

Appendix 1
Interface Inventory for Audio/Video Routing and Formats, 3/17/98

From #	To #	From Name	To Name	Interface Name	Comments
5, 7, 26, 27, 28, 29, 30	24	Video Decoder, HDTV Down- Convert, Master Control Switcher, VTRs, Servers, Graphics, Production	Router	259M	SDTV Bit-Serial Interface (4:3): 4:2:2 Component Digital at 270Mbps; Coaxial Cable
5, 7, 26, 27, 28, 29, 30	24	Video Decoder, HDTV Down- Convert, Master Control Switcher, VTRs, Servers, Graphics, Production	Router	125M	SDTV Bit-Serial Interface (4:3): 4:2:2 Component Digital at 270Mbps; Coaxial Cable
5, 7, 26, 27, 28, 29, 30	24	Video Decoder, HDTV Down- Convert, Master Control Switcher, VTRs, Servers, Graphics, Production	Router	259M	SDTV Bit-Serial Interface (4:3): 4Fsc Composite Digital at 143Mbps; Coaxial Cable
5, 7, 26, 27, 28, 29, 30	24	Video Decoder, HDTV Down- Convert, Master Control Switcher, VTRs, Servers, Graphics, Production	Router	244M	SDTV Bit-Serial Interface (4:3): 4Fsc Composite Digital at 143Mbps; Coaxial Cable
5, 7, 26, 27, 28, 29, 30	24	Video Decoder, HDTV Down- Convert, Master Control Switcher, VTRs, Servers, Graphics, Production	Router	259M	SDTV Bit-Serial Interface (16:9): 4:2:2 Component Digital at 270Mbps; 13.5 MHz Sampling; Coaxial Cable
5, 7, 26, 27, 28, 29, 30	24	Video Decoder, HDTV Down- Convert, Master Control Switcher, VTRs, Servers, Graphics, Production	Router	267M	SDTV Bit-Serial Interface (16:9): 4:2:2 Component Digital at 270Mbps; 13.5 MHz Sampling; Coaxial Cable
5, 7, 26, 27, 28, 29, 30	24	Video Decoder, HDTV Down- Convert, Master Control Switcher, VTRs, Servers, Graphics, Production	Router	259M	SDTV Bit-Serial Interface (16:9): 4:2:2 Component Digital at 360Mbps; 18 MHz Sampling; Coaxial Cable

From #	To #	From Name	To Name	Interface Name	Comments
5, 7, 26, 27, 28, 29, 30	24	Video Decoder, HDTV Down- Convert, Master Control Switcher, VTRs, Servers, Graphics, Production	Router	267M	SDTV Bit-Serial Interface (16:9): 4:2:2 Component Digital at 360Mbps; 18 MHz Sampling; Coaxial Cable
5, 7, 26, 27, 28, 29, 30	24	Video Decoder, HDTV Down- Convert, Master Control Switcher, VTRs, Servers, Graphics, Production	Router	259M	Mapping MPEG-2 Transport Streams to 143 Mbps: Coaxial Cable
5, 7, 26, 27, 28, 29, 30	24	Video Decoder, HDTV Down- Convert, Master Control Switcher, VTRs, Servers, Graphics, Production	Router	AES3-1992	Digital Audio: Twisted Pair; Balanced Pair; Shielded; 110 ohms
5, 7, 26, 27, 28, 29, 30	24	Video Decoder, HDTV Down- Convert, Master Control Switcher, VTRs, Servers, Graphics, Production	Router	AES3-1992	Digital Audio: Coaxial Cable
5, 7, 26, 27, 28, 29, 30	24	Video Decoder, HDTV Down- Convert, Master Control Switcher, VTRs, Servers, Graphics, Production	Router	170M	Analog Video: Composite Video; Coaxial Cable
5, 7, 26, 27, 28, 29, 30	24	Video Decoder, HDTV Down- Convert, Master Control Switcher, VTRs, Servers, Graphics, Production	Router		Analog Audio: Shielded Twisted Pair
5, 7, 26, 27, 28, 29, 30	24	Video Decoder, HDTV Down- Convert, Master Control Switcher, VTRs, Servers, Graphics, Production	Router	12M	Time Code: Twisted Pair; Balanced Pair, Shielded
5, 7, 26, 27, 28, 29, 30	24	Video Decoder, HDTV Down- Convert, Master Control Switcher, VTRs, Servers, Graphics, Production	Router	12M?	Time Code: Vertical Interval

From #	To #	From Name	To Name	Interface Name	Comments
5, 7, 26, 27, 28, 29, 30	24	Video Decoder, HDTV Down-Convert, Master Control Switcher, VTRs, Servers, Graphics, Production	Router	RP164?	Time Code: Vertical Interval
24	26, 27, 28, 29, 30, 31	Router	Master Control Switcher, VTRs, Servers, Graphics, Production	259M	SDTV Bit-Serial Interface (4:3): 4:2:2 Component Digital at 270Mbps; Coaxial Cable
24	26, 27, 28, 29, 30, 31	Router	Master Control Switcher, VTRs, Servers, Graphics, Production	125M	SDTV Bit-Serial Interface (4:3): 4:2:2 Component Digital at 270Mbps; Coaxial Cable
24	26, 27, 28, 29, 30, 31	Router	Master Control Switcher, VTRs, Servers, Graphics, Production	259M	SDTV Bit-Serial Interface (4:3): 4Fsc Composite Digital at 143Mbps; Coaxial Cable
24	26, 27, 28, 29, 30, 31	Router	Master Control Switcher, VTRs, Servers, Graphics, Production	244M	SDTV Bit-Serial Interface (4:3): 4Fsc Composite Digital at 143Mbps; Coaxial Cable
24	26, 27, 28, 29, 30, 31	Router	Master Control Switcher, VTRs, Servers, Graphics, Production	259M	SDTV Bit-Serial Interface (16:9): 4:2:2 Component Digital at 270Mbps; 13.5 MHz Sampling; Coaxial Cable
24	26, 27, 28, 29, 30, 31	Router	Master Control Switcher, VTRs, Servers, Graphics, Production	267M	SDTV Bit-Serial Interface (16:9): 4:2:2 Component Digital at 270Mbps; 13.5 MHz Sampling; Coaxial Cable
24	26, 27, 28, 29, 30, 31	Router	Master Control Switcher, VTRs, Servers, Graphics, Production	259M	SDTV Bit-Serial Interface (16:9): 4:2:2 Component Digital at 360Mbps; 18 MHz Sampling; Coaxial Cable
24	26, 27, 28, 29, 30, 31	Router	Master Control Switcher, VTRs, Servers, Graphics, Production	267M	SDTV Bit-Serial Interface (16:9): 4:2:2 Component Digital at 360Mbps; 18 MHz Sampling; Coaxial Cable
24	26, 27, 28, 29, 30, 31	Router	Master Control Switcher, VTRs, Servers, Graphics, Production	259M	Mapping MPEG-2 Transport Streams to 143 Mbps: Coaxial Cable
24	26, 27, 28, 29, 30, 31	Router	Master Control Switcher, VTRs, Servers, Graphics, Production	AES3-1992	Digital Audio: Twisted Pair; Balanced Pair; Shielded; 110 ohms
24	26, 27, 28, 29, 30, 31	Router	Master Control Switcher, VTRs, Servers, Graphics, Production	AES3-1992	Digital Audio: Coaxial Cable

From #	To #	From Name	To Name	Interface Name	Comments
24	26, 27, 28, 29, 30, 31	Router	Master Control Switcher, VTRs, Servers, Graphics, Production	170M	Analog Video: Composite Video; Coaxial Cable
24	26, 27, 28, 29, 30, 31	Router	Master Control Switcher, VTRs, Servers, Graphics, Production		Analog Audio: Shielded Twisted Pair
24	26, 27, 28, 29, 30, 31	Router	Master Control Switcher, VTRs, Servers, Graphics, Production	12M	Time Code: Twisted Pair; Balanced Pair, Shielded
24	26, 27, 28, 29, 30, 31	Router	Master Control Switcher, VTRs, Servers, Graphics, Production	12M?	Time Code: Vertical Interval
24	26, 27, 28, 29, 30, 31	Router	Master Control Switcher, VTRs, Servers, Graphics, Production	RP164?	Time Code: Vertical Interval
32	34, 79, 81, 86	Data Bridge	Video Encoder, HD Video Encoder, Multiplexer, PSIP Management	SCTE DVS/053	Data Distribution to/from Data Bridge: TCP/IP
32	34, 79, 81, 86	Data Bridge	Video Encoder, HD Video Encoder, Multiplexer, PSIP Management		Data Distribution to/from Data Bridge: UDP/IP
32	34, 79, 81, 86	Data Bridge	Video Encoder, HD Video Encoder, Multiplexer, PSIP Management		Data Distribution to/from Data Bridge: SNMP
32	34, 79, 81, 86	Data Bridge	Video Encoder, HD Video Encoder, Multiplexer, PSIP Management		Data Distribution to/from Data Bridge: ASCII
32	34, 79, 81, 86	Data Bridge	Video Encoder, HD Video Encoder, Multiplexer, PSIP Management		Data Distribution to/from Data Bridge: RS422
51, 52, 58, 63, 72, 73, 74, 75, 76	70	HDTV Upconverter, HD Video Decoder, HD Video Decoder, HD Video Decoder, Master Control Switcher, HD VTRs, HD Servers, HD Graphics, HD Production	HD Router	259M	Lightly Compressed HDTV (200 to 400 Mbps range): Coaxial Cable

From #	To #	From Name	To Name	Interface Name	Comments
51, 52, 58, 63, 72, 73, 74, 75, 76	70	HDTV Upconverter, HD Video Decoder, HD Video Decoder, HD Video Decoder, Master Control Switcher, HD VTRs, HD Servers, HD Graphics, HD Production	HD Router	305M	Lightly Compressed HDTV (200 to 400 Mbps range): Coaxial Cable
51, 52, 58, 63, 72, 73, 74, 75, 76	70	HDTV Upconverter, HD Video Decoder, HD Video Decoder, HD Video Decoder, Master Control Switcher, HD VTRs, HD Servers, HD Graphics, HD Production	HD Router	308M	Lightly Compressed HDTV (200 to 400 Mbps range): Coaxial Cable
51, 52, 58, 63, 72, 73, 74, 75, 76	70	HDTV Upconverter, HD Video Decoder, HD Video Decoder, HD Video Decoder, Master Control Switcher, HD VTRs, HD Servers, HD Graphics, HD Production	HD Router	Specification Needed: Mapping 308M to 305M	Lightly Compressed HDTV (200 to 400 Mbps range): Coaxial Cable
51, 52, 58, 63, 72, 73, 74, 75, 76	70	HDTV Upconverter, HD Video Decoder, HD Video Decoder, HD Video Decoder, Master Control Switcher, HD VTRs, HD Servers, HD Graphics, HD Production	HD Router	259M	Mapping 720 x 483 / 60P into 259M (Coax): 4:2:0 at 360 Mbps; Coaxial Cable
51, 52, 58, 63, 72, 73, 74, 75, 76	70	HDTV Upconverter, HD Video Decoder, HD Video Decoder, HD Video Decoder, Master Control Switcher, HD VTRs, HD Servers, HD Graphics, HD Production	HD Router	294M	Mapping 720 x 483 / 60P into 259M (Coax): 4:2:0 at 360 Mbps; Coaxial Cable
51, 52, 58, 63, 72, 73, 74, 75, 76	70	HDTV Upconverter, HD Video Decoder, HD Video Decoder, HD Video Decoder, Master Control Switcher, HD VTRs, HD Servers, HD Graphics, HD Production	HD Router	293M	Mapping 720 x 483 / 60P into 259M (Coax): 4:2:0 at 360 Mbps; Coaxial Cable

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51, 52, 58, 63, 72, 73, 74, 75, 76	70	HDTV Upconverter, HD Video Decoder, HD Video Decoder, HD Video Decoder, Master Control Switcher, HD VTRs, HD Servers, HD Graphics, HD Production	HD Router	259M	Mapping 720 x 483 / 60P into 259M (Coax): 4:2:2 at 540 Mbps using two 270Mbps links
51, 52, 58, 63, 72, 73, 74, 75, 76	70	HDTV Upconverter, HD Video Decoder, HD Video Decoder, HD Video Decoder, Master Control Switcher, HD VTRs, HD Servers, HD Graphics, HD Production	HD Router	294M	Mapping 720 x 483 / 60P into 259M (Coax): 4:2:2 at 540 Mbps using two 270Mbps links
51, 52, 58, 63, 72, 73, 74, 75, 76	70	HDTV Upconverter, HD Video Decoder, HD Video Decoder, HD Video Decoder, Master Control Switcher, HD VTRs, HD Servers, HD Graphics, HD Production	HD Router	293M	Mapping 720 x 483 / 60P into 259M (Coax): 4:2:2 at 540 Mbps using two 270Mbps links
51, 52, 58, 63, 72, 73, 74, 75, 76	70	HDTV Upconverter, HD Video Decoder, HD Video Decoder, HD Video Decoder, Master Control Switcher, HD VTRs, HD Servers, HD Graphics, HD Production	HD Router	294M	Mapping 720 x 483 / 60P into ???M (Fiber): 4:2:0 at 360 Mbps; Optical Fiber; Single Mode Fiber
51, 52, 58, 63, 72, 73, 74, 75, 76	70	HDTV Upconverter, HD Video Decoder, HD Video Decoder, HD Video Decoder, Master Control Switcher, HD VTRs, HD Servers, HD Graphics, HD Production	HD Router	293M	Mapping 720 x 483 / 60P into ???M (Fiber): 4:2:0 at 360 Mbps; Optical Fiber; Single Mode Fiber
51, 52, 58, 63, 72, 73, 74, 75, 76	70	HDTV Upconverter, HD Video Decoder, HD Video Decoder, HD Video Decoder, Master Control Switcher, HD VTRs, HD Servers, HD Graphics, HD Production	HD Router	294M	Mapping 720 x 483 / 60P into ???M (Fiber): 4:2:2 at 540 Mbps; Optical Fiber; Single Mode Fiber

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51, 52, 58, 63, 72, 73, 74, 75, 76	70	HDTV Upconverter, HD Video Decoder, HD Video Decoder, HD Video Decoder, Master Control Switcher, HD VTRs, HD Servers, HD Graphics, HD Production	HD Router	293M	Mapping 720 x 483 / 60P into ???M (Fiber): 4:2:2 at 540 Mbps; Optical Fiber; Single Mode Fiber
51, 52, 58, 63, 72, 73, 74, 75, 76	70	HDTV Upconverter, HD Video Decoder, HD Video Decoder, HD Video Decoder, Master Control Switcher, HD VTRs, HD Servers, HD Graphics, HD Production	HD Router	SMPTE S17.48X	Mapping 480I, 480p, 720p/24 into 292M
51, 52, 58, 63, 72, 73, 74, 75, 76	70	HDTV Upconverter, HD Video Decoder, HD Video Decoder, HD Video Decoder, Master Control Switcher, HD VTRs, HD Servers, HD Graphics, HD Production	HD Router	Standard Needed	SDTV 480p/60, 4:2:2 @ 540 Mbps: Coaxial Cable
51, 52, 58, 63, 72, 73, 74, 75, 76	70	HDTV Upconverter, HD Video Decoder, HD Video Decoder, HD Video Decoder, Master Control Switcher, HD VTRs, HD Servers, HD Graphics, HD Production	HD Router		HDTV 720p/30 @ 720Mbps or 1.5 Gbps
51, 52, 58, 63, 72, 73, 74, 75, 76	70	HDTV Upconverter, HD Video Decoder, HD Video Decoder, HD Video Decoder, Master Control Switcher, HD VTRs, HD Servers, HD Graphics, HD Production	HD Router	292M	HDTV 1.5 Gbps Bit-Serial Interface for 720p and 1080I: Coaxial Cable
51, 52, 58, 63, 72, 73, 74, 75, 76	70	HDTV Upconverter, HD Video Decoder, HD Video Decoder, HD Video Decoder, Master Control Switcher, HD VTRs, HD Servers, HD Graphics, HD Production	HD Router	292M	HDTV 1.5 Gbps Bit-Serial Interface for 720p and 1080I: Optical Fiber; Single Mode Fiber

From #	To #	From Name	To Name	Interface Name	Comments
51, 52, 58, 63, 72, 73, 74, 75, 76	70	HDTV Upconverter, HD Video Decoder, HD Video Decoder, HD Video Decoder, Master Control Switcher, HD VTRs, HD Servers, HD Graphics, HD Production	HD Router	274M	HDTV Component Analog Interface: 1920 x 1080i; Coaxial Cable
51, 52, 58, 63, 72, 73, 74, 75, 76	70	HDTV Upconverter, HD Video Decoder, HD Video Decoder, HD Video Decoder, Master Control Switcher, HD VTRs, HD Servers, HD Graphics, HD Production	HD Router	296M	HDTV Component Analog Interface: 1280 x 720p; Coaxial Cable
51, 52, 58, 63, 72, 73, 74, 75, 76	70	HDTV Upconverter, HD Video Decoder, HD Video Decoder, HD Video Decoder, Master Control Switcher, HD VTRs, HD Servers, HD Graphics, HD Production	HD Router		HDTV Parallel: Not recommended for new installations
51, 52, 58, 63, 72, 73, 74, 75, 76	70	HDTV Upconverter, HD Video Decoder, HD Video Decoder, HD Video Decoder, Master Control Switcher, HD VTRs, HD Servers, HD Graphics, HD Production	HD Router	Too soon to standardize; technology still in development	HDTV 3.0 Gbps Bit Serial Interface for 1920 x 1080p:
70	72, 73, 74, 75, 76	HD Router	Master Control, HD VTRs, HD Servers, HD Graphics, HD Production	259M	Lightly Compressed HDTV (200 to 400 Mbps range): Coaxial Cable
70	72, 73, 74, 75, 76	HD Router	Master Control, HD VTRs, HD Servers, HD Graphics, HD Production	305M	Lightly Compressed HDTV (200 to 400 Mbps range): Coaxial Cable
70	72, 73, 74, 75, 76	HD Router	Master Control, HD VTRs, HD Servers, HD Graphics, HD Production	308M	Lightly Compressed HDTV (200 to 400 Mbps range): Coaxial Cable
70	72, 73, 74, 75, 76	HD Router	Master Control, HD VTRs, HD Servers, HD Graphics, HD Production	Specification Needed: Mapping 308M to 305M	Lightly Compressed HDTV (200 to 400 Mbps range): Coaxial Cable

From #	To #	From Name	To Name	Interface Name	Comments
70	72, 73, 74, 75, 76	HD Router	Master Control, HD VTRs, HD Servers, HD Graphics, HD Production	259M	Mapping 720 x 483 / 60P into 259M (Coax): 4:2:0 at 360 Mbps; Coaxial Cable
70	72, 73, 74, 75, 76	HD Router	Master Control, HD VTRs, HD Servers, HD Graphics, HD Production	294M	Mapping 720 x 483 / 60P into 259M (Coax): 4:2:0 at 360 Mbps; Coaxial Cable
70	72, 73, 74, 75, 76	HD Router	Master Control, HD VTRs, HD Servers, HD Graphics, HD Production	293M	Mapping 720 x 483 / 60P into 259M (Coax): 4:2:0 at 360 Mbps; Coaxial Cable
70	72, 73, 74, 75, 76	HD Router	Master Control, HD VTRs, HD Servers, HD Graphics, HD Production	259M	Mapping 720 x 483 / 60P into 259M (Coax): 4:2:2 at 540 Mbps using two 270Mbps links
70	72, 73, 74, 75, 76	HD Router	Master Control, HD VTRs, HD Servers, HD Graphics, HD Production	294M	Mapping 720 x 483 / 60P into 259M (Coax): 4:2:2 at 540 Mbps using two 270Mbps links
70	72, 73, 74, 75, 76	HD Router	Master Control, HD VTRs, HD Servers, HD Graphics, HD Production	293M	Mapping 720 x 483 / 60P into 259M (Coax): 4:2:2 at 540 Mbps using two 270Mbps links
70	72, 73, 74, 75, 76	HD Router	Master Control, HD VTRs, HD Servers, HD Graphics, HD Production	294M	Mapping 720 x 483 / 60P into ???M (Fiber): 4:2:0 at 360 Mbps; Optical Fiber; Single Mode Fiber
70	72, 73, 74, 75, 76	HD Router	Master Control, HD VTRs, HD Servers, HD Graphics, HD Production	293M	Mapping 720 x 483 / 60P into ???M (Fiber): 4:2:0 at 360 Mbps; Optical Fiber; Single Mode Fiber
70	72, 73, 74, 75, 76	HD Router	Master Control, HD VTRs, HD Servers, HD Graphics, HD Production	294M	Mapping 720 x 483 / 60P into ???M (Fiber): 4:2:2 at 540 Mbps; Optical Fiber; Single Mode Fiber
70	72, 73, 74, 75, 76	HD Router	Master Control, HD VTRs, HD Servers, HD Graphics, HD Production	293M	Mapping 720 x 483 / 60P into ???M (Fiber): 4:2:2 at 540 Mbps; Optical Fiber; Single Mode Fiber
70	72, 73, 74, 75, 76	HD Router	Master Control, HD VTRs, HD Servers, HD Graphics, HD Production	SMPTE S17.48X	Mapping 480I, 480p, 720p/24 into 292M

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70	72, 73, 74, 75, 76	HD Router	Master Control, HD VTRs, HD Servers, HD Graphics, HD Production	Standard Needed	SDTV 480p/60, 4:2:2 @ 540 Mbps: Coaxial Cable
70	72, 73, 74, 75, 76	HD Router	Master Control, HD VTRs, HD Servers, HD Graphics, HD Production		HDTV 720p/30 @ 720Mbps or 1.5 Gbps
70	72, 73, 74, 75, 76	HD Router	Master Control, HD VTRs, HD Servers, HD Graphics, HD Production	292M	HDTV 1.5 Gbps Bit-Serial Interface for 720p and 1080I: Coaxial Cable
70	72, 73, 74, 75, 76	HD Router	Master Control, HD VTRs, HD Servers, HD Graphics, HD Production	292M	HDTV 1.5 Gbps Bit-Serial Interface for 720p and 1080I: Optical Fiber; Single Mode Fiber
70	72, 73, 74, 75, 76	HD Router	Master Control, HD VTRs, HD Servers, HD Graphics, HD Production	274M	HDTV Component Analog Interface: 1920 x 1080I; Coaxial Cable
70	72, 73, 74, 75, 76	HD Router	Master Control, HD VTRs, HD Servers, HD Graphics, HD Production	296M	HDTV Component Analog Interface: 1280 x 720p; Coaxial Cable
70	72, 73, 74, 75, 76	HD Router	Master Control, HD VTRs, HD Servers, HD Graphics, HD Production		HDTV Parallel: Not recommended for new installations
70	72, 73, 74, 75, 76	HD Router	Master Control, HD VTRs, HD Servers, HD Graphics, HD Production	Too soon to standardize; technology still in development	HDTV 3.0 Gbps Bit Serial Interface for 1920 x 1080p: