TVBURST™

Professional
Video & Audio
Electronics
Spring/Summer
2010 Catalog

Cover Photos: A few of our customers here in New Mexico.

KNME (the PBS affiliate) is using our Model LG-1 Logo Generator in Master Control. Note in the photo of their building, to the left in the background, is Sandia Peak (10,678 ft.) where their transmitter is located.

KOAT Channel 7, Albuquerque's ABC affiliate, has a Bell 206 Long Ranger IV outfitted by Helicopters Inc. of Cahokia, Illinois (St. Louis) (618) 337-2903. The aircraft has a pair of Burst Electronics 8×1 video switchers (the blue switches in the small photo) linked via RS232.

Welcome to Burst Electronics

Thank you for choosing Burst Electronics as your manufacturer of video editing and control products. We are here to serve your needs. We look forward to working with you in the future, and hope you find the products contained within this catalog the solution that you are seeking, but if you can't find exactly what you are looking for, give us a call anyway. Our experienced design staff is always open to suggestions (many of our products are suggestions from you, the professional videographer).

Burst Electronics Inc, formerly Bio-Electronics, has been active in the design and manufacture of video products for professional and prosumer users since 1985. Our first product, the PC-2 Character Generator (the first high quality CG card for the IBM PC), is but one of nearly 50 products we have produced. Our product line ranges from analog A/V switchers to HD/SD SDI test pattern generators. Each of our products is backed by a 1 year warranty and, as always, free technical support.

We also want to make it easy for you to contact us if you have need, so all of our products are labeled with our contact information. This way you don't need to go hunting around for the manual that is buried under a ton of paperwork.

Again, thank you for choosing Burst Electronics as your manufacturer of video editing products, let us know what you think, we are happy to be of service.

Visit our web site at www.burstelectronics.com for the latest news on our products or to contact us via e-mail.

All products of Burst Electronics are designed and built in the USA. All products carry a 1 year warranty.

Proud to say,

Made in USA

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Rev. 3/10

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Video Generators

The BG Series of Black Burst/Color Bar Generators.

If you need to switch quickly and operate in both NTSC and PAL, Composite and Y/C (in the same generator) and have Full Field Color Bars (option) the BG Series is the answer. Rack mounts (option) plus tone (either balanced or unbalanced option) add to the flexibility.

BG-2 and BG-2CB
Black Burst Generators

The BG-2 (and BG-2CB) are a new generation of Black Burst Generators. The BG-2 has two video outputs that are digitally generated by an internal microprocessor and a D/A converter. This allows precise waveform generation meeting the requirements of the most demanding applications. Can be configured as either composite or Y/C or both (option).

The BG-2CB includes the features and specifications of the BG-2 plus Full Field Color Bars and user switchable NTSC/PAL dual standard. 5Vdc.

BG-4 and BG-4CB
Black Burst Generators

The BG-4 (and BG-4CB) are a new generation of Black Burst Generators. The BG-4 has four video outputs that are digitally generated by an internal microprocessor and a D/A converter. This allows precise waveform generation meeting the requirements of the most demanding applications. Also, built-in, is a 1 kHz tone generator. Both balanced and unbalanced versions are available (option). See the price list for exact model numbers.

The BG-4CB includes the features and specifications of the BG-4 plus Full Field Color Bars and user switchable NTSC/PAL dual standard.

BG-5 and BG-5CB
Black Burst Generators

The BG-5 (and BG-5CB) are five output Black Burst Generators. An internal Tone Option is available.

Video Generators

BG-3 and BG-7
Video Pattern Generators with
Full Color Graphics ID Image Import

The BG-3 (single output) and the BG-7 (single pattern output plus 6 black burst outputs) are video multi-pattern generators with the ability for the user to import a graphic file and overlay that image on the pattern output.

Applications include source ID in studio and mobile applications.

A 24-bit full color graphic is created with any paint program and loaded into the BG-3/7 via a USB port. Once stored in the unit, the graphic image is overlayed on the pattern output. There is an On/Off switch to control the insertion of the image.

The image can be a digital photo, logo, station call letters, etc.

A front-panel USB 2.0 port allows image/ID import. The image is 24-bit color. The size is 720x488 for NTSC, 720x588 for PAL, BMP file format.

The BG-3 and BG-7 are dual standard, NTSC/PAL, jumper selectable (front panel switch optional). Tone 1 kHz (Balanced or Unbalanced) Option. Female MiniXLR - male XLR adapter available.

Patterns:

- SMPTE Color Bars
- Full Field Bars
- Red
- Green
- Blue

- Window
- 5 Step Luma
- 5 Step Chroma
- 10 Step Chroma
- Black Burst

Specifications - BG Series

Output: 1 volt standard video 75 Ohms 1%

Sync at -40 IRE

Burst at +/-20 IRE (3.579 MHz NTSC, 4.433 MHz PAL)

Setup 7.5 IRE (0 IRE PAL)

Fully saturated 75% bars (gray, yellow, cyan, green, magenta, red, blue, black)

12 Vdc, center positive (5 Vdc option) 5 Vdc is standard on the BG-2 and BG-2CB

Tone 1 kHz (0dB unbalanced phono jack, +4dB balanced miniXLR)

Video Generators

SMPTE Color Bar, Black Burst, with ID Option and Tone

Burst Electronics manufactures a series of NTSC (and PAL) Black Burst, Sync and SMPTE Color Bars Generators. Models are available that range from single output Black Burst (SG-2) up to six Black Burst plus SMPTE Bars (SG-7). ID generation is available in the SG-3 and SG-7. Tone can be either unbalanced (0 dBm) or balanced (+4 dBm).

Model SG-2
2nd Generation Single Output Black Burst Generator

The SG-2 Black Burst Generator is a single output unit. The output, which contains composite sync, color burst and 7.5 IRE setup (0 IRE in PAL) is a standard 1 Volt Video signal. The SG-2 is used to drive Genlock inputs, laydown "black" on tape, or feed a DA to distribute house black.

Options: Y/C (S-Video), PAL

Models SG-4 and SG-5
have been replaced by the BG-4 and BG-5

Models SG-3 and SG-7
SMPTE Color Bars, ID and
Black Burst Generators
Now with Full Graphics Color ID
(for field-programmable ID versions, see BG-3 and BG-7)

The SG-3 SMPTE Color Bar/Black Burst Generator is a low cost unit that produces the SMPTE Color Bar pattern and black burst. A front panel switch selects either Bars or Black for the output. ID option available (programmed at factory) on both black and bars output.

Options: ID, 1 kHz Tone (balanced or unbalanced), Rack Mount, Female MiniXLR - male XLR adapter available

The SG-7 Generator outputs SMPTE Color Bars and 6 outputs of black burst simultaneously. An ID option is available on the bars output.

Options: ID, 1 kHz Tone (balanced or unbalanced), Rack Mount, Female MiniXLR - male XLR adapter available

Video Generators

Specifications - Video Generators

Output: 1 volt standard video NTSC (PAL)

Output Impedance: 75 Ohms 1%

Sync Tip: -40 IRE

Burst: +/-20 IRE, 3.579545 MHz (PAL: 4.433619 MHz)

Setup: 7.5 IRE NTSC (0 IRE PAL)

Video Output Connector: BNC (Y/C: 4 pin miniDIN)

Audio Output Connector: RCA (1 kHz, 0 dBm, 1% THD)

Output Protection: Open or Short, infinite duration

SMPTE Color Bars:

Sync at -40 IRE

Burst at +/- 20 IRE (3.579545 MHz)

Setup at 7.5 IRE

Fully saturated 75% bars (gray, yellow, cyan, green, magenta, red, blue)

Reverse blue bars (blue, black, magenta, black, cyan, black, gray)

100 IRE white bar

-I and +Q signals

Pluge pulse signal:

Whiter than black at 11.5 IRE

Black at 7.5 IRE

Blacker than black at 3.5 IRE

Black Burst: Sync, Color Burst and 7.5 IRE Setup

Wall module (included): 120 Vac 60 Hz, 12 Vdc 500 mA, UL Listed

DC Powered: 12 Vdc, center positive

Warranty: One Year Parts and Labor

Video LOGO Generator

Model LG-1 Plus and LG-4
Video LOGO Generator with Timed Take

The Burst Electronics LG-1 Plus Video LOGO Generator/Inserter is a video graphics overlay unit. The LG-1 Plus imports a PC generated graphics file and overlays that graphics on composite video. The graphics can be a LOGO, text, ID, etc. The graphics are created using Microsoft PC Paintbrush for Windows or any other Paint program that creates a BMP (Bit Mapped) file. The graphics window is 256 pixels wide by 64 scan lines high and may be placed anywhere over the background video. One horizontal scan line is 750 pixels wide (70 nS pixel resolution). The overlaid graphic is a monochrome image adjustable in gray scale from black to 100 IRE white.

The timed take feature allows the logo to appear at user selectable preset time intervals.

The LG-1 Plus has an internal mixer and keyer with fade and intensity control. This allows for a smooth up/down transition of the overlaid graphics. Additionally, the transparency of the graphics can be adjusted to suit the background program material.

Imported graphics are stored in a non-volatile EEPROM memory; this allows retention of the graphic image with power off. A USB 2.0 interface is standard. A Windows program is provided to load the graphics file into the LG-1 Plus and LG-4. A video input is required for operation.

There is also a GPI trigger for additional flexibility and remote control operation.

Features

- Overlays LOGO graphics on Video
- Graphics created with any Paint software (BMP file)
- Graphics loaded via USB
- Genlocks to NTSC
- Graphics Brightness Adjustable
- Transparency of overlay adjustable
- Built in Fader/Mixer
- Adjustable transition/take speed
- Timed take mode
- USB 2.0 interface
- Non-volatile EEPROM storage of graphics
- GPI Trigger for remote control
- Powered from external 12Vdc
- Compact Size in a Rugged Aluminum and Steel Enclosure
- Warranty: One Year Parts and Labor

Options: Y/C, Rack Mount, PAL

The LG-4 Video LOGO Generator is identical to the LG-1 Plus with the addition of expanded nonvolatile memory allowing the internal storage of up to four logos. The four stored logos may be recalled via front panel control or PC.

Options: Y/C, Rack Mount, PAL

Video LOGO Generator

Specifications - LG-1 Plus, LG-4

Video Input/Output: 1 Volt Standard

Video Standard: NTSC (PAL optional)

Input/Output Impedance: 75 Ohms 1%

Internal Mixer/Fader with On/Off Control

Graphic Intensity: 7.5 IRE to 100 IRE

Fader Speed: Adjustable from 0.2 to 3 seconds

Transparency: Adjustable from clear (0%) to opaque (100%)

Graphic window: 256 pixels by 64 scan lines

USB 2.0 interface

Pixel resolution: 70 ns

Graphic Storage: Non-Volatile EEPROM (4 memories in LG-4)

Graphic format: BMP file, black and white (2-bit monochrome)

GPI: External trigger (Ground or TTL low) 50 mS min.

Video Connectors: BNC, Y/C (4 Pin Mini DIN)

Size: 5.6W x 1.5H x 7.3D inches Aluminum and Steel Enclosure

DC Powered: 12 Vdc 300 mA, center positive

Wall module (included): 120 VAC 60 Hz, 12 Vdc 500 mA, UL Listed

Warranty: One Year Parts and Labor

Burst logo overlayed on SMPTE bars

Digital LOGO Generator

Model HDLG
HD/SD SDI Color Logo Generator

The HDLG is a self-contained in-line HD/SD SDI logo generator with the form and function of the existing LG1Plus/LG4 family of logo generators. The HDLG provides storage for up to four 512Hx512V pixel 24-bit static logos.

The HD/SD SDI program video path is a full 10-bit resolution, while the resolution of the logo is 8-bit RGB (24-bit total) bitmap image. These logos can be switched on/off or faded in/out of the program path using Windows based software interface, a real-time clock scheduler, an external GPI input or directly from the Front Panel. The transparency of the insert and the fade rate are also selectable.

The HDLG ships with a Windows based GUI that accommodates the loading and positioning of the image. Optional scheduling capabilities are available which make use of the internal time keeping capabilities of the HDLG on-board processor to run the schedule. The HDLG also accepts a one-pulse-per-second time-keeping pulse from an external source (such as the Time Sync Plus from Broadcast Tools Inc www.broadcasttools.com) to maintain the timing accuracy of the on-board clock. The scheduler's database can then be stored in the HDLG and accessed by the GUI.

Although the HDLG has but one GPI input, its function is fully programmable. The GPI input could be used to over-ride the scheduler and display a pre-defined logo. For example, a logo indicating technical difficulties could be selected by the GPI input, regardless of the schedule. The GPI could also be programmed to cycle through the available logos, or just initiate the cut/fade in/out. It can be made level sensitive, as in – as long as its activated the default logo is displayed, or the logo cuts in when the GPI is high, and cuts out when it's low. Or, it could be edge-sensitive, as in - each time the GPI is switched from low-to-high; the next logo in sequence is aired.

The input/output to the HDLG is serial digital (SDI) in either standard definition NTSC/PAL 480i/576i or the high-definition HDTV 720p50/60 and 1080i50/60 formats. The HDLG automatically detects the input standard and format without user intervention. The logo generator intrinsically locked and formatted to the program channel input format. The latency between input and output of the HDLG is about 6 clock cycles, allowing it to be inserted in-line anywhere in the system. Additionally, because this device may be in-line and in a critical path, a failsafe bypass relay is included to route the SDI input directly to the output when power is lost or the unit is off.

The HDLG also doubles as an HD SDI video bar generator. The front panel switch labeled "Func" is a three position switch that allows the user to command the HDLG as a logo inserter (a logo on your incoming video) or as a color bar generator. The standard function of the HDLG is as a logo inserter. The switch is labeled "STD" for Standard Operation. However, if you need either 1080i/60 or 720p/60 color bars, just flip the switch to the appropriate position and the HDLG will generate color bars. Your logos can also be inserted over the internally generated bars. Just toggle the "Take" switch to turn your logo on.

Digital LOGO Generator

Specifications:

Inputs: 1

Connectors: BNC

Standards: SMPTE 292M/259M (NTSC 480i; PAL 576i; 720p59.94; 1080i50/59.94)

Level: 800mv p-p

Impedance: 75 ohm terminating

Equalization: Automatic up to 100m @ 1.5GHz using Belden 1694

Outputs: 2 (1 program, 1 bypass)

Connectors: BNC

Standards: SMTPE 292M/259M

Level: 800mv p-p

Impedance: 75 ohm

Signal Path: YUV 4:2:2

Sampling: SD – 27MHz; HD – 74.25MHz or 74.25/1.001MHz

Quantization: 10-bits signal path

Latency: 6 clocks

Output Jitter: 0.2UI

LOGO Format: Bitmap (24-bit color)

Loading Interface: USB 1.1/2.0 compliant

Number: 4

Max Size: 512Hx512V

Quantization: 8-bits RGB

Front Panel Control Functions:
- Switch 1: Func. 1080i, 720p, Pass Through
- Switch 2: Speed Up/Down
- Switch 3: Transparency 0-100%
- Switch 4: Horizontal Position
- Switch 5: Vertical Position
- Switch 6: Take/Timed
- Switch 7: Logo select
- Switch 8: Power

Indicators:
- Number: 6
- Logo: Quad-level bi-color
- SD/HD: Bi-color LED
  (SD = Green, HD = Amber)
- Active: LED (Red)

GPI Input:
- 3p Phoenix type
- Bi-directional optically isolated
- One +5 (short-circuit protected) for common

Clock Sync Input:
- 3p Phoenix type
- Impedance: 2K
- Level: TTL

General:
  Power Supply: 12V DC external Wall Mount

Environmental:
- Operation temperature: 0C to +40C
- Storage temperature: -40C to +85C
- Relative Humidity: 5% to 95% RH
  (non-condensing)

Character Generators

Model MCG-2
Micro Character Generator
With Real Time Clock Option
Composite and S-Video Versions

The Burst Electronics MCG-2 Micro Character Generator is a genlockable unit that accepts a standard NTSC (or PAL) video signal and overlays basic black and white characters with a selectable black and white background. Character and background intensity are independently adjustable from white through black. A video input is required for operation.

Maximum number of characters displayable at one time is 180 (20 characters by 9 lines). There are 16 character sizes (4 character heights and 4 character widths) allowing page by page text emphasis control.

Display pages can be highlighted by the use of an adjustable background, and individual characters may also be set to blink for an additional effect. Built-in Menus, Help Screens and Self-test all add to ease of use.

Text input is performed with front panel push buttons in a "letter up/letter down" and "cursor left/cursor right" fashion. Up to 10 pages of text can be stored and recalled from battery backed memory. An RS232 interface for connection to a PC is standard. USB with use of a USB-2 cable (optional). Text can be downloaded from a PC.

A Real Time Clock Option is available that allows Time of Day and Date information to be overlayed on video. The RTC is battery backed. The RTC can be programmed by the front panel or via the RS232 link for additional flexibility.

Applications include Source ID, Bulletin Board Displays, Subtitling, Message Screens, Time Keeping and Clock Display Applications.

Features

- Overlays Text on Video
- Front Panel Programmable or via RS232 Computer Link
- Up to 32 MCG-2's on one RS232 bus
- USB 1.1 (optional cable required)
- Genlocks to either NTSC and PAL automatically
- Character/Background Brightness Adjustable
- Four Character Heights and Four Character Widths
- A-Z, a-z, 0-9 and Punctuation Marks Character Set
- Built in Menus, Help Screens and Self-test
- Real Time Clock (RTC) option
- Remote Control via RS232 (RJ11 Connector)
- BNC Video Connectors, 4 Pin MiniDIN on S-Video
- Ten Pages of Text Storage in Memory
- Lithium Battery Backup
- Can be powered from external 12Vdc, for Field use
- Compact Size in a Rugged Aluminum and Steel Enclosure
- Warranty: One Year Parts and Labor

Character Sizes (16 Combinations):

Height 1: 28 Scan Lines Width 1: 20 Characters per Line

Height 2: 56 Scan Lines   Width 2: 13 Characters per Line

Height 3: 84 Scan Lines   Width 3: 9 Characters per Line

Height 4: 112 Scan Lines   Width 4: 6 Characters per Line

Options: Real Time Clock (RTC), Y/C, Rack Mount, Remote Control Page Select (Contact Closure)

Specifications - MCG-2

Input/Output: 1 Volt standard video

Video Standard: Both NTSC and PAL (auto selects)

Input/Output Impedance: 75 Ohms 1%

Internal Mixer with On/Off Control

Character Size: 28, 56, 84 & 112 Scan Lines (16 Sizes)

Character Flash: Selectable

Character Display Level: 7.5 to 100 IRE (0 to 100% White)

Background Display Level: 7.5 to 100 IRE (0 to 100% White)

Remote Control via RS232 to a PC, up to 9600 Baud

USB 1.1 (optional cable required)

Simple Two Letter Remote Control Commands

Page Storage: 10 Pages, Battery Backed

Video Connectors: BNC, 4 Pin MiniDIN on S-Video

Size: 5.6W x 1.5H x 7.3D inches Aluminum and Steel Enclosure

DC Powered: 12 Vdc 300 mA, center positive

Wall module (included): 120 VAC 60 Hz, 12 Vdc 500 mA, UL Listed

Warranty: One Year Parts and Labor

Model MCG-RTC
Real Time Clock

RTC option for MCG-2 allows date and time to be displayed. Format is either 12-hour AM/PM or 24-hour military time format. Display may be time or date or both time and date.

Raster output of MCG-2 over SMPTE bars

Model Pixie-FS
Pixie Frame Store/TBC Model Pixie-FS

The Pixie-FS is a Frame Store/TBC unit that, through the use of micro miniature electronics, is shrunk to the size of a deck of cards. The Pixie-FS is a full feature 8-bit frame store including proc amp control. Adjustments for gain, color and timing. The Pixie-FS is dual standard, operating in either NTSC or PAL.

Features:

- Full Frame TBC
- Adaptive Comb Filter Decoding
- Input Anti-aliasing Filters
- Multi-standard NTSC/PAL
- Genlock
- Y/C ➔ CVS or CVS ➔ Y/C Transcoding
- Extremely compact
- Instant Recall of Factory Preset Levels

Inputs:

- Composite or S-Video (75 Ohms)
- Genlock (High-Z or 75 Ohms)
- AGC - Sync priority
- Input Level +/-6dB
- 4:2:2 CCIR656 Processing
- 9-bit ND quantization
- 27MHz Sampling
- 4-line Adaptive Comb Filter

Outputs:

- Composite or S-Video (Y/C)
- Level 1vpp

Performance:

- Frequency Response +/-1.0dB to 5.5MHz
- Differential Gain <2%
- Differential Phase <2°
- SNR>62dB
- K Factor M<1%
- Infinite Frame Sync

Frame Sync/TBC

Adjustments:

- Luminance
- Chromance
- Hue
- Brightness
- Genlock H-Phase +1- 2us
- Genlock Subcarrier Phase 0
- Genlock on/off
- Standards NTSC or PAL
- Input Selection CVS I S-Video

Power:

- 5 Vdc 450mA, center positive

Environmental:

- Operational Temperature Range 0° to 50° C
- Storage -20° to +85° C
- Humidity to 98% non-condensing

Digital Video

Model DVA-1
Digital Video DA with Analog Converter

The Burst Electronics Model DVA-1 is two products in one. First, it's a reclocking serial digital video distribution amplifier with 2 outputs. The reclocking of the serial digital signal minimizes errors that occur during transmission over long cable runs. Secondly, the DVA-1 is a serial digital to analog composite converter. The composite output allows the use of a composite analog video monitor to display the digital video signal.

Features

- Reclocking Serial Digital DA with Analog output
- 4:2:2 270 Mbit SMPTE 259M
- 601 Serial Digital Input
- Two Re-clocked Serial Digital outputs
- One Analog Composite NTSC output
- DA equalization for up to 1000 feet of cable

Model DV-1

The Model DV-1 converts serial digital video into analog video. The output is selectable for composite or Y/C.

Features

- Serial Digital to Analog Converter
- NTSC/PAL
- NTSC Pedestal On or Off
- 10 bit internal
- 4:2:2 270 Mbit SMPTE 259M
- Serial Digital input
- Composite or Y/C output
- Equalized for up to 1000 feet of cable
- Internal Color Bars

Model DV-2

The Model DV-2 converts analog video (either composite or Y/C) to Serial Digital video. There are two SDI outputs.

Features

- Analog to Serial Digital Converter
- Composite or Y/C input (NTSC/PAL Autoselect)
- Dual Serial Digital output
- 4:2:2 270 Mbit SMPTE 259M
- 8 bit conversion
- Test Patterns built in
- Low Jitter PLL Design

BURST™ **Digital Video**

Model DV-4
Analog to SDI Converter 10-Bit

The DV-4 is a true 10-bit Analog to SDI Converter. Features include full proc amp control of the incoming analog video, allow for corrections and adjustments. The DV-4 supports all popular analog formats in NTSC, PAL and SECAM. The input section has anti-aliasing filters that allows clean conversion of satellite and ENG sources. Internal color bars and Pathological generators add to the functionality of the DV-4.

- Full 10-bit processing throughout
- Supports ALL popular baseband analog video formats, including:
- YPbPr (YUV), Betacam, RGB, NTSC, PAL, SECAM, and YC
- 2D 5-line Adaptive comb filter
- Automatically senses PAL/NTSC/SECAM inputs
- Full locally adjustable video processing levels, including:
- Contrast, Setup, Hue, Saturation, and Cr/Cb color gain
- Built-in Full-field colorbar and Pathological generators
- Dual SMPTE 259M outputs
- Internal anti-aliasing filters for satellite and ENG cameras
- Lock Status LED
- Crystal PPL yields <500ps Output jitter
- Freq Response flat to 5.5MHz
- Diff gain - 1.0%; Diff phase - 0.5 degrees
- Input 12Vdc - over/reverse voltage protected
- RS-232 (Optional) for remote adjustment and status reporting

Loss of Video Detectors

Model VDS
Loss of Video Detector

The Burst Electronics Model VDS (and the VDS-3, a 3 channel version) detects the presence of composite video at its A input. If loss of video on the A input is detected, then the unit switches to the B input, lights a Red LED (VDS only), and energizes an internal "tally" relay (standard on VDS and VSA, optional on VDS-3). This relay may be used to control external devices. The tally relay has both normally closed and normally open contacts (Form C relay). The Model VSA includes stereo audio switching, audio follow video.

The video detection process utilizes a sophisticated sync separator circuit and a micro controller IC to analyze the A input. The composite sync tip amplitude, vertical sync, horizontal sync, and frame pulse are all analyzed by the micro controller to determine the quality of the incoming video on the A input.

The frame test allows progressive scan video signals (blue screen) and VCR search and pause modes to be detected as bad video.

Options: PAL

Model VDS-3
Loss of Video Detector

Three channel version of VDS. Includes self test feature.

Options: PAL, Rack Mount, Tally Relay, Audio Follow (balanced or unbalanced)

Model VSA
Loss of Video Detector with Audio Follow

All the features of the VDS plus audio follow video (stereo, unbalanced) and front panel self test feature.

Options: PAL, Rack Mount

Specifications - Loss of Video Detectors

Video detect: Sync tip, vertical sync, and frame pulse (selectable)

Sync Detect Level: -5 to -30 IRE, adjustable

Delay: 0.1 seconds

Input/Output: 1 Volt standard video

Input Impedance: HiZ or 75 Ohms 1%, looping (jumper/switch selected)

Output Impedance: 75 Ohms 1%

Size: VDS: 4.4W x 1.2H x 2.4D inches

Size: VDS-3: 5.6W x 1.5H x 7.0D inches

Size: VSA: 4.1W x 1.5H x 5.5D inches

DC Powered: 12 Vdc, center positive

Wall module (included): 120 VAC 60 Hz, 12 Vdc 500 mA, UL Listed

Warranty: One Year Parts and Labor

Analog Video Switchers

Model VS4x1
Four Input Active Switcher

The VS4x1 is a four input, one output vertical interval video switcher. A special feature of the VS4x1 is digital logic that inhibits selection of an unused input, i.e. one where no video is present. The output is dc clamped to zero Volts. This allows for jump free switching between genlocked sources. The VS4x1 can be slaved with the AS4x1 audio switcher to allow audio follow video and breakaway switching. The VS4x1 is 12 Vdc powered, wall module included.

Options: Y/C, Rack Mount, Remote Channel Select (Contact Closure)

Option D: Remote Contact Closure for Channel Select

Model VS4x1R: Includes RS232 remote control input (USB 1.1 with optional cable)

Model VS8x1
Eight Input Active Switcher with Dual Outputs

The VS8x1 is an eight input, dual output vertical interval video switcher. Specifications are the same as Model VS4x1. Second output to drive monitor, etc.

Options: Rack Mount, Remote Channel Select (Contact Closure), Advance/Retard Channel Select

Option D: Remote Contact Closure for Channel Select

Model VS8x1R: Includes RS232 remote control input (USB 1.1 with optional cable)

Option RC (formerly Option B): Remote version for use with RC8x1

Option T: DTMF remote control

Model RC8x1
Remote Control Unit for VS8x1RC, DSR8x1RC

The RC8x1 is a remote control unit for the VS8x1RC and DSR8x1RC. Illuminated switches with brightness control. The RC8x1 derives its power from the VS8x1RC or DSR8x1RC. Up to two RC8x1's can control one VS8x1RC or DSR8x1RC video switcher.

Option: Rack Mount

Analog Video Switchers

Model VS8x8
Video Switch - 8 In by 8 Out
Composite and Y/C
Versions, all with
RS232 Control

The Burst Electronics VS8x8 Video
Switch is a crosspoint matrix configuration under microprocessor control. The 8x8 design allows any of 8 inputs to be switched to any or all of the 8 outputs. Inputs and outputs are fully buffered giving a high degree of isolation (60 dB at 5 MHz) between channels. The routing selection is either by front panel thumbwheel switches or RS232 remote control.

Applications include broadcast, post production, small video studios, industrial and educational installations, surveillance cameras, and clubs. The flexibility of either front panel or RS232 (USB 1.1 with optional cable) control allows for easy integration in manual and remote controlled systems.

Options: Y/C, Rack Mount

Features

- Eight Inputs by Eight Outputs
- Any Input can be switched to any or all Outputs
- Vertical interval switching
- Programmable by front panel or via RS232 computer link
- All inputs and outputs are buffered
- Y/C (S-VHS Hi8) Version Model VS8x8YC
- One Rack Unit High
- BNC Connectors (4 pin MiniDIN on Y/C version)
- Compact size in a rugged aluminum and steel enclosure
- Warranty: One Year Parts and Labor

Analog Video Switchers

Specifications - Analog Video Switchers

Input/Output: 1 Volt standard video
Input Impedance: HiZ or 75 Ohms 1%, looping (jumper/switch selected)
Output Impedance: 75 Ohms 1%
Video Connector: BNC, 4 pin MiniDIN for Y/C
Output Protection: Open or Short, infinite duration
DC Powered: 11-14 Vdc (see chart)

Models VS4x1, VS4x1R, VS8x1, VS8x1R:

Video Standard: Both NTSC and PAL
Gain: Unity
Bandwidth: 25 MHz @ 1 dB
Diff Gain: 0.1%
Diff Phase: 0.1 deg
S/N: 60 dB
Crosstalk: 60 dB
Switching: Vertical Interval
RS232 Format: 8N1
Baud Rate: 2400
USB 1.1 (with optional cable)
Size: VS4x1 and VS4x1R: 4.1W x 5.5D x 1.5H inches
Size: VS8x1 and VS8x1R: 5.6W x 7.0D x 1.5H inches

Model VS8x8:

Video Standard: Both NTSC and PAL
Gain: Unity
Bandwidth: 16 MHz @ -1 dB
Off Isolation: 60 dB at 5 MHz
Switching: Vertical Interval
RS232 Format: 8N1
Baud Rate: 1200, 2400, 4800, 9600
USB 1.1 (with optional cable)
Size: 17W x 1.75H x 6D inches
DC Powered: 12 Vdc, center positive
Wall module (included): 120 VAC 60 Hz, 12 Vdc 500 mA, UL Listed
Warranty: One Year Parts and Labor
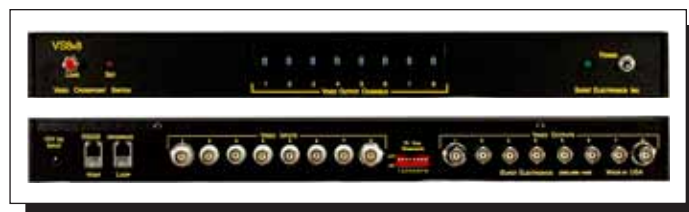
Digital Video Switchers

Model DSR4x1/DSR8x1
HD/SD SDI Reclocking Switcher w/ Analog Reference

The Burst Electronics DSR4x1 (4 input) and DSR8x1 (8 input) provides dependable switching of HD and SD SDI video signals between 143Mbps and 1.5Gbps to a selected output. An analog reference input (tri-level or composite sync) is also included to synchronize these switchers to your reference video signal. This will allow for clean switching between digital sources.

An LED is mounted on each front panel pushbutton switch to indicate which input is selected. For remote control on both DSR4x1 and DSR8x1 is an optional RS232 serial port that uses simple ASCII commands for input selection. On the DSR8x1, an optional remote controller called the RC8x1 can be installed. The RC8x1 is a separate device with illuminated switches for selection between inputs. Another optional remote control for the DSR8x1 uses DTMF tones.

The DSR4x1 and DSR8x1 are housed in a Burst Electronics standard aluminum and steel enclosure that can be either desktop or rack mounted in a 1U rail. Power is supplied by a 12Vdc wall module, which is included with each unit.

Features

- Accepts HD/SD signals between 143Mbps and 1.5Gbps
- Cross standard switching (between HD and SD inputs)
- Analog reference input for clean switching between synchronized sources
- LED-Illuminated pushbutton switches for input selects
- Compact design and easy to use
- Serial RS232 remote control option using simple ASCII commands
- Optional RC8x1 (DSR8x1RC only)
- Optional DTMF (DSR8x1T only)

Digital Video Switchers

Specifications

Inputs:

Number: 5/9 (includes analog reference input)
Connectors: BNC
Level: 20-800mV p-p
Freq. Range: 143Mbps – 1.5Gbps inclusive

Outputs:

Number: 1 (2 on DSR8x1, but lose analog reference input)
Connectors: BNC
Level: 20-800mV p-p
Freq. Range: 143Mbps – 1.5Gbps inclusive

Control:

Front Panel: 4 or 8 momentary
                       LED illuminated pushbuttons
RS232:   Simple ASCII commands
                       at selectable baud rates
RC8x1:   Available as an optional add on
                       for the DSR8x1RC
DTMF: Available as an optional add on
                       for the DSR8x1T

Power:

Connector: Standard 5.5mm X 2.1mm circular
                         connector (polarity insensitive)
Input Voltage: 12Vdc (optional 5Vdc on 5.5mm X 2.5mm
                         circular connector)
Input Current: ~600mA

Video Mixers and Faders

Model F2B
Fade to Black Module

The F2B Fade to Black Module is a single input device. The video input fades to black (7.5 IRE) through the action of a fader bar. The output is dc clamped to zero Volts. The F2B is 12 Vdc powered, wall module included.

Options: PAL

Model VM-2
Video Mixer

The VM-2 is a 2 channel video mixer. The unit allows fade/dissolve between two genlocked video signals. The fade "take" is both local and GPI remote controlled. Fade rate is adjustable from approximately 5 frames to 5 seconds. The VM-2 is similar to the VMF-2, but without the Remote Control Unit (RCU).

- Fade from A to B and B to A
- Adjustable fade rate
- GPI trigger

Options: Y/C, Rack Mount, PAL, Channel A to Black

Model VMF-2
Two Ch. Mixer/Fader with Fade to Black

The VMF-2 is a 2 channel mixer/fader. It will fade from A to B, B to A or A to Black. There is an auto mode that allows the transition to be preset from 0.2 seconds (approx. 6 Frames) to 6 seconds. The transition occurs upon hitting the TAKE button or a GPI trigger. In the A to B mode, the sources must be genlocked. In the A to Black mode, no B input is required. The output is dc clamped to zero Volts. The VMF-2 is 12 Vdc powered, wall module included.

Options: Rack Mount, Y/C, PAL

Video Mixers and Faders

Specifications - Video Mixers and Faders

Input/Output: 1 Volt standard video

Input Impedance: HiZ or 75 Ohms 1%, looping (jumper/switch selected)

Output Impedance: 75 Ohms 1%

Video Connector: BNC, 4 pin MiniDIN for Y/C input

GPI Trigger: Contact closure initiates action (not on F2B)

Output Protection: Open or Short, infinite duration

Black Output: Sync, Color Burst and 7.5 IRE setup (0 IRE PAL)

Model F2B:

Bandwidth: 10 MHz @ 0.5 dB

Diff Gain: 0.1%

Diff Phase: 0.1 deg

S/N: 60 dB

Size: 2.5W x 6.0D x 1.8H inches

Model VMF-2, VM-2:

Bandwidth: 10 MHz @ 0.5 dB

Diff Gain: 0.1%

Diff Phase: 0.1 deg

S/N: 60 dB

Crosstalk: 60 dB

Size: (Head End): 4.1W x 5.5D x 1.5H inches

Size: (RCU): 2.5W x 6.0D x 1.8H inches

DC Powered: 12 Vdc, center positive

Wall module (included): 120 VAC 60 Hz, 12 Vdc 500 mA, UL Listed

Warranty: One Year Parts and Labor

Format Converters

Model YC2C
Y/C to Composite Converter

The YC2C converter accepts a Y/C input (also called S-Video, S-VHS and Hi8) and outputs a composite video 1 Volt standard signal. Works in both NTSC and PAL. The YC2C is 12 Vdc powered, wall module included.

Options: None

Model C2YC
Composite to Y/C Converter

The C2YC format converter accepts an NTSC composite video input and splits it into Y/C. The C2YC converter is a 2 H Digital adaptive comb filter giving high precision Y/C separation. The Y (luminance) and C (chromance) signal levels can be individually adjusted.

- Splits Composite into Y/C
- Digital Comb Filter separation
- High Precision Y/C separation
- Loop thru input with termination resistor

Options: Rack Mount

Specifications - YC2C and C2YC

Model YC2C:
Input/Output: 1 Volt standard video
Input Connector: 4 Pin MiniDIN
Input Impedance: HiZ or 75 Ohms 1%, looping (jumper/switch selected)
Bandwidth: 10 MHz @ 0.5 dB
Output Impedance: 75 Ohms 1%
Output: Composite Video, BNC
Output Protection: Open or Short, infinite duration
S/N: 60 dB
Size: 4.4W x 2.4H x 1.2D inches

Model C2YC:
Input/Output: 1 Volt standard video
Input Connector: Composite Video, BNC
Input Termination: 75 Ohms 1% or HiZ
Bandwidth: 10 MHz @ 0.5 dB
Output Impedance: 75 Ohms 1%
Output: 4 Pin MiniDIN
Output Protection: Open or Short, infinite duration
S/N: 60 dB
Size: 4.1W x 1.5H x 5.5D inches
DC Powered: 12 Vdc, center positive
Wall module (included): 120 VAC 60 Hz, 12 Vdc 500 mA, UL Listed
Warranty: One Year Parts and Labor

Time Code Generators/Readers

Model TC-3
SMPTE Time Code Generator/Reader

The TC-3 SMPTE Time Code Generator/Reader allows the standard Video SMPTE Time Code to be generated on and read from 8 mm, 1/2", 3/4" or 1" tape. Features include ability to generate window dubs, drop frame and field 1 indicator, plus a jam sync mode. The high legibility characters have user adjustable position and size, allowing for flexibility in the video display. The TC-3 also has selectable auto backtime of 0:30, 1:00, 1:30 and 2:00 minutes. The longitudinal time code can be recorded on an audio channel or a separate time code channel, if the recorder is so equipped. The time code then can be read back at play speed.

Options: Y/C, Rack Mount

Features:

- SMPTE Longitudinal Time Code Standard
- Generates and Reads Time Code
- Generates Window Dubs
- Jam Sync Mode
- Drop Frames/Non Drop Frames Modes
- Auto Backtime
- Field 1 Indicator
- User Settable Bits
- Play Speed Reader
- Records on Linear or HiFi Audio Track
- Y/C Model TC-3YC
- External 12V Powered (Adapter Included)
- Rugged, Lightweight Case
- Made in USA
- Warranty: One Year Parts and Labor

Specifications - SMPTE Time Code Generators/Readers

Video Input: Standard 1 Volt, 75 Ohms, BNC, 4 pin MiniDIN on Y/C

Video Output: Standard 1 Volt, 75 Ohms, BNC, 4 pin MiniDIN on Y/C

Time Code In (Audio): -13 to +7 dBm (500 mV to 5 V P-P) Zin=100K, Phono Connector

Time Code Out (Audio): 0.0 to 2.0 V adjustable, Zout=2K, Phono Connector

Time Code: SMPTE 80 Bit longitudinal drop frame/non-drop frame

User Bits: 8 settable digits, format is hexadecimal 0-F

Size: 5.6W x 1.5H x 7.0D inches Aluminum Enclosure

DC Powered: 12 Vdc, center positive

Wall module (included): 120 VAC 60 Hz, 12 Vdc 500 mA, UL Listed

Warranty: One Year Parts and Labor

Video Distribution Amplifiers

Burst Electronics manufactures a series of Video Distribution Amplifiers. These units use the latest in high speed, monolithic operational amplifier technology. This results in wide bandwidth, high gain stability, low differential gain and phase. Models are available that range from a MicroDA that will fit most anywhere to an 8 output version. All units contain internal regulated bipolar power supplies and are powered by external 12 Vdc, perfect for field applications.

Model MicroDA
Four Output MicroDA

The four output MicroDA is a compact unit featuring a looping input. A wide bandwidth of 33 MHz assures clean video. Small enough to fit most anywhere but with no sacrifice in performance. Gain is adjustable plus or minus 3 dB. There is an internal jumper to select 75 Ohm termination, no need for an external terminator.

Model VDA-2EQ
Two Output MicroDA with EQ

The two output VDA-2EQ is a compact unit featuring a looping input. Adjustment allows for up to 1000 feet of RG59 cable. Small enough to fit most anywhere but with no sacrifice in performance. There is an internal jumper to select 75 Ohm termination, no need for an external terminator.

Models VDA-4 and VDA-4YC
Four Output DA

The VDA-4 has the same features, performance and specifications as the MicroDA but in an enclosure that can be for either table top use or rack mounted. There is a rear panel switch to select an internal 75 Ohm termination resistor on the loop through input.

Options: Rack Mount, Y/C

Model VDA-8
Eight Output DA

The VDA-8 has the same features, performance and specifications as the VDA-4 except it has 8 outputs. There is a rear panel switch to select an internal 75 Ohm termination resistor on the loop through input.

Options: Rack Mount

Video Distribution Amplifiers

Specifications - Video Distribution Amplifiers

Input: 1 volt standard video

Input Impedance: HiZ or 75 Ohms 1%, looping (jumper/switch selected)

Coupling: DC throughout

Internal Power: ± 5 Vdc derived from external 12 Volt

Outputs: Four or Eight, 75 Ohm

Output Voltage: 4 Vpp max

Delay Input to Output: 10 nS

Output Impedance: 75 Ohms 1%

Frequency Response: DC to 33 MHz 0.2 dB

Gain: Unity, adjustable ± 3 dB

S/N: 68 dB

Diff Gain: 0.03%

Diff Phase: 0.05 deg

Video Connector: BNC (4 pin miniDIN on Y/C Version)

Output Protection: Open or Short, infinite duration

Size MicroDA: 4.4W x 2.4H x 1.3D inches

Size: VDA-4: 4.2W x 1.5H x 5.5D inches

Size: VDA-8: 5.6W x 1.5H x 7.0D inches

DC Powered: 12 Vdc, center positive

Wall module (included): 120 VAC 60 Hz, 12 Vdc 500 mA, UL Listed

Warranty: One Year Parts and Labor
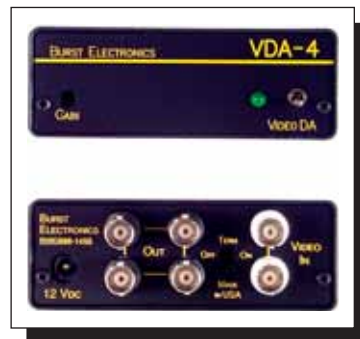
Audio Distribution Amplifiers

Model ADA-4 and ADA-4B

The ADA-4 is a stereo in, four output audio distribution amplifier. These units use the latest in high speed, monolithic operational amplifier technology. This results in wide bandwidth, low noise and low distortion. All units contain internal regulated bipolar power supplies and are powered by external 12 Vdc, perfect for field or studio applications. Each of the four outputs is a separate buffer amplifier resulting in a high degree of isolation between outputs.

Model ADA-4B is the balanced in/out version.

Options: Rack Mount, Mono Version (1x8)

Specifications - Audio Distribution Amplifiers

Input Impedance: 100k Ohms

Output Impedance: 51 Ohms

Gain: ADA-4B: Adjustable

ADA-4U: Unity

Bandwidth: 5 Hz to 20 kHz ±½ dB

THD: 20 Hz 0.01%, 20 kHz 0.15%

Crosstalk: 70 dB

S/N: 91 dB

Clipping: +17 dBm

Output Protection: Open or Short, infinite duration

Size: 4.2W x 1.5H x 5.5D inches

DC Powered: 12 Vdc, center positive

Wall module (included): Model PS-12

Warranty: One Year Parts and Labor

Audio Switches

Models AS4x1 and AS4x1R
Audio Switches

The AS4x1 is a four stereo input, one stereo output audio switcher. The AS4x1 includes an internal monitor amp and speaker. The monitor amp can drive external headphones or stereo speakers. There is also a peak LED indicator for each channel to guard against input overload. The 50 kHz bandwidth and 85 dB S/N assures clean audio. The inputs and outputs are unbalanced line level type with phono (RCA) connectors. Can be slaved with the VS4x1 Video Switcher to allow audio follow video and breakaway switching. RS232 remote control option.

Options: Rack Mount, USB 1.1 interface cable, Model AS4x1R includes RS232 remote control, Option KB: Remote Channel Select (Contact Closure)

Model AS8x8
Audio Switch

The AS8x8 Audio Switch is a crosspoint matrix configuration of 8 stereo audio inputs and 8 stereo outputs under microprocessor control. The 8x8 design allows any of 8 stereo inputs to be switched to any or all of the 8 stereo outputs. The low noise design and wide bandwidth assure clean audio. The inputs and outputs are unbalanced line level type with phono (RCA) connectors. The routing selection is either by front panel thumbwheel switches or RS232 remote control (USB 1.1 with optional cable). Under RS232 control, the AS8x8 in conjunction with the VS8x8 Video Switch form a complete audio/video crosspoint switch system with audio follow or breakaway.

- Eight inputs by eight outputs
- Any input can be switched to any or all outputs
- Unbalanced stereo input/output
- Programmable by front panel or via RS232 computer link
- All inputs and outputs are buffered
- Wide bandwidth: 1 Hz to 50 kHz

Option: Rack Mount

Audio Switches

Specifications - Audio Switches

Model AS8x8:

Audio Inputs: HiZ (100k) stereo unbalanced Phono (RCA) connectors

Level: 0dBm (775 mV)

Audio Outputs: Level 1V p-p, nominal

Impedance: 75 Ohm

Serial Interface: Standard RS232 (3 wire)

USB 1.1 (with optional cable)

Baud Rate: 150, 300, 600, 1200, 2400, 4800, and 9600
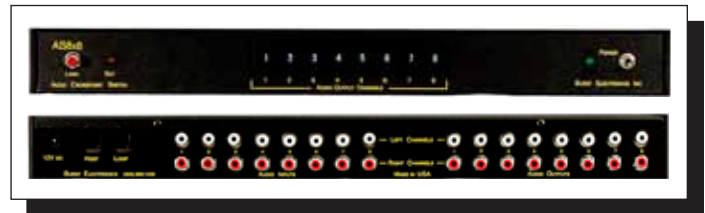
Performance: Distortion .03% THD

Headroom +12 dB

Bandwidth: 10 Hz to 40 kHz ±0.25 dB

S/N: 90 dBA

Power Supply: 12 Vdc, center positive

Size: 17W x 1.75H x 6D inches

Model AS4x1:

Audio: All spec ref 0 dB (0.77 Vac)

Bandwidth: 10 Hz to 40 kHz @ 1/4 dB. 2 Hz to 70 kHz @ 3 dB

THD: 0.03% @ 20 Hz, 0.03% @ 1 kHz, 0.15% @ 20 kHz

S/N: 85 dB/100 dBA

Crosstalk: >85 dB

Channel Separation: >50 dB

Headroom +12 dB (3.1 Vac)

Peak Detector: Factory set to +12 dB

Input Impedance: 100k Ohms

Output Impedance: 100 Ohms

Audio Connector: Phono (RCA)

Internal Speaker: 3 inch

Headphone/External Speaker Connector: 3.5mm Stereo, Tip: Left

Size: 4.2W x 1.5H x 5.5D inches

Power: 12 Vdc, center positive

RS232 (Model AS4x1R)

USB 1.1 (Model AS4x1R), with optional cable

Data: 2400 Baud 8N1, listen only

Connector: 3.5mm 3 conductor (stereo connector)

Audio/Video
Passive Switchers

Model AV4x1P
Audio/Video Passive Switcher

The AV4x1P is a passive 4 channel combination stereo audio and video switcher. The use of a high quality switch allows for clean switching of audio and video. The switching function is audio follow video (both audio and video are switched simultaneously). The audio connectors are phono (RCA) type; the video connectors are BNC.

Option: Rack Mount

Model AV8x1P
Audio/Video Passive Switcher

Eight channel version of AV4x1P.

Option: Rack Mount

Model AV8x1A
Audio/Video Passive Switcher

Includes stereo audio monitor amp. Power: 12Vdc

GPI to RS232 Converters

Model GPI-10 and GPI-20
GPI to RS232 Converters

The GPI-10 and GPI-20 convert GPI contact closures to serial data strings. The GPI-10 has ten (10) GPI inputs and one (1) RS232 output. The GPI-20 has twenty (20) GPI inputs and one RS232 output. Each GPI input works with a contact closure and a contact open. This allows the GPI-10 to send up to 20 unique data strings, and the GPI-20 to send up to 40 unique data strings. Factory default firmware included is designed to operate with Avid's DekoCast and DekoMOS, but customized programming of the firmware for your particular application is available. Call for details.

Option: Rack Mount, Customized Firmware, Build-in Keypad (GPI-10 Only)

GPI to RS232 Converters

Specifications - GPI-10, GPI-20
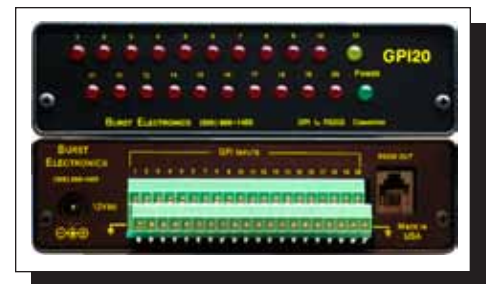
Input Terminals: Screw Terminals (Phoenix)

Ouput Connector: RJ11

Baud Rate: 9600 by factory Default (up to 38400 w/ customize programming)

Max Data String GPI-10: 300 ASCII characters

Max Data String GPI-20: 600 ASCII characters

Power 12Vdc, center positive.

Accessories and Options

Power Supplies

PS-5 .... Power supply 5V 1A, 5.5/2.5 mm plug, center positive. 100–240Vac, 50/60 Hz

PS-12 .... Power supply (Wall Module) 12Vdc 500mA, 5.5/2.1 mm plug, center positive. Included with 12V products

PS-12/0.5 .... Power supply 12Vdc 0.5A 100–240Vac, 50/60 Hz. International input voltage. May be used in the USA

PS-12/HC .... Power supply 12Vdc 1.5A, 100-240Vac, 50/60 Hz. International input voltage. High current output allows operation of multiple units with one power supply. See chart for product current draw. May be used in the USA. Formerly Model PS-Intl.

Options

Tone-UB   Tone option. 1 kHz, 0 dBm unbalanced

Tone-B   Tone option. 1 kHz, +4 dBm balanced

ID   ID option for SG-3, SG-7

RTC   Real Time Clock for MCG-2

MiniXLR-XLR   Female MiniXLR to XLR Male cable adapter for Balanced Tone options (except ADA-4B), ~1' length

USB–RS232 Cable ..... Allows RS232 type devices to be controlled by USB 1.1

Rack Mount Hardware

RM-2-1 ...... Rack mount for AV8x1P. Holds one unit. One unit high

RM-2-2 ...... Rack mount for AV8x1P. Holds two units side by side. One unit high

RM-3 .... Rack mount for "Third Wide (T)" units. Holds three units side by side. One unit high

RM-4 .... Rack mount for "Quarter Wide (Q)" units. Holds four units side by side. One unit high

RM-6-1 ...... Rack mount for MB units

RM-6-2 ...... Rack mount for MB2 units

RM-12 .... Rack mount for MD2 units

**RM-18** .... Rack mount for MD units

RM-344 ..... Rack mount. Holds one "Third Wide" unit and two "Quarter Wide" units

RM-334 ..... Rack mount. Holds two "Third Wide" units and one "Quarter Wide" unit

RM-EAR .... Rack ears (pair) for VS8x8, AS8x8, F2Bx8

RM-432 ..... Rack mount. Holds one "Third Wide", one "Quarter Wide" and one "MB" unit

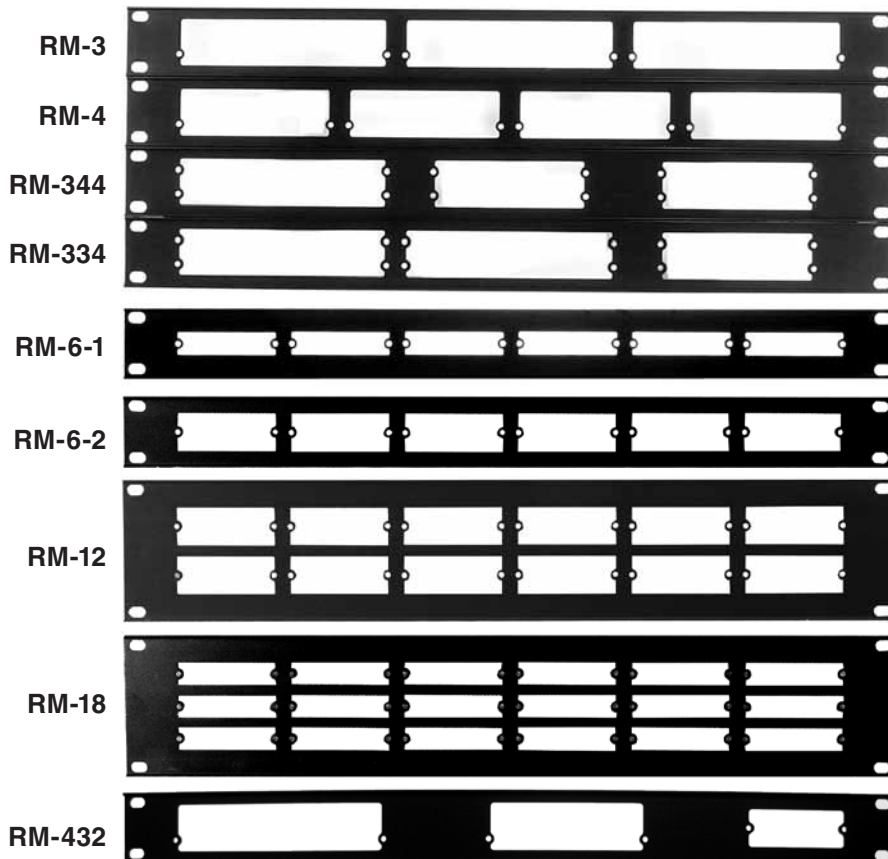**RM-PM1Q** .. Rack mount plate. Adapter for one "MB" unit mounted into the space for one "Quarter Wide"

RM-2-1

RM-2-2

RM-EAR

RM-PM1Q

RM-3

RM-4

RM-344

RM-334

RM-6-1

RM-6-2

RM-12

RM-18

RM-432
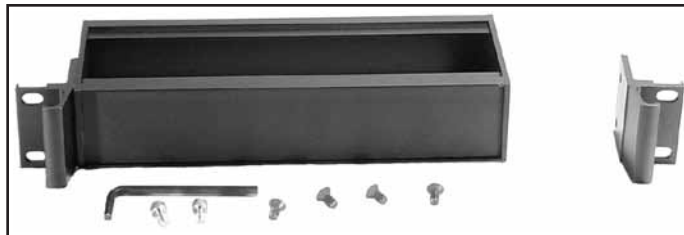
Tables of Rack Mount, unit sizes and current requirements

Model	Size	Current (note 1)	S-Video (note 2)	Rack Mt
ADA-4	Q	70	N/A	RM-4
AS4x1	Q	150	N/A	RM-4
AS8x8	1U	250	N/A	EAR
AV4x1P	T	N/A	No	RM-3
AV8x1A	H	200	N/A	RM-2-1
AV8x1P	H	N/A	No	RM-2-1
BG-2	MB2	250	Yes	RM-6-2
BG-3	T	375	No	RM-3
BG-4	Q	300	Yes	RM-4
BG-5	Q	300	Yes	RM-4
BG-7	T	375	No	RM-3
C2YC	Q	200	Yes	RM-4
DSR4x1	Q	600	N/A	RM-4
DSR8x1	T	600	N/A	RM-3
DV-1	MB	5V 0.5A	Yes	RM-6
DV-2	MB	5V 0.5A	Yes	RM-6
DV-4	Q	5V 0.3A	Yes	RM-4
DVA-1	T	5V 1A	No	RM-3
F2B	R	100	No	N/A
GPI-10	Q	100	N/A	RM-4
GPI-20	T	200	N/A	RM-3
HDLG	T	500	N/A	RM-3

Model	Size	Current (note 1)	S-Video (note 2)	Rack Mt
LG-1, 4	T	300	No	RM-3
MCG-2	T	300	Yes	RM-3
MicroDA	M	150	No	N/A
Pixie-FS	MB	5V 0.5A	Yes	RM-6-1
RC8x1	note 4	note 4	N/A	RM-3
SG-2	M	100	Yes	N/A
SG-3	T	250	No	RM-3
SG-7	T	350	No	RM-3
TC-3	T	350	Yes	RM-3
VDA-2EQ	M	140	No	N/A
VDA-4	Q	150	Yes	RM-4
VDA-8	T	200	No	RM-3
VDS	M	125	No	N/A
VDS-3	T	300	No	RM-3
VM-2	Q	120	Yes	RM-4
VMF-2	note 3	250	Yes	RM-4
VS4x1	Q	250	Yes	RM-4
VS8x1	T	300	No	RM-3
VS8x8	1U	450	Yes	EAR
VSA	Q	250	No	RM-4
YC2C	M	100	Yes	N/A

Sizes (inches)

	W	H	D
R	2.5	1.8	6.0
M	4.4	2.4	1.2
MB	2.8	.8	4.2
MB2	2.8	1.3	4.2
H	8.4	1.7	6.0
T	5.6	1.5	7.0
Q	4.1	1.5	5.5
1U	17	1.7	

Notes:

1. Current draw (mA) at 12 Vdc

2. S-Video (S-VHS/Hi8) version available. Add Y/C to end of model number. Video connectors are 4 pin MiniDIN.

3. Headend: Q, Remote: R

4. RC8x1 dimensions: 5.6W x 1.5H x 2D inches. (Fits RM-3 rack mount.) Draws power from VS8x1.

5. Operating temperature range of all products is 32°F to 104°F Humidity range is 5–85%, non-condensing.

All Products Made in the USA
Warranty: One Year Parts and Labor
Specifications subject to change without notice

Model F2B Fade to Black, 8 Channel Version

A customer had a need, in a theatrical presentation, for eight channels of video fade to black. Using our Model F2B Fade to Black as the core, we designed an eight channel version. The eight channel unit consisted of a rack mount head end that handled the video and a remote console with eight fader bars along with master fade control. Mission accomplished.

How to read oven temperature with your video monitor

Another customer approached us with this problem. He has a process oven with a Yokogawa temperature controller, and would like to display the temperature in the oven on video. The Yokogawa controller has a RS485 output. Could we do a special MCG-2 Micro Character Generator to accomplish the task? The MCG-2 has a RS232 interface, so we redesigned to RS485 and embedded the smarts to read the data string from the Yokogawa. Result, the customer now can read his oven temperature on the video monitor.

How do I measure a voltage and display it on video?

This customer wished to video the inspection of an offshore oil platform that involved having a scuba diver make an underwater voltage measurement. An underwater camera and a digital voltmeter (with RS232 output) were employed for the measurement. We wrote the interface code to allow the meter to talk directly with our MCG-2 Micro Character Generator. In this way, during the inspection, the video has overlaid the voltage measurement. Problem solved.

Some Of Our Customers Include...

ABC Television Network	NASA Logistics Support Depot
Air Combat USA	NBC Stations Management
AVID	NOAA Fisheries
B&H Photo	Oregon State University
Boeing	Paramount Pictures
CBS Inc	PBS
Discovery Channel	Pennsylvania Attorney General
E! Networks	Raytheon Systems Company
Entertainment Tonight	Royal Canadian Mounted Police
ESPN	San Francisco State University
Florida Public Television	Sandia National Laboratories
Harvard University	Scientific Atlanta
Helicopters Inc	Scripps Network
Homeshopping Network	Sea World
House of Blues	Stanford University
Image Works	Systemas Digitales
Johnson Controls	The Walt Disney Company
KNME-TV	Trinity Broadcasting Network
KOAT-TV	United States Navy
KOB-TV	Universal Studios Inc
KRQE-TV	University of Iowa
MCA SkyWatch Traffic	University of Maine
Meadowlands Race Track	Walt Disney Imagineering
Monterey Bay Aquarium Research Institute	Washington Opera

Proud to say,

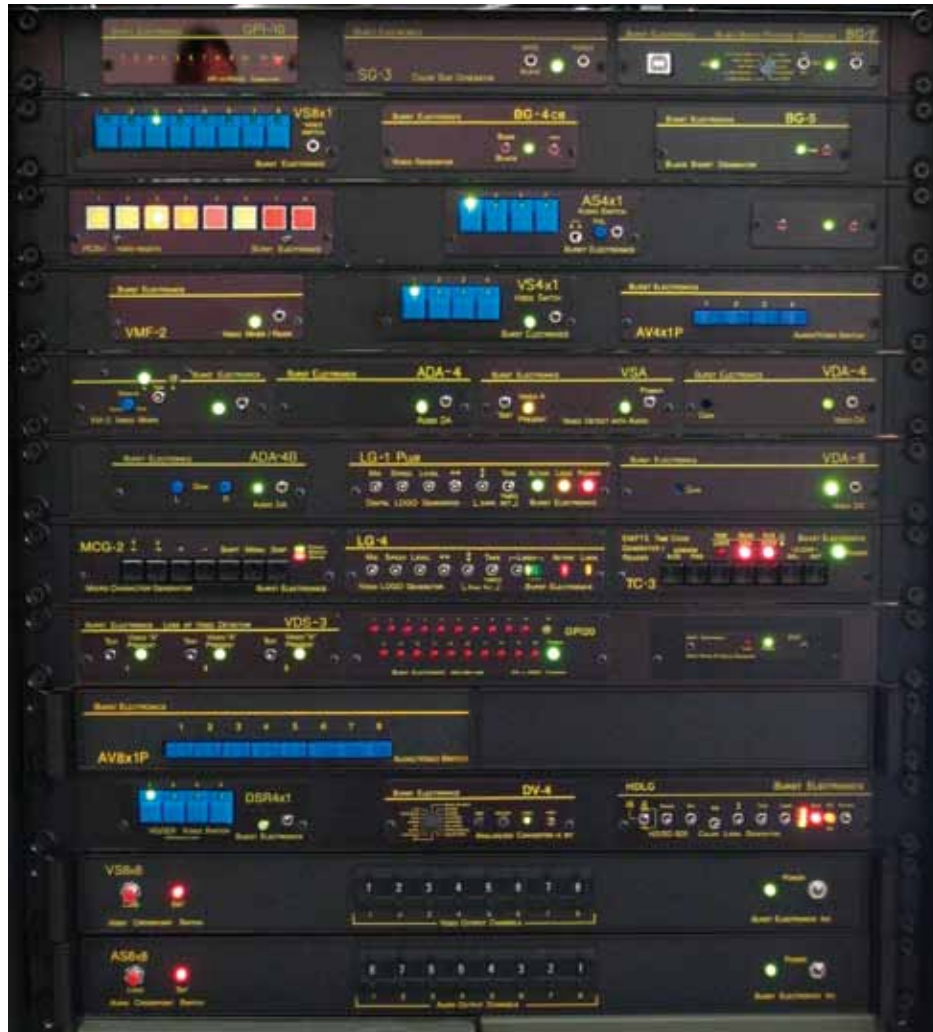Made in USA

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