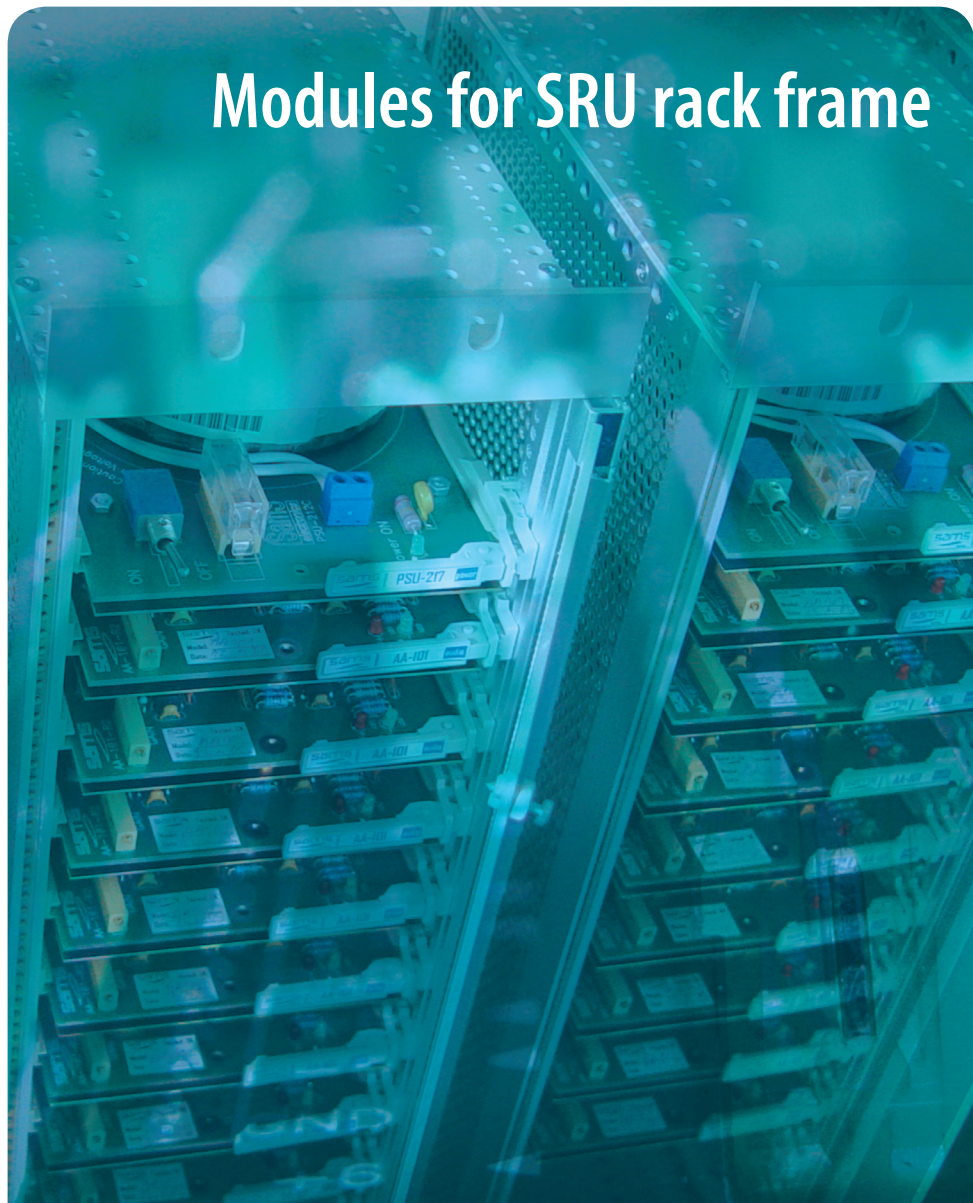


Modules for SRU rack frame



sams

Professional and broadcast video/audio equipment

48 Zivka Davidovica st. • 11050 Belgrade • Serbia • +381 11 3806 253; +381 11 2402 212 • sams@sams.rs • www.sams.rs

- 3RU 19" rack frame for 6/12 modules
- It can be configured in any combination of digital modules
- The system provides three individual grounds (mains, chassis and 0V) performed on a connector on the back of the case
- Wiring is completely eliminated by using the motherboard which keeps all signals and low voltage power supply to each card

SRU-306/312 is a 3RU chassis with pull-down door that accepts up to 6/12 modules. The casing is capable of storing any combination of digital modules.

All modules are in format "LITTLE EUROPE", 100x160mm and easily assembled and disassembled from the rack. All modules have the ability to lock in the frame, which prevents accidental problems in contacts between the module and the motherboard.

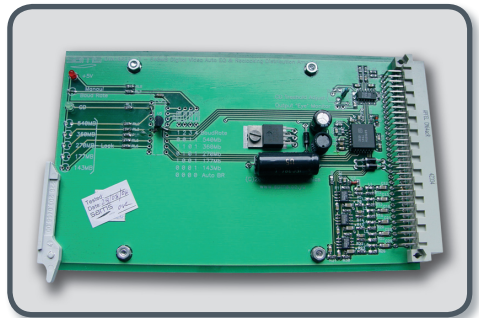
Modules can be reconfigurable, whether it comes to replacing them, adding new or relocation of existing. The door on the housing can be of aluminum or acrylic glass. The back of the frame has a choice of the masses.



DIGITAL **video**

DIGITAL VIDEO DISTRIBUTION AMPLIFIER (EQ AND RELOCKING) **DVA^{106er}**

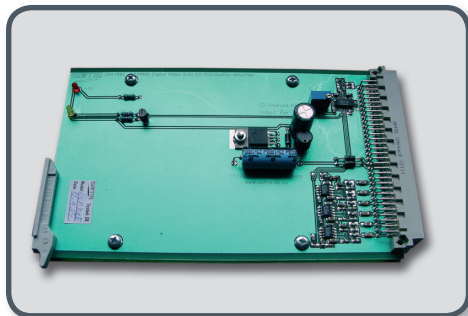
- High quality
- Automatic cable EQ and redocking
- Provides EQ warning light which indicate when cable length exceeds user specified maximum
- SMPTE: 540, 360, 270, 177, 143 Mb/s
- 6 outputs
- Auto SMPTE
- An indication of the presence of the input signal



The DVA-106er serial EQ distribution amplifiers provide the EQ and redocking features required for distribution of serial video over longer distances (up to 200m with Belden 1694A video cable). The DVA-106er accepts both composite (143 and 147 Mb/s) and component serial standards (270 Mb/s), thus eliminating the need for different cards for component and composite applications. The DVA-106er is designed to support wide screen 16:9 360Mb/s and 4:4:4:4 540Mb/s standards. Distribution is DVB-ASI compatible. The modules mount into the SRU-306/312 3RU frames, 6/12 module capacity.

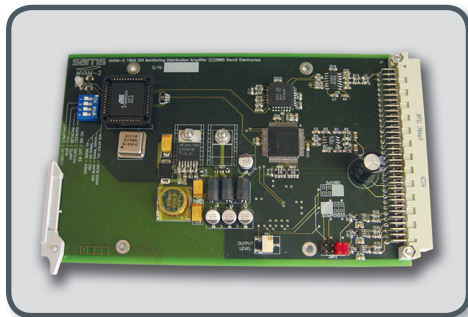
- High quality
- Low cost
- 6 outputs
- Auto input EQ
- Ideal for short distance (< 30m)
- Transparent to all serial video data rates

The DVA-106e serial EQ distribution amplifiers is solution for distribution of serial digital signal over short distances (up to 25m with Belden 1694A video cable) where the reclocking feature found is not required. The module is transparent to the different incoming signal data rates from 143 up to 540Mb/s. CD threshold adjust output "eye" monitor includes in to DVA-106e. The modules mount into the SRU-312 frames 3RU, 12 module capacity.



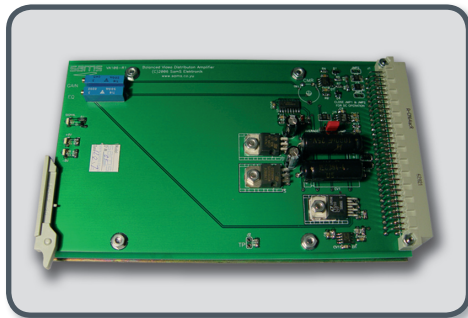
- Multiformat distribution and monitoring in one card
- 8bit conversion with 10bit DAC and special output filtering to reduce artifacts
- Color bar test mode available with valid input signal
- Indicator LED
- Input EQ up to 300m of cable

The DVAM-2 converts serial digital video signal to composite, RGB, YUV or YC analog video. This device is specially made for monitoring SDI video and for video distribution. D/A fully differential path and 10/8 bit processing ensure that signal can be used in the most demanding broadcast and professional applications. Comprehensive user adjustable digital filtering ensures full frequency response even for a composite signal.



- High quality
- Differential input
- 30 MHz bandwidth
- Selectable black level clamp
- Cable equalization for up to 300m at 8 MHz
- Gain range $\pm 3\text{dB}$
- 6 outputs
- Jumper select AC or DC
- Led indication of presence of input video signal
- Composite / Component video or reference distribution

The VA-106c will provides hum removal and equalization for long cable runs of up to 300m. The VA-106c features 30MHz bandwidth, differential input and variable equalization for up to 300m (1000ft) of belden 8281 coaxial cable. The VA-106c is also suitable for use in analog component or composite distribution (jumper select). The modules mount into the SRU-112 frames 3RU, 12 module capacity.

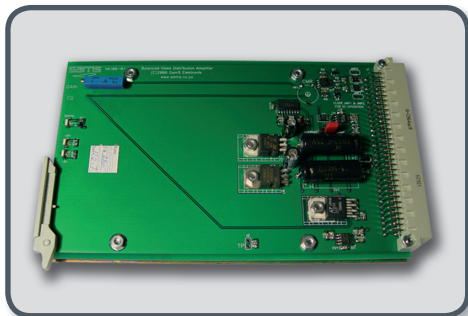


ANALOG video

ANALOG VIDEO DISTRIBUTION AMPLIFIER **VA¹⁰⁶**

- High quality
- Differential input
- 30 MHz bandwidth
- Gain range $\pm 3\text{dB}$
- 6 outputs
- Jumper select AC or DC
- Composite / Component video

The VA-106 will provides hum removal and equalization for long cable runs of up to 30m. The VA-106 features 30MHz bandwidth, differential input. The VA-106 is also suitable for use in analog component or composit distribution (jumper select). The modules mount into the SRU-112 frames 3RU, 12 module capacity.

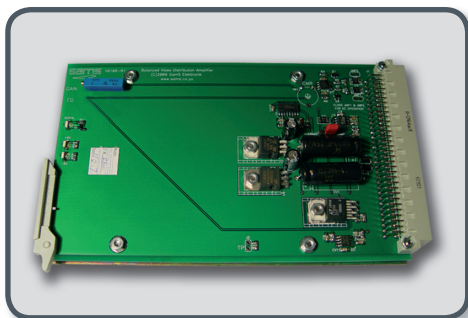


DIGITAL audio

DIGITAL AUDIO DISTRIBUTION AMPLIFIER **DAA¹⁰⁶**

- High quality
- 6 individual buffer outputs
- AES/EBU 110 Ω balanced / SPDIF 75 Ω unbalanced inputs
- AES/EBU 110 Ω balanced / SPDIF 75 Ω unbalanced outputs
- Input and output transformers
- Automatic cable EQ
- Multiple configuration possible

The DAA-106 Digital Audio Distribution Amplifier is solution for distribution of digital audio signal over long distances (up to 200m). An hybrid 75/100 unit allowing signals to be converted from balanced to unbalanced format without the amplitude and phase distortion associated with transformers. The modules mount into the SRU-312 frames 3RU, 12 module capacity.

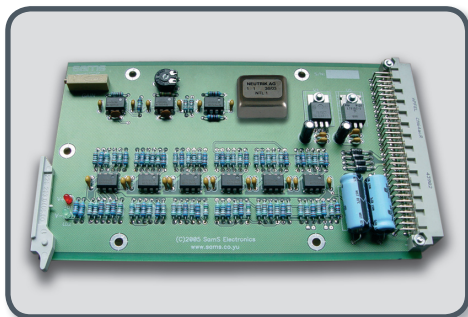


ANALOG audio

ANALOG AUDIO DISTRIBUTION AMPLIFIER WITH TRANSFORMER COUPLET INPUT **AA^{101t}**

- Low noise (100dB S/N)
- 6 outputs
- Individual buffer outputs
- Gain range -6dB to +6dB
- +24/16dB maximum output level
- Dual low voltage AC power input
- Available in 66 Ω or 600 Ω output impedance
- Transformer coupled input

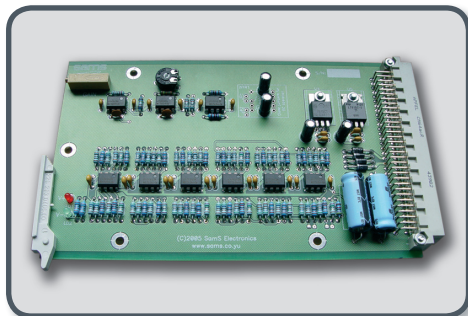
The AA-101t mono audio distribution amplifier with Transformer coupled input is designed for Broadcast Television and post Productions. Excellent output isolation and inter channel crosstalk is assured by the use of individual drivers for each output. Outputs can be customized, 600 Ω or low 66 Ω as per AES recommendations 1708 (1-3). The modules mount into the SRU-112 frames 3RU, 12 module capacity.



- Low noise (100dB S/N)
- 6 outputs
- Individual buffer outputs
- Gain range -6dB to +6dB
- +24/16dB maximum output level
- Dual low voltage AC power input
- Available in 66Ω or 600Ω output impedance

The AA-101 mono audio distribution amplifier is designed for Broadcast Television and post Productions. Excellent output isolation and inter channel crosstalk is assured by the use of individual drivers for each output. Outputs can be customized, 600Ω or low 66Ω as per AES recommendations 1708 (1-3). The modules mount into the SRU-112 frames 3RU, 12 module capacity.

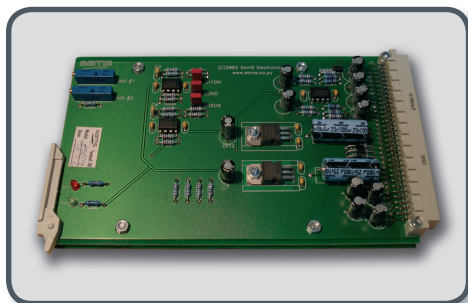
ANALOG AUDIO DISTRIBUTION AMPLIFIER **AA¹⁰¹**



- High quality
- Jumper selectable Stereo or Summa Mode
- Stereo analog input and output

The ASA-100 is designed to combine two stereo signals into one mono in adjustable aspects. This device is usefull also as stereo amplifier. Ideal position of ASA-100 is before transmitter antenna. The modules mount into the SRU-112 frames 3RU, 12 module capacity.

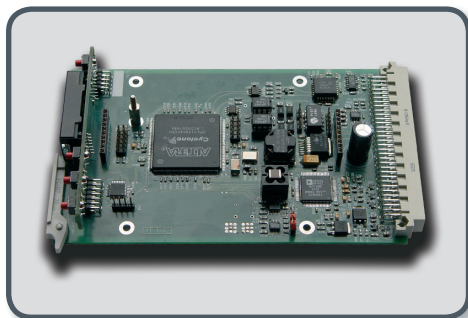
AUDIO SUMMA AMPLIFIER **ASA¹⁰⁰**



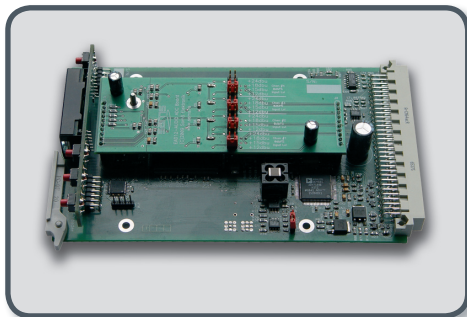
- Broadcast quality
- Converts YUV, RGB, CVBS or YC to digital video
- 12/10bit processing
- Fiveline adaptive 3D comb filter
- Integrated Three 54MHz: Noise Shaped Video, 12-bit AD converter and 4 x oversampling
- Integrated automatic gain control with adaptive peak white mode
- CTI (chroma transient improvement)
- DNR (Digital Noise Reduction)
- EDH processing
- Automatic YUV pixel timing adjustment
- Input signal presence detection
- Pass, "Freezing" or broadcast test in the case of incorrect video input
- Integrated Test Generator (Black, Color Bar)
- Easy setup with local control and LCD display

AD-12fs converts composite or component analog video to SDI. AD-12 have a frame sinhronaizer that asynchronous video signal recorded in the memory and reads it synchronized with an external reference, as well as other settings. It is useful for synchronizing large number of external signals with signals from the TV station, or the capture of material from an amateur into a professional format. With both available, composite and component (Y, Cr, Cb or RGB or YC) inputs, this unit is ideal for converting all types of analog video. Advanced and highly flexible digital output, enables high-quality conversion of referral systems. "12bit 4x oversampling allows the A / D conversion of high-performance 10bit output. An intelligent adjustment system provides full digital filter frequency response, even in the composite signal. Fixed frequency 54MHz ADC and buses for all options, allows for very precise processing and digital filtering. The module is placed in the SRU-306 3RU chassis with capacity of 6 modules. Also, the device is available in standalone version.

ANALOG TO DIGITAL CONVERTER WITH FRAME SYNCHRONIZER **AD^{12Fs}**

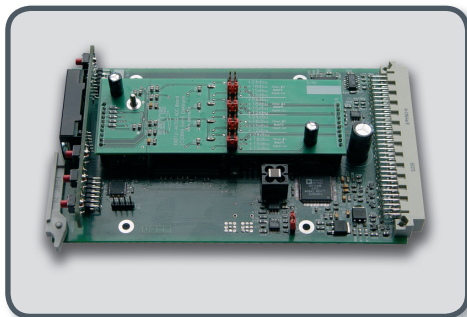


- Broadcast quality
- Converts YUV, RGB, CVBS or YC to digital video
- 12/10bit processing
- Fiveline adaptive 3D comb filter
- AGC / CTI / DNR
- EDH processing
- Automatic YUV pixel timing adjustment
- Input signal presence detection
- Pass, "Freezing" or broadcast test in the case of incorrect video input
- Integrated Test Generator (Black, Color Bar)
- Easy setup with local control and LCD display
- Audio embedder with adjustable input level - 12, 15, 18 or 24dB
- Balanced analog audio inputs
- 24bit / 48kHz / 4 ch sampling and processing



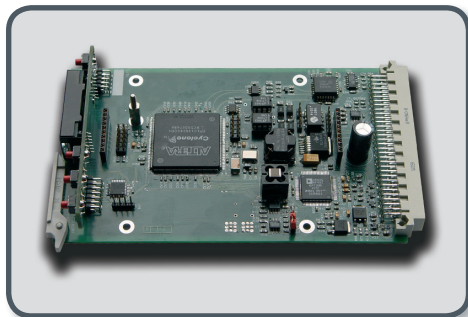
AVA-12ef converts composite or component analog video to SDI. AVA-12ef have a frame synchronizer that asynchronous video signal recorded in the memory and reads it synchronized with an external reference, as well as other settings. It is useful for synchronizing large number of external signals with signals from the TV station, or the capture of material from an amateur into a professional format. With both available, composite and component (Y, Cr, Cb or RGB or YC) inputs, this unit is ideal for converting all types of analog video. Advanced and highly flexible digital output, enables high-quality conversion of referral systems. "12bit 4x oversampling allows the A / D conversion of high-performance 10bit output. An intelligent adjustment system provides full digital filter frequency response, even in the composite signal. Fixed frequency 54MHz ADC and buses for all options, allows for very precise processing and digital filtering. AVA-12ef is high quality embedder, designed to insert four analog audio signals into digital video. The device has a level adjustment, change the audio phase and selection of channel place. The module is placed in the SRU-306 3RU chassis with capacity of 6 modules. Also, the device is available in standalone version.

- Broadcast quality
- Converts YUV, RGB, CVBS or YC to digital video
- 12/10bit processing
- Processing delay - 1 line
- Easy setup with local control and LCD display
- Audio embedder with adjustable input level - 12, 15, 18 or 24dB
- Balanced analog audio inputs
- 24bit / 48kHz / 4 ch sampling and processing



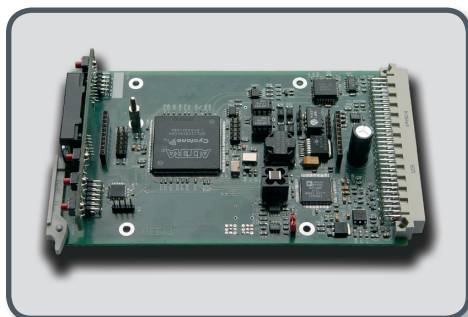
AVA-12e converts composite or component analog video to SDI. With both available, composite and component (Y, Cr, Cb or RGB or YC) inputs, this unit is ideal for converting all types of analog video. Advanced and highly flexible digital output, enables high-quality conversion. "12bit 4x oversampling allows the A / D conversion of high-performance 10bit output. An intelligent adjustment system provides full digital filter frequency response, even in the composite signal. Fixed frequency 54MHz ADC and buses for all options, allows for very precise processing and digital filtering. AVA-12e is high quality embedder, designed to insert four analog audio signals into digital video. The device has a level adjustment, change the audio phase and selection of channel place. The module is placed in the SRU-306 3RU chassis with capacity of 6 modules. Also, the device is available in standalone version.

- Broadcast quality
- Converts YUV, RGB, CVBS or YC to digital video
- 12/10bit processing
- Fiveline adaptive 3D comb filter
- AGC / CTI / DNR
- EDH processing
- Automatic YUV pixel timing adjustment
- Input signal presence detection
- Pass, "Freezing" or broadcast test in the case of incorrect video input
- Integrated Test Generator (Black, Color Bar)
- Easy setup with local control and LCD display
- Audio embedder
- Balanced / unbalanced digital audio inputs
- 24bit / 48kHz / 2 ch sampling and processing



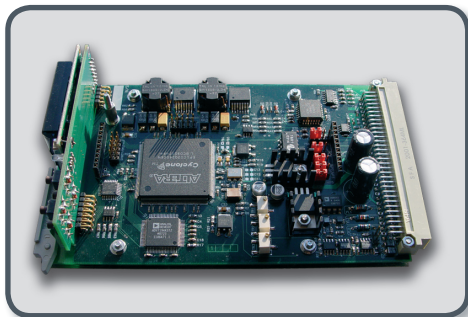
AVD-12ef converts composite or component analog video to SDI. AVD-12ef have a frame synchronizer that asynchronizes video signal recorded in the memory and reads it synchronized with an external reference, as well as other settings. It is useful for synchronizing large number of external signals with signals from the TV station, or the capture of material from an amateur into a professional format. With both available, composite and component (Y, Cr, Cb or RGB or YC) inputs, this unit is ideal for converting all types of analog video. Advanced and highly flexible digital output, enables high-quality conversion of referral systems. "12bit 4x oversampling allows the A / D conversion of high-performance 10bit output. An intelligent adjustment system provides full digital filter frequency response, even in the composite signal. Fixed frequency 54MHz ADC and buses for all options, allows for very precise processing and digital filtering. AVD-12ef is high quality embedder, designed to insert two 24-bit digital audio signals into digital video. The device has a level adjustment, change the audio phase and selection of channel place. The module is placed in the SRU-306 3RU chassis with capacity of 6 modules. Also, the device is available in standalone version.

- Broadcast quality
- Converts YUV, RGB, CVBS or YC to digital video
- 12/10bit processing
- Processing delay - 1 line
- Easy setup with local control and LCD display
- Audio embedder
- Balanced / unbalanced digital audio inputs
- 24bit / 48kHz sampling and processing



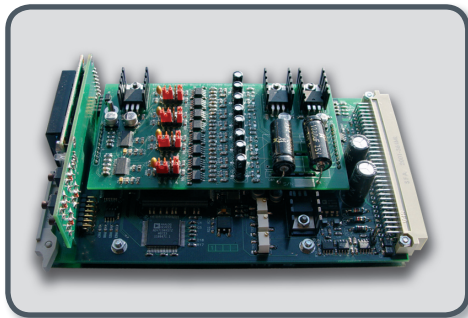
AVD-12e converts composite or component analog video to SDI. With both available, composite and component (Y, Cr, Cb or RGB or YC) inputs, this unit is ideal for converting all types of analog video. Advanced and highly flexible digital output, enables high-quality conversion. "12bit 4x oversampling allows the A / D conversion of high-performance 10bit output. An intelligent adjustment system provides full digital filter frequency response, even in the composite signal. Fixed frequency 54MHz ADC and buses for all options, allows for very precise processing and digital filtering. AVD-12e is high quality embedder, designed to insert two 24-bit digital audio signals into digital video. The device has a level adjustment, change the audio phase and selection of channel place. The module is placed in the SRU-306 3RU chassis with capacity of 6 modules. Also, the device is available in standalone version.

- Broadcast quality (12/10bit processing)
- Converts SDI to YUV, RGB, CVBS or YC
- Reclocked digital output
- Save 4 different presets
- Complete ProcAmp adjustment
- Jitter cleaner
- EDH processing
- PAL CVBS color framing and SC phase
- Pass, "Freezing" or broadcast test in the case of incorrect video input
- Integrated Test Generator (Black, Color Bar)
- Easy setup with local control and LCD display



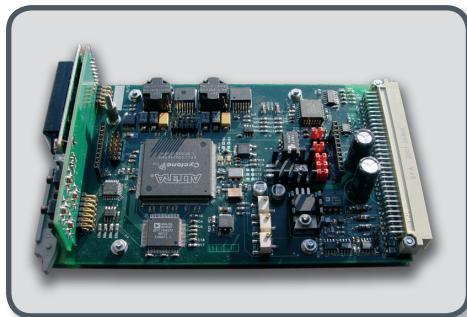
DA-12fs converts SDI to composite or component analog video. DA-12fs have a frame synchronizer that asynchronous video signal recorded in the memory and reads it synchronized with an external reference, as well as other settings. It is useful for synchronizing large number of external signals with signals from the TV station, or the capture of material from an amateur into a professional format. With both available, composite and component (Y, Cr, Cb or RGB or YC) outputs, this unit is ideal for converting all types of analog video. Complete ProcAmp output signal controls are provided for all output formats with adjustments: Horizontal and Vertical Blanking, Horizontal and Vertical Position, SC Phase, Color Framing, Luma, Color, Pedestal, Sharpness, YC Delay etc. The module is placed in the SRU-306 3RU chassis with capacity of 6 modules. Also, the device is available in standalone version.

- Broadcast quality (12/10bit processing)
- Converts SDI to YUV, RGB, CVBS or YC
- Synchronized digital output
- Synchronous switch tolerant (RP 168)
- Save 4 different presets
- Complete ProcAmp adjustment
- Jitter cleaner
- EDH processing
- PAL CVBS color framing and SC phase
- Pass, "Freezing" or broadcast test in the case of incorrect video input
- Integrated Test Generator (Black, Color Bar)
- Easy setup with local control and LCD display
- Audio de-embeder
- Balanced analog audio outputs
- 24bit / 48khz / 4ch sampling and processing



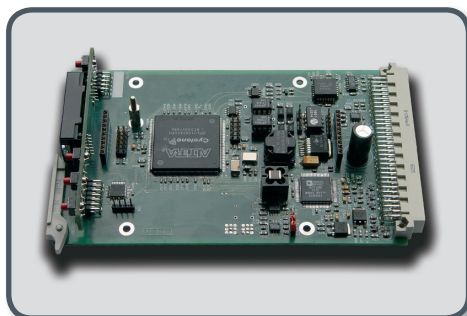
DAVA-12df converts SDI to composite or component analog video. DAVA-12df have a frame synchronizer that asynchronous video signal recorded in the memory and reads it synchronized with an external reference, as well as other settings. It is useful for synchronizing large number of external signals with signals from the TV station, or the capture of material from an amateur into a professional format. DAVA-12df is synchronous switch tolerant (RP 168), for a smooth transfer without unpleasant visual effects when switching between two sources. With both available, composite and component (Y, Cr, Cb or RGB or YC) outputs, this unit is ideal for converting all types of analog video. Complete ProcAmp output signal controls are provided for all output formats with adjustments: Horizontal and Vertical Blanking, Horizontal and Vertical Position, SC Phase, Color Framing, Luma, Color, Pedestal, Sharpness, YC Delay etc. DAVA-12df is high quality de-embeder, designed to separate the four 24-bit audio signals from digital video and convert them to analog. The device has a level adjustment, change the audio phase and selection of channel place. The module is placed in the SRU-306 3RU chassis with capacity of 6 modules. Also, the device is available in standalone version.

- Broadcast quality (12/10bit processing)
- Converts SDI to YUV, RGB, CVBS or YC
- Synchronized digital output
- Synchronous switch tolerant (RP 168)
- Save 4 different presets
- Complete ProcAmp adjustment
- Jitter cleaner
- EDH processing
- PAL CVBS color framing and SC phase
- Pass, "Freezing" or broadcast test in the case of incorrect video input
- Integrated Test Generator (Black, Color Bar)
- Easy setup with local control and LCD display
- Audio de-embeder
- Balanced / unbalanced AES digital audio outputs
- 24bit / 48khz / 2ch sampling and processing



DAVD-12df converts SDI to composite or component analog video. DAVD-12df have a frame synchronizer that asynchronous video signal recorded in the memory and reads it synchronized with an external reference, as well as other settings. It is useful for synchronizing large number of external signals with signals from the TV station, or the capture of material from an amateur into a professional format. DAVD-12df is synchronous switch tolerant (RP 168), for a smooth transfer without unpleasant visual effects when switching between two sources. With both available, composite and component (Y, Cr, Cb or RGB or YC) outputs, this unit is ideal for converting all types of analog video. Complete ProcAmp output signal controls are provided for all output formats with adjustments: Horizontal and Vertical Blanking, Horizontal and Vertical Position, SC Phase, Color Framing, Luma, Color, Pedestal, Sharpness, YC Delay etc. DAVD-12df is high quality de-embeder, designed to separate the two 24-bit audio signals from digital video. The device has a level adjustment, change the audio phase and selection of channel place. The module is placed in the SRU-306 3RU chassis with capacity of 6 modules. Also, the device is available in standalone version.

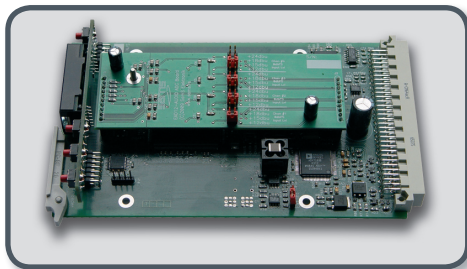
- Broadcast quality
- Synchronize digital video
- 12/10bit processing, 4 x oversampling
- Fiveline adaptive 3D comb filter
- AGC / CTI / DNR
- EDH processing
- Automatic YUV pixel timing adjustment
- Input signal presence detection
- Pass, "Freezing" or broadcast test in the case of incorrect video input
- Integrated Test Generator (Black, Color Bar)
- Easy setup with local control and LCD display
- Allows CLEAN SWITCH on the SDI switchers and routing switchers



DD-12fs synchronize SDI video. DD-12fs have a frame synchronizer that asynchronous video signal recorded in the memory and reads it synchronized with an external reference, as well as other settings. It is useful for synchronizing large number of external signals with signals from the TV station, or the capture of material from an amateur into a professional format. DD-12fs is synchronous switch tolerant (RP 168), for a smooth transfer without unpleasant visual effects when switching between two sources. This unit is perfect for synchronizing digital video sources. The module is placed in the SRU-306 3RU chassis with capacity of 6 modules. Also, the device is available in standalone version.

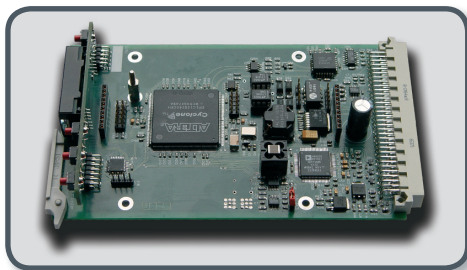
- Broadcast quality
- Synchronize digital video and embedding analog audio
- EDH processing
- Input signal presence detection
- Pass, "Freezing" or broadcast test in the case of incorrect video input
- Easy setup with local control and LCD display
- Audio embedder with adjustable input level - 12, 15, 18 or 24dB
- Balanced analog audio inputs
- 24bit / 48kHz / 4 ch sampling and processing

DVA-12ef have a frame synchronizer that asynchronous video signal recorded in the memory and reads it synchronized with an external reference, as well as other settings. It is useful for synchronizing large number of external signals with signals from the TV station, or the capture of material from an amateur into a professional format. DVA-12ef is synchronous switch tolerant (RP 168), for a smooth transfer without unpleasant visual effects when switching between two sources. DVA-12ef is high quality embedder, designed to insert four analog audio signals into digital video. The device has a level adjustment, change the audio phase and selection of channel place. The module is placed in the SRU-306 3RU chassis with capacity of 6 modules. Also, the device is available in standalone version.



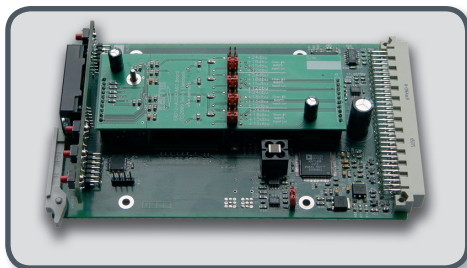
- Broadcast quality
- Synchronize digital video and embedding digital audio
- EDH processing
- Input signal presence detection
- Pass, "Freezing" or broadcast test in the case of incorrect video input
- Easy setup with local control and LCD display
- Audio embedder
- Balanced / unbalanced digital audio inputs
- 24bit / 48kHz sampling and processing

DVD-12ef have a frame synchronizer that asynchronous video signal recorded in the memory and reads it synchronized with an external reference, as well as other settings. It is useful for synchronizing large number of external signals with signals from the TV station, or the capture of material from an amateur into a professional format. DVD-12ef is synchronous switch tolerant (RP 168), for a smooth transfer without unpleasant visual effects when switching between two sources. DVD-12ef is high quality embedder, designed to insert two 24-bit digital audio signals into digital video. The device has a level adjustment, change the audio phase and selection of channel place. The module is placed in the SRU-306 3RU chassis with capacity of 6 modules. Also, the device is available in standalone version.



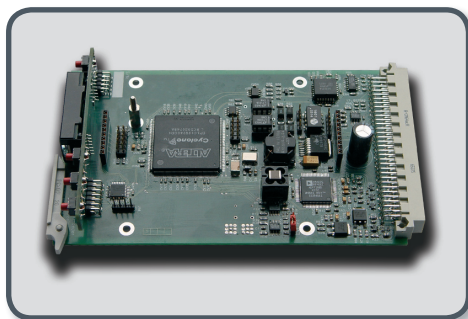
- Broadcast quality
- Embedding analog audio into digital video
- Input signal presence detection
- Easy setup with local control and LCD display
- Audio embedder with adjustable input level - 12, 15, 18 or 24dB
- Balanced analog audio inputs
- 24bit / 48kHz / 4 ch sampling and processing

DVA-12e is high quality embedder, designed to insert four analog audio signals into digital video. The device has a level adjustment, change the audio phase and selection of channel place. The module is placed in the SRU-306 3RU chassis with capacity of 6 modules. Also, the device is available in standalone version.



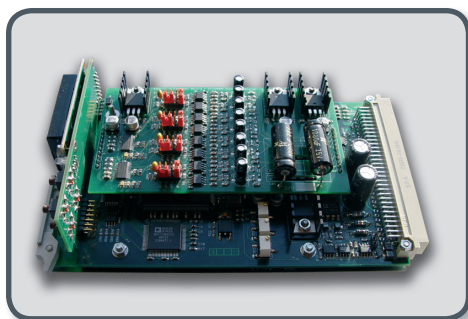
- Broadcast quality
- Embedding analog audio into digital video
- Input signal presence detection
- Easy setup with local control and LCD display
- Audio embedder
- Balanced / unbalanced digital audio inputs
- 24bit / 48kHz sampling and processing

DVD-12e is high quality embedder, designed to insert two 24-bit digital audio signals into digital video. The device has a level adjustment, change the audio phase and selection of channel place. The module is placed in the SRU-306 3RU chassis with capacity of 6 modules. Also, the device is available in standalone version.



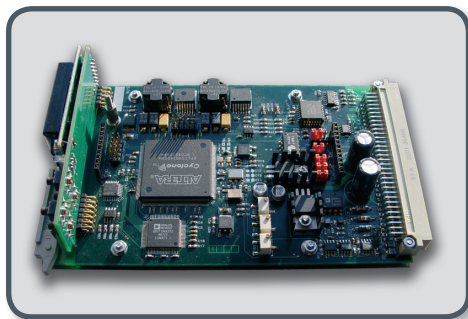
- Broadcast quality (12/10bit processing)
- Save 4 different presets
- Easy setup with local control and LCD display
- Audio de-embedder
- Balanced analog audio outputs
- 24bit / 48kHz / 4ch sampling and processing

DVA-12d is high quality de-embedder, designed to separate the four 24-bit audio signals from digital video and convert them to analog. The device has a level adjustment, change the audio phase and selection of channel place. The module is placed in the SRU-306 3RU chassis with capacity of 6 modules. Also, the device is available in standalone version.



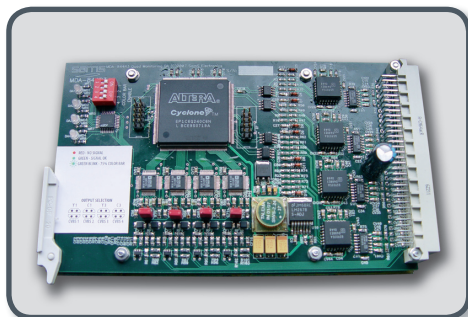
- Broadcast quality (12/10bit processing)
- Save 4 different presets
- Easy setup with local control and LCD display
- Audio de-embedder
- Balanced / unbalanced AES digital audio outputs
- 24bit / 48kHz / 2ch sampling and processing

DVD-12d is high quality de-embedder, designed to separate the two 24-bit audio signals from digital video. The device has a level adjustment, change the audio phase and selection of channel place. The module is placed in the SRU-306 3RU chassis with capacity of 6 modules. Also, the device is available in standalone version.



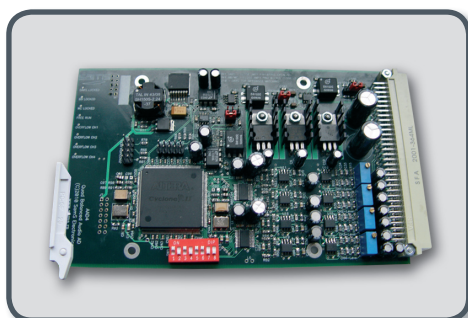
- 4 channels of monitoring conversion on one card
- 24 channels of monitoring in a 3RU frame
- Supports PAL and NTSC
- 8-bit conversion with 10-bit DAC and special output filter
- Color bar test mode available with valid input signal
- Input indicator LEDs (one per channel)
- Input EQ for up to 300m of cable

The MDA-844 converts serial digital video signal to composite or YC analog video. This device is specially made for monitoring SDI video over analog monitor. With both composite and YC outputs available, this module is perfect for converting SDI video sources. D/A fully differential path and 10/8 bit processing ensure that signal can be used in the most demanding broadcast and professional applications. Comprehensive user adjustable digital filtering ensures full frequency response even for a composite signal.



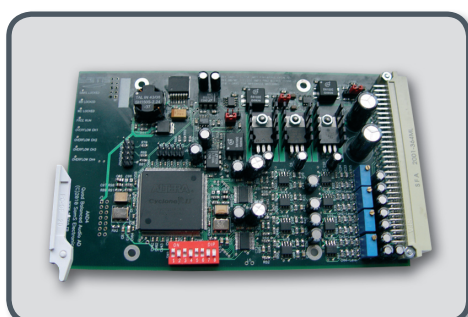
- Broadcast quality
- 24bit conversion, 48 / 96 / 192 sampling rate
- 24dBu max input level
- 4ch analog inputs
- 2ch digital outputs
- The possibility of raising input level 0dbFS @ 24dBu or 0dbFS @ 18dBu
- Automatic or manual reference selection: BB / DARS / Word clock (optional)

AAD-4 is a high quality four channel analog audio to digital two channel converter. The conversion is 24 bit and the device has selectable sampling rates over the dip switch: 48 / 96 / 192 KHz. UNITS accepts different types of external references: Black Burst, DARS, Free Run or Word clock (optional). Audio input level can be raised to +6 dB. Maximum input level is 24dB. The output can be AES / EBU or SPDIF. The module is placed in the SRU-306 3RU chassis with capacity of 6 modules. Also, the device is available in standalone version.

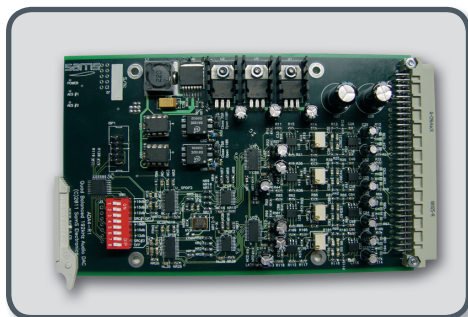


- Broadcast quality
- 24bit conversion, 48 / 96 / 192 sampling rate
- 24dBu max input level
- 2ch analog inputs
- 1ch digital outputs
- The possibility of raising input level 0dbFS @ 24dBu or 0dbFS @ 18dBu
- Automatic or manual reference selection: BB / DARS / Word clock (optional)

AAD-2 is a high quality two channel analog audio to digital one channel converter. The conversion is 24 bit and the device has selectable sampling rates over the dip switch: 48 / 96 / 192 KHz. UNITS accepts different types of external references: Black Burst, DARS, Free Run or Word clock (optional). Audio input level can be raised to +6 dB. Maximum input level is 24dB. The output can be AES / EBU or SPDIF. The module is placed in the SRU-306 3RU chassis with capacity of 6 modules. Also, the device is available in standalone version.

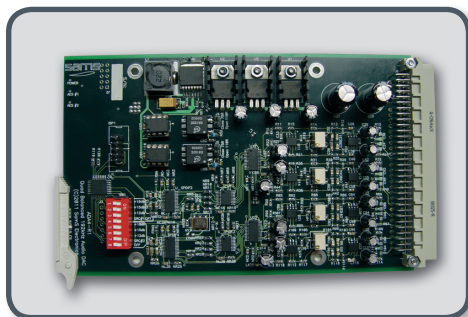


- Broadcast quality
- 24bit conversion, 32 to 192 KHz sampling rate
- Output level from 9 to 24dB for 0dBFS in 1dB increment
- 4ch analog outputs
- 2ch digital inputs
- Low-Jitter Clock Recovery
- The selection of inputs: AES/EBU or SPDIF
- Fine-tune the output level
- Led indication of input signal



ADA-4 is a high quality two channel digital audio to four channel analog converter. The conversion is 24 bit and the device automatically adjusts by the incoming sampling rate and supports from 32 to 192 KHz. The maximum output level from +9 to +24 dB 0dBFS and is set by dip-switch in 1dB increment. The input can be AES / EBU or SPDIF. The module is placed in the SRU-306 3RU chassis with capacity of 6 modules. Also, the device is available in standalone version.

- Broadcast quality
- 24bit conversion, 48 / 96 KHz sampling rate
- 24dBu max output level
- 2ch analog outputs
- 1ch digital inputs
- Possibility to select 48KHz or 96KHz sampling rate
- The selection of inputs: AES/EBU or SPDIF
- Fine-tune the output level



ADA-4 is a high quality two channel digital audio to four channel analog converter. The conversion is 24 bit and the device automatically adjusts by the incoming sampling rate and supports from 32 to 192 KHz. The maximum output level from +9 to +24 dB 0dBFS and is set by dip-switch in 1dB increment. The input can be AES / EBU or SPDIF. The module is placed in the SRU-306 3RU chassis with capacity of 6 modules. Also, the device is available in standalone version.

- Broadcast quality
- Converts YUV, CVBS or YC to digital video
- 12/10bit processing
- Fiveline adaptive 3D comb filter
- Integrated Three 54MHz: Noise Shaped Video, 12-bit AD converter and 4 x oversampling
- Integrated automatic gain control with adaptive peak white mode
- CTI (chroma transient improvement)
- DNR (Digital Noise Reduction)
- EDH processing
- Automatic YUV pixel timing adjustment
- Input signal presence detection
- Pass, "Freezing" or broadcast test in the case of incorrect video input
- Integrated Test Generator (Black, Color Bar)
- Easy setup with local control and LCD display



AD-11fs converts composite or component analog video to SDI. AD-11fs have a frame synchronizer that asynchronous video signal recorded in the memory and reads it synchronized with an external reference, as well as other settings. It is useful for synchronizing large number of external signals with signals from the TV station, or the capture of material from an amateur into a professional format. With both available, composite and component (Y, Cr, Cb or RGB or YC) inputs, this unit is ideal for converting all types of analog video. Advanced and highly flexible digital output, enables high-quality conversion of referral systems. "12bit 4x oversampling allows the A / D conversion of high-performance 10bit output. An intelligent adjustment system provides full digital filter frequency response, even in the composite signal. Fixed frequency 54MHz ADC and buses for all options, allows for very precise processing and digital filtering. The module is placed in the SRU-306 3RU chassis with capacity of 6 modules. Also, the device is available in standalone version.

- Broadcast quality
- Converts YUV, RGB, CVBS or YC to digital video
- 12/10bit processing
- Fiveline adaptive 3D comb filter
- Processing delay - 1line
- Integrated Three 54MHz: Noise Shaped Video, 12-bit AD converter and 4 x oversampling
- Integrated automatic gain control with adaptive peak white mode
- CTI (chroma transient improvement)
- DNR (Digital Noise Reduction)
- EDH processing
- Automatic YUV pixel timing adjustment
- Input signal presence detection
- Pass, "Freezing" or broadcast test in the case of incorrect video input
- Integrated Test Generator (Black, Color Bar)
- Easy setup with local control and LCD display



AD-11 converts composite or component analog video to SDI. With both available, composite and component (Y, Cr, Cb or RGB or YC) inputs, this unit is ideal for converting all types of analog video. Advanced and highly flexible digital output, enables high-quality conversion. "12bit 4x oversampling allows the A / D conversion of high-performance 10bit output. An intelligent adjustment system provides full digital filter frequency response, even in the composite signal. Fixed frequency 54MHz ADC and buses for all options, allows for very precise processing and digital filtering. The module is placed in the SRU-306 3RU chassis with capacity of 6 modules. Also, the device is available in standalone version.

- Broadcast quality (12/10bit processing)
- Converts SDI to YUV, RGB, CVBS or YC
- Reclocked digital output
- Save 4 different presets
- Complete ProcAmp adjustment
- Jitter cleaner
- EDH processing
- PAL CVBS color framing and SC phase
- Pass, "Freezing" or broadcast test in the case of incorrect video input
- Integrated Test Generator (Black, Color Bar)
- Easy setup with local control and LCD display



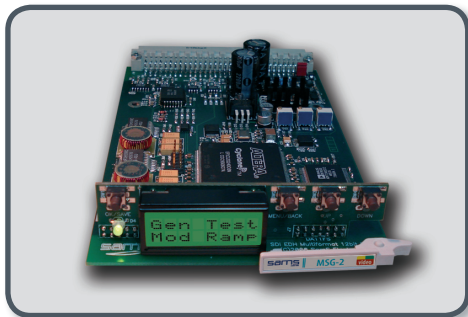
DA-11fs converts SDI to composite or component analog video. DA-12fs have a frame synchronizer that asynchronous video signal recorded in the memory and reads it synchronized with an external reference, as well as other settings. It is useful for synchronizing large number of external signals with signals from the TV station, or the capture of material from an amateur into a professional format. With both available, composite and component (Y, Cr, Cb or RGB or YC) outputs, this unit is ideal for converting all types of analog video. Complete ProcAmp output signal controls are provided for all output formats with adjustments: Horizontal and Vertical Blanking, Horizontal and Vertical Position, SC Phase, Color Framing, Luma, Color, Pedestal, Sharpness, YC Delay etc. The module is placed in the SRU-306 3RU chassis with capacity of 6 modules. Also, the device is available in standalone version.

- Broadcast quality (12/10bit processing)
- Converts SDI to YUV, RGB, CVBS or YC
- Digital output
- Save 4 different presets
- 4x oversampling
- Complete ProcAmp adjustment
- Integrated Test Generator (Black, Color Bar)
- Easy setup with local control and LCD display



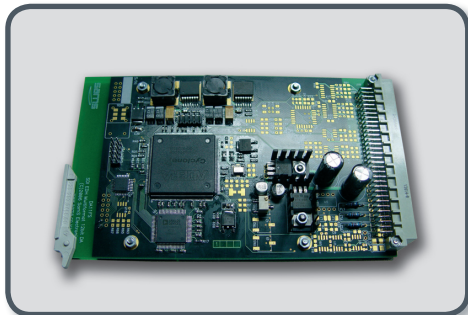
DA-11 converts SDI to composite or component analog video. With both available, composite and component (Y, Cr, Cb or RGB or YC) outputs, this unit is ideal for converting all types of analog video. Complete ProcAmp output signal controls are provided for all output formats. The module is placed in the SRU-306 3RU chassis with capacity of 6 modules. Also, the device is available in standalone version.

- Broadcast quality (10bit extended)
- Analog component (YCrCb / RGB / YC) and composite CVBS output
- Digital video output with embedded audio
- AES/EBU digital audio output
- Digital or analog external genlock
- Internal precision master clock 1ppm
- Superior jitter performance
- 26 different tests
- Auto Cable EQ exceeding 200m (usually 300m depend on cable quality)
- Pal CVBS color framing and phase adjustment
- Easy setup with local control and LCD display



The MSG-2 is multiformat signal generator. MSG-2 synchronize output test from external digital or analog genlock source. MSG-2 may also be system reference with internal precision master clock 1ppm. With both, digital and analog - composite and component (Y, Cr, Cb or RGB or YC) outputs available, this module is perfect as master video reference in combined digital and analog facilities. Provided adjustments for analog video are: Horizontal and Vertical Position, SC Phase and Color Framing. Included tests are: bars 75%, bars+red 75%, bars 100%, bars+red 100%, red, green, blue, black, 50% field, 100% field, convergence, pluge, bounce, activeline, 10 steps, 10 mod steps, ramp, mod ramp, 2t 10t bar, pulse bar, $\sin(x)/x$, multiburst 60%, sweep, check field, eq and pll. Audio adjustment are: frequency (0Hz-20Khz), output level for every channel (-63dbFS to 0dbFS) and audio click time for every channel.

- Broadcast quality
- 6 black burst outputs
- CCIR 624-4 PAL standards
- High stability
- Internal precision master clock 1ppm
- External reference genlock mode (optional)



MSG-BB6 is generator black with 6 outputs. Outputs are generated from the same source in order to ensure synchronization without delay. This module is perfect as the main video reference, which has an internal precision temperature and voltage stable master clock 1ppm. Signal is derived from the temperature-stable oscillators. This device provides a stable output signal and does not need to be adjusted during operation in different temperature environments. MSG-BB6 video outputs are the CCIR 624-4 standard. This module is designed for Sams SRU-306 3RU rack frame, but can be delivered as stand-alone 1RU device.

Authorized dealer: