MPS 112 & MPS 112CS

MEDIA PRESENTATION SWITCHERS

- ■ Three switchers in one enclosure:
    - — Four input VGA and stereo audio switcher
    - — Four input S-video and stereo audio switcher
    - — Four input composite and stereo audio switcher
- ■ 350 MHz (-3dB) RGB video bandwidth
- ■ Program Audio switcher with volume and mute control
- ■ Two operating modes: single switcher or separate switcher
- ■ Microphone input
- ■ 48V microphone phantom power (MPS 112CS only)
- ■ Microphone Talk Over mode to voice over the program audio
- ■ RS-232 control
- ■ Rugged metal enclosure
- ■ Versatile mounting options
- ■ Internal international power supply

MPS 112

The Extron MPS Media Presentation Switchers merge three independent switchers into a single enclosure: a four input, one output VGA with stereo audio switcher; a four input, one output S-video with stereo audio switcher; and a four input, one output composite video with stereo audio switcher.

Extron® Electronics

DESCRIPTION

The easy-to-integrate **MPS 112** and **MPS 112CS** switchers are cost-effective solutions for signal routing applications – small conference rooms, boardrooms, classrooms, and rental and staging environments – that usually require three separate switchers.

Both switchers can switch between VGA, S-video, and composite video signals, enabling presenters to incorporate and access a variety of different sources. Together with a wide range of audio enhancements, the MPS 112 and MPS 112CS can accommodate virtually any presentation environment.

There are several distinct differences between the MPS 112 and MPS 112CS. They are broken down as follows:

Model	Microphone Connector	Microphone Power	Program Audio Output
MPS 112	1/4" phono jack	15V power	RCA connectors (unbalanced)
MPS 112CS	Captive screw connectors	48V phantom power	Captive screw connectors (balanced/unbalanced)

The MPS 112 and MPS 112CS can be mounted in a rack or podium, as well as under a desk, for easy and trouble-free integration. Offering unique feature sets, either switcher can be controlled via the front panel buttons or RS-232. Both models are flexible and intuitive media presentation switchers, designed to streamline operations and centralize video and audio switching.
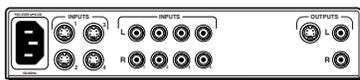
Three Switchers in One

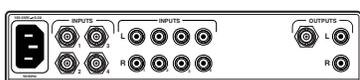|	Video Signal Type	Video Connectors	Stereo Audio Connectors	Inputs	Outputs
1	VGA	15-pin HD	3.5 mm female stereo mini jack	4	1
2	S-Video	4-pin mini DIN	RCA	4	1
3	Composite Video	BNC	RCA	4	1

4 input VGA and stereo audio switcher

+

4 input S-video and stereo audio switcher

+

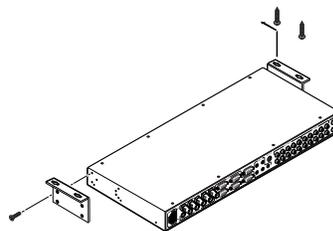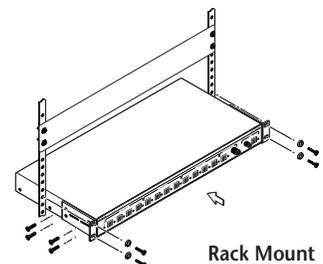**4 input composite video and stereo audio switcher**

MPS 112

FEATURES

- **Bandwidth** – 350 MHz (-3dB) RGB video bandwidth maintains signal integrity.

- **Program Audio switcher** – Provides volume and mute control while switching stereo audio output between all of the sources (VGA with stereo audio, S-video with stereo audio, and composite video with stereo audio) and mix with the microphone input. This feature can be controlled via the front panel or RS-232.

- **Single Switcher mode** – Allows one-touch switching. When one of the 12 inputs is accessed, the signals of the input will be routed to the outputs of its group, as well as to the Program Audio output. Outputs of the other groups are muted, while audio output is centralized to its own group.

- **Separate Switcher mode** – Allows independent switching to the output of any given I/O group. This effectively breaks down the MPS 112 or MPS 112CS into three separate switchers in one box. The Program Audio can output the audio signals from any group, while cuing up for another group without interruption.

- **Microphone input** – Complete with volume and mix control, the MPS 112 and MPS 112CS enable voice announcements with an unbalanced mono microphone input on a 1/4-inch phone jack (MPS 112) or a balanced/unbalanced mono microphone input on captive screw connectors (MPS 112CS).

- **Microphone power** – The MPS 112 offers +15V microphone power, while the MPS 112CS includes a 48V microphone phantom power to support condenser microphones.

- **Microphone Talk Over** – Whenever a signal is present at the microphone output, Microphone Talk Over automatically reduces the A/V audio level.

- **Quad standard** – The MPS 112 and MPS 112CS are capable of switching NTSC 3.58, NTSC 4.43, PAL, and SECAM video (quad standard) for worldwide compatibility.

- **RS-232 control** – A rear panel, RS-232 port enables control via a third party control system. Extron's Simple Instruction Set (SIS™) allows for quick and easy programming.

- **Versatile mounting options** – The MPS 112 and MPS 112CS are housed in rugged, 1U, full rack width metal enclosures, and can be easily mounted into any rack or podium, or under a desk.

- **Internal international power supply** – The autoswitchable, internal power supply provides worldwide power compatibility.
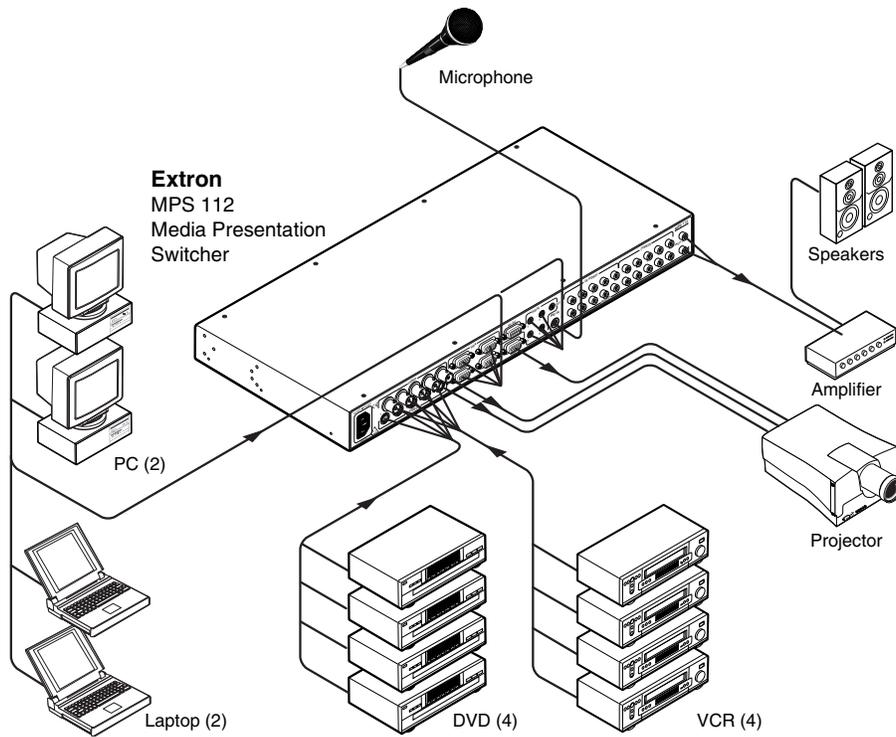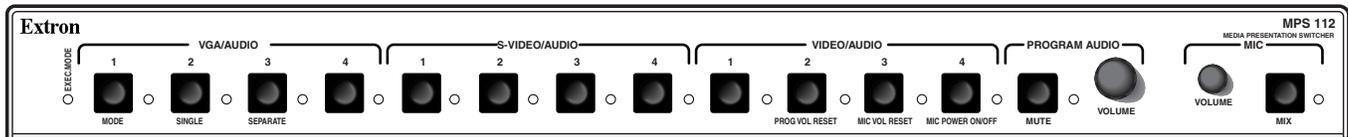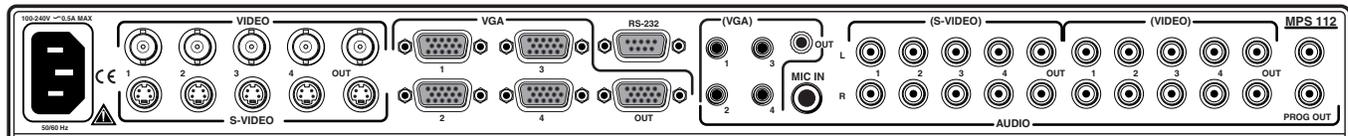

Under-desk Mount

Rack Mount

APPLICATION DIAGRAM

Extron
MPS 112
Media Presentation
Switcher

Microphone

Speakers

Amplifier

Projector

PC (2)

Laptop (2)

DVD (4)

VCR (4)

PANEL DRAWINGS

MPS 112 Front

MPS 112 Back
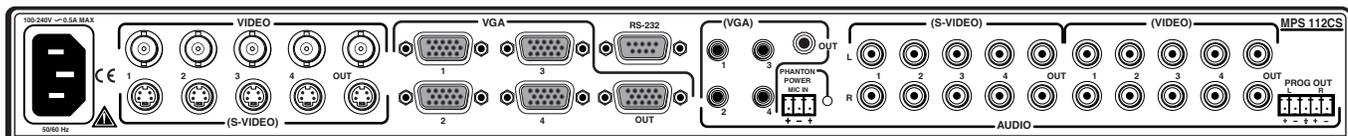
MPS 112CS Back

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SPECIFICATIONS

VIDEO

Gain	Unity
Bandwidth	350, 250, 300 MHz (-3dB) for VGA, S-video, composite video, respectively
Differential phase error	1.0° at 3.58 MHz and 4.43 MHz
Differential gain error	1.0% at 3.58 MHz and 4.43 MHz

Crosstalk
  VGA signal group .... -68dB @ 10 MHz, -39dB @ 100 MHz
Switching speed
  VGA group's sync .... <5 ms (max.)
  VGA/S-video/composite video.. ~100 ms

VIDEO INPUT

Number/signal type
  VGA inputs .... 4 VGA–UXGA RGBHV, RGBS, RGsB, RsGsBs
  S-video & video inputs ... 4 NTSC/PAL/SECAM
Connectors .... (4) 15-pin HD, (4) 4-pin mini DIN, and 4 BNC for VGA, S-video, composite video, respectively

VIDEO OUTPUT

Connectors .... (1) 15-pin HD, (1) 4-pin mini DIN, and 1 BNC for S-video, composite video, respectively

SYNC

Type (VGA group) .... RGBHV, RGBS, RGsB, RsGsBs
Standards (S-video & composite video groups)
  NTSC 3.58, NTSC 4.43, PAL, SECAM
Input level .... 1.9V to 5.0V p-p
Output level .... TTL: 5.0V p-p (unterminated)

AUDIO — INDIVIDUAL AUDIO GROUPS (VGA, S-VIDEO, COMPOSITE VIDEO)

Gain .... Unity
Frequency response ..... 20 Hz to 20 kHz, ±0.05dB
THD + Noise .... 0.03% @ 1 kHz, 0.3% @ 20 kHz at nominal level
S/N .... >90dB at maximum output

AUDIO INPUT — INDIVIDUAL AUDIO GROUPS (VGA, S-VIDEO, COMPOSITE VIDEO)

Number/signal type ..... 4 stereo, unbalanced, per each group
Connectors
  VGA input group ...... (4) 3.5 mm female stereo mini jacks; tip (L), ring (R), sleeve (GND)
  S-video and composite video input groups ... 4 pairs of female RCA connectors per group
Nominal level .... -10dBV (316mV)
NOTE: 0dBu = 0.775V (rms), 0dBV = 1V (rms), 0dBV≈ 2dBu.

AUDIO OUTPUT — INDIVIDUAL AUDIO GROUPS (VGA, S-VIDEO, COMPOSITE VIDEO)

Number/signal type ..... 1 stereo, unbalanced, per each group
Connectors
  VGA group .... (1) 3.5 mm female stereo mini jack; tip (L), ring (R), sleeve (GND)
  S-video and composite video groups ..... 1 pair of female RCA connectors per each group
Nominal level .... -10dBV (316mV)
Maximum level (Hi-Z) ... +10dBV (3.16V) at 1% THD+N

AUDIO — PROGRAM AUDIO

Gain
  When program volume is at default:
    MPS 112: 0dB for unbalanced output
    MPS 112CS: 0dB for unbalanced output, +12dB for balanced output
  When program volume is at maximum:
    MPS 112: +12dB for unbalanced output
    MPS 112CS: +12dB for unbalanced output, +18dB for balanced output
Program volume range ... 0 to 82 (-70dB to +12dB)
Frequency response ..... 20 Hz to 20 kHz, ±0.05dB
THD + Noise .... 0.03% @ 1 kHz, 0.3% @ 20 kHz at nominal level
S/N .... >90dB at maximum output drive

AUDIO OUTPUT — PROGRAM AUDIO

Number/type
  MPS 112 .... 1 stereo, unbalanced
  MPS 112CS .... 1 stereo, balanced/unbalanced
Connectors
  MPS 112 .... (1) pair of RCA connectors
  MPS 112CS .... (1) 3.5 mm, 5-pole captive screw connector

MICROPHONE INPUT

Number/type
  MPS 112 .... 1 mono unbalanced
  MPS 112CS .... 1 mono balanced/unbalanced
Connectors
  MPS 112 .... (1) 1/4" (6.3 mm) audio connector; tip (signal), sleeve (GND)
  MPS 112CS .... (1) 3.5 mm, 3-pole captive screw connector
Nominal level .... -60dBV (1mV) when mic volume is set to 0dB gain
Microphone DC power
  MPS 112 .... 15VDC, can be turned on or off
  MPS 112CS .... 48VDC phantom power, can be turned on or off

CONTROL/REMOTE — SWITCHER

Serial control port ...... RS-232, 9-pin female D connector
Program control .... Extron's control program for Windows® Extron's Simple Instruction Set™ – (SIS™)

GENERAL

Power .... 100VAC to 240VAC, 50/60 Hz, 20 watts, internal, autoswitchable
Rack mount .... Yes, with included brackets, part #70-077-03, or furniture mountable with an optional under-desk mounting bracket, part #70-222-01.
Enclosure type .... Metal
Enclosure dimensions ... 1.75" H x 17.4" W x 8.5" D (1U high, full rack width) 4.4 cm H x 43.2 cm W x 21.6 cm D (Depth excludes connectors and knobs. Width excludes rack ears.)
Product weight .... 7.0 lbs (3.2 kg)
Shipping weight .... 10 lbs (4.5 kg)
Listings/Compliances ... UL, CUL, CE, FCC Class A, VCCI, AS/NZS, ICES
MTBF .... 30,000 hours
Warranty .... 3 years parts and labor

Model	Part Numbers
MPS 112	60-532-01
MPS 112CS	60-532-02

Specifications are subject to change without notice.