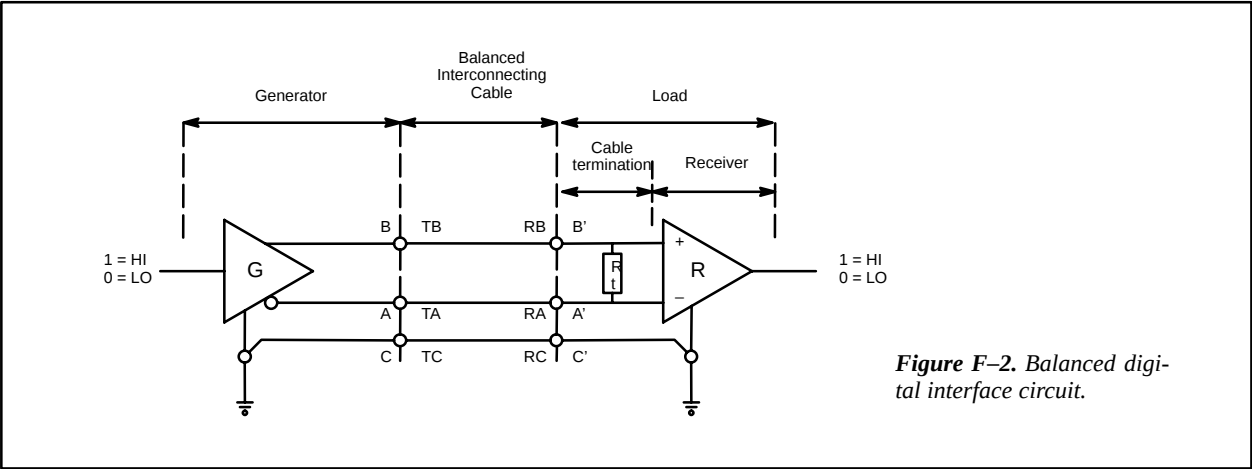
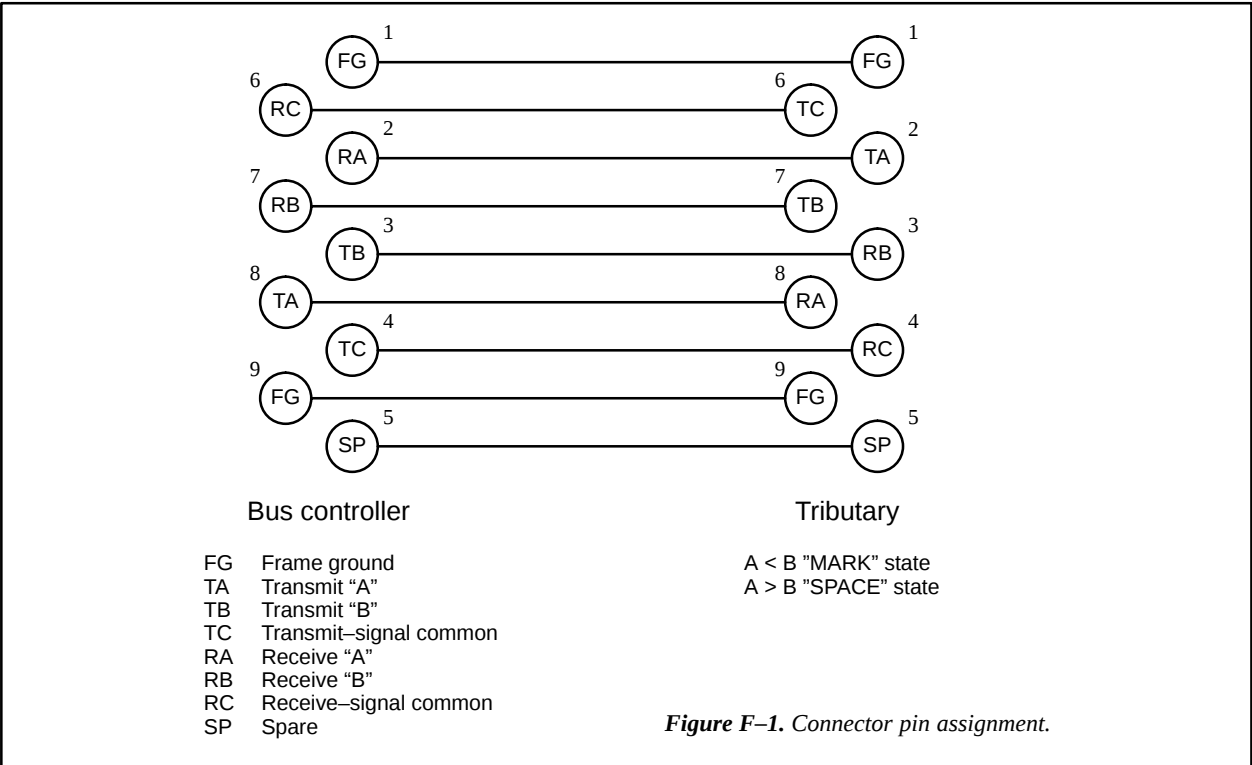


Appendix F

“ESbus” Specifications

MECHANICAL AND ELECTRICAL CHARACTERISTICS

Source: EBU tech. 3245–E, *Remote–Control Systems for Television Equipment*, December, 1984.



ESbus VTR protocol to Sony VTR protocol conversion table

ESbus command	Hex	Sony command	Hex
STOP	41	STOP	20 00
VAPL	42	VAR FWD	22 12 + speed
		VAR REV	22 22 + speed
STPL	43	PLAY	22 01
VFST	45	JOG FWD	22 11 + speed
		JOG REV	22 21 + speed
SHUT	46	SHUTTLE FWD	22 13 + speed
		SHUTTLE REV	22 23 + speed
TSPO	47	PROG. SPEED +	21 38
		PROG. SPEED –	21 39
REDS	48	STANDBY ON	20 05
		STANDBY OFF	20 04
SRES	49	SERVO REF SEL	41 33
REMS	4A	EDIT PRESET	41 30 + control bits
ENTY	4B	EDIT PRESET	41 30 + control bits
		(then) REC	20 02
EXIT	4C	EDIT PRESET	41 30 + control bits
		(then) PLAY	20 01
TASE	4E	CUE UP W/DATA	24 31 + data
PRSE	4F	CUE UP W/DATA	24 31 + data
TEES	67	TAPE/AUTO SEL	41 32
PRST (TTON)	60 46	TIMER–1 PRESET	44 00 + data
PRST (PTSV)	60 6D	TIME CODE PRES	44 04 + data

ESbus VTR protocol to Ampex VTR protocol conversion table

ESbus command	Hex	Ampex command	Hex
STOP	41	STOP	0C
VAPL	42	SLOW	10 + speed
STPL	43	PLAY	0D
STEP (still) (Fwd VPR3) (1 frame) (many frames) (Rev VPR3) (1 frame) (many frames) (Fwd other) (Rev other)	44	SLOW FFDJOG SLEW RFDJOG SLEW FJOG RJOG	10 00 00 42 35 + # of frames 43 35 + # of frames 25 26
VFST	45	SLOW	10 + speed
SHUT	46	SHUTTLE	11 + “shuttle magnitude”
TSPO	47	TSO	0F + data
REDS	48	READY	01 + (01 = ON, 00 = OFF)
REMS	4A	EDMODE	06 + data
ENTY	4B	uses 3 commands 1) ENABLE 2) ROLL 3) ENTRY	07 + data 0E 17 + data
EXIT	4C	uses 2 commands 1) EXIT 2) ENABLE	18 + data 07 + data
TACS	4D	TMSEL	2C + data
TASE	4E	SEARCH	16 + time
PRSE	4F	SEARCH	16 + time
CFRS	51	CF	03 + data
PRST TTON TTTW	60 46 47	uses 3 commands 1) TMSEL 2) TIMER 3) TMSEL uses 3 commands 1) TMSEL 2) TIMER 3) TMSEL	2C 01 28 + time 2C + last selected time source 2C 02 28 + time 2C + last selected time source
TEES	67	EE	02 + data