

RS232C/LAN command list
MODEL : Full HD LCD Display TH-43/48/55/65 LFE8

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	Power ON	PON	Avail	-	-	-		
	Power OFF	POF	-	-	-	-		
	Power Status	-	-	QPW	QPW:*	Avail	0 / 1	
	Input Change	IMS (:***)	Not avail	QMI	QMI:***	Not avail	Control:(Toggle) HM1 / HM2 / DV1 / PC1 / VD1 / UD1 Inquiry: HM1 / HM2 / DV1 / PC1 / VD1 / UD1	HM1 : HDMI1 HM2 : HDMI2 DV1 : DVI-D PC1 : PC VD1 : VIDEO UD1 : USB Display
	Audio Volume	AVL:***	Not avail	-	-	-	000 - 100	Volume value
	Volume Up	AJU	Not avail	-	-	-	-	
	Volume Down	AUD	Not avail	-	-	-	-	
	Current Audio Volume	-	-	QAV	QAV:***	Not avail	000 - 100	Volume value
	Audio Mute	AMT (*:*)	Not avail	QAM	QAM:*	Not avail	Control:(Toggle) 0 / 1	Toggle (Audio mute Off) / (Audio mute On)
	Video Mute	VMT (*:*)	Not avail	QVM	QVM:*	Not avail	Control:(Toggle) 0 / 1	Toggle (Video mute Off) / (Video mute On)
	Aspect Change	DAM:****	Not avail	QAS	QAS:****	Not avail	FULL / NORM / ZOOM / ZOM2	FULL / NORMAL / ZOOM1 / ZOOM2
	Picture Mode	VPC:MEN***	Not avail	QPC:MEN	QPC:MEN***	Not avail	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	0 - 100 DEF:SET SHIPPING VALUE
Black Level Brightness		VPC:BLK***	Not avail	QPC:BLK	QPC:BLK***	Not avail	000 - 100 DEF	0 - 100 DEF:SET SHIPPING VALUE
Sharpness		VPC:SHP***	Not avail	QPC:SHP	QPC:SHP***	Not avail	000 - 100 DEF	0 - 100 DEF:SET SHIPPING VALUE Available except PC Input.
Color		VPC:COL***	Not avail	QPC:COL	QPC:COL***	Not avail	000 - 100 DEF	0 - 100 DEF:SET SHIPPING VALUE Available except PC Input.
Tint		VPC:TIN***	Not avail	QPC:TIN	QPC:TIN***	Not avail	000 - 100 DEF	0 - 100 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 /	3200K ~ 10700K / NaïTiVe / USER1 / USER2
Red Gain		VWB:RGN****	Not avail	QWB:RGN	QWB:RGN****	Not avail	0000 - 0255	0 - 255 Available when Color Temperature is USER1 or USER2.
Green Gain		VWB:GGN****	Not avail	QWB:GGN	QWB:GGN****	Not avail	0000 - 0255	0 - 255 Available when Color Temperature is USER1 or USER2.
Blue Gain		VWB:BGN****	Not avail	QWB:BGN	QWB:BGN****	Not avail	0000 - 0255	0 - 255 Available when Color Temperature is USER1 or USER2.
Red Bias		VWB:RBS****	Not avail	QWB:RBS	QWB:RBS****	Not avail	-127 ~ 0000 ~ 0128	-127 ~ 128 Available when Color Temperature is USER1 or USER2.
Green Bias		VWB:GBS****	Not avail	QWB:GBS	QWB:GBS****	Not avail	-127 ~ 0000 ~ 0128	-127 ~ 128 Available when Color Temperature is USER1 or USER2.
Blue Bias		VWB:BBS****	Not avail	QWB:BBS	QWB:BBS****	Not avail	-127 ~ 0000 ~ 0128	-127 ~ 128 Available when Color Temperature is USER1 or USER2.
Gamma		VWB:GMM**	Not avail	QWB:GMM	QWB:GMM**	Not avail	20 / 22 / 24 / 26	2.0 / 2.2 / 2.4 / 2.6
Dynamic Contrast		VPC:DCO**	Not avail	QPC:DCO	QPC:DCO**	Not avail	00 ~ 10	0 - 10
Color Enhancement		VPC:PAJ*	Not avail	QPC:PAJ	QPC:PAJ*	Not avail	0 / 1	OFF / ON
Memory function		Memory delete	VPF:DEL**	Not avail	-	-	-	01 ~ 06
	Memory load	VPF:LOD**	Not avail	-	-	-	01 ~ 06	Memory No.1 - Memory No.6
	Memory name change	VPF:NAM** *...*	Not avail	QPF:NAM**	QPF:NAM** *...*	Not avail	01 ~ 06 space ! " # \$ % & ' () * + , - . / 0 1 2 3 4 5 6 7 8 9 ; : < = > ? @ A B C D E F G H I J K L M N O P Q R S T U V W X Y Z [\]^_` a b c d e f g h i j k l m n o p q r s t u v w x y z { } ~	Memory No.1 - Memory No.6 Memory name(Max 20 Parameters)

TYPE	Function	Control Command		Inquiry Command			Range and kind of parameter Call-back	Explanation	
		Transmission Command[:Parameters]	Standby	Transmission Command[:Parameter]	Reply Command[:Parameters]	Standby			
P i c t u r e	Memory function	Memory save	VPF:SAV** ***	Not avail	-	-	-	01 ~ 06 space ! " # \$ % & ' () * + , - . / 0 1 2 3 4 5 6 7 8 9 : ; < = > ? @ A B C D E F G H I J K L M N O P Q R S T U V W X Y Z [\] ^ _ ` a b c d e f g h i j k l m n o p q r s t u v w x y z { } ~	Memory No.1 - Memory No.6 Memory name(Max 20 Parameters)
		Memory state	-	-	QPF:STA	QPF:STA*****	Not avail	- / 0 (Memory No.1 - No.06)	Unused / Use
S o u n d	Sound Adjustment	Output Select	AAC:OUT***	Not avail	QAC:OUT	QAC:OUT***	Not avail	SPO / LNO	SPEAKERS / AUDIO 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 SPEAKERS.
		Bass	AAC:BAS***	Not avail	QAC:BAS	QAC:BAS***	Not avail	-20 ~ 000 ~ +20(020)	-20 ~ 20 Available when Output Select is SPEAKERS.
		Treble	AAC:TRE***	Not avail	QAC:TRE	QAC:TRE***	Not avail	-20 ~ 000 ~ +20(020)	-20 ~ 20 Available when Output Select is SPEAKERS.
		Balance	AAC:BAL***	Not avail	QAC:BAL	QAC:BAL***	Not avail	-20 ~ 000 ~ +20(020)	-20 ~ 20 Available when Output Select is SPEAKERS.
		Surround	AAC:SUR***	Not avail	QAC:SUR	QAC:SUR***	Not avail	MON / OFF	ON / OFF Available when Output Select is SPEAKERS.
P o s i t i o n	Position/Size Adjustment	Horizontal Position	DGE:HPO****	Not avail	QGE:HPO	QGE:HPO****	Not avail	-100 ~ 0000 ~ +100(0100)	H-Pos : -100 - 0000 - +100(0100)
		Horizontal Size	DGE:HSZ****	Not avail	QGE:HSZ	QGE:HSZ****	Not avail	-100 ~ 0000 ~ +100(0100)	H-Size : -100 - 0000 - +100(0100)
		Vertical Position	DGE:VPO****	Not avail	QGE:VPO	QGE:VPO****	Not avail	-100 ~ 0000 ~ +100(0100)	V-Pos : -100 - 0000 - +100(0100)
		Vertical Size	DGE:VSZ****	Not avail	QGE:VSZ	QGE:VSZ****	Not avail	-100 ~ 0000 ~ +100(0100)	V-Size : -100 - 0000 - +100(0100)
		Clock Phase	DGE:CLK***	Not avail	QGE:CLK	QGE:CLK***	Not avail	00 ~ 30	0 ~ 30
		Dot Clock	DGE:DCL***	Not avail	QGE:DCL	QGE:DCL***	Not avail	-5 ~ 00 ~ +5(05)	-5 ~ 5
		1:1 Pixel Mode	DGE:DBD*	Not avail	QGE:DBD	QGE:DBD*	Not avail	0 / 1	OFF / ON
		Overscan	DGE:OVS*	Not avail	QGE:OVS	QGE:OVS*	Not avail	0 / 1	OFF / 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)	H-Pos : -100 - 0000 - +100(0100) H-Size : -100 - 0000 - +100(0100) V-Pos : -100 - 0000 - +100(0100) V-Size : -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 : result OK NG : result NG OF : Un-performing or when not effective NW : adjusting
		S E T U P	Set up	Wobbling	OSP:WOB*	Not avail	QSP:WOB	QSP:WOB*	Not avail
	SSU:NAO*			Not avail	QSU:NAO	QSU:NAO*	Not avail	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
Power Management Mode	SSU:ECS*			Not avail	QSU:ECS	QSU:ECS*	Not avail	0 / 1	CUSTOM / ON
No Signal Power Off	SSU:AOF*			Not avail	QSU:AOF	QSU:AOF*	Not avail	0 / 1	OFF / ON
PC Power Management	SSU:DPM*			Not avail	QSU:DPM	QSU:DPM*	Not avail	0 / 1	OFF / ON
DVID Power Management	SSU:DPD*			Not avail	QSU:DPD	QSU:DPD*	Not avail	0 / 1	OFF / ON
DVI-D1 Power Management	SSU:D1V*			Not avail	QSU:D1V	QSU:D1V*	Not avail	0 / 1	OFF / ON
HDMI1 Power Management	SSU:D1H*			Not avail	QSU:D1H	QSU:D1H*	Not avail	0 / 1	OFF / ON
HDMI2 Power Management	SSU:D2H*			Not avail	QSU:D2H	QSU:D2H*	Not avail	0 / 1	OFF / ON
Power Save	SSU:ECO*			Not avail	QSU:ECO	QSU:ECO*	Not avail	0 / 1	OFF / ON
Display Orientation	SSU:DOR*			Not avail	QSU:DOR	QSU:DOR*	Not avail	0 / 1	Landscape / Portrait
Menu Position	SSU:OPS*			Not avail	QSU:OPS	QSU:OPS*	Not avail	1 / 2 / 3 / 4 / 5 / 6 / 7 / 8 / 9	1:Upper/left 2:Upper/Center 3:Upper/right 4:Center/left 5:Center/Center 6:Center/right 7:Lower/left 8:Lower/Center 9:Lower/right
Menu Display Duration	SSU:MDT***			Not avail	QSU:MDT	QSU:MDT***	Not avail	005 ~ 180	Timeout time of a menu display 5 - 180 seconds (5 second unit)
Menu Transparency	SSU:MTL***	Not avail	QSU:MTL	QSU:MTL***	Not avail	000 ~ 100	Transmissivity of a menu 0 ~ 100% (10% unit)		

TYPE	Function	Control Command		Inquiry Command			Range and kind of parameter Call-back	Explanation
		Transmission Command[:Parameters]	Standby	Transmission Command[:Parameter s]	Reply Command[:Parameters]	Standby		
Input Label	Set Label for Current Input	SSU:ILA***	Not avail	QSU:ILA	QSU:ILA***	Not avail	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+++	Not avail	+++ HM1/HM2/DV1/PC1/VD1 +++ INP / DV1 / DV2 / DV3 / BD1 / BD2 / BD3 / CTV / VCR / STB / SKP	INPUT HDMI1 / HDMI2 / DVI-D / PC / 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***	Not avail	INP / MEM / ACT	INPUT / MEMORY / ACTION & MENU(SHORTCUT)
	Function Button Settings	OSP:KFN* ***	Not avail	QSP:KFN*	QSP:KFN* ***	Not avail	1 - 6 (ACTION & MENU) SIG / SSV / SUT / LNS / ECO / OSH (INPUT) HM1/HM2/DV1/PC1/VD1/UD1	setup to FUNCTION KEY 1 - 6 (ACTION & MENU) SIG : Signal menu SSV : Screensaver menu SUT : Timer setup menu LNS : Network settings menu ECO : ECO Mode menu OSH : AV Mute (INPUT) HM1 : HDMI1 HM2 : HDMI2 DV1 : DVI-D PC1 : PC VD1 : VIDEO UD1 : USB
	Function guide Settings	OSP:KFG*	Not avail	QSP:KFG	QSP:KFG*	Not avail	0 / 1	OFF / ON
Multi Display Setup	Multi Display ON/OFF	MDC:* -	Not avail	-	-	-	0 / 1	OFF / ON
	Multi Display Setup Detail	MDC:EXP* ** ** ** ** **	Not avail	QDC:EXP	QDC:EXP* ** ** ** ** **	Not avail	0 / 1, 01 ~ 05, 01 ~ 05, 000 ~ 100, 000 ~ 100, 01 ~ 025	OFF / ON, (Horizontal Scale) 1~5, (Vertical Scale) 1~5, (Bezel H Adjustment) 0~100 (Bezel V Adjustment) 0~100 (Location)(A1~E5)
TimerSetup		TIM:PRG** * *** *** **** ***	Not avail	QIM:PRG**	QIM:PRG** * *** *** **** ***	Not avail	01 ~ 20, 0 / 1, SUN / MON / TUE / WED / THU / FRI / SAT / EVD, PON / POF, 0000 ~ 2359, HM1/HM2/DV1/PC1/VD1/UD1	Program number : 1~20, Function : OFF / 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 / POF, Time : hour, minute, Start-up input : HDMI1/HDMI2/DVI-D/PC/VIDEO/USB Display
Day Time	Present Day	-	-	QIM:DAY	QIM:DAY***	Not avail	SUN / MON / TUE / WED / THU / FRI / SAT	(a day of the week): Sunday / Monday / Tuesday / Wednesday / Thursday / Friday / Saturday / Everyday
	Present Time	-	-	QIM:NOW	QIM:NOW****	Not avail	0000 ~ 2359	Present time (hour:minute)
	DAY TIME	TIM:DAT**** ** ** ** **	Not avail	QIM:DAT	QIM:DAT**** ** ** ** **	Not avail	YYYY : 2015 ~ 2099 MM : 01 ~ 12 DD : 01 ~ 31 hh : 00 ~ 23 mm : 00 ~ 59	(Year) (Month) (Day) (Hour) (Minute) format is "YYYYMMDDhhmm "
USB media player Seiup	USB media player	SUS:UMP*	Not avail	QUS:UMP	QUS:UMP*	Not avail	0 / 1	Disable / Enable
	Resume play	SUS:RSP*	Not avail	QUS:RSP	QUS:RSP*	Not avail	0 / 1	OFF / ON
	Slide show duration	SUS:SSD***	Not avail	QUS:SSD	QUS:SSD***	Not avail	005 ~ 600	5 - 600 seconds (5 second unit)

TYPE	Function	Control Command		Inquiry Command		Range and kind of parameter Call-back	Explanation		
		Transmission Command[:Parameters]	Standby	Transmission Command[:Parameter s]	Reply Command[:Parameters]			Standby	
Options Menu	On screen display	OSP:OSD*	Not avail	QSP:OSD	QSP:OSD*	Not avail	0 / 1	OFF / ON	
	Initial input	OSP:IIN***	Not avail	QSP:IIN	QSP:IIN***	Not avail	OFF / HM1 / HM2 / DV1 / PC1 / VD1 / UD1	OFF / HDMI1 / HDMI2 / DVI-D / PC / VIDEO / USB Display	
	Initial VOL level	OSP:IVL****	Not avail	QSP:IVL	QSP:IVL****	Not avail	0 / 1, 000 ~ 100	function : OFF / ON, valume : 0-100	
	Maximum VOL level	OSP:MVL****	Not avail	QSP:MVL	QSP:MVL****	Not avail	0 / 1, 000 ~ 100	function : OFF / ON, valume : 0-100	
	Input lock	OSP:INL***	Not avail	QSP:INL	QSP:INL***	Not avail	OFF / HM1 / HM2 / DV1 / PC1 / VD1 / UD1	OFF / HDMI1 / HDMI2 / DVI-D / PC / VIDEO / USB Display	
	Button lock	OSP:BTL***	Not avail	QSP:BTL	QSP:BTL***	Not avail	OFF / MEN / ALL	OFF / MENU&ENTER / ON	
	Controller User level	OSP:RCM*	Not avail	QSP:RCM	QSP:RCM*	Not avail	0 / 1 / 2 / 3	OFF / User1 / User2 / User3	
	Offtimer function	OSP:OFT*	Not avail	QSP:OFT	QSP:OFT*	Not avail	0 / 1	OFF / ON	
	Initial Power Mode	OSP:IPM***	Not avail	QSP:IPM	QSP:IPM***	Not avail	NOR / PON / STB	NOR : NORMAL(return to a front state) PON : ON STB : STANDBY	
	Power ON Screen Delay	OSP:POD**	Not avail	QSP:POD	QSP:POD**	Not avail	AT / 00 ~ 30	AT : Auto 0-30 : 0-30 seconds	
	Clock Display	OSP:CLK*	Not avail	QSP:CLK	QSP:CLK*	Not avail	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 avail	QSP:PAS	QSP:PAS*	Not avail	0 / 1	OFF / ON	
	Power on messageNo activity power off	OSP:NAP*	Not avail	QSP:NAP	QSP:NAP*	Not avail	0 / 1	OFF / ON	
	Power on messagePower management	OSP:PMM*	Not avail	QSP:PMM	QSP:PMM*	Not avail	0 / 1	OFF / ON	
	Input search	ISH:FNC***	Not avail	QSH:FNC	QSH:FNC***	Not avail	OFF / ALL / PRI	OFF / ALL inputs / Custom	
	1st search input	ISH:PRI***	Not avail	QSH:PRI	QSH:PRI***	Not avail	NON / HM1 / HM2 / DV1 / PC1 / VD1 / UD1	(none) / HDMI1 / HDMI2 / DVI-D / PC / VIDEO / USB	
	2nd search input	ISH:SCI***	Not avail	QSH:SCI	QSH:SCI***	Not avail	NON / HM1 / HM2 / DV1 / PC1 / VD1 / UD1	(none) / HDMI1 / HDMI2 / DVI-D / PC / VIDEO / USB	
	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)
		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.		
Others	Recall	DDS	Not avail	-	-	-	-	Recall	
	Audio Mute	AOC:*	Not avail	-	-	-	0 / 1	MUTE OFF / MUTE ON	
	OSD Clear	VDO	Not avail	-	-	-	-	OSD Clear	
	digital zoom	DZM:*	Not avail	QDZ	QDZ:*	Not avail	0 / 1, 1 / 2 / 3 / 4, 1 / 2 / 3 / 4 / 5, 1 / 2 / 3 / 4 / 5	OFF / ON, Enlargement factor, display position(Horizontal), display position(Vertical)	
	Off Timer	ZOT:**	Not avail	-	-	-	00 ~ 90	0-90(minutes)	
	Inquiry about Signal Frequency of input signal	-	-	QFR	QFR:H***.*** V***.***	Not avail	000.00 ~ 999.99, 000.00 ~ 999.99	Horizontal frequency Vertical frequency (LFE8)Displayed until the decimal point second place.	
	Inquiry about Signal Format of input signal	-	-	QSF	QSF:*****	Not avail	(MAX 20 Charactors)	Signal format information	
	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:*	Not avail	-	-	-	0 / 1 0 / 1 (1~2 / Number of parameters is 1 to 2.)	OFF / ON --- QSS (QSS command) OFF / ON --- QSS:STSERR (QSS:STSERR)	
	Inquiry about Model Name	-	-	QMN	QMN: ** * **	Avail	43 / 48 / 55 / 65 F 13	43inch / 48inch / 55inch / 65inch FHD model LFE8	
	Software Version Main MCU	-	-	QRV	QRV: *.**** LFE8	Avail	*Example 1.0000 LFE8	Verson model	

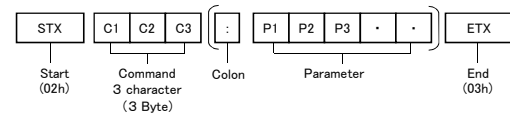
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		Transmission Command[:Parameters]	Standby	Transmission Command[:Parameter s]	Reply Command[:Parameters]	Standby		
O t h e r s	Software Version Sub MCU	-	-	QRV:STB	QRV:STB**.**	Avail	*Example 01.00	Version
	Software Version EEPROM	-	-	QRV:EEP	QRV:EEP**.**	Avail	*Example 01.00	Version
	Serial number	-	-	QSN	QSN:*****	Avail	(ASCII 9-15 / 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	NON : no SOS history ERR : SOS generating EXT : SOS history exists

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	DE	0	@	P	p	(Example)		
01	SH	D1	:	1	A	Q	a	Power on
02	SX	D2	:	2	B	R	b	Character
03	EX	D3	:	3	C	S	c	Binary
04	ET	D4	:	4	D	T	d	Picture+85
05	EO	NK	:	5	E	U	e	Character
06	AK	SN	:	6	F	V	f	Binary
07	BL	EB	:	7	G	W	w	Character
08	BS	CN	:	8	H	X	x	Binary
09	HT	EM	:	9	I	Y	y	Character
0A	LF	SB	:	:	J	Z	z	Binary
0B	HM	EC	:	:	K	[[Character
0C	CL	==	:	:	L	Y	Y	Binary
0D	CR	==	:	:	M]]	Binary
0E	SO	T	:	:	>	N	n	Binary
0F	SI	/	:	:	?	O	o	Binary

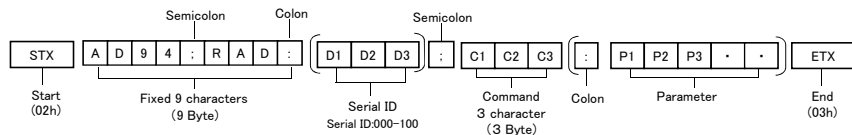
Binary is sent in this unit.
When sending commands, be sure to wait for the response for the first sending the next command.
Parameters are different for each command.
With the power off (stand-by mode), this display responds to "PON"/"QPW" command only.

<When sending command with Display ID>

- When sending command with Display ID, set [Options] - [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.

How to send to add "Serial ID"

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

通信規約

Jun, 2016
Panasonic Corporation

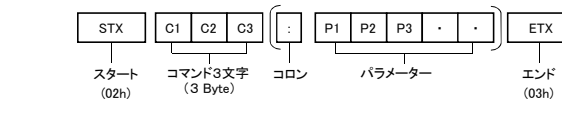
通信条件	
信号レベル	RS-232C準拠
同期方式	歩同期 (非同期)
ボーレート	9600 bps
パリティなし	なし
キャラクター長	8 ビット
ストップビット	1 ビット
フロー制御	なし

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 (:) を付けなくても構いません。



これらの信号名はコンピュータ仕様のもです。



00	10	20	30	40	50	60	70	
00	DE	0	@	P	p	(コマンド例)		
01	SH	D1	:	1	A	Q	a	電源オンコマンド
02	SX	D2	:	2	B	R	b	キャラクタ
03	EX	D3	:	3	C	S	c	バイナリ
04	ET	D4	:	4	D	T	d	ピクチャー+85設定
05	EO	NK	:	5	E	U	e	キャラクタ
06	AK	SN	:	6	F	V	f	Binary
07	BL	EB	:	7	G	W	w	Character
08	BS	CN	:	8	H	X	x	Binary
09	HT	EM	:	9	I	Y	y	Character
0A	LF	SB	:	:	J	Z	z	Binary
0B	HM	EC	:	:	K	[[Character
0C	CL	==	:	:	L	Y	Y	Binary
0D	CR	==	:	:	M]]	Binary
0E	SO	T	:	:	>	N	n	Binary
0F	SI	/	:	:	?	O	o	Binary

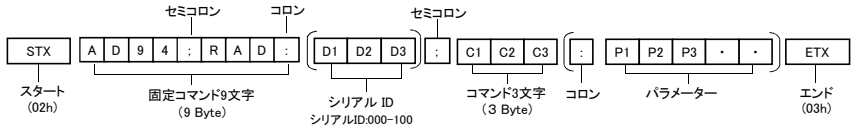
その他
間違ったコマンドを送信した場合、送信側が本機の応答を受け取ってから、次のコマンドを送信することを想定しています。
パラメーターを必要としないコマンドを送信する場合は、コロン (:) を付けなくても構いません。
電源「スタンバイ」状態 (リモコンで電源「切」) 中は "PON"/"QPW" コマンド以外の動作は保証されません。

ID付コマンドで制御する場合>

- シリアルID付で制御する場合は、「Options」メニューの「Serial ID function (シリアルID制御)」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。
- 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

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)
(例) Serial ID = 1の場合	<STX>AD94:RAD:001:PON<ETX>



- AD94:RAD: は、シリアルID付きコマンドを送る場合に必要固定文字列です。
- 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。