



Roland XS-1HD

ProdCode: ROLXS1HD

Multi-Format Matrix Switcher



[Download Images] (.zip file)

Features

- Multi-Format Matrix Switcher
- A table-top matrix switcher that's the width of a 13" laptop, equipped with four HDMI inputs and outputs
- High-quality 4:4:4/10-bit processing at up to WUXGA/1080p
- Frame synchronizer and scaler on all inputs
- Three operation modes Matrix Mode allow switching of 4 sources to any of 4 outputs
- Switcher Mode allows PinP, key-compositing, and dissolve transitions
- Split Mode allows PinP of up to three inset windows
- Built-in eight-channel digital audio mixer handles audio from four HDMI signals and stereo analogue input
- Built-in EDID emulator, and HDCP-compliant
- Still images can be loaded from a USB flash drive

A Versatile And Compact Switcher With Multi-Screen Output And Video Compositing.

A Multi-Format Matrix Switcher With Scalers That Supports Up To Full HD.

APPLICATIONS AND EXAMPLE CONNECTIONS

LIVE EVENTS

The XS-1HD is ideal for supporting live event productions that involve a variety of video signals. A high quality scaler is provided on each input, allowing for fast setup. At only the width of a 13" laptop computer, the XS-1HD allows realtime operation in even the most space-limited working environments.

- **Exhibits**

The XS-1HD can switch video from up to four sources such as cameras, computers, or media players, and freely assign them to LCD displays or projectors. A built-in scaler on each input means that the position or zoom can be adjusted even if the video signals being input have different formats. Since an EDID emulator is built-in, the correct resolution will be sent from computers to the switcher. You can instantly change the what is being sent to any display by recalling previously-saved preset memories as the event progresses or when appropriate for the situation.

- **Stage Events / Conferences**

Matrix mode lets you switch to a total of four output destinations, such as a main screen, a secondary screen, a monitor for the presenter, and a digital signage for general information. Switcher mode is convenient when the operator requires traditional realtime switching capability with a multiview preview, PinP, key-compositing, and dissolve transitions.

MEETING ROOM / BANQUET ROOM / HALL

The XS-1HD is ideal for banquet venues, halls, theaters, or e-learning studios that use multiple destinations to display video. Complex applications that would otherwise require the integration of video switchers, audio mixers, and control panels can be realized using just the XS-1HD. Since settings can be stored, even complex setups can be recalled instantly. The RS-232 control port makes it easy add a third-party control system to the XS-1HD.

- **Conference Rooms With Multiple Displays**

The built-in scalers and multiple operation modes make it ideal for use in

event spaces since it handles ever changing input source types and resolutions and adapts to different output destination requirements easily. HDCP compliance makes it indispensable when clients want to playback HDCP-protected HDMI signals from sources such as Blu-ray or smartphones. Still images can be loaded from USB and are great for convenient displaying logos.

- **Multiple Images On An Existing Display**

By showing multiple images such as PowerPoint, video, or TV conferences on a single screen, you can avoid the bother of switching between the images. This is also a convenient way to compare information from multiple presenters.

The XS-1HD provides a split mode that can display up to four images side by side as shown here. Since the screen layout can also be switched at a touch, it's usable even by those who are not skilled at equipment operation.

PANEL LAYOUT

Even with its compact footprint, the XS-1HD lets you operate its powerful functions using only the operation panel. Since HDMI input/output and the controls are integrated into a single unit, it can be used in a variety of situations such as on a small desk or podium, or on a media cart.

- **Cross-Point Buttons**

These buttons select the input channel for each output. The vertical columns correspond to the input, and the horizontal rows correspond to the output. Buttons are lite-up white when a video signal is present.

- **Quick Edit**

This function lets you adjust the video or audio from the operation panel without need to access the menu. You can control settings such as the position and scaling of the image, the location of the PinP inset windows, and the audio volume.

- **Hdmi Input/Output**

HDMI connectors allow video and audio (stereo) to be input and output. A scaler and EDID emulator are built-in for each input, and HDCP is also supported, allowing for even rights-protected content to be switched.

- **Usb Memory Port**

Settings can be backed up on a USB flash drive. Still images can also be loaded, and instantly displayed when needed.

- **Audio Input/Output**

Line-level stereo input and output are available and can be mixed with audio that is input via HDMI. Audio embedding and de-embedding are supported, along with audio delay to adjust for lip-sync.

- **Remote Control**

Serial control is enabled. It is possible to cooperate with other switchers and mixers and control from the outside.

SCREEN MODES

The XS-1HD provides three screen modes for a variety of applications. In addition to the matrix switcher mode, there's a Switcher mode that lets you use PinP or key-compositing, dissolve transitions and provides a multi-view output, and a Split mode that can display up to three PinP images.

- **Matrix Mode**

Four input video signals can be individually switched to one of four outputs. Since a scaler is provided for each of the four inputs, you can connect a mix of video devices such as cameras, PCs, media players, Blu-ray discs, or smartphones. You can switch between videos by fading-in/out and can adjust desired transition time using the TIME knob.

- **Switcher Mode**

This mode lets you use a cross-dissolve to seamlessly transition between sources, or use PinP or key-compositing. A multi-view input preview can be output from HDMI OUT 4 for confirming input sources while operating the unit.*1 If you're not using PinP or key-compositing, you can use an AUX bus to output a separate video signal to a confidence monitor or other destination.

*1 Skip-frame display

- **Split Mode**

This mode composites multiple videos into a single screen for output. Up to three small screens can be composited into a background video. The position, size and layering order of the inset screens can be individually set. This is useful when it is required show multiple videos simultaneously, such as when recording e-learning content or presentations.

FUNCTIONS

All contained in a compact format, the XS-1HD includes a switcher, scalers, and audio mixer in a single unit. Additionally, high-quality image processing allows output to large high-resolution screens, without any degradation of quality.

- **High-Quality 4:4:4 10-Bit Processing**

The XS-1HD uses RGB/YPbPr 4:4:4 10-bit signal processing, ensuring that the quality of the video input sources is maintained to the output display especially with data sources. Video that is switched to a large LED display or projector is output with crisp clarity.

- **Digital Audio Mixer**

This allows the HDMI audio and analogue stereo input to be mixed. There's also an "audio follow" function that switches the audio in synchronization with video transitions.

- **Internal Scalers**

Each video input is equipped with a scaler that can be set individually. The incoming video input resolution will automatically be matched to the output resolution. The output video can be zoomed to a maximum of 1000.0% and down to 10.0% in detailed 0.1% steps, allowing the video to be properly scaled for the display.

- **Test Pattern Generator**

You can output a test pattern that is convenient for adjusting the video output to a projector or large LED display. A selection of various patterns is provided, including colour bars, cross-hatch, and ramp. Also included is an animation function that diagonally scrolls the displayed pattern.

- **EDID Emulator**

You can prevent connection problems between video devices by specifying the desired format of EDID. This is convenient in situations such as a banquet or hall, where the computer connected to the XS-1HD is changed throughout the event.

- **Memories**

The current setting of the switcher can be saved into one of sixteen memories. Settings can be saved for specific scenes or configurations, and be easily recalled when needed.

