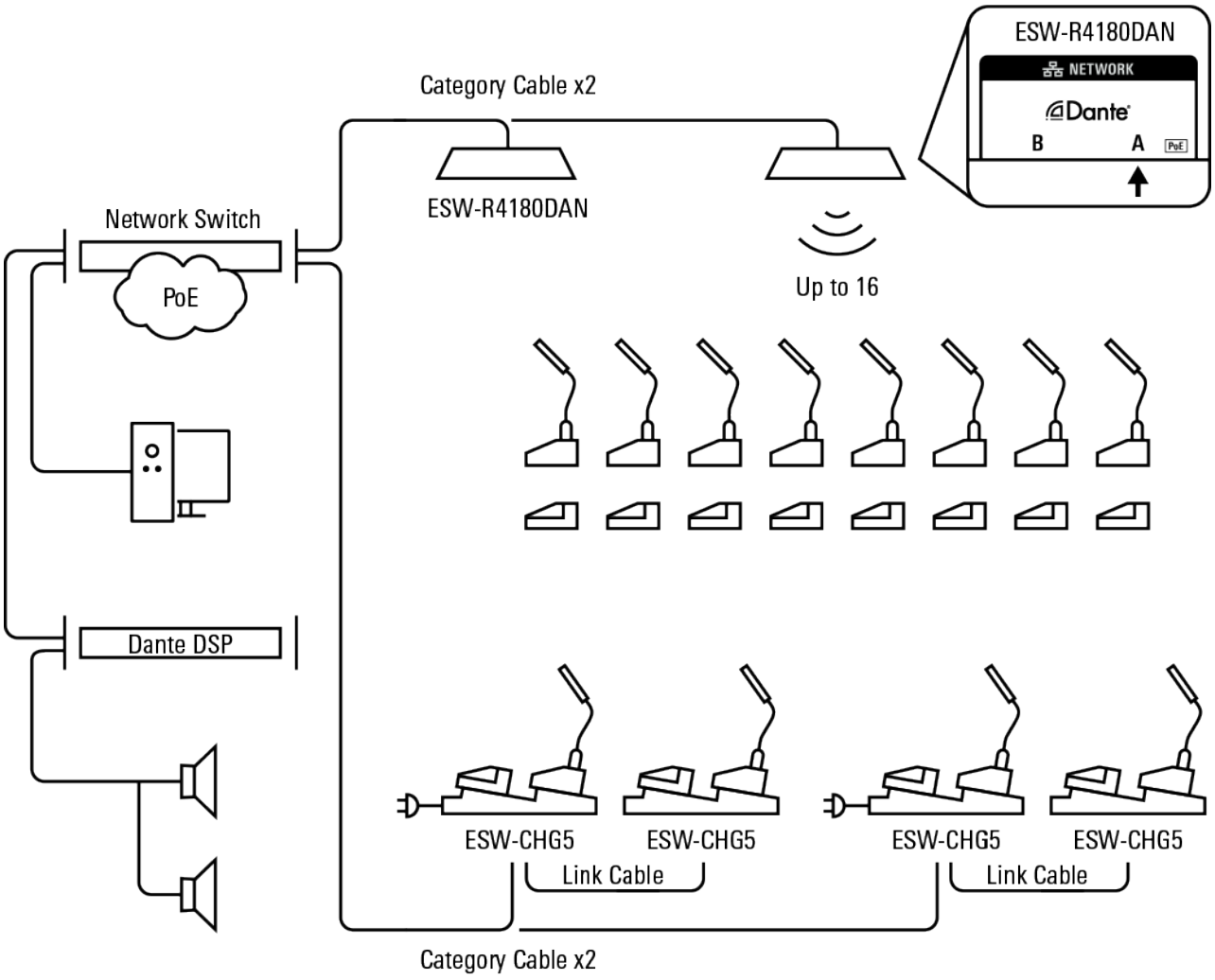
Any combination of up to 8 handheld, body-pack, desk stand, or boundary transmitters may be used simultaneously with each ESW-R4180DAN receiver.

Up to 12 receivers can be used providing a maximum count of 192 simultaneous channels (when utilizing HD mode). Simply connect each receiver via Cat 5e cable to a PoE network switch. To further simplify cable management, 8 bays of transmitter charging may be powered off of one AC adapter and connected via one Cat 5e cable for monitoring.



Product table

Quantity	Code	Description	Notes
1-8	**ESW-R4180DAN**	8ch Receiver	
1-64	**ESW-T4101**	Body-Pack Transmitter	Any combination of transmitters
1-64	**ESW-T4102/C510**	Handheld Transmitter	Any combination of transmitters
1-64	**ESW-T4106**	Boundary Microphone Transmitter	Any combination of transmitters
1-64	**ESW-T4107**	Desk Stand Transmitter	Any combination of transmitters
1-64	**ES925**	Gooseneck Microphone	Use with ESW-T4107
1-4	**ESW-CHG4**	Two-Bay Charging Station	
1-2	**ESW-CHG5**	Four-Bay Charging Station	


ESW-R4180DAN
NETWORK
Dante
B
A
PoE
Category Cable x2
ESW-R4180DAN
Network Switch
PoE
Up to 16
Dante DSP
ESW-CHG5
ESW-CHG5
ESW-CHG5
ESW-CHG5
Link Cable
Link Cable
Category Cable x2

Audio-Technica Australia
Technical Audio Group

Unit 19, 43-53 Bridge Rd
Stanmore, NSW
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