

# RS232C Serial Command List

## Model: Interactive Plasma Display TH-103PB1/TH-85PB1

2013/8/28

Panasonic Corporation

Category	Function	Control commands	Query commands		Parameters	Parameters Explanation	
			Transmission	Reply			
Basic Controls	Power ON	PON	QPW	QPW:*	0/1	Off/On	
	Power OFF	POF					
	Input select	IMS:***	QMI	QMI:***	SL1(S1A/S1B)/VD1/YP1/HM1/DV1/PC1/NW1	SLOT(A/B)/VIDEO/COMPONENT/HDMI/DVI/HX/NETWORK	
	Input select(toggle)	IMS					
	Volume	AVL:***					
	Volume up	AUU	QAV	QAV:***	00 ~ 63	0 ~ 63	
	Volume down	AUD					
	Audio mute	AMT:*	QAM	QAM:*	0/1	Off/On	
	Audio mute(toggle)	AMT					
	Video mute	VMT:*	QVM	QVM:*	0/1	Off/On	
	Video mute(toggle)	VMT					
	Aspect select	DAM:****	QAS	QAS:****	ZOOM/FULL/JUST/NORM/ZOM2/ZOM3/SJST/SNOW/SFUL/14:9	Zoom/16:9/Just/4:3/Zoom2/Zoom3/Side cut Just/4:3 Side cut/4:3 Full/14:9	
Aspect select(toggle)	DAM						
Picture	Picture Mode	VPC:MEN**	QPC:MEN	QPC:MEN***	STD/DYN/CNM/MON	Normal/Dynamic/Cinema/Monitor	
	Contrast	VPC:PIC***	QPC:PIC	QPC:PIC***	-30 ~ 000 ~ +30(030)	-30 ~ 30	
	Brightness	VPC:BLK***	QPC:BLK	QPC:BLK***	-30 ~ 000 ~ +30(030)	-30 ~ 30	
	Colour	VPC:COL***	QPC:COL	QPC:COL***	-30 ~ 000 ~ +30(030)	-30 ~ 30	
	Hue	VPC:TIN***	QPC:TIN	QPC:TIN***	-30 ~ 000 ~ +30(030)	-30 ~ 30	
	Sharpness	VPC:SHP***	QPC:SHP	QPC:SHP***	-15 ~ 000 ~ +15(015)	-15 ~ 15	
	White balance	VPC:TMP***	QPC:TMP	QPC:TMP***	WRM/MID/COL	Warm/Normal/Cool	
	Black extension	VWB:BEX***	QWB:BEX	QWB:BEX***	000 ~ 008	0 ~ 8	
	Input level	VWB:ILV***	QWB:ILV	QWB:ILV***	-32 ~ 000 ~ +32(032)	-32 ~ 32	
	W/B High R	VWB:RDR***	QWB:RDR	QWB:RDR***	-30 ~ 000 ~ +30(030)	-30 ~ 30	
	W/B High G	VWB:GDR***	QWB:GDR	QWB:GDR***	-30 ~ 000 ~ +30(030)	-30 ~ 30	
	W/B High B	VWB:BDR***	QWB:BDR	QWB:BDR***	-30 ~ 000 ~ +30(030)	-30 ~ 30	
	W/B Low R	VWB:RCT***	QWB:RCT	QWB:RCT***	-30 ~ 000 ~ +30(030)	-30 ~ 30	
	W/B Low G	VWB:GCT***	QWB:GCT	QWB:GCT***	-30 ~ 000 ~ +30(030)	-30 ~ 30	
	W/B Low B	VWB:BCT***	QWB:BCT	QWB:BCT***	-30 ~ 000 ~ +30(030)	-30 ~ 30	
	Gamma	VWB:GMM**	QWB:GMM	QWB:GMM**	20/22/24/26	2.0/2.2/2.4/2.6	
	Memory delete	VPF:DEL**	-	-	01 ~ 08	Memory No.1 - Memory No.08	
	Memory load	VPF:LOD**	-	-	01 ~ 08	Memory No.1 - Memory No.08	
	Memory name change	VPF:NAM ** *...*	QPF:NAM **	QPF:NAM ** *...*	01 ~ 08 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.01 - Memory No.08 Memory name(Max 40 Parameters)	
	Memory save	VPF:SAV ** *...*	-	-	01 ~ 08 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.01 - Memory No.08 Memory name(Max 40 Parameters)	
	Memory state	-	QPF:STA	QPF:STA*****	-/0 (Memory No.1- No.08)	Unused/Use	
	Sound	OutPut Select	AAC:OUT***	QAC:OUT	QAC:OUT***	SPO/LNO	Speakers / Audio Out
		Sound Mode	AAC:MEN***	QAC:MEN	QAC:MEN***	STD(AUT)/DYN/CLR	Normal/Dynamic/Clear
		Bass	AAC:BAS***	QAC:BAS	QAC:BAS***	-15 ~ 000 ~ +15(015)	-15 ~ 15
Mid		AAC:MID***	QAC:MID	QAC:MID***	-15 ~ 000 ~ +15(015)	-15 ~ 15	
Treble		AAC:TRE***	QAC:TRE	QAC:TRE***	-15 ~ 000 ~ +15(015)	-15 ~ 15	
Balance		AAC:BAL***	QAC:BAL	QAC:BAL***	-30 ~ 000 ~ +30(030)	-30 ~ 30	
Surround		AAC:SUR***	QAC:SUR	QAC:SUR***	MON/OFF	On/Off	
SDI Sound Output		Left Channel	ASD:LCH**	QSD:LCH	QSD:LCH**	01~16	Channel 1 - Channel 16
		Right Channel	ASD:RCH**	QSD:RCH	QSD:RCH**	01~16	Channel 1 - Channel 16
		Sound Out	ASD:OUT*	QSD:OUT	QSD:OUT*	0/1	Off/On
		Level Meter	ASD:LMT*	QSD:LMT	QSD:LMT*	0/1/2	Off/1-8ch/9-16ch
Pos./Size		H-Pos	DGE:HPO****	QGE:HPO	QGE:HPO****	-124 ~ 0000 ~ +124(0124)	-124 ~ 124
	H-Size	DGE:HSZ****	QGE:HSZ	QGE:HSZ****	-124 ~ 0000 ~ +124(0124)	-124 ~ 124	
	V-Pos	DGE:VPO****	QGE:VPO	QGE:VPO****	-124 ~ 0000 ~ +124(0124)	-124 ~ 124	
	V-Size	DGE:VSZ****	QGE:VSZ	QGE:VSZ****	-062 ~ 0000 ~ +062(0062)	-62 ~ 62	
	Dot Clock	DGE:DCL****	QGE:DCL	QGE:DCL****	-032 ~ 0000 ~ +032(0032)	-32 ~ 32	
	Clock Phase	DGE:CLK****	QGE:CLK	QGE:CLK****	-016 ~ 0000 ~ +016(0016)	-16 ~ 16	
	Clamp Position	DGE:CLP	QGE:CLP	QGE:CLP****	0000 ~ +127(0127)	0 ~ 127	
	1:1 Pixel Mode	DGE:DBD*	QGE:DBD	QGE:DBD*	0/1	Off/On	
	Over Scan	DGE:OVS*	QGE:OVS	QGE:OVS*	0/1	Off/On	
	Adjusting POS./SIZE(H-Pos/H-Size/V-Pos/V-Size)	DGE:PSZ*****	QGE:PSZ	QGE:PSZ*****	-124 ~ 0000 ~ +124(0124),-124 ~ 0000 ~ +124(0124),-124 ~ 0000 ~ +124(0124),-062 ~ 0000 ~ +062(0062)	H-Pos(-124 ~ 0000 ~ +124(0124)),H-Size(-124 ~ 0000 ~ +124(0124)),V-Pos(-124 ~ 0000 ~ +124(0124)),V-Size(-062 ~ 0000 ~ +062(0062))	
	Auto Setup	DGE:ASU*	-	-	1/0	executes/interrupts	

Category	Function	Control commands	Query commands		Parameters	Parameters Explanation
			Transmission	Reply		
	Component/RGB-in select	SSU:CMPI***	QSU:CMPI	QSU:CMPI***	YBR/RGB	Component/RGB
	DVI YUV/RGB select	SSU:DYR***	QSU:DYR	QSU:DYR***	YUV/RGB	YUV/RGB
	Input label (Current input)	SSU:ILA***	QSU:ILA	QSU:ILA***	NRM / DV1 / DV2 / DV3 / DV4 / BD1 / BD2 / BD3 / BD4 / CTV / VCR / STB / SKP	Default input name / DVD1 / DVD2 / DVD3 / DVD4 / Blu-ray1 / Blu-ray2 / Blu-ray3 / Blu-ray4 / CTV / VCR / STB / SKIP
	Input label (Specified input)	SSU:ILA***+++	QSU:ILA	QSU:ILA***+++	*** : Specified input SL1(S1A/S1B)/VD1/YP1/HM1/DV1/PC1/NW1 +++ : Input label NRM / DV1 / DV2 / DV3 / DV4 / BD1 / BD2 / BD3 / BD4 / CTV / VCR / STB / SKP	SLOT(A/B)/VIDEO/COMPONENT/HDMI/DVI/HX/NETWORK  (Default input name) / DVD1 / DVD2 / DVD3 / DVD4 / Blu-ray1 / Blu-ray2 / Blu-ray3 / Blu-ray4 / CTV / VCR / STB / (Skin)
	Power save	SSU:PSV*	QSU:PSV	QSU:PSV*	0/1/2	Off/On/Sensor
	Standby save	SSU:SSV*	QSU:SSV	QSU:SSV*	0/1	Off/On
	PC Power management	SSU:DPM*	QSU:DPM	QSU:DPM*	0/1	Off/On
	DVI-D Power management	SSU:DPD*	QSU:DPD	QSU:DPD*	0/1	Off/On
	No signal power off	SSU:AOF*	QSU:AOF	QSU:AOF*	0/1	Off/On
	No activity power off	SSU:NAO*	QSU:NAO	QSU:NAO*	0/1	Off/On
	ECO Mode settings	SSU:ECS*	QSU:ECS	QSU:ECS*	0/1	Custom/On
	Menu Display Duration	SSU:MDT***	QSU:MDT	QSU:MDT***	005/010/015/020/025/030	5s/10s/15s/20s/25s/30s
	OSD Brightness	SSU:OBR*	QSU:OBR	QSU:OBR*	1/2/3/4/5	1(Low)/2/3/4/5(High)
	OSD Language	SSU:LNG***	QSU:LNG	QSU:LNG***	ENG/DEU/FRA/ITL/CHA/USA/ESP/JPN/RUS	English(UK)/German/French/Italian/Chinese/English(US)/Spanish/Japanese/Russian
Touch-pen Settings	Touch-pen Mode(Current input)	SSU:TPM*	QSU:TPM	QSU:TPM*	0/1	Off/On
	Touch-pen Mode(Specified input)	SSU:TPM*** *	QSU:TPM*** *	QSU:TPM*** *	SL1(S1A/S1B)/HM1/DV1/PC1/NW1 0/1	SLOT(A/B)/HDMI/DVI/HX/NETWORK Off/On
	Touch-pen Operation	SSU:TOM*	QSU:TOM	QSU:TOM*	0/1	Touch only/Touch&Remote
Signal	3D Y/C Filter (NTSC)	SSG:YCS*	QSG:YCS	QSG:YCS*	0/1	Off/On
	Sync	SSG:SNC***	QSG:SNC	QSG:SNC***	GRN/HAV	VBS/On G/On Y/Auto
	Colour system	SSG:COS***	QSG:COS	QSG:COS***	NTS/PAL/SCM/MNT/AUT	NTSC/PAL/SECAM/NTSC/Auto
	Cinema reality	SSG:DCR*	QSG:DCR	QSG:DCR*	0/1	Off/On
	P-NR (Limited choice)	SSG:VNR*	QSG:VNR	QSG:VNR*	0/1	Off/Min
	P-NR	SSG:VNREXT***	QSG:VNREXT	QSG:VNREXT***	OFF/MIN/MID/MAX	Off/Min/Mid/Max
	Block NR	SSG:BNR***	QSG:BNR	QSG:BNR***	OFF/MIN/MID/MAX	Off/Min/Mid/Max
	Mosquito NR	SSG:MNR***	QSG:MNR	QSG:MNR***	OFF/MIN/MID/MAX	Off/Min/Mid/Max
	Noise reduction	SSG:NRS***	QSG:NRS	QSG:NRS***	OFF/MIN/MID/MAX/ADV	Off/Min/Mid/Max/Advanced
	XGA Mode	SSG:XGA*	QSG:XGA	QSG:XGA*	1/2/3/4	1024x768 / 1280x768 / 1366x768 / Auto
	SDI Through	SSG:STH*	QSG:STH	QSG:STH*	0/1	Off/On
	FRAME CREATION	SSG:FRC*	QSG:FRC	QSG:FRC*	0/2/3	Off/MID/MAX
	3D Refresh Rate	SSG:TRR*	QSG:TRR	QSG:TRR*	0/1	100Hz/120Hz
	HDMI Range	SSG:HRC***	QSG:HRC	QSG:HRC***	VID/FUL/AUT	Video(16-235)/Full(0-255)/Auto
Screensaver	Screensaver	OSP:SCR*	QSP:SCR	QSP:SCR*	0/1/2/3/4	Off/Scrolling bar only ON/Negative image ON/Overlay scrolling bar ON/White screen ON
	Function	SSC:FNC*	QSC:FNC	QSC:FNC*	0/1/2/3	Scrolling bar only/Negative image/Overlay scrolling bar/White screen
	Mode	SSC:MOD*	QSC:MOD	QSC:MOD*	0/1/2/3/4	Off/Interval/Time Designation/On/Standby after SCR Saver
	Interval	SSC:INT **** ****	QSC:INT	QSC:INT **** ****	0000 ~ 2359 0000 ~ 2359	Periodic Time 00:00 - 23:59 Operation Time 00:00 - 23:59
	Time Designation	SSC:TIM **** ****	QSC:TIM	QSC:TIM **** ****	0000 ~ 2359 0000 ~ 2359	Start Time 00:00 - 23:59 Finish Time 00:00 - 23:59
	Standby after SCR Saver	SSC:AOF ****	QSC:AOF	QSC:AOF ****	0000 ~ 2359	Screensaver duration 00:00 - 23:59
Extended life settings	Side panel	SSC:SPC*	QSC:SPC	QSC:SPC*	0/1/2/3	Off/Low/Mid/High
	Peak limit	SSC:PLT*	QSC:PLT	QSC:PLT*	0/1	Off/On
	NANODRIFT Saver	SSC:NDS*	QSC:NDS	QSC:NDS*	0/1/2/3/4	Off/Min/Low mid/High mid/Max
	NANODRIFT Shift Mode	SSC:NSM*	QSC:NSM	QSC:NSM*	0/1	Smooth/Pixel
	NANODRIFT OFF enable	SSC:NDO*	QSC:NDO	QSC:NDO*	0/1	disable off select/enable off select
	Express settings	SLS:QUI**	-	-	NOW/ALL	Current input/All input
	Reset	SLS:RES**	-	-	NOW/ALL	Current input/All input
Function Button Settings	Setting Lock	SLS:LCK*	QLS:LCK	QLS:LCK*	0/1	Unlock/Lock
	Function Button Settings	OSP:KFN + ***	QSP:KFN +	QSP:KFN + ***	1/2 ECO/REF/SDS/SIG/SUT/S1A/S1B/VD1/YP1/HM1/DV1/PC1/NW1/TPML NS/LCS/LML/OSH	Function Button No.1-No.2 ECO Mode settings/Scrolling bar/3D Settings/Signal/On/Off Timer Setup/SLOT A/SLOT B/VIDEO/COMPONENT/HDMI/DVI/HX/NETWORK/Touch- pen/Network Setup/Computer Search/Multi-Live/AV Mute
	Function Button Guide	OSP:KFG*	QSP:KFG	QSP:KFG*	0/1	Off/On
MULTI DISPLAY Setup	MULTI DISPLAY Setup Off/On	MDC:**	-	-	0/1	MULTI DISPLAY Setup:Off/On
	MULTI DISPLAY Setup	MDC:** **	QDC	QDC:** **	1/0 0/1/2/3/4/5	MULTI DISPLAY Setup:Off/On 2x2/3x3/4x4/2x2F/3x3F/4x4F Location
	MULTI DISPLAY Setup	MDC:EXT*	QDC:EXT	QDC:EXT*	0/1	Off /On

Category	Function	Control commands	Query commands		Parameters	Parameters Explanation
			Transmission	Reply		
MULTI DISPLAY Setup	MULTI DISPLAY Setup Horizontal Scale/Vertical Scale/Seam hides video/Location	MDC:EXT * * 1/2/3/4/5 1/2/3/4/5 * * **	QDC:EXT	QDC:EXT * * * * **	0/1 1/2/3/4/5 1/2/3/4/5 0/1 01 ~ 25	MULTI DISPLAY Setup:Off/On Horizontal Scale:x1/x2/x3/x4/x5 Vertical Scale:x1/x2/x3/x4/x5 Seam hides video:Off/On Location.. 1x2:A1(01)-A2(02) / 1x3:A1(01)-A3(03) / 1x4:A1(01)-A4(04) / 1x5:A1(01)-A5(05) 2x1:A1(01)-A2(02) / 2x2:A1(01)-B2(04) / 2x3:A1(01)-C2(06) / 2x4:A1(01)-D2(08) / 2x5:A1(01)-E2(10) 3x1:A1(01)-A3(03) / 3x2:A1(01)-B3(06) / 3x3:A1(01)-C3(09) / 3x4:A1(01)-D3(12) / 3x5:A1(01)-E3(15) 4x1:A1(01)-A4(04) / 4x2:A1(01)-B4(08) / 4x3:A1(01)-C4(12) / 4x4:A1(01)-D4(16) / 4x5:A1(01)-E4(20) 5x1:A1(01)-A5(05) / 5x2:A1(01)-B5(10) / 5x3:A1(01)-C5(15) / 5x4:A1(01)-D5(20) / 5x5:A1(01)-E5(25)
	Video Wall Uniformity	MDC:AIC*	QDC:AIC	QDC:AIC*	0/1	Off/On
Portrait Setup	Portrait Setup Seam hides video/Viewing Area /Location	DPR:* * * * * *	QPR	QPR: * * * *	0/1 0/1 1/2 1/2/3	Portrait Setup:Off/On Seam hides video:Off/On Viewing Area:1/2 Location:Left/Center/Right
	Video Wall Uniformity	DPR:AIC*	QPR:AIC	QPR:AIC*	0/1	Off/On
Network Setup	Wired LAN (Network)	SSU:NET ***** ***** ***** *	QSU:NET	QSU:NET ***** ***** ***** *	000~255,000~255,000~255,000~255 000~255,000~255,000~255,000~255 000~255,000~255,000~255,000~255 0/1	IP address Subnet mask Gateway DHCP - Off/On
	Wireless LAN(Select Network)	SSU:LWL*** SSU:LTI ***** ***** ***** *	QSU:LWL QSU:LTI	QSU:LWL*** QSU:LTI ***** ***** ***** *	OFF/SDT/MDT/SMP/ES1/ES2/ES3/ES4/UR1/UR2/UR3	Off/S-DIRECT/M-DIRECT/S-MAP/1/2/3/4/USER1/USER2/USER3
	Wireless LAN (Network)	SSU:LNC*...*	QSU:LNC	QSU:LNC*...*	000~255,000~255,000~255,000~255 000~255,000~255,000~255,000~255 000~255,000~255,000~255,000~255 0/1	IP address Subnet mask Gateway DHCP - Off/On
	Wireless LAN (User name)	SSU:LDN*...*	QSU:LDN	QSU:LDN*...*	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 {   } -	User name (Max 8 Parameters)
	Name Change	SSU:LML	QSU:LML	QSU:LML****	04MLT/04IDX/16IDX	DISPLAY NAME(Max 8 Parameters)
	Multi-Live	SSU:LLI*	QSU:LLI	QSU:LLI*	0/1	4-screen multi style/4-screen index style/16-screen index style
	Live mode Cut In	SSU:LWC*	QSU:LWC	QSU:LWC*	0/1	Off/On
	WEB Control	SSU:LRT	QSU:LRT	QSU:LRT	0/1	Off/On
	Reset	-	-	-	-	-
	Status(DISPLAY ID)	-	QSU:LDI	QSU:LDI*...*	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 {   } -	DISPLAY ID(Max 8 Parameters)
	Status(Antenna level)	-	QSU:LAL	QSU:LAL*	1~5	Antenna level
	Port	SSU:LCP****	QSU:LCP	QSU:LCP****	01024-65535 *Except 04352,10000	Port
	Power ON Settings	TIM:PON****	QIM:PON	QIM:PON****	0/1, 0000 ~ 2359	Off/On, 00:00 - 23:59
	Power OFF Settings	TIM:POF****	QIM:POF	QIM:POF****	0/1, 0000 ~ 2359	Off/On, 00:00 - 23:59
Day/Time Setup	Day	TIM:DAY***	QIM:DAY	QIM:DAY***	MON/TUE/WED/THU/FRI/SAT/SUN	MON/TUE/WED/THU/FRI/SAT/SUN
	Time	TIM:NOW0****	QIM:NOW	QIM:NOW0****	0000 ~ 2359	00:00 - 23:59
Audio input select	Audio input select	SAI:V***A+++ SAI:A+++	QAI:V*** QAI	QAI:V***A+++ QAI:V***A+++	***...SL1(S1A/S1B)/VD1/YP1/HM1/DV1/PC1/NW1 +++...SL1(S1A/S1B)/VD1/HM1/PC1/NW1/NAD	*...Video Input SLOT(A/B)/VIDEO/COMPONENT/HDMI/DVI/HX/NETWORK +...Audio Input SLOT(A/B)/VIDEO or COMPONENT/HDMI/DVI or HX/NETWORK/No Audio
	Onscreen display	OSP:OSD*	QSP:OSD	QSP:OSD*	0/1	Disable/Enable
	Initial INPUT	OSP:IIN***	QSP:IIN	QSP:IIN***	0FF/SL1(S1A/S1B)/VD1/YP1/HM1/DV1/PC1/NW1	Off/SLOT(A/B)/VIDEO/COMPONENT/HDMI/DVI/HX/NETWORK
	Initial VOL level	OSP:IVL***	QSP:IVL	QSP:IVL***	0/1, 00 ~ 63	Off/On,volume: 0 ~63
	Maximum VOL level	OSP:MVL***	QSP:MVL	QSP:MVL***	0/1, 00 ~ 63	Off/On,maximum volume: 0 ~63
	INPUT lock	OSP:INL***	QSP:INL	QSP:INL***	0FF/SL1(S1A/S1B)/VD1/YP1/HM1/DV1/PC1/NW1	Off/SLOT(A/B)/VIDEO/COMPONENT/HDMI/DVI/HX/NETWORK
	Button lock	OSP:BTL***	QSP:BTL	QSP:BTL***	OFF/MEN/ALL	Off/MENU&ENTER/On
	Remocon User level	OSP:RCM*	QSP:RCM	QSP:RCM*	0/1/2/3	Off/User1/User2/User3
	Off-timer function	OSP:OFT*	QSP:OFT	QSP:OFT*	0/1	Disable/Enable
	Initial Power Mode	OSP:IPM***	QSP:IPM	QSP:IPM***	NOR/PON/STB	Normal/On/Standby
	Display Size	DGE:SCN*	QGE:SCN	QGE:SCN*	0/1	Off/On
	Studio W/B	OSP:SWB*	QSP:SWB	QSP:SWB*	0/1	Off/On
	Studio Gain	OSP:SGA*	QSP:SGA	QSP:SGA*	0/1	Off/On

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Options	Slot power	OSP:SLP**	QSP:SLP	QSP:SLP**	ON/AT/OF	On/Auto/Off	
	Power On Screen Delay	OSP:POD**	QSP:POD	QSP:POD**	00-30	00(OFF),1-30	
	ClockDisplay	OSP:CLK*	QSP:CLK	QSP:CLK*	0/1	Off/On	
	All Aspect	OSP:AAS*	QSP:AAS	QSP:AAS*	0/1	Off/On	
	Auto Setup	OSP:ASU***	QSP:ASU	QSP:ASU***	AUT/BTN	Auto/Manual	
	Rotate	OSP:ROT*	QSP:ROT	QSP:ROT*	0/1	Off/On	
	Advanced Motion Resolution	OSP:AMR*	QSP:AMR	QSP:AMR*	0/1	Off/On	
	Power On Message (No activity power off)	OSP:NAP*	QSP:NAP	QSP:NAP*	0/1	Off/On	
	Function	TIW:FNC*	QIW:FNC	QIW:FNC*	1/0	Off/On	
	Program Number	TIW:DPS *** *	-	-	MON/TUE/WED/THU/FRI/SAT/SUN 1-7	MONDAY/TUESDAY/WEDNESDAY/THURSDAY/FRIDAY/SATURDAY/SUNDAY PROGRAM1-PROGRAM7	
	Program Number	TIW:WPS * * * * * * * *	QIW:WPS	QIW:WPS * * * * * * * *	1-7/ 1-7/ 1-7/ 1-7/ 1-7/ 1-7/ 1-7/ 1-7/	PROGRAM1-PROGRAM7/ PROGRAM1-PROGRAM7/ PROGRAM1-PROGRAM7/ PROGRAM1-PROGRAM7/ PROGRAM1-PROGRAM7/ PROGRAM1-PROGRAM7/ PROGRAM1-PROGRAM7/ PROGRAM1-PROGRAM7/	
	Program Edit	TIW:PRG * * **** ***	QIW:PRG **	QIW:PRG * ** **** ***	1-7 01-64 0000-2359/---- S01-S64/U01-U64/---	PROGRAM1-PROGRAM7 01-64 00:00-23:59/---- Standard Command 01-64/User Command 01-64/--- (Not Supported Standard Command 8,9,20,22-38,48-54)	
	User Command Edit	TIW:CMD *** *****	QIW:CMD ***	QIW:CMD *** *****	U01-U64 *****	User Command 01-64(Command number) User Command(Max 15 Parameters)	
	Input Search	Input Search	ISH:FNC***	QSH:FNC	QSH:FNC***	ALL/PRI/OFF	All Inputs/Priority/Off
		Primary Input	ISH:PRI***	QSH:PRI	QSH:PRI***	SL1(S1A/S1B)/VD1/YP1/HM1/DV1/PC1/NW1/NON	SLOT
		Secondary Input	ISH:SCI***	QSH:SCI	QSH:SCI***	SL1(S1A/S1B)/VD1/YP1/HM1/DV1/PC1/NW1/NON	SLOT
	Text display	Text Clear	XTD:CLR	-	-	-	Text Clear
		Text display	XTD:NML *** ** * * * * * **	-	-	001 - 116 01 - 30 0/1/2/3/4/5/6/7/8/9 0/1/2/3/4/5/6/7/8/9 0/1/2/3 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 { } -	Horizontal display start position Vertical display start position Text color : Black/Red/Green/Yellow/Blue/Magenta/Cyan/White/Half-brightness/Transparency Background color : Black/Red/Green/Yellow/Blue/Magenta/Cyan/White/Half-brightness/Transparency Text size : Usually/ Twice length/ Twice width/ Twice Display Strings : (Max 40 Parameters)
		Time out setting	XTD:OPT**	QTD:OPT	QTD:OPT**	01 - 99	Time out(Second)
Text display(memory load)		XTD:REA*	-	-	1/2/3/4/5	Storage area	
Text Scrolling display		XTD:SCR *** ** * * * * * **	-	-	001 - 116 01 - 30 0/1/2/3/4/5/6/7/8/9 0/1/2/3/4/5/6/7/8/9 0/1/2/3 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 { } -	Horizontal display start position Vertical display start position Text color : Black/Red/Green/Yellow/Blue/Magenta/Cyan/White/Half-brightness/Transparency Background color : Black/Red/Green/Yellow/Blue/Magenta/Cyan/White/Half-brightness/Transparency Text size : Usually/ Twice length/ Twice width/ Twice Display Strings : (Max 40 Parameters)	
Memory save	XTD:WRT * *** ** * * * * **	QTD:WRT *	QTD:WRT * *** ** * * * * **	1/2/3/4/5 001 - 116 01 - 30 0/1/2/3/4/5/6/7/8/9 0/1/2/3/4/5/6/7/8/9 0/1/2/3 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 { } -	Storage area Horizontal display start position Vertical display start position Text color : Black/Red/Green/Yellow/Blue/Magenta/Cyan/White/Half-brightness/Transparency Background color : Black/Red/Green/Yellow/Blue/Magenta/Cyan/White/Half-brightness/Transparency Text size : Usually/ Twice length/ Twice width/ Twice Display Strings : (Max 40 Parameters)		
Label display	DDS	-	-	-	Labels ON / OFF		
Audio Mute(for tuner)	AOC.*	-	-	0/1	Off/On		

Category	Function	Control commands	Query commands		Parameters	Parameters Explanation
			Transmission	Reply		
Other	Clear OSD	VDO DZM:	-	-	-	OSD Clear
	Digital Zoom	*	QDZ	QDZ: *	0/1 1-4 1-5 1-5	Off/On Expansion rate Display position (length) Display position (side)
	Off Timer	ZOT:*	-	-	0-90	00 - 90 min
	SOS History	-	QSS	QSS: ** ** ** ** ** **	00 - FF 00 - F2 00 - F2 00 - F2 00 - F2 00 - F2	SOS generation frequency SOS information on the first time SOS information on the second times SOS information on the 3, 6, 9 ... times SOS information on the 4, 7, 10 ... times SOS information on the 5, 8, 11 ... times <-SOS Factor> 00 : None E1 : Unknown SOS, E2 : 15V SOS, F2 : F15V MON, *2 : 12V SOS, *3 : 3.3V SOS, *4 : POWER SOS, *5 : 5V SOS, *6 : Driver SOS1, *7 : Driver SOS2, *8 : Driver SOS3, *9 : DCC SOS, 0A : DS SOS, 0B : FAN SOS, 1C-5C : FpgaConfig SOS1-5, 6C : CPG SOS, 0D : A SOS2, 1D : 5V SOS, 2D : A SOS, 4D : AUDIO SOS, 5D : LED8V SOS, 6D : DN SOS
	SOS State	-	QSS:STS	QSS:STS***	NON EXT FRR	No SOS History With SOS History Of SOS
	Signal frequency	-	QFR	QFR: H*** * V*** *	000.0 - 999.9 000.0 - 999.9	H-Freq. (KHz) V-Freq. (Hz)
	Signal name	-	QSF	QSF:M*****	M-1125(1080)/60i *Example	Signal Format
	Model Information	-	QMN	QMN: ** * **	03/85 F 10	103inch/85inch Model : FHD Series
	Version(MONITOR-MCU)	-	QRV	QRV: *.*.*.* +***	1.0000- PB1	MONITOR MCU Version Series
	Version(MONITOR-EEPROM)	-	QRV:EEP	QRV:EEP** **	00.01-	MONITOR EEPROM Version
	Version(PANEL-MCU)	-	QRV:PMC	QRV:PMC** **	00.01-	PANEL MCU Version
	Version(PANEL-EEPROM)	-	QRV:PEP	QRV:PEP** **	00.01-	PANEL EEPROM Version
	Version(PANEL-DCC)	-	QRV:PDC	QRV:PDC** **	00.01-	PANEL DCC Version
	Version(PANEL-PDROM)	-	QRV:PPD	QRV:PPD** **	00.01-	PANEL PDROM Version
	Serial number	-	QSN	QSN*...*	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 { } -	Serial number(Max 15 Parameters)