

Key Features

- Monitor HD or SD-SDI feeds on flat-panel monitors
- Drive video or low-cost computer monitor panels
- Support for digital DVI or analog VGA-style monitors
- UMD and tally control from an external controller via Ethernet (8949SVM-UMD only)
- Analog audio monitoring outputs
- Audio delay compensation for both module and monitor processing
- Auto-sensing of monitor resolution and scan rate via EDID
- Temporal conversion to display video or non-video (PC) monitors
- Built-in display compensation for color and black stretch
- Patterns, including PLUGE, for monitor setup
- Frame lock modes to ensure no skipped or repeated frames

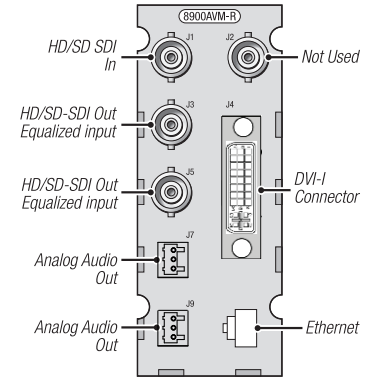
Applications

- Monitoring video in the production environment on compact, high-quality flat-panel displays
- Using low-cost computer displays for viewing HD signals
- Creating a complete monitor station with high-resolution viewing and stereo audio

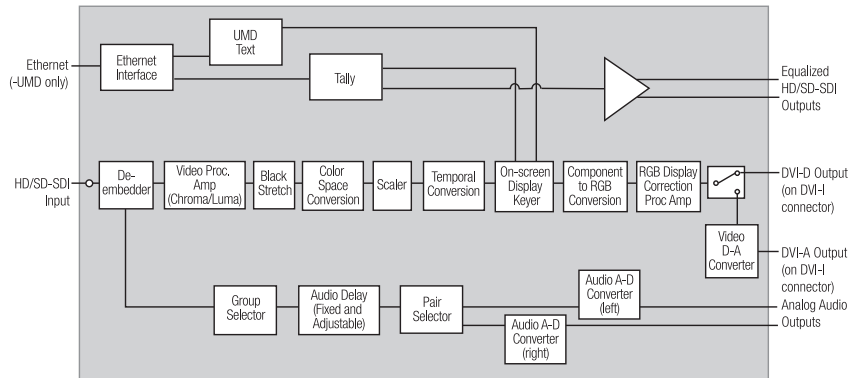
The 8949SVM module displays HD-SDI and SD-SDI signals on flat-panel monitors, including video or computer TFT displays. The output is via a DVI-I type connection and can be used to feed digital DVI monitors or analog VGA-style units. The 8949SVM supports a wide range of monitor resolutions and refresh rates. The input is auto-sensing for HD and SD. The output is auto-sensing for resolution and scan rate. These features can provide for zero-configuration installation.

The 8949SVM-UMD includes on-screen UMD text and tally indicators. The UMD and tally facilities can be driven from a central controller via the module's own Ethernet connection.

The module includes balanced analog audio monitoring outputs. Display of 50 Hz video formats on 60 Hz monitors is supported. The picture can be tuned using the built-in black stretch, color space conversion, and RGB proc amp controls. These adjustments are usually



missing from the monitor itself. This module supports 16:9, 16:10, 4:3, and 5:4 monitor screen aspects when fed with 16:9, 4:3, or 16:9 anamorphic (SD) pictures. The input is auto-sensing for non-anamorphic HD and SD units. SD inputs with anamorphic aspect ratios can be displayed but the aspect ratio must be set manually.



Specifications

Supported Frame Types

The module is compatible with GeckoFlex frames with fans (8900FF and 8900FFN)

Power Rating and Size

8.5 Watts – single slot

Inputs

HD/SD-SDI: Auto-sensing

Note: selection of anamorphic SD initiated by the user

Equalization:

- Up to 125m (HD-SDI on Belden 1694A cable)
- Up to 330m (SD-SDI on Belden 1694A cable)

Ethernet (8949SVM-UMD only): For UMD and tally control

Outputs

DVI-I:

- With digital and analog (VGA-type) signals
- Maximum cable length 15m (dependent on cable and display resolution)

HD/SD-SDI: 2 x equalized copy of input feed (not re-clocked)

Analog: 2 x channels balanced (maximum level +24 dBu)

Supported Output Resolutions

5:4: 1280 x 1024

4:3: 1024 x 768, 1400 x 1050, 1600 x 1200

16:10: 1280 x 800, 1440 x 900, 1680 x 1050, 1920 x 1200

16:9: 1366 x 768, 1920 X 1080

Other: 1280 x 768

Frame Rate Conversion

The table below shows approximate available output frame rates:

Input	Output		
	50 Hz	59.94 Hz	60 Hz
23.98 Hz			Yes
50 Hz	Yes		Yes
59.94 Hz		Yes	

Output modes only available where supported by the monitor. Shaded modes in the table above apply temporal conversion. Computer scan rates are often close but not exactly equal to 60 Hz. The 8949SVM adjusts the blanking and vertical blanking to provide 60 Hz scan rate.

On-Screen Display

Tallies: Two (red and green)

UMD Text: 16 characters (standard ASCII characters plus an extended character set)

Important Note: Configuration of the module parameters is done with local on-board paddle switch controls. The configuration for the UMD and tally connections is not through the frame's 8900NET (Net Card). For the 8949SVM-UMD, the UMD and tally are connected through the module's own Ethernet connection and managed by an external system supporting TSL protocol.

Ordering Information

This module can be mounted in a GeckoFlex frame with fans but not in other 8900 series frames, including Gecko-A or Gecko-V frames.

8949SVM-UMD

HD/SD single viewing module with UMD and tally management, front and rear module set

8949SVM-LOC

HD/SD single viewing module, front and rear module set

For detailed specifications, installation, and setup instructions see: www.grassvalley.com/docs/modular