Sonnex® Multiroom Audio Expander, 4-Zone

> *4-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-4 is a 4-zone expander for the Sonnex® Multiroom Audio System (SWAMP-24X8[1]) from Crestron®. It adds 4 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-4 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 8 channels (configured as 4 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-4 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-4, 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-4 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-4 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 4 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

SWAMPE-4 – 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, T8AH; (1/4" x 1-1/4", 250V, 8A, time-lag, high-rupture rated)

FUSE (International): Main fuse, T4AH; (1/4" x 1-1/4", 250V, 4A, time-lag, high-rupture rated)

120V~50/60Hz MAX 6A (US/North America): (1) IEC 60320 C14 main power inlet; Mates with removable power cord (included)

220-240V~50/60Hz MAX 3A (International): (1) IEC 60320 C14 main power inlet; Mates with removable power cord (included)

G: 6-32 screw, chassis ground lug

SPEAKER OUTPUTS LEFT/RIGHT 1 – 4: (8) 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 – 4: (4) 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): (4) red LEDs, indicate adjacent outputs are configured for bridged operation

Power Requirements

Main Power (US/North America): 6 Amps @ 120 Volts AC, 50/60 Hz

Main Power (International): 3 Amps @ 220-240 Volts AC, 50/60 Hz

Environmental

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

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

Heat Dissipation: 300 BTU/Hr (140W@8Ω), 450 BTU/Hr (240W@4Ω)

SWAMPE-4   Sonnex® Multiroom Audio Expander, 4-Zone

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 lb (27.3 kg)

MODELS & ACCESSORIES

Available Models

SWAMPE-4: Sonnex® Multiroom Audio Expander, 4-Zone
SWAMPIE-4: Sonnex® Multiroom Audio Expander - International Version, 4-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-4 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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Cover
17.08 in
(43.39 cm)

17.75 in
(45.09 cm)

17.41 in
(44.23 cm)

17.69 in
(44.93 cm)

Rack Ears
17.26 in
(43.84 cm)

5 in
(12.7 cm)

0.28 in
(0.71 cm)

17.29 in
(43.9 cm)

18.22 in
(46.28 cm)

0.2 in
(0.49 cm)

4.98 in
(12.64 cm)

3.73 in
(9.47 cm)

1.48 in
(3.75 cm)

0.23 in
(0.58 cm)

5.2 in
(13.21 cm)

5.83 in
(14.81 cm)

18.32 in
(46.52 cm)

19 in
(48.26 cm)

2.15 in
(5.45 cm)

2.44 in
(6.2 cm)

13 in
(33.02 cm)

13 in
(33.02 cm)

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