

Sonnex® Multiroom Audio Expander, 8-Zone

- > 8-Zone Sonnex® expansion with amplified outputs
- > 140 Watts/Ch. @ 8 Ohms, 400 Watts/Ch. bridged
- > 70/100 Volt “constant-voltage” output options available
- > Advanced DSP, mono summing, and output bussing per zone
- > Sonnex Speaker Protect™
- > Individual zone power control and global standby
- > Remote fault monitoring
- > Heavy duty detachable terminal blocks
- > Single-cable interface to SWAMP-24X8 via Sonnex Link
- > Plug-and-play operation
- > Low power consumption, cool-running operation
- > Three-space rack mountable



The SWAMPE-8 is an 8-zone expander for the Sonnex® Multiroom Audio System (SWAMP-24X8^[1]) from Crestron®. It adds 8 stereo amplified zones to the Sonnex system, with the option for installation at the central equipment rack or at a remote location near the rooms it serves. The latter “decentralized” approach has the benefit of minimizing the amount of speaker wiring required, affording higher performance and efficiency, and a faster, easier, and less expensive installation.

Integrated Audiophile Amplifier

The SWAMPE-8 features the same custom hybrid amplifier design as the SWAMP-24X8, delivering the warmth and neutrality of a fine Class AB amplifier with all the efficiency benefits of modern Class D. Each of its 16 channels (configured as 8 stereo zones) delivers 140 Watts into 8 Ohms, or 240 Watts into 4 Ohms, and any two adjacent outputs can be bridged to produce 400 Watts per channel at 8 Ohms. Even with such incredible power, the SWAMPE-8 runs cool and efficiently, and requires only three rack spaces for mounting. Each zone is individually controllable to save energy by turning off any unused channels.

Digital Signal Processing

Each zone features independent DSP for optimal sound quality and control in every room. Sonnex DSP capabilities include the choice of graphic or parametric 5-band EQ, dynamic range control, volume, bass, treble, balance, loudness, mute, mono summing, and five selectable tone profiles. For passive subwoofer applications, a choice of 2nd or 4th order active crossover filters can be set using the parametric EQ, leaving the four remaining EQ filters available for room correction and tonal enhancement.

Output Bussing

Output bussing allows multiple zones to function as one, whether fed from the SWAMPE-8, the SWAMP-24X8, or another Sonnex Expander. Output bussing is ideal for grouping adjacent listening areas together or associating a subwoofer with its stereo speaker pair. Volume Offset adjustments allow for balancing the levels of each bussed zone for smooth, even coverage.

70/100V Option

Any zone output can be converted to 70 or 100 Volt using one or more Sonnex Output Transformers (SAT-70V/100V-2 or SAT-70V/100V-4^[1]). Also known as “constant-voltage”, 70 Volt and 100 Volt speaker systems allow for long wire runs using small-gauge wire, with the potential for connecting numerous speakers per circuit. Typical applications include outdoor speaker zones, commercial retail spaces, hallways, and common areas.

Simple, Versatile Installation

The SWAMPE-8 can be installed along with the SWAMP-24X8 at the central equipment rack, or separately at a remote location. It interfaces with the SWAMP-24X8 via a single CAT5e shielded twisted pair (STP) cable up to 200 ft (61 m) in length^[2]. This length can be increased to 2000 ft (610 m) using multimode fiber optic cable with the S-EXT1-S Sonnex Link over Fiber Extender^[1]. Plug-and-play connectivity affords an extremely easy installation, with full control access to all the SWAMPE-8 functions provided through the SWAMP-24X8.

Please see the SWAMP-24X8 spec sheet for complete Sonnex system information.

SPECIFICATIONS

Audio

Input Signal Types: Sonnex® Link

Output Signal Types: Stereo speaker level

Typical of up to 8 amplified stereo zone outputs:

Digital-To-Analog Conversion: 24-bit 48 kHz

Output Power: 140 Watts per channel at 8 Ohms;

240 Watts per channel at 4 Ohms;

400 Watts per channel at 8 Ohms bridged

Damping Factor: >200 @ 20 Hz

Amplifier Monitoring: Over Current, Over/Under Voltage, Over Temperature, DC Offset, Clipping

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SWAMPE-8 – Rear View

Frequency Response: 20 Hz to 20 kHz ± 0.5 dB
THD: 0.02%
S/N Ratio: >105dB SPDIF in, >100dB balanced or unbalanced analog in, A-weighted
Stereo Separation: >90dB
Zone Separation: >95dB
Zone Volume Level Control: -80.0 to +20.0 dB, adjustable from 0% to 100% plus mute
Bass Control: ± 12.0 dB
Treble Control: ± 12.0 dB
Loudness Compensation: On/Off
Dynamic Range Control: On/Off
Balance Control: Left/right adjustable
Mono Summing: Selectable
Power Limiting: Sonnex Speaker Protect[™] (SSP[®]) output limiting; configurable 40 to 140 Watts @ 8 Ohms, 40 to 240 Watts @ 4 Ohms, 40 to 400 Watts @ 8 Ohms bridged
Tone Profiles: Flat, Classical, Jazz, Pop, Rock, Spoken Word
EQ Modes: 5-band graphic or 5-band parametric EQ
GEQ Center Frequencies: 63, 250, 1k, 4k, 16k Hz
GEQ Gain: ± 12.0 dB per band
PEQ Filter Types: EQ, High Pass, Low Pass, Treble Shelf, Bass Shelf, Notch
PEQ Center Frequency: 10 to 20,000 Hz per band
PEQ Gain: ± 12.0 dB per band
PEQ Bandwidth: 0.1 to 3.5 octaves per band
Speaker Profiles: Comprises 5-band GEQ and SSP settings
Bus Volume Offset: ± 12.0 dB per zone for output bussing

Communications

Sonnex Link: 64-channel (48 utilized) digital audio w/embedded control, auto-discovery, auto-negotiating

Connectors

DIGITAL IN: (1) 8-wire RJ45 female;
Sonnex link input;
Connects to SWAMP-24X8 Multiroom Audio System^[1,2]

FUSE (US/North America): Main fuse, T15AH;
(1/4" x 1-1/4", 250V, 15A, time-lag, high-rupture rated)

FUSE (International): Main fuse, T8AH;
(1/4" x 1-1/4", 250V, 8A, time-lag, high-rupture rated)

120V~50/60Hz MAX 12A (US/North America): (1) IEC 60320 C14 main power inlet, mates with removable power cord (included);
A dedicated 15 Amp circuit is strongly recommended

220-240V~50/60Hz MAX 6A (International): (1) IEC 60320 C14 main power inlet, mates with removable power cord (included);
A dedicated 10 Amp circuit is strongly recommended

G: 6-32 screw, chassis ground lug

SPEAKER OUTPUTS LEFT/RIGHT 1 – 8: (16) 2-pin 7.62mm 15A detachable terminal blocks;

Power amplifier outputs;

Wire Size: Terminals accept up to 14 AWG

Controls & Indicators

On/Off: (1) Rocker switch, turns unit on and off

PWR: (1) green LED, indicates unit is turned on

ZONE 1 – 8: (8) pushbuttons and green LEDs, select output zone for routing and adjustment

DIGITAL IN (rear): (1) green and (1) amber LEDs, green indicates link status and amber indicates data communication

Bridging (rear): (8) red LEDs, indicate adjacent outputs are configured for bridged operation

Power Requirements

Main Power (US/North America): 12 Amps @ 120 Volts AC, 50/60 Hz (a dedicated 15 Amp circuit is strongly recommended)

Main Power (International): 6 Amps @ 220-240 Volts AC, 50/60 Hz (a dedicated 10 Amp circuit is strongly recommended)

Environmental

Temperature: 41° to 104°F (5° to 40°C)

Humidity: 10% to 90% RH (non-condensing)

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Heat Dissipation: 475 BTU/Hr (140W@8Ω), 750 BTU/Hr (240W@4Ω)

Enclosure

Chassis: Metal with black finish, vented sides, variable-speed fan-cooled

Front Panel: Metal, black finish with polycarbonate label overlay

Mounting: Freestanding or 3U 19-inch rack-mountable (feet and rack ears included)

Dimensions

Height: 5.83 in (149 mm);
5.20 in (133 mm) without feet

Width: 19.0 in (483 mm);
17.29 in (439 mm) without rack ears

Depth: 18.22 in (463 mm)

Weight

60.0 lb (27.3 kg)

MODELS & ACCESSORIES

Available Models

SWAMPE-8: Sonnex® Multiroom Audio Expander, 8-Zone

SWAMPIE-8: Sonnex® Multiroom Audio Expander - International Version, 8-Zone

Available Accessories

SWAMP-24X8: Sonnex® Multiroom Audio System

SWAMPI-24X8: Sonnex® Multiroom Audio System - International Version, 220-240V

DM-CBL-8G-NP: High-Performance CAT5e Shielded Twisted-Pair Cable, non-plenum

DM-CBL-8G-P: High-Performance CAT5e Shielded Twisted-Pair Cable, plenum

DM-8G-CONN: Cable Connector for DM-CBL-8G

DM-8G-CRIMP: Crimping Tool for DM-8G-CONN

DM-8G-CONN-WG: Cable Connector with Wire Guide for DM-CBL-8G

DM-8G-CRIMP-WG: Crimping Tool for DM-8G-CONN-WG

S-EXT1-S: Sonnex® Link over Fiber Extender

SAT-70V/100V-2: 2-Channel Sonnex® Output Transformer

SAT-70V/100V-4: 4-Channel Sonnex® Output Transformer

EXCITE Series: Excite® In-Ceiling & In-Wall Speakers

ASPIRE Series: Aspire® In-Ceiling & In-Wall Speakers

ESSENCE Series: Essence® In-Ceiling & In-Wall Speakers

AIR Series: AIR® Surface Mount Outdoor Speakers

SAROS Series: Saros® Commercial Speakers

Notes:

1. Item(s) sold separately.
2. For connection of the Sonnex Link between the SWAMPE-8 and [SWAMP-24X8](#), use Crestron [DM-CBL-8G](#) or high-quality CAT5e shielded twisted-pair cable. The maximum cable length using DM-CBL-8G or CAT5e is 200 ft (61 m). For longer distances, use the [S-EXT1-S](#) Sonnex Link over Fiber Extender.

This product may be purchased from an authorized Crestron dealer. To find a dealer, please contact the Crestron sales representative for your area. A list of sales representatives is available online at www.crestron.com/salesreps or by calling 800-237-2041.

The specific patents that cover Crestron products are listed online at: patents.crestron.com.

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