Pioneer

ELITE

ELITE® KURO™ SIGNATURE SERIES MONITOR INTEGRATOR REFERENCE MANUAL

VER. 1.0

Introduction

The Elite® line of Signature Series KURO™ monitors offers unsurpassed picture quality combined with comprehensive functionality designed for custom integrators and high-end home theater applications.

This manual was created to assist with integrator access to panel menus, command protocol, IP control and other panel setup features during the installation process.

Other technical specifications and support documents can be found on our website at www.pioneerelectronics.com under the **Support** and **Custom Installation** sections.

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- IP Control

- RS-232C

Menu Structure

Menu Structure

1. User Menu Tree

1.1 User Menu (Simplified, for End User)

Signal	USER MENU	
Video	USER MENU (Video)	
	Input Change	
	A/V Selection	
	Film Mode	
	Sleep Timer	
	KURO LINK	

Signal	USER MENU	
PC	USER MENU (PC)	
	Input Change	
	A/V Selection	
	Sleep Timer	
	KURO LINK	

1.2 User Menu Breakdown

INPUT CHANGE	INPUT 1-8
A/V SELECTION	"OPTIMUM,"
	"STANDARD,"
	"DYNAMIC,"
	"MOVIE,"
	"PURE,"
	"SPORT,"
	"GAME,"
	"USER,"
	"ISF-Day,"
	"ISF-Night,"
	"ISF-Auto"
FILM MODE	"Off,"
	"Standard,"
	"Smooth,"
	"Advance"
SLEEP TIMER	"Off,"
	"30min,"
	"60min,"
	"90min,"
	"120min"
KURO LINK	Disc Navigator
	Timer REC (DVR)
	Timer REC List (DVR)
	Pause Live TV
	Stop REC (DVR)
	CTRL Panel (A/V-SYS)
	Playback CTRL Panel
	Switch to A/V Sound
	Switch to FPD Sound
	Linked Device Menu
	Linked Device Sub-Menu

2. HOME MENU TREE

2.1 Home Menu (Detailed, for Installer)

Signal	PICTURE Overall Picture Related except White balance		SCREEN Screen Adjustment Related	POWER CONTROL Energy Save Related	OPTION Other Capabilities for Home Theater Use	INPUT SETUP Input Set Up Related		CONTROL SETUP Control Setup Related	
Video	A/V Selection		H. Position	Energy Save	Language	INPUT 1 (VIDEO)		IP Control Setting	IP Control
	Contrast		V. Position	No Signal Off	Input Priority		Input Name		DHCP
	Brightness		Auto Size	No Operation Off	Blue LED Dimmer		Color System		IP Address
	Color		Side Mask		Orbiter	INPUT 2 (COMPONENT)			Subnet Mask
	Tint		Reset		Video Pattern		Input Name		Default Gateway
	Sharpness				Long Life Setting		Color System		MAC Address
	Color Temp				Room Light Sensor	INPUT 3 (D-Sub15)			LED
		White Balance			PIP Detect		Input Name	KURO LINK Setting	
	Gamma						Color System		Input Setting
	Pro Adjust						Signal Format		Power Off Control
		Pure Cinema				INPUT 4 (DVI)			Power On Ready
			Film Mode				Input Name		Hold Sound Status
			Text Optimization				Signal Type		HD A/V Converter
		Intelligent Mode					VIDEO		Power On Test
		Picture Detail					Signal Format		Power Off Test
			DRE Picture			INPUT 5 (HDMI)		Serial Setting	
			Black Level				Input Name		ID NO. Set
			ACL				Signal Type		Baud Rate
			Enhancer Mode				VIDEO		
		Color Detail					Signal Format		
			CTI			INPUT 6 (HDMI)			
			Color Management				Input Name		
			Color Space				Signal Type		
		Noise Reduction					VIDEO		
			3D NR				Signal Format		
			Field NR			INPUT 7 (HDMI)			
			Block NR				Input Name		
			Mosquito NR				Signal Type		
		Other					VIDEO		
			3D YC				Signal Format		
			I-P Mode			INPUT 8 (HDMI)			
			Drive Mode				Input Name		
			Game Control Pref.				Signal Type		
			Blue Only Mode				VIDEO		
	Reset						Signal Format		
	*INPUT3 (Analog PC) Only								

Signal	PICTURE		SCREEN INPUT3 (Analog PC) Only	POWER CONTROL				
PC	A/V Selection		Auto Setup	Energy Save				
	Contrast		H. Position	Power Management				
	Brightness		V. Position					
	Red		Clock					
	Green		Phase					
	Blue		Reset					
	Reset							

2.2 Home Menu (Video) Breakdown

PICTURE

A/V Selection	"OPTIMUM," "STANDARD," "DYNAMIC" "MOVIE," "PURE," "SPORT," "GAME," "USER," "ISF-Day," "ISF-Night," "ISF-Auto"
Contrast	0~60
Brightness	-60~0~+60
Color	-60~0~+60
Tint	•-30~0~+30•
Sharpness	-15~0~+15
Color Temp	"High," "Mid-High," "Mid," "Mid-Low," "Low," "Manual"(*1)

(*1) Manual setting

R High	-60~0~+60
G High	-60~0~+60
B High	-60~0~+60
R Low	-60~0~+60
G Low	-60~0~+60
B Low	-60~0~+60
Reset	"No," "Yes"

Gamma	"1," "2," "3," "4," "5"
Pro Adjust	

PureCinema	→

Film Mode	"Off," Standard, Smooth, "Advance"
Text Optimization	"Off," "On"

Intelligent Mode	"Off," "Mode1," "Mode2"

Picture Detail	→

DRE Picture	"Off," "High," "Mid," "Low"
Black Level	"Off," "On"
ACL	"Off," "On"
Enhancer Mode	"1," "2," "3"
CTI	"Off," "On"

1: "Hard," 2: "Natural," 3: "Soft"

Color Detail	→

Color Management	→

R	•-30~0~+30•
Y	•-30~0~+30•
G	•-30~0~+30•
C	•-30~0~+30•
B	•-30~0~+30•
M	•-30~0~+30•
Reset	"No," "Yes"

Color Space	"1," "2"

1: Suitable color reproduction for PDP, 2: Typical Color Reproduction

Noise Reduction	→

3DNR	"Off," "High," "Mid," "Low"
Field NR	"Off," "High," "Mid," "Low"
Block NR	"Off," "On"
Mosquito NR	"Off," "On"

Other	→

3DYC	"Off," "High," "Mid," "Low"
I-P Mode	"1," "2," "3"
Drive Mode	"1," "2," "3"
Game Control Pref	"Off," "On"
Blue Only Mode	"Off," "On"

1: "Motion," 2: "Standard," 3: "Still"

Reset	"No," "Yes"

SCREEN

H. Position	-10~0~+10
V. Position	-10~0~+10
Auto Size	"Off," "Natural," "Wide," "Zoom"
Side Mask	

Detection	"Off," "Mode1," "Mode2"
HD Wide Mode	"Mode1," "Mode2"
Brightness Sync.	"Fixed," "Auto"

Reset	"No," "Yes"

SOUND

Treble	-7~0~+7
Bass	-7~0~+7
Balance	L30~0~R30
Sub Volume	"0"~"+20"
Reset	"No," "Yes"

POWER CONTROL

Energy Save	"Standard," "Save1," "Save2," "Picture Off"
No Signal Off	"Disable," "Enable"
No Operation Off	"Disable," "Enable"

OPTION

Language	"English," "Deutsche," "Français," "Italiano," "Español," "Nederlands," "Svenska," "Português," "Ελληνικά," "Suomi," "Русский," "Türkçe," "Norsk," "Dansk," "日本語"
Input Priority	"Auto," "Off"
Blue LED Dimmer	"Auto," "High," "Mid," "Low"
Orbiter	"Off," "Mode1," "Mode2"
Video pattern	"Cancel," "Start"
Long Life Setting	"No," "Yes"
Room Light Sensor	"Off," "On"
PIP Detect	"Auto," "Off"

INPUT SETUP

INPUT 1 (Video)	Input Name	"Video," "Blu-ray," "DVD," "DVR," "VCR," "Cable," "Satellite," "GAME," "Computer"
	Color system	"Auto," "PAL," "SECAM," "NTSC," "4.43 NTSC," "PAL-M," "PAL-N"

INPUT 2 (Component)	Input Name	"Component," "Blu-ray," "DVD," "DVR," "VCR," "Cable," "Satellite," "GAME," "Computer"
	Color Decoding	"Comp1 (YCbCr)," "Comp2 (YPbPr)"

INPUT 3 (D-Sub15)	Input Name	"D-Sub15," "Blu-ray," "DVD," "DVR," "VCR," "Cable," "Satellite," "GAME," "Computer"
	Color Decoding	"RGB," "Comp1 (YCbCr)," "Comp2 (YPbPr)"
	Signal Format	"Auto," & each signal

INPUT 4 (DVI)	Input Name	"DVI," "Blu-ray," "DVD," "DVR," "VCR," "Cable," "Satellite," "GAME," "Computer"
	Signal Type	"Video," "PC"
	Video	"Auto," "1 (YUV422)," "2 (YUV444)," "3 (RGB16-235)," "4 (RGB 0-255)"
	Signal Format	"Auto," & each signal

INPUT 5 (HDMI1) →	Input Name	"HDMI," "Blu-ray," "DVD," "DVR," "VCR," "Cable," "Satellite," "GAME," "Computer"
	Signal Type	"Video," "PC"
	Video	"Auto," "1 (YUV422)," "2 (YUV444)," "3 (RGB16-235)," "4 (RGB 0-255)"
	Signal Format	"Auto," & each signals

INPUT 6 (HDMI2) →	Input Name	"HDMI," "Blu-ray," "DVD," "DVR," "VCR," "Cable," "Satellite," "GAME," "Computer"
	Signal Type	"Video," "PC"
	Video	"Auto," "1 (YUV422)," "2 (YUV444)," "3 (RGB16-235)," "4 (RGB 0-255)"
	Signal Format	"Auto," & each signals

INPUT 7 (HDMI3) →	Input Name	"HDMI," "Blu-ray," "DVD," "DVR," "VCR," "Cable," "Satellite," "GAME," "Computer"
	Signal Type	"Video," "PC"
	Video	"Auto," "1 (YUV422)," "2 (YUV444)," "3 (RGB16-235)," "4 (RGB 0-255)"
	Signal Format	"Auto," & each signals

INPUT 8 (HDMI4) →	Input Name	"HDMI," "Blu-ray," "DVD," "DVR," "VCR," "Cable," "Satellite," "GAME," "Computer"
	Signal Type	"Video," "PC"
	Video	"Auto," "1 (YUV422)," "2 (YUV444)," "3 (RGB16-235)," "4 (RGB 0-255)"
	Signal Format	"Auto," & each signals

CONTROL SETUP

IP Control Setting →	IP Control	"Disable," "Enable"
	DHCP	"Off," "On"
	IP Address	
	Sub Net Mask	
	Default Gateway	
	MAC Address	
	LED	"Off," "On"

KURO LINK Setting →	Input Setting	"Off," "INPUT5," "INPUT6" "INPUT7," "INPUT8"
	Power Off Control	"Off," "On"
	Power On Ready	"Off," "On"
	Hold Sound Status	"Off," "On"
	HD A/V Converter	"Disable," "Enable"
	Power On Test	
	Power Off Test	

Serial Setting →	ID No. Set	"All," "01H"~"FFH"
	BAUD RATE	"1200bps," "2400bps," "4800bps," "9600bps," "19200bps," "38400bps"

2.3 Home Menu (PC) Breakdown

PICTURE	
A/V Selection (PC)	"STANDARD," "USER"
Contrast	0~60
Brightness	-60~0~+60
Red	-30~0~+30
Green	-30~0~+30
Blue	-30~0~+30
Reset	"No," "Yes"

SCREEN	INPUT3 (Analog PC) Only.
Auto Setup	"Off," "On"
H. Position	-120~0~+120
V. Position	-120~0~+120
Clock	-120~0~+120
Phase	-32~0~+31
Reset	"No," "Yes"

POWER CONTROL	
Energy Save	"Standard" "Save1" "Save2" "Picture Off"
Power Management	"Off" "Mode1" "Mode2"

The following specifications are the same as VIDEO signal settings.
Option
Setup
HDMI Control

3. Integrator Mode

3.1 Outline

3.1.1 About Integrator Menu
This menu is for professional installation and users.

3.1.2 Base function
When display INTEGRATOR MENU, Picture settings of HOME MENU go back to default settings.
In A/V Selection, Blue Only, Sound, Screen, Power control, Input Setup, and Control Setup, there are no changes.

3.1.3 Display method
Hold down DISPLAY key for 3 seconds and push the HOME MENU key.

Language: English only

3.2 Integrator Mode

VIDEO SIGNAL ON INTEGRATOR MODE			PC SIGNAL ON INTEGRATOR MODE		
Picture Preset			Picture Preset		
	A/V Selection			A/V Selection	
	Contrast			Contrast	
	Brightness			Brightness	
	Color			Red	
	Tint			Green	
	Sharpness			Blue	
	White Balance			Reset	
	Color Management				
	Blue Only Mode				
	Reset				
Studio Mode					
Monotone Mode					
Drive Mode			FRC Mode		
Fan Control			Fan Control		
OSD Display			OSD Display		
Power ON Mode			Power ON Mode		
	Input			Input	
Mirror Mode			Mirror Mode		
Banner PIP			Banner PIP		
	Translucent			Translucent	
	Banner PIP			Banner PIP	
	Banner Input			Banner Input	
IP Control Lock			IP Control Lock		
Network ID Beacon			Network ID Beacon		
Factory Default			Factory Default		

3.3 Integrator Menu Breakdown

VIDEO

Picture Preset	→ A/V Selection	"OPTIMUM," "STANDARD," "DYNAMIC," "MOVIE," "PURE," "SPORT," "GAME," "USER," "ISF-Day," "ISF-Night," "ISF-Auto"
	Contrast	0~60
	Brightness	-60~0~+60
	Color	-60~0~+60
	Tint	•-30~0~+30•
	Sharpness	-15~0~+15
	R High	-60~0~+60
	G High	-60~0~+60
	B High	-60~0~+60
	R Low	-60~0~+60
	G Low	-60~0~+60
	B Low	-60~0~+60
	Red	•-30~0~+30•
	Yellow	•-30~0~+30•
	Green	•-30~0~+30•
	Cyan	•-30~0~+30•
	Blue	•-30~0~+30•
	Magenta	•-30~0~+30•
	Blue Only Mode	"Off," "On"
	Picture Reset	"No," "Yes"
Studio Mode	"Off," "On"	
Monotone Mode	"Off," "On"	
Drive Mode	"1," "2," "3"	
Fan Control	"Auto," "Max"	
OSD Display	"Off," "On"	
Power On Mode	→ Input	"Last," "Input1" ~ "Input8"
	Volume	"Last," 0~+60
Mirror Mode	"Off," "On"	
Banner PIP	→ Translucent	"Off"
		"10%," "20%," "30%," "40%," "50%," "60%," "70%," "80%"
	Banner PIP	"Off," "Bottom1," "Bottom2," "Bottom3," "Mid Low," "Mid High," "Top3," "Top2," "Top1"
	Banner Input	"Input 3" ~ "Input8"
IP Control Lock	"Off," "On"	
Network ID Beacon	"Off," "On"	
Factory Default	"Off," "On"	

PC

Picture Preset	→ A/V Selection	"STANDARD," "USER"
	Contrast	0~60
	Brightness	-60~0~+60
	Red	-30~0~+30
	Green	-30~0~+30
	Blue	-30~0~+30
	Picture Reset	"No," "Yes"
FRC Mode	"Default," "Sync"	
Fan Control	"Auto," "Max"	
OSD Display	"Off," "On"	
Power on mode	→ Input	"Last," "Input1" ~ "Input8"
Mirror Mode	"Off," "On"	
Banner PIP	→ Translucent	"Off," "10%," "20%," "30%," "40%," "50%," "60%," "70%," "80%"
	Banner PIP	"Off," "Bottom1," "Bottom2," "Bottom3," "Mid Low," "Mid High," "Top3," "Top2," "Top1"
	Banner Input	"Input 3" ~ "Input8"
IP Control Lock	"Off," "On"	
Network ID Beacon	"Off," "On"	
Factory Default	"Off," "On"	

Integrator Menu

Integrator Menu

1. Picture Preset

To enable setup of the following:
Each Input
Each A/V Selection
Each Signal

Color Temperature: Manual adjustment
The picture setting parameters are the same as the picture setting parameters of the HOME MENU.

Example: Picture Preset Contrast = 40 → 50
Contrast default of Home Menu = 40 → 50 (Auto change)

2. Blue Only Mode

To set Color and Tint, it is function for display Input signal by only "blue" image.
Off = Disable (Default setting)
On = Enable

Selecting the "On" setting disables the following functions:
Color Temperature
White Balance
Monotone: "Off" fixed
Studio Mode: "Off" fixed

3. Studio Mode

This function is only for Video Signal.
Color temperature is changed to 3200K.
A/V Selection is fixed to "Standard" Mode.
Off = Disable (Default setting)
On = Enable

Selecting the "On" setting disables the following functions:
A/V Selection: "Standard" fixed
Color Temperature: "Manual" fixed
Monotone Mode: "Off" fixed
Blue Only Mode: "Off" fixed
Intelligent Mode: "Off" fixed

4. Monotone Mode

This function is only for Video Signal.
White and Black mode.
Off = Disable (Default setting)
On = Enable

Selecting the "On" setting disables the following functions:
A/V Selection: "Standard" fixed
Picture (excludes Contrast and Brightness)
Picture Preset
Studio Mode: "Off" fixed

5. Drive mode (Video)/Frame Rate Conversion (PC)

Video Signal
Same as "Drive Mode" setting in the HOME MENU.
1: Standard = 75Hz, Default setting
2: 100Hz
3: Smooth 60Hz

PC Signal
Sync
Default

6. Fan Control
Auto: Normal (Default setting)
Max: Fan control is always set to maximum.

7. On-Screen Display (OSD)
Off = No display on screen of input type, etc. Off will display HOME MENU and other GUI information.
On = Normal (Default setting)

8. Power On Mode
When power is on, start by setting input.

8.1 Input
Last Input Selected = Normal (Default setting)
INPUT 1-8 = Designated input override

9. Mirror Mode
Off = Normal (Default setting)
On = Reverse left and right
Off/Normal
On/Mirror Mode

10. IP Control Lock
Lock "IP Control Setting" of HOME MENU-Control Setup
Off = Normal, Disable
On = Lock "IP Control Setting"

11. Network ID Beacon
Off = No replay of beacon message for RBC (AMX) command protocol.
On = Replay beacon message for RBC (AMX) command protocol.

ACK command
AMXB<-UUID= MAC address ><-SDKClass=Monitor><-GUID=PIONEER_9G_Monitor>
<-Make=PIONEER><-Model= Model name ><-Revision=1.0.0>'\r'
Message lengs is 160.
After '\r'(0x0D), it is filled '*'.

	Elite model	
	50 inch	60 inch
MAC address	Mac Address lengs: 12, (Hex)	
Model name	PRO-101FD	PRO-141FD

RS-232C
Is always available regardless of menu setting

Format
Poll message:
AMX'\r'

Beacon Message:
AMXB<-SDKClass=Monitor><-GUID=PIONEER_9G_Monitor><-Make=PIONEER>
<-Model=   ><-Revision=1.0.0>'\r'

Caution: Send command does not need ID.

12. Factory Default
Factory setting takes approximately 10 seconds to reset.

Signal Support

Signal Support

1. Video/PC Signals (HDMI/DVI/Component/Mini D-Sub/Composite)

1.1 Input 1 (Video Signal)

	SCREEN MODE											Remarks
	DOT BY DOT	4:3	FULL (FULL1)	FULL2	ZOOM	CINEMA	WIDE	WIDE 1	WIDE 2	FULL 14:9	CINEMA 14:9	
NTSC	-	YES	YES	-	YES	YES	YES	-	-	YES	YES	
PAL	-	YES	YES	-	YES	YES	YES	-	-	YES	YES	
SECAM	-	YES	YES	-	YES	YES	YES	-	-	YES	YES	
4.43NTSC	-	YES	YES	-	YES	YES	YES	-	-	YES	YES	
PAL M	-	YES	YES	-	YES	YES	YES	-	-	YES	YES	
PAL N	-	YES	YES	-	YES	YES	YES	-	-	YES	YES	

1.2 Input 2 (Component)/Input 3 (D-Sub) – Video Signals (Analog)
When reproducing the analog signals in the table below, set the Color Decoding option to Comp 1 or Comp 2

Resolution	HF (kHz)	VF (Hz)	SCREEN MODE											Remarks
			DOT BY DOT	4:3	FULL (FULL1)	FULL 2	ZOOM	CINEMA	WIDE	WIDE 1	WIDE 2	FULL 14:9	CINEMA 14:9	
480i	15.8	60.0	-	YES	YES	-	YES	YES	YES	-	-	YES	YES	
480p	31.5	60.0	-	YES	YES	-	YES	YES	YES	-	-	YES	YES	
576i	15.6	50.0	-	YES	YES	-	YES	YES	YES	-	-	YES	YES	
576p	31.3	50.0	-	YES	YES	-	YES	YES	YES	-	-	YES	YES	
720p	37.5	50.0	-	YES	YES	-	YES	-	-	YES	YES	-	-	
720p	45.0	60.0	-	YES	YES	-	YES	-	-	YES	YES	-	-	
1080i	28.1	50.0	YES	YES	YES	YES	YES	-	-	YES	YES	-	-	
1080i	33.8	60.0	YES	YES	YES	YES	YES	-	-	YES	YES	-	-	
1080p	27.0	24.0	YES	YES	YES	YES	YES	-	-	YES	YES	-	-	
1080p	56.3	50.0	YES	YES	YES	YES	YES	-	-	YES	YES	-	-	
1080p	67.5	60.0	YES	YES	YES	YES	YES	-	-	YES	YES	-	-	

1.3 Input 4 (DVI)/Input 5 through 8 (HDMI) – Video Signals (Digital)
When reproducing the digital signals in the table below, set the signal type option to Video.

Resolution	HF (kHz)	VF (Hz)	SCREEN MODE											Remarks
			DOT BY DOT	4:3	FULL (FULL1)	FULL 2	ZOOM	CINEMA	WIDE	WIDE 1	WIDE 2	FULL 14:9	CINEMA 14:9	
480i	15.8	60.0	-	YES	YES	-	YES	YES	YES	-	-	YES	YES	
480p	31.5	60.0	-	YES	YES	-	YES	YES	YES	-	-	YES	YES	
576i	15.6	50.0	-	YES	YES	-	YES	YES	YES	-	-	YES	YES	
576p	31.3	50.0	-	YES	YES	-	YES	YES	YES	-	-	YES	YES	
720p	37.5	50.0	-	YES	YES	-	YES	-	-	YES	YES	-	-	
720p	45.0	60.0	-	YES	YES	-	YES	-	-	YES	YES	-	-	
1080i	28.1	50.0	YES	YES	YES	YES	YES	-	-	YES	YES	-	-	
1080i	33.8	60.0	YES	YES	YES	YES	YES	-	-	YES	YES	-	-	
1080p	27.0	24.0	YES	YES	YES	YES	YES	-	-	YES	YES	-	-	
1080p	56.3	50.0	YES	YES	YES	YES	YES	-	-	YES	YES	-	-	
1080p	67.5	60.0	YES	YES	YES	YES	YES	-	-	YES	YES	-	-	

1.4 Input 3 (D-Sub) – PC Signals (Analog)

When reproducing the analog signals in the table below, set the Color Decoding option to RGB. If the picture does not appear properly, change the Signal Format setting to the desired resolution.

Resolution	HF (kHz)	VF (Hz)	DOT BY DOT	4:3	FULL (FULL1)	FULL 2	ZOOM	CINEMA	WIDE	WIDE 1	WIDE 2	FULL 14:9	CINEMA 14:9	Remarks
720 × 400	31.5	70.1	-	YES	YES	-	-	-	-	-	-	-	-	
640 × 480	31.5	59.9	-	YES	YES	-	-	-	-	-	-	-	-	
640 × 480	35.00	66.7	-	YES	YES	-	-	-	-	-	-	-	-	Apple Macintosh 13
640 × 480	37.9	72.8	-	YES	YES	-	-	-	-	-	-	-	-	
640 × 480	37.5	75.0	-	YES	YES	-	-	-	-	-	-	-	-	
640 × 480	43.3	85.0	-	YES	YES	-	-	-	-	-	-	-	-	
720 × 480	31.5	60.0	-	YES	YES	-	-	-	-	-	-	-	-	
720 × 480	27.2	71.9	-	YES	YES	-	-	-	-	-	-	-	-	
848 × 480	31.0	60.0	-	YES	YES	-	-	-	-	-	-	-	-	
800 × 600	35.2	56.3	-	YES	YES	-	-	-	-	-	-	-	-	
800 × 600	37.9	60.3	-	YES	YES	-	-	-	-	-	-	-	-	
800 × 600	48.1	72.2	-	YES	YES	-	-	-	-	-	-	-	-	
800 × 600	46.9	75.0	-	YES	YES	-	-	-	-	-	-	-	-	
800 × 600	53.7	85.1	-	YES	YES	-	-	-	-	-	-	-	-	
832 × 624	49.7	74.6	-	YES	YES	-	-	-	-	-	-	-	-	Apple Macintosh 16
1280 × 720	44.8	60.0	-	YES	YES	-	-	-	-	-	-	-	-	
1280 × 720	18.4	71.9	-	YES	YES	-	-	-	-	-	-	-	-	
1360 × 768	47.7	60.0	-	YES	YES	-	-	-	-	-	-	-	-	
1280 × 768	47.8	59.9	-	YES	YES	-	-	-	-	-	-	-	-	
1024 × 768	48.4	60.0	-	YES	YES	-	-	-	-	-	-	-	-	
1024 × 768	56.5	70.1	-	YES	YES	-	-	-	-	-	-	-	-	
1024 × 768	60.0	75.0	-	YES	YES	-	-	-	-	-	-	-	-	
1024 × 768	68.7	85.0	-	YES	YES	-	-	-	-	-	-	-	-	
1024 × 768	58.0	71.9	-	YES	YES	-	-	-	-	-	-	-	-	
1024 × 768	60.2	74.9	-	YES	YES	-	-	-	-	-	-	-	-	Apple Macintosh 19
1280 × 768	56.0	69.8	-	YES	YES	-	-	-	-	-	-	-	-	CVT
1280 × 768	57.8	72.1	-	YES	YES	-	-	-	-	-	-	-	-	
1280 × 800	49.7	60.0	-	YES	YES	-	-	-	-	-	-	-	-	
1152 × 864	53.7	60.0	-	YES	YES	-	-	-	-	-	-	-	-	
1152 × 864	67.5	75.0	-	YES	YES	-	-	-	-	-	-	-	-	
1152 × 870	68.7	75.1	-	YES	YES	-	-	-	-	-	-	-	-	Apple Macintosh 21
1280 × 960	60.0	60.0	-	YES	YES	-	-	-	-	-	-	-	-	
1280 × 960	85.9	85.0	-	YES	YES	-	-	-	-	-	-	-	-	
1280 × 1024	64.0	60.0	-	YES	YES	-	-	-	-	-	-	-	-	
1280 × 1024	80.0	75.0	-	YES	YES	-	-	-	-	-	-	-	-	
1440 × 900	56.0	60.0	-	YES	YES	-	-	-	-	-	-	-	-	Apple Macintosh 17
1400 × 1050	65.3	60.0	-	YES	YES	-	-	-	-	-	-	-	-	CVT
1400 × 1050	82.3	74.9	-	YES	YES	-	-	-	-	-	-	-	-	
1400 × 1050	93.9	85.0	-	YES	YES	-	-	-	-	-	-	-	-	
1680 × 1050	65.3	60.0	-	YES	YES	-	-	-	-	-	-	-	-	
1280 × 1024	91.1	85.0	-	YES	YES	-	-	-	-	-	-	-	-	
1920 × 1080	67.5	60.0	-	YES	YES	-	-	-	-	-	-	-	-	
1600 × 1200	75.0	60.0	-	YES	YES	-	-	-	-	-	-	-	-	
1600 × 1200	81.3	65.0	-	YES	YES	-	-	-	-	-	-	-	-	
1600 × 1200	87.5	70.0	-	YES	YES	-	-	-	-	-	-	-	-	
1600 × 1200	93.8	75.0	-	YES	YES	-	-	-	-	-	-	-	-	
1600 × 1200	106.3	85.0	-	YES	YES	-	-	-	-	-	-	-	-	
1920 × 1200	74.6	60.0	-	YES	YES	-	-	-	-	-	-	-	-	
1920 × 1200 RB	74.0	60.0	-	YES	YES	-	-	-	-	-	-	-	-	

1.5 Input 4 (DVI)/Input 5 through 8 (HDMI) – PC Signals (Digital)

When reproducing the digital signals in the table below, set the Signal Type option to PC. If the picture does not appear properly, change the Signal Format setting to the desired resolution.

Resolution	HF (kHz)	VF (Hz)	SCREEN MODE											Remarks
			DOT BY DOT	4:3	FULL (FULL1)	FULL 2	ZOOM	CINEMA	WIDE	WIDE 1	WIDE 2	FULL 14:9	CINEMA 14:9	
720 × 400	31.5	70.1	-	YES	YES	-	-	-	-	-	-	-	-	
640 × 480	31.5	59.9	-	YES	YES	-	-	-	-	-	-	-	-	
640 × 480	37.9	72.8	-	YES	YES	-	-	-	-	-	-	-	-	
640 × 480	37.5	75.0	-	YES	YES	-	-	-	-	-	-	-	-	
640 × 480	43.3	85.0	-	YES	YES	-	-	-	-	-	-	-	-	
848 × 480	31.0	60.0	-	YES	YES	-	-	-	-	-	-	-	-	
800 × 600	35.2	56.3	-	YES	YES	-	-	-	-	-	-	-	-	
800 × 600	37.9	60.3	-	YES	YES	-	-	-	-	-	-	-	-	
800 × 600	48.1	72.2	-	YES	YES	-	-	-	-	-	-	-	-	
800 × 600	46.9	75.0	-	YES	YES	-	-	-	-	-	-	-	-	
800 × 600	53.7	85.1	-	YES	YES	-	-	-	-	-	-	-	-	
1360 × 768	47.7	60.0	-	YES	YES	-	-	-	-	-	-	-	-	
1280 × 768	47.8	59.9	-	YES	YES	-	-	-	-	-	-	-	-	
1024 × 768	48.4	60.0	-	YES	YES	-	-	-	-	-	-	-	-	
1024 × 768	56.5	70.1	-	YES	YES	-	-	-	-	-	-	-	-	
1024 × 768	60.0	75.0	-	YES	YES	-	-	-	-	-	-	-	-	
1024 × 768	68.7	85.0	-	YES	YES	-	-	-	-	-	-	-	-	
1024 × 768	58.0	71.9	-	YES	YES	-	-	-	-	-	-	-	-	
1280 × 768	56.0	69.8	-	YES	YES	-	-	-	-	-	-	-	-	CVT
1280 × 768	57.8	72.1	-	YES	YES	-	-	-	-	-	-	-	-	
1280 × 800	49.7	60.0	-	YES	YES	-	-	-	-	-	-	-	-	
1152 × 864	53.7	60.0	-	YES	YES	-	-	-	-	-	-	-	-	
1152 × 864	67.5	75.0	-	YES	YES	-	-	-	-	-	-	-	-	
1280 × 960	60.0	60.0	-	YES	YES	-	-	-	-	-	-	-	-	
1280 × 960	85.9	85.0	-	YES	YES	-	-	-	-	-	-	-	-	
1280 × 1024	64.0	60.0	-	YES	YES	-	-	-	-	-	-	-	-	
1280 × 1024	80.0	75.0	-	YES	YES	-	-	-	-	-	-	-	-	
1440 × 900	56.0	60.0	-	YES	YES	-	-	-	-	-	-	-	-	Apple Macintosh 17
1400 × 1050	65.3	60.0	-	YES	YES	-	-	-	-	-	-	-	-	CVT
1400 × 1050	82.3	74.9	-	YES	YES	-	-	-	-	-	-	-	-	
1680 × 1050	65.3	60.0	-	YES	YES	-	-	-	-	-	-	-	-	
1280 × 1024	91.1	85.0	-	YES	YES	-	-	-	-	-	-	-	-	
1600 × 1200	75.0	60.0	-	YES	YES	-	-	-	-	-	-	-	-	
1920 × 1200RB	74.0	60.0	-	YES	YES	-	-	-	-	-	-	-	-	

Banner PIP supports 1360 × 768 and 1024 × 768 signals.

Memory Structure

Memory Structure

1. Home Menu

INPUT	SIGNAL	PICTURE	SCREEN	SOUND	POWER CONTROL	OPTION	INPUT SETUP	CONTROL SETUP
1	Video	Total 8 preset memory selections for each input 1-8, with option of 7 existing A/V selections and by type of signal (ex: 1080i, 1080p, etc.)	Last 8 signals *When 9th signal is adjusted, 1st signal memory automatically clear.	Sub volume: 1 memory at each INPUT. Other Function: 1 memory.	Energy Save/ No Signal off: 1 memory at each INPUT. Other Function: 1 memory.	1 memory. (Orbiter: 1 memory at each PC/Video signal.)	1 memory	1 memory
2	Component							
3	PC/Comp.							
4	Video/PC							
5	Video/PC							
6	Video/PC							
7	Video/PC							
8	Video/PC							

2. User Menu

Sleep Timer has 1 memory.
Other functions are the same as a HOME MENU.

3. Integrator Menu

INPUT	Signal	Picture Preset	Studio Mode Monotone Mode Drive Mode FRC Mode	Other Function
1	Video	1 memory at each A/V selection. (total 8 memories)	1 memory at each INPUT *Drive mode is common to with USER MEMORY	1 memory
2	Component			
3	PC/Comp.			
4	Video/PC			
5	Video/PC			
6	Video/PC			
7	Video/PC			
8	Video/PC			

*ISF mode has one designated memory for each (Day, Night, Auto) ISF setting and will supercede any pre-selected memory in above chart when selected.

LIP SYNC INFORMATION

Lip Sync Information

Approximate time elapsed before being displayed after a picture signal is input.
This data does not guarantee that it is the reference standard or exact time. The chart data below is only an estimate.

SIGNALS		LIPSYNC DLY (V) FRAMES = (V)
60HZ	NTSC	5
	480i	5
	480P	4
	720P	4
	1080i	5
	1080P	3
	Game mode*	3
50HZ	PAL	5
	576i	5
	576P	4
	720P	4
	1080i	5
	1080P	3
	Game mode*	3
PC		3

*Game mode: **A/V Selection = Game** and **Game Control Pref = On**

To enable the Game Control Preference:
1. Access **Pro Adjust** through the **Picture** menu.
2. Select **Other** from the **Pro Adjust** menu.
3. Select **Game Control Pref** from the submenu.
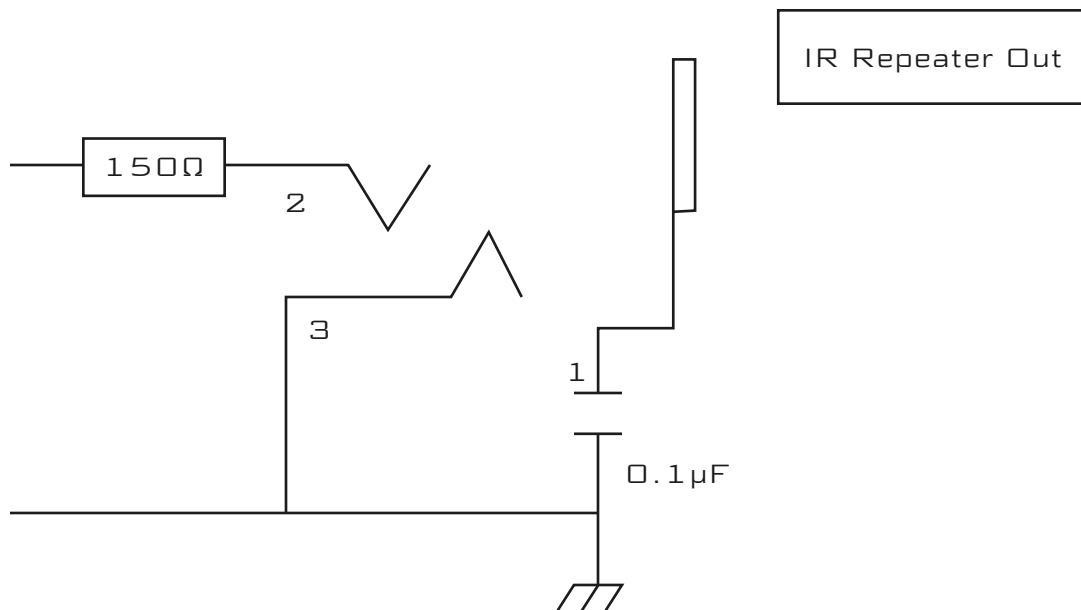4. Select **On**.

IR Repeater Specifications

IR Repeater Specifications

1. Specifications

PARAMETER	RATING (TYP.)
Output Voltage	4.5V (at OPEN)
Internal Resistance	150Ω
Carrier Frequency	38kHz

2. Terminals

TERMINAL NO.	FUNCTION
1	N.C.
2	Signal
3	GND

IR Repeater Out

150Ω

2

3

1

0.1μF

Banner PIP Specifications

Banner PIP Specifications

1. Banner PIP

It cancels Banner PIP for the time being when display HOME MENU / USER MENU / INTEGRATOR MENU.

Excluding following display
DISPLAY for Input, Input Name, Resolution, Deep Color, Screen Size, A/V Selection and Input Priority
Rest of the time by Sleep timer and Power control.
Message and Warning message
Volume
No multi-screen

2. Translucent Banner

Set translucency of Banner PIP screen.
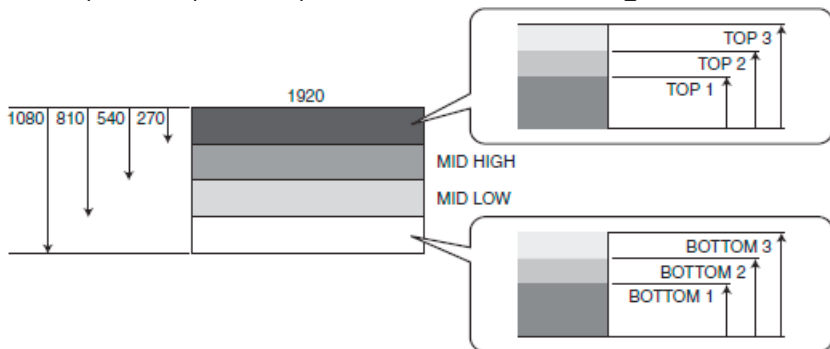Off: 0 Translucency
10% Translucency
⬇
80% Translucency

3. Banner PIP

Set position of Banner PIP on screen.
Off: Banner PIP off (Default setting)
Top1, Top2, Top3, Mid Low, Mid High, Bottom1, Bottom2, Bottom3

4. Banner Input

Set input of Banner PIP screen.
INPUT3 - INPUT8

MAIN SCREEN		SUBCREEN							
		INPUT 1 (VIDEO)	INPUT 2 (3RCA)	INPUT 3 (D-SUB)	INPUT 4 (DVI)	INPUT 5 (HDMI1)	INPUT 6 (HDMI2)	INPUT 7 (HDMI3)	INPUT 8 (HDMI4)
MAIN SCREEN	INPUT 1	-	-	OK	OK	OK	OK	OK	OK
	INPUT 2	-	-	NG	OK	OK	OK	OK	OK
	INPUT 3	-	-	NG	OK	OK	OK	OK	OK
	INPUT 4	-	-	OK	NG	NG	NG	NG	NG
	INPUT 5	-	-	OK	NG	NG	NG	NG	NG
	INPUT 6	-	-	OK	NG	NG	NG	NG	NG
	INPUT 7	-	-	OK	NG	NG	NG	NG	NG
	INPUT 8	-	-	OK	NG	NG	NG	NG	NG

Figure: Banner PIP combination
Corresponding signal
XGA 60
WXGA 60
In case of not combination, it is single screen of main input.

5. 2-screen display and BANNER PIP display

The combination of inputs for 2-screen displays are shown in the table below:

MAIN SCREEN		BANNER PIP SCREEN							
		INPUT 1 (VIDEO)	INPUT 2 (3RCA)	INPUT 3 (D-SUB)	INPUT 4 (DVI)	INPUT 5 (HDMI1)	INPUT 6 (HDMI2)	INPUT 7 (HDMI3)	INPUT 8 (HDMI4)
MAIN SCREEN	INPUT 1	X	0	0	0	0	0	0	0
	INPUT 2	0	X	X	0	0	0	0	0
	INPUT 3	0	X	X	0	0	0	0	0
	INPUT 4	0	0	0	X	X	X	X	X
	INPUT 5	0	0	0	X	X	X	X	X
	INPUT 6	0	0	0	X	X	X	X	X
	INPUT 7	0	0	0	X	X	X	X	X
	INPUT 8	0	0	0	X	X	X	X	X

Because there is only one digital receiver, displaying a combination of two digital signals simultaneously is not possible.
Signals input to the 3RCA and D-SUB connectors are both output via the same RGB SW output; therefore, they cannot be selected or viewed simultaneously.
If signals that are not allowed to be selected in combination are selected, the signal for the subscreen will become that of the INPUT connector, with the number increased by 1 from the specified number.

6. Combinations of inputs for BANNER PIP display

The combinations of inputs when the BANNER PIP function is enabled for the Integrator menu are shown in the table below:

MAIN SCREEN		SUBCREEN							
		INPUT 1 (VIDEO)	INPUT 2 (3RCA)	INPUT 3 (D-SUB)	INPUT 4 (DVI)	INPUT 5 (HDMI1)	INPUT 6 (HBMI2)	INPUT 7 (HDMI3)	INPUT 8 (HDMI 4)
MAIN SCREEN	INPUT 1	-	-	0	0	0	0	0	0
	INPUT 2	-	-	X	0	0	0	0	0
	INPUT 3	-	-	X	0	0	0	0	0
	INPUT 4	-	-	0	X	X	X	X	X
	INPUT 5	-	-	0	X	X	X	X	X
	INPUT 6	-	-	0	X	X	X	X	X
	INPUT 7	-	-	0	X	X	X	X	X
	INPUT 8	-	-	0	X	X	X	X	X

Some inputs cannot be combined in the BANNER PIP function for the same reasons as the dual-screen display function.

Note: The input for which the BANNER PIP function is available are only PC signals (1024x768@60Hz and 1360x768@60Hz) to INPUT connectors 3-8.

PC input is not provided for INPUT connectors 1 and 2; therefore, the BANNER PIP function is not available using those inputs.

The combination of inputs with X's in the above table display only the main screen.

While the BANNER PIP function is activated, the dual screen display function cannot be activated.

IP Control Setup
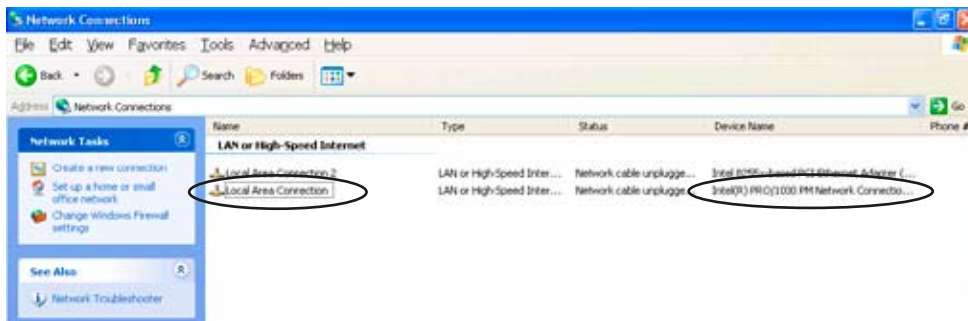
IP Control Setup – Personal Computer

1. Setting for TCP/IP
Property settings of the network on your personal computer.

> ### 1) Open control panel in start menu.

> ### 2) Open the "Network Connections."

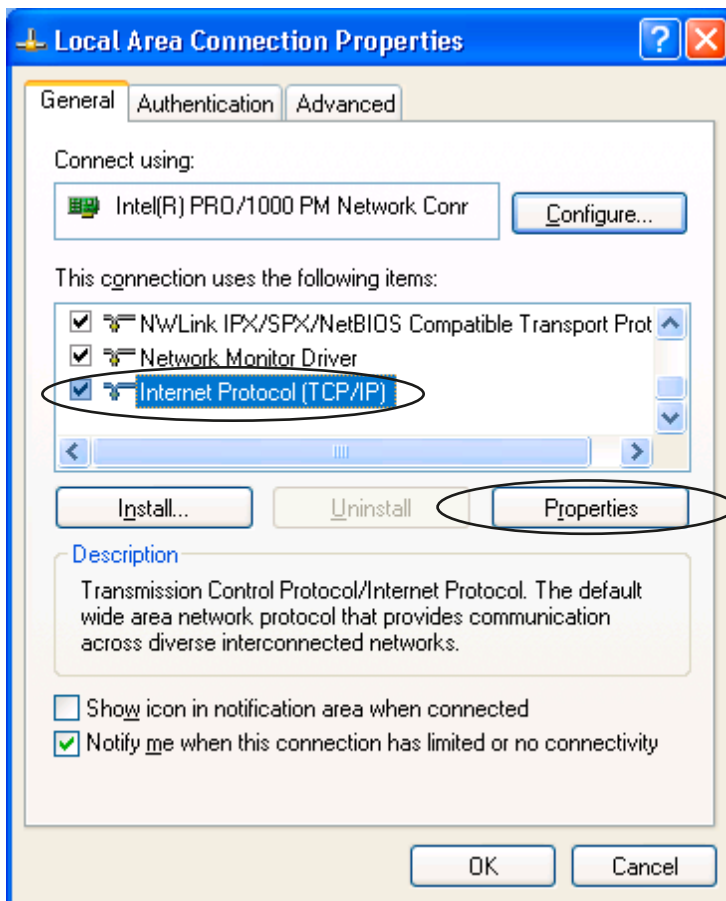Choose the Local Area Network (LAN), which includes PDP, and open.

Example for Windows XP below:
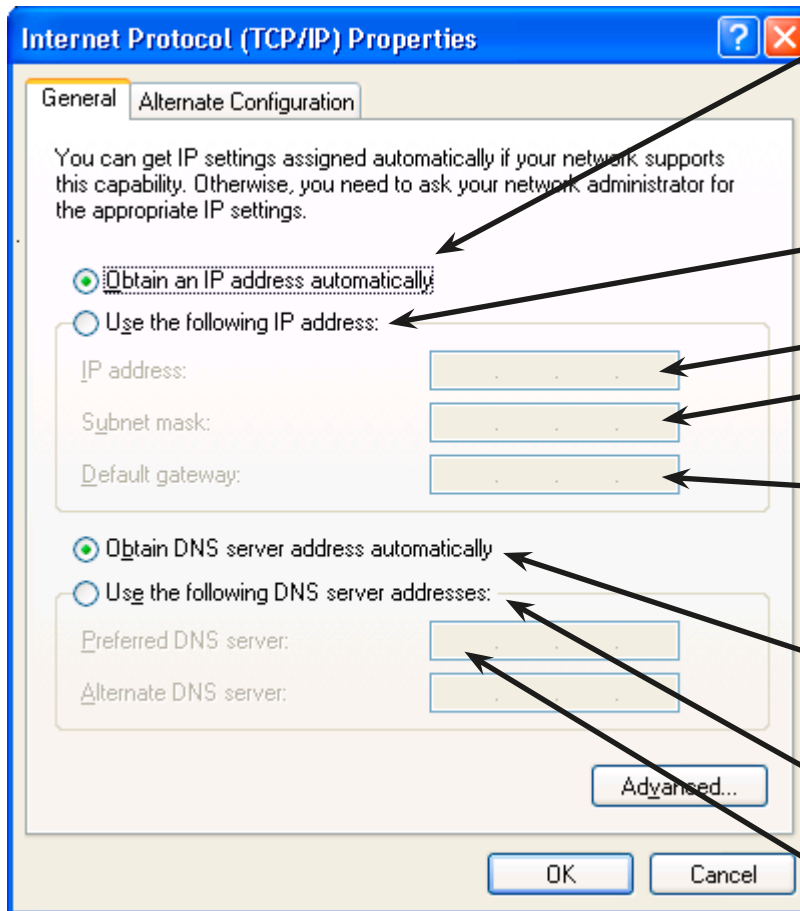

> ### 3) Open "Internet Protocol (TCP/IP) Properties."

Choose "Internet Protocol (TCP/IP)" in the "General" tab of "Local Area Connection Properties" and click "Properties" button.

Example for Windows XP below:

4) Set "Internet Protocol (TCP/IP) Properties"

Example for Windows XP below:

Select when the IP address is allocated by DHCP automatically.
IP address, subnet mask, and default gateway should be selected automatically.

Select when fixed IP address is allocated.

Input IP address of PDP.

Input subnet mask. This is used to decide what destination is chosen in the network.

Input the address of the equipment that transmits data to the external network. The IP address of the router should generally be used.

Select when DNS server address is chosen by DHCP automatically.

Select when fixed DNS server address is chosen.

Input DNS server address(es) when a DNS server exists. An empty column is acceptable when there is no DNS server available.

2. Web browser setting

Because the pop up function of a browser is used in the Web control function, this setting is necessary and permits the pop up screen to appear as necessary.

2.1. Internet Explorer

1) Open "Pop-up Blocker Settings."
"Pop-up Blocker Settings" is in the "Tools" menu of Internet Explorer.

2) Set up Pop-up Blocker.
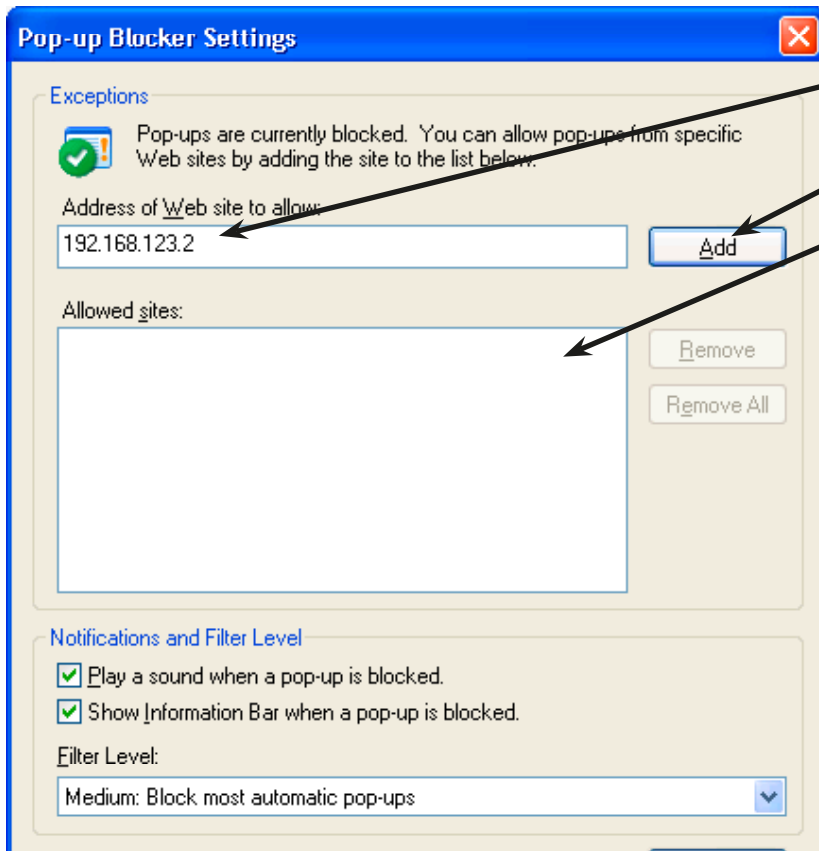
Input IP address of PDP

Click "Add" button

IP address of PDP is then added to allow access to the Internet.

*When using Internet Explorer, please go to Tools > Internet Options > General > Browsing History > Settings and make sure that "Every time I visit the webpage" is selected.

2.2. Firefox

1) Open "Options" in the "Tools" menu. Click "Content."

2) Click the "Exceptions" button, then the "Allowed Sites - Pop-ups" screen will appear.
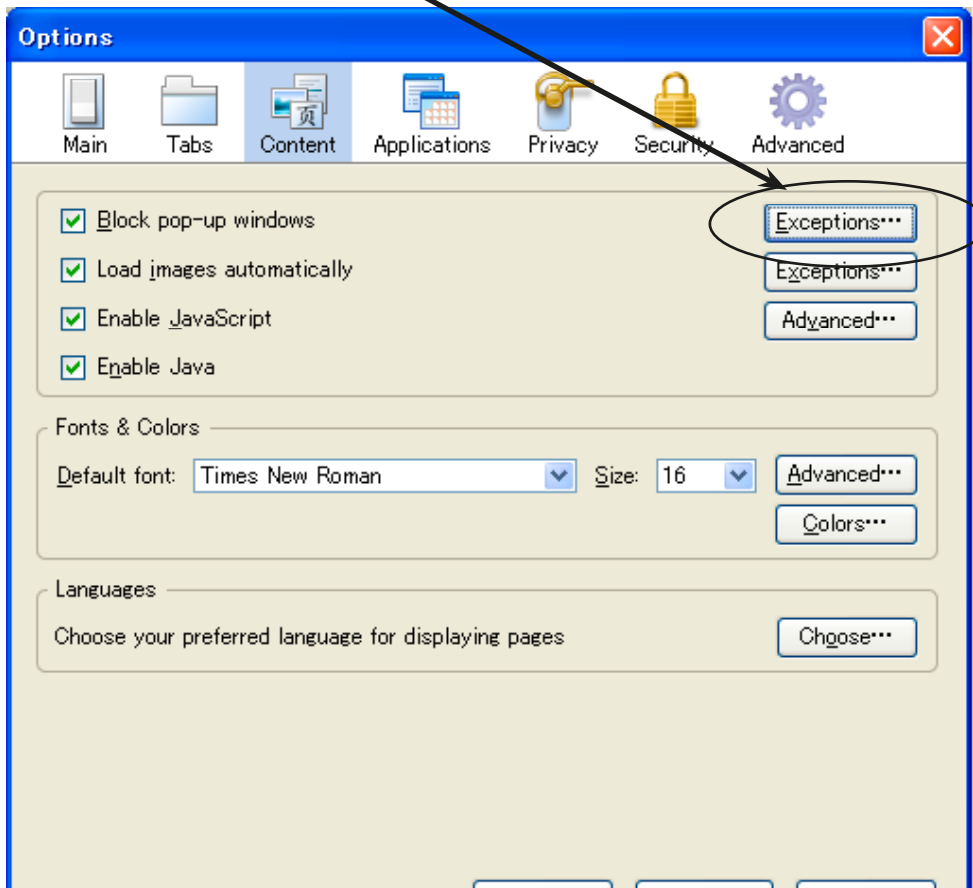
3) Add allowed sites
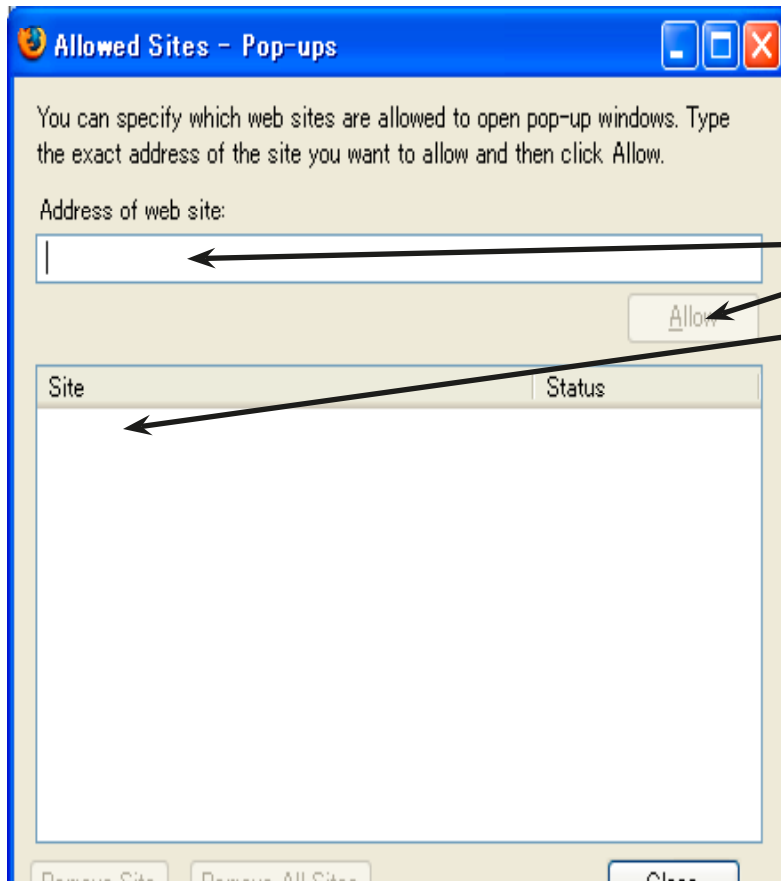
Input IP address of PDP
and click "Allow" button.
The IP address of PDP will be
added and will appear on allowed
Internet sites.

2.3. Safari on iPhone
Setup following parameters in settings of Safari.
Java script --> ON
Popup block --> OFF

2.4. Google Toolbar

When Google Toolbar is installed on your personal computer, please uncheck the pop up blocker for the Google Toolbar.
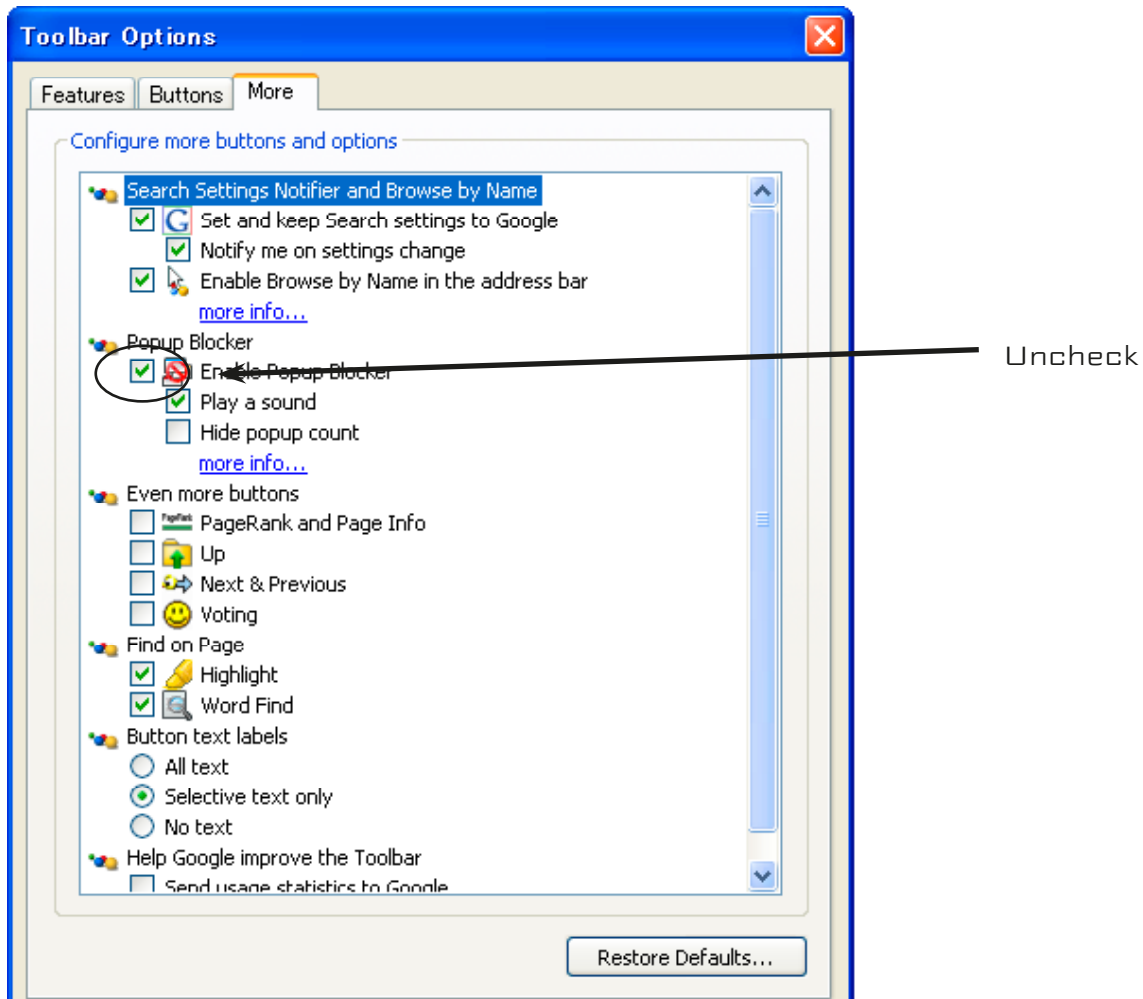
3. Web Screen Display
Browsers other than Internet Explorer will not display the WEB screen correctly.

3.1 Netscape
Button layout is not correct.
Background is not correct.
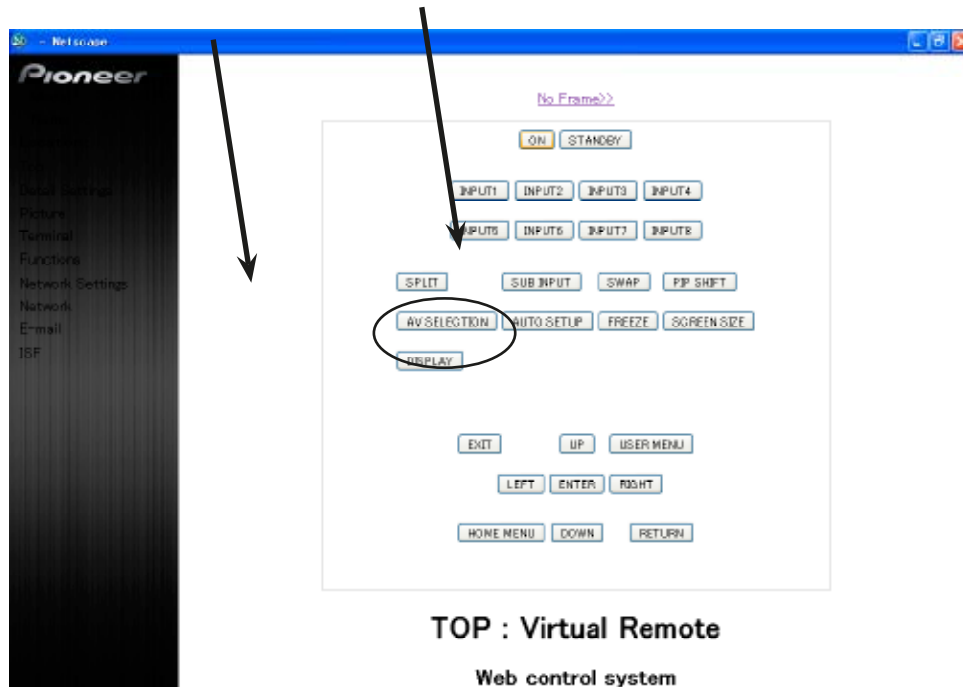
TOP : Virtual Remote

Web control system

The shape of the Power and Input buttons under the selection menu will be different from the other buttons.

3.2 Firefox 2.0
Button layout is not correct.
Background is not correct.
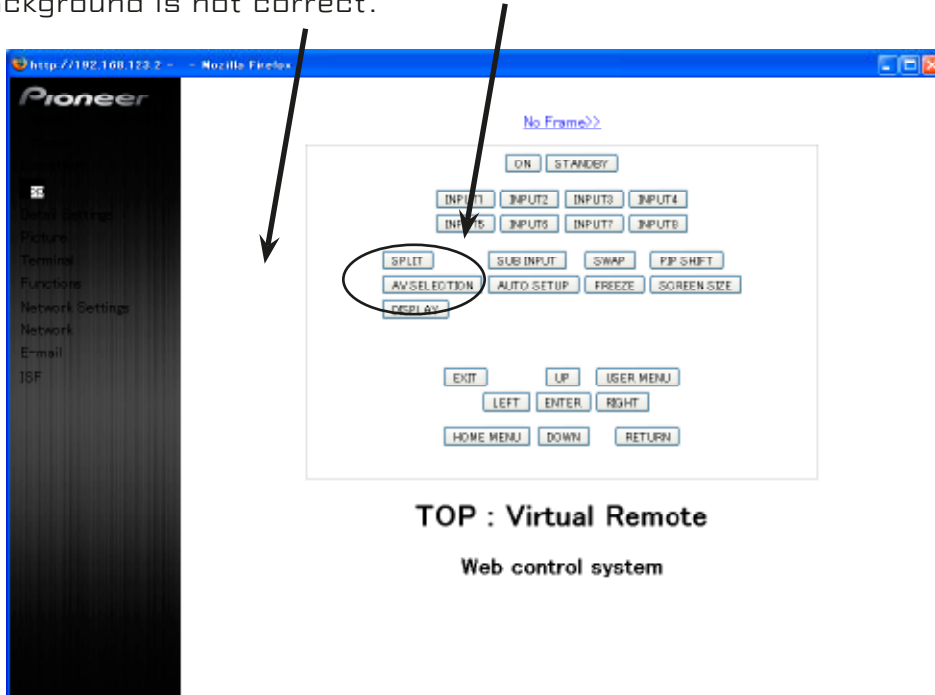
The shape of the Power and Input buttons under the selection menu will be different from the other buttons.
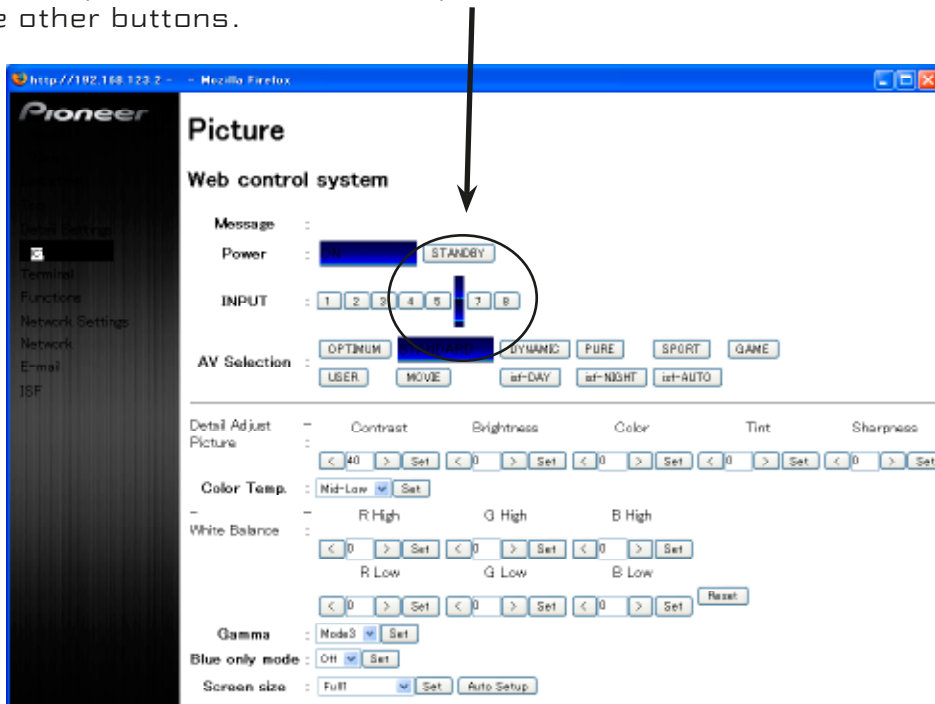
The password screen will remain open after password is input.
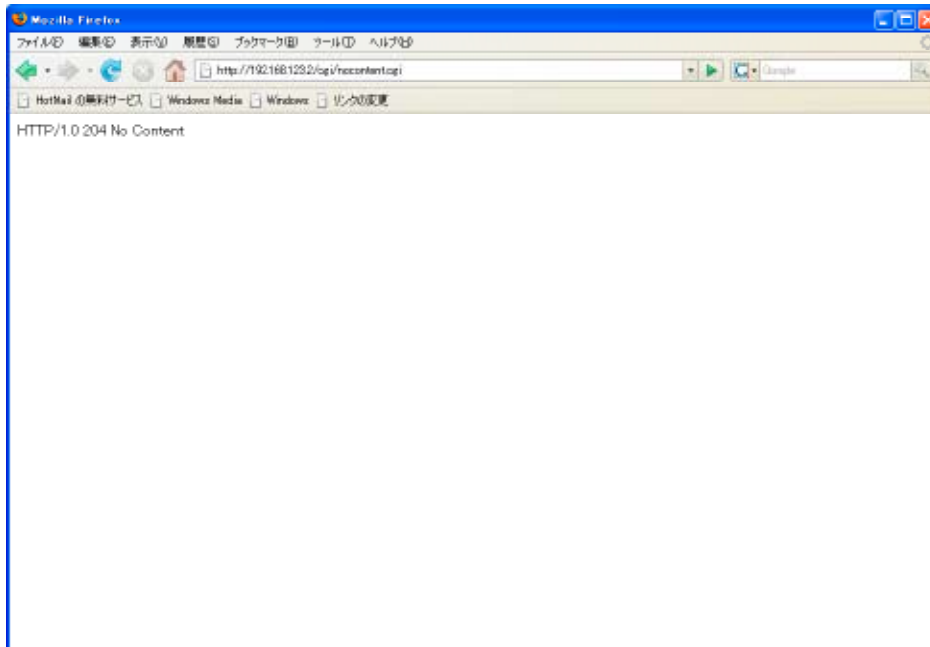
3.3 Safari

The shape of the Power and Input buttons under this section is different from the other buttons.
The numeric value is not displayed in the text box that displays the individual adjustment and the character string.
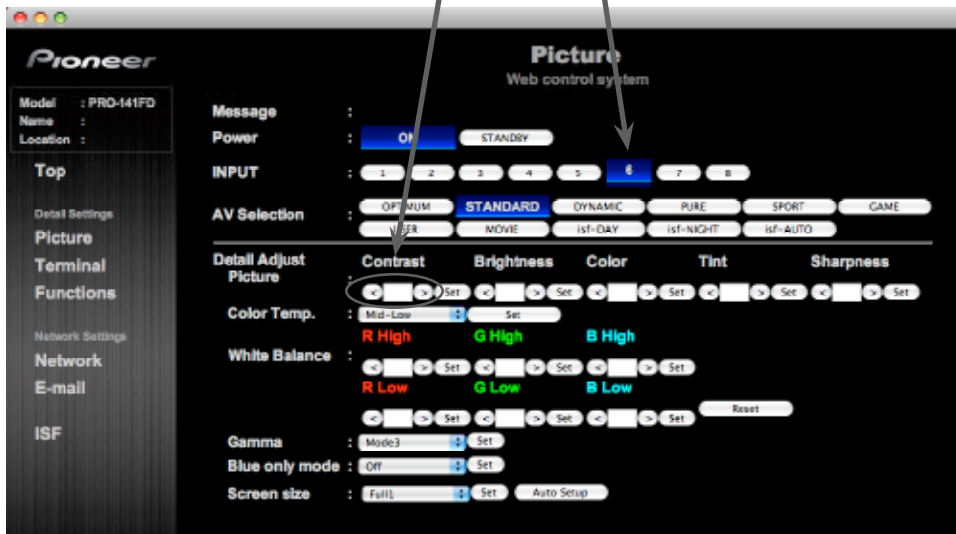
4. IP CONTROL SETTINGS

Control Setup		
IP Control Setting		
IP Control	:	Disable
DHCP	:	Off
IP Address		
Subnet Mask		
Default Gateway		
MAC Address		
LED	:	On

4.1 DHCP

When DHCP is turned on, the PDP will display the IP address, subnet mask, and default gateway from the DHCP server automatically.

Set up of the DHCP server in the network is necessary.

When the DHCP server is not set up, turn off DHCP.

4.2 IP address

Setup of the Internet Protocol address will differ according to the network environment.

192.168.0.1-254 or 192.168.1.1-254 is often used as a standard IP address in home network router.

The Internet Protocol address is usually decided by setting the network address of the router.

Example: When network address is "192.168.1.0," you can use any range of numeric values from "192.168.1.1" to "192.168.1.254" as the default IP address.

Note: Do not use the same IP address for different equipment located on the same network.

4.3 Subnet mask

Subnet mask is a setting used to determine whether the equipment of the destination is inside or outside of the network.

Example: When the network address is "192.168.1.0," and subnet mask is "255.255.255.0":

  data that has the destination address from the range of "192.168.1.1" to "192.168.1.254" is transferred directly;

  data that has the destination address from the range of "192.168.1.1" to "192.168.1.254" is transferred to the external network.

4.4 Default gateway

The default gateway is the address of the equipment that transmits data to an external network.

The IP address of the router should generally be used.

Control Commands

Control Commands

1. IP Control

1.1 IP Setting

ITEM	SETTING	REMARKS
LAN	10base-T/100base-TX	
TCP/UDP	TCP/UDP	
DHCP	ON (default)	Confirmable IP address on GUI menu.
IP Address	192.168.123.2 (When DHCP setting is off)	Selectable on GUI menu
Subnet Mask	255.255.255.0 (default)	Selectable on GUI menu
Default Gateway	192.168.1.254 (default)	Selectable on GUI menu
Port	4201/TCP (default)	Selectable on Web server.
	4202/UDP (default)	Selectable on Web server.
MAC address	-	Confirmable MAC address on GUI menu.

1.2 Protocol
From the PC to the display

Sending one command at a time:
ID   COMMAND (3byte to 6byte)

Sending direct numerical commands:
ID   COMMAND (3byte)   ARGUMENT (3 Byte)
ID, COMMAND, ARGUMENT are transmitted as ASCII characters.

From the display to a PC

(1) Echo back (Normal response)

Command received and returned but the ID is not returned.
COMMAND (3byte)
Received command is a numerical direct effect command and numerical data is returned:
COMMAND (3byte)   ARGUMENT (3 Byte)

(2) Error (Abnormal response)

Received command is a non-corresponding command, 'ERR' is returned:
ERR (3byte)

Received commands cannot be processed (when PON is received, when the power is already ON, etc.), 'XXX' is returned:
XXX (3byte)

1.3 Debug mode
Send "OSR" commands via IP or RS-232c; command line that the PDP receives is displayed on screen.

1.4 AMX Beacon for IP
The IP beacon can be set in the Integrator menu.

How to enter Integrator Mode
1) Hold down the "DISPLAY" button for 3 seconds
2) Push HOME MENU button

The following "INTEGRATOR MENU" will be displayed.

```
            INTEGRATOR MENU
  Picture
    Picture Preset
    Studio Mode          :    Off
    Monotone Mode        :    Off
    Drive Mode           :    1
    FRC Mode             :    Default
  Option
    Fan Control          :    Auto
    OSD Display          :    On
    Power On Mode
      Input              :    Last
      Power On Mode (Input)
    Mirror Mode          :    Off
    Banner PIP
    Translucent          :    Off
    Banner PIP           :    Off
    IP Control Look      :    Off
    Network ID Beacon    :    Off
  Factory Default

  ☒ Exit
```
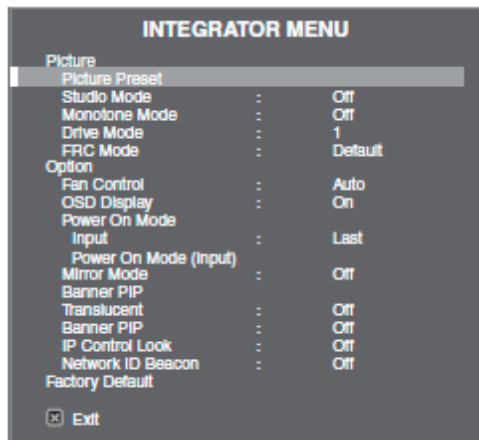
Select Network ID beacon.

Network ID Beacon setting
Parameter Description
ON   Applies AMX Beacon for IP
OFF No effect
*After the connection is established, please set "Network ID beacon" to "OFF"
position.

Note:
The beacon transmit cycle is approximately 37 seconds.
The beacon message will transmit until the "Network ID beacon" is set to "OFF."

2. RS-232C Communication Protocol

Data format

ITEM	SETTING	REMARKS
COMMUNICATION MODE	Non synchronizing start-stop transmission	
START BIT	1 bit	
DATA BIT	8 bit LSB First	
PARITY	-	
STOP BIT	1 bit	
BAUD RATE	1200/2400/4800/9600/19200/38400	In Integrator menu.

2.1 Protocol
From the PC to the display
(1) Sending one command at a time:
STX (02   ID   COMMAND (3byte to ETX (03

(2) Sending numerical direct commands:
STX (02   ID   COMMAND ARGUMENT (3 Byte) ETX (03
ID, COMMAND, ARGUMENT are transmitted as ASCII characters.

From the display to a PC

(1) Echo back (Normal response)
Command received and returned but the ID is not returned.
STX (02   COMMAND (3byte)   ETX (03

Received command is a direct effect numerical command and numerical data is returned:
STX (02   COMMAND (3byte)   ARGUMENT (3 Byte) ETX (03

(2) Error (Abnormal response)
Received command is a non-corresponding command, 'ERR' is returned:
STX (02   ERR (3byte)   ETX (03

Received command cannot be processed (when PON is received, when the power is already ON, etc.), 'XXX' is returned:
STX (02   XXX (3byte)   ETX (03

2.2 Debug mode
Send "OSR" commands via IP or RS-232c, then the command line that the PDP receives is displayed on screen.

3. Command List

COMMAND			NUMBER DIRECT			STANDBY EFFECTIVENESS	LAST MEMORY	MODEL	REMARKS
CMD	DATA	FUNCTION	MINIMUM	MAXIMUM	DEFAULT			ELITE	
ACL	S00	ACL adjustment OFF	-	-	-	-	•	•	
ACL	S01	ACL adjustment ON	-	-	-	-	•	•	
ACL		Notice the current ACL adjustment mode	-	-	-	-		•	
AIN	S11	Outputs the Audio Input 1 sound when input 1 is selected	-	-	-	-	•		
AIN	S12	Outputs the Audio Input 1 sound when input 2 is selected	-	-	-	-	•		
AIN	S13	Outputs the Audio Input 1 sound when input 3 is selected	-	-	-	-	•		
AIN	S14	Outputs the Audio Input 1 sound when input 4 is selected	-	-	-	-	•		
AIN	S15	Outputs the Audio Input 1 sound when input 5 is selected	-	-	-	-	•		
AIN	S16	Outputs the Audio Input 1 sound when input 6 is selected	-	-	-	-	•		
AIN	S21	Outputs the Audio Input 2 sound when input 1 is selected	-	-	-	-	•		
AIN	S22	Outputs the Audio Input 2 sound when input 2 is selected	-	-	-	-	•		
AIN	S23	Outputs the Audio Input 2 sound when input 3 is selected	-	-	-	-	•		
AIN	S24	Outputs the Audio Input 2 sound when input 4 is selected	-	-	-	-	•		
AIN	S25	Outputs the Audio Input 2 sound when input 5 is selected	-	-	-	-	•		
AIN	S26	Outputs the Audio Input 2 sound when input 6 is selected	-	-	-	-	•		
AMT	S00	Sound Mute: OFF	-	-	-	-	-	•	
AMT	S01	Sound Mute: ON	-	-	-	-	-	•	
AST		Executes Sound-setup	-	-	-	-	•	•	
AUS	S01	Sound Source: Main	-	-	-	-	•	•	
AUS	S02	Sound Source: Sub	-	-	-	-	•	•	
AVS		Notice the current A/V SELECTION mode	-	-	-	-		•	
AVS	S01	A/V SELECTION: STANDARD	-	-	-	-	•	•	
AVS	S02	A/V SELECTION: DYNAMIC	-	-	-	-	•	•	
AVS	S03	A/V SELECTION: MOVIE	-	-	-	-	•	•	
AVS	S04	A/V SELECTION: GAME	-	-	-	-	•	•	
AVS	S05	A/V SELECTION: SPORT	-	-	-	-	•	•	
AVS	S06	A/V SELECTION: PURE	-	-	-	-	•	•	
AVS	S07	A/V SELECTION: USER	-	-	-	-	•	•	
AVS	S08	A/V SELECTION: ISF-DAY	-	-	-	-	•	•	
AVS	S09	A/V SELECTION: ISF-NIGHT	-	-	-	-	•	•	
AVS	S10	A/V SELECTION: OPTIMUM	-	-	-	-	•	•	
AVS	S11	A/V SELECTION: ISF-AUTO	-	-	-	-	•	•	
BAL	***	Adjusts the Sound Balance	000	060	030	-	•		
BAL		Notice the current Sound Balance number	-	-	-	-			
BAS	***	Adjusts the Sound Bass	000	015	008	-	•		
BAS		Notice the current Sound Bass number	-	-	-	-			
BHI	***	Adjusts the B HIGH of white balance.	000	120	060	-	•	•	
BHI		Notice the current B HIGH number of white balance	-	-	-	-	•	•	
BLK	S00	Black Level: OFF	-	-	-	-	•	•	
BLK	S01	Black Level: ON	-	-	-	-	•	•	
BLK		Notice the current Black Level mode	-	-	-	-	•	•	
BLW	***	Adjusts the B.LOW of the white balance	000	120	060	-	•	•	
BLW		Notice the current B Low number of white balance	-	-	-	-	•	•	
BNR	S00	Block NR: OFF	-	-	-	-	•	•	
BNR	S01	Block NR: ON	-	-	-	-	•	•	

COMMAND			NUMBER DIRECT			STANDBY EFFECTIVENESS	LAST MEMORY	MODEL	REMARKS
CMD	DATA	FUNCTION	MINIMUM	MAXIMUM	DEFAULT			ELITE	
BNR		Notice the current Block NR mode	-	-	-	-	•	•	
BOM	S00	Blue Only: OFF	-	-	-	-	•	•	
BOM	S01	Blue Only: ON	-	-	-	-	•	•	
BPI	S03	BANNER PinP input: INPUT3	-	-	-	-	•	•	
BPI	S04	BANNER PinP input: INPUT4	-	-	-	-	•	•	
BPI	S05	BANNER PinP input: INPUT5	-	-	-	-	•	•	
BPI	S06	BANNER PinP input: INPUT6	-	-	-	-	•	•	
BPI	S07	BANNER PinP input: INPUT7	-	-	-	-	•	•	
BPI	S08	BANNER PinP input: INPUT8	-	-	-	-	•	•	
BPP	S00	BANNER PinP input: OFF	-	-	-	-	•	•	
BPP	S01	BANNER PinP setting: TOP-3	-	-	-	-	•	•	
BPP	S02	BANNER PinP setting: MID-HIGH	-	-	-	-	•	•	
BPP	S03	BANNER PinP setting: MID-LOW	-	-	-	-	•	•	
BPP	S04	BANNER PinP setting: BOTTOM-3	-	-	-	-	•	•	
BPP	S05	BANNER PinP setting: TOP-2	-	-	-	-	•	•	
BPP	S06	BANNER PinP setting: BOTTOM-2	-	-	-	-	•	•	
BPP	S07	BANNER PinP setting: TOP-1	-	-	-	-	•	•	
BPP	S08	BANNER PinP setting: BOTTOM-1	-	-	-	-	•	•	
BRA	S01	RS-232C baud rate: 1200 bps	-	-	-	-	•	•	
BRA	S02	RS-232C baud rate: 2400 bps	-	-	-	-	•	•	
BRA	S03	RS-232C baud rate: 4800 bps	-	-	-	-	•	•	
BRA	S04	RS-232C baud rate: 9600 bps	-	-	-	-	•	•	
BRA	S05	RS-232C baud rate: 19200 bps	-	-	-	-	•	•	
BRA	S06	RS-232C baud rate: 38400 bps	-	-	-	-	•	•	
BRA		Notice the current RS-232C baud rate	-	-	-	-	-	•	
BRT	***	Adjusts the Brightness	000	120	060	-	•	•	
BRT		Notice the current Brightness number				-	•	•	
CDE	S21	Color Decoding of INPUT2: Component1	-	-	-	-	•	•	
CDE	S22	Color Decoding of INPUT2: Component2	-	-	-	-	•	•	
CDE	S31	Color Decoding of INPUT3: Component1	-	-	-	-	•	•	
CDE	S32	Color Decoding of INPUT3: Component2	-	-	-	-	•	•	
CDE	S33	Color Decoding of INPUT3: RGB	-	-	-	-	•	•	
CFR	***	Adjusts the CLOCK (PLL frequency)	000	120	240	-	•	•	
CGB	***	Adjusts the Color Detail Blue	000	060	030	-	•	•	
CGC	***	Adjusts the Color Detail Cyan	000	060	030	-	•	•	
CGG	***	Adjusts the Color Detail Green	000	060	030	-	•	•	
CGM	***	Adjusts the Color Detail Magenta	000	060	030	-	•	•	
CGR	***	Adjusts the Color Detail Red	000	060	030	-	•	•	
CGY	***	Adjusts the Color Detail Yellow	000	060	030	-	•	•	
CLM	S00	STUDIO MODE: OFF (Sets the COLOR MODE to NORMAL.)	-	-	-	-	•	•	
CLM	S01	STUDIO MODE: ON (Sets the COLOR MODE to STUDIO.)	-	-	-	-	•	•	
CLS	S01	Color System: NTSC	-	-	-	-	•	•	
CLS	S02	Color System: PAL	-	-	-	-	•	•	
CLS	S03	Color System: AUTO	-	-	-	-	•	•	
CLS	S04	Sets color system to SECAM	-	-	-	-	•	•	
CLS	S05	Color System: 4.43NTSC	-	-	-	-	•	•	
CLS	S06	Color System: PAL M	-	-	-	-	•	•	

| COMMAND | | | NUMBER DIRECT | | | STANDBY EFFECTIVENESS | LAST MEMORY | MODEL | |
CMD	DATA	FUNCTION	MINIMUM	MAXIMUM	DEFAULT			ELITE	REMARKS
CLS	S07	Color System: PAL N	-	-	-	-	●	●	
CLS		Notice the current Color System mode	-	-	-	-	-	●	
CNT	***	Adjusts the Contrast	000	060	040	-	●	●	
COL	***	Adjusts the Color	000	060	120	-	●	●	
CPH	***	Adjusts the PHASE (PLL phase)	000	031	016	-	●	●	
CSM	S01	Color Space: 1 (standard)	-	-	-	-	●	●	
CSM	S02	Color Space: 2 (EBU)	-	-	-	-	●	●	
CSM		Norice the current Color Space mode	-	-	-	-	●	●	
CTI	S00	Color Temp CTI: OFF	-	-	-	-	●	●	
CTI	S01	Color Temp CTI: ON	-	-	-	-	●	●	
CTI		Norice the current Color Temp CTI mode	-	-	-	-	●	●	
CTP	S01	Color Temperature: LOW	-	-	-	-	●	●	
CTP	S02	Color Temperature: MID LOW	-	-	-	-	●	●	
CTP	S03	Color Temperature: MIDDLE	-	-	-	-	●	●	
CTP	S04	Color Temperature: MID HIGH	-	-	-	-	●	●	
CTP	S05	Color Temperature: HIGH	-	-	-	-	●	●	
CTP	S06	Color Temperature: MANUAL	-	-	-	-	●	●	
CTP		Notice the current Color Temperature mode	-	-	-	-	-	●	
DIT	S01	Displays DISPLAY CALL 1	-	-	-	-	-	●	
DIT	S02	Displays DISPLAY CALL 2	-	-	-	-	-	●	
DNR	S01	Digital NR: LOW	-	-	-	-	●	●	Refer to DIP sheet
DNR	S02	Digital NR: MIDDLE	-	-	-	-	●	●	
DNR	S03	Digital NR: HIGH	-	-	-	-	●	●	
DNR		Notice the current Digital NR mode	-	-	-	-	-	●	
DOF		Disappear the current OSD display	-	-	-	-	-	●	
DRP	S00	DRE Picture: OFF	-	-	-	-	●	●	
DRP	S01	DRE Picture: LOW	-	-	-	-	●	●	
DRP	S02	DRE Picture: MID	-	-	-	-	●	●	
DRP	S03	DRE Picture: HIGH	-	-	-	-	●	●	
DRP		Returns the current DRE Picture mode	-	-	-	-	-	●	
DW0		Subtracts 10 from the adjustment value	-	-	-	-	●	●	
DWF		Minimizes the adjustment value	-	-	-	-	●	●	
DWn		Subtracts "n" from the adjustment value (n=1 to 9)	-	-	-	-	●	●	
DYC	S00	3DYC: OFF	-	-	-	-	●	●	
DYC	S01	3DYC: LOW	-	-	-	-	●	●	
DYC	S02	3DYC: MID	-	-	-	-	●	●	
DYC	S03	3DYC: HIGH	-	-	-	-	●	●	
DYC		Notice the current 3DYC mode	-	-	-	-	-	●	
ENH	S01	Horizontal Enhance: Mode1	-	-	-	-	●	●	
ENH	S02	Horizontal Enhance: Mode2	-	-	-	-	●	●	
ENH	S03	Horizontal Enhance: Mode3	-	-	-	-	●	●	
ENH		Notice the current Horizontal Enhance mode	-	-	-	-	-	●	
ESV	S00	ENERGY SAVE: STANDARD (STANDARD1)	-	-	-	-	●	●	
ESV	S01	ENERGY SAVE: Save Energy	-	-	-	-	●	●	
ESV	S02	ENERGY SAVE: Fixed Brightness	-	-	-	-	●	●	
ESV	S05	ENERGY SAVE: Picture OFF	-	-	-	-	●	●	
ESV		Notice the current ENERGY SAVE mode	-	-	-	-	-	●	

COMMAND			NUMBER DIRECT			STANDBY EFFECTIVENESS	LAST MEMORY	MODEL	REMARKS
CMD	DATA	FUNCTION	MINIMUM	MAXIMUM	DEFAULT			ELITE	
FCL		Notice the current Functional Lock mode	-	-	-	-	-	•	
FCM		Maximizes fan rotation control	-	-	-	-	•	•	
FDT		Executes FUNCTION DEFAULT	-	-	-	-	-	•	
FFM	S01	Drive Mode: 1 (Standard)	-	-	-	-	•	•	
FFM	S02	Drive Mode: 2 (Cinema)	-	-	-	-	•	•	
FFM	S03	Drive Mode: 3 (Text)	-	-	-	-	•	•	
FFM		Notice the current Drive Mode number	-	-	-	-	-	•	
FNR	S00	Field NR: OFF	-	-	-	-	•	•	
FNR	S01	Field NR: LOW	-	-	-	-	•	•	
FNR	S02	Field NR: MID	-	-	-	-	•	•	
FNR	S03	Field NR: HIGH	-	-	-	-	•	•	
FNR		Notice the current Field NR mode	-	-	-	-	-	•	
FRC	S00	FRC: OFF	-	-	-	-	•	•	
FRC	S01	FRC: ON	-	-	-	-	•	•	
FRC		Notice the current FRC mode	-	-	-	-	-	•	
GCP	S00	Game Control Pref: OFF				-	•	•	
GCP	S01	Game Control Pref: ON				-	•	•	
GHI	***	Adjusts the G.HIGH of white balance	000	120	060	-	•	•	
GLW	***	Adjusts the G.LOW of white balance	000	120	060	-	•	•	
GMM	S01	Gradation GAMMA: 1	-	-	-	-	•	•	
GMM	S02	Gradation GAMMA: 2	-	-	-	-	•	•	
GMM	S03	Gradation GAMMA: 3	-	-	-	-	•	•	
GMM	S04	Gradation GAMMA: 4	-	-	-	-	•	•	
GMM	S05	Gradation GAMMA: 5	-	-	-	-	•	•	
GMM		Notice the current Gradation GAMMA number	-	-	-	-	-	•	
HAV	S00	HDMI-HD A/V converter is disabled	-	-	-	-	•	•	
HAV	S01	HDMI-HD A/V converter is enabled	-	-	-	-	•	•	
HCS	S00	Kuro Link is not set	-	-	-	-	•	•	
HCS	S05	Kuro Link Setting: INPUT5	-	-	-	-	•	•	
HCS	S06	Kuro Link Setting: INPUT6	-	-	-	-	•	•	
HCS	S07	Kuro Link Setting: INPUT7	-	-	-	-	•	•	
HCS	S08	Kuro Link Setting: INPUT8	-	-	-	-	•	•	
HDT	S41	Signal type of INPUT4: Video	-	-	-	-	•	•	
HDT	S42	Signal type of INPUT4: PC	-	-	-	-	•	•	
HDT	S51	Signal type of INPUT5: Video	-	-	-	-	•	•	
HDT	S52	Signal type of INPUT5: PC	-	-	-	-	•	•	
HDT	S61	Signal type of INPUT6: Video	-	-	-	-	•	•	
HDT	S62	Signal type of INPUT6: PC	-	-	-	-	•	•	
HDT	S71	Signal type of INPUT7: Video	-	-	-	-	•	•	
HDT	S72	Signal type of INPUT7: PC	-	-	-	-	•	•	
HDT	S81	Signal type of INPUT8: Video	-	-	-	-	•	•	
HDT	S82	Signal type of INPUT8: PC	-	-	-	-	•	•	
HDV	S40	Video (DVI,HDMI) of INPUT4: Auto	-	-	-	-	•	•	
HDV	S41	Video (DVI,HDMI) of INPUT4: Control 1	-	-	-	-	•	•	
HDV	S42	Video (DVI,HDMI) of INPUT4: Control 2	-	-	-	-	•	•	
HDV	S43	Video (DVI,HDMI) of INPUT4: Control 3	-	-	-	-	•	•	
HDV	S44	Video (DVI,HDMI) of INPUT4: Control 4	-	-	-	-	•	•	

COMMAND			NUMBER DIRECT			STANDBY EFFECTIVENESS	LAST MEMORY	MODEL	REMARKS
CMD	DATA	FUNCTION	MINIMUM	MAXIMUM	DEFAULT			ELITE	
HDV	S50	Video (DVI,HDMI) of INPUT5: Auto	-	-	-	-	●	●	
HDV	S51	Video (DVI,HDMI) of INPUT5: Control 1	-	-	-	-	●	●	
HDV	S52	Video (DVI,HDMI) of INPUT5: Control 2	-	-	-	-	●	●	
HDV	S53	Video (DVI,HDMI) of INPUT5: Control 3	-	-	-	-	●	●	
HDV	S54	Video (DVI,HDMI) of INPUT5: Control 4	-	-	-	-	●	●	
HDV	S60	Video (DVI,HDMI) of INPUT6: Auto	-	-	-	-	●	●	
HDV	S61	Video (DVI,HDMI) of INPUT6: Control 1	-	-	-	-	●	●	
HDV	S62	Video (DVI,HDMI) of INPUT6: Control 2	-	-	-	-	●	●	
HDV	S63	Video (DVI,HDMI) of INPUT6: Control 3	-	-	-	-	●	●	
HDV	S64	Video (DVI,HDMI) of INPUT6: Control 4	-	-	-	-	●	●	
HDV	S70	Video (DVI,HDMI) of INPUT7: Auto	-	-	-	-	●	●	
HDV	S71	Video (DVI,HDMI) of INPUT7: Control 1	-	-	-	-	●	●	
HDV	S72	Video (DVI,HDMI) of INPUT7: Control 2	-	-	-	-	●	●	
HDV	S73	Video (DVI,HDMI) of INPUT7: Control 3	-	-	-	-	●	●	
HDV	S74	Video (DVI,HDMI) of INPUT7: Control 4	-	-	-	-	●	●	
HDV	S80	Video (DVI,HDMI) of INPUT8: Auto	-	-	-	-	●	●	
HDV	S81	Video (DVI,HDMI) of INPUT8: Control 1	-	-	-	-	●	●	
HDV	S82	Video (DVI,HDMI) of INPUT8: Control 2	-	-	-	-	●	●	
HDV	S83	Video (DVI,HDMI) of INPUT8: Control 3	-	-	-	-	●	●	
HDV	S84	Video (DVI,HDMI) of INPUT8: Control 4	-	-	-	-	●	●	
HPS	***	Adjusts the Horizontal Position	000	240 (PC) 020 (Video)	120 (PC) 010 (Video)	-	●	●	
HSS	S00	HDMI-Hold Sound: OFF	-	-	-	-	●	●	
HSS	S01	HDMI-Hold Sound: ON	-	-	-	-	●	●	
IDC		Clears the ID Number	-	-	-	-	●	●	
IDS		Sets the ID Number	-	-	-	-	●	●	
INN	S10	Change "INPUT1" to "Video" on input display	-	-	-	-	●	●	
INN	S11	Change "INPUT1" to "Blu-ray" on input display	-	-	-	-	●	●	
INN	S12	Change "INPUT1" to "DVD" on input display	-	-	-	-	●	●	
INN	S13	Change "INPUT1" to "DVR" on input display	-	-	-	-	●	●	
INN	S14	Change "INPUT1" to "VCR" on input display	-	-	-	-	●	●	
INN	S15	Change "INPUT1" to "Cable" on input display	-	-	-	-	●	●	
INN	S16	Change "INPUT1" to "Satellite" on input display	-	-	-	-	●	●	
INN	S17	Change "INPUT1" to "GAME" on input display	-	-	-	-	●	●	
INN	S18	Change "INPUT1" to "Computer" on input display	-	-	-	-	●	●	
INN	S20	Change "INPUT2" to "Component" on input display	-	-	-	-	●	●	
INN	S21	Change "INPUT2" to "Blu-ray" on input display	-	-	-	-	●	●	
INN	S22	Change "INPUT2" to "DVD" on input display	-	-	-	-	●	●	
INN	S23	Change "INPUT2" to "DVR" on input display	-	-	-	-	●	●	
INN	S24	Change "INPUT2" to "VCR" on input display	-	-	-	-	●	●	
INN	S25	Change "INPUT2" to "Cable" on input display	-	-	-	-	●	●	
INN	S26	Change "INPUT2" to "Satellite" on input display	-	-	-	-	●	●	
INN	S27	Change "INPUT2" to "GAME" on input display	-	-	-	-	●	●	
INN	S28	Change "INPUT2" to "Computer" on input display	-	-	-	-	●	●	
INN	S30	Change "INPUT3" to "D-Sub" on input display	-	-	-	-	●	●	
INN	S31	Change "INPUT3" to "Blu-ray" on input display	-	-	-	-	●	●	
INN	S32	Change "INPUT3" to "DVD" on input display	-	-	-	-	●	●	
INN	S33	Change "INPUT3" to "DVR" on input display	-	-	-	-	●	●	

COMMAND			NUMBER DIRECT			STANDBY EFFECTIVENESS	LAST MEMORY	MODEL	
CMD	DATA	FUNCTION	MINIMUM	MAXIMUM	DEFAULT			ELITE	REMARKS
INN	S34	Change "INPUT3" to "VCR" on input display	-	-	-	-	•	•	
INN	S35	Change "INPUT3" to "Cable" on input display	-	-	-	-	•	•	
INN	S36	Change "INPUT3" to "Satellite" on input display	-	-	-	-	•	•	
INN	S37	Change "INPUT3" to "GAME" on input display	-	-	-	-	•	•	
INN	S38	Change "INPUT3" to "Computer" on input display	-	-	-	-	•	•	
INN	S40	Change "INPUT4" to "DVI" on input display	-	-	-	-	•	•	
INN	S41	Change "INPUT4" to "Blu-ray" on input display	-	-	-	-	•	•	
INN	S42	Change "INPUT4" to "DVD" on input display	-	-	-	-	•	•	
INN	S43	Change "INPUT4" to "DVR" on input display	-	-	-	-	•	•	
INN	S44	Change "INPUT4" to "VCR" on input display	-	-	-	-	•	•	
INN	S45	Change "INPUT4" to "Cable" on input display	-	-	-	-	•	•	
INN	S46	Change "INPUT4" to "Satellite" on input display	-	-	-	-	•	•	
INN	S47	Change "INPUT4" to "GAME" on input display	-	-	-	-	•	•	
INN	S48	Change "INPUT4" to "Computer" on input display	-	-	-	-	•	•	
INN	S50	Change "INPUT5" to "HDMI1" on input display	-	-	-	-	•	•	
INN	S51	Change "INPUT5" to "Blu-ray" on input display	-	-	-	-	•	•	
INN	S52	Change "INPUT5" to "DVD" on input display	-	-	-	-	•	•	
INN	S53	Change "INPUT5" to "DVR" on input display	-	-	-	-	•	•	
INN	S54	Change "INPUT5" to "VCR" on input display	-	-	-	-	•	•	
INN	S55	Change "INPUT5" to "Cable" on input display	-	-	-	-	•	•	
INN	S56	Change "INPUT5" to "Satellite" on input display	-	-	-	-	•	•	
INN	S57	Change "INPUT5" to "GAME" on input display	-	-	-	-	•	•	
INN	S58	Change "INPUT5" to "Computer" on input display	-	-	-	-	•	•	
INN	S60	Change "INPUT6" to "HDMI2" on input display	-	-	-	-	•	•	
INN	S61	Change "INPUT6" to "Blu-ray" on input display	-	-	-	-	•	•	
INN	S62	Change "INPUT6" to "DVD" on input display	-	-	-	-	•	•	
INN	S63	Change "INPUT6" to "DVR" on input display	-	-	-	-	•	•	
INN	S64	Change "INPUT6" to "VCR" on input display	-	-	-	-	•	•	
INN	S65	Change "INPUT6" to "Cable" on input display	-	-	-	-	•	•	
INN	S66	Change "INPUT6" to "Satellite" on input display	-	-	-	-	•	•	
INN	S67	Change "INPUT6" to "GAME" on input display	-	-	-	-	•	•	
INN	S68	Change "INPUT6" to "Computer" on input display	-	-	-	-	•	•	
INN	S70	Change "INPUT7" to "HDMI3" on input display	-	-	-	-	•	•	
INN	S71	Change "INPUT7" to "Blu-ray" on input display	-	-	-	-	•	•	
INN	S72	Change "INPUT7" to "DVD" on input display	-	-	-	-	•	•	
INN	S73	Change "INPUT7" to "DVR" on input display	-	-	-	-	•	•	
INN	S74	Change "INPUT7" to "VCR" on input display	-	-	-	-	•	•	
INN	S75	Change "INPUT7" to "Cable" on input display	-	-	-	-	•	•	
INN	S76	Change "INPUT7" to "Satellite" on input display	-	-	-	-	•	•	
INN	S77	Change "INPUT7" to "GAME" on input display	-	-	-	-	•	•	
INN	S78	Change "INPUT7" to "Computer" on input display	-	-	-	-	•	•	
INN	S80	Change "INPUT8" to "HDMI4" on input display	-	-	-	-	•	•	
INN	S81	Change "INPUT8" to "Blu-ray" on input display	-	-	-	-	•	•	
INN	S82	Change "INPUT8" to "DVD" on input display	-	-	-	-	•	•	
INN	S83	Change "INPUT8" to "DVR" on input display	-	-	-	-	•	•	
INN	S84	Change "INPUT8" to "VCR" on input display	-	-	-	-	•	•	
INN	S85	Change "INPUT8" to "Cable" on input display	-	-	-	-	•	•	

COMMAND			NUMBER DIRECT			STANDBY EFFECTIVENESS	LAST MEMORY	MODEL	REMARKS
CMD	DATA	FUNCTION	MINIMUM	MAXIMUM	DEFAULT			ELITE	
INN	S86	Change "INPUT8" to "Satellite" on input display	-	-	-	-	•	•	
INN	S87	Change "INPUT8" to "GAME" on input display	-	-	-	-	•	•	
INN	S88	Change "INPUT8" to "Computer" on input display	-	-	-	-	•	•	
INP	S01	Switches the main screen to INPUT1	-	-	-	-	•	•	
INP	S02	Switches the main screen to INPUT2	-	-	-	-	•	•	
INP	S03	Switches the main screen to INPUT3	-	-	-	-	•	•	
INP	S04	Switches the main screen to INPUT4	-	-	-	-	•	•	
INP	S05	Switches the main screen to INPUT5	-	-	-	-	•	•	
INP	S06	Switches the main screen to INPUT6	-	-	-	-	•	•	
INP	S07	Switches the main screen to INPUT7	-	-	-	-	•	•	
INP	S08	Switches the main screen to INPUT8	-	-	-	-	•	•	
IPM	S01	I-P Mode: 1 (Motion)	-	-	-	-	•	•	
IPM	S02	I-P Mode: 2 (Standard)	-	-	-	-	•	•	
IPM	S03	I-P Mode: 3 (Still)	-	-	-	-	•	•	
IPM		Notice the current I-P Mode number	-	-	-	-		•	
IPV	S00	Turn the IP control power OFF	-	-	-	•	•	•	
IPV	S01	Turn the IP control power ON	-	-	-	•	•	•	
ITM	S00	Intelligent Mode: OFF	-	-	-	-	•	•	
ITM	S01	Intelligent Mode: Mode 1	-	-	-	-	•	•	
ITM	S02	Intelligent Mode: Mode 2	-	-	-	-	•	•	
ITM		Notice the current Intelligent Mode number	-	-	-	-		•	
MCD	S21	INPUT2 COLOR DECODING: COMPONENT1 (YCbCr)	-	-	-	-	•	•	
MCD	S22	INPUT2 COLOR DECODING: COMPONENT2 (YPbPr)	-	-	-	-	•	•	
MCD	S31	INPUT3 COLOR DECODING: COMPONENT1 (YCbCr)	-	-	-	-	•	•	
MCD	S32	INPUT3 COLOR DECODING: COMPONENT2 (YPbPr)	-	-	-	-	•	•	
MCD	S33	INPUT3 COLOR DECODING: RGB (VIDEO)	-	-	-	-	•	•	
MIR	S00	Mirror Mode: OFF (normal display)	-	-	-	-	•	•	
MIR	S01	Performs left-right reversal with MIRROR MODE	-	-	-	-	•	•	
MIR		Notice the current Mirror Mode number	-	-	-	-	-	•	
MOR	S00	Mosquito NR: OFF	-	-	-	-	•	•	
MOR	S01	Mosquito NR: ON	-	-	-	-	•	•	
MOR		Notice the current Mosquito NR mode	-	-	-	-		•	
MST	S00	MULTI SCREEN: OFF	-	-	-	-	•	•	
MST	S01	MULTI SCREEN: 2 SCREEN (side by side 1)	-	-	-	-	•	•	
MST	S02	MULTI SCREEN: PinP (lower right)	-	-	-	-	•	•	
MST	S03	MULTI SCREEN: PinP (upper right)	-	-	-	-	•	•	
MST	S04	MULTI SCREEN: PinP (upper left)	-	-	-	-	•	•	
MST	S05	MULTI SCREEN: PinP (lower left)	-	-	-	-	•	•	
MST	S08	MULTI SCREEN: SWAP (switches between main and sub screens)	-	-	-	-	•	•	
NOO	S00	No Operation OFF is disabled	-	-	-	-	•	•	
NOO	S01	No Operation OFF is enabled	-	-	-	-	•	•	
NR3	S00	3DNR: OFF	-	-	-	-	•	•	
NR3	S01	3DNR: LOW	-	-	-	-	•	•	
NR3	S02	3DNR: MID	-	-	-	-	•	•	
NR3	S03	3DNR: HIGH	-	-	-	-	•	•	
NR3		Notice the current 3DNR mode	-	-	-	-	•	•	
NSO	S00	No Signal OFF is disabled	-	-	-	-	•	•	

| COMMAND | | | NUMBER DIRECT | | | STANDBY EFFECTIVENESS | LAST MEMORY | MODEL | |
CMD	DATA	FUNCTION	MINIMUM	MAXIMUM	DEFAULT			ELITE	REMARKS
NSO	S01	No Signal OFF is enabled	-	-	-	-	•	•	
ORB	S00	ORBITER: OFF	-	-	-	-	•	•	
ORB	S01	ORBITER: ON (MODE1)	-	-	-	-	•	•	
ORB	S02	ORBITER: ON (MODE2)	-	-	-	-	•	•	
OSD	S00	OSD Display: ON	-	-	-	-	•	•	
OSD	S01	OSD Display: OFF	-	-	-	-	•	•	
OSR	S00	Display commands line via IP and RS-232C is enable.	-	-	-	-	•	•	
OSR	S00	Display commands line via IP and RS-232C is disable.	-	-	-	-	•	•	
PMN	S00	Power Management: OFF	-	-	-	-	•	•	
PMN	S01	Power Management: MODE 1	-	-	-	-	•	•	
PMN	S02	Power Management: MODE 2	-	-	-	-	•	•	
PMT	S00	Video Mute: OFF	-	-	-	-	-	•	
PMT	S01	Video Mute: ON	-	-	-	-	-	•	
POC	S00	HDMI-Power off control: OFF	-	-	-	-	•	•	
POC	S01	HDMI-Power off control: ON	-	-	-	-	•	•	
POF		Turns the main power OFF	-	-	-	-	•	•	
PON		Turns the main power ON	-	-	-	•	•	•	
POR	S00	Turns HDMI-Power on ready to OFF	-	-	-	-	•	•	
POR	S01	Turns HDMI-Power on ready to ON	-	-	-	-	•	•	
PTR	S00	Sub Screen Translucence: OFF (0%)	-	-	-	-	•	•	
PTR	S01	Sub Screen Translucence: 10%	-	-	-	-	•	•	
PTR	S02	Sub Screen Translucence: 20%	-	-	-	-	•	•	
PTR	S03	Sub Screen Translucence: 30%	-	-	-	-	•	•	
PTR	S04	Sub Screen Translucence: 40%	-	-	-	-	•	•	
PTR	S05	Sub Screen Translucence: 50%	-	-	-	-	•	•	
PTR	S06	Sub Screen Translucence: 60%	-	-	-	-	•	•	
PTR	S07	Sub Screen Translucence: 70%	-	-	-	-	•	•	
PTR	S08	Sub Screen Translucence: 80%	-	-	-	-	•	•	
PUC	S00	PURE CINEMA: OFF	-	-	-	-	•	•	
PUC	S01	PURE CINEMA: STANDARD	-	-	-	-	•	•	
PUC	S02	PURE CINEMA: ADVANCE	-	-	-	-	•	•	
PUC	S03	PURE CINEMA: SMOOTH	-	-	-	-	•	•	
PUC		Notice the current PURE CINEMA mode	-	-	-	-		•	
QAP		Obtains various machine names	-	-	-	•	-	•	Refer to QAP sheet
QIS		Obtains input set-up information	-	-	-	•	-	•	Refer to QIS sheet
QIT		Obtains model information	-	-	-	•	-	•	Refer to QIT sheet
QOS		Obtains option settings	-	-	-	•	-	•	Refer to QOS sheet
QPI		Obtains integrator/PICTURE information	-	-	-	•	-	•	Refer to QPI sheet
QPS		Obtains integrator/SCREEN information	-	-	-	•	-	•	Refer to QPS sheet
QST		Obtains status information	-	-	-	•	-	•	Refer to QST sheet
QSU		Obtains audio status	-	-	-	•	-	•	Refer to QSU sheet
QWB		Obtains integrator/WHITE BALANCE information.	-	-	-	•	-	•	Refer to QWB sheet
RHI	***	Adjusts the R.HIGH of white balance	000	120	060	-	•	•	
RHI		Notice the current R.HIGH number	-	-	-	-	•	•	
RIP		Read the IP address	-	-	-	•	-	•	Refer to RIP sheet
RLC	S00	Room Light Sensor: OFF	-	-	-	-	•	•	
RLC	S01	Room Light Sensor: ON	-	-	-	-	•	•	

| COMMAND | | | NUMBER DIRECT | | | STANDBY EFFECTIVENESS | LAST MEMORY | MODEL | |
CMD	DATA	FUNCTION	MINIMUM	MAXIMUM	DEFAULT			ELITE	REMARKS
RLC		Notice the current Room Light Sensor mode	-	-	-	-	●	●	
RLW	***	Adjusts the R.LOW of the white balance	000	120	060	-	●	●	
RLW		Notice the current R.LOW number	-	-	-	-	●	●	
RMA		Read the Mac address	-	-	-	●	-	●	Refer to RMA sheet
RMC	S00	Remote control key: "0"	-	-	-	-	-	●	
RMC	S01	Remote control key: "1"	-	-	-	-	-	●	
RMC	S02	Remote control key: "2"	-	-	-	-	-	●	
RMC	S03	Remote control key: "3"	-	-	-	-	-	●	
RMC	S04	Remote control key: "4"	-	-	-	-	-	●	
RMC	S05	Remote control key: "5"	-	-	-	-	-	●	
RMC	S06	Remote control key: "6"	-	-	-	-	-	●	
RMC	S07	Remote control key: "7"	-	-	-	-	-	●	
RMC	S08	Remote control key: "8"	-	-	-	-	-	●	
RMC	S09	Remote control key: "9"	-	-	-	-	-	●	
RMC	S10	Remote control key: CURSOR RIGHT	-	-	-	-	-	●	
RMC	S11	Remote control key: CURSOR LEFT	-	-	-	-	-	●	
RMC	S12	Remote control key: CURSOR UP	-	-	-	-	-	●	
RMC	S13	Remote control key: CURSOR DOWN	-	-	-	-	-	●	
RMC	S14	Remote control key: SET	-	-	-	-	-	●	
RMC	S25	Remote control key: MENU	-	-	-	-	-	●	
RMC	S29	Remote control key: FREEZE	-	-	-	-	-	●	
RMC	S30	Remote control key: STANDBY/ON	-	-	-	-	-	●	
RMC	S31	Remote control key: VOLUME UP	-	-	-	-	-	●	
RMC	S32	Remote control key: VOLUME DOWN	-	-	-	-	-	●	
RMC	S33	Remote control key: MUTING	-	-	-	-	-	●	
RMC	S34	Remote control key: SCREEN SIZE	-	-	-	-	-	●	
RMC	S35	Remote control key: SPLIT	-	-	-	-	-	●	
RMC	S36	Remote control key: SUB INPUT	-	-	-	-	-	●	
RMC	S37	Remote control key: PIP SHIFT	-	-	-	-	-	●	
RMC	S41	Remote control key: DISPLAY	-	-	-	-	-	●	
RMC	S42	Remote control key: RETURN	-	-	-	-	-	●	
RMC	S56	Remote control key: EXIT	-	-	-	-	-	●	
RMC	S57	Remote control key: A/V SELECTION	-	-	-	-	-	●	
RMC	S59	Remote control key: USER MENU	-	-	-	-	-	●	
RMC	S60	Remote control key: SWAP	-	-	-	-	-	●	
SFT	S01	SIGNAL FORMAT: Type1	-	-	-	-	●	●	Refer to SFT sheet
SFT	S02	SIGNAL FORMAT: Type2	-	-	-	-	●	●	Refer to SFT sheet
SFT	S03	SIGNAL FORMAT: Type3	-	-	-	-	●	●	Refer to SFT sheet
SFT	S04	SIGNAL FORMAT: Type4	-	-	-	-	●	●	Refer to SFT sheet
SFT	S05	SIGNAL FORMAT: Type5	-	-	-	-	●	●	Refer to SFT sheet
SFT	S06	SIGNAL FORMAT: Type6	-	-	-	-	●	●	Refer to SFT sheet
SFT	S07	SIGNAL FORMAT: Type7	-	-	-	-	●	●	Refer to SFT sheet
SFT	S08	SIGNAL FORMAT: Type8	-	-	-	-	●	●	Refer to SFT sheet
SFT	S09	SIGNAL FORMAT: Type9	-	-	-	-	●	●	Refer to SFT sheet
SFT	S10	SIGNAL FORMAT: AUTO	-	-	-	-	●	●	Refer to SFT sheet
SFT	S20	SIGNAL FORMAT: Type10	-	-	-	-	●	●	Refer to SFT sheet
SFT		Notice the current SIGNAL FORMAT type	-	-	-	-	-	●	Refer to SFT sheet

CMD	DATA	FUNCTION	MINIMUM	MAXIMUM	DEFAULT	STANDBY EFFECTIVENESS	LAST MEMORY	ELITE	REMARKS
SHP	***	Adjusts the Sharpness	000	031	016	-	•	•	
SSI	S01	Switches the Sub Screen to INPUT1	-	-	-	-	•	•	
SSI	S02	Switches the Sub Screen to INPUT2	-	-	-	-	•	•	
SSI	S03	Switches the Sub Screen to INPUT3	-	-	-	-	•	•	
SSI	S04	Switches the Sub Screen to INPUT4	-	-	-	-	•	•	
SSI	S05	Switches the Sub Screen to INPUT5	-	-	-	-	•	•	
SSI	S06	Switches the Sub Screen to INPUT6	-	-	-	-	•	•	
SSI	S07	Switches the Sub Screen to INPUT7	-	-	-	-	•	•	
SSI	S08	Switches the Sub Screen to INPUT8	-	-	-	-	•	•	
SSI		Notice the current Sub Screen input	-	-	-	-	-	•	
STD		Restores the PICTURE, W/B adjustment value of the integrator to the initial values	-	-	-	-	•	•	
STL	S00	FREEZE: OFF	-	-	-	-	-	•	
STL	S01	FREEZE: ON	-	-	-	-	-	•	
SVL	***	Adjusts the SUB VOLUME.	000	020	020	-	•		
SWM		Outputs the main input to the full screen	-	-	-	-	•	•	
SWS		Outputs the sub input to the full screen	-	-	-	-	•	•	
SZM	S00	SCREEN SIZE: Dot by Dot or PARTIAL	-	-	-	-	•	•	
SZM	S01	SCREEN SIZE: 4: 3	-	-	-	-	•	•	
SZM	S02	SCREEN SIZE: FULL (1) or FULL1080i	-	-	-	-	•	•	
SZM	S03	SCREEN SIZE: ZOOM	-	-	-	-	•	•	
SZM	S04	SCREEN SIZE: CINEMA	-	-	-	-	•	•	
SZM	S05	SCREEN SIZE: WIDE or WIDE1	-	-	-	-	•	•	
SZM	S06	SCREEN SIZE: FULL 14:9	-	-	-	-	•	•	
SZM	S07	SCREEN SIZE: CINEMA 14:9	-	-	-	-	•	•	
SZM	S08	SCREEN SIZE: FULL2 (1035i)	-	-	-	-	•	•	
SZM	S11	SCREEN SIZE: Auto	-	-	-	-	•	•	
SZM	S12	SCREEN SIZE: WIDE2	-	-	-	-	•	•	
TNT	***	Adjusts the Tint	000	120	060	-	•	•	
TOP	S00	Text Optimization: ON	-	-	-	-	•	•	
TOP	S01	Text Optimization: OFF	-	-	-	-	•	•	
UP0		Adds 10 to the adjustment value	-	-	-	-	•	•	
UPF		Maximizes the adjustment value	-	-	-	-	•	•	
UPn		Adds "n" to the adjustment value (n=1 to 9)	-	-	-	-	•	•	
VOL	***	Adjusts the Audio Volume	000	060	020	-	•		
VPS	***	Adjusts the vertical position	000	240 (PC) 020 (Video)	120 (PC) 010 (Video)	-	•	•	
WIP		Writes the Mac address	-	-	-	•	-	•	Refer to WIP sheet
WMA		Writes the IP address	-	-	-	•	-	•	Refer to WMA sheet
WNM		Writes the Host name	-	-	-	•	-	•	Refer to WNM sheet

4. Signal Format

SFT S**

H MODE / V MODE		TYPE1 (S01)	TYPE2 (S02)	TYPE3 (S03)	TYPE4 (S04)	TYPE5 (S05)	TYPE6 (S06)	TYPE7 (S07)	TYPE8 (S08)	TYPE9 (S09)	TYPE10 (S10)
H MODE:3 **V MODE:5**	Group A	VGA@50 (640 × 480 @ 50) mode74	WVGA@50 (848 × 480 @ 50) mode76								
H MODE:4 **V MODE:6**	Group B	VGA@60 (640 × 480 @ 60) mode5	480P60 (720 × 480P @ 60) mode138	WNEC1 (848 × 480 @ 60) mode19							
H MODE:6 OR 7 **V MODE:4**	Group C	XGA@48 (1024 × 768 @ 48) mode68	WXGA@48 (1280 × 768 @ 48) mode78								
H MODE:7 **V MODE:5**	Group D	XGA@50 (1024 × 768 @ 50) mode69	WXGA@50 (1280 × 768 @ 50) mode79								
H MODE:7 **V MODE:6**	Group E	720P60 (1280 × 720P @ 60) mode132	WXGA@56.2 (1280 × 768 @ 56.2) mode52								
H MODE:8 **V MODE:6**	Group F	XGA@60 (1024 × 768 @ 60) mode24	WXGA @ 60CVT (1280 × 768 @ 60) mode23	WNEC2 (1360 × 768 @ 60) mode22							
H MODE:9 **V MODE:6**	Group G	WXGA@60 (1280 × 800 @ 60) mode21	XGA-N@60 (1152 × 864 @ 60) mode84								
H MODE: 10 **V MODE: 6**	Group H	WXGA 1366 × 768 @ 60 mode67	Apple19 (1440 × 900 @ 60) mode89	XGA-N (1280 × 960 @ 60) mode63	SXGA (1280 × 1024 @ 60) mode29	SXGA+@60 (1400 × 1050 @ 60 (CVT)) mode131	WSXGA (1680 × 1050 @ 60) mode38	1080P60 (1920 × 1080P @ 60) mode138	UXGA@60 (1600 × 1200 @ 60) mode54	WSXGA+ (1920 × 1200 @ 60) mode81	WUXGA (1920 × 1200 RB @ 60) mode88
H MODE: 10 **V MODE: 7**	Group I	XGA@70 (1024 × 768 @ 70) mode25	XGA@72 (1024 × 768 @ 72) mode70	W-XGA@70 (1280 × 768 @ 72) mode66	W-XGA@72 (1280 × 768 @ 72) mode130						
H MODE: 10 **V MODE: 8**	Group J	XGA@75 (1024 × 768 @ 75) mode26	XGA-NEW (1152 × 864 @ 75) mode51								

"1920x1200RB@60Hz" is Reduce blanking signal.

5. QAP Commands

COMMAND		FUNCTION
FUNCTION	SUB	
QAP		Obtain the model name

Response Format

SEQUENCE	DATA CONTENTS	LENGTH (BYTE)	VALUE	REMARKS
1	STX		0x02	
2	Command Echo-back	3	"QAP"	
3	Model name information	18	PRO-101FD********	50-inch ELITE model
			PRO-141FD********	60-inch ELITE model
5	Check sum	2	(CS)	
6	ETX	1	0x03	

6. QIS Commands

COMMAND		FUNCTION
FUNCTION	SUB	
QIS		Obtains the setup information

Send Commands

SEQUENCE	DATA CONTENTS	Length (BYTE)	VALUE	REMARKS
1	STX	1	0x02	
2	ID	2	"**"	
3	Command	3	"QIS"	
4	ETX	1	0x03	

Response Format

SEQUENCE	DATA CONTENTS	Length (BYTE)	VALUE	REMARKS
1	STX	1	0x02	
2	Command Echo-back	3	"QIS"	
3	INPUT1 Input Name	1		
4	INPUT1 Color System	1		
5	INPUT1 Color Decoding	1		
6	INPUT1 Signal Type	1		
7	INPUT1 Video	1		
8	INPUT2 Input Name	1		
9	INPUT2 Color System	1		
10	INPUT2 Color Decoding	1		
11	INPUT2 Signal Type	1		
12	INPUT2 Video	1		
13	INPUT3 Input Name	1		
14	INPUT3 Color System	1		
15	INPUT3 Color Decoding	1		
16	INPUT3 Signal Type	1		
17	INPUT3 Video	1		
18	INPUT4 Input Name	1		
19	INPUT4 Color System	1		
20	INPUT4 Color Decoding	1		
21	INPUT4 Signal Type	1		
22	INPUT4 Video	1		
23	INPUT5 Input Name	1		See below.
24	INPUT5 Color System	1		
25	INPUT5 Color Decoding	1		
26	INPUT5 Signal Type	1		
27	INPUT5 Video	1		
28	INPUT6 Input Name	1		
29	INPUT6 Color System	1		
30	INPUT6 Color Decoding	1		
31	INPUT6 Signal Type	1		
32	INPUT6 Video	1		
33	INPUT7 Input Name	1		
34	INPUT7 Color System	1		
35	INPUT7 Color Decoding	1		
36	INPUT7 Signal Type	1		
37	INPUT7 Video	1		
38	INPUT8 Input Name	1		
39	INPUT8 Color System	1		
40	INPUT8 Color Decoding	1		
41	INPUT8 Signal Type	1		
42	INPUT8 Video	1		
43	Reserved	16		ALL "*".
44	Check sum	2	(CS)	
45	ETX	1	0x03	

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Input Name

VALUE	INPUT NAME
"1"	VIDEO
"2"	COMPONENT
"3"	D-SUB
"4"	DVI
"5"	HDMI1
"6"	HDMI2
"7"	HDMI3
"8"	HDMI4
"9"	PC
"A"	GAME
"B"	STB
"C"	DVD
"D"	LD
"E"	DVR
"F"	BDP
"G"	VCR

Signal Type

VALUE	INPUT MODE
"1"	VIDEO
"2"	PC

Color System

VALUE	INPUT SIGNAL
"0"	AUTO
"1"	PAL
"2"	SECAM
"3"	NTSC
"4"	4.43NTSC
"5"	PAL-M
"6"	PAL-N

Color Decoding

VALUE	INPUT SIGNAL
"1"	Component1
"2"	Component2
"3"	RGB

Video

VALUE	INPUT MODE
"0"	AUTO
"1"	COLOR1
"2"	COLOR2
"3"	COLOR3
"4"	COLOR4

7. QOS Commands

COMMAND		FUNCTION
FUNCTION	SUB	
QOS		Obtains the current option settings

Send Commands

SEQUENCE	DATA CONTENTS	Length (BYTE)	VALUE	REMARKS
1	STX	1	0x02	
2	ID	2	"**"	
3	Command	3	"QOS"	
4	ETX	1	0x03	

Response Format

SEQUENCE	DATA CONTENTS	Length (BYTE)	VALUE	REMARKS
1	STX	1	0x02	
2	Command Echo-back	3	"QOS"	
3	Energy save	1		0:OFF, 1:SAVE1, 2:SAVE2, 3:Picture off
4	Power Management	1		0:OFF, 1:MODE1, 2:MODE2
5	No signal off	1		0:Disable, 1:Enable
6	No operation off	1		0:Disable, 1:Enable
7	Room light sensor	1		0:OFF, 1:ON
8	HDMI control Input setting	1		0:OFF, 1:INPUT5, 2:INPUT6, 3:INPUT7, 4:INPUT8
9	HDMI control Power off control	1		0:OFF, 1:ON
10	HDMI control Power on ready	1		0:OFF, 1:ON
11	HDMI control Hold sound status	1		0:OFF, 1:ON
12	HDMI control HD A/V converter	1		0:Disable, 1:Enable
43	Reserved	15		All "*"
44	Check sum	2	(CS)	
45	ETX	1	0x03	

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8. QPI Commands

COMMAND		FUNCTION
FUNCTION	**SUB**	
QPI		Obtains the current PICTURE information

Send Commands

SEQUENCE	DATA CONTENTS	Length (BYTE)	VALUE	REMARKS
1	STX	1	0x02	
2	Command Echo-back	3	"QPI"	
3	AV. SELECTION	1		See the following sheet
4	CONTRAST	3		
5	BRIGHTNESS	3		Adjusted values are displayed (a base 10 number 3-digit ASCII characters).
6	COLOR	3		On 1-2 digit, upper digit is "0."
7	TINT	3		When Input signal is not settled, response is "***".
8	SHARPNESS	3		
9	COLOR TEMP.	1		1: LOW, 2: MID LOW, 3: MIDDLE, 4: MID HIGH, 5: HIGH, 6: Manual
10	R.HIGH	3		
11	G.HIGH	3		
12	B.HIGH	3		Adjusted values are displayed (a base 10 number 3-digit ASCII characters).
13	R.LOW	3		On 1-2 digit, upper digit is "0."
14	G.LOW	3		When Input signal is not settled, response is "***".
15	B.LOW	3		
16	GAMMA	1		See below
17	FILM MODE	1		0: OFF, 1: Mode1, 2: Mode1
18	Text Optimization	1		0: OFF, 1: ON
19	DRE PICTURE	1		0: OFF, 1: LOW, 2: MIDDLE, 3: HIGH
20	BLACK LEVEL	1		0: OFF, 1: ON
21	ACL	1		0: OFF, 1: ON
22	ENHANCER MODE	1		1: Soft, 2: Natural, 3: Hard
23	CTI	1		0: OFF, 1: ON
24	COLOR MANAGEMENT R (RED)	3		
25	COLOR MANAGEMENT Y (YELLOW)	3		
26	COLOR MANAGEMENT G (GREEN)	3		Adjusted values are displayed (a base 10 number 3-digit ASCII characters).
27	COLOR MANAGEMENT C (CYAN)	3		On 1-2 digit, upper digit is "0."
28	COLOR MANAGEMENT B (BLUE)	3		When Input signal is not settled, response is "***".
29	COLOR MANAGEMENT M (MAGENTA)	3		
30	COLOR SPACE	3		0: Standard, 1: EBU
31	3DNR	1		0: OFF, 1: LOW, 2: MIDDLE, 3: HIGH
32	FIELD NR	1		0: OFF, 1: LOW, 2: MIDDLE, 3: HIGH
33	BLOCK NR	1		0: OFF, 1: ON
34	MOSQUITO NR	1		0: OFF, 1: ON
35	3DYC	1		0: OFF, 1: ON
36	I-P MODE	1		0: OFF, 1: ON
37	DRIVE MODE	1		1: Standard, 2: Text, 3: Cinema
38	GAME CONTROL PREF.	1		0: OFF, 1: ON
39	BLUE ONLY MODE	1		0: OFF, 1: ON
40	Reserved	1	*	All "*".
41	Main screen input function	3		See below.
42	Main screen size information	1		
43	Check sum	2	(CS)	
44	ETX	1	0x03	

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A/V Selection

Value (response)	MODE
"0"	Standard
"1"	Dynamic
"2"	Movie
"3"	Game
"4"	Sport
"5"	Pure
"6"	User
"7"	ISF-DAY
"8"	ISF-NIGHT
"A"	Optimum
"B"	ISF-AUTO

Gamma

Value (response)	MODE
1	MODE1
2	MODE2
3	MODE3
4	MODE4
5	MODE5

Main screen input function

MAIN SCREEN INPUT (RESPONSE)	MAIN SCREEN INPUT
"IN1"	INPUT1
"IN2"	INPUT2
"IN3"	INPUT3
"IN4"	INPUT4
"IN5"	INPUT5
"IN6"	INPUT6
"IN7"	INPUT7
"IN8"	INPUT8

On standby, response is the last-memoried status

Main screen size information

MAIN SCREEN SIZE (RESPONSE)	MAIN SCREEN SIZE
"0"	DOT BY DOT
"1"	4:3
"2"	FULL or FULL1080i
"3"	ZOOM
"4"	CINEMA
"5"	WIDE or WIDE1
"6"	FULL 14:9
"7"	CINEMA 14:9
"8"	FULL2 (1035i)
"A"	WIDE2
"B"	AUTO

9. QPS Commands

COMMAND		FUNCTION
FUNCTION	SUB	
QPS		Obtains the current SCREEN information

Response Format

SEQUENCE	DATA CONTENTS	Length (BYTE)	VALUE	REMARKS
1	STX	1	0x02	
2	Command Echo-back	3	"QPS"	
3	H. POSITION	3		Adjusted values are displayed (a base 10 number 3-digit ASCII characters).
4	V. POSITION	3		
5	H. SIZE	3	***	Response is "***" as PDP monitor is not adjusted.
6	V. SIZE	3	***	
7	CLOCK	3		Adjusted values are displayed (a base 10 number 3-digit ASCII characters). On 1-2 digit, upper digit is "0." When Input signal is not settled or DVI or Video, response is "***".
8	PHASE	3		
9	Main screen input function	3		See below.
10	Main screen size information	1		
11	Check sum	2	(CS)	
12	ETX	1	0x03	

Main screen input function

MAIN SCREEN INPUT (RESPONSE)	MAIN SCREEN INPUT
"IN1"	INPUT1
"IN2"	INPUT2
"IN3"	INPUT3
"IN4"	INPUT4
"IN5"	INPUT5
"IN6"	INPUT6
"IN7"	INPUT7
"IN8"	INPUT8
"***"	not settled (on standby)

Main screen size information

MAIN SCREEN SIZE (RESPONSE)	MAIN SCREEN SIZE
"0"	DOT BY DOT
"1"	4:3
"2"	FULL or FULL1080i
"3"	ZOOM
"4"	CINEMA
"5"	WIDE or WIDE1
"6"	FULL 14:9
"7"	CINEMA 14:9
"8"	FULL2 (1035i)
"A"	WIDE2
"B"	AUTO

10. QST Commands

COMMAND		FUNCTION
FUNCTION	SUB	
QST		Obtains the current status.

Response Format

SEQUENCE	DATA CONTENTS	LENGTH BYTE)	VALUE	REMARKS
1	STX	1	0x02	
2	Command Echo-back	3	"QST"	"QST"(QST command)
3	Generation information	1	"5"	
4	Reserved	1		Don't care
5	Reserved	1		Don't care
6	Power source status	1		
7	During standby: Standby cause	1		
	During power supply: Main screen signal status			
8	Sub screen signal information	1		
9	Main screen input function	3		See the following each sheet
10	Sub screen input function	3		
11	Main screen size information	1		
12	2-screen display information	1		
13	Temperature information 1	3		Temperature inside the set (Celsius) (T1)
14	Temperature information 2	3		Temperature inside the set (Celsius) (T2)
15	Temperature information 3	3		Temperature inside the set (Celsius) (T3)
16	Temperature information 4	3		Temperature inside the set (Celsius) (PDP panel)
17	Serial No.	15		
18	Dummy data	3		All "0" are debugging.
19	Dummy data	2		All "*" are debugging.
20	HOUR METER	5		On 1-5 digit, upper digit is "0."
21	Check sum	2	(CS)	
22	ETX	1	0x03	

Inch information

INCH INFORMATION (RESPONSE)	OBTAINED INCH INFORMATION
"3"	"1"
"4"	"2"
	"3"
	"4"
"5"	"5"
	"6"
"6"	"7"
"*"	others

Power Source Status

RESPONSE	POWER SOURCE STATUS
"S"	Standby
"P"	Power on

Standby cause During standby/Main screen signal status/During power supply

NORMAL STANDBY TIME		NORMAL SIGNAL INPUT TIME	
STANDBY CAUSE (RESPONSE)	STANDBY CAUSE	MAIN SCREEN SIGNAL STATUS (RESPONSE)	SIGNAL STATUS
"N"	Normal standby	"N"	Normal signal input
"W"	Standby time based on Power Management	"L"	No signal input
"S"	Standby time based on SD or PD	"0"	Out of Range signal input

Sub screen signal information

SUB SCREEN SIGNAL INFORMATION (RESPONSE)	SIGNAL STATUS
"*"	1 screen
"N"	Normal signal input
"L"	No signal input
"0"	Out of range

Main screen input function/Sub screen input function

INPUT FUNCTION (RESPONSE)	INPUT
"IN1"	INPUT1
"IN2"	INPUT2
"IN3"	INPUT3
"IN4"	INPUT4
"IN5"	INPUT5
"IN6"	INPUT6
"IN7"	INPUT7
"IN8"	INPUT8

On standby, response is last-memoried status

Main screen size information

MAIN SCREEN SIZE (RESPONSE)	MAIN SCREEN SIZE
"0"	DOT BY DOT
"1"	4:3
"2"	FULL or FULL1080i
"3"	ZOOM
"4"	CINEMA
"5"	WIDE or WIDE1
"6"	FULL 14:9
"7"	CINEMA 14:9
"8"	FULL2 (1035i)
"A"	WIDE2
"B"	AUTO

2-screen display information

2-SCREEN DISPLAY (RESPONSE)	2-SCREEN DISPLAY
"0"	OFF (1-screen display)
"2"	PinP (lower right)
"3"	PinP (upper right)
"4"	PinP (upper left)
"5"	PinP (lower left)
"1"	SIDE BY SIDE 1

11. QSU Commands

COMMAND		FUNCTION	
FUNCTION	SUB		
QSU		Obtains the current main volume, sub volume of each function and sound mute status.	

Response Format

SEQUENCE	DATA CONTENTS	LENGTH (BYTE)	VALUE	REMARKS
1	STX	1	0x02	
2	Command Echo-back	3	"QSU"	
3	Main volumes	3		On 1-2 digit, upper digit is "0."
4	Sound mute status	1		See the following sheet.
5	INPUT1 sub volume	3		
6	INPUT2 sub volume	3		
7	INPUT3 sub volume	3		
8	INPUT4 sub volume	3		On 1-2 digit, upper digit is "0."
9	INPUT5 sub volume	3		
10	INPUT6 sub volume	3		
11	Sound INPUT1 information	3	IN*	IN1~IN6: INPUT1~6
12	Sound INPUT2 information	3	IN*	IN1~IN6: INPUT1~6
13	Dummy data	3	***	
14	Dummy data	1	*	
15	Check sum	2	(CS)	
16	ETX	1	0x03	

Sound mute status

SOUND MUTE (RESPONSE)	SOUND MUTE
"0"	OFF
"1"	ON

12. QWB Commands

COMMAND		FUNCTION
FUNCTION	**SUB**	
QWB		Obtains the current WHITE BALANCE status

Response Format

SEQUENCE	DATA CONTENTS	LENGTH (BYTE)	VALUE	REMARKS
1	STX	1	0x02	
2	Command Echo-back	3	"QWB"	"GWB" (GWB command)
3	R.HIGH	3		
4	G.HIGH	3		Adjusted values are displayed (a base 10 number 3-digit ASCII characters).
5	B.HIGH	3		On 1-2 digit, upper digit is "0."
6	R.LOW	3		When Input signal is not settled or DVI or Video, response is "***".
7	G.LOW	3		
8	B.LOW	3		
9	Main screen input function	3		See below.
10	Main screen size information	1		
11	Check sum	2	(CS)	
12	ETX	1	0x03	

Main screen input function

MAIN SCREEN INPUT (RESPONSE)	MAIN SCREEN INPUT
"IN1"	INPUT1
"IN2"	INPUT2
"IN3"	INPUT3
"IN4"	INPUT4
"IN5"	INPUT5
"IN6"	INPUT6
"IN7"	INPUT7
"IN8"	INPUT8
"***"	not settled (on standby)

Main screen size information

MAIN SCREEN SIZE (RESPONSE)	MAIN SCREEN SIZE
"0"	DOT BY DOT
"1"	4:3
"2"	FULL or FULL1080i
"3"	ZOOM
"4"	CINEMA
"5"	WIDE or WIDE1
"6"	FULL 14:9
"7"	CINEMA 14:9
"8"	FULL2 (1035i)
"A"	WIDE2
"B"	AUTO

13. RIP Commands

COMMAND		FUNCTION		
FUNCTION	SUB			
RIP		Read the IP address.		

Response Format

SEQUENCE	DATA CONTENTS	LENGTH (BYTE)	VALUE	REMARKS
1	STX	1	0x02	
3	Command Echo-back	3	"RIP"	
4	DHCP	1		0: ON 1: OFF
5	IP address (1st byte)	3		
6	IP address (2nd byte)	3		
7	IP address (3rd byte)	3		
8	IP address (4th byte)	3		
9	Subnet mask (1st byte)	3		
10	Subnet mask (2st byte)	3		
11	Subnet mask (3st byte)	3		On 1-2 digit, upper digit is "0."
12	Subnet mask (4st byte)	3		
13	Default gateway (1st byte)	3		
14	Default gateway (2st byte)	3		
15	Default gateway (3st byte)	3		
16	Default gateway (4st byte)	3		
17	Reserved	5		All "*"
18	TCP CONTROL PORT	5		On 1-4 digit, upper digit is "0."
19	UDP CONTROL PORT	5		
20	TCP CONNECTION LIMIT	1		0: ON 1: OFF
21	LIMIT TIME	3		On 1-2 digit, upper digit is "0."
22	LED	1		0: ON 1: OFF
23	Reserved	12		All "*"
24	Check sum	2	(CS)	
25	ETX	1	0x03	

14. WIP Commands

COMMAND		FUNCTION
FUNCTION	SUB	
WIP		Sets the IP address.

Send Commands

SEQUENCE	DATA CONTENTS	LENGTH (BYTE)	VALUE	REMARKS
1	STX	1	0x02	
2	ID	2	"**"	
3	Command	3	"WIP"	
4	DHCP	1		0: ON 1: OFF
5	IP address (1st byte)	3		
6	IP address (2nd byte)	3		
7	IP address (3rd byte)	3		
8	IP address (4th byte)	3		
9	Subnet mask (1st byte)	3		
10	Subnet mask (2st byte)	3		
11	Subnet mask (3st byte)	3		On 1-2 digit, upper digit is "0."
12	Subnet mask (4st byte)	3		
13	Default gateway (1st byte)	3		
14	Default gateway (2st byte)	3		
15	Default gateway (3st byte)	3		
16	Default gateway (4st byte)	3		
17	Reserved	5		All "*"
18	TCP CONTROL PORT	5		On 1-4 digit, upper digit is "0."
19	UDP CONTROL PORT	5		
20	TCP CONNECTION LIMIT	1		0: ON 1: OFF
21	LIMIT TIME	3		
22	LED	1		0: ON 1: OFF
23	Reserved	12		All "*"
24	Check sum	2	(CS)	
25	ETX	1	0x03	

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Response Format

SEQUENCE	DATA CONTENTS	LENGTH (BYTE)	VALUE	REMARKS
1	STX	1	0x02	
2	Command Echo-back	3	"WIP"	
3	ETX	1	0x03	

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15. RMA Commands

COMMAND		FUNCTION
FUNCTION	SUB	
RMA		Reads the MAC address.

Send Commands

SEQUENCE	DATA CONTENTS	LENGTH (BYTE)	VALUE	REMARKS
1	STX	1	0x02	
2	ID	2	"**"	
3	Command	3	"RMA"	
12	ETX	1	0x03	

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Response Format

SEQUENCE	DATA CONTENTS	LENGTH (BYTE)	VALUE	REMARKS
1	STX	1	0x02	
2	Command Echo-back	3	"RMA"	
3	MAC address (1st byte)	2		
4	MAC address (2nd byte)	2		
5	MAC address (3rd byte)	2		On digit, upper digit is "0."
6	MAC address (4th byte)	2		
7	MAC address (5th byte)	2		
8	MAC address (6th byte)	2		
9	Reserved	11		All "*"
10	Check sum	2	(CS)	
11	ETX	1	0x03	

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16. WNM Commands

COMMAND		FUNCTION
FUNCTION	**SUB**	
WNM		Sets the PDP information for web page.

Send Commands

SEQUENCE	DATA CONTENTS	LENGTH (BYTE)	VALUE	REMARKS
1	STX	1	0x02	
2	ID	2	"**"	
3	Command	3	"WNM"	
4	PDP NAME	20		
5	LOCATION	30		
6	INSTALLATION DATE	10		
7	Reserved	27		All "*"
8	Check sum	2	(CS)	
9	ETX	1	0x03	

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Response Format

SEQUENCE	DATA CONTENTS	LENGTH (BYTE)	VALUE	REMARKS
1	STX	1	0x02	
2	Command Echo-back	3	"WNM"	
3	ETX	1	0x03	

5