HD/SD Switcher

SE-1000

HD/SD

Datavideo SE-1000 is a new compact, high definition and standard definition video switcher ideal for applications within Education, Worship, Live, Music videos, Cable shows, Corporate videos, Event staging and many more.

Datavideo SE-1000 features six inputs (five HD or SD SDI and one DVI-I) and three outputs (three HD or SD SDI), RS-422 control, Ethernet connectivity and a built-in, 10-bit, 6-channel frame synchronizer that adjusts automatically

To assist the producer during any live event SE-1000 also features six built in HD-SDI to HD-YUV, SD-YUV and Composite format converters enabling loop through of each input for real time monitoring during production.

Features also include nine wipe patterns and three directional wipes.

Datavideo SE-1000 will operate in all recognised SD and HD formats enabling integration with existing equipment, while at the same time being future proof.

Simple operation and rugged construction allow the SE-1000 to be used in studios, in a Mobile Video Studio, on board an OB truck, in a Post Production facility, in education applications or for any application where a reliable, high quality/low cost video switcher is required.

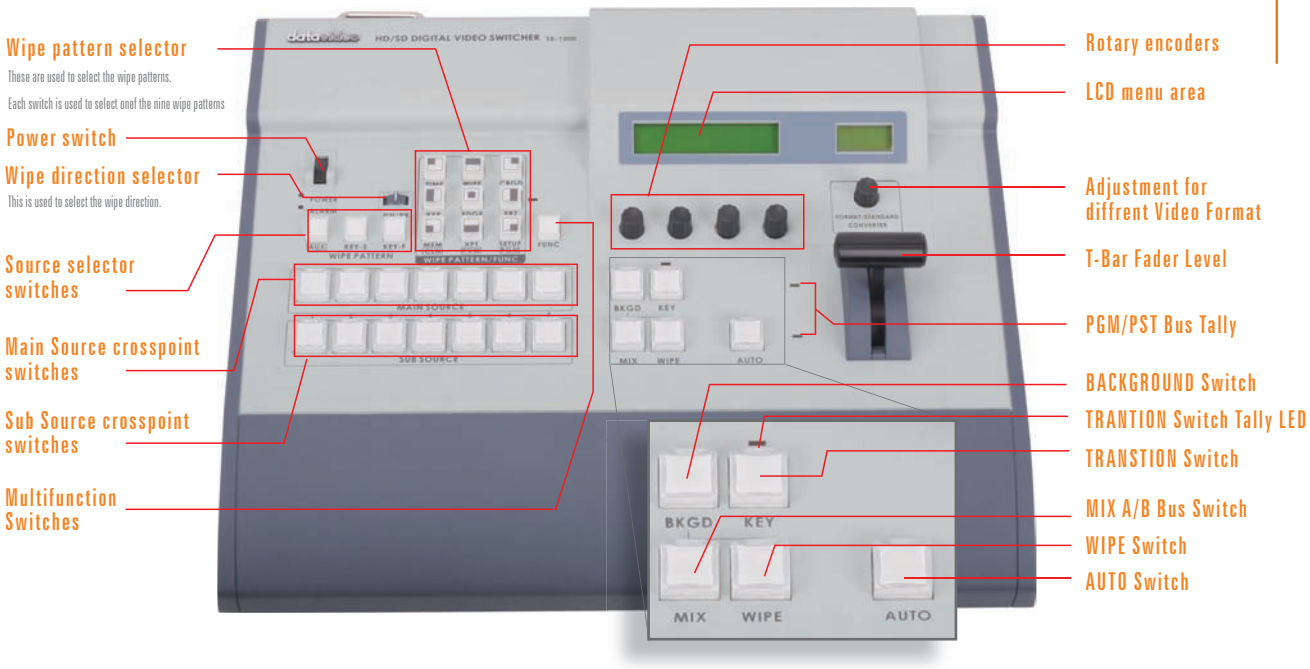
Features

- Multi Format Compatibility
- Worldwide SD and HD formats supported in one unit.
  (Although not mixed formats)

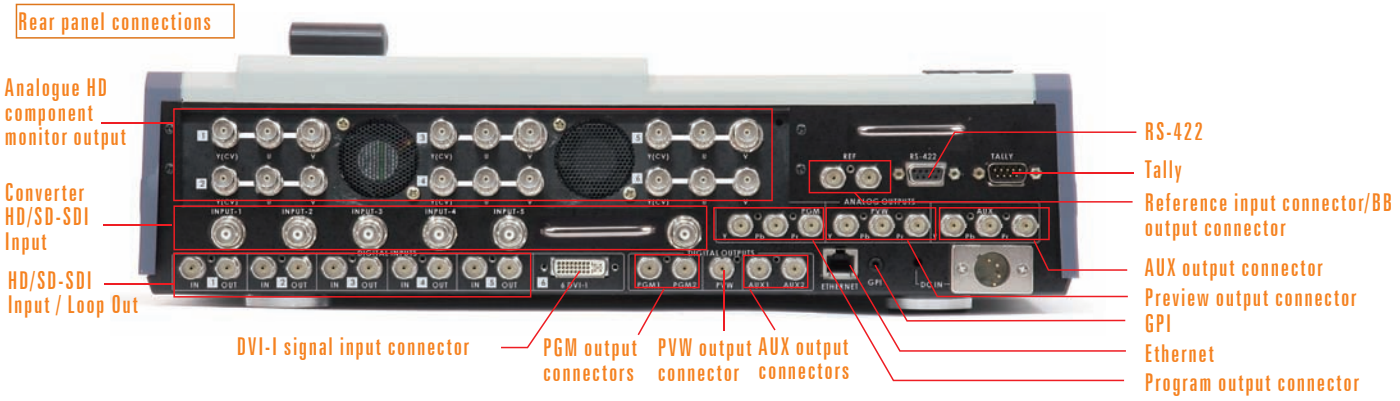
  SD. 480/59.94, 576/50i
  HD. 1080/59.94i, 1080/50i, 720/59.94p, 720/50p
- 6 inputs (5 HD-SDI or SDI, 1 DVI-I)
- 3 SDI output and 3 HD Analogue Component Output
- 10 bit Frame Synchroniser
- Built in 10bit Frame Synchroniser enables switching without glitch or freeze even with asynchronous video signals.
- Keying - Both linear and self keying is possible as well as key invert.
- Easy Titling - Versatile titling can be achieved and enhanced by adding Datavideo CG-100 Character generator.
- Multiple Interfaces
- 6 tally outputs and an RS-422 interface enable configuration in a wide range of switching options.
- To complete the IT infrastructure the SE-1000 has a built in network interface enabling easy use of a PC to add images and graphics.
- Range of Switching Effects - The unit includes a wide range of simple to operate wipe patterns including nine wipe patterns and three directional wipes.
- 12 volt operation - 12 volt operation makes this unit ideal for outside broadcast applications, and a perfect companion for Datavideo's Mobile Video Studio Solutions

SE-1000

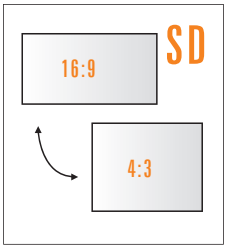
Control panel



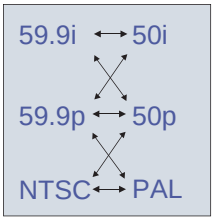
Rear panel connections



All 6 input source can be selected as key source



SD aspect convertion



Six independent video standard conveters

Internal Genlock

LINEAR KEY

LINEAR KEY+SELF KEY

LINEAR KEY

Six independent and cross-format digital to analogue conveter

SDI Convertion

HD-SDI → DOWN-CONVERTER → HD-YUV, SD-YUV, SD-COMPOSITE

SD-SDI → UP-CONVERTER → HD-YUV, SD-YUV, SD-COMPOSITE

Down / Format Convertion

HD-SDI 59.9i → DOWN/FORMAT CONVERTER → HD-YUV 50i, SD-YUV PAL, SD-COMPOSITE PAL

HD-SDI 50i → DOWN/FORMAT CONVERTER → HD-YUV 59.9i, SD-YUV/ NTSC, SD-COMPOSITE NTSC

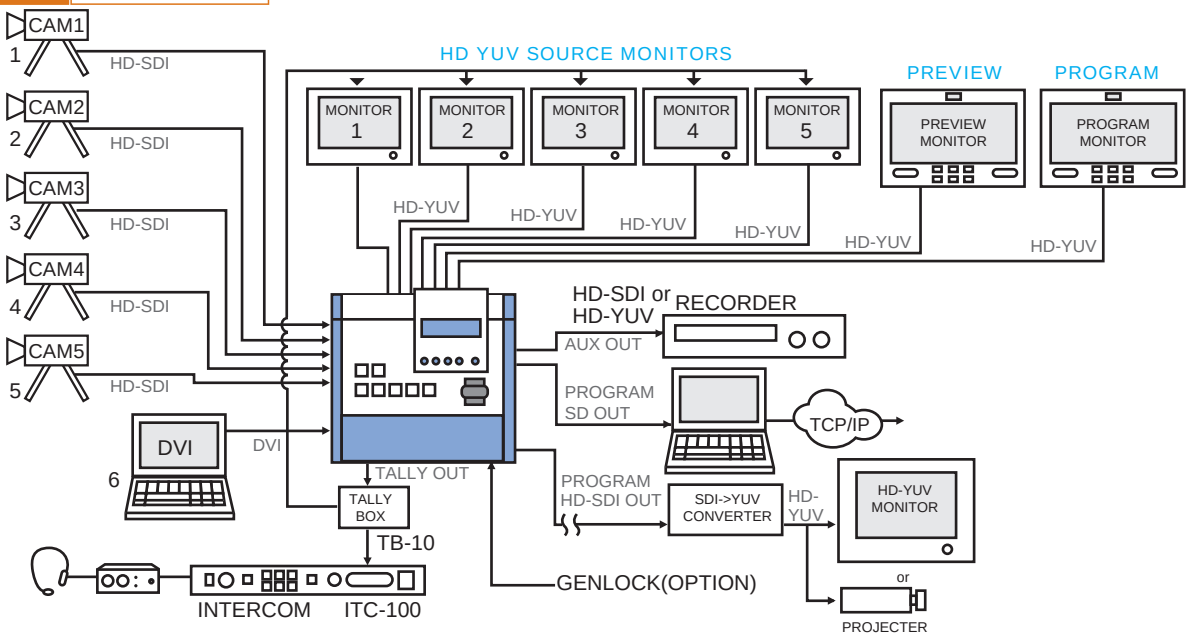
Standard Convertion

SD-SDI NTSC → UP/FORMAT CONVERTER → HD-YUV 50i, SD-YUV/PAL, SD-COMPOSITE PAL

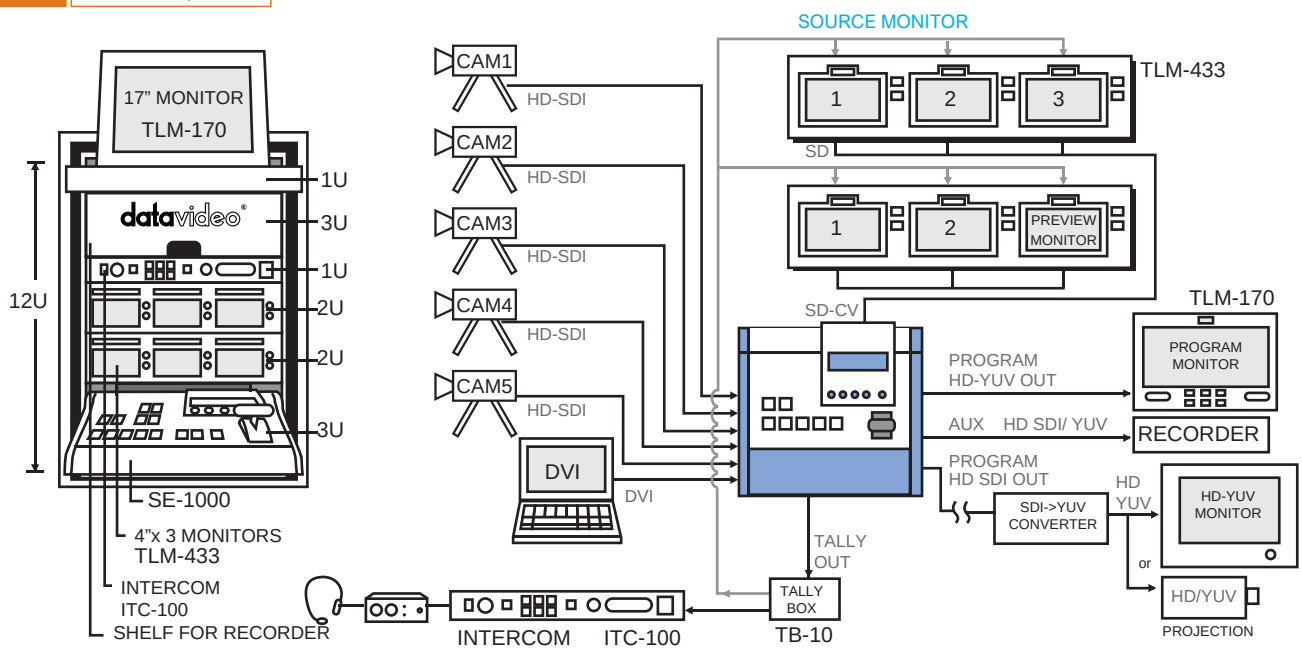
SD-SDI PAL → UP/FORMAT CONVERTER → HD-YUV 59.9i, SD-YUV/ NTSC, SD-COMPOSITE/ NTSC

Diragram

Studio



Mobile System



SE-1000

■ Video processing	
Video format	SD (480/59.94i, 576/50i), HD (1080/59.94i, 1080/50i, 720/59.94p, 720/50p)
	Y:Cb:Cr, 4:2:2 10 bit RGB, 4:4:4 8 bit
■ SDI/HD-SDI Specifications	
Standard	SMPTE 259M-C (270 Mbps, 525/625 component video) and
	SMPTE 292M (1.485, 1.485/1.001 Gbps)
Connector	BNC (IEC169-8)
Impedance	75 ohms
Return Loss	HD >15dB(5 MHz to 750 MHz),
	>10dB(750 MHz to 1.5 GHz)
	SD >15dB(5 MHz to 270 MHz)
Equalization	265 m Belden 8281 cable at 270 Mbps; 135 m (typical) of Belden 1694A at 1.485 Gbps
■ Source Inputs	
HD/SD-SDI	5 inputs (with active through output)
RGB	DV1-1 x 1 (SXGA 1280x1024, XGA 1024x768(60 Hz)
Key	1 input from video inputs.
Reference	Black burst/TRI (Loop through) x 1
■ Main Outputs	
SDI	3 outputs (PGM x 2, PVW x 1, AUX x 2)
HD Analogue	3 outputs (Y, Pb, Pr: HD only) Component
Reference	Loop through x 1 (Gen-lock) / Black burst x 2 (Internal synchronization)
	Black burst/TRI (Loop through) x 1

■ Effects	
Transition	Cut, Mix, Wipe (9 patterns, 3 directions)
Key synthesis	Self key, Linear key
■ Interface	
Ethernet	100 Mbps / 10 Mbps x 1
Serial (EDITOR)	D-sub 9pin x 1 : RS422A
Tally output	D-sub 9pin x 1:6 ch, open collector output
GPI	1 (Auto take)
■ HD/SD Cross Converter	
Inputs	6 SDI/HD-SDI
Outputs	6 HD-YUV, YUV, Composite video
Input Formats	SD (480/59.94i, 576/50i),
	HD (1080/59.94i, 1080/50i, 720/59.94p, 720/50p) – Auto Detect
Output Formats	SD (480/59.94i, 576/50i),
	HD-YUV (1080/59.94i, 1080/50i,720/59.9p, 720/50p)
Aspect Converter	Input SD 16:9 or 4:3
	Output SD 16:9 or 4:3
Video Correction	Brightness, Colour and Tint (Tint NTSC only)
IRE	0/7.5IRE -- Options
■ Operating temperature	0 ˚C to +40 ˚C
■ Humidity	10% to 90% (non condensing)
■ Power	DC 12 V / 10 A
■ Dimensions (WxHxD)	426mm(16.8") x 119mm(4.7") x
■ Weight	368mm(14.5")
	Approx. 5.5 kg/ 13.8 pbs

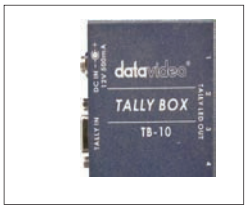
■ Specification in this document is subject to change without notice due to continual improvements.

Accessories

TLM-433
Monitor bank of 3 x 4Inch TFT LCD monitors

TLM-170
17-inch TFT LCD screen monitors

ITC-100
8-channel Intercom

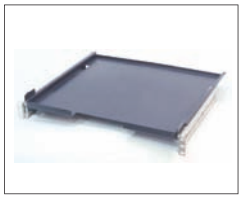


TB-10
Tally box

CB-10
3 m HD/SD YUV Cable

CB-9
1.8m DVI Cable

RP-19
19 Inch tray designed to hold Recorders



RP-20
19 Inch sliding tray for SE-1000

TLM-433JF
Monitor & Intercom holder

Datavideo Reseller / Distributor