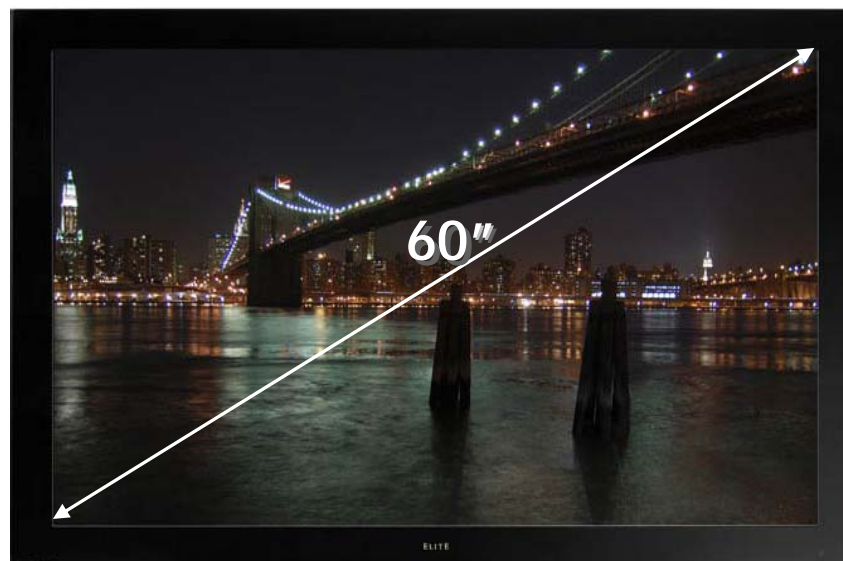


Product Training Guide - Supplement 9th Generation Plasma Monitor Models



**KRP-500M
PRO-101FD**



**KRP-600M
PRO-141FD**

KURO

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This Training Guide should be used together with Training Guide PTG-080001

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Preface

This technical training guide will address the circuit and assembly descriptions of the Pioneer's 9th generation (G9) series Plasma models.

This guide was designed as a servicing aid and is not intended to replace the service manual. The student should have the appropriate service manual on hand when using this guide. Data in the service manual for this unit contains specific information on safety, parts and adjustments.

For more information on electronic circuits and block diagrams refer to the Service manual.

Safety information

Important safety data for this Pioneer model is contained in the service manual. Before returning the unit to the customer, complete all product safety obligations and tests. Technicians who bypass safety features or fail to carry out safety checks may expose themselves and others to possible injury, and may be liable for any resulting damages.



Lead in the solder used in this product is a known reproductive toxicant that may cause birth defects or other reproductive harm. (California Health and Safety Code Section 25249.5).

When servicing this or handling circuit boards and other components that contain solder, avoid unprotected skin contact with the solder. Also, when soldering do not inhale any smoke or fumes produced.

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New 9G Plasma Model List

	Type	Model #	Resolution	Speakers	Table top stand	Wall mount bracket	Intro.
Pioneer Models	50" HDTV	PDP-5020FD	1080P	SMW2023A	Preinstalled	No	6/08
	60" HDTV	PDP-6020FD	1080P	SMW2024A	Yes	No	6/08
Elite Models	50" HDTV	PRO-111FD	1080P	SMW2025A	Preinstalled	No	6/08
	50" Monitor	PRO-101FD	1080P	No	No	No	8/08
	60" HDTV	PRO-151FD	1080P	SMW2026A	Yes	No	6/08
	60" Monitor	PRO-141FD	1080P	No	No	No	10/08
Industrial Models	50" Monitor	KRP-500M	1080P	No	No	No	9/08
	60" Monitor	KRP-600M	1080P	No	No	No	10/08



Models not covered in this Training Guide

Legend

TVs	Only TV (Pioneer & Elite) models have this function
ELITE TVs	Only ELITE TV models have this function
Pioneer TVs	Only Pioneer TV models have this function
ELITE Monitors	Only ELITE monitor models have this function
Pioneer Monitors	Only Pioneer Monitor models have this function
All Models	All models have this function
(All Models)	All models have this function with some exceptions

Main features of 50" & 60" Monitors

- “Custom Installation monitor with ultimate total quality”
 - ❖ Customers - High-end Customers that want the best products
 - ❖ Dealers - For Hi-end Dealer / Custom installers
- Highest picture quality in the industry
 - ❖ 9G panel with much improved high contrast
 - ❖ Improved ASIC based on 8G
 - ❖ ELITE class filter
- Highest panel quality in the industry (Under study)
 - ❖ **Selected (Handpick & hand-adjust) panel (without cell failure)**
***Info. Only for internal**
- Ultimate flexibility & versatility for custom installation
 - ❖ Wide-range controllability (**IP , Web server** , RS-232C , IR repeater , HDMI-CEC)
 - ❖ Strengthen ISF by **more commands** , luminance sensor
 - ❖ A broad range of inputs & input signals
(**HDMI x 4, DVI-D x 1**, Component x 1, D-sub 15 x 1, Composite x 1)
- Design best fitted for custom installation
 - ❖ **Thin body (64mm/2.52 in)** *Optional tabletop stand , No optional speakers
 - ❖ **Super flush “acrylic” bezel**



Ultra Thin Depth

➤ “Ultra thin depth body”

- ❖ Blend in with furniture & interior decorating at customer’s house very well
- ❖ Easy to install monitors into customized structures. Example: Picture frame , in-wall , cabinet , etc.
- ❖ flexibility for installation

9G Monitor : 50”



Target: 64mm
(2.52 inch)

9G HDTV : 50”



94mm

Flat Bezel

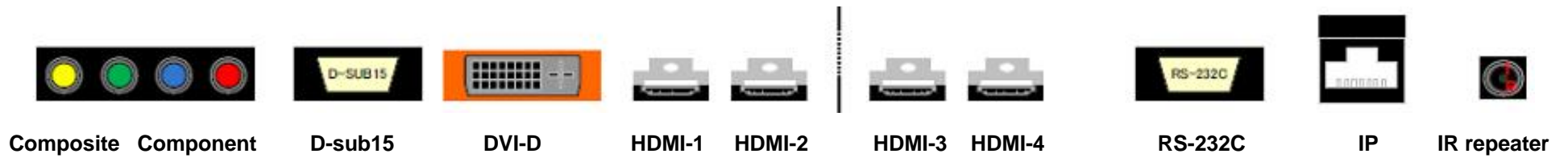
➤ Flat acrylic bezel



No optional speakers

Design of optional tabletop stand : TBD

Terminals

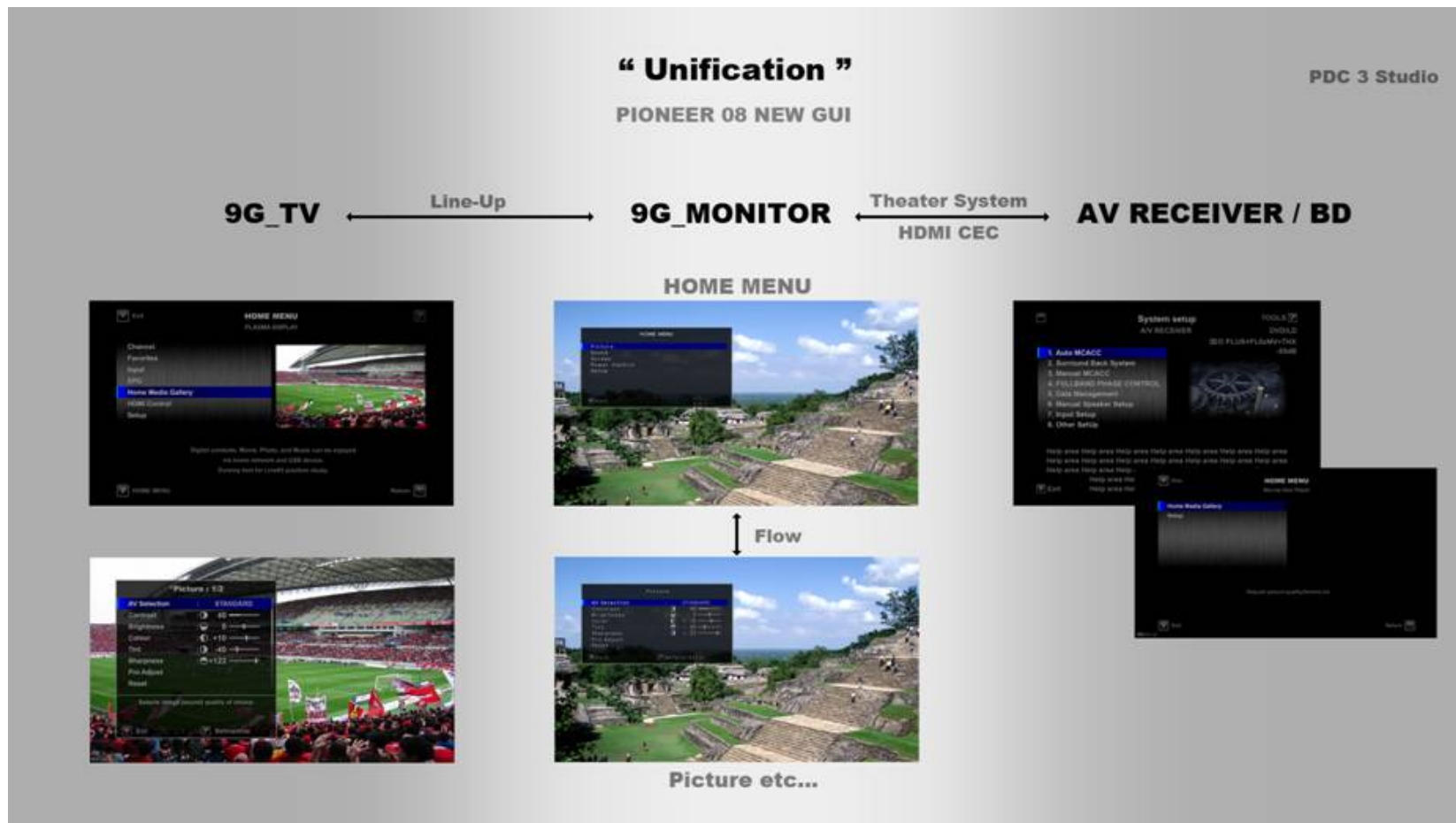


- HDMI Digital Video / Digital RGB
- DVI-D Digital Video / Digital RGB
- D-sub Analog RGB / Component Video

Video	INPUT1	Video
	INPUT2	Component
	INPUT3	D-sub15
	INPUT4	DVI
	INPUT5	HDMI 1
	INPUT6	HDMI 2
	INPUT7	HDMI 3
	INPUT8	HDMI 4

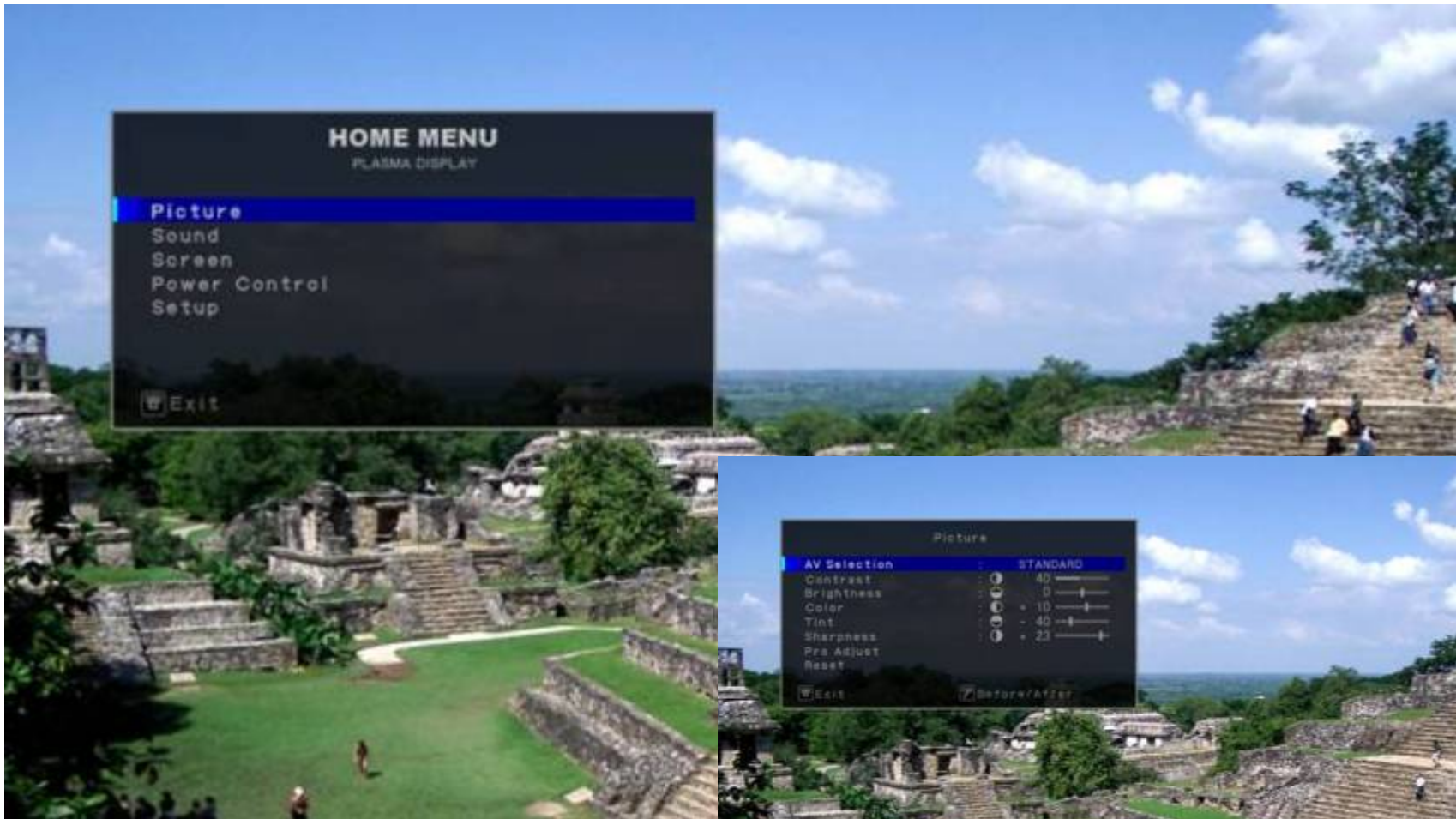
New OSD

- Simple OSD with unification through HBG products
 - ❖ Usability for both the installer & end-user
 - ❖ Find ability of adjustment items (Browsing ability)
 - ❖ Uniformity with TV models , BD player & AV receiver



New OSD

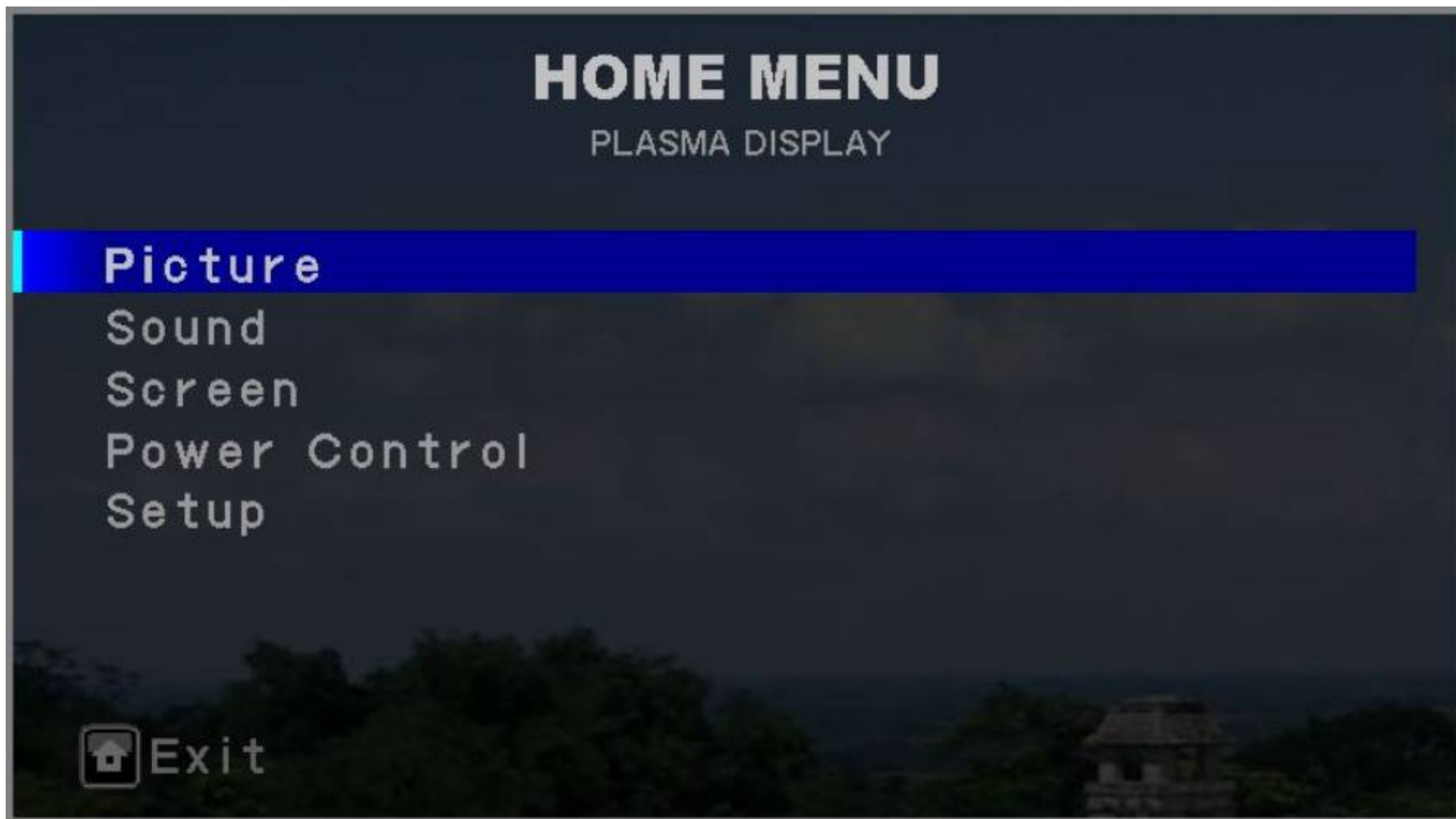
- Simple OSD with unification through HBG products



Same tone & color as 9G TV's GUI
Semi-transparent

All 2nd layer

New OSD



New OSD



New OSD

Example of menu structure

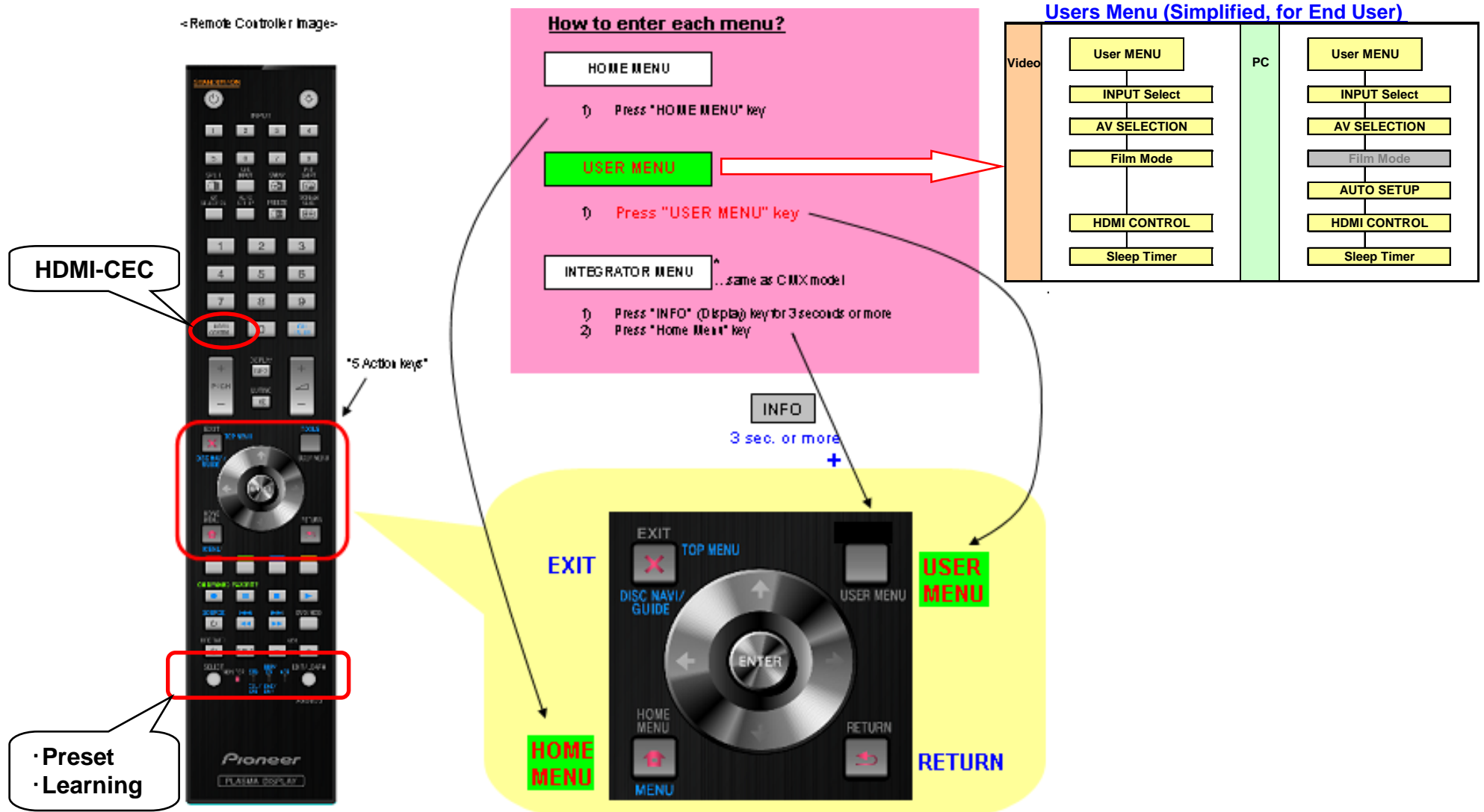


Menu	Contents	Target User
User Menu	Quick & easy setting	End user
Home Menu	Adjustment , all items	Installer
Integrator	Commercial Industrial function	Integrator

Pro Adjust	
PureCinema	
Film Mode	• Off
Text Optimisation	• Off
Intelligent Mode	• Off
Picture Detail	
DRE Picture	• Off
BlackLevel	• Off
ACL	• Off
Enhancer Mode	• 1
Color Detail	
CTI	• Off
Color Management	
Color Space	• 1
Noise Reduction	
3DNR	<<OFF
Field NR	• Off
Block NR	• Off
Mosquito NR	• Off
Other	
3DYC	• Off
I-P Mode	• Standard
Drive Mode	• Off
Game Control Pref	• Off
Blue Only Mode	• Off
Key Guide	

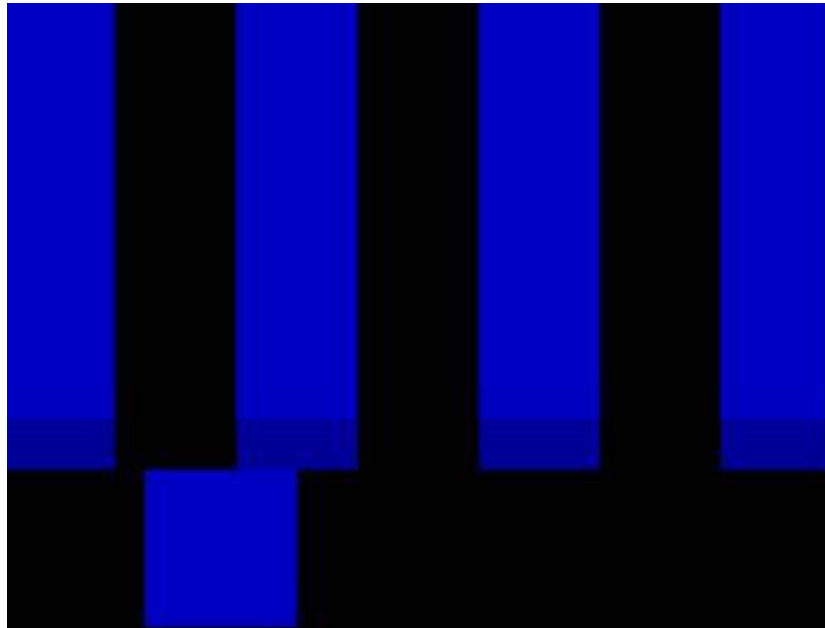
Remote Control

- Multi-function remote for simple & minimum system



Blue Only Mode

- Blue Only Mode is in the Pro Adjust menu
- Useful for dealers when calibrating the picture setting



Color bars with only Blue on

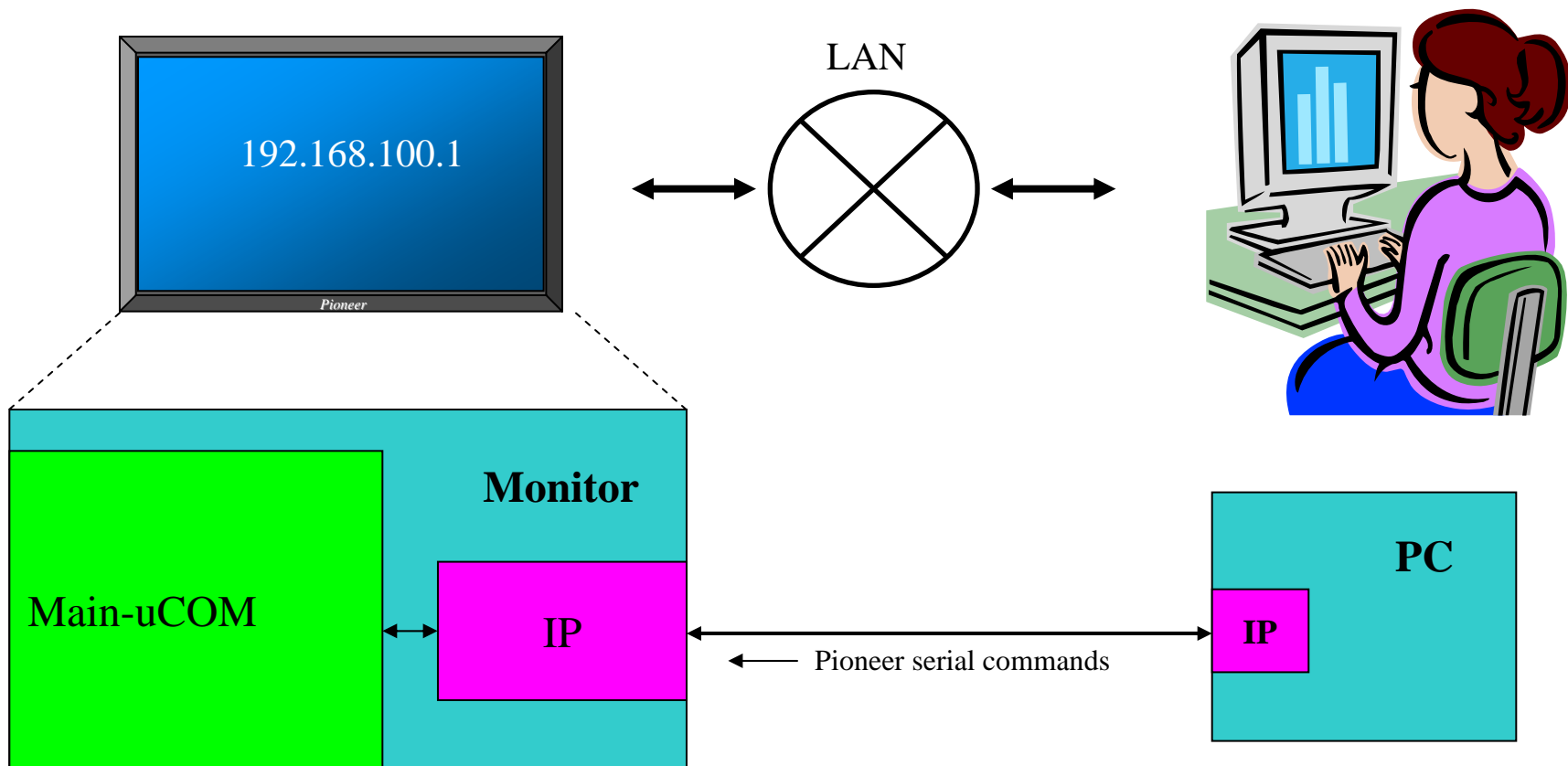
Flexibility & Versatility for Custom Installations

- “IP control”, “Web server application”, & “E-mail”
- “Enriched RS-232C control”. More commands than HDTV models
- “IR repeater”
 - ❖ Monitor’s IR sensor works as IR receiver for other equipments
 - ❖ Monitor has outputs for IR emitter
- HDMI-CEC control

- Useful for dealer to install AV system centering on monitor
 - ❖ IP : Becoming more popular, future-proof technology
 - ❖ IR & RS-232C control : Still used by a majority of Dealers

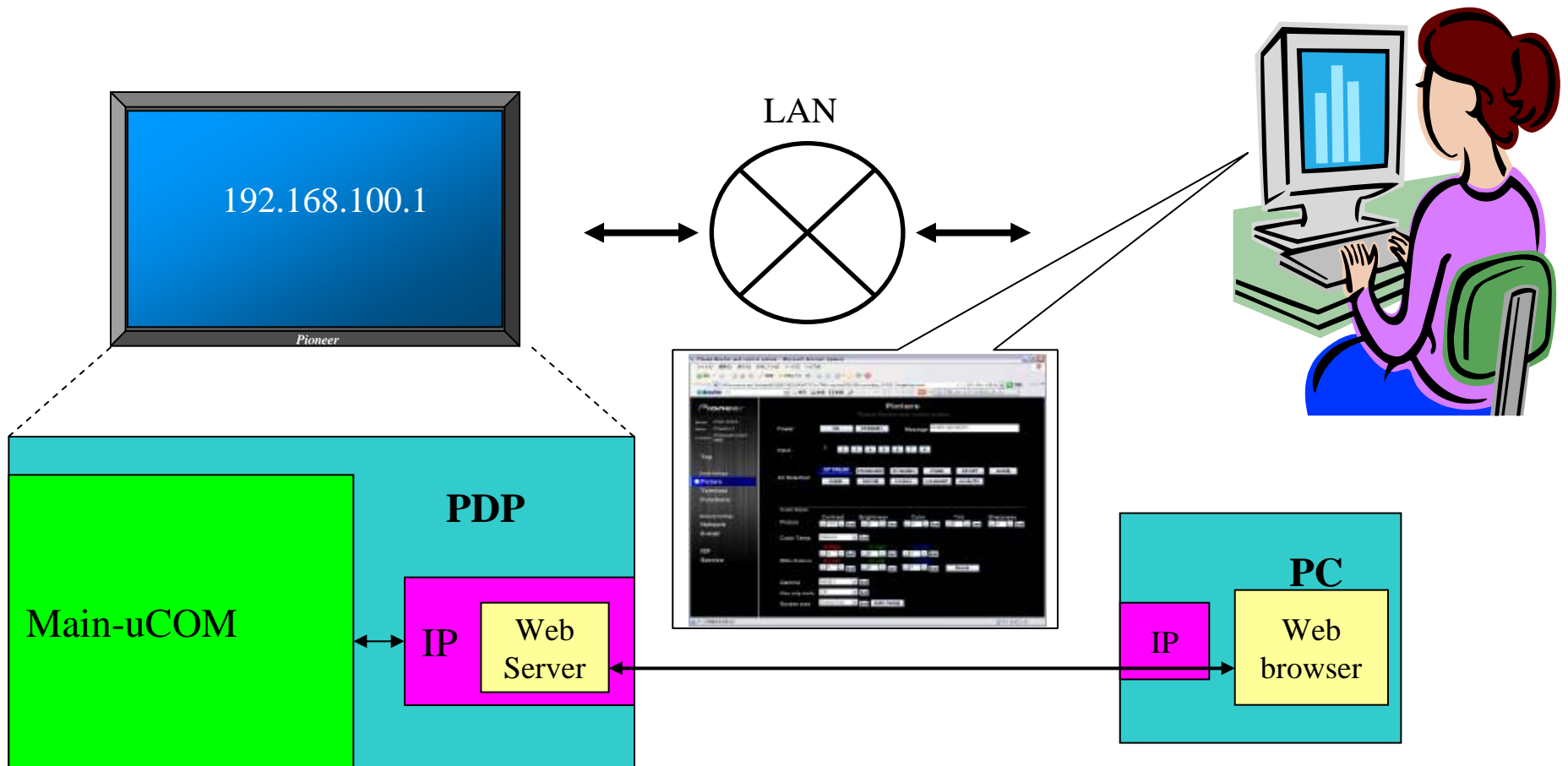
IP control

- Receive commands from PC or other controller via LAN.



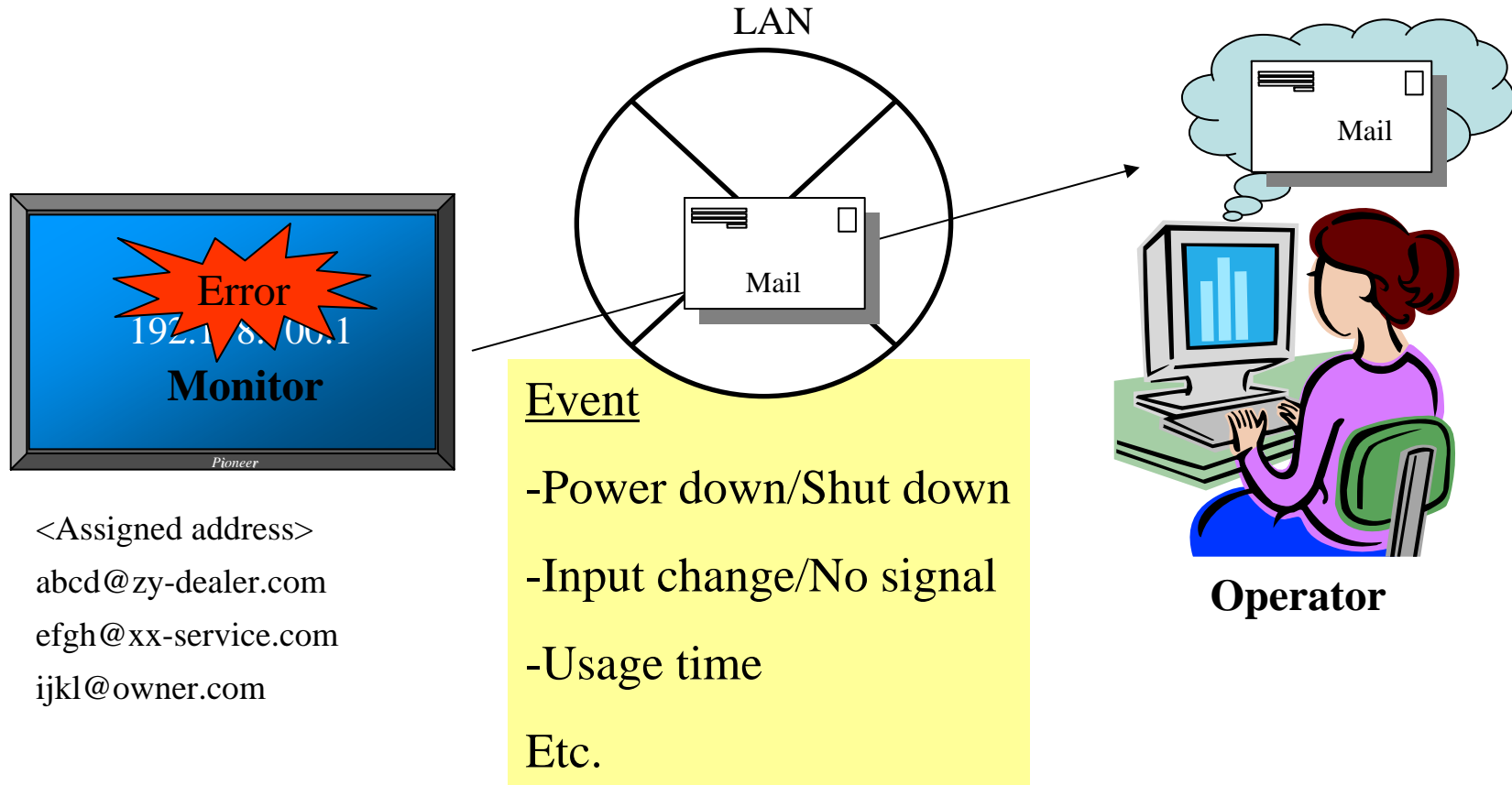
Web Control

- Monitors have web server function. User controls the monitor with a web browser in the PC.



E-mail

- To provide premium service the operator can find out by E-mail if the monitor has a problem or error.



Web control – Screen Shot

Pioneer

Model :PRO-101FD
Name :Plasma 3
Location :Kawasaki plant
5WN

■ Top

Detail Settings
Picture
Terminal
Functions

Network Settings
Network
E-mail

ISF
Service

<No frame>

ON STANDBY

INPUT1 INPUT2 INPUT3 INPUT4
INPUT5 INPUT6 INPUT7 INPUT8

SPLIT SUB INPUT SWAP PIP SHIFT

AV SELECTIO AUTO SETUP FREEZE SCREEN SIZE

DISPLAY

EXIT UP USER MENU
LEFT ENTER RIGHT
HOME MENU DOWN RETURN

TOP : Virtual Remote
Plasma Monitor web control system

Design :
not final

ページが表示されました

Web control – Screen Shot

The screenshot shows a web browser window titled "Plasma Monitor web control system - Microsoft Internet Explorer". The address bar shows a local file path. The main content area is a control interface for a Pioneer Plasma 3 monitor. On the left is a navigation menu with options like "Top", "Detail Settings", "Picture" (selected), "Terminal Functions", "Network Settings", "Network", "E-mail", "ISF", and "Service". The main area is titled "Picture" and includes sections for "Power" (ON, STANDBY), "Input" (1-8), "AV Selection" (OPTIMUM, STANDARD, DYNAMIC, PURE, SPORT, GAME, USER, MOVIE, isf-DAY, isf-NIGHT, isf-AUTO), and "Detail Adjust" (Contrast, Brightness, Color, Tint, Sharpness, Color Temp., White Balance, Gamma, Blue only mode, Screen size). A "Message" box displays "Invalid operation!". A red box in the bottom right corner contains the text "Design : not final".

Web control – Screen Shot

Plasma Monitor web control system – Microsoft Internet Explorer

ファイル(E) 編集(E) 表示(V) お気に入り(A) ツール(T) ヘルプ(H)

戻る 検索 お気に入り

アドレス(AD) C:\Documents and Settings\%6102081.MEGURO\Desktop\%9G_monitor\%SPEC\IPcontrol\%pdc_071031_01nag\index.html

移動 リンク

検索 辞書 動画 マーカー 東京 社羊座 RSS

ページの読み込み中に予期しないエラー

Pioneer

Model :PRO-101FD
Name :Plasma 3
Location :Kawasaki plant 5WN

Top

Detail Settings

Picture

Terminal

Functions

Network Settings

Network

E-mail

ISF

Service

ページが表示されました

Terminal

Plasma Monitor web control system

Power

INPUT SETUP

INPUT 1	VCR	Color System	INPUT1		
INPUT 2	DVD	Color Decoding	Component		
INPUT 3	PC	Color Decoding	RGB		
INPUT 4	STB	Signal Type	PC	Video	AUTO
INPUT 5	BD Player	Signal Type	VIDEO	Video	COLOR1
INPUT 6		Signal Type	VIDEO	Video	COLOR1
INPUT 7		Signal Type	VIDEO	Video	COLOR1
INPUT 8	PS3	Signal Type	VIDEO	Video	COLOR1

AUDIO SETUP

AUDIO 1	INPUT1
AUDIO 2	INPUT3

Design : not final

Web control – Screen Shot

Plasma Monitor web control system – Microsoft Internet Explorer

Model :PRO-101FD
Name :Plasma 3
Location :Kawasaki plant 5WN

Functions

Plasma Monitor web control system

Power

Input 1

Option setting

Energy save INPUT2

Power management INPUT2

No signal off INPUT2

No operation off INPUT2

Room light sensor INPUT2

HDMI control setting

Input Setting INPUT5(HDMI1)

Power off control OFF

Power on ready OFF

Hold sound status OFF

HD AV converter Disable

Design : not final

Web control – Screen Shot

Plasma Monitor web control system - Microsoft Internet Explorer

ファイル(F) 編集(E) 表示(V) お気に入り(A) ツール(T) ヘルプ(H)

戻る 検索 お気に入り

アドレス(①) C:\Documents and Settings\6102081.MEGURO\Desktop\9G_monitor\SPEC\IPcontrol\pdc_071031_01nag\index.html

検索 辞書 動画 マーカー 東京 社羊座 RSS フィードの読み込み中に予期しないエラー

Pioneer

Model :PRO-101FD
Name :Plasma 3
Location :Kawasaki plant 5WN

Top

Detail Settings

Picture

Terminal

Functions

Network Settings

Network

E-mail

ISF

Service

Network

Plasma Monitor web control system

HOST(PDP)NAME	pdp_user@xxx.com
Location	Kawasaki plant 5WN
Installation date	2008/09/24
DHCP	<input type="radio"/> ON <input checked="" type="radio"/> OFF
IP address	192.168.10.1
Sub net mask	255.255.255.0
Default gateway	192.168.10.254
TCP Control Port	8401
UDP Control Port	8402
TCP Connection limit	<input type="radio"/> OFF <input checked="" type="radio"/> ON 5 minutes
LED	<input type="radio"/> ON <input checked="" type="radio"/> OFF
MAC address	00:00:00:00:00:00

Set

Design : not final

Web control – Screen Shot

Pioneer

Model :PRO-101FD
Name :Plasma 3
Location :Kawasaki plant 5WN

Top

Detail Settings
Picture
Terminal Functions
Functions

Network Settings
Network

E-mail

ISF
Service

E-mail

Plasma Monitor web control system

Sender address: pdp_user@xxx.com

Mail server(SMTP): 192.168.10.253

Authentication: ON OFF

ID: pdp_user

Password:

Received address (1): user1@service.111.com

Received address (2): user@control.222.com

Received address (3): user@store.333.com

Event option

- Power down ... Panel error
- Shut down ... Temp.,speaker and fan error
- Input change
- Loss of input signal
- Power toggle
- IR/Button activity
- Usage time :Every 500 hours

Set TEST MAIL

Design : not final

Web control – Screen Shot

ELITE Monitors

isf Plasma Monitor web control system

Model :PRO-101FD
Name :Plasma 3
Location :Kawasaki plant 5WN

Message: Invalid Operation!!

Input: INPUT3
AV Selection: DAY [Set] <INPUTとAVの真ん中にします>

Adjust Status			
INPUT	Day	Night	Auto
INPUT 1	YES	YES	YES
INPUT 2	YES	YES	YES
INPUT 3	NO	NO	NO
INPUT 3(PC)	NO	NO	NO
INPUT 4	YES	YES	YES
INPUT 4(PC)	YES	YES	YES
INPUT 5	NO	NO	NO
INPUT 5(PC)	NO	NO	NO
INPUT 6	NO	NO	NO
INPUT 6(PC)	NO	NO	NO
INPUT 7	NO	NO	NO
INPUT 7(PC)	NO	NO	NO
INPUT 8	YES	YES	YES
INPUT 8(PC)	NO	NO	NO

Settings

Picture: Contrast [100] [Set], Brightness [0] [Set], Color [0] [Set], Tint [0] [Set], Sharpness [0] [Set]

White Balance: R.High [0] [Set], G.High [0] [Set], B.High [0] [Set], R.Low [0] [Set], G.Low [0] [Set], B.Low [0] [Set]

Buttons: SAVE Settings, Erase all, Erase current

Info: Line 1-4: Kawasaki plant 5WN [SAVE Info.]

Buttons: Exit, Exit without save

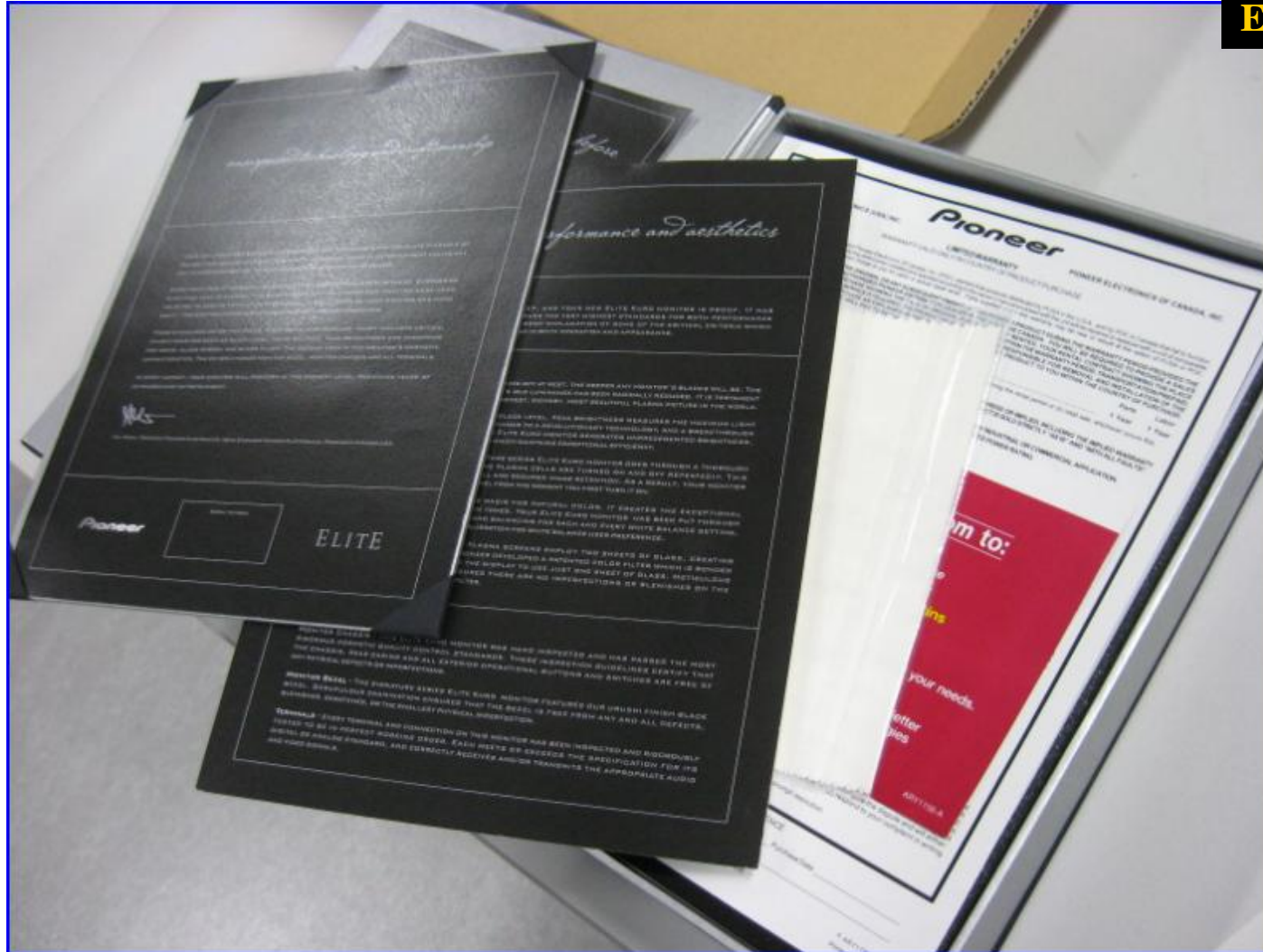
Design : not final

Web control – Screen Shot

**Design :
not final**

Special Package for Elite Customers

ELITE Monitors



Special Package that includes: Certificate with Authenticity, Certificate Glossary, Users manual, Warranty Sheet, Etc.

ELITE Monitor vs. Pioneer Monitor

Pioneer Monitor	ELITE Monitor
	Precise Quality Control
9G Panel with improved high contrast	
Elite Filter	
Improved ASIC based on 8G	
Flat Acrylic Bezel (* ELITE : Embedded logo badge)	
Slim 64 mm Depth Design (Side/Top/Bottom : same as 8G ELITE)	
Optional Side Speaker (60"/ 50")	
Optional Tabletop Stand	
HDMI 1.3 / 2 Inputs	HDMI 1.3 / 4 Inputs
Audio Amp / 2 Audio Inputs	
IP Control & WEB Server (* ELITE : with ISF page)	
Richer RS-232C Control (than TV)	
IR Repeater	
	ISF ccc Calibration with ISF Auto Mode
Preset / Learning / Illuminated R. C. (Same Design)	
Simple GUI (Home Menu / User Menu / Integrator Menu)	
Optimum Mode	
UL60950	UL60065

Pioneer model (INPUT number)

INPUT1	1 RCA (Composite Video)
INPUT2	3 RCA(Component)
INPUT3	Dsub15 (Analog RGB)
INPUT4	DM-D(Digital RGB, HDCP)
INPUT5	HDMI1
INPUT6	HDMI2

AUDIO1	RCA x2
AUDIO2	Stereo Mri

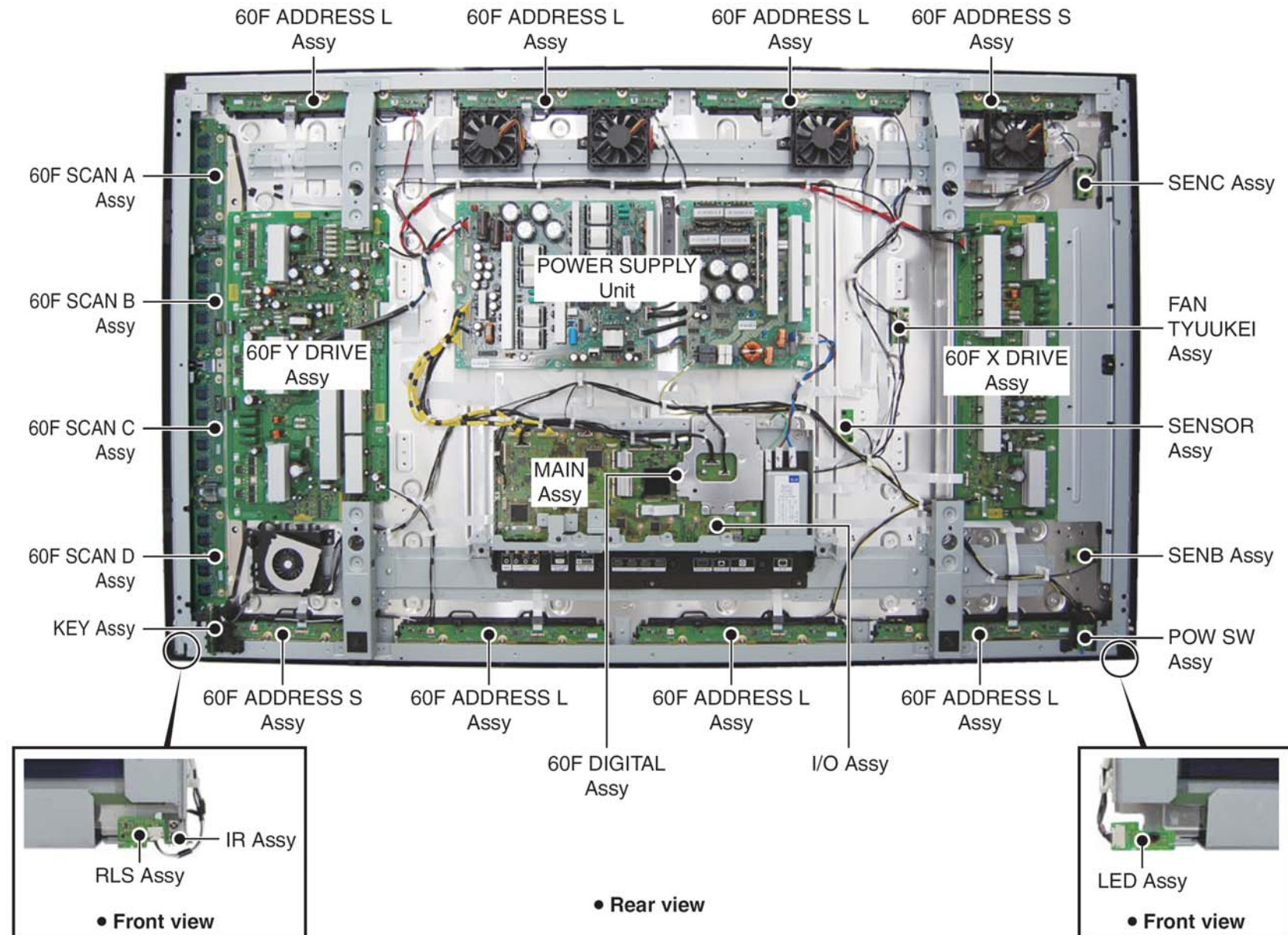
Elite model (INPUT number)

INPUT1	1 RCA (Composite Video)
INPUT2	3 RCA(Component)
INPUT3	Dsub15 (Analog RGB)
INPUT4	DM-D(Digital RGB, HDCP)
INPUT5	HDMI1
INPUT6	HDMI2
INPUT7	HDMI3
INPUT8	HDMI4

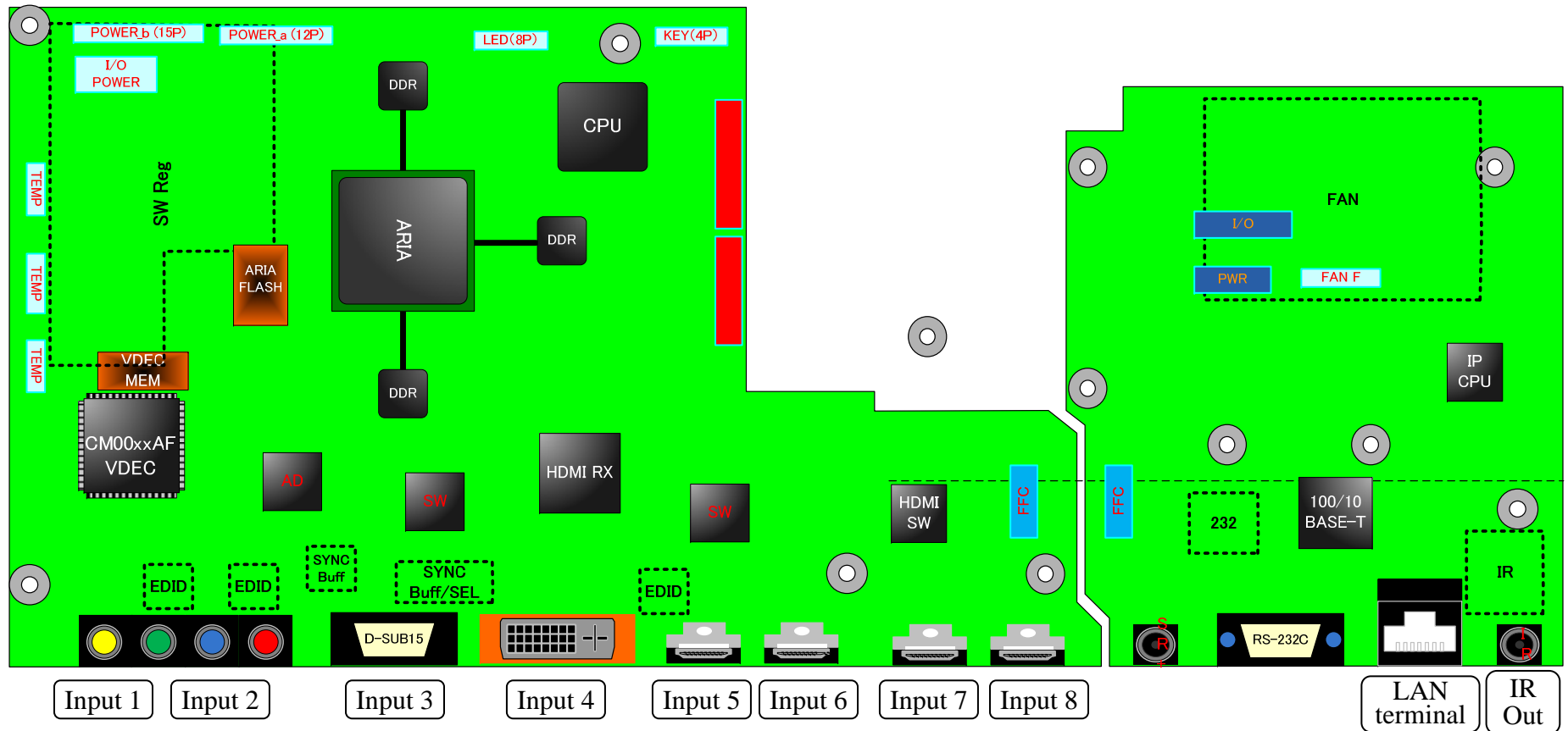
ELITE Monitor vs. Pioneer Monitor

Specifications		PRO-141FD	KRP-600M	Remarks	
Brand		ELITE	Pioneer		
Safety regulation		UL60065	UL60065/60950	*Defference1	
Panel		9G FHD selected ELITE monitor only	9G FHD		
Filter		DCF(ELITE)			
Terminals	Composite video input RCA	1		MAIN and IO ASSY of Pioneer monitor are different from ELITE	
	Component video input 3RCA	1			
	Digital RGB input DVI-D	1			
	Analog RGB input D-sub	1			
	HDMI input	4	2		
	Audio input	Stereo RCA	-		1
		Stereo 2.5mm jack	-		1
	Speaker output	-	9W+9W		
	RS-232C control I/O	1			
	IP control I/O	1			
IR repeater out 3.5mm jack	1				
IR remote control unit		New			
Options	Stand	Fixed		Common stand of TV model	
	Speaker	-	Side	Common Speakers of TV model, brackets are different	
ISF function		Yes	No	*Difference2	

Board Locations - 60" Elite

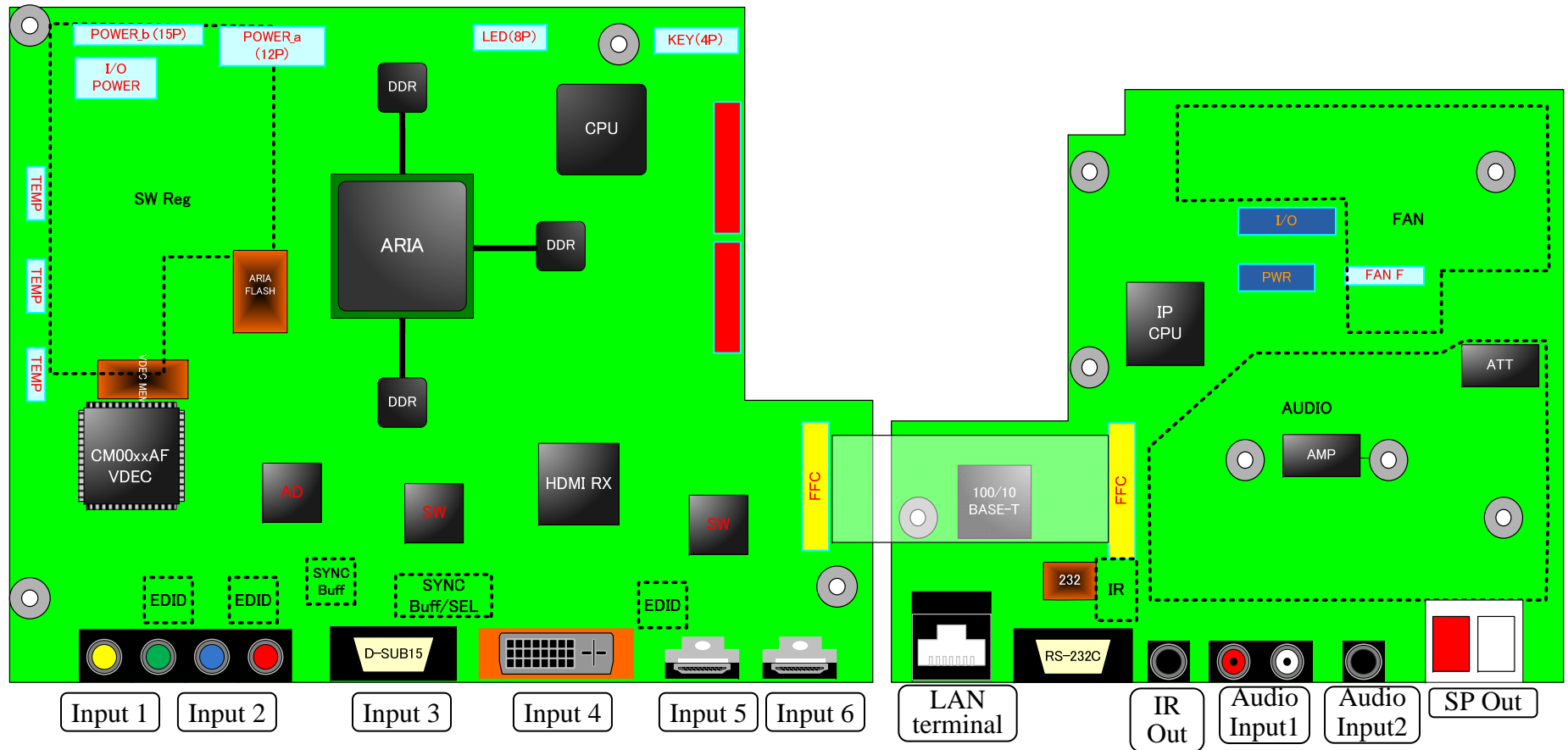


Main & I/O Ass'y - Elite



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Main & I/O Ass'y - Pioneer

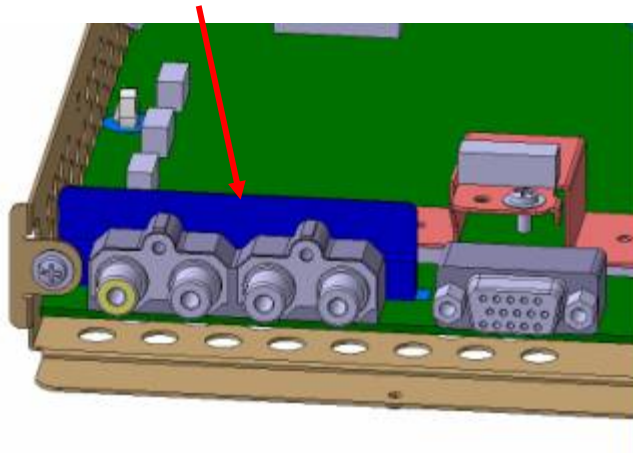


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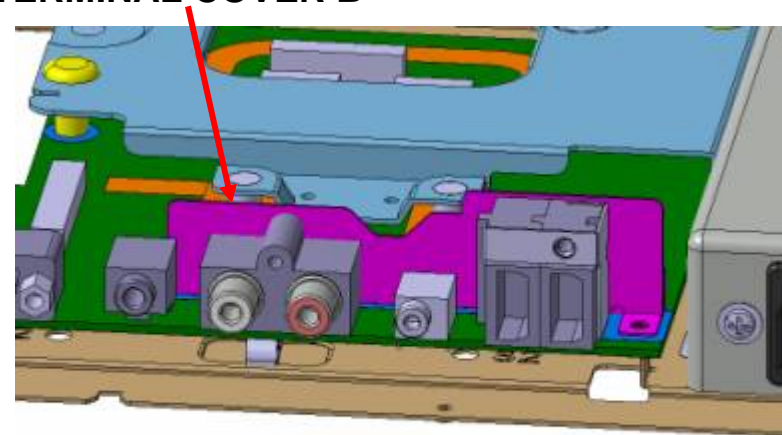
Main & I/O Ass'y - Pioneer

- KRP-600M has 2 barriers and push rivets added to meet UL60950

TERMINAL COVER A



TERMINAL COVER B



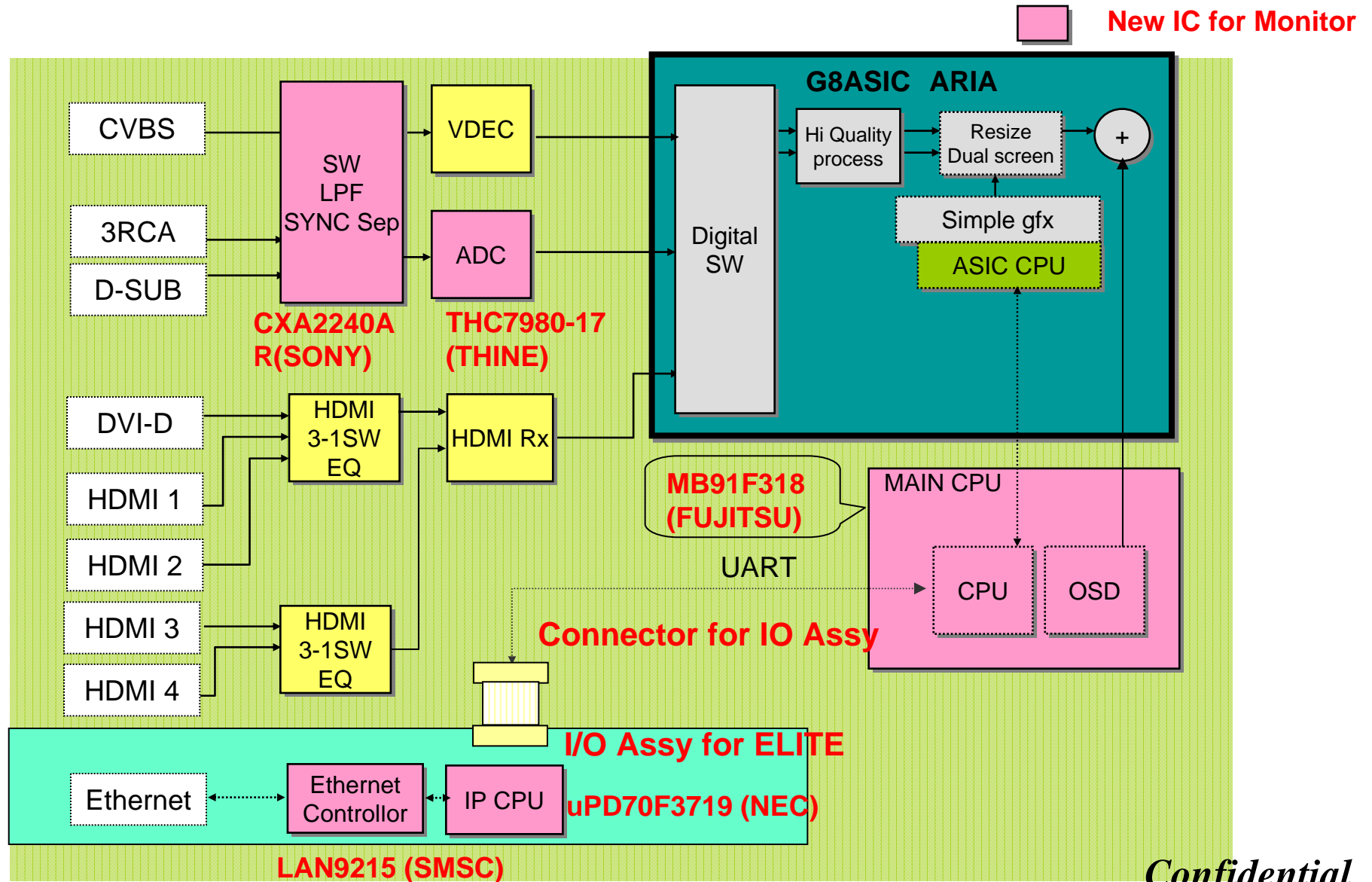
TERMINAL COVER : PC

Note:

These covers are not supplied with the service parts and will need to be transferred

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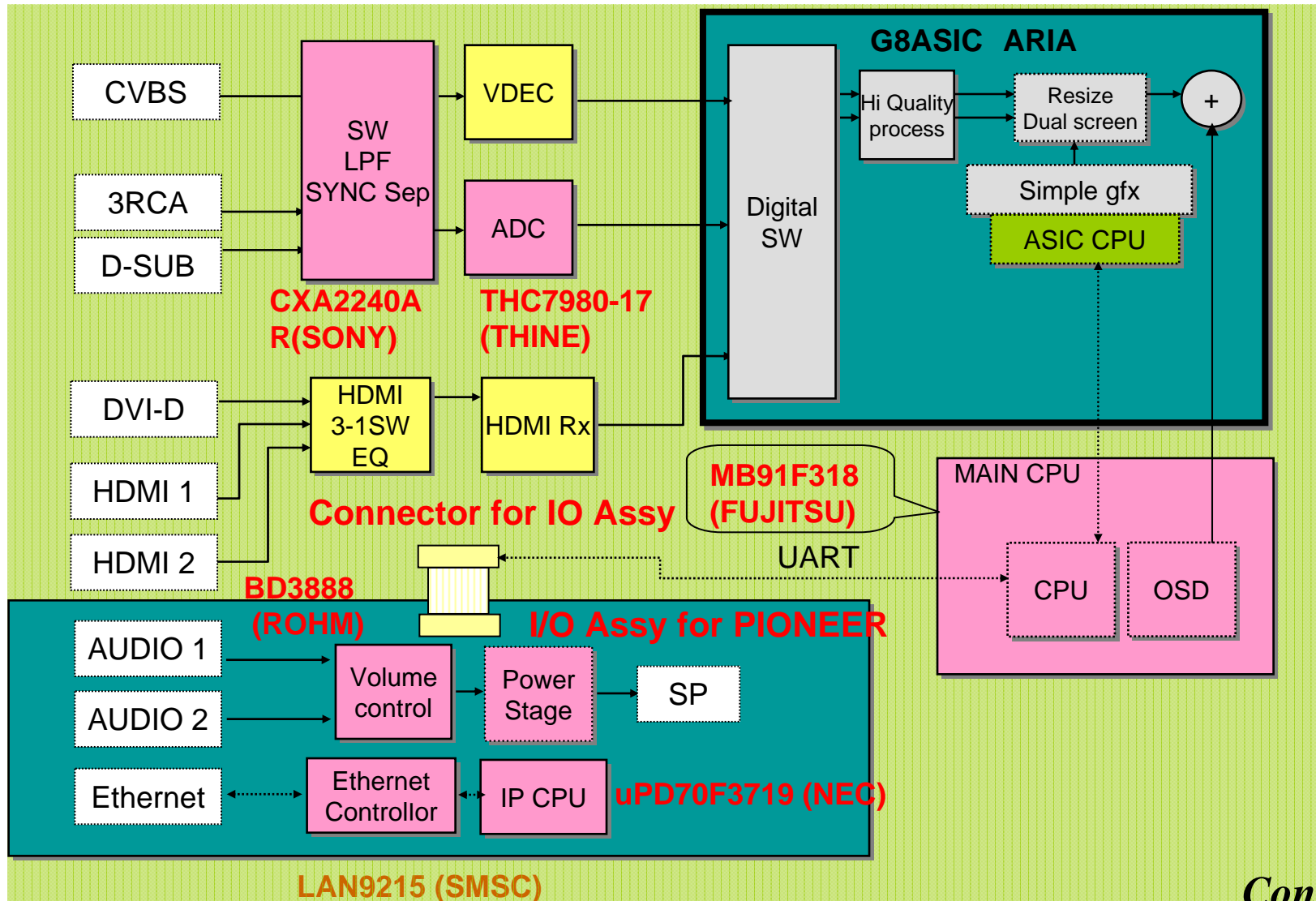
System Block Diagram - Elite



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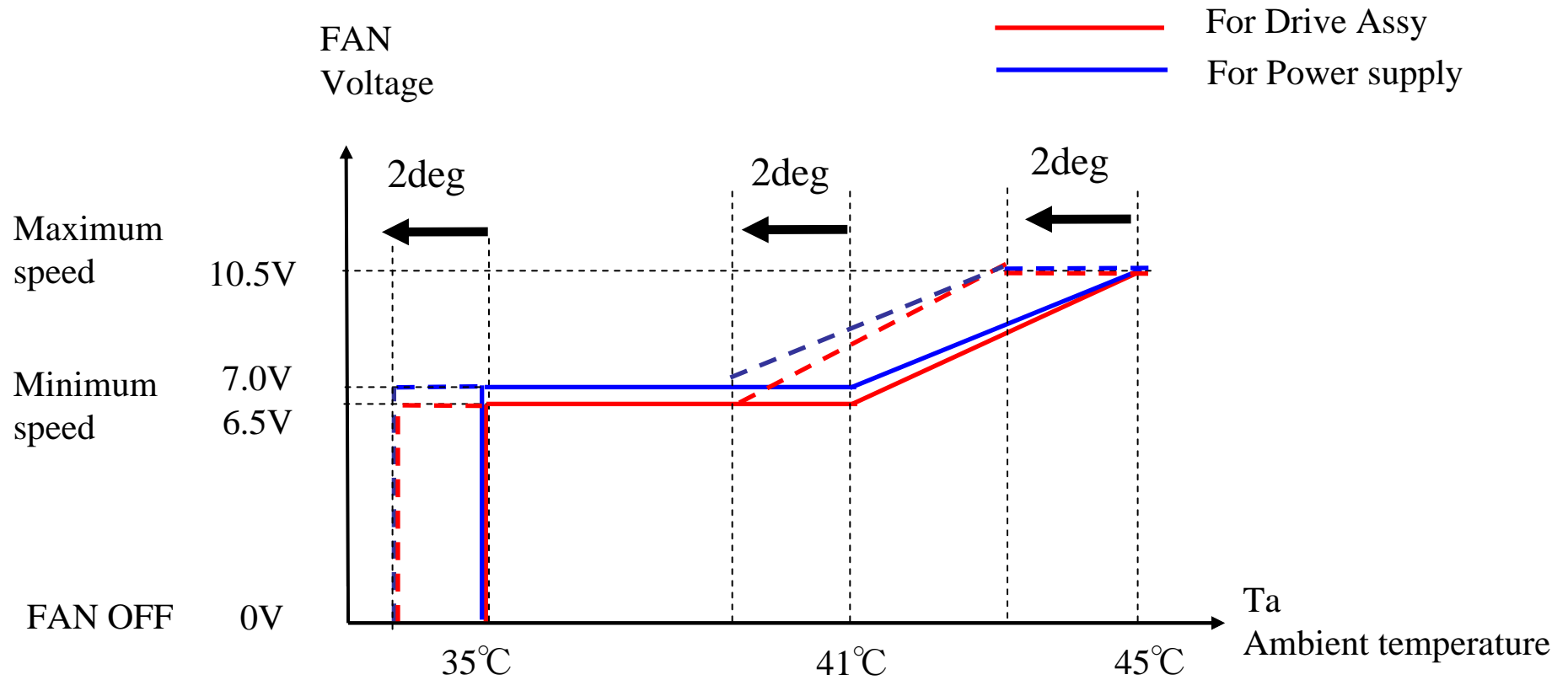
System Block Diagram - Pioneer

 New IC for Monitor



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Fan Control



(Temp Sensor of X drive) - (Sensor of Ta) > 18°C

(Temp Sensor of X drive) > 64°C

Shift threshold temperature 2deg lower

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Diagnosis & Troubleshooting

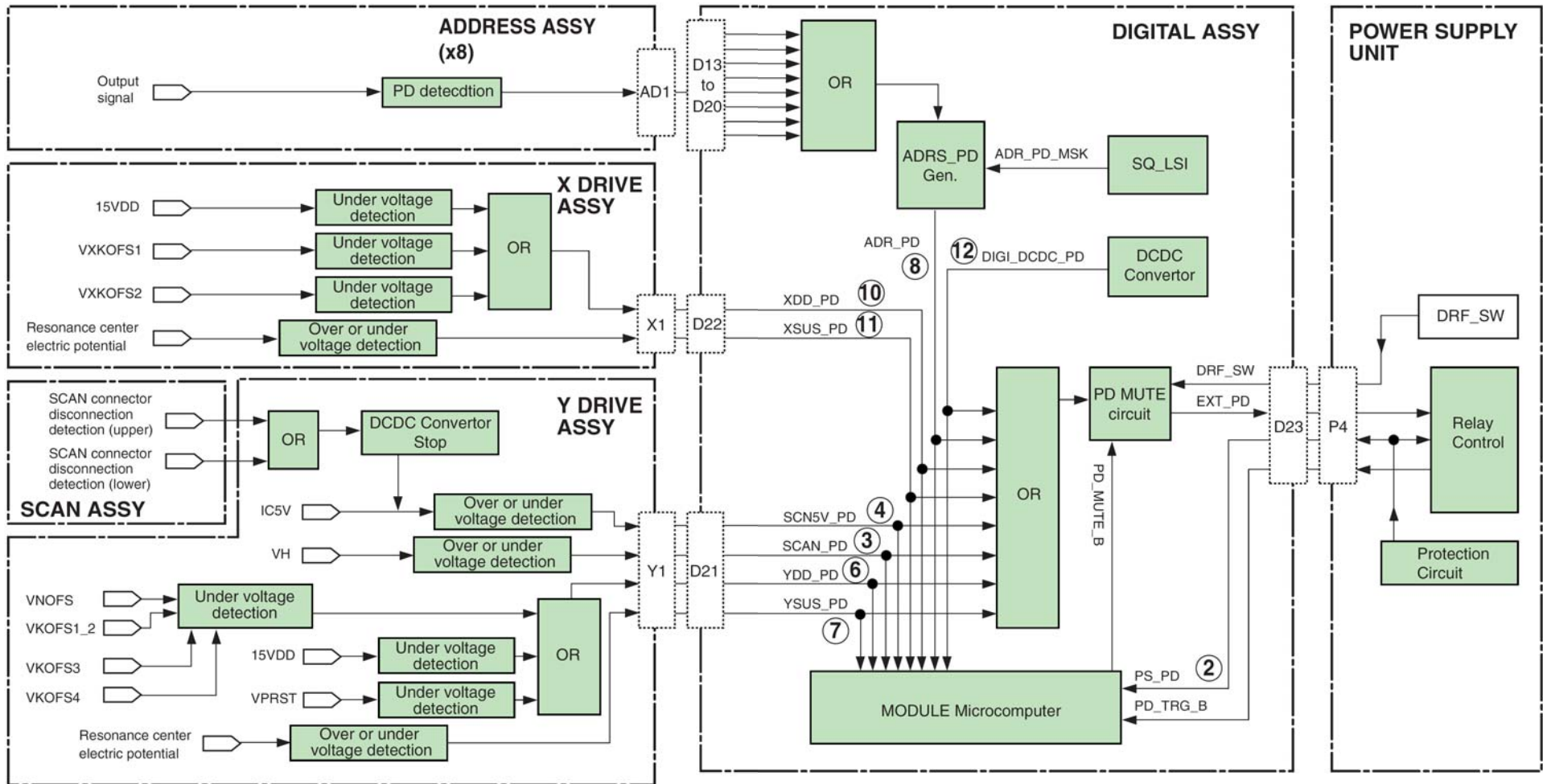
LED Information

Status	LED Display Pattern		Remarks
Power OFF (Indicator OFF)	Red and blue LEDs unlit		
Power ON (Indicator ON)	Blue LED lit		
Standby	Red LED lit		
Power Management	The blue LED flashes at intervals of 1000 ms.		
PD (Power-Down)	The red LED flashes at intervals of 500 ms one to n times *1 then goes dark and remains unlit for 2500 ms.		
SD (ShutDown)	The blue LED flashes at intervals of 500 ms one to n times *2 then goes dark and remains unlit for 2500 ms.		
No backup copying (panel)	The red LED lights, and the blue LED flashes at intervals of 200 ms.		
Panel aging in progress (Not for servicing. Only for factory use)	The red and blue LEDs flash alternately at intervals of 300 ms twice then go dark and remain unlit for 900 ms.		Execution of ZAC command
During main micro-computer rewriting (during MAI)	The red and blue LEDs flash alternately at intervals of 100 ms.		
During MD micro-computer rewriting (during MOD)	The red and blue LEDs flash alternately at intervals of 100 ms.		
During ZEUS rewriting (during PNL)	The red and blue LEDs flash alternately at intervals of 100 ms.		
During ARIA rewriting (during WID)	The red and blue LEDs flash alternately at intervals of 100 ms.		
During IP micro-computer rewriting	The red and blue LEDs flash alternately at intervals of 100 ms.		

*1 Refer to the "5.3 Diagnosis of PD (Power-Down)" sheet for the number of times of flashing during power-down.

*2 Refer to the "5.4 Diagnosis of SD (ShutDown)" sheet for the number of times of flashing during shutdown.

Power Down (PD)



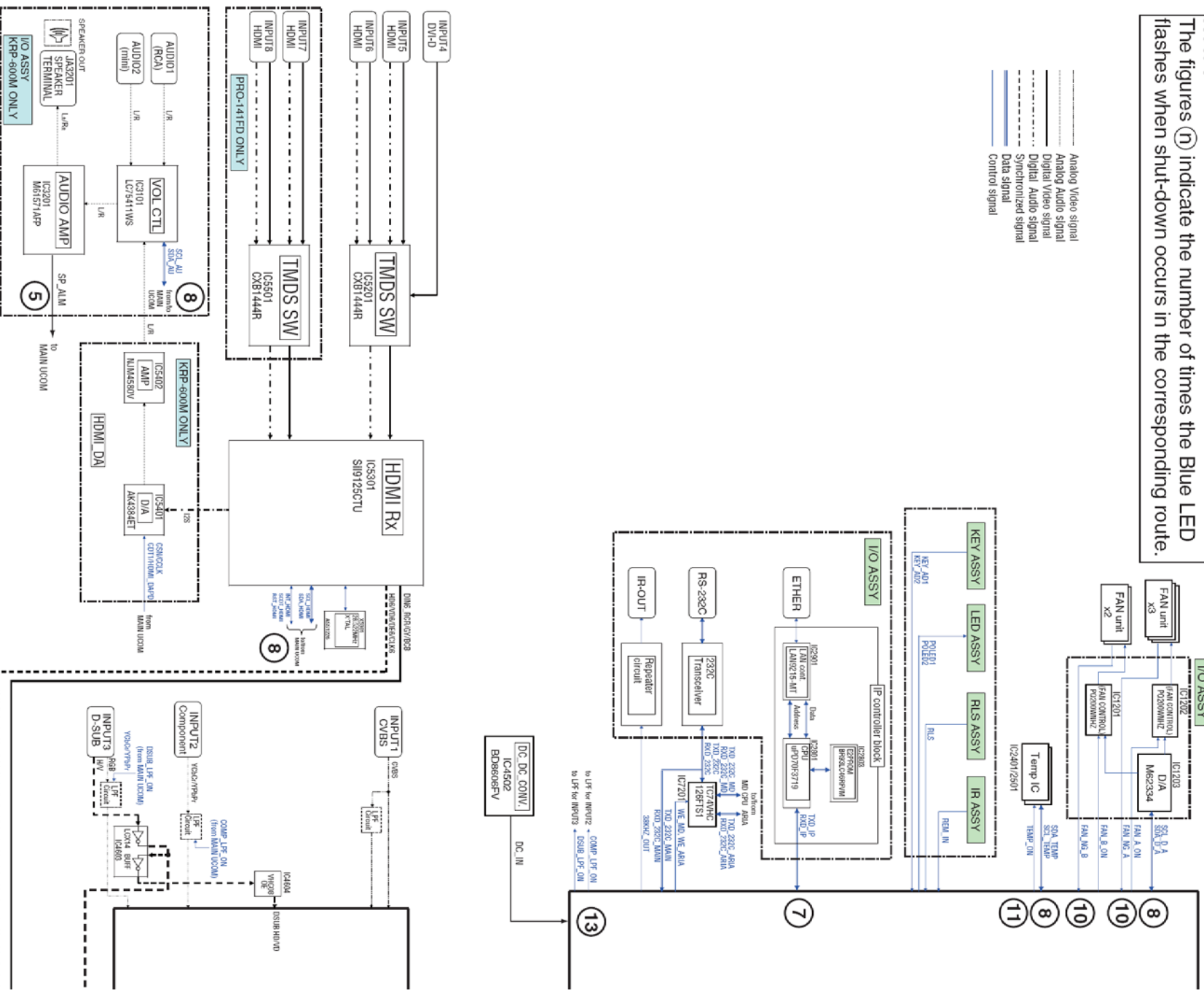
Note:
The figures ② to ⑫ indicate the number of times the Red LED flashes when power-down occurs in the corresponding route.

Shut Down (SD) 1 of 3

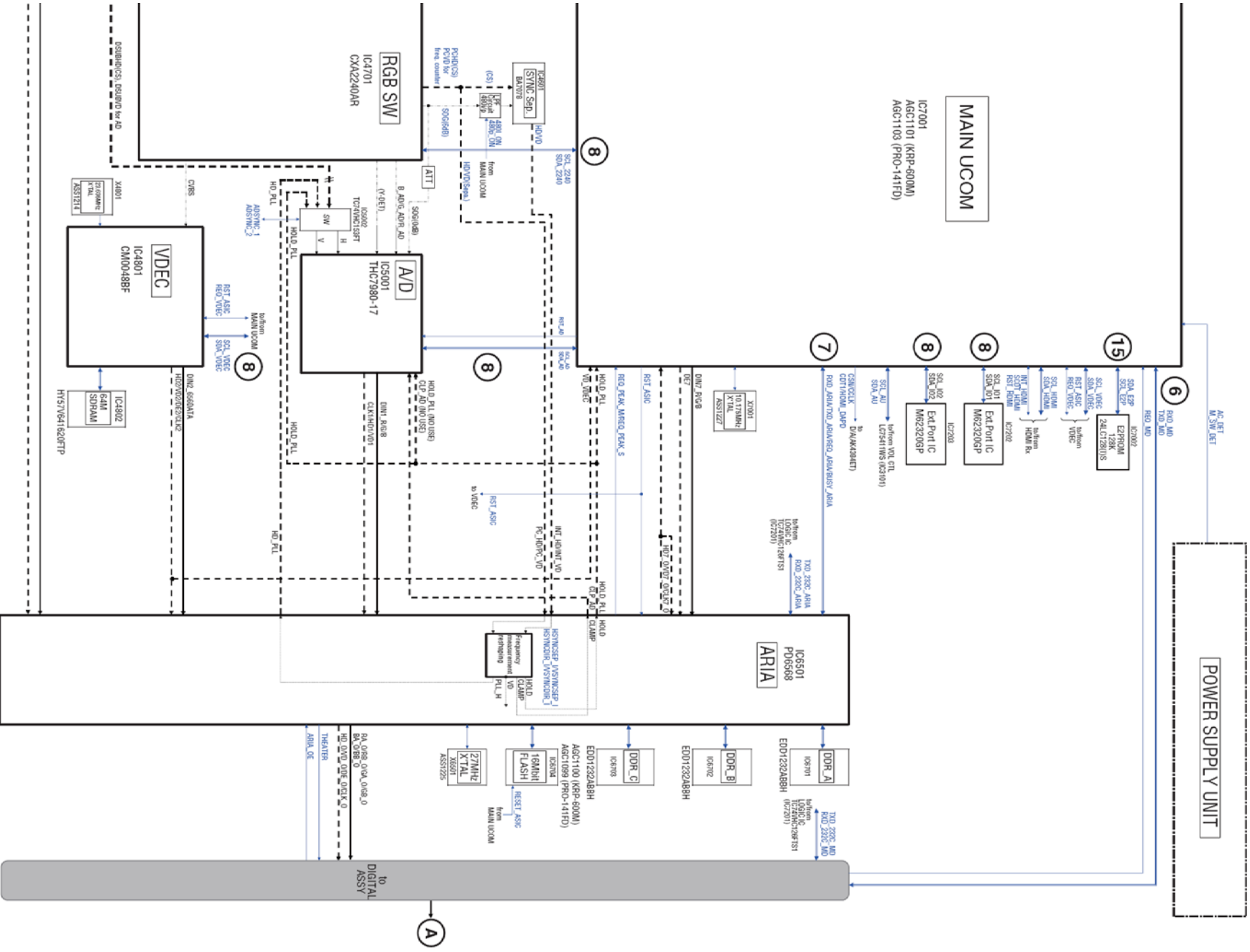
Note :

The figures ⑧ indicate the number of times the Blue LED flashes when shut-down occurs in the corresponding route.

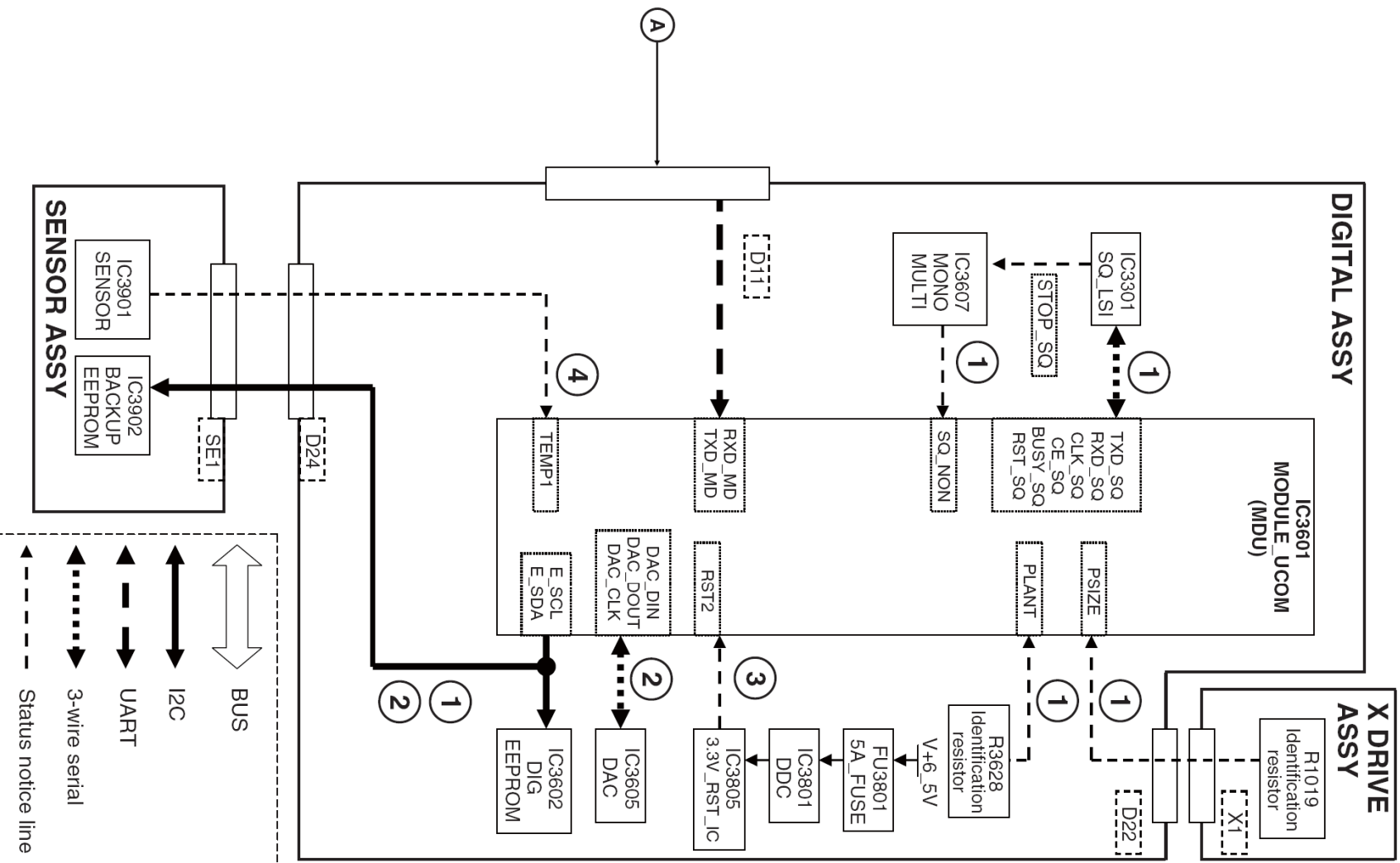
- Analog Video signal
- Analog Audio signal
- Digital Video signal
- Digital Audio signal
- Synchronized signal
- Data signal
- Control signal



Shut Down (SD) 2 of 3



Shut Down (SD) 3 of 3



The End