

# DIGITAL WIRELESS SYSTEMS



Shure ULX-D® Digital Wireless offers uncompromising 24-bit audio clarity and extremely efficient RF performance with single, dual, and quad channel receivers for any size professional sound reinforcement application. Generations ahead of any other available system in its class, ULX-D brings a new level of performance to professional sound reinforcement.

#### UNCOMPROMISING PROFESSIONAL DIGITAL WIRELESS

24-bit/48 kHz digital audio that delivers incredibly clear and accurate sound reproduction

Greater than 120 dB dynamic range

Wide selection of trusted Shure Microphones

Available in LIHE VHE and ISM (900MHz) Frequency Bands (region dependent

#### EXTREMELY EFFICIENT AND RELIABLE RF PERFORMANCE

Up to 64 MHz overall tuning range (region dependent)

Jp to 17 active transmitters in one 6 MHz TV channel (22 on an 8 MHz TV channel)

High Density mode enables up to 47 active transmitters in one 6 MHz TV channe

Rock-solid signal stability with no audio artifacts over the entire 100 meter rang

Optimized scanning automatically finds, prioritizes, and selects the cleanest frequencies available

#### SCALABLE, INTELLIGENT HARDWARE

Single (half-rack), Dual and Quad (full-rack) receiver form factors

AES 256-bit encryption equipped for secure wireless transmission

Dante™ digital networked audio over Ethernet

Wireless Workbench® 6 compatible for advanced coordination, monitoring and control; features Site Survey tool for scanning frequencies in the 902-928 MHz ISM band

Compatible with the Shure SB900A Rechargeable Battery and SBC chargers

### **APPLICATIONS**

Installed Audio

Critical Audio Performances

High channel counts

Secure presentations

## PRODUCT HIGHLIGHTS

24-bit/48 kHz Digital Wireless Audio

High Density Mode

Single, Dual, and Quad Channel Receiver

Advanced Rechargeability

DanteTM Networked Audio over Ethernet

available in black and white color options



## ULX-D® DIGITAL WIRELESS SYSTEMS

## SPECIFICATIONS (SUBJECT TO CHANGE)

RF Carrier Range	174-216 MHz, 470-865 MHz, 1492-1525 MHz, 1785-1805 MHz Note: Varies by region (See Frequency Range and Ouput Power table)
Working Range	100 m (328 ft) Note: Actual range depends on RF signal absorption, reflection and interference.
RF Tuning Step Size	25 kHz, varies by region
Image Rejection	>70 dB, typical
RF Sensitivity	-98dBm at 10 <sup>-5</sup> BER
Latency	<2.9 ms
Audio Frequency Response	ULXD1: 20 Hz – 20 kHz (±1 dB) ULXD2: 30 Hz – 20 kHz (±1 dB) Note: Dependent on microphone type
Audio Dynamic Range System Gain @ +10	XLR Analog Output: >120 dB, A-weighted Dante Digital Output (Dual and Quad receivers): 130 dB (typical), A-weighted
Total Harmonic Distortion -12 dBFS input, System Gain @ +10	<0.1%
System Audio Polarity	Positive pressure on microphone diaphragm produces positive voltage on pin 2 (with respect to pin 3 of XLR output) and the tip of the $6.35\mathrm{mm}$ (1/4-inch) output.
Operating Temperature Range	-18 °C (0 °F) to 50 °C (122 °F) Note: Battery characteristics may limit this range.
Storage Temperature Range	-29°C (-20°F) to 74°C (165°F) Note: Battery characteristics may limit this range.

## FREQUENCY RANGE

Band	Range (MHz)	Transmitter Output (mW)
V50	174 to 216	1/10/20
V51	174 to 216	1/10/20
G50	470 to 534	1/10/20
G51	470 to 534	1/10/20
G52	479 to 534	1/10
H50	534 to 598	1/10/20
H51	534 to 598	1/10/20
H52	534 to 565	1/10
J50	572 to 636	1/10/20
K51	606 to 670	1/10
_50	632 to 696	1/10/20
L51	632 to 696	1/10/20
P51	710 to 782	1/10/20
R51	800 to 810	1/10/20
JB (Tx only)	806 to 810	1/10
AB (Rx and Tx)	770 to 810	"A" band (770.250-805.750): 1/10/20 "B" band (806.125-809.750): 1/10
Q51	794 to 806	1/10/20
X52	902 to 928	1/10/20
X50	925 to 932	1/10
X51	925 to 937.5	1/10
X52	902 to 928	0.25/10/20
X53	902 to 907.5; 915 to 928	0.25/10/20
X54	915 to 928	0.25/10/20
Z16	1240 to 1260	1/10/20

<sup>\*</sup>Note: Not all frequencies available in all regions. Contact your authorized Shure dealer for availability.

#### NOTE:

This Radio equipment is intended for use in musical professional entertainment and similar applications. This Radio apparatus may be capable of operating on some frequencies not authorized in your region. Please contact your national authority to obtain information on authorized frequencies and RF power levels for wireless microphone products.

## RECHARGEABLE POWER MANAGEMENT (sold separately)

#### SB900A RECHARGEABLE **BATTERY**

ULX-D transmitters are compatible with the SB900A lithium-ion rechargeable battery, which provides over 9 hours of continuous use and precise tracking of remaining life and charge cycle details.



#### SBC200 DUAL DOCKING RECHARGING STATION

This compact and portable unit charges batteries while in transmitters or out. Up to 4 SBC200's can be chained toget.her to run off one power supply.

#### SBC220 2-BAY NETWORKED CHARGING STATION

Enables docked charging and storage for any combination of two SB900A batteries or ULXD1, ULXD2 wireless transmitters. When connected to a network, the charging status of each transmitter can be viewed remotely. Up to four SBC220 units can be linked together to share power and network connectivity.

#### SBC800 EIGHT BATTERY **RECHARGING STATION**

This compact and portable unit charges up to 8 SB900A batteries to full capacity within 3 hours, with status LEDs to indicate power levels. SB900A batteries fit securely in the charger for easy, efficient storage and transport.

## **BATTERY RUNTIMES**

(Note: Freq	(Note: Frequency Band Dependent)		
BATTERY TYPE	1 MW	10 MW	20 MW
SB900A	> 9 hours	> 9 hours	> 7 hours
Alkaline	> 8 hours	> 8 hours	< 6 hours
NiMH	> 8 hours	> 8 hours	< 6 hours
Li-primary	10-16 hours	10-16 hours	7-9 hours



## ULXD4 DIGITAL WIRELESS RECEIVER

## **OVERVIEW**

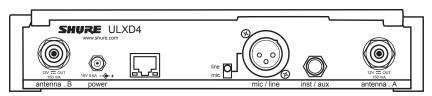
The Shure ULXD4 is a half-rack wireless receiver for use with ULX-D® Digital Wireless Systems. With an expansive set of professional features, including 24-bit/48kHz digital audio quality, efficient and intelligent RF performance, and AES 256-bit encryption, ULX-D offers uncompromising wireless tailored for professional sound reinforcement.

## **FEATURES**

- · Up to 64 MHz tuning range
- · Predictive switching diversity
- · Intelligent scanning automatically finds and deploys the cleanest frequencies to transmitters over IR sync
- Interference detection and alerts provided on both the receiver and WWB6
- Front panel gain adjustment buttons provide up to 60 dB additional gain
- · AES 256-bit encryption-enabled for applications where secure transmission is needed
- Ethernet networking for streamlined setup across multiple receivers, WWB6 integration (coming soon), and AMX/Crestron control
- · Support for frequency coordination with Axient Spectrum Manager (coming soon)
- · Rugged metal chassis
- · Intuitive front panel LCD menu and controls
- · Easily readableUpgraded LCD with adjustable contrast and brightness
- · Audio and RF LED meters with peak indicator
- · Front panel lockout
- · XLR and ¼" outputs
- Remoteable  $\frac{1}{2}$  wave antennas
- · Furnished rack hardware



ULXD4 Front Panel



ULXD4 Back Panel

## **SPECIFICATIONS**

SUBJECT TO CHANGE)

(SUBJECT TO CHANGE)		
Dimensions	197 mm × 171 mm × 42 mm (7.75 in. × 6.75 in. × 1.65 in.), H × W × D	
Weight	913 g (2.0 lbs), without antennas	
Housing	Galvanized Steel	
RF OUTPUT		
Spurious Rejection	>80 dB, typical	
Connector Type	BNC	
Impedance	50 Ω	
Bias Voltage	12 - 13 V DC, 170 mA maximum, per antenna	
AUDIO INPUT		
Gain Adjustment Range	-18 to +42 dB in 1 dB steps (plus Mute setting)	
Configuration	1/4" (6.35 mm): Impedance balanced (Tip=audio, Ring=no audio, Sleeve=ground) XLR: Balanced (1=ground, 2=audio +, 3=audio -)	
Impedance	1/4" (6.35 mm): 100 Ω (50 Ω Unbalanced) XLR: 100 Ω	
Full Scale Output	1/4" (6.35 mm): +12 dB XLR: LINE setting= +18 dBV, MIC setting= -12 dBV	
Mic/Line Switch	30 dB pad	
Phantom Power Protection	1/4" (6.35 mm): Yes XLR: Yes	
NETWORKING		
Power Over Ethernet (PoE)	No, protected	
Network Interface	Single Port Ethernet 10/100 Mbps	
Network Addressing Capability	DHCP or Manual IP address	

Maximum Ethernet 100 m (328 ft)

Cable Length



# COMPONENT SPECIFICATIONS ULXD4D DUAL CHANNEL DIGITAL WIRELESS RECEIVER

### **OVERVIEW**

The Shure ULXD4D Dual Channel Digital Wireless Receiver offers two channels of uncompromising audio quality, RF signal stability, and advanced setup features in a space-efficient single rack unit. Digital wireless processing delivers premium 24-bit/48 kHz audio and RF spectrum efficiencies that dramatically increase the number of available compatible channels. With an expansive set of enhanced features including AES 256-bit encryption for security and Dante™ digital networking for audio over Ethernet, the ULXD4D brings a new level of performance to professional sound reinforcement.

- Two receivers in a rugged 1RU metal chassis with internal power supply
- · Individual gain controls, LED meters, and XLR outputs for each channel
- · Up to 64 MHz tuning range (region dependent)
- · Digital predictive switching diversity
- High Density mode optimizes ULX-D systems to simultaneously operate significantly more channels in applications up to 30 meters
- · RF cascade ports allow distribution of RF signal to another unit
- · Optimized scanning automatically finds, prioritizes, and deploys the cleanest frequencies to transmitters over IR sync
- · Bodypack Frequency Diversity ensures uninterrupted audio for mission-critical applications
- AES 256-bit encryption-enabled for secure transmission
- · Audio summing routes both audio channels to each XLR receiver output
- Dante<sup>™</sup> digital networked audio over Ethernet
- · Up to 60 dB independently adjustable gain for each channel
- · Ethernet networking for streamlined frequency coordination and deployment across multiple receivers
- · Wireless Workbench® 6 (WWB6) software integration for advanced coordination, monitoring, and control
- · Interference detection and alerts provided on both the receiver and WWB6
- · AMX®/Crestron® control
- · AXT600 Axient® Spectrum Manager compatible
- · Intuitive front panel LCD menu and controls with lockout feature
- · Audio and RF LED meters with peak indicator
- · XLR connectors with switchable mic/line output level
- Remoteable  $\frac{1}{2}$  wave antennas



#### ULXD4D Front Panel



ULXD4D Back Panel

### **SPECIFICATIONS**

NGE)
44 mm × 482 mm × 274 mm (1.73 in × 18.97 in. × 10.79 in.), H × W × D
3.36 kg (7.4 lbs), without antennas
Steel; Extruded Aluminum
100 to 240 V AC, 50-60 Hz, 0.26 A max.
>80 dB, typical
BNC
50 Ω
12-13 V DC, 150 mA maximum, per antenna
-18 to +42 dB in 1 dB steps (plus Mute setting)
XLR: Balanced (1=ground, 2=audio +, 3=audio -)
100 Ω
LINE setting= +18 dBV, MIC setting= -12 dBV
30 dB pad
Yes
Dual Port Ethernet 10/100 Mbps, 1 Gbps
DHCP or Manual IP address
100 m (328 ft)
PUT
BNC: For connection of 1 additional receiver
Unbalanced, passive
50 Ω

Insertion Loss

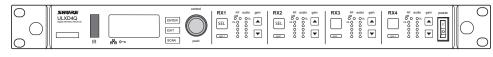


## COMPONENT SPECIFICATIONS ULXD4Q QUAD CHANNEL DIGITAL WIRELESS RECEIVER

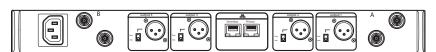
### **OVERVIEW**

The Shure ULXD4Q Quad Channel Digital Wireless Receiver offers four channels of uncompromising audio quality, RF signal stability, and advanced setup features in a space-efficient single rack unit. Digital wireless processing delivers premium 24-bit/48 kHz audio and RF spectrum efficiencies that dramatically increase the number of available compatible channels. With an expansive set of enhanced features including AES 256-bit encryption for security and Dante $^{\text{TM}}$  digital networking for audio over Ethernet, the ULXD4D delivers the most wireless performance per square inch.

- Four receivers in a rugged 1RU metal chassis with internal power supply
- · Individual gain controls, LED meters, and XLR outputs for each channel
- · Up to 64 MHz tuning range (region dependent)
- · Digital predictive switching diversity
- High Density mode optimizes ULX-D systems to simultaneously operate significantly more channels in applications up to 30 meters
- · RF cascade ports allow distribution of RF signal to another unit
- · Optimized scanning automatically finds, prioritizes, and deploys the cleanest frequencies to transmitters over IR sync
- · Bodypack Frequency Diversity ensures uninterrupted audio for mission-critical applications
- AES 256-bit encryption-enabled for secure transmission
- Audio summing routes two or more audio channels to combinations of receiver outputs. Use each channel's gain
  adjustment to reach the desired mix.
- Dante™ digital networked audio over Ethernet Two receivers in a rugged 1RU metal chassis with internal power supply
- · Individual gain controls, LED meters, and XLR outputs for each channel
- · Ethernet networking for streamlined frequency coordination and deployment across multiple receivers
- · Interference detection and alerts provided on both the receiver and WWB6
- · Up to 60 dB independently adjustable gain for each channel
- $\cdot \ \, \text{Wireless Workbench} \\ \text{@ 6 software integration for advanced coordination, monitoring, and control AMX/Crestron control} \\$
- Compatible with the AXT600 Axient™ Spectrum Manager
- · Intuitive front panel LCD menu and controls with lockout feature
- · Upgraded LCD with adjustable contrast and brightness
- · Audio and RF LED meters with peak indicator
- Switchable mic/line output level
- Remoteable ½ wave antennas



ULXD4Q Front Pane



ULXD4Q Back Panel

### SPECIFICATIONS

(SUBJECT TO CHANGE)

(	/
Dimensions	44 mm x 482 mm x 274 mm (1.73 in. x 18.97 in. x 10.79 in.), H x W x D
Weight	3.45 Kg (7.6 lbs), without antennas
Housing	Steel; Extruded Aluminum
Power Requirements	100 to 240 V AC, 50-60 Hz, 0.32 A max.
RF OUTPUT	
Spurious Rejection	>80 dB, typical
Connector Type	BNC
Impedance	50 Ω
Bias Voltage	12 - 13 V DC, 150 mA maximum, per antenna
AUDIO INPUT	
Gain Adjustment Range	–18 to +42 dB in 1 dB steps (plus Mute setting)
Configuration	XLR: Balanced (1=ground, 2=audio +, 3=audio -)
Impedance	100 Ω
Full Scale Output	LINE setting= +18 dBV, MIC setting= -12 dBV
Mic/Line Switch	30 dB pad
Phantom Power Protection	Yes
CASCADE OUT	PUT
Connector Type	BNC: For connection of 1 additional receiver
Configuration	Unbalanced, passive
Impedance	50 Ω
Insertion Loss	0 dB



# COMPONENT SPECIFICATIONS ULXD2 WIRELESS HANDHELD TRANSMITTER

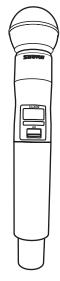
## **OVERVIEW**

The Shure ULXD2 is a handheld wireless transmitter compatible with ULX-D $^{\odot}$  Digital Wireless Systems. Offering premium 20 Hz - 20 kHz audio quality, advanced rechargeability options, and a wide selection of interchangeable Shure microphone heads, the ULXD2 delivers uncompromising wireless performance for professional sound reinforcement applications. The ULXD2 is offered with SM58 $^{\circ}$ , SM86, SM87A, Beta 58A $^{\circ}$ , Beta 87A, and Beta 87C.

- 20 Hz to 20 kHz range with flat frequency response (actual response is microphone dependent)
- · AES 256-bit encryption-enabled for applications where secure transmission is needed
- · >120 dB dynamic range
- · 1, 10, and 20 mW selectable RF output power
- 5 segment battery fuel gauge
- Shure lithium-ion rechargeable battery pack provides up to 9 hours of battery life, precision metering, and zero memory
  effect
- Up to 8 hours continuous use with 2 x AA batteries
- · Backlit LCD with easy to navigate menu and controls
- · Available with TA4M and LEMO3 input connectors
- · 100 meter (300 ft) operating range
- · Rugged metal construction
- · Frequency and power lockout

## SPECIFICATIONS (SUBJECT TO CHANGE)

Gain Offset Range	0 to 21 dB (in 3 dB steps)
Battery Type	Shure SB900A Rechargeable Li-Ion or LR6 AA batteries 1.5 V
Battery Runtime @ 10 mW	Shure SB900A: up to 9 Alkaline: 8 hours See Battery Runtime Chart
Dimensions	256 mm × 51 mm (10.1 in. × 2.0 in.) L × Dia. V50, V51 Bands: 278 mm × 51 mm (10.9 in. × 2.0 in.) L × Dia.
Weight	340 g (12.0 oz.), without batteries V50, V51 Bands: 348 g (12.3 oz.), without batteries
Housing	Machined aluminum
AUDIO INPUT	
Configuration	Unbalanced
Maximum Input Level 1 kHz at 1% THD	145 dB SPL (SM58), typical Note: Dependent on microphone type
Preamplifier Equivalent Input Noise (EIN) System Gain Setting > +20	120 dBV, A-weighted, typical
RF OUTPUT	
Antenna Type	Integrated Single Band Helical
Occupied Bandwidth	<200 kHz
Modulation Type	Shure Proprietary Digital
Power	1 mW, 10 mW, 20 mW See Frequency Range and Ouput Power table, varies by region



ULXD2 Wireless Handheld Transmitter

MICROPHONE OPTIONS (See shure.com for more)	
WL93	WL93 condenser capsule, omnidi- rectional lavalier mic
WL183	WL183 condenser capsule, omnidi- rectional lavalier mic
WL184	WL184 condenser capsule, super- cardioid lavalier mic
WL185	WL185 condenser capsule, cardioid lavalier mic
WL50	WL50 condenser capsule, omnidi- rectional lavalier mic
WL51	WL51 condenser capsule, cardioid lavalier mic
SM31FH	SM31FH condenser capsule, moisture repellant cardioid headset mic
SM35	SM35 condenser capsule, cardioid headset mic
WCM16	WCM16 condenser capsule, hyper- cardioid headworn mic
WBH53	WBH53 condenser capsule, omnidi- rectional headworn mic
WBH54	WBH54 condenser capsule, super- cardioid headworn mic
WB98H/C	WB98H/C condenser capsule, cardioid instrument clip mic



# COMPONENT SPECIFICATIONS ULXD1 WIRELESS BODYPACK TRANSMITER

## **OVERVIEW**

The ULXD1 is a wireless bodypack transmitter compatible with  $ULX-D^{\otimes}$  Digital Systems. With a rugged yet lightweight aluminum case, the ULXD1 delivers uncompromising audio quality and RF performance, AES 256-bit encryption for secure transmission, and advanced rechargeability options for professional sound reinforcement applications.

- 20 Hz to 20 kHz range with flat frequency response (actual response is microphone dependent)
- AES 256-bit encryption-enabled for applications where secure transmission is needed
- · >120 dB dynamic range
- · 1, 10, and 20 mW selectable RF output power
- 5 segment battery fuel gauge
- Shure lithium-ion rechargeable battery pack provides up to 9 hours of battery life, precision metering, and zero memory effect
- Up to 8 hours continuous use with 2 x AA batteries
- Backlit LCD with easy to navigate menu and controls
- · Available with TA4M and LEMO3 input connectors
- 100 meter (300 ft) operating range
- · Rugged metal construction
- · Frequency and power lockout

## SPECIFICATIONS (SUBJECT TO CHANGE)

Gain Offset Range	0 to 21 dB (in 3 dB steps)
Battery Type	Shure SB900A Rechargeable Li-lon or AA batteries
Battery Runtime @ 10 mW	Shure SB900A: up to 9 Alkaline: 8 hours See Battery Runtime Chart
Dimensions	86 mm × 66 mm × 23 mm (3.4 in. × 2.6 in. × 0.9 in.) H × W × D
Weight	142 g (5.0 oz.), without batteries
Housing	Cast aluminum
AUDIO INPUT	
Connector	4-Pin male mini connector (TA4M) LEM03 connector
Configuration	Unbalanced
Impedance	1 ΜΩ
Maximum Input Level 1 kHz at 1% THD	Pad Off: 8.5 dBV (7.5 Vpp) Pad On: 20.5 dBV (30 Vpp)
Preamplifier Equivalent Input Noise (EIN) System Gain Setting > +20	120 dBV, A-weighted, typical
RF OUTPUT	
Connector	SMA
Antenna Type	1/4 wave
Impedance	50 Ω
Occupied Bandwidth	<200 kHz
Modulation Type	Shure Proprietary Digital
Power	1 mW, 10 mW, 20 mW See Frequency Range and Ouput Power table, varies by region



**ULXD1**Wireless Bodypack Transmitter

MICROPHONE OPTIONS (See shure.com for more)	
WL93	WL93 condenser capsule, omnidi- rectional lavalier mic
WL183	WL183 condenser capsule, omnidi- rectional lavalier mic
WL184	WL184 condenser capsule, super- cardioid lavalier mic
WL185	WL185 condenser capsule, cardioid lavalier mic
WL50	WL50 condenser capsule, omnidi- rectional lavalier mic
WL51	WL51 condenser capsule, cardioid lavalier mic
SM31FH	SM31FH condenser capsule, moisture repellant cardioid headset mic
SM35	SM35 condenser capsule, cardioid headset mic
WCM16	WCM16 condenser capsule, hyper- cardioid headworn mic
WBH53	WBH53 condenser capsule, omnidi- rectional headworn mic
WBH54	WBH54 condenser capsule, super- cardioid headworn mic
WB98H/C	WB98H/C condenser capsule, cardioid instrument clip mic



## COMPONENT SPECIFICATIONS ULXD8 WIRELESS GOOSENECK BASE TRANSMITTER

### **OVERVIEW**

The ULXD8 Gooseneck Base Transmitter offers a low-profile boundary form factor that is ideal for meetings and events where quick setup and teardown is important. With long transmission range (up to 300 feet/91 meters) and a wide selection of antenna distribution components, the ULXD8 is easily and efficiently scalable for use in very large meetings at conference and convention centers. A choice of rechargeable battery pack or standard AA batteries provide all-day runtime.

- · Available in UHF TV band
- · Available in black (ULXD8) or white (ULXD8W)
- · AES 256-bit encryption for secure transmission
- · Convenient gooseneck form factor for meetings and events where quick setup and teardown is important
- Designed for use with Shure Microflex MX405, MX410 and MX415 gooseneck microphones
- · Very short latency (<3 msec)
- · Long transmission range (up to 300 feet / 100 meters)
- · Rechargeable SB900A battery pack provides up to 9 hours of battery life
- · Standard AA alkaline batteries are additional power options
- · SBC250 (2-bay), SBC450 (4-bay) and SBC850 (8-bay) Networked Charging Stations for docked charging of 2, 4 or 8 UI XD8 transmitters

0 to 21 dP (in 2 dP stops)

- · Configurable Mute button (Toggle, Push-to-Mute, Push-to-Talk, disabled) and Mute LED behavior
- · Adjustable RF power, high-pass filter, and power lock settings

## SPECIFICATIONS (SUBJECT TO CHANGE)

Gain Offset Range	0 to 21 dB (in 3 dB steps)
Battery Type	Shure SB900A Rechargeable Li-Ion or AA batteries
Battery Runtime @ 10 mW	Shure SB900A: Up to 9 hours Alkaline: Up to 8 hours 20 minutes Note: See Battery Runtime chart
Dimensions	137 mm $\times$ 78 mm $\times$ 41 mm (5.4 in. $\times$ 3.1 in. $\times$ 1.6 in.) H $\times$ W $\times$ D
Weight	293 g (10.3 oz.), with 2 AA batteries
Housing	Molded Plastic
AUDIO INPUT	
Connector	6-pin connector for Shure MX405/MX410/MX415
Configuration	Unbalanced
Impedance	>20 kΩ
RF OUTPUT	
Antenna Type	Integrated PIFA
Impedance	50 Ω
Occupied Bandwidth	<200 kHz
Modulation Type	Shure Proprietary Digital
Power	1 mW, 10 mW, 20 mW See Frequency Range and Ouput Power table, varies by region

## **AVAILABLE MODELS**

ULXD8	Wireless Gooseneck Base Transmitter, Black
ULXD8W	Wireless Gooseneck Base Transmitter, White



ULXD8 Wireless Gooseneck Base Transmitter

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#### MICROPHONE OPTIONS (See shure.com for more) MX405LP/C 5" Cardioid Gooseneck Microphone MX405LP/S 5" Supercardioid Gooseneck

MX405RLP/N

MX415LPDF/S

MX405WLP/N

MX410WLP/N

MX410LP/C	10" Cardioid Gooseneck Microphone
MX410LP/S	10" Supercardioid Gooseneck Microphone
MX410RLP/N	10" Gooseneck with Red Top LED (no cartridge)
MX410LPDF/C	10" Cardioid Dualflex Gooseneck Microphone
MX410LPDF/S	10" Supercardioid Dualflex Goose-

cartridge)

5" Gooseneck with Red Top LED (no

10" Supercardioid Dualflex Goose- neck Microphone
10" Dualflex Gooseneck with Red Top LED (no cartridge)
10" Cardioid Dualflex Gooseneck Microphone with Red Top LED

MX410RLPDF/S	10" Supercardioid Dualflex Goose- neck Microphone with Red Top LED
MX415LP/C	15" Cardioid Gooseneck Microphone
MV/1ELD/C	15" Cupercardioid Coocepack

MX415LP/S	15" Supercardioid Gooseneck Microphone
MX415RLP/N	15" Gooseneck with Red Top LED (no cartridge)
MX415LPDF/C	15" Cardioid Dualflex Gooseneck Microphone

MX415RLPDF/N	15" Dualflex Gooseneck with Red Top LED (no cartridge)
MX415RLPDF/C	15" Cardioid Dualflex Gooseneck Microphone with Red Top LED
MX415RLPDF/S	15" Supercardioid Dualflex Goose- neck Microphone with Red Top LED

15" Supercardioid Dualflex Goose-

No microphone cartridge, 5"

No microphone cartridge, 10"

	(12.7cm) Gooseneck, bi-color status indicator, less preamp, white
MX405WRLP/N	No microphone cartridge, 5" (12.7cm) Gooseneck, light ring, less preamp, white

	indicator, less preamp, white
MX410WRLP/N	No microphone cartridge, 10" (25.4cm) Gooseneck, light ring, less

MX415WLP/N	No microphone cartridge, 15" (38.1cm) Gooseneck, bi-color status indicator, less preamp, white
MX415WRLP/N	No microphone cartridge, 15"

	preamp, wnite
MX410WLPDF/N	No microphone cartridge, 10"
	(25.4cm) Dual Flex Gooseneck, bi-
	color status indicator, less preamp
	1.91.

	0. 1.
MX415WLPDF/N	No microphone cartridge, 15"
	(38.1cm) Dual Flex Gooseneck, bi-
	color status indicator, less preamp
	white

	William
MX415WRLPDF/N	No microphone cartridge, 15"
	(38.1cm) Dual Flex Gooseneck, lig
	ring loss prooms white



# COMPONENT SPECIFICATIONS ULXD6 WIRELESS BOUNDARY TRANSMITTER

## **OVERVIEW**

The ULXD6 Boundary Microphone Transmitter offers a low-profile boundary form factor that is ideal for meetings and events where quick setup and teardown is important. With long transmission range (up to 300 feet/91 meters) and a wide selection of antenna distribution components, the ULXD6 is easily and efficiently scalable for use in very large meetings at conference and convention centers. A choice of rechargeable battery pack or standard AA batteries provide all-day runtime.

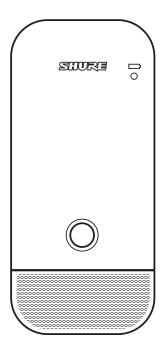
- · Available in UHF TV band
- · Available in black (ULXD6) or white (ULXD6W)
- · AES 256-bit encryption for secure transmission
- · Low-profile boundary form factor for meetings and events where quick setup and teardown is important
- · Very short latency (<3 msec)
- Long transmission range (up to 300 feet / 100 meters)
- SB900A rechargeable battery pack provides up to 9 hours of battery life
- · Standard AA alkaline batteries are additional power options
- SBC250 (2-bay), SBC450 (4-bay) and SBC850 (8-bay) Networked Charging Stations for docked charging of 2, 4 or 8 ULXD6 transmitters
- $\cdot \ \, \text{Configurable Mute button (Toggle, Push-to-Mute, Push-to-Talk, disabled) and Mute LED behavior}$
- · Adjustable RF power, high-pass filter, and power lock settings

## SPECIFICATIONS (SUBJECT TO CHANGE)

O to 21 dP (in 2 dP stops)

Gain Offset Range	0 to 21 dB (in 3 dB steps)
Battery Type	Shure SB900A Rechargeable Li-Ion or AA batteries 1.5 V
Battery Runtime @ 10 mW	Shure SB900: Up to 9 hours 20 minutes AA batteries: Up to 8 hours 40 minutes See Battery Runtime Chart
Dimensions	114 mm × 62 mm × 34 mm (4.5 in. × 2.4 in. × 1.4 in.) H × W × D
Weight	241 g with AA batteries
Housing	Molded Plastic
AUDIO INPUT	
Configuration	Unbalanced
Impedance	>20 kΩ
RF OUTPUT	
Antenna Type	Integrated PIFA
Impedance	50 Ω
Occupied Bandwidth	<200 kHz
Modulation Type	Shure proprietary digital
Power	1 mW, 10 mW, 20 mW See Frequency Range and Ouput Power table, varies by region
AVAILABLE MODELS	
ULXD6	Wireless Boundary Transmitter, Black

ULXD6	Wireless Boundary Transmitter, Black
ULXD6W	Wireless Boundary Transmitter, White



**ULXD6**Wireless Boundary Transmitter



## **COMPONENT SPECIFICATIONS**

## SBC250, SBC450 & SBC850 NETWORKED DOCKING STATIONS

## **OVERVIEW**

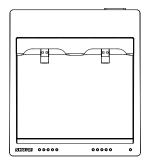
2-bay, 4-bay, and 8-bay Networked Docking Stations charges up to 2, 4, or 8 ULXD6 or ULXD8 transmitters that are equipped with the SB900A rechargeable battery. The transmitters simply slide into the charger; no need to remove the SB900A battery. When the stations are connected to a network, charging status of transmitters can be viewed remotely and settings or firmware can be updated while transmitters are docked, using Shure Wireless Workbench, SystemOn software or third-party room control systems.

## SPECIFICATIONS (SUBJECT TO CHANGE)

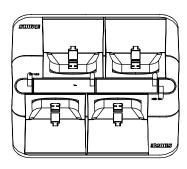
Charge Time	ULXD6 and ULXD8 15 minutes = 1 hour runtime; 1 hour = $50\%$ charged; 3 hours = $100\%$ charged.
Network Interface	10/100 Mbps Ethernet;
Power Requirement	SBC250 100 - 240V AC @ 0.35 A maximum, $50/60  \text{Hz}$ SBC450/SBC850 15 V DC @ 4.0 A maximum, supplied by external power supply (tip positive)
Housing	SBC250 Molded Plastic, Sheet Metal SBC450/SBC850 Molded Plastic, Cast Zinc Alloy
Dimensions	SBC250 215 mm × 191 mm × 62.5 mm (8.46 in. × 7.52 in. × 2.44 in.), H × W × D SBC450 82.1 mm × 224.4 mm × 192 mm (3.23 in. × 8.83 in. × 7.56 in.), H × W × D SBC850 82.1 mm × 392 mm × 192 mm (3.23 in. × 15.43 in. × 7.56 in.), H × W × D
Weight	SBC250 2.7 kg (5.95 lbs) SBC450 1.59 kg (3.51 lbs) SBC850 2.67 kg (5.89 lbs)
Operating Temperature Range	0 °C (32 °F) to 45 °C (113 °F)
Storage Temperature Range	-29 °C (-20 °F) to 74 °C (165 °F)

## **AVAILABLE MODELS**

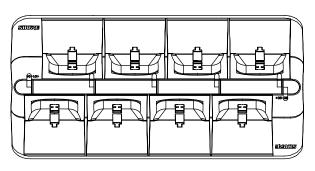
SBC250	Networked Docking Station, 2 Ports
SBC450	Networked Docking Station, 4 Ports
SBC850	Networked Docking Station, 8 Ports



SBC250 Networked Docking Station



SBC450 Networked Docking Statio



SBC850 Networked Docking Station

