

RS232C/LAN command list
MODEL: FullHD LCD Display TH-32EF1

2022/4/1
 Panasonic Connect Co.,Ltd.

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
	Audio Volume	AVL:***	Not avail	-	-	-	000 - 100
	Volume Up	AUU	Not avail	-	-	-	-
	Volume Down	AUD	Not avail	-	-	-	-
	Current Audio Volume	-	-	QAV	QAV:***	Not avail	000 - 100
	Audio Mute	AMT (:*)	Not avail	QAM	QAM: *	Not avail	Control:(Toggle) 0 / 1
	Video Mute	VMT (:*)	Not avail	QVM	QVM: *	Not avail	Control:(Toggle) 0 / 1
Aspect Change	DAM:****	Not avail	QAS	QAS:****	Not avail	FULL / NORM / ZOOM / ZOM2	
Picture Mode	VPC:MEN***	Not avail	QPC:MEN	QPC:MEN***	Not avail	STD / DYN / CNM	
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	
Black Level Brightness	VPC:BLK***	Not avail	QPC:BLK	QPC:BLK***	Not avail	000 ~ 100 DEF	
Sharpness	VPC:SHP***	Not avail	QPC:SHP	QPC:SHP***	Not avail	000 ~ 100 DEF	
Color	VPC:COL***	Not avail	QPC:COL	QPC:COL***	Not avail	000 ~ 100 DEF	
Tint	VPC:TIN***	Not avail	QPC:TIN	QPC:TIN***	Not avail	000 ~ 100 DEF	
Color Temperature	VPC:TMP***	Not avail	QPC:TMP	QPC:TMP***	Not avail	032 / 040 / 050 / 065 / 075 / 093 / 107 / NTV / U01 / U02	
Red Gain	VWB:RGN****	Not avail	QWB:RGN	QWB:RGN****	Not avail	0000 ~ 0255	
Green Gain	VWB:GGN****	Not avail	QWB:GGN	QWB:GGN****	Not avail	0000 ~ 0255	
Blue Gain	VWB:BGH****	Not avail	QWB:BGH	QWB:BGH****	Not avail	0000 ~ 0255	
Red Bias	VWB:RBS****	Not avail	QWB:RBS	QWB:RBS****	Not avail	-127 ~ 0000 ~ 0128	
Green Bias	VWB:GBS****	Not avail	QWB:GBS	QWB:GBS****	Not avail	-127 ~ 0000 ~ 0128	
Blue Bias	VWB:BBS****	Not avail	QWB:BBS	QWB:BBS****	Not avail	-127 ~ 0000 ~ 0128	
Gamma	VWB:GMM**	Not avail	QWB:GMM	QWB:GMM**	Not avail	20 / 22 / 24 / 26	
Dynamic Contrast	VPC:DCO**	Not avail	QPC:DCO	QPC:DCO**	Not avail	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 ~ 06	
Memory function	Memory load	VPF:LOD**	Not avail	-	-	01 ~ 06	

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		Transmission Command[:Parameters]	Standby	Transmission Command[:Parameters]	Reply Command[:Parameters]	Standby			
P i c t u r e	Memory function	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)
		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	QSP:WOB*	Not avail	QSU:WOB	QSU:WOB*	Not avail	0 / 1	OFF / ON
		OSD Language	SSU:NAO* SSU:LNG***	Not avail Not avail	QSU:NAO QSU:LNG	QSU:NAO* QSU:LNG***	Not avail 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

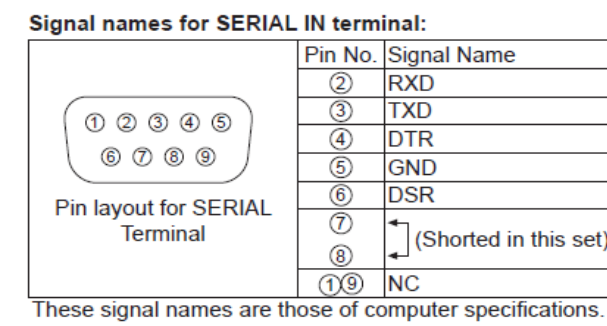
TYPE	Function	Control Command		Inquiry Command			Range and kind of parameter Call-back	Explanation	
		Transmission Command[:Parameters]	Standby	Transmission Command[:Parameters]	Reply Command[:Parameters]	Standby			
S E T U P	Screensaver	Screensaver Mode	SSC:MOD*	Not avail	QSC:MOD	QSC:MOD*	Not avail	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****	Not avail	0000 ~ 2359, 0000 ~ 2359	Periodic time Operating time
		Time Designation Screensaver	SSC:TIM****	Not avail	QSC:TIM	QSC:TIM****	Not avail	0000 ~ 2359, 0000 ~ 2359	Start time Finish time
		Standby after Screensaver	SSC:AOF****	Not avail	QSC:AOF	QSC:AOF****	Not avail	0000 ~ 2359	Time of operation(hour:minute)
	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 : Power management settings 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, 001 ~ 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** * *** *** **** ****	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	

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		Transmission Command[:Parameters]	Standby	Transmission Command[:Parameters]	Reply Command[:Parameters]	Standby				
S E T U P	Day Time	Present Time DAY TIME	-	QIM:NOW QIM:DAT	QIM:NOW0**** QIM:DAT****	Not avail	0000 ~ 2359 YYYY : 2016 ~ 2099 MM : 01 ~ 12 DD : 01 ~ 31 hh : 00 ~ 23 mm : 00 ~ 59	Present time (hour:minute) (Year) (Month) (Day) (Hour) (Minute) format is "YYYYMMDDhhmm "		
	USB media player Setup	USB media player Resume play Slide show duration On screen display Initial input Initial VOL level Maximum VOL level Input lock Button lock Controller User level PC auto setting Off-timer function Initial Startup	SUS:UMP* SUS:RSP* SUS:SSD*** OSP:OSD* OSP:IIN**** OSP:IVL**** OSP:MVL**** OSP:INL*** OSP:BTL*** OSP:RCM* OSP:PAS* OSP:OFT* OSP:ISU***	Not avail Not avail Not avail Not avail Not avail Not avail Not avail Not avail Not avail Not avail Not avail Not avail Not avail	QUS:UMP QUS:RSP QUS:SSD QSP:OSD QSP:IIN QSP:IVL QSP:MVL QSP:INL QSP:BTL QSP:RCM QSP:PAS QSP:OFT QSP:ISU	QUS:UMP* QUS:RSP* QUS:SSD*** QSP:OSD* QSP:IIN*** QSP:IVL**** QSP:MVL**** QSP:INL*** QSP:BTL*** QSP:RCM* QSP:PAS* QSP:OFT* QSP:ISU***	Not avail Not avail Not avail Not avail Not avail Not avail Not avail Not avail Not avail Not avail Not avail Not avail Not avail Not avail	0 / 1 0 / 1 010 ~ 600 0 / 1 OFF / HM1 / HM2 / DV1 / PC1 / VD1 / UD1 0 / 1, 000 ~ 100 0 / 1, 000 ~ 100 OFF / HM1 / HM2 / DV1 / PC1 / VD1 / UD1 OFF / MENU&ENTER / ON 0 / 1 / 2 / 3 0 / 1 0 / 1 LST PON STB 000 ~ 100 0 / 1 0 / 1 000~100 LP1 / LP2 AT / 00 ~ 30 0 / 1 0 / 1 0 / 1 OFF / ALL / PRI NON / HM1 / HM2 / DV1 / PC1 / VD1 / UD1 NON / HM1 / HM2 / DV1 / PC1 / VD1 / UD1	Disable / Enable OFF / ON 10 - 600 seconds (5 second unit) OFF / ON OFF / HDMI1 / HDMI2 / DVI-D / PC / VIDEO / USB Display function : OFF / ON, volume : 0~100 function : OFF / ON, volume : 0~100 OFF / HDMI1 / HDMI2 / DVI-D / PC / VIDEO / USB Display OFF / MENU&ENTER / ON OFF / User1 / User2 / User3 OFF / ON OFF / ON LST : Last memory(return to a front state) PON : ON STB : STANDBY Display ID OFF / ON OFF / ON Display ID Protocol1 / Protocol2 AT : Auto 0~30 : 0~30 seconds OFF / ON OFF / ON OFF / ON OFF / ALL inputs / Custom (none) / HDMI1 / HDMI2 / DVI-D / PC / VIDEO / USB (none) / HDMI1 / HDMI2 / DVI-D / PC / VIDEO / USB	
O p t i o n s	Options Menu	Display ID	-	QID:DID	QID:DID***	Not avail	000 ~ 100	Display ID		
		Serial ID function	SID:SID*	Not avail	QID:SID	QID:SID*	Not avail	0 / 1	OFF / ON	
		Serial ID Setup (Serial ID Function and Display ID)	SIF:***	Not avail	QIF:***	QIF:***	Not avail	0 / 1 000~100	OFF / ON Display ID	
		LAN Control Protocol	OSP:LPN***	Not avail	QSP:LPN	QSP:LPN***	Not avail	LP1 / LP2	Protocol1 / Protocol2	
		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	
		Power on message(No activity power off)	OSP:NAP*	Not avail	QSP:NAP	QSP:NAP*	Not avail	0 / 1	OFF / ON	
		Power on message(Power management)	OSP:PMM*	Not avail	QSP:PMM	QSP:PMM*	Not avail	0 / 1	OFF / ON	
		Input search	ISH:FNC*** 1st search input 2nd search input	Not avail Not avail Not avail	QSH:FNC QSH:PRI QSH:SCI	QSH:FNC*** QSH:PRI*** QSH:SCI***	Not avail Not avail Not avail	OFF / ALL / PRI NON / HM1 / HM2 / DV1 / PC1 / VD1 / UD1 NON / HM1 / HM2 / DV1 / PC1 / VD1 / UD1	OFF / ALL inputs / Custom (none) / HDMI1 / HDMI2 / DVI-D / PC / VIDEO / USB (none) / HDMI1 / HDMI2 / DVI-D / PC / VIDEO / USB	
		M e n u	Information Timing	No Signal Warning	SIT:NSW*	Not avail	QIT:NSW	QIT:NSW*	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.			
O t h e r s	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)	
		USB media player Skip to the next playback file	UMP:NXT	Not avail	-	-	Not avail	-	Play next content Available using USB media player ※Supported by the main software Ver3.10 or later.	

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	USB media player Skip to the previous playback file	UMP:PRE	Not avail	-	-	Not avail	Play previous content Available using USB media player ※Supported by the main software Ver3.10 or later.
	USB media player Playback again from top of the file	UMP:RPY	Not avail	-	-	Not avail	Play top of the content Available using USB media player ※Supported by the main software Ver3.10 or later.
	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 Displayed until the decimal point second place.
	Inquiry about Signal Format of input signal	-	-	QSF	QSF:*****	Not avail	(MAX 20 Characters) 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	32 F 16 32inch FHD model EF1
	Inquiry about Model	-	-	QID	QID: ** *** *..	Not avail	32 EF1 J / E / W 32inch model market
	Software Version Main MCU	-	-	QRV	QRV: *. **** FF1	Avail	*Example 1.0000 FF1 Version model
	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. 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	

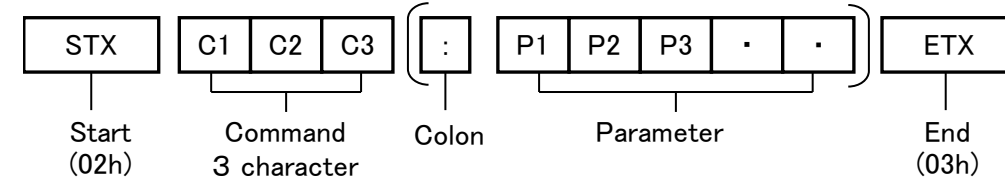
Protocol

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		
01	SH	D1	!	1	A	Q	a
02	SX	D2	"	2	B	R	b
03	EX	D3	#	3	C	S	c
04	ET	D4	\$	4	D	T	d
05	EQ	NK	%	5	E	U	e
06	AK	SN	&	6	F	V	f
07	BL	EB	'	7	G	W	w
08	BS	ON	(	8	H	X	h
09	HT	EM	)	9	I	Y	y
0A	LF	SB	*	:	J	Z	j
0B	HM	EC	+	:	K	[	k
0C	CL	→	<	L	¥	|	l
0D	CR	←	=	M	] m		
0E	SO	↑	.	>	N	^	n
0F	SI	↓	/	? O	_	o	

(Example)

Power on
Character: STX P O N ETX
Binary: 02 50 4F 4E 03

Picture+85
Character: STX V P C : P I C 0 8 5 ETX
Binary: 02 56 50 43 3A 50 49 43 30 38 35 03

Notes:

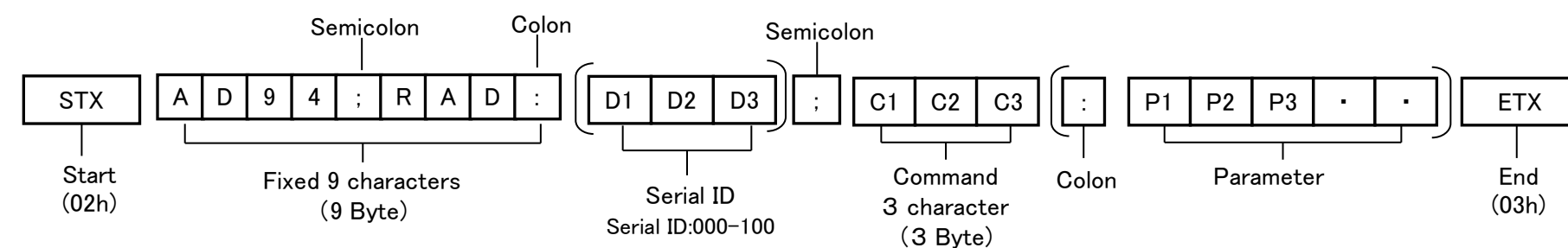
- If an incorrect command is sent, this unit will reply an "ER401" command to the computer.
- If customer send multiple commands, be sure to wait for the response for the first command to come before sending the next command.
- The length of the Parameters are different for each command.
- With the power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

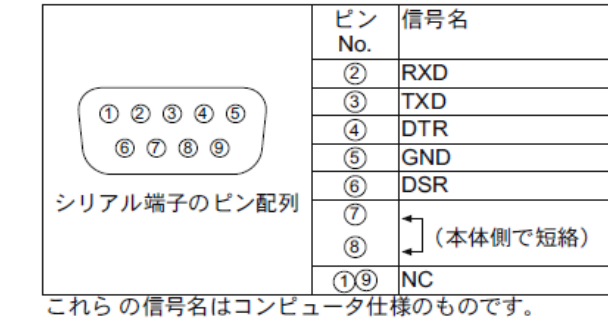


- AD94:RAD: is fixed characters when sending command with ID.
- Serial ID is 3 characters and specified with Display ID which will be controlled.
 - If Display ID is 1, Serial ID is 001.
 - If Display ID is 15, Serial ID is 015.

通信規約

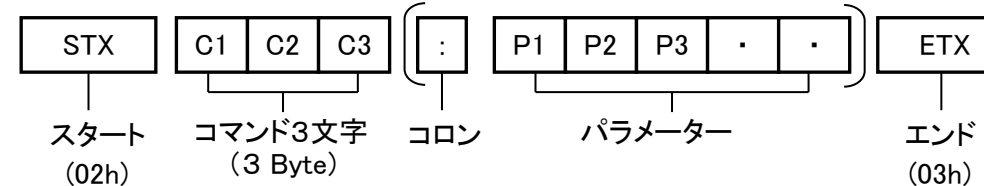
通信条件	
信号レベル	RS-232C準拠
同期方式	調歩同期 (非同期)
ボーレート	9600 bps
パリティなし	なし
キャラクター長	8 ビット
ストップビット	1 ビット
フロー制御	なし

シリアル入力端子の信号名:



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 (:) を付けしないでください。



00	10	20	30	40	50	60	70
00	DE	0	@	P	p		
01	SH	D1	!	1	A	Q	a
02	SX	D2	"	2	B	R	b
03	EX	D3	#	3	C	S	c
04	ET	D4	\$	4	D	T	d
05	EQ	NK	%	5	E	U	e
06	AK	SN	&	6	F	V	f
07	BL	EB	'	7	G	W	w
08	BS	ON	(	8	H	X	h
09	HT	EM	)	9	I	Y	y
0A	LF	SB	*	:	J	Z	j
0B	HM	EC	+	:	K	[	k
0C	CL	→	<	L	¥	|	l
0D	CR	←	=	M	] m		
0E	SO	↑	.	>	N	^	n
0F	SI	↓	/	? O	_	o	

(コマンド例)

電源オンコマンド
キャラクター: STX P O N ETX
バイナリ: 02 50 4F 4E 03

ピクチャー+85設定
キャラクター: STX V P C : P I C 0 8 5 ETX
バイナリ: 02 56 50 43 3A 50 49 43 30 38 35 03

その他

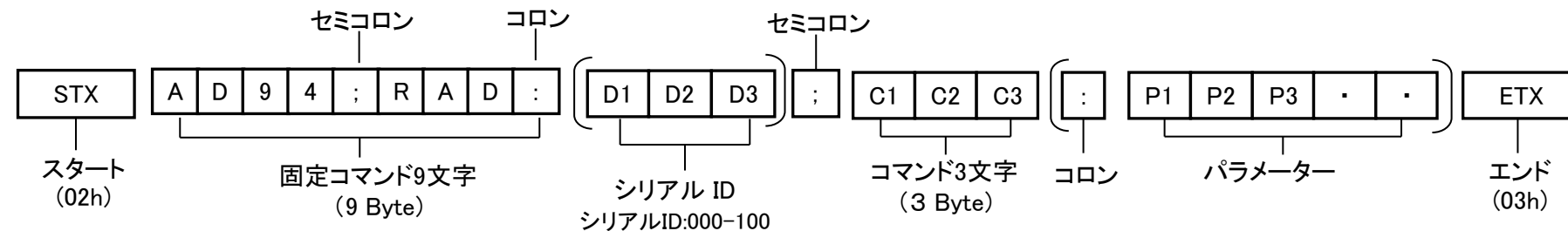
- 間違ったコマンドを受信すると、「ER401」という応答コマンドを返信します。
- 複数コマンドで制御する場合は、送信側が本機の応答を受け取ってから、次のコマンドを送信することを想定しています。
- パラメータの長さはコマンドごとに異なります。
- 電源「スタンバイ」状態 (リモコンで電源「切」) 中は "PON"/"QPW" コマンド以外の動作は保証されません。

<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ー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。