ClearOne

WS800
Wireless Microphone System

ClearOne's Wireless Microphone System is the most economical, versatile, and easily scalable wireless system in the market today with unprecedented ease-of-use and simple installation.

This microphone system complements other professional audio products from ClearOne including CONVERGE® Pro 1 & 2 Mixers, INTERACT Mixers, CONVERGE Matrix products. WS800 Receiver comes with and without Dante™ built-in audio networking.

Flexibility

+ Reliable digital wireless system is the best for flexible spaces and upgrading existing areas without access to cable paths

Economical

+ Cost-effective and flexible as one system can serve the wireless needs of up to six rooms

Scalability

+ Provides up to 32 channels per RF band allowing channels to be added in the field to respond to future growth

Audio Quality

+ From 20 Hz to 20 kHz very low-latency digital audio, enhanced through the Dante™ interface

Mixed Audio Outputs

+ Balanced line or headphone output and the GUI can be used to send control signals to the main and mixed outputs

Multiple RF Ranges

+ M915: 902 MHz to 928 MHz
+ M715: 710 MHz to 740 MHz
+ M610: 603 MHz to 630 MHz
+ M500: 486 MHz to 512 MHz
+ M586: 573 MHz to 599 MHz
+ M800: 793 MHz to 819 MHz
+ M930: 917 MHz to 943 MHz

VENUES

Boardrooms

Conference Rooms

Courtrooms

Training Rooms

Auditoriums

Houses of Worship

ClearOne

WS800
Components/Back Panel

Model	Part Numbers	RF Range	Available Options*
WS840 (4 output channels)	910-6000-401	M915 (902-928 MHz)	**-D : Dante network capability**
	910-6000-402	M715 (710-740 MHz)	-X : XLR Connector Outputs*
	910-6000-403	M610 (603-630 MHz)	-S : Receiver is a Stage Audio receiver
	910-6000-404	M500 (486-512 MHz)	-C : Audio Compression
	910-6000-405	M586 (573-599 MHz)	
	910-6000-406	M800 (793-819 MHz)	
	910-6000-407	M930 (917-943 MHz)	
WS880 (8 output channels)	910-6000-801	M915 (902-928 MHz)	
	910-6000-802	M715 (710-740 MHz)	
	910-6000-803	M610 (603-630 MHz)	
	910-6000-804	M500 (486-512 MHz)	
	910-6000-805	M586 (573-599 MHz)	
	910-6000-806	M800 (793-819 MHz)	
	910-6000-807	M930 (917-943 MHz)	

* Any combination of options are available separate or combined, except for options -C and -S together.
* Euroblock connectors provided unless -X option is ordered

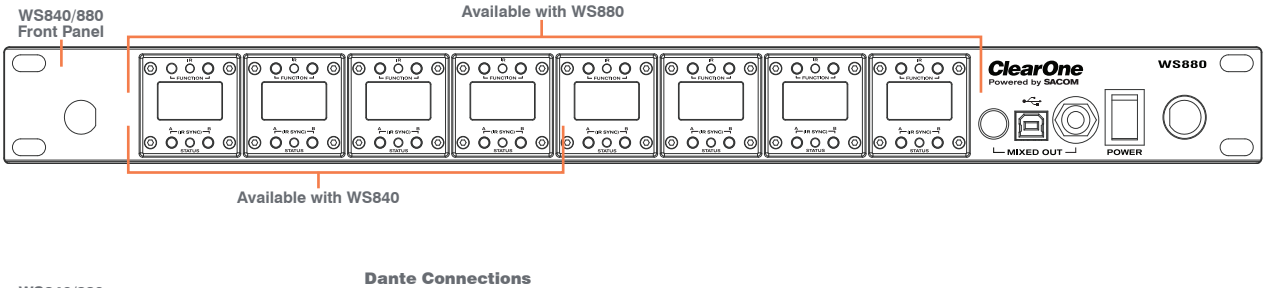
PRODUCT SPECIFICATIONS

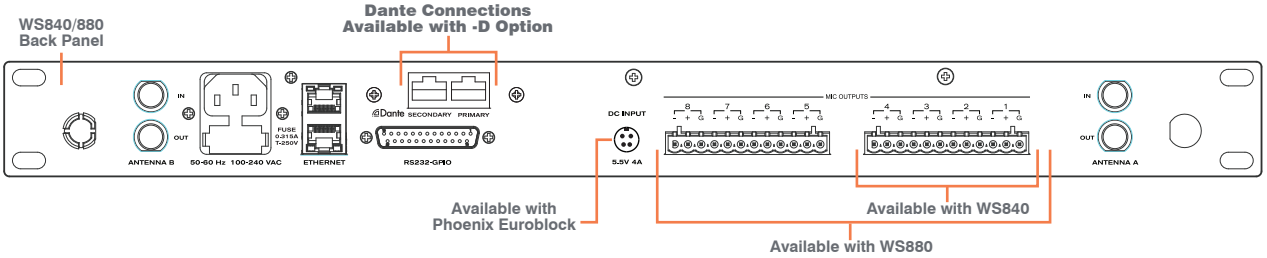
WS800 Wireless Microphone System:

- Wireless System: Up to 24-bit, 48 KHz, digital audio RF technology
- Channels: 4 or 8-channel receivers
- Daisy-chainable up to 32 channels per RF band
- RF Range: M915: 902 MHz to 928 MHz M715: 710 MHz to 740 MHz
  M610: 603 MHz to 630 MHz M500: 486 MHz to 512 MHz
  M586: 573 MHz to 599 MHz M800: 793 MHz to 819 MHz
  M930: 917 MHz to 943 MHz
- **Working Range:** 300 feet (line-of-sight)
- **Encryption:** 256 bit key (AES) always-on, laboratory-verified
  NSA FIPS 197 standard
- **Frequency Response:**
  16 channels 20 Hz - 20 KHz (stage)
  32 channels 20 Hz - 20 KHz (compressed, conference)
  32 channels 20 Hz - 12 KHz (non-compressed, conference)
- **S/N Ratio:** 109 dB (typical 'A' weighted)
- **Total Harmonic Distortion:** <0.03% @ 1kHz
- Latency:
  Stage..... 3ms
  Conference, non-compressed..... 4ms
  Conference, compressed..... 9-10ms
- **Stability:** <5ppm
- **Operation Temperature Range:** 0 - 50 degrees Celsius ambient temperature

Receiver (Base Station)

- **Channels per receiver:** 4-channels (WS840), 8 channels (WS880)
- **Power Requirements**: 100-240 VAC 50-60 Hz, 15 Watts
- **Display:** OLED
- **External Antennas:** Support up to six pairs per system
- **Antenna Distribution:** Attach up to 32 channels to one pair of antennas
- **Analog Audio Outputs:** Phoenix terminal blocks or with XLR adapters
- **Output Impedance:** 100 Ohm
- **Headphone out (mixed):** Balanced 1/4 inch TRS mixed line out for recorders or powered speakers; or headphone out
- **Interface:** USB, RS232 & Ethernet (dual port 10/100 Mbps)
- **Dante™ Audio channels:** Eight (8) digital outputs @ 48 KHz.
- **Dante Ports:** Primary & secondary, RJ45 ports, 100/1000 Mbps, 328 ft.
- **GPIO Interface:** 22 programmable pins
- **Gain Adjustment Range:** -20dB to +31 dB
- **Dimension:** 1-U rack-mount, 19 x 1.75 x 6.5 inches
- **Weight:** 4.7 lbs (2.14 kg) for 8-channel receiver; 4.5 lbs (2.04 kg) for 4-channel receiver





Note: Receivers with -X option come with Euroblock-to-XLR adapters.

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PRODUCT SPECIFICATIONS

Charging Station (Docking Station)

- **Housing:** ABS
- **Capacity**: Charges 8 microphones simultaneously (mix and match any type of the supplied microphones)
- **Power:** 5.6V DC / 4 A
- **Dimension:** 13.25 x 5.75 inches
- **Weight:** 1.30 lbs (.58 kg)

Part Number | 910-6000-800 (comes free with Receiver)

Extension Antennas

- **Mount:** Wall mount, ceiling or mic-stand mount
- **Connectors**: Straight connectors
- **Reception Pattern:** 130-degree reception pattern
- Gain: Provides 15dB of RF gain (915MHz)
- **Power:** Phantom-powered from the receiver
- **Dimensions:** 5.8"(dia) x 1.125"(d) (14.8cm x 2.9cm)
- **Weight:** .55 lbs (.24 kg)

Category	Part Numbers	RF Range
Extension Antenna Kit (with 25 ft plenum cable)	910-6005-001 910-6005-002 910-6005-003 910-6005-004 910-6005-005 910-6005-006 910-6005-007	M915 (902-928 MHz) M715 (710-740 MHz) M610 (603-630 MHz) M500 (486-512 MHz) M586 (573-599 MHz) M800 (793-819 MHz) M930 (917-943 MHz)
Extension Antenna Kit (with 50 ft plenum cable)	910-6005-011 910-6005-012 910-6005-013 910-6005-014 910-6005-015 910-6005-016 910-6005-017	M915 (902-928 MHz) M715 (710-740 MHz) M610 (603-630 MHz) M500 (486-512 MHz) M586 (573-599 MHz) M800 (793-819 MHz) M930 (917-943 MHz)
Extension Antenna Combiner	910-6005-200 (2way) 910-6005-300 (3way) 910-6005-400 (4way)	

Transmitters (Microphones)

- **Mic Polar Pattern :** Cardioid, omni
- **RF Output**: 1, 10, 25 or 50mW, user selectable
- **Power:** USB or AA rechargeable (included) or AA disposal
- **Antenna:** Internal
- **LED Indicators:** Battery status, mute status
- **Button:** Press to talk, press to mute (or logic mute), toggle on/off
- **Programmable Switch:** Talk, mute, logic mute, on / off
- **Frequency Response:** 60 - 20kHz (Omni version); 60 - 15kHz (Cardioid version)
- **Signal-to-Noise Ratio:** 80dB Typ. at 1kHz (1Pa) 'A' weighted (Omni version); 74dB Typ. at 1kHz (1Pa) 'A' weighted (Cardioid version)
- **Battery:** Two rechargeable NiMH included, standard AA size
- **Battery Charge Time:** 4 hrs
- **Battery Talk Time:** Up to 8 hrs continuous usage per charge, typical @ 1mW
- **Dimension:** 3.9 L x 2.8 W x .69 H inches
- **Weight:** 0.25lbs (.12 Kg) including batteries

Model	Part Numbers	RF Range	Available Options*
Cardiod version	910-6001-001 910-6001-002 910-6001-003 910-6001-004 910-6001-005 910-6001-006 910-6001-007	M915 (902-928 MHz) M715 (710-740 MHz) M610 (603-630 MHz) M500 (486-512 MHz) M586 (573-599 MHz) M800 (793-819 MHz) M930 (917-943 MHz)	-C : Audio Compression
Omni version	910-6001-011 910-6001-012 910-6001-013 910-6001-014 910-6001-015 910-6001-016 910-6001-017	M915 (902-928 MHz) M715 (710-740 MHz) M610 (603-630 MHz) M500 (486-512 MHz) M586 (573-599 MHz) M800 (793-819 MHz) M930 (917-943 MHz)	

* For systems with audio compression, -C must be added to the transmitter part number

Gooseneck Microphone

- **Mic Polar Pattern:** Cardioid, Super-Cardioid
- **Gooseneck Lengths**: 6, 12 or 18 inch, with double bend
- **RF Output:** 1, 10, 25 or 50mW, user-selectable
- **Frequency Response:** 60 - 15kHz
- **Signal-to-Noise Ratio:** 74dB Typ. at 1kHz (1Pa) 'A' weighted
- **Antenna:** Internal
- **Power:** USB or AA rechargeable (included) or AA disposal
- **Button:** Press-to-talk, press-to-mute (or logic mute), toggle on/off
- **LED Indicators:** Battery status, mute status
- **Programmable Switch:** Talk, mute, logic mute, on / off
- **Battery:** Four rechargeable NiMH included, standard AA size
- **Battery Charge Time:** 4 hrs
- **Battery Talk Time:** Up to 16 hrs continuous usage per charge, typical @ 1mW
- **Dimension:** 6.1 L x 4.6 W x 1.4 H inches
- **Weight:** 1.60lbs (.72 Kg) including batteries

Model	Part Numbers	RF Range	Available Options*
6-inch neck	910-6002-061 910-6002-062 910-6002-063 910-6002-064 910-6002-065 910-6002-066 910-6002-067	M915 (902-928 MHz) M715 (710-740 MHz) M610 (603-630 MHz) M500 (486-512 MHz) M586 (573-599 MHz) M800 (793-819 MHz) M930 (917-943 MHz)	-C : Audio Compression
12-inch neck	910-6002-121 910-6002-122 910-6002-123 910-6002-124 910-6002-125 910-6002-126 910-6002-127	M915 (902-928 MHz) M715 (710-740 MHz) M610 (603-630 MHz) M500 (486-512 MHz) M586 (573-599 MHz) M800 (793-819 MHz) M930 (917-943 MHz)	
18-inch neck	910-6002-181 910-6002-182 910-6002-183 910-6002-184 910-6002-185 910-6002-186 910-6002-187	M915 (902-928 MHz) M715 (710-740 MHz) M610 (603-630 MHz) M500 (486-512 MHz) M586 (573-599 MHz) M800 (793-819 MHz) M930 (917-943 MHz)	

* For systems with audio compression, -C must be added to the transmitter part number

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PRODUCT SPECIFICATIONS

Handheld Microphone

- **Mic Polar Pattern:** Cardioid, Super-Cardioid, or Hyper-Cardioid
- **RF Output**: 1, 10, 25 or 50mW, user-selectable
- **Frequency Response:** 60 - 15kHz
- **Signal-to-Noise Ratio:** : 74dB Typ. at 1kHz (1Pa) 'A' weighted
- **Antenna:** Internal
- **Display:** OLED
- **Power:** USB or AA rechargeable (included) or AA disposal
- **Indicators:** Battery status, mute status
- **Programmable Switch:** Talk, mute, logic mute, on / off
- **Battery:** Two rechargeable NiMH included, standard AA size
- **Battery Charge Time:** 4 hrs
- **Battery Talk Time:** Up to 8 hrs continuous usage per charge, typical @ 1mW
- **Dimension:** 10.2 L x 1.4 W x 1.4 H inches
- **Weight:** 0.75lbs (.34 Kg) including batteries

Model	Part Numbers	RF Range	Available Options*
Handheld mic	910-6003-001	M915 (902-928 MHz)	-C : Audio Compression
	910-6003-002	M715 (710-740 MHz)	
	910-6003-003	M610 (603-630 MHz)	
	910-6003-004	M500 (486-512 MHz)	
	910-6003-005	M586 (573-599 MHz)	
	910-6003-006	M800 (793-819 MHz)	
	910-6003-007	M930 (917-943 MHz)	

Model	Part Numbers	RF Range
OM5	910-6003-021	M915 (902-928 MHz)
	910-6003-022	M715 (710-740 MHz)
	910-6003-023	M610 (603-630 MHz)
	910-6003-024	M500 (486-512 MHz)
	910-6003-025	M586 (573-599 MHz)
	910-6003-026	M800 (793-819 MHz)
	910-6003-027	M930 (917-943 MHz)

Model	Part Numbers	RF Range
OM3	910-6003-011	M915 (902-928 MHz)
	910-6003-012	M715 (710-740 MHz)
	910-6003-013	M610 (603-630 MHz)
	910-6003-014	M500 (486-512 MHz)
	910-6003-015	M586 (573-599 MHz)
	910-6003-016	M800 (793-819 MHz)
	910-6003-017	M930 (917-943 MHz)

* For systems with audio compression, -C must be added to the transmitter part number

Beltpack Transmitter

- **RF Output**: 1, 10, 25 or 50mW, user-selectable
- **Antenna:** External, field-replaceable
- **Display:** OLED
- **Power:** USB, AA rechargable (included), or AA disposable
- **Indicators:** Battery status, mute status
- **Programmable Switch:** Talk, mute, logic mute, on / off
- **Mic Input Impedance:** 47 K Ohms
- **Mic Bias:** 3V
- **Mic Connector:** TA4
- **Battery:** Two rechargeable NiMH included, standard AA size
- **Battery Charge Time:** 4 hrs
- **Battery Talk Time:** Up to 8 hrs continuous usage per charge, typical @ 1 mW
- **Dimension:** 2.8 L x 2.4 W x .66 H inches
- **Weight:** 0.35 lbs (.16 Kg) including batteries

Beltpack Transmitter

Headset Mic

Lavalier Mic

Model	Part Numbers	RF Range	Available Options*
Beltpack Transmitter	910-6004-001	M915 (902-928 MHz)	-C : Audio Compression
	910-6004-002	M715 (710-740 MHz)	
	910-6004-003	M610 (603-630 MHz)	
	910-6004-004	M500 (486-512 MHz)	
	910-6004-005	M586 (573-599 MHz)	
	910-6004-006	M800 (793-819 MHz)	
	910-6004-007	M930 (917-943 MHz)	

* M500, M586, M800, M930 (MHz) systems are only available with audio compression

* For systems with audio compression, -C must be added to the transmitter part number

Lavalier Mic for Beltpack Transmitter

- **Mic Polar Pattern:** Omni
- **Frequency Response:** 20 - 20kHz
- **Signal-to-Noise Ratio:** Above 56dB at 1kHz (1Pa) 'A' weighted

Headset Mic for Beltpack Transmitter

- **Mic Polar Pattern:** Omni
- **Frequency Response:** 50 - 18kHz
- **Signal-to-Noise Ratio:** Above 56dB at 1kHz (1Pa) 'A' weighted
- **Headset:** Single-ear headset

Lavalier Mic	910-6004-010	Lavalier Mic for Beltpack transmitter
Headset Mic	910-6004-020	Headset Mic for Beltpack transmitter

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