MCS-8M
Compact Audio Video Mixing Switcher
Sony introduces a new model to its switcher lineup, the MCS-8M Compact Switcher with a built-in audio mixer and frame synchronizer.

Equipped with a variety of interfaces as standard, the MSC-8M in HD mode can accept sources from HD SDI, HDMI and DVI-I input. Plus with 3ch AUX output, this switcher can be easily integrated into a wide-range of production systems.

In addition, this user-friendly switcher has many preset DME wipe patterns, P in P, a built-in multi-viewer, one-channel frame memory output, an Input Freeze function for each source, the ability to import still images via a USB port, a 3D Mode function, a six-channel audio mixer, and more.

Designed to be simple with intuitive operability, the MCS-8M reduces the learning curve time and provides ideal functionality for a wide range of small live production applications. Affordable and powerful, it is well-suited for applications from fly packs, weddings, houses of worship productions, music videos to conferencing.
Versatile Capability

The MCS-8M is a powerful production tool, with Sony’s state-of-the-art switcher technology packed into its compact body. The internal video-processing technology comes from Sony’s popular and trusted Sony MVS Series switchers. Based on the production needs, a signal can be selected from either HD or SD mode for processing. This switcher offers an ideal performance for small live productions.

HD Mode: 1080i/59.94/50, 720p/59.94/50
SD Mode: 480i/59.94, 576i/50

Unique and Creative AUX MIX Function

Not only can you make a mix transition within AUX1 or AUX2, but you can prepare the program video on M/E by setting parameters such as effects and keys before it is switched from AUX 1 and AUX2. Then make a mix transition from a source assigned to AUX1 PVM/AUX2 PVM to the prepared program video. The performance is similar to that of integrating an additional M/E row, and the mix capability is available for both AUX1 and AUX2 outputs. With this flexibility, the MCS-8M allows you to choose AUX MIX function or 3 different program outs and apply to a wide range of system configurations and applications.

Application Examples:
- Presentation: Program out for speaker, AUX1 and AUX2 for PC sources and Video source.
- Live News: Switching Studio and Video feed from Field by AUX MIX.

Inputs
HD Mode: HD-SDI (x 4), HDMI (x 3), DVI-I (x 1)
SD Mode: SD-SDI (x 4), Analog Composite (x 3), DVI-I (x 1)
* Frame synchronizer function is available for all inputs.

Outputs
HD Mode: PGM (HD-SDI), AUX1 (HD-SDI), AUX2 (HD-SDI and DVI-D), Multi-viewer (DVI-D and HD-SDI)
SD Mode: PGM (SD-SDI), AUX1 (SD-SDI), AUX2 (SD-SDI and Analog Composite), Multi-viewer (DVI-D and SD-SDI)
Built-in Six-channel Audio Mixer Function with Audio Delay Adjustment

For applications such as making music videos or multi-lingual programming, the MCS-8M supports six-channel audio assignable from any input. An excellent audio delay adjustment function is also provided for lip synchronization.

- **Audio Delay Adjustment Up To 7.5 Frames**
  Adjustment is separately applied to PGM, AUX1 and AUX2.

- **Audio Monitoring Function**
  - Selected audio channel
  - PGM, AUX1, AUX2, or MIX

**Audio Input:**
SDI (Embedded x 4), HDMI (Embedded x 3), MIC/LINE (XLR/TRS combo: Balance x 2), MIC/LINE (TRS phone: Balance x 4), LINE (Phono jack: Unbalance x 2)

**Audio Output:**
SDI (Embedded x 3), PGM (XLR: Balance x 2), AUX (TRS phone: Balance x 2), MON (TRS phone: Balance x 2), MIX (Phono jack: Unbalance x 2), Headphones (x 1)
Multi-viewing Function Reduces Total System Cost

The Multi-viewing function splits the screen into ten or four windows to show multiple sources on a single monitor. You can check sources on the same monitor at the same time.

The sub-screen with a red frame contains the video that is currently on air. The multi-viewing video signal is output from SDI and DVI-D simultaneously.

**Multi-viewing (10-split) Out**

**Multi-viewing (4-split) Out**

Benefits for Live Production Operations

**Frame Memory System**
The MCS-8M provides one-channel frame memory. Up to 12 still images can be stored.

**Import Still Image Function Via a USB port**
TIFF/TGA images with alpha channels and BMP images can be imported from USB memory.

**Input Freeze Function for Each Source**
A freeze video can be assigned to any cross point to be used as a video input signal. It can be exported from a USB port.

**Snapshot**
The snapshot function allows you to save effect and key configurations for a specific scene. By saving frequently-used configurations as snapshots, you can quickly recall settings when necessary. Up to 20 snapshots can be saved.

**Preset Effect Buttons**
The following effect patterns are pre-assigned to the numeric buttons (0 to 9). These buttons make it easy for you to apply effects to the video.

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Effect Pattern List

- Wipe
  - 1021
  - 1022
  - 1023
  - 1024
  - 1025
  - 1026
  - 1027
  - 1028
  - 1029
  - 1030

- Mix
  - 900

- NAM (non-additive mix)
  - 901

- Slide
  - 1001
  - 1002
  - 1003
  - 1004
  - 1005
  - 1006

- Squeeze
  - 1021
  - 1022
  - 1023

- Door (3D)
  - 1041
  - 1042
  - 1043

- Frame In/Out
  - 1011
  - 1012
  - 1013

- Flip Tumble
  - 1101

- Mosaic
  - 1102

- Defocus
  - 1103

1) Can only be used for BKGD transitions.
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Rear Panel View

- Analog Composite Video Output (AUX) *1
- Analog Audio Output
- Analog Audio Input
- Analog Composite Video Input *1
- Analog Composite Video Output (MULTI VIEWER, AUX)
- HDMI Input *2
- DVI-I Input
- SDI Input
- SDI Output (MULTI VIEWER)
- SDI Output (AUX2, AUX1, PGM)
- DVI-D Output (MULTI VIEWER, AUX)

*1 Available in SD mode.
*2 Available in HD mode.

MCS-8M switcher shown with LMD-1530W monitor and HXC-D70K camera.
System Configuration Example:

The MCS-8M is effectively used in combination with other leading Sony products including HD/SD system cameras (the HXC Series), SD system cameras (the DXC Series), and camcorders (the XDCAM EX™ Series and NXCAM® Series). Setting up a system with these various elements, you can easily achieve solutions for small-scale production right up to full-scale live production.

**3D Mode (L/R-linked Cut or Mix, Side-By-Side Output)**

In 3D mode, CUT or MIX functions are available as a background transition of right-eye and left-eye signals. 3D images can be output as side-by-side signals.
## Specifications

### General

- **Power requirement**: 100 V AC to 240 V AC ±10%, 50/60 Hz
- **Power consumption**: 100 V: 0.7 A, 240 V: 0.3 A
- **Dimensions (W x H x D)**: 16 5/8 x 4 7/8 x 10 1/2 inches (420 x 122 x 265 mm)
- **Weight**: 13 lb 4 oz (5 kg)
- **Operating temperature**: 41 °F to 104 °F (5 °C to 40 °C)
- **Supported format**: 1080i/50, 1080i/59.94, 720p/50, 720p/59.94, 480i/59.94, 576i/50

### Input/output

#### Video input

- SDI: BNC (x4), SMPTE-292M, 299M, 259M-C, 272M-A
- HDMI: HDMI (Type A) (x3)
- DVI-I: DVI (x1) (DVI-I)
- Composite: BNC (x3)
- Reference: BNC (x2), loop through 75 Ω, analog black burst or tri-level sync signal

#### Video output

- SDI: BNC (x4), SMPTE-292M, 299M, 259M-C, 272M-A
- DVI-D: DVI (x2) (AUX, MULTI VIEWER)
- Composite: BNC (x1)
- Reference: BNC (x1), 75 Ω, black burst signal

#### Audio input

- Analog input 1 and 2: XLR/TRS combo (x2) (MIC/LINE 1 and 2), male
- Analog input 3 to 6: TRS phone (x4) (MIC/LINE 3 to 6)
- Analog input 7 and 8: Phono jack (x2) (LINE 7 and 8)

#### Audio output

- Analog output 1 and 2: XLR (x2) (PGM OUT L and R), female
- Analog output: TRS phone (x4) (AUX 1/AUX 2/MON L/MON R)
- Analog output: Phono jack (x2) (MIX L/MIX R)
- Headphones output: Standard stereo phone (x1)

### Other Interfaces

- **USB**: Type A (x1)
- **Remote**: D-sub 9-pin (x1), male, RS-232C
- **TALLY/GPI**: D-sub 15-pin (x1), male

### Supplied accessories

- 75-ohm termination resistor (1)
- Operating instructions for basic operation (Japanese and English, 1 each)
- CD-ROM operating instructions for basic/advanced operation (Japanese, English, French, German, Italian, Spanish, Simplified Chinese, Korean, and Portuguese) (1)

## Dimensions

![Dimensions Diagram]

Unit: inches (mm)