

RS232C/LAN command list
MODEL : Ultra Narrow Bezel Full HD LCD Display TH-55LFV70

2017/05/26
Panasonic Corporation

TYPE	Function	Control Command		Inquiry Command			Range and kind of parameter Call-back	Explanation
		Transmission Command[:Parameters]	Standby	Transmission Command[:Parameters]	Reply Command[:Parameters]	Standby		
Basic Control	ONPower ON	PON	Avail					
	OFFPower OFF	POF	-					
	Power Status			QPW	QPW:*	Avail	0 / 1	0:Standby (Off) / 1:Power ON (On)
	Input Change	IMS (:***)	Not avail	QMI	QMI:***	Not avail	Control:(Toggle) HM1/DP1/DL1/DV1/DV2/PC1/YP1/VD1/UD1 Inquiry: HM1/DP1/DL1/DV1/DV2/PC1/YP1/VD1/UD1	HM1 : HDMI1 DP1 : DISPLAY PORT DL1 : DIGITAL LINK DV1 : DVI1 DV2 : DVI2 PC1 : PC YP1 : COMPONENT(RGB) VD1 : VIDEO UD1 : USB Display
	DIGITAL LINK YFB Digital Link Input select for YFB Series	IMS:DL1***	Not avail	QMI:DL1	QMI:DL1***	Not avail	Control: HD1/HD2/PC1/PC2/SVD/VID (YFB100) Inquiry: HD1/HD2/PC1/PC2/SVD/VID (YFB100)	Available when YFB100 is connected. HD1 : HDMI1 HD2 : HDMI2 PC1 : COMPUTER 1 PC2 : COMPUTER 2 SVD : S-VIDEO VID : VIDEO
	Audio Volume	AVL:***	Not				000 - 100	Volume value
	UPVolume Up	AUU	Not					
	DOWNVolume Down	AUD	Not					
	Current Audio Volume			QAV	QAV:***	Not	000 - 100	Volume value
	Audio Mute	AMT (:*)	Not avail	QAM	QAM: *	Not avail	Control:(Toggle) 0 / 1	Toggle 0:(Audio mute Off) / 1:(Audio mute On)
	Video Mute	VMT (:*)	Not avail	QVM	QVM: *	Not avail	Control:(Toggle) 0 / 1	Toggle 0:(Video mute Off) / 1:(Video mute On)
	Aspect Change	DAM:****	Not	QAS	QAS:****	Not	FULL / NORM / ZOOM / ZOM2	FULL / NORMAL / ZOOM1 / ZOOM2
	Picture Mode	VPC:MEN***	Not	QPC:MEN	QPC:MEN***	Not	STD / DYN / CNM	STANDARD / DYNAMIC / CINEMA
	Picture Adjustment	Backlight	VPC:BLT***	Not avail	QPC:BLT	QPC:BLT***	Not avail	000 - 100 DEF
Picture (Contrast)		VPC:PIC***	Not avail	QPC:PIC	QPC:PIC***	Not avail	000 - 100 DEF	DEF:SET SHIPPING VALUE
Black Level (Brightness)		VPC:BLK***	Not avail	QPC:BLK	QPC:BLK***	Not avail	000 - 100 DEF	DEF:SET SHIPPING VALUE
Sharpness		VPC:SHP***	Not avail	QPC:SHP	QPC:SHP***	Not avail	000 - 100 DEF	DEF:SET SHIPPING VALUE Available except PC Input.
Color		VPC:COL***	Not avail	QPC:COL	QPC:COL***	Not avail	000 - 100 DEF	DEF:SET SHIPPING VALUE Available except PC Input.
Tint		VPC:TIN***	Not avail	QPC:TIN	QPC:TIN***	Not avail	000 - 100 DEF	DEF:SET SHIPPING VALUE Available except PC Input.
Color Temperature		VPC:TMP***	Not avail	QPC:TMP	QPC:TMP***	Not avail	032 / 040 / 050 / 065 / 075 / 093 / 107 / NTV / U01 / U02	3200K ~ 10700K / NaïTiVe / USER1 / USER2
RRed Drive		VWB:RDR****	Not avail	QWB:RDR	QWB:RDR****	Not avail	0000 ~ 0255	Available when Color Temperature is USER1 or USER2.
GGreen Drive		VWB:GDR****	Not avail	QWB:GDR	QWB:GDR****	Not avail	0000 ~ 0255	Available when Color Temperature is USER1 or USER2.
BBlue Drive		VWB:BDR****	Not avail	QWB:BDR	QWB:BDR****	Not avail	0000 ~ 0255	Available when Color Temperature is USER1 or USER2.
RRed Cut off		VWB:RCT****	Not avail	QWB:RCT	QWB:RCT****	Not avail	-127 ~ 0000 ~ 0128	Available when Color Temperature is USER1 or USER2.

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		Transmission Command[:Parameters]	Standby	Transmission Command[:Parameters]	Reply Command[:Parameters]	Standby			
P i c t u r e	Picture Adjustment	GGreen Cut off	VWB:GCT****	Not avail	QWB:GCT	QWB:GCT****	Not avail	-127 ~ 0000 ~ 0128	Available when Color Temperature is USER1 or USER2.
		BBlue Cut off	VWB:BCT****	Not avail	QWB:BCT	QWB:BCT****	Not avail	-127 ~ 0000 ~ 0128	Available when Color Temperature is USER1 or USER2.
		Gamma	VWB:GMM**	Not	QWB:GMM	QWB:GMM**	Not	20 / 22 / 24 / 26	2.0 / 2.2 / 2.4 / 2.6
		Dynamic Contrast	VPC:DCO**	Not	QPC:DCO	QPC:DCO**	Not	00 ~ 10	-
		Color Enhancement	VPC:PAJ*	Not avail	QPC:PAJ	QPC:PAJ*	Not avail	0 / 1	-
	Memory function	Memory delete	VPF:DEL**	Not avail				01 ~ 08	Memory No.1 - Memory No.8
		Memory load	VPF:LOD**	Not avail				01 ~ 08	Memory No.1 - Memory No.8
Memory save		VPF:SAV**	Not avail				01 ~ 08	Memory No.1 - Memory No.8	
Memory state				QPF:STA	QPF:STA*****	Not avail	/0 (Memory No.1- No.08)	Unused/Use	
S o u n d	Sound Adjustment	Output Select	AAC:OUT***	Not avail	QAC:OUT	QAC:OUT***	Not avail	SPO / LNO	SPEAKER-OUT / LINE-OUT
		Sound Mode	AAC:MEN***	Not avail	QAC:MEN	QAC:MEN***	Not avail	STD(AUT) / DYN / CLR	STANDARD / DYNAMIC / CLEAR Available when Output Select is SPEAKER-OUT.
		Bass	AAC:BAS***	Not	QAC:BAS	QAC:BAS***	Not	-20 ~ 000 ~ +20(020)	Available when Output Select is SPEAKER-OUT.
		Treble	AAC:TRE***	Not	QAC:TRE	QAC:TRE***	Not	-20 ~ 000 ~ +20(020)	Available when Output Select is SPEAKER-OUT.
		Balance	AAC:BAL***	Not	QAC:BAL	QAC:BAL***	Not	-10 ~ 000 ~ +10(010)	Available when Output Select is SPEAKER-OUT.
		Surround	AAC:SUR***	Not avail	QAC:SUR	QAC:SUR***	Not avail	MON / OFF	ON / OFF Available when Output Select is SPEAKER-OUT.
P o s i t i o n	Position/Size Adjustment	Horizontal Position	DGE:HPO****	Not	QGE:HPO	QGE:HPO****	Not	-100 ~ 0000 ~ +100(0100)	-
		Horizontal Size	DGE:HSZ****	Not	QGE:HSZ	QGE:HSZ****	Not	-100 ~ 0000 ~ +100(0100)	-
		Vertical Position	DGE:VPO****	Not	QGE:VPO	QGE:VPO****	Not	-100 ~ 0000 ~ +100(0100)	-
		Vertical Size	DGE:VSZ****	Not	QGE:VSZ	QGE:VSZ****	Not	-100 ~ 0000 ~ +100(0100)	-
		Clock Phase	DGE:CLK***	Not	QGE:CLK	QGE:CLK***	Not	00 ~ 30	-
		Dot Clock	DGE:DCL***	Not	QGE:DCL	QGE:DCL***	Not	-5 ~ 00 ~ +5(05)	-
		1:1 Pixel Mode	DGE:DBD*	Not	QGE:DBD	QGE:DBD*	Not	0 / 1	0:OFF / 1:ON
		Overscan	DGE:OVS*	Not	QGE:OVS	QGE:OVS*	Not	0 / 1	0:OFF / 1:ON
		Pos./Size Lump Setting	DGE:PSZ**** **** **** ****	Not avail	QGE:PSZ	QGE:PSZ**** **** **** ****	Not avail	-100 ~ 0000 ~ +100(0100), -100 ~ 0000 ~ +100(0100), -100 ~ 0000 ~ +100(0100), -100 ~ 0000 ~ +100(0100)	-
		Auto Setup	DGE:ASU* 	Not avail	QGE:ASU	QGE:ASU **	Not avail	Control: 1 Inquiry: OK / NG / OF / NW	Control: 1:Execution start Inquiry: OK / NG / OF(Un-performing or when not effective) / NW(adjusting)
S E T U P	Set up	Wobbling	OSP:WOB*	Not	QSP:WOB	QSP:WOB*	Not	0 / 1	OFF / ON
		OSD Language	SSU:LNG***	Not avail	QSU:LNG	QSU:LNG***	Not avail	ENG / DEU / FRA / ITL(ITA) / ESP / USA / CHA / JPN / RUS	English (UK) / German / French / Italian / Spanish / English (US) / Chinese/Japanese /Russian
		ECO Mode Settings	SSU:ECS*	Not	QSU:ECS	QSU:ECS*	Not	0 / 1	CUSTOM / ON
		No Signal Power Off	SSU:AOF*	Not	QSU:AOF	QSU:AOF*	Not	0 / 1	OFF / ON
		PC Power Management	SSU:DPM*	Not	QSU:DPM	QSU:DPM*	Not	0 / 1	OFF / ON
		DVI-D Power Management	SSU:DPD*	Not	QSU:DPD	QSU:DPD*	Not	0 / 1	OFF / ON
		DVI-D1 Power Management	SSU:D1V*	Not	QSU:D1V	QSU:D1V*	Not	0 / 1	OFF / ON
		DVI-D2 Power Management	SSU:D2V*	Not	QSU:D2V	QSU:D2V*	Not	0 / 1	OFF / ON
		HDMI Power Management	SSU:D1H*	Not	QSU:D1H	QSU:D1H*	Not	0 / 1	OFF / ON
		Power Save	SSU:ECO*	Not	QSU:ECO	QSU:ECO*	Not	0 / 1	OFF / ON

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		Transmission Command[:Parameters]	Standby	Transmission Command[:Parameters]	Reply Command[:Parameters]	Standby		
S E T U P	Set up	Reset	SSU:LRT	Not avail				
	Display ID Setup	ID	AID:***	Not avail	QAI	QAI:	000 - 100 / AUT	
		Auto Command Send Setting	*	Not avail		*	0/1	1:Control pass = Digital link 0:
		IDDisplay ID Auto Setup	SID:SID*	Not avail	QID:SID	QID:SID*	0 / 1	OFF / ON
		IDSerial ID Setup	SIF:*	Not avail	QIF	QIF:*	0 / 1	OFF / ON
		(Serial ID Function and Display ID)	***	Not avail		***	000 ~ 100	Display ID
		IDDisplay ID			QID:DID	QID:DID***	000 ~ 100	Display ID
	Signal	3D Y/C Filter	SSG:YCS*	Not avail	QSG:YCS	QSG:YCS*	0 / 1	OFF / ON
	Signal	Color System	SSG:COS	Not avail	QSG:COS	QSG:COS		NTSC / PAL / SCM / 4NT / MPA / NPA / AUTO
			***			***		
		Sync Signal Setting	SSG:SNC	Not avail	QSG:SNC	QSG:SNC		Only PC input
			***			***		Auto detection / Sync On Green
		Cinema Reality (3:2 Pull Down)	SSG:DCR*	Not avail	QSG:DCR	QSG:DCR*	0 / 1	OFF / ON
		XGA Mode	SSG:XGA*	Not avail	QSG:XGA	QSG:XGA*	1 / 3	1024x768 / 1366x768
		Noise Reduction	SSG:NRS***	Not avail	QSG:NRS	QSG:NRS***		OFF / Auto / Low / Middle / High
		MPEG Noise Reduction	SSG:MNR***	Not avail	QSG:MNR	QSG:MNR***		OFF / Low / Middle / High
		Signal Range	SSG:HRC***	Not avail	QSG:HRC	QSG:HRC***		Video / FULL / Auto
								DVI1/DVI2:"Auto" not avail
		Component/RGB-IN Select	SSU:CMP***	Not avail	QSU:CMP	QSU:CMP***		YBR/RGB
								Available when PC1/YP1 is selected.
		YUV/RGB-IN Select	SSU:DYR***	Not avail	QSU:DYR	QSU:DYR***		YUV/RGB
								HDMI / Display Port / DIGITAL LINK / DVI1 / DVI2
		Input Level	VWB:ILV***	Not avail	QWB:ILV	QWB:ILV***		-16 ~ 000 ~ +16(016)
								-
	Screensaver	Screensaver ON/OFF	OSP:SCR*	Not avail	QSP:SCR	QSP:SCR*	0 / 5	0:(stop) / 5:(operating)
		Screensaver Mode	SSC:MOD*	Not avail	QSC:MOD	QSC:MOD*	0 / 1 / 2 / 3 / 4	0:OFF / 1:Interval / 2:Time Designation / 3:ON / 4:Standby after Screensaver
		Interval Screensaver	SSC:INT****	Not avail	QSC:INT	QSC:INT****	0000 ~ 2359, 0000 ~ 2359	Periodic time Operating time
	Time Designation Screensaver	SSC:TIM****	Not avail	QSC:TIM	QSC:TIM****	0000 ~ 2359, 0000 ~ 2359	Start time Finish time	
	Standby after Screensaver	SSC:AOF****	Not avail	QSC:AOF	QSC:AOF****	0000 ~ 2359	Time of operation(hour:minute)	
Input Label	Set Label for Current Input	SSU:ILA***	Not avail	QSU:ILA	QSU:ILA***		INP / PCN / DV1 / DV2 / DV3 / BD1 / BD2 / BD3 / CTV / VCR / STB / SKP	
							reset input name(Except PC) / reset input name(for PC) DVD1 / DVD2 / DVD3 / Blu-ray1 / Blu-ray2 / Blu-ray3 / CATV / VCR / STB / (Skip)	
	Set Label for EACH INPUT	SSU:ILA****	Not avail	QSU:ILA+++	QSU:ILA+++		INPUT HDMI1 / DISPLAY PORT / DIGITAL LINK / DVI1 / DVI2 / PC / COMPONENT(RGB) / VIDEO	
					***		(reset input name) / DVD1 / DVD2 / DVD3 / Blu-ray1 / Blu-ray2 / Blu-ray3 / CATV / VCR / STB / (Skip)	
Function Button Settings	Function Group	OSP:KGR***	Not avail	QSP:KGR	QSP:KGR***		INP / MEM / ACT	
							INPUT / MEMORY / ACTION & MENU(SHORTCUT)	

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		Transmission Command[:Parameters]	Standby	Transmission Command[:Parameters]	Reply Command[:Parameters]			Standby
S E T U P	Function Button Settings	OSP:KFN* ***	Not avail	QSP:KFN*	QSP:KFN* ***	1 - 9 , 0 (ACTION & MENU) SIG / SSV / SUT / ECO / MLT / OSH (INPUT) HM1/DP1/DL1/DV1/DV2/PC1/YP1/VD1/ UD1	setup to FUNCTION KEY 1 - setup to FUNCTION KEY 9, setup to FUNCTION KEY 0 (ACTION & MENU) Signal menu / Screensaver menu / Timer setup menu / ECO Mode menu / Multi Display menu / AV Mute (INPUT) HDMI1 / DISPLAY PORT / DIGITAL LINK / DVI1 / DVI2 / PC / COMPONENT(RGB) / VIDEO / USB Display	
	Multi Display Setup	Multi Display ON/OFF	MDC:*	Not			0 / 1	OFF/ ON
		Multi Display Setup (Detail)	MDC:EXP* ** ** *** *** ***	Not avail	QDC:EXP	QDC:EXP* ** ** *** *** ***	0 / 1, 01 ~ 10, 01 ~ 10, 000 ~ 100, 000 ~ 100, 001 ~ 010 ~ 011 ~ 090 ~ 091 ~ 100	OFF / ON, Horizontal Scale 1 ~ 10, Vertical Scale 1 ~ 10, Bezel H Adjustment 0 ~ 100 Bezel V Adjustment 0 ~ 100 Location A1 ~ A10 ~ B1 ~ I10 ~ J1 ~ J10
	TimerSetup	TIM:PRG** * *** *** **** ***	Not avail	QIM:PRG**	QIM:PRG** * *** *** **** ***	01 20, 0 / 1, SUN / MON / TUE / WED / THU / FRI / SAT / EVD, PON / POF, 0000 2359, HM1/DP1/DL1/DV1/DV2/PC1/YP1/VD1/ UD1	Program number120, 0:OFF / 1:ON, A lower parameter is not given when the upper setup is "OFF." (a day of the week):Sunday / Monday / Tuesday / Wednesday / Thursday / Friday / Saturday / Everyday (Action type)PON:ON / POF:OFF, Time (hour, minute) (start-up input) HDMI1/DISPLAY PORT/DIGITAL LINK/DVI1/DVI2/PC/COMPONENT(RGB)/VIDEO/USB Display	
	Present Time Setup	Present Day	TIM:DAY***	Not avail	QIM:DAY	QIM:DAY***	SUN / MON / TUE / WED / THU / FRI / SAT	(a day of the week): Sunday / Monday / Tuesday / Wednesday / Thursday / Friday / Saturday
		Present Time	TIM:NOW0****	Not	QIM:NOW	QIM:NOW0****	0000 ~ 2359	Present time (hour:minute)
	Backup Input Setup	Input Change Mode Off	SBI:OFF (NON NON *)	Not avail	QBI	QBI:OFF NON NON *	0 / 1	0: Disable / 1 : Enable (Auto switch back mode)
		Input Change Mode Quick	SBI:QIC (*** *** *)	Not avail	QBI	QBI:QIC *** *** *	NON / HM1 / DP1 / DL1 / DV1 / DV2 NON / HM1 / DP1 / DL1 / DV1 / DV2 0 / 1	(Primary backup input) (Secondary backup input) 0: Disable / 1 : Enable (Auto switch back mode)
		Input Change Mode Normal	SBI:NOR (*** *** *)	Not avail	QBI	QBI:NOR *** *** *	NON / HM1 / DP1 / DL1 / DV1 / DV2 / PC1 / YP1 / VD1 / UD1 NON / HM1 / DP1 / DL1 / DV1 / DV2 / PC1 / YP1 / VD1 / UD1 0 / 1	(Primary backup input) (Secondary backup input) 0: Disable / 1 : Enable (Auto switch back mode)

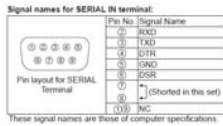
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		Transmission Command[:Parameters]	Standby	Transmission Command[:Parameters]	Reply Command[:Parameters]	Standby			
S E T U P	Backup Input Setup	Backup Input Status			QBI:STS	QBI:STS * *** *	Not avail	0 / 1 HM1/DP1/DL1/DV1/DV2/PC1/YP1/VD1/ UD1 0 / 1 / 2	0: inactive / 1: active (Status) Main Input 0: Main Input / 1: Primary Backup input / 2: Secondary Backup input (Current Input Status)
		Backup Input Signal Status			QBI:SIG	QBI:SIG * * *	Not avail	0 / 1 0 / 1 0 / 1	0 : no signal / 1 : not no signal (Main input) 0 : no signal / 1 : not no signal (Primary backup input) 0 : no signal / 1 : not no signal (Secondary backup input) When Input change mode is not Off
	Backup Input Setup	Manual Switch Back	BIP:FSB	Not avail					Enable when Input change mode is not Off and Auto switch back mode is Disable.
	Control settings	Serial Control	SCT:SEC***	Not	QCT:SEC	QCT:SEC***	Not	SE1 / DL1	Serial in / DIGITAL LINK
		Serial Out	SCT:SEO***	Not	QCT:SEO	QCT:SEO***	Not	SE1 / DL1	Serial out / DIGITAL LINK
		IRIR Control	SCT:IRC***	Not	QCT:IRC	QCT:IRC***	Not	B1 / IR1 / DL1	Built in / IR-in / DIGITAL LINK
		IRIR Out	SCT:IRO***	Not	QCT:IRO	QCT:IRO***	Not	IR1 / DL1	IR-out / DIGITAL LINK
		Serial Daisy Chain Position	SCT:DCP***	Not	QCT:DCP	QCT:DCP***	Not	TOP / DEF / END	TOP / --- / END
		(ID)Serial Response(ID ALL)	SCT:RIA*	Not	QCT:RIA	QCT:RIA*	Not	0 / 1	OFF / ON
		IDSerial ID Group	SCT:SIG*	Not	QCT:SIG	QCT:SIG*	Not	A / B / C / D / E / F / G	A / B / C / D / E / F / G
		(ID)Serial ResponseID Group	SCT:RIG*	Not	QCT:RIG	QCT:RIG*	Not	0 / 1	OFF / ON
	USBUSB media player Seiup	USBUSB media player	SUS:UMP*	Not	QUS:UMP	QUS:UMP*	Not	0 / 1	Disable / Enable
		Resume play	SUS:RSP*	Not	QUS:RSP	QUS:RSP*	Not	0 / 1	OFF / ON
		Slide show duration	SUS:SSD***	Not	QUS:SSD	QUS:SSD***	Not	005 ~ 600	5 ~ 600 seconds (5 second unit)
	Options Menu	On screen display	OSP:OSD*	Not	QSP:OSD	QSP:OSD*	Not	0 / 1 / 2	OFF / ON / (Undisplayed at the time of external
		Initial input	OSP:IIN***	Not avail	QSP:IIN	QSP:IIN***	Not avail	OFF / HM1 / DP1 / DL1 / DV1 / DV2 / PC1 / YP1 / VD1 / UD1	OFF / HDMI1 / DISPLAY PORT / DIGITAL LINK / DV1 / DVI2 / PC / COMPONENT(RGB) / VIDEO / USB Display
		Initial VOL level	OSP:IVL****	Not avail	QSP:IVL	QSP:IVL****	Not avail	0 / 1, 000 ~ 100	OFF / ON, 0 ~ 100
		Maximum VOL level	OSP:MVL****	Not avail	QSP:MVL	QSP:MVL****	Not avail	0 / 1, 000 ~ 100	OFF / ON, 0 ~ 100
		Input lock	OSP:INL***	Not avail	QSP:INL	QSP:INL***	Not avail	OFF / HM1 / DP1 / DL1 / DV1 / DV2 / PC1 / YP1 / VD1 / UD1	OFF / HDMI1 / DISPLAY PORT / DIGITAL LINK / DV1 / DVI2 / PC / COMPONENT(RGB) / VIDEO / USB Display
		Button lock	OSP:BTL***	Not	QSP:BTL	QSP:BTL***	Not	OFF / MEN / ALL	OFF / MENU&ENTER / ON
		Remocon User level	OSP:RCM*	Not	QSP:RCM	QSP:RCM*	Not	0 / 1 / 2 / 3	OFF / User1 / User2 / User3
		Local Dimming	OSP:LDM*	Not avail	QSP:LDM	QSP:LDM*	Not avail	0 / 1	OFF / ON
		Off-timer function	OSP:OFT*	Not	QSP:OFT	QSP:OFT*	Not	0 / 1	OFF / ON
		Initail Power Mode	OSP:IPM***	Not avail	QSP:IPM	QSP:IPM***	Not avail	NOR / PON / STB	NORMAL(return to a front state) / ON / STANDBY
		Clock Display	OSP:CLK*	Not	QSP:CLK	QSP:CLK*	Not	0 / 1	OFF / ON
		LAN Control Protocol	OSP:LPN***	Not avail	QSP:LPN	QSP:LPN***	Not avail	LP1 / LP2	Procotol1 / Protocol2
			PC AUTO SETUP	OSP:PAS*	Not	QSP:PAS	QSP:PAS*	Not	0 / 1
	Information Timing	No Signal Warning	SIT:NSW*	Not avail	QIT:NSW	QIT:NSW*	Not avail	0 / 1	0: Off /1:On On:display sends out the no signal warning.(QST:NSW*)
		No Signal Warning Timing	SIT:SWT**	Not avail	QIT:SWT	QIT:SWT**	Not avail	01 ~ 60	01 ~ 60 (minutes)

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		Transmission Command[:Parameters]	Standby	Transmission Command[:Parameters]	Reply Command[:Parameters]	Standby			
Options Menu	Information Timing	Query status :No Signal Warning Timing	-	Not avail	QST:NSW	QST:NSW*	Not avail	0/1	1: No Signal Warning: 0: No waring for this function.
	Message of No Signal Warning (Auto) While RS-232C controls: message sent on the display automatically.	-	Not avail	-	QST:NSW*	Not avail	0/1	1: No Signal Warning: 0: No waring for this function.	
	No Signal Error	SIT:NSE*	Not avail	QIT:NSE	QIT:NSE*	Not avail	0 / 1	0: Off /1:On On:display sends out the no signal error..(QST:NSE*)	
	No Signal Error Timing	SIT:SET**	Not avail	QIT:SET	QIT:SET**	Not avail	01 ~ 90	01 ~ 90 (minutes)	
	Query status :No Signal Error Timing	-	Not avail	QST:NSE	QST:NSE*	Not avail	0/1	1: No Signal Error 0: No error for this function.	
	Message of No Signal Error Timing (Auto) While RS-232C controls: message sent on the display automatically.	-	Not avail	-	QST:NSE*	Not avail	0/1	1: No Signal Error 0: No error for this function.	
	Temperature Warning	SIT:TPW*	Not avail	QIT:TPW	QIT:TPW*	Not avail	0 / 1	0: Off /1:On On:display sends out the warning temperature..(QST:TO*)	
	Query status :Temperature warning	-	Not avail	QST:TO	QST:TO*	Not avail	0/1	1: "HIGH TEMPERATURE-MODE". *Please check the condition. 0: "NORMAL-MODE".	
	Message of Temperatur warning(Auto) While RS-232C controls: message sent on the display automatically.	-	Not avail	-	QST:TO*	Not avail	0/1	1: "HIGH TEMPERATURE-MODE". *Please check the condition. 0: "NORMAL-MODE".	
	No Signal Warning	SIT:NSW*	Not avail	QIT:NSW	QIT:NSW*	Not avail	0 / 1	Off / On Not send command if set Off.	
	No Signal Warning Timing	SIT:SWT**	Not	QIT:SWT	QIT:SWT**	Not	01 ~ 60	01 ~ 60 (minutes)	
	No Signal Error	SIT:NSE*	Not avail	QIT:NSE	QIT:NSE*	Not avail	0 / 1	Off / On Not send command if set Off.	
	No Signal Error Timing	SIT:SET**	Not avail	QIT:SET	QIT:SET**	Not avail	01 ~ 90	01 ~ 90 (minutes)	
	Temperature Waning	SIT:TPW*	Not avail	QIT:TPW	QIT:TPW*	Not avail	0 / 1	Off / On Not send command if set Off.	
Others	Recall	DDS	Not					Recall	
	Audio Mute	AOC:*	Not				0 / 1	MUTE OFF / MUTE ON	
	OSDQSD Clear	VDO	Not					OSD Clear	
	Off Timer	ZOT:**	Not				00 ~ 90	0 ~ 90(minutes)	
	Local Dimming	OSP:LDM*	Not avail	QSP:LDM	QSP:LDM*	Not avail	0 / 1	OFF / ON	
	Inquiry about Signal Frequency of input signal			QFR	QFR:***.* ***.*	Not avail	000.0 ~ 999.9, 000.0 ~ 999.9	Horizontal frequency Vertical frequency	
	Inquiry about Signal Format of input signal			QSF	QSF:*****	Not	MAX 20 Characters	Signal format information	
	DIGITAL LINK Inquiry about detail of DIGITAL LINK status			QST:DLD	QST:DLD* *** * -** -** -** -** -** -** -**	Not avail	0 / 1 / 2 / 3 000-225, <20 0 / 1 / 2 -00 ~ -99 -00 ~ -99 -00 ~ -99 -00 ~ -99 -00 ~ -99 -00 ~ -99	No connect / Digital Link / LPM / Ethernet (Est. Cable Length)(m) No HDMI / HDMI(No HDCP) / HDMI(HDCP) ChannelA Signal Quarity ChannelB Signal Quarity ChannelC Signal Quarity ChannelD Signal Quarity Minimum Signal Quarity Maximum Signal Quarity	

TYPE	Function	Control Command		Inquiry Command			Range and kind of parameter Call-back	Explanation
		Transmission Command[:Parameters]	Standby	Transmission Command[:Parameters]	Reply Command[:Parameters]	Standby		
Others	Inquiry about No Signal Warning			QST:NSW	QST:NSW*	Not avail	0 / 1	0 : Normal / 1 : No Signal Warning Reply "0" when No Signal Warning is set "OFF".
	Inquiry about No Signal Error			QST:NSE	QST:NSE*	Not avail	0 / 1	0 : Normal / 1 :No Signal Error Reply "0" when No Signal Error is set "OFF".
	Auto Command Send Setting	RCM:* *					0 / 1 0 / 1 (Number of parameters is 1 to 2.)	OFF / ON --- (QSS:STSERR)
	Inquiry about Model Name			QMN	QMN:****	Avail	55F12	
	Software Version (Main MCU)			QRV	QRV:* ****LFV70	Avail		
	Software Version (Sub MCU)			QRV:STB	QRV:STB**.**	Avail		
	Serial number			QSN	QSN:****...	Avail	(9 to 15 figures of the ASCII characters)	(Alphanumeric character),(capital letter of the alphabet),(Blank),'-',(0x30-0x39,0x41-0x5a,0x20,0x2d)
	SOS History			QSS	QSS:**. **. **. **. **. **.	Avail	00 ~ FF. 00 ~ FF. 00 ~ FF. 00 ~ FF. 00 ~ FF. 00 ~ FF.	Number of times First time SOS classification 2nd SOS classification 3n time SOS classification 3n+1st SOS classification 3n+2nd SOS classification In the 10th time, it is arranged as follows. First time SOS classification 2nd SOS classification 9th SOS classification 10th SOS classification 8th SOS classification
	Inquiry about SOS Status			QSS:STS	QSS:STS****	Avail	NON / ERR / EXT	no SOS history / SOS generating / SOS history

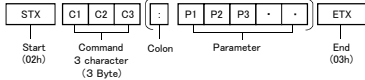
Protocol

Communication parameters	
Signal level	RS-232C compliant
Synchronization method	Asynchronous
Baudrate	9600 bps
Parity	None
Character length	8 bits
Stop bit	1 bit
Flow control	None



type of cable : straight cable

Basic format for control data:
The transmission of control data starts with a STX signal, followed by the command, the parameters, and lastly an ETX signal in that order.
If there are no parameters, the colon ":" does not need to be sent.



00	10	20	30	40	50	60	70
00	0x	10	20	30	40	50	60
01	04	14	24	34	44	54	64
02	0x	1x	2x	3x	4x	5x	6x
03	0x	10	20	30	40	50	60
04	ET	D4	S	4	D	T	d
05	0x	10	20	30	40	50	60
06	AK	AN	S	6	F	V	f
07	BL	EB	7	G	W	g	w
08	BS	CH	8	H	X	h	x
09	HT	EM	9	T	Y	t	y
0A	LF	FR	10	J	Z	j	z
0B	MF	GC	11	K	[k	[
0C	CL	-	<	L]	l]
0D	CR	-	=	M]	m]
0E	SD	T	>	N	^	n	^
0F	SI	1	?	O	_	o	_

(Example)

Power-on

Character ST P O N ET

Binary 02 50 4F 4E 03

Picture+85

Character STX V P C : P I C O 8 5 ETX

Binary 02 56 50 43 3A 50 49 43 30 38 35 03

Notes:

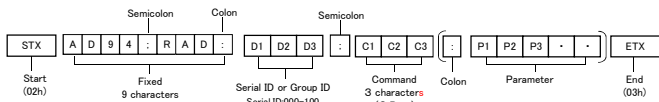
- If an incorrect command is sent, this unit will reply an "ER401" command to the computer.
- If customer send multiple commands, be sure to wait for the response for the first command to come before sending the next command.
- The length of the Parameters are different for each command.
- With the power off (stand-by mode), this display responds to "PON"/"OPW" command only.

When sending command with Display ID

- When sending command with Display ID, set [Display ID settings] - [Serial ID function] to "on".
- If Display ID is "0", any ID number in command is acceptable to control.
- If serial ID in command is "000", it is acceptable regardless of Display ID of target display.
- If a command is sent with serial ID, a response will be sent to the computer only in the following cases.
 - When [display ID and serial ID] is not 0: the display ID needs to match the serial ID.
 - When serial ID is 0: it needs to set [Control settings] - [Serial response(ID all)] to "on".
 - When display ID is 0: it needs to set [Control settings] - [Serial response(ID all)] to "on", and the serial ID is 0.

How to send to add "Serial ID"

Serial ID Format	<STX>AD94:RAD:<NUM1><NUM2><NUM3>:*****ETX> (Serial Control Only)
Group ID Format	(ex.) Serial ID = 1 <STX>AD94:RAD:001:PON:ETX> (ex.) Group ID = A <STX>AD94:RAD:AAA:PON:ETX>



- AD94:RAD: is fixed characters when sending command with ID.
- Serial ID is 3 characters and specified with Display ID which will be controlled.
 - If Display ID is 1, Serial ID is 001.
 - If Display ID is 15, Serial ID is 015.
- Group ID is 3 same characters and specified with Serial ID group which will be controlled.
 - If Serial ID group is A, Group ID is AAA.
 - If Serial ID group is B, Group ID is BBB.

For TH-55LFV70

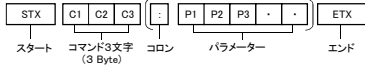
- Sets [Serial control] which terminal to use for input for serial communication.
 - SERIAL IN : SERIAL IN terminal
 - DIGITAL LINK : DIGITAL LINK terminal
- When using daisy chaining, set [Control settings] - [Serial daisy chain position] correctly.
- When using daisy chaining by serial terminal, use a straight cable which pin No. ② through ⑧ are hard wired.
- Sets [Serial Group ID] in Control settings menu. Options are A/B/C/D/E/F/G. Sets whether or not to return a response command when the command with group ID has been received. [Control terminal settings] - [Response(ID group)]

通信規約

通信条件	
信号レベル	RS-232C準拠
同期方式	非同期 (非同期)
ボーレート	9600 bps
パリティなし	なし
文字長	8ビット
ストップビット	1ビット
フロー制御	なし

ケーブル種 : ストレート

基本フォーマット:
データは、「STX」、「コマンド」、「パラメーター」、「ETX」の順に送信してください。
パラメーターを必要としないコマンドを送信する場合は、コロン(:)を付けないでください。



00	10	20	30	40	50	60	70
00	0x	10	20	30	40	50	60
01	04	14	24	34	44	54	64
02	0x	1x	2x	3x	4x	5x	6x
03	0x	10	20	30	40	50	60
04	ET	D4	S	4	D	T	d
05	0x	10	20	30	40	50	60
06	AK	AN	S	6	F	V	f
07	BL	EB	7	G	W	g	w
08	BS	CH	8	H	X	h	x
09	HT	EM	9	T	Y	t	y
0A	LF	FR	10	J	Z	j	z
0B	MF	GC	11	K	[k	[
0C	CL	-	<	L]	l]
0D	CR	-	=	M]	m]
0E	SD	T	>	N	^	n	^
0F	SI	1	?	O	_	o	_

(コマンド例)

電源オンコマンド

キャラクタ ST P O N ET

バイナリ 02 50 4F 4E 03

ピクチャー+85設定

キャラクタ STX V P C : P I C O 8 5 ETX

バイナリ 02 56 50 43 3A 50 49 43 30 38 35 03

その他

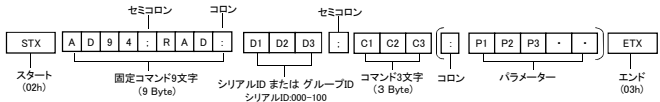
- 間違ったコマンドを受信すると、「ER401」という応答コマンドを返信します。
- 複数コマンドで制御する場合は、送信側が本機の応答を受け取ってから、次のコマンドを送信することを想定しています。
- パラメータの長さはコマンドごとに異なります。
- 電源「スタンバイ」状態(リモコンで電源「切」)中は「PON」「OPW」コマンド以外の動作は保証されません。

ID付コマンドで制御する場合

- ID付コマンドで制御する場合は、「ディスプレイID設定」メニューの「シリアルID機能」をオンに設定してください。
- ディスプレイIDが0の場合、コマンドに付与するIDはどのような数字でもコントロールします。
- 送信するコマンドのシリアルIDを"000"とすると、ディスプレイIDに関係なく制御します。(シリアルIDオール機能)
- ID付コマンドを送信した場合、以下の時のみコンピュータへの応答を返します。
 - ディスプレイID、シリアルIDが0以外の場合: ディスプレイIDとシリアルIDが一致した時
 - シリアルIDが0の場合: メニューの「応答(シリアルID オール)」がオンの時
 - ディスプレイIDが0の場合: シリアルIDが0 かつ 「制御端子設定」メニューの「応答(シリアルID オール)」がオンの時

ID付コマンドフォーマット

Serial ID Format	<STX>AD94:RAD:<NUM1><NUM2><NUM3>:*****ETX> (シリアル制御のみ)
Group ID Format	(例) Serial ID = 1の場合 <STX>AD94:RAD:001:PON:ETX> (例) Group ID = Aの場合 <STX>AD94:RAD:AAA:PON:ETX>



- AD94:RAD: は、シリアルID付きコマンドを送る場合に必要の固定文字列です。
 - シリアルIDには、制御したいディスプレイのディスプレイIDを3文字で指定します。
 - ディスプレイID が 1 の場合、シリアルIDは 001 になります。
 - ディスプレイID が 15 の場合、シリアルIDは 015 になります。
 - グループIDには、制御したいディスプレイのグループを継続して3文字で指定します。
 - シリアルIDグループが A の場合、グループIDは AAA になります。
 - シリアルIDグループが B の場合、グループIDは BBB になります。
- TH-55LFV70をご使用の場合
- 「制御端子設定」メニューの「シリアル制御」は、本機をどのように制御するかによって以下のように設定してください。
 - SERIAL IN : [SERIAL IN] 端子から制御する場合
 - DIGITAL LINK : DIGITAL LINK 機器もしくは本機の DIGITAL LINK 出力経由で制御する場合
 - デジチェーン(DIGITAL LINK/シリアル端子)でシリアル制御を行う場合は「制御端子設定」メニューの「シリアルデジチェーン接続位置」を正しく設定してください。
 - シリアル端子でデジチェーン接続する場合は、ピンNo. ②~⑧が接続されているストレートケーブルを使用してください。
 - グループIDは「接続端子設定」メニューの「シリアルIDグループ」で設定します。A/B/C/D/E/F/Gが設定できます。
 - グループID指定のコマンドに対して、本機が応答を返すかどうかは、「接続端子設定」メニューの「応答(シリアルIDグループ)」で設定します。