

# Sx100+

Sx100+  
Compact Portable Sound  
Reinforcement Speaker for  
Live Sound, Speech, Playback, DJ,  
A/V, Institutional Venues



## Key Features:

- Compact, Ergonomic Size
- Integral Monitor Stand
- Ring-Mode Decoupling (RMD™)
- Pure Titanium Compression Driver
- 65° x 65° Constant Coverage Horn
- High Efficiency, High Output
- Molded-in Pole Mount, Rigging Points



## General Description:

The Electro-Voice® Sx100+ is a 200-watt, 12-inch two-way, high efficiency, constant-directivity portable speaker system. Through the extensive use of computer-aided design and modeling, Electro-Voice engineers have developed a state-of-the-art professional loudspeaker system. Its performance and physical design make it perfect for many applications requiring quality sound in portable and fixed environments.

The high-frequency section of the Sx100+ utilizes a molded-in, 65° x 65° constant-directivity horn. This unique pattern contributes to high intelligibility, vocals sound natural yet "cut through" in reverberant, noisy rooms. Coverage pattern is uniform, sound quality off-axis is very well maintained, even at 45° off axis (a 90° total coverage angle).

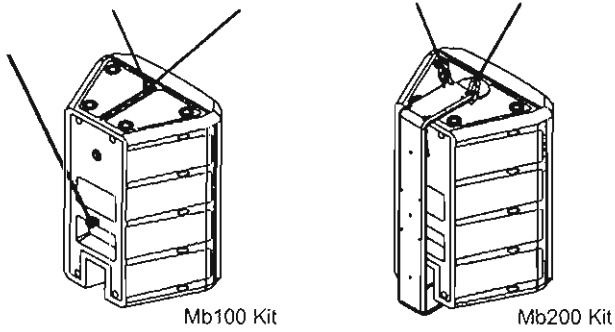
The horn's unique, Varipath™ throat geometry helps driver output to the corners of the room, areas which are not described in the usual specifications of horizontal and vertical coverage angles. This results in more uniform coverage throughout, even to those parts of the audience that typically do not receive the strongest coverage.

The Sx100+'s high-frequency horn is driven by the DH3, a one-inch-throat, wide-bandwidth, titanium-diaphragm driver using a unique, convex-drive TimePath™ phasing plug structure (U.S. Patent #4,525,604) for smooth and extended high-frequency response.

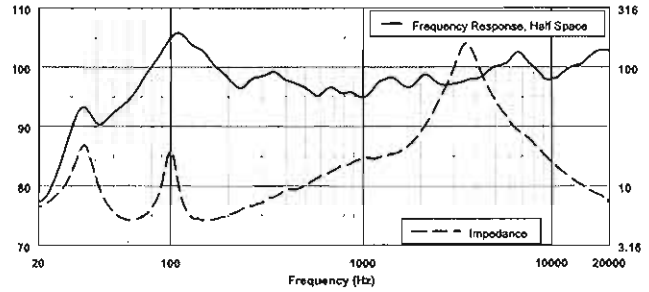
## Technical Specifications:

Freq. Response (-10 dB):	60 Hz - 25 kHz
Sensitivity:	98 dB
Max SPL:	127 dB
Impedance:	8 ohms Nominal, 5.6 ohms Min.
Horizontal Coverage:	65°
Vertical Coverage:	65°
Power Handling:	200W Continuous, 800W Peak
LF Transducer:	12" (300mm)
HF Transducer:	1" (25mm) exit DH3 Comp. Driver
Connectors:	Neutrik Speakon®
Enclosure Material:	Copolymer
Grille:	Powder Coated Steel
Dim (H x W x D):	23.1" x 16.9" x 12.3" (586 x 429 x 312mm)
Net Weight:	32 lbs (14.5 kg)
Shipping Weight:	35 lbs (15.9 kg)

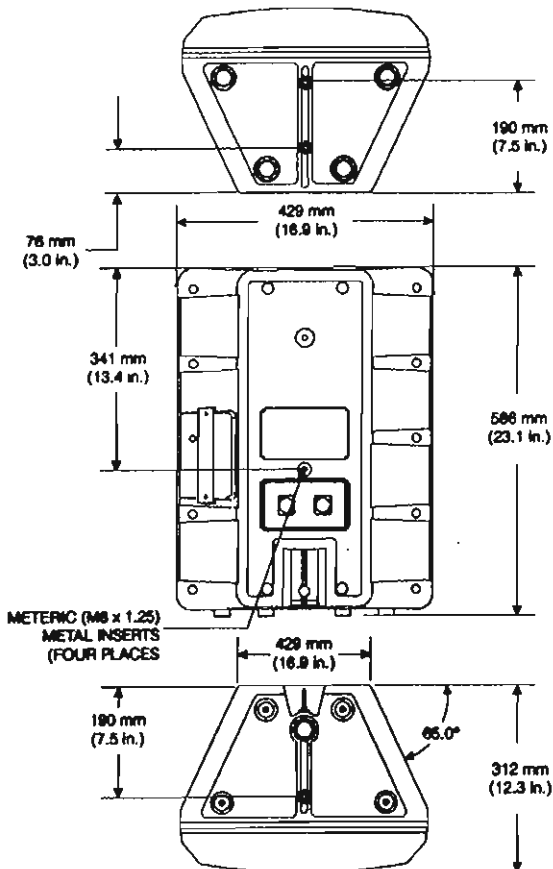
## Suspending the Sx100+:



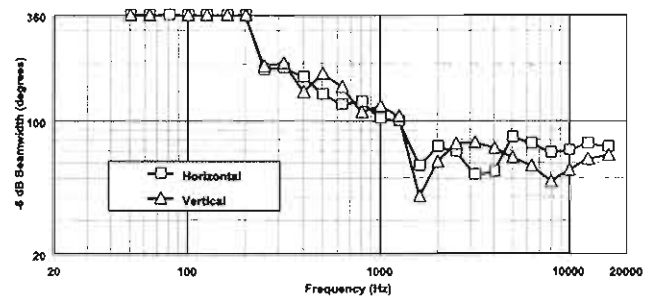
## Frequency Response & Impedance:



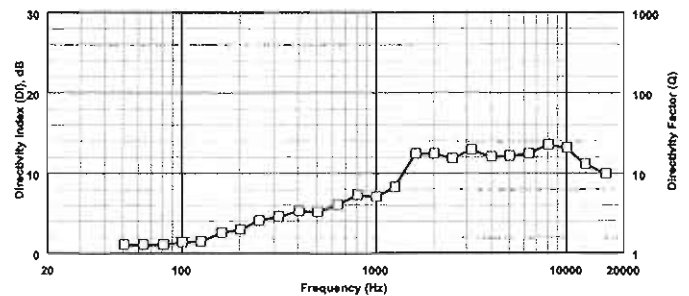
## Dimension Drawings:



## Beamwidth:



## Directivity:



### Performance Match:

- Sb122 Subwoofer

### Available Accessories:

- F200 Monitor Feet (Qty. 2)
- TSS-1 Tripod Stand
- MB100 Eyebolt Suspension Kit
- MB200 Bracket Suspension Kit
- MB300 Bracket Suspension Kit

### Sx100+ Part Numbers:

- Sx100+E (Black/Speakon®) -- 11053282
- Sx100+WE (White/Speakon®) -- 11053285

**EV Electro-Voice®**

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Phone: 952/884-4051, Fax: 952/884-0043

[www.electrovoice.com](http://www.electrovoice.com)

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Part Number 535581 Rev F

U.S.A. and Canada only. For customer orders, contact Customer Service at:  
800/392-3497 Fax: 800/955-6831

Europe, Africa, and Middle East only. For customer orders, contact Customer Service at:  
+ 49 9421-706 0 Fax: + 49 9421-706 265

Other International locations. For customer orders, contact Customer Service at:  
+ 1 952 884-4051 Fax: + 1 952 736-4212

For warranty repair or service information, contact the Service Repair department at:  
800/685-2606

For technical assistance, contact Technical Support at: 866/78AUDIO

Specifications subject to change without notice.

PA2250T

Two-Channel  
Power Amplifier

## Key Features:

- 2 x 270W at 70V or 270W at 4 Ohms
- 2 U Rack Space Chassis
- Stepped Rear Level Controls
- Bridge Mode Operation Provides 1 x 540W at 8 ohms
- Complete Protection Package
- Selectable 50Hz or 300Hz Hi-Pass Filter for each Channel
- Phoenix Type Inputs
- Phoenix Type Outputs
- High Efficiency Circuit Design
- Front Panel Power On/Off



## General Description:

The Electro-Voice® PA2250T is from the PA series of professional commercial audio amplifiers. The direct path airflow design reduces the heat buildup significantly and allows more amplifier channels and output power in slim two rack space chassis. The audio performance of the PA2250T is superior and fulfills the requirements in many demanding long term applications from sound reinforcement, paging or life safety installations.

High performance toroidal power and output transformers combine clean saturation free audio performance with cool running operation. The PA2250T features many of the same comprehensive protection circuits typical in EV amplifiers. Complete protection is provided for high temperature, audio limiters, power up delay and peak current limiters. In addition to the rated output power, the PA2250T provides excellent headroom for a wide dynamic range on music signals. The onboard dynamic limiter ensures that the output clipping of the PA2250T will not generate excessive distortion. The amplifier channels can be bridged for more power flexibility. Marked level controls on the rear panel provide hidden reliable level adjustments for each channel. Front panel LEDs indicate signal present, 0 dB, and limit. Phoenix type connectors for inputs and outputs provide an easy rack wiring.

## Technical Specifications:

Number of Channels	2		
Load Impedance	8 Ohm	4 Ohm	70V
Rated Output Power (*Rated Load) THD<1%, 1kHz	135W	270W	270W
Rated Output Power (*Rated Load) THD<0.2%, 20Hz...20kHz	125W	250W	250W
Slew Rate at 1kHz	18V/μs		41V/μs
Frequency Response, -1dB, Ref. 1kHz	65Hz - 40kHz		65Hz - 20kHz
Damping factor, at 100Hz / 1kHz, 4 Ohm	>250		N/A
Power Bandwidth THD=1%, Ref. 1kHz, Half Power	45Hz - >20kHz		
Input Impedance, 20Hz ... 20kHz, Balanced	>20kOhm		
Signal-to-Noise Ratio, A-Weighted	103 dB		
Input Sensitivity at Rated Output Power or Voltage, 1kHz	0dBu (775mV)		
THD at rated output power, MBW=80kHz, 1kHz	<0.1%		
IMD-SMPTE, 60Hz, 7kHz	<0.1%		
DIM30, 3.15kHz, 15kHz	<0.1%		
Crosstalk, Ref. 1kHz, at 10% Rated Output Power	<-75 dB		
Power Requirements	120V or 230V, 50Hz - 60Hz		
Protection	Audio Limiters High Temperature Peak Current Limiters Turn-On Delay		
Cooling	Front-to-Rear		
Dimensions (W x H x D), mm	483 x 88 x 406mm (2Ru) 19" x 3.5" x 16"		
Weight	23.5kg (51.76lbs)		

Low Impedance Outputs:  
 - Min. Rated Load for Single Channel Operation is 4 Ohms. 2 Ohm Load is Not Recommended.  
 - Min. Rated Load for Bridged Operation is 8 Ohms. 4 Ohm Load is Not Recommended.



## ULX STANDARD

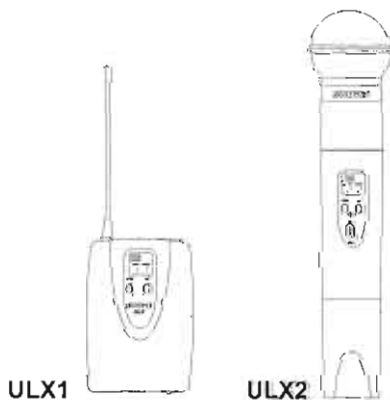
ULX Standard UHF systems represent a breakthrough in performance and price for both working musicians and professional sound installers. Multiple system configurations provide limitless options, each with a choice of legendary Shure microphone transmitters. Over 1400 selectable, pre-programmed frequencies are available, and Automatic Frequency Selection provides a straight shot to a clear channel.

## ULX PROFESSIONAL

Step up to ULX Professional wireless, UHF systems for working musicians and professional sound installers. Multiple system configurations provide limitless options, each with a choice of legendary Shure microphones. Up to 1400 selectable, pre-programmed frequencies are available, and Automatic Frequency Selection provides a straight shot to a clear channel. ULX Professional systems offer more advanced features and controls, including lockable settings and group scan function.

### ULXS4 DIVERSITY RECEIVER

- Automatic Frequency Selection
- Over 1400 selectable frequencies
- Predictive Diversity
- RF presence LED
- 5-segment audio meter
- 3-segment transmitter battery fuel gauge
- Multi-function LCD
- 1/2 rack design
- Detachable 1/4 wave antennas
- Durable plastic chassis
- Locking DC connector
- XLR and 1/4" outputs
- Mic/line switchable



## ULXP4 DIVERSITY RECEIVER

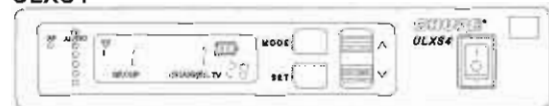
- Automatic Frequency Selection with group scan function
- Over 1400 selectable frequencies
- Predictive Diversity
- 5-segment audio meter
- 5-segment RF meter
- Advanced multi-function LCD
- 3-segment transmitter battery fuel gauge
- Squelch adjustment
- 1/2 rack design
- In-line power
- Removable 1/2 wave antenna
- Frequency and volume lockout
- Rugged metal chassis
- Furnished rack hardware
- Locking DC connector
- XLR and 1/4" outputs

### ULX1 AND ULX2 TRANSMITTERS

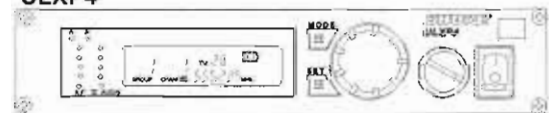
- 3-segment battery fuel gauge
- Backlit LCD shows group and channel
- Automatic Frequency Selection with group scan function
- Frequency and power settings
- Up to 1400 selectable frequencies
- Control lockout
- Predictive Diversity
- 8 hour battery life
- 5-segment audio meter
- 300 ft (92m) operating range
- 5-segment RF meter
- -20dB pad switch on ULX1

NOTE: Available frequencies depend on the applicable regulations in the country where the system is used.

### ULXS4



### ULXP4



# SPECIFICATIONS

## RF Carrier Frequency Range

470.000 to 865.000 MHz (Available frequencies depend on the applicable regulations in the country where the system is used). Refer to the frequency supplement supplied with the system.

## Effective Range

100 m (300 ft.) under optimal conditions

**NOTE:** Actual working range depends on RF signal absorption, reflection, and interference

## Audio Frequency Response

25 to 15,000 Hz,  $\pm 2$  dB

**NOTE:** Overall system frequency response depends on the microphone element.

## Transmitter Audio Polarity

Positive pressure on microphone diaphragm (or positive voltage applied to tip of WA302 phone plug) produces positive voltage on pin 2 (with respect to pin 3 of low impedance output) and the tip of the high impedance 1/4-inch output

## Transmitter Gain Adjustment Range

ULX1: 25 dB

ULX2: 25 dB

## Receiver Audio Output Level ( $\pm 38$ kHz deviation, 1 kHz tone)

XLR connector (into 600 ohm load): +3.9 dBV (line), -17 dBV (mic)

1/4 inch connector (into 3000 ohm load): -2 dBV

## Impedance

ULX1 (input): 1 Megohm ULXS4, ULXP4 (output): 50 ohms at line level; 2000 ohms at mic level

## Modulation

$\pm 38$  kHz deviation compressor-expander system with pre- and de-emphasis.

## RF Power Output

ULX1, ULX2: 30 mW maximum

## Dynamic Range

>100 dB, A-weighted

## RF Sensitivity

1.26  $\mu$ V for 12 dB SINAD (typical)

## Image Rejection

80 dB typical

## Spurious Rejection

75 dB typical

## Ultimate Quieting (reference $\pm 38$ kHz deviation)

>105 dB, A-weighted

## System Distortion (reference $\pm 38$ kHz deviation, 1 kHz modulation)

0.3% total harmonic distortion, typical

## Power Requirements

ULX1, ULX2: 9V alkaline battery; 8.4 V Nicad optional  
ULXS4, ULXP4: 14 - 18 Vdc (negative ground), 550 mA

## Battery Life

8 to 9 hours (with 9V alkaline battery)

## Operating Temperature Range

- 20° to 49° C (- 4° to 120° F)

**NOTE:** Battery characteristics may limit this range.

## Overall Dimensions

ULX1: 96.5 mm H x 67 mm W x 26.7 mm D (3.86 x 2.68 x 1.10 in.)

ULX2/SM58: 228.6 L x 51 mm Dia. (9 x 2 in.)

ULX2/BETA 58: 220.9 mm L x 51 mm Dia. (8.7 x 2 in.)

ULX2/SM86: 213 mm L x 49 mm Dia. (8.4 in x 1.9 in.)

ULX2/87, ULX2/BETA 87: 223.5 mm L x 51 mm Dia. (8.8 x 2 in.)

ULX4S: 43 mm H x 214 mm W x 163 mm D (1.72 in. x 8.56 in. x 6.52 in.)

ULX4P: 43 mm H x 214 mm W x 172 mm D (1.72 in. x 8.56 in. x 6.88 in.)

## Net Weight

ULX1: 79 g (2.8 oz.) without battery

ULX2/58, ULX2/BETA 58: 289 g (10.2 oz.) without battery

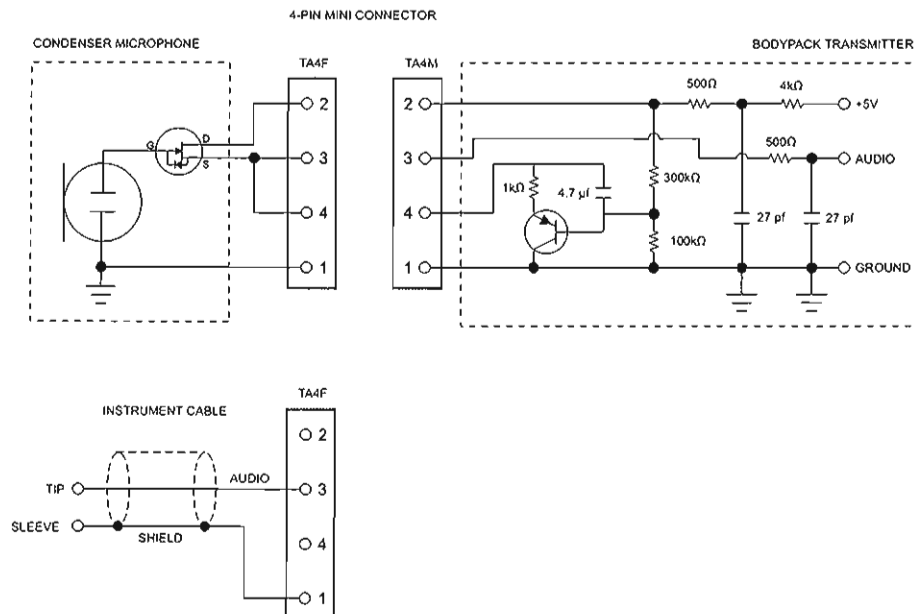
ULX2/SM86: 251 g (8.8 oz.) without battery

ULX2/87, ULX2/BETA 87: 258 g (9.1 oz.) without battery

ULXS4: 1049 g (2 lbs, 5 oz.)

ULXP4: 1105 g (2 lbs, 7 oz.)

## ULX1 Bodypack Transmitter



## ULX1 Transmitter Input

	Microphone (pins 3 and 4 tied together)	Guitar (with WA302)
Connector	TA4M	TA4M
Configuration	Unbalanced, active	Unbalanced, active
Actual Impedance	75 k $\Omega$	1 M $\Omega$
Maximum Input Level	-4 dBV (1.82 Vp-p)	Gain Switch 0 dB: 5 dBV (5 Vp-p) Gain Switch -20 dB: 25 dBV (50 Vp-p)
Pin Assignments	1 = Ground 2 = +5V through 4.5 k $\Omega$ (Microphone Bias) 3 = Audio 4 = FET active load	1 = Ground 2 = No Connection 3 = Audio 4 = No Connection

## ULX2 Transmitter Input

Configuration	Unbalanced, active
Actual Impedance	20 k $\Omega$
Maximum Input Level (1 kHz, 1% THD)	12 dBV (10 Vp-p)

## ULXP4, ULXS4 Receiver Audio Output

Connector	Unbalanced (1/4 in.)	Balanced (XLR)
Actual Impedance	3 k $\Omega$	Mic. Level: 1848 $\Omega$ Line Level: 75 $\Omega$
Pin Assignments	Tip = Hot Ring/Sleeve = Ground	1 = Ground 2 = Hot 3 = Cold
Phantom Power Protection?	Yes	Yes

## ULXP4, ULXS4 Receiver Antenna Input

Connector Type	BNC
Actual Impedance	50 $\Omega$
Nominal Input Level	-95 to -30 dBm
Maximum Input Level	+6 dBm (-20 dBm recommended)
Pin Assignments	Shell = Ground, Center = Signal
Voltage for Remote Power	12 Vdc, 150 mA maximum

## Furnished Accessories

Microphone Stand Adapter (ULX2)	WA371
Grip/Switch Cover (ULX2)	WA555
Zipper Bag (ULX1)	95A2313
Zipper Bag (ULX2)	95B2313
Screwdriver (ULX2)	80A498

## Optional Accessories

Passive Antenna Splitter/Combiner Kit	UA221
UHF In-Line Antenna Amplifier	UA830USTV
UHF Powered Directional Antenna	UA870USTV
UHF Antenna Power Distribution Amplifier (U.S.A.)	UA844SWB
UHF Antenna Power Distribution Amplifier (Europe)	UA844SWB-E
UHF Antenna Power Distribution Amplifier (UK)	UA844SWB-UK
33 m (100 ft.) BNC-BNC cable (RG213)	UA8100
1.8 m (6 ft.) BNC-BNC cable (RG58)	UA806
Four Antenna Rack Panel	UA440
Front Mount Antenna Kit (Includes 2 cables and 2 bulkhead adapters)	UA600
Remote Antenna Bracket with BNC Bulkhead Adapter	UA505
Rack Mount Antenna Kit for single Receiver	UA506
Rack Mount Kit for Two Receivers	UA507
Carrying Case	WA610
Microphone Adapter Cable (XLR to TA4F)	WA310

## Replacement Parts

AC Adapter (120 VAC, 60 Hz)	PS41
AC Adapter (220 VAC, 50 Hz)	PS41AR
AC Adapter (230 VAC, 50/60 Hz)	PS41AZ
AC Adapter (230 VAC, 50/60 Hz, Europlug)	PS41E
AC Adapter (230 VAC, 50/60 Hz)	PS41UK
AC Adapter (100 VAC, 50/60 Hz)	PS41J
SM58 <sup>®</sup> Cartridge with Grille (ULX2/58)	RPW112
BETA 58A <sup>®</sup> Cartridge with Grille (ULX2/BETA 58)	RPW118
SM86 Cartridge with Grille (ULX2/SM86)	RPW114
SM87A Cartridge with Grille (ULX2/87)	RPW116
BETA 87A Cartridge with Grille (ULX2/BETA 87A)	RPW120
BETA 87C Cartridge with Grille (ULX2/BETA 87C)	RPW122
Matte Silver Grille for SM58 <sup>®</sup>	RK143G
Matte Silver Grille for SM86	RPM226
Matte Silver Grille for BETA 58A <sup>®</sup>	RK265G
Matte Silver Grille for BETA 87A	RK312
Black Grille for SM87A	RK214G
Black Grille for BETA 58A	RPM323G
Black Grille for BETA 87A and BETA 87C	RPM324G
Belt Clip	44A8013A
1/4-Wave Antenna (470 - 752 MHz)	UA400B
1/4-Wave Antenna (774 - 952 MHz)	UA400
1/2-Wave Antenna (638 - 698 MHz)	UA820L3
1/2-Wave Antenna (554 - 590 MHz)	UA820D
1/2-Wave Antenna (740 - 814 MHz)	UA820Q
1/2-Wave Antenna (470 - 530 MHz)	UA820G
1/2-Wave Antenna (746 - 784 MHz)	UA820E
1/2-Wave Antenna (572 - 596 MHz)	UA820F
1/2-Wave Antenna (578 - 638 MHz)	UA820J

## ARC Audio

What is ARC Audio? A single channel of balanced analog audio routed over the CAT5 cable between an ARC and the DSP hardware. Applications include paging, local system inputs, and confidence feeds. To avoid the possible grounding, mixing or shorting of ARC Audio lines, the installer should home run any ARCs making use of ARC Audio lines so that only one ARC device is in the chain.

## No special tools are required

to program any of the Symetrix remotes because they are programmed directly from **SymNet Designer** or your **Symetrix software**. Configure and test your system's remote control devices in minutes rather than days. Your DSP and control hardware all come from the same vendor.



**Pictured:** the **ARC-2** (above) and the **Integrator Series ARC-2i** (right).



**The ARC-2 is a menu-driven remote control for Symetrix DSPs.** Tap into the full power of your system with twenty-four (24) menus with up to sixteen (16) items each that can be used to address multiple basic functions or initiate complex logic-based control events: gain, preset triggering, source selection, room combining and more. The 8-character backlit display supports up to thirty-one (31) scrolling characters, providing instant user feedback for control assignments, default settings, and actions. The three buttons help you navigate menus, raise or lower values, and enable or disable the remote control. All control assignments, including item labeling, parameter limits and firmware version upgrades are handled by software included with Symetrix DSP hardware. Power, control, and a single channel of ARC Audio are connected via RJ-45 inputs or screw-type barrier strips. **Intuitive**

**Navigation:** Pressing the menu button

navigates through the menu names. The menu button also acts as a preset trigger when a preset list is scrolled. The up/down arrow buttons adjust parameter settings and scroll through preset lists. Holding the menu button and using the up/down arrow keys moves you forward or backward through the menus. **Programmable Setup:** The wall panel's behavior is programmable as well. Menu brightness in "active" and "inactive" states can be set independently, so the display will "sleep" in light-sensitive environments like theaters. If the ARC-2 goes idle, it can scroll a message and return to the top of its menu tree. Upper and lower parameter limits help contain the range of adjustment and a button press lockout will prevent tampering by curious but unauthorized fingers. The ARC-2 features an aluminum faceplate and includes a power supply while the ARC-2i features a white plastic faceplate and is powered directly by its host device, power supply not included. Both mount into a single gang electrical box (US).



# DATA SHEET: Integrator Series Automix Matrix 780

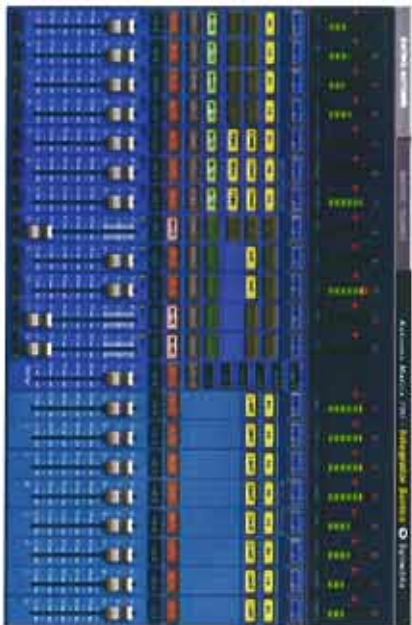


The Vision Behind the Sound



## The Integrator Series Automix Matrix 780 from Symetrix.

The third product in the Integrator Series is the **Automix Matrix 780**, designed to do justice to sound where justice matters most. The 780 provides the tools required for consistently clear audio in courtrooms, government chambers, corporate boardrooms and houses of worship. Featuring twelve inputs (eight microphone, four line level) and eight outputs, it contains microphone pre-amplification, compression, AGC, automixing (both Gating and Gain-sharing), matrix mixing, feedback elimination, filters, equalization, limiting and delay. Setup is easy and efficient with a straightforward Windows® interface connected over Ethernet. The 780 is also compatible with Symetrix RS-485-based Adaptive Remote Control (ARC) Wall Panels for user control. An interactive front panel provides convenient access to vital system parameters or may be custom programmed for user and technician control. Open Collector outputs can drive LEDs directly for status updates or integrate with external logic and automation systems. Save time and money with the Automix Matrix 780 from Symetrix, the engineering-driven company of signal processing specialists.



The **Automix Matrix 780's** beautiful software interface makes system setup a breeze. All mixing and routing functions are clearly displayed within two distinct panels ensuring that no parameter is more than two clicks away.

### Automix Matrix 780 Applications

AUTOMIXING, SUBMIXING, ROUTING AND PROCESSING FOR:

- Courtrooms
- Legislative and Government Chambers
- Corporate Boardrooms and Training Facilities
- Houses of Worship

### Features

- A complete, fully-optioned 12-channel Automixer with eight submixes for Courtrooms, Government Chambers, Corporate Boardrooms and Houses of Worship.
- Eight (8) Mic/Line inputs with filters, EQ, and feedback elimination into Gating or Gain-sharing Automixing with full control over NOM counts and priorities.
- Four (4) Line inputs featuring filters, EQ and Automatic Gain Control (AGC) for devices such as CD Player, TV Audio, DVD Audio, or an additional mixer.
- Eight (8) Outputs: Route sub or minus mixes to as many as eight (8) unique locations or dedicate any number of outputs to specific tasks such as recording, archive or broadcast.
- Wizard-driven software set-up: network ready.



## Half-space 1RU Solid State Audio Recorder

# DN-F450R

**100<sup>th</sup>**  
*Anniversary*  
**DENON**  
since 1910

The DN-F450R offers a simplified, cost competitive solid state recording and playback capability. Derived from the DN-F650R, the half rack size unit provides for recording and playback to and from SD and SDHC flash memory cards, with USB connectivity to PC for file management and transfer. Balanced analog inputs on XLR are featured alongside unbalanced I/O. Stereo and mono audio channels are simultaneously available, and PCM WAV and MP3 file formats are supported, at 48 / 44.1 kHz and 32 - 320 kbps. Serial and contact closure remote control are supported, and a headphone out with volume control is included. Selectable playback modes, power on auto play, marking and mark search, audible quick search, and easy file search with the front panel jog wheel are all featured.



### Key Features

- Recording to a SD/SDHC card
- Supports WAV (PCM) and MP3 format
- Half of 19 inch rack mountable, 1U size
- OLED display
- Balanced and unbalanced audio input
- Serial Remote (RS232)
- Contact closure remote control (Foot Pedal Remote)
- Connecting to PC via USB
- Marking and Mark search
- Audible Quick Search
- Various playback modes (Single/Continuous, Repeat, Random)
- Power On Auto Play
- Easy file search with Jog Wheel
- Headphones with Level Control

### Overview

The Denon DN-F450R is a highly versatile professional solid state recorder offering recording to SD/SDHC flash cards. Designed to fulfill the most demanding playback and recording applications in A/V installation, audio production, live sound, theatre and broadcast, the DN-F450R is a professionally specified, cost-effective replacement for cassette, DAT, MD, CDR and commodity PC based systems currently fulfilling such roles. The DN-F450R has balanced XLR analog audio inputs as well as unbalanced analog connectivity. Serial and contact closure remote control are supported for support with externally controlled devices and for system integration.

### Advanced Usability

The easy-to-read OLED display and easy file search jog wheel enables simple front panel operation. A variety of playback modes includes single, repeat, random, continuous and skip back play and a headphone out with volume control are also included.

### Recording and Formats

Stereo and mono audio channels are simultaneously available and both WAV and MP3 file formats are supported, with selectable sample rates of 48 and 44.1 kHz at 16 bit resolution, and MP3 bit rates between 32 and 320 kbps.



# DN-F450R

Continued

## Applications

- Education
- Government / Municipality
- Conference Recording
- Houses of Worship
- Broadcast
- Studio
- Lecture Recording
- Hospitality
- Corporate / Meeting Recording



## Specifications

### System

Media:	SD / SDHC
File Format:	WAV / MP3 (MPEG-1 Layer III)
Media Format:	FAT / FAT32
MP3 Bit Rate:	32 - 320 kbps / stereo
Sampling Frequency:	48 / 44.1 kHz
Quantization:	16 bit

### Audio Section

Audio Channels:	2 (Stereo) / 1 (Mono)
Frequency Response:	20 Hz ~ 20 kHz $\pm$ 1.0 dB
S/N Ratio:	90 dB (1 kHz, 0 dB playback, A filter)
Channel Separation:	80 dB (1 kHz, 0 dB playback)
Total Harmonic Distortion:	0.01% (1 kHz, 0 dB playback)
Dynamic Range:	96 dB

### Inputs

Balanced Input:	Type XLR (1:GND, 2:Hot, 3:Cold)
Input Sensitivity:	+24 / 0 dBu
Input Impedance:	24 kohms
Unbalanced Input:	Type RCA
Input Sensitivity:	500 mVrms
Input Impedance:	22 kohms

### Outputs

Unbalanced Output:	Type RCA
Level:	2 Vrms
Headphone Output:	Type TRS 1/4"
Level:	20 mW / 32 ohms

### General

Power Supply:	DC 5V (DA620PMD)
Power Consumption:	5 W
Dimensions (W x H x D):	217 x 44 x 270 mm
Weight:	1.7 kg

### Environmental Conditions

Operating temperature:	+5°C to +35°C
Operating humidity:	25% to 85%, no condensation
Storage temperature:	-20°C to +60°C
Storage humidity:	25% to 85%, no condensation

### Included Accessories

Stereo Audio Cable:	1
USB Cable:	1
AC Adaptor DA620PMD:	1
19" Rack Kit:	1
Operating Instructions:	1
CD-ROM for multi-language manuals & DMP Mark Editor software:	1

### Other Information

Carton Size (W x H x D):	435 x 145 x 310 mm
Carton Weight:	3.5 kg
Country of Origin:	Japan

D&M Professional  
1100 Maplewood Drive Itasca, Illinois 60143  
Tel: 630.741.0330 Fax: 630.741.0652  
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PLEASE NOTE: Specifications are based on measurement conditions and proper care for the machine, and are subject to change without notice.

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DENON marantz  
PROFESSIONAL PROFESSIONAL

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LEVEL

## Professional CD-R/RW Recorder

# CDR633

In 1992, Marantz was first to introduce the recordable Compact Disc to systems installers. The CDR600 was the first of its kind, and offered professional features at a price that users could afford. Of course, technology has improved and prices have lowered since 1992 — and of course, Marantz has always been leading the way.

Enter Marantz's newest standalone CD-RW recorder, the CDR633: positioned to make full-featured professional CD recording technology available to virtually any installation where the highest quality audio recording is desirable. Rackable in a 2U space, this professionally solid workhorse plays and records on standard CD-R and CD-RW discs. In addition, it will play MP3 files for hours and hours of playback from a single disc.

An updated version of its predecessor, Marantz Pro took care to pack the CDR633 with features specifically requested by the installation market — like Programmable Auto-Track Increment, Pitch Control, Level-dependent Sync Recording, Single Play Mode, Power-on Play and more. Analog, digital and optical input and output, complete with integrated sample rate conversion, are just a few examples of the meticulous design and engineering that went into the CDR633. CD-text can be programmed and read right from the front panel. Programmable fade-in/fade-out recording allows your clients' recording technique to be as good as their Marantz Professional CD-R sounds — and the list goes on.



### Key Features

- CD-R and CD-RW Recorder and Player with new worry-free slot-in mechanism
- Compatible with most discs - CD-R data, CD-R for digital audio, CD-RW data, and CD-RW for digital audio
- Marantz Minute Track with Adjustable Time - or Level-dependent Auto Track Increment
- Plays MP3s for hours of playback from one disc
- MP3 directory navigation
- CD-Text and ID3 tag displays right on the CDR633's FL display
- CD-Text can be input onto recorded tracks right from the front panel
- Plays unfinalized CD-Rs and CD-RWs
- Step-adjustable  $\pm 16\%$  Pitch Control
- Continuous, Shuffle (Random), Programmable and Single Playback and Repeat modes
- New Auto-cue feature for playback
- Internal Sample Rate Converter (32 ~ 48kHz)
- Analog and Coaxial / Optical (S/PDIF) digital inputs and outputs
- Auto Fade-in and Out with programmable time
- Sync (Level Dependent) Recording
- On-the-fly Manual Track Increment from front panel or remote
- 2 RU Rack mountable chassis

### Compatibility

The CDR633 may be the last CD recorder you ever consider for installation. It has analog and digital I/O's to interface with most audio gear, and uses most recordable or re-recordable discs on the market. It can even play back MP3s from CD-ROM discs, and unfinalized CD-Rs and CD-RWs.

### Professional Functionality

Not every installation has an engineer to run the show. The CDR633 includes convenience features like Marantz Minute Track with programmable auto-track increment, sync-recording, and programmable fade in/out to make your clients' recordings sound great with a minimum amount of effort. The Single Play function plays one track — and then stops. Your client doesn't have to worry about running to the machine or aiming the remote before the next track starts. Power-on play allows clients to start playback simply by powering on their system. The CDR633 even offers pitch control. Houses of Worship and other presentation venues will appreciate the ability to match the key of a soundtrack to the vocal range of their performers.

### Quality

And lest we forget, you're buying it from Marantz Professional. We pioneered CD recording over a decade ago, and we've been designing and engineering studio quality, commercial grade audio gear since the '60s. Our loyal customer base is no accident. They know that we build smartly designed, great sounding, exceedingly reliable equipment because those are the tools they use to make a living. If you know who we are, we're preaching to the choir. If not, consider the CDR633 for your next installation. We'll make you a loyal customer, too.

# CDR633

Continued



## Specifications

### Digital Audio System

System:	CD Recorder
Usable Media:	CD-R, CD-R-DA, CD-RW, CD-RW-DA (High Speed CD-RW is supported)
Quantization Bit Depth:	16-bit linear
Sampling Frequency:	44.1 kHz

### Audio Performance

Frequency Response:	20Hz - 20kHz
Playback:	±0.8 dB
Recording:	±1.0 dB
S/N Ratio	
Playback:	95 dB or better
Recording:	90 dB or better
Distortion	
Playback:	0.006% or less
Recording:	0.008% or less
Dynamic Range	
Playback:	95 dB or better
Recording:	90 dB or better
Channel Separation (at 1 kHz)	
Playback:	90 dB or better
Recording:	80 dB or better
Wow and Flutter:	below measurable limits (less than 0.001%)

### Analog Inputs

Unbalanced Input	
Type:	RCA jack
Nominal Input Level:	-10 dBV (at full scale: -16 dB)
Minimum Input Level:	-19 dBV or higher (minimum input level that can be adjusted to nominal level (Full Scale -16 dB))
Input Impedance:	22 kohms ±10% (unbalanced)

### Analog Outputs

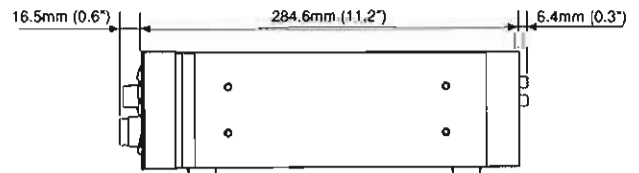
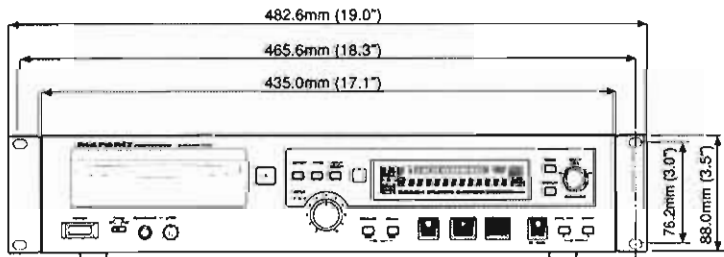
Unbalanced Output	
Type:	RCA jack
Nominal Output Level:	-10 dBV ±2 dB (at full scale: -16 dB)
Maximum Output Level:	+6 dBV ±2 dB
Output Impedance:	600 ohms ±10% (unbalanced)
Phones Output:	Stereo Phone Jack (1/4") 20 mW or greater 32 ohm load

### Digital Output

Coaxial	
Type:	RCA jack (IEC-60958 Type II)
Optical	
Type:	TOSLINK (IEC-60958 Type II)

### General

Power Supply / U1B:	120 VAC / 60Hz
Current Consumption / U1B:	18 W
Dimensions	
Width:	482.6mm (19")
Height:	98mm (3.9")
Depth:	307.5mm (12.1")
Weight:	4.3Kg (9.5 lbs)



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