

SDI Digital Video Routing Switcher

Rev. 10/05/03 djm

Available as a .PDF Download at: <http://www.uwplatt.edu/~meinhard/routeswitch.pdf>

About the SDI Digital Signal

SDI (Serial Digital Interface) Is a Digital Component Signal based on a 270 Mbps transfer rate. This is a 10-bit, scrambled, polarity independent interface, with common scrambling for both component ITU-R 601 and composite digital video. This signal can also carry up to four channels of (embedded) Digital Audio. **(In our Studios we only use 2 channels of Digital Audio.)** The signal uses the standard 75 ohm BNC connector and coax cable as is commonly used for analog video, and can transmit the signal over 600 feet (200 meters) depending on cable type.



The SDI Digital Video Routing switcher allows DIGITAL signals to be sent to Digital Destinations INDEPENDENTLY of the Production video switcher settings. Currently our **Digital Destinations include:**

Lightning Still Store

Deko CG

VTR E (DVCAM DSR 1800)

VTR F (DVCAM DSR-2000)

AUDIO

They Only Audio that is routed with this switcher is embedded SDI Audio From a **Native Digital source To a Native Digital Destination.** (At this time the only Native Digital Sources with SDI are VTR E (DVCAM DSR 1800) and VTR F (DVCAM DSR-2000))

If you need audio from another source (EX. ANALOG VTR to ANY OTHER VTR) you must patch it via the Audio Patch Panel (Bottom row Destination, Top row Source)

Since all our analog VIDEO sources are converted into digital signals for use in the production switcher (a digital device) **All sources that are available for the production switcher can be used for a Source, BUT ONLY Digital Devices can be used as a Destination.**

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TO ROUTE SIGNALS VIA The SDI Digital Video Routing Switcher



- 1) First **Select a Destination** (I.E. Where you want to send the video) (Bottom Row of Buttons)
- 2) Secondly **Select a Source** (I.E. Where you want the video to originate from) (Top Row of Buttons)

NOTE IF YOU WANT TO SELECT **PROGRAM AS A DIGITAL **SOURCE** IT IS LOCATED IN THE **BOTTOM** ROW-THIS IS AN **EXCEPTION** TO HAVING ALL THE SOURCES ON THE **TOP***



You may route several simultaneous paths. (Example you could route VTR A to VTR E **WHILE AT THE SAME TIME** Routing the CG to VTR F)

Note that if you are routing a DIGITAL VIDEO SIGNAL to a Digital VTR (VTR E OR VTR F) the Video Input on the DESTINATION VTR must be set to “SDI”. If you wish to record the **Embedded SDI Digital Audio, Both Audio Channels of the DESTINATION VTR must be set for **SDI**.**



IMPORTANT:

*****FOR NORMAL OPERATIONS**

(Signals sent to Digital VTRS from Switcher) the Digital VTRS Video Input should be set to **COMPOSITE** and **BOTH AUDIO CHANNELS** should be set to **ANALOG**

