



Kaleido-Solo *preliminary information*

3Gbps/HD/SD to HDMI converter for high quality video and loudness monitoring

Kaleido-Solo is a compact, stand-alone 3Gbps/HD/SD video to HDMI converter, which allows low cost LCD displays to be used for video and loudness/Dialnorm monitoring. It's ideal for many professional monitoring applications, including production, mobile truck, post-production and broadcast.

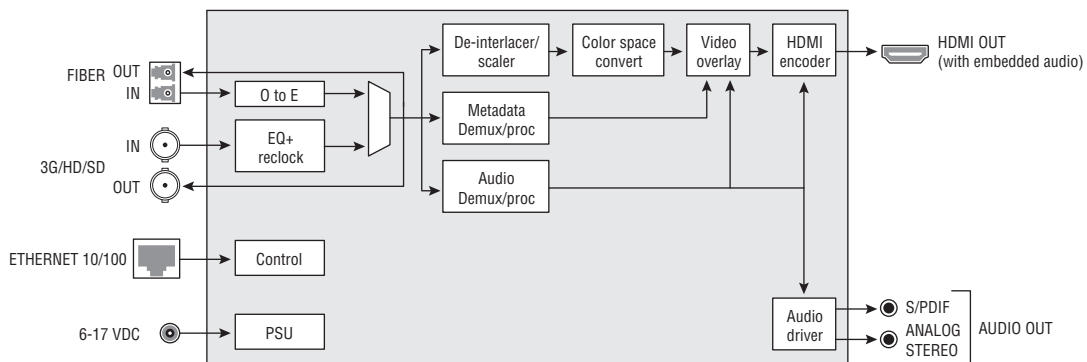
The converter allows operators to monitor loudness and Dialnorm levels accurately over time, using an histogram overlay, without the cost and complexity of a traditional loudness monitoring device. Kaleido-Solo also provides overlays for markers, time code, AFD and peak meters. To simplify embedded audio monitoring, it provides two audio connectors to output S/PDIF and analog stereo of a 5.1 downmix, or any audio pair.

To ensure the correct aspect ratio for high quality video monitoring, Kaleido-Solo fully supports AFD, WSS, and VLI Metadata. It also provides automatic video input format detection, and supports a wide variety of video resolutions, including 525i, 625i, 720p, 1080i and 1080p.

Kaleido-Solo is available in two versions: KS-900 and KS-910. These two versions are identical except that the KS-900 does not offer loudness and Dialnorm monitoring.

KEY FEATURES AND BENEFITS

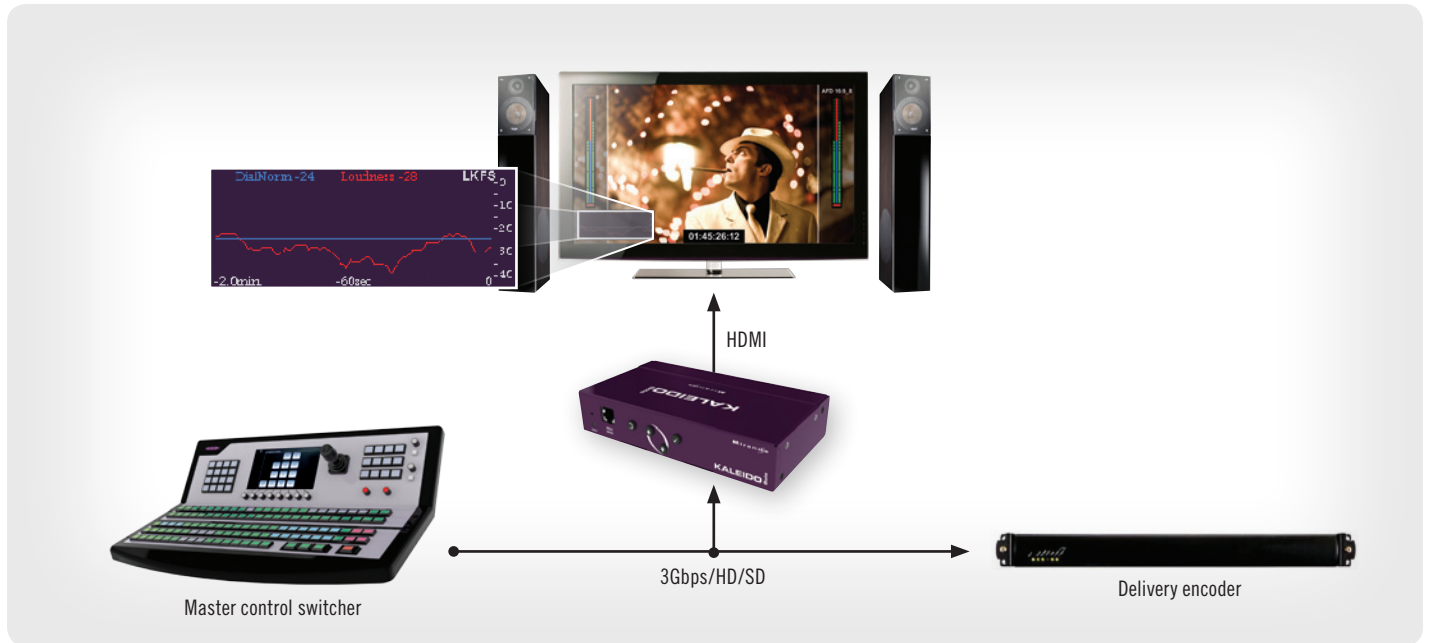
- > 3Gbps/HD/SD to HDMI / DVI converter for video and loudness monitoring
- > Offers high quality monitoring using a low cost LCD panel
- > Loudness and Dialnorm monitoring over time (KS-910 only)
- > Automatic input format detection
- > Built-in scaler/de-interlacer
- > Supports 525i, 625i, 720p, 1080i and 1080p
- > Multi frame rate support including 23.98p/PsF, 24p/PsF, 25p/PsF, 50i, 50p, 59.94i and 59.94p
- > Optical SFP fiber input option
- > Automatic aspect ratio conversion using AFD/WSS/VLI
- > Dual audio outputs for:
 - S/PDIF
 - 5.1 Downmix analog audio output
 - Selected pair analog audio output
- > Selectable burn-in and Metadata overlay:
 - Peak meters
 - Aspect ratio markers
 - Time Code
 - AFD/WSS/VLI
 - Histogram with Audio Loudness Level and Dialnorm
- > Easy configuration using on-screen menu



Kaleido-Solo Functional Block Diagram

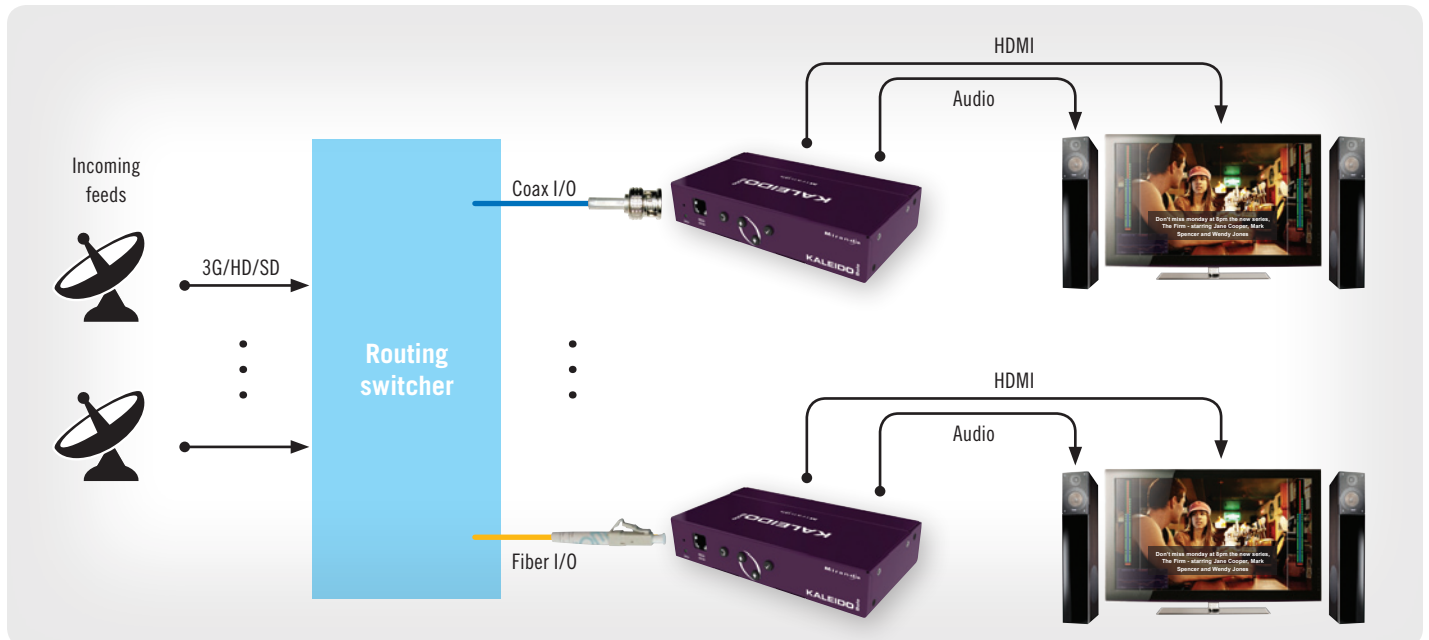
Broadcast application: loudness monitoring in master control

Kaleido-Solo can be used to monitor the video and loudness level at the output of a master control switcher.



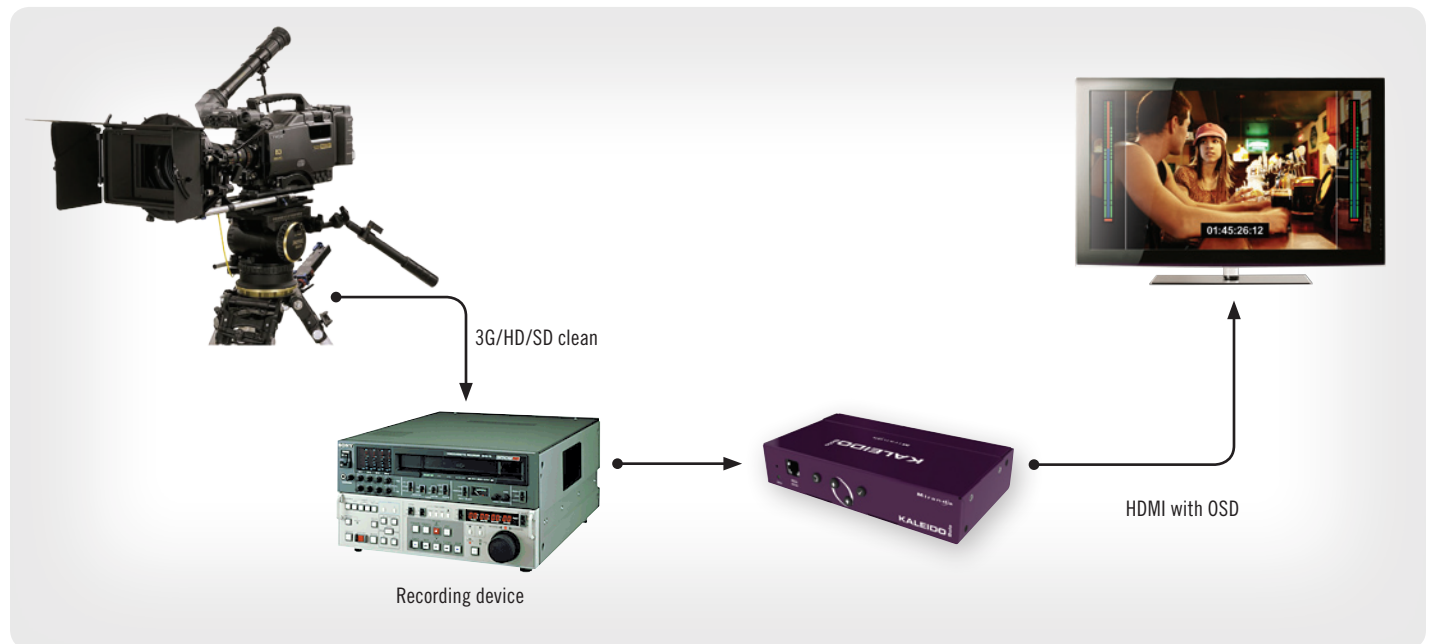
Broadcast application: incoming/outgoing feed monitoring

Monitoring the incoming feeds, or the feeds going on-air, including the AFD, Loudness, and Dialnorm Metadata.



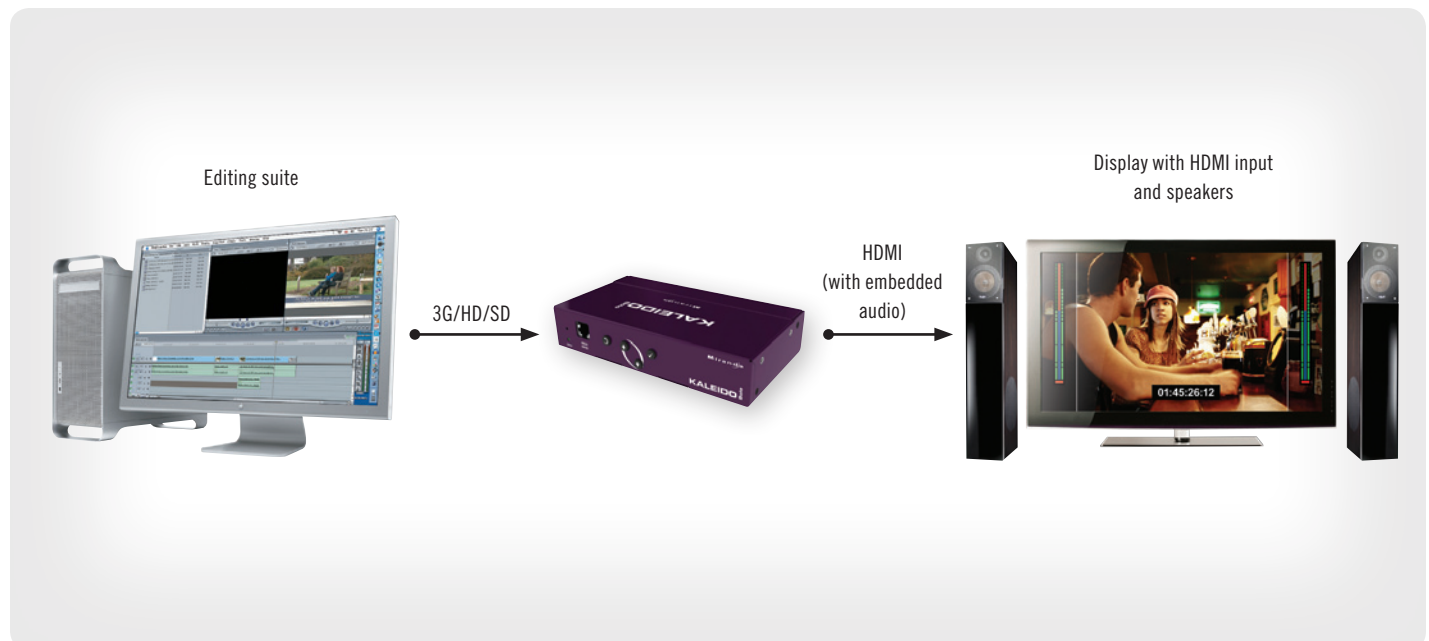
Production application: on-set monitoring

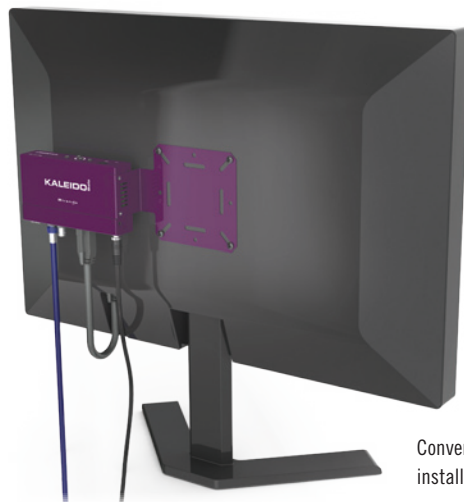
Kaleido-Solo is used to feed a low-cost display with HDMI input for full 3Gbps/HD monitoring, with all essential on-screen-display information.



Post-production application: editing suite monitoring

Kaleido-Solo is used for client monitoring in the editing suite, and for video confidence monitoring during dubs in the machine room. This solution supports 3Gbps, HD and SD, and thereby removes the need for a set-up change when switching back and forth between HD and SD sessions.





Convenient mounting bracket included for easy installation directly on the rear of a low cost display



Rear view

TECHNICAL SPECIFICATIONS

VIDEO INPUT

Signal: SMPTE-259M-C (270 Mbps)
 SMPTE-272M-C (270 Mbps with embedded audio)
 SMPTE-292M, SMPTE-299M (HD: 1.485, 1.485/1.001 Gbps)
 SMPTE-425 (2.970, 2.970/1.001 Gbps)

Supported formats: SD: 480i/59.94, 576i/50
 HD: SMPTE-274M: 1080i 50, 59.94, 1080p/PsF 23.98, 24, 25
 HD: SMPTE-296M: 720p 50, 59.94
 3G: SMPTE-425 level A (mapping 1): 1080p 50, 59.94

Cable length: 240 m Belden 1694A at 270 Mbps
 150 m Belden 1694A at 1.485 Gbps
 120 m Belden 1694A at 2.97 Gbps

Return loss: >15 dB up to 3 GHz
 Jitter: HD/SD: <0.2 UI
 3Gbps: <0.3 UI

FIBER I/O

SMPTE 297M-2006 compliant
 For full specifications on SFP optical modules, please see www.miranda.com/SFP

HDMI OUTPUT

Connector: HDMI Type A
 Standard: HDMI 1.3a
 Format: Compliant to EIA/CEA-861-D

ANALOG AUDIO OUTPUT

Connector: 3.5 mm stereo Jack
 Signal: 2 channels unbalanced analog audio
 Level: +6.5 dBu
 Impedance: 50 ohm

SPDIF

Connector: 3.5 mm stereo Jack
 Signal: IEC 60958
 Level: 0.5 Vp-p ±20%
 Impedance: 75 ohm unbalanced
 Sampling rate: 48kHz

ETHERNET

Connector: RJ-45

PROCESSING

Signal path: 8 bits
 Processing delay: 1 frame

ELECTRICAL

Voltage range: 6 to 17 VDC
 Power: 7 W

ORDERING INFORMATION

KS-900 3Gbps/HD/SD to HDMI converter with audio
 KS-910 3Gbps/HD/SD to HDMI converter with audio and loudness meter

Options (hardware)

SFP-R-LC
 SFP-RT-S13-LC

Single fiber Rx (input) cartridge with LC/PC connector
 Dual fiber Rx/Tx (input/output) cartridge 1310 nm with LC/PC connector



www.miranda.com

Miranda Technologies Inc.
 Tel: 514.333.1772
ussales@miranda.com

Miranda USA
 Tel: 973.379.0089
ussales@miranda.com

Miranda Benelux
 Tel: +31 418 641 756
europesales@miranda.com

Miranda Europe
 Tel: +44 (0) 1491 820 000
europesales@miranda.com

Miranda France
 Tel: +33 (0) 1 55 86 87 88
francesales@miranda.com

Miranda Middle East
 Tel: +971 50 459 1437
middleeastsales@miranda.com

Miranda Asia
 Tel: +852-2539-6987
asiasales@miranda.com

Miranda China
 Tel: +86-10-5873 1814
chinasales@miranda.com

Miranda Japan
 Tel: +81 (0) 3-5644-7533
japansales@miranda.com