



Operating Instructions



PBM-3G

"QC & ENGINEERING" 3G Series

PBM-307-3G

PBM-209-3G

PBM-317-3G

PBM-221-3G

PBM-224-3G

PBM-224-3G-10

PBM-332-3G

PBM-346-3G

PBM-347-3G

PBM-255-3G



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• PRECAUTION

Before operating this unit, please read this manual carefully.

 WARNING RISK OF ELECTRIC SHOCK DO NOT OPEN 	 The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.
WARNING : The unit is operated at dangerous voltages. The unit may only be opened by an authorized specialist. All maintenance and servicing work must be carried out by an authorized company. Repairs that are carried out incorrectly could result in fatal injuries to the user.	 The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING:

To reduce the risk of any electric shock, please do not remove the back cover. No user serviceable parts inside. Refer any service matters to qualified service personnel. To prevent fire or shock hazard, do not expose the rear of the set to rain or moisture. Do not rub, clean or hit the Active Matrix LCD with object that may scratch, mark, or damage the Active Matrix LCD permanently.

CAUTION:

Unauthorized tampering with the inside of the monitor invalidates the warranty.

The manufacturer shall not warrant for any damage caused by improper maintenance and/or repair or work by third parties.

Important safeguards for you and your new product:

Your product has been manufactured and tested with your safety in mind. However, improper use can result in potential electrical shock or fire hazards. Please read and observe the following safety points when installing and using your new product and save them for future reference.

1. **Read Instructions**
2. **Follow Instructions**
All operating and use instructions should be followed.
3. **Retain Instructions**
The safety and operating instructions should be retained for future reference.
4. **Notice Warnings**
All warnings on the product and in the operating instructions should be adhered to.
5. **Cleaning**
Disconnect the unit from the mains before cleaning the unit. Do not use abrasive cleaners. Use a damp cloth ONLY for cleaning.
6. **Water and Moisture**



Do not use this product near water surface.

7. Transporting Product

This product should be moved with care. Quick stops, excessive force and uneven surfaces may cause the product damages.

8. Accessories

Do not use accessories not recommended by PLURA Inc. as they may cause hazards.

9. Ventilation

Do not block any of the ventilation openings.

Install in accordance with the manufacturer's instructions.

10. Power Sources

This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply, consult your power supply company.

11. Power Lead Polarization

This product is equipped with a three-wire grounding-type cord. This is a safety feature. Do not use any other type power cord.

12. Power Cord Protection

Power-supply cords should be dressed so that they are not likely to be pulled or pinched by items placed upon or against them.

13. Lightning

For added protection for this product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet. This will prevent possible damage to the product due to lightning and power-line surges.

14. Grounding the product

This product must be grounded properly to comply with the safety regulations in the country of use. If you are unsure of these regulations, please consult a qualified electrician.

15. Servicing

Do not attempt to service this product by yourself as opening or removing covers may expose you to dangerous voltages or other hazards. Refer all servicing to qualified service personnel.

16. Damage Service Required

Isolate this product from the mains and refer to qualified service personnel under the following conditions:

- A. *If the power-supply cord or plug is damaged.*
- B. *If the front LCD front has been damaged.*
- C. *If the product does not operate correctly by following the operating instructions. Use only the user control buttons any improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.*
- D. *If the product has been dropped.*



E. If the product exhibits a distinct change in performance.

17. Safety Check

Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition and the warranty seal is provided.

18. Mounting

The product should be mounted on a wall as recommended in the instructions.

19. Power

This set operates on an AC supply; the voltage is as indicated on the label on the Manual. This appliance must be earthed at all times through the chassis as well as through the power lead.



1. OVERVIEW

The new PBM-3G Plura Precision Broadcast LCD Series which is built with Grade A LCD Panel that supports 3Gb/s-1080/60P input, Powerful Dual 3Gb/s input display with advanced Waveform / Vector scope, Closed Caption or Teletext 801 & subtitle for North American or Australian markets respectively, VPID, IMD and many more . . .

2. Advanced FEATURES

- 3Gb/s-1080/60p
- 2 x Auto-detect HD-SDI, SDI with active loops (3 Gb/s / 1.485Gb/s / 270Mb/s)
- Dual HD SDI YPbPr 4:2:2 – Dual HD SDI YPbPr/RGB 4:4:4 & 2K
- RGB, YUV, Y/C, Composite, UXGA, DVI & HDMI (DHCP)
- Complies with EBU-3320 TECH, SMPTE-C and ITU-R BT.709 Standards
- (ICAC) - Plura Intelligent Connection for Alignment & Calibration
- Closed Caption (608/708) – North American Market
- Teletext 801 & Subtitle OP-47 – Australia & NZ Market
- Cutting edge De-interlacing and Scaling Technology
- Fast Response Time for high motion video
- RGB 10 Bit Digital Signal Processing
- 178° Viewing Angle Display
- Internal Monitor Display (IMD)
- Underscan / Overscan / Normal / Zoom
- Pixel to Pixel Mode, Tally, DC Operation
- Display LTC & DVITC time code with line select
- Internal Pattern Generator and Wall Control System
- Built In Stereo Speaker, 16 CH Audio Metering Display
- Analog & Embedded Audio Input, Digital Audio Decoding
- Color Temperature – User, VAR, Adjustable (11000K TO 3200K)
- Various and User defined Markers Display, Safe Area in HD & SD
- Picture and Picture (PaP), Picture in Picture (PIP) display / Blend
- Intuitive OSD Display, Graphic based, 6 Languages (UNICODE System)
- Display Advanced Waveform & Vector Scope simultaneously with line select
- Programmable 3 User Front Pushbutton Controls, GPI & RS232 Remote Control
- OPTIONS: Ember+ Control, Battery Mount: PBM-AB (Anton Bauer), PBM-VM (V-Mount), Hard Carry Case, Rack mount & Soft Carry case



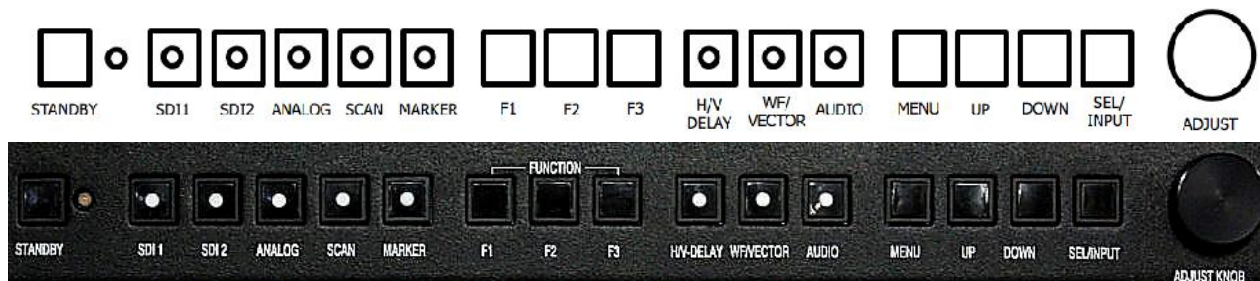
3. Functional explanation of each part

1. Front Panel

PBM-307 & PBM-224-3G



Front Keys Arrangements



Front Keys Operations

Key Name	Operati
Stand By	Power on/off Button. This button is operated after being pressed about 3 seconds.
SEL/INPUT	Activates OSD menu of input source selecting. Changes input source. Executes functions (by OSD help commands) in main OSD menu.
Down	Decreases Audio volume of speaker. Decreases values of user menu in main OSD menu. Executes function (by OSD help commands) in main OSD menu.
UP	Increases Audio volume of speaker. Increases values of user menu in main OSD menu. Executes function (by OSD help commands) in main OSD menu.
Menu	Activates main OSD menu. Navigates higher menu in main OSD menu. Stops auto frequency searching. Exits OSD menu.
Audio	Activates Audio Lever Meter
WF/Vector	Activates Waveform & Vector Scope (SDI only) SETUP Menu Waveform format selection
Blue Only	Mono color / Blue ONLY selection
H/V-DeLay	Activates 'H & V' blanking display 'H DeLay' -> 'V DeLay' -> 'HV DeLay' -> off



Function 1	Executes functions as programmed
Function 2	Executes functions as programmed
Function 3	Executes functions as programmed
Marker	Draw Marker on Screen (off -> 16:9 -> 4:3 ... -> 2.35:1)
Scan	executes Scan function (over-Scan -> Zero-Scan -> under Scan-> Pixel to Pixel)
SDI1	Select SDI 1 source
SDI 2	Select SDI 2 source
Analog	Select analog source directly (‘composite1’ ->‘composite2’ ->‘composite3’ -> ‘S-video’ -> ‘G.B.R’ -> ‘Y.Pb.Pr’ -> ‘Pc’ -> ‘HDMI’ -> ‘DVI’)
Adjust	Adjust Video Menu (Brightness -> contrast -> color -> Sharpness->Phase & tint) turn right = ‘UP’ button turn left = ‘Down’ button

Front Panel Operations

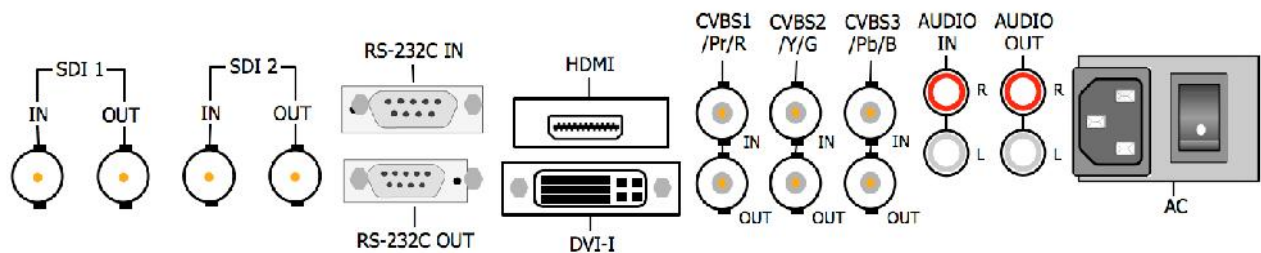
GREEN Led is ON when any LED button is selected or Power is ON
RED led is ON when monitor is in stand-by mode

Speaker Out

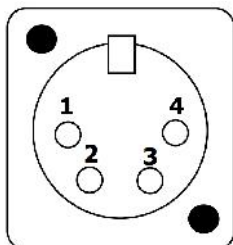
Speaker R out	8 ohm315%, Max 2W + 2W
Speaker L out	

2. Rear Panel

Connection Details



DC Battery IN

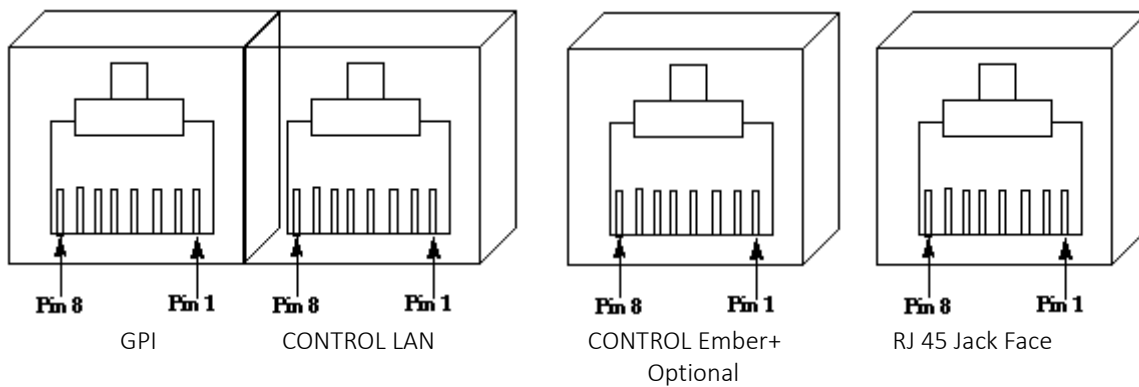


PIN No.	description
1	GnD
2, 3	
4	+ 12V/24V

PBM-317 ->12V, PBM-224 ->24V - PBM-224 ->12V (S/N starts with 17APL)

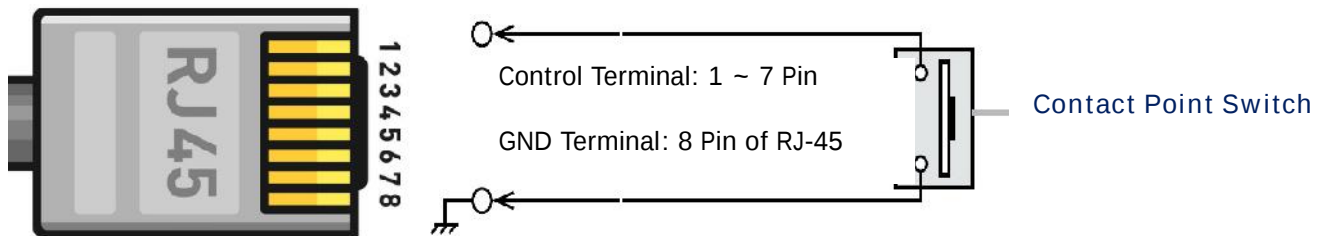


RJ-45 - GPI, Control LAN (Ember+-OPTIONAL)



Remote PIN Assignment

8 Pin	Common (GND)	4 Pin	GPI 4 Port
7 Pin	GPI 7 Port	3 Pin	GPI 3 Port
6 Pin	GPI 6 Port	2 Pin	GPI 2 Port
5 Pin	GPI 5 Port	1 Pin	GPI 1 Port



Interface description

Interface	Description
SDI 1 IN SDI 2 IN	HD SDI / SD SDI input
SDI 1 OUT SDI 2 OUT	SDI 1, SDI 2 Loop out
RS-232 IN	update/Multi control/auto color calibration
RS-232 OUT	Multi control out
HDMI	High Definition Multimedia input
DVI-I	DVI-I type Digital / analog Pc-RGB Video input High Definition Multimedia input compatible
CVBS1/Pr/G IN CVBS2/Y/R IN CVBS3/Pb/B IN	Gbr (SoG sync) input Y, Pb, Pr component Video input CVBS / composite input
CVBS1/Pr/G OUT CVBS2/Y/R OUT CVBS3/Pb/B OUT	Component/Gbr/composite1,2,3/ S-Video Loop out



Audio R IN Audio L IN	DVI-I/component/GBR/composite1,2,3/S-Video Audio input
Audio R OUT Audio L OUT	Audio Monitor out
AC IN	AC 90V ~ 240V, 50Hz/60Hz
DC IN	PBM-317: DC 11V ~ 17V , PBM-224: DC 24V, PBM-224: DC 12V (S/N starts with 17APL)
UPDATE/Ethernet	Firmware Upgrade / Ember+ Optional
GPI	GPI 1 ~ 7 control Port

4. MENU OVERVIEW

In this system menu, there are several ways to maneuver the menu settings.

Most menus consist of three levels to select the necessary option, but some settings require greater depth. If you press the **MENU** button, the first and second level of the menu system will appear on the monitor screen. The third level can be displayed by pressing **SEL/INPUT**. If a menu has more than three levels, the pop-up dialogue box will be displayed as the fourth or fifth level.

1. To show and remove the Menu

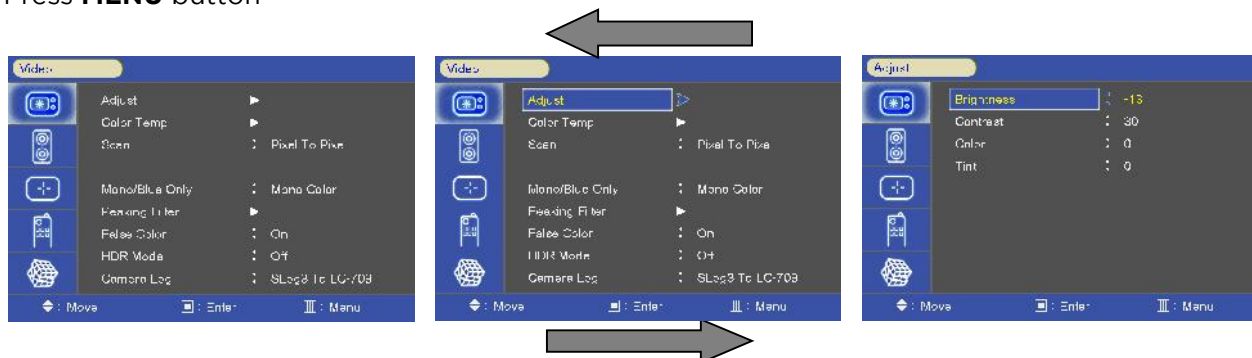
Press the **MENU** button to display the menu. Press the **MENU** button again to hide the menu.

2. To go to the next level

Press **SEL/INPUT** button.

3. To go back to the previous level

Press **MENU** button



4. Typical Menu Operation

1. Press **MENU** button: The main menu will appear.
2. Use **UP/DOWN** button to select the desired menu option (icon).
3. While the desired menu option is selected, press **SEL/INPUT** to move to the second level.
4. Use **UP/DOWN** button to select the second menu option.
5. Press **SEL/INPUT** to move to the third level: Some menu options require additional steps.
6. Press **MENU** to return to the previous menu to return to monitor viewing.

5. BASIC OPERATION

1. Turning On the Monitor



1. Firstly, make sure you have connected the AC power cord or DC XLR connector. The monitor will switch to standby or power on mode. If the monitor is in standby mode, press the ST-BY button to turn on the monitor.
2. Select the source by using **SEL/INPUT** button on Keypad in front of monitor

2. Volume Adjustment

1. Press the **ADJUST** button on Keypad.
 2. Press the **MENU** button on Keypad.
- OSD Audio menu -> Volume menu.



6. On Screen Menus Selection and Adjustment

1. How to adjust the OSD screen

1. Press the **MENU** button and then **UP/DOWN** button to select each menu.
2. Press the **SEL/INPUT** button and then use **UP/DOWN (SEL/INPUT)/MENU** button to display the available menu.



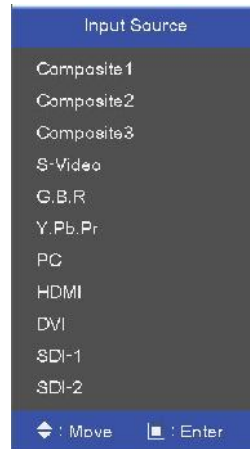
- The monitor's OSD (On Screen Display) may differ slightly from what is shown in this manual.



7. SELECT VIDEO INPUT

1. How to Select Video Source by OSD

1. Press the **SET/INPUT** button and then **UP/DOWN** button to select the required video source.
2. Press the **SET/INPUT** button to go to select the desired video source.
3. If Input Name is enabled, The **SET/INPUT** button will show the input name previously programmed instead of the source name.



8. VIDEO MENU OPTIONS



1. Adjust

- Adjust the values of Brightness, Contrast, Color, Tint and Sharpness directly from -50 to 50



2. Color Temperature Control

- For Setting the Color temperature or adjusting RGB gain value
- User (User setting RGB gain value), VAR(3200K ~ 9300K), Often used value(9300K, 6500K, 5400K,3200K)
- Color Space: Native/BT.709



3. Scan

- Select desired scan mode.

1. Over Scan - 95% input size and fit the selected display size
2. Zero Scan - 100% input size and fit the selected display size
3. Under Scan - 105% input size and fit the selected display size
4. Pixel to Pixel - Video input will match the video display resolution (NO Scaling).



5. Aspect Ratio

- For setting the aspect ratio.
- Full Screen: The video input will be scaled to the max panel resolution.
- Full Screen, 16:9, 4:3, 14:9, 13:9, 1.85:1: The video will be displayed based on the selected aspect ratio.
- Function key can be assigned to the aspect ratio and will be rotating through this sequence, Pixel to Pixel, Full Screen, 16:9, 4:3, 14:9, 13:9, 1.85:1, 2.35:1

6. Zoom



- Can see the enlarged video by (2X, 3X, 4X, 5X) ratios.
- If user select the Zoom 2X, can see the below yellow box in picture.
- Press Select or enter button, user can see the enlarged picture.
- Menu key or exit key escape the zoom mode.
- Example (3X3)

Zoom X position: coordinate of video image's column position. Zoom y position: coordinate of video image's row position.



7. Mono/Blue Only



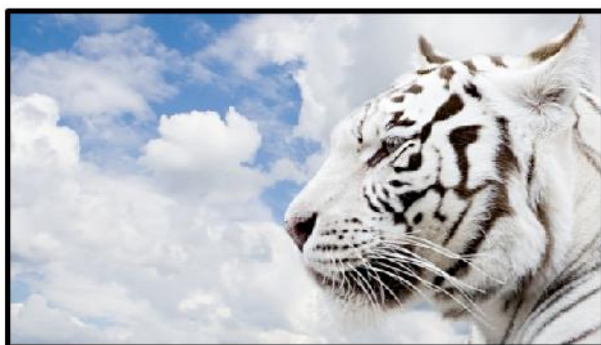
- Mono color: For selecting monochrome images.
- Blue Only: Blue Video channel is enabled

8. PC Menu (pc mode only)



- Only operate in PC input mode
- Select auto-adjust and adjust Phase, HV position, frequency
- Auto-adjust automatically set the optimum values of Phase, HV position and frequency.

9. Flip mode



< H-flip off >



< H-flip on >

- H-Flip Display on/off

10. NR (Noise Reduction)

- noise reduction on/off. (SDI mode only)



11. Dual Link Mode (SDI Only)

-Dual Link Mode select. (Auto / Off / RGB444 / YCbCr 444/ YCbCr 422)

- If SDI signal has a video payload identification and Dual Link Mode set auto mode. Dual link is set automatically.

9. AUDIO MENU OPTIONS

1. SDI 1/ SDI 2 Audio Group

-Select primary or secondary Audio group to extract.
(Group 1~4)

2. SDI 1/ SDI 2 Audio Output Channel

-Audio output channel source select.
(channel1~4, channel1/2, channel3/4, off)

3. Level Meter



- Display the Audio level meter on screen in SDI input.
- Audio level meter cannot be displayed with OSD.
- SDI input can support 16 CH embedded Audio, other inputs can only support 2 CH Audio

4. Level Meter Type

- Pair: respectively channel with right and left display
- Group: respectively group display

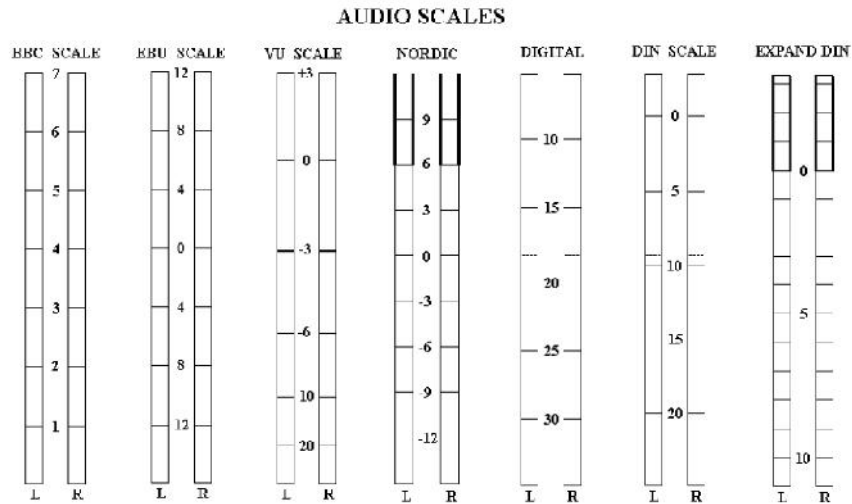
5. Level Meter Position

- Level Meter Position selects. (TOP/Middle/Bottom)

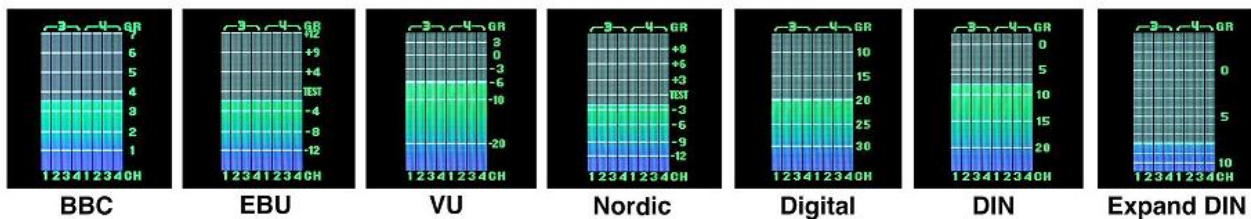


6. Level Meter Scale

- Level Meter Scale mode selects. (BBC / EBU / VU / NORDIC / DIGITAL / DIN / EXPAND DIN)



Audio Level Meter Scales: PBM-3G



7. Audio Mode

- Sound mode selects (Stereo/Dual Mono)

8. Volume



- Adjust the speaker or headphone Volume level. (0~32)



10. Marker MENU OPTIONS



- Marker: 16:9, 4:3, 14:9, 13:9, 1.85:1, 2.35:1, 1.85:1&4:3, User1, User2, User3 (Customized markers).

- User Marker: The user defined Marker size setting.



2. Safety Area



-Safety Area: Draw dotted line Marker on screen.
(16:9 95/93/90/88/80%,
4:3 95/93/90/88/80%,
EBU Action 16:9/14:9/4:3,
EBU Graphic 16:9/14:9/4:3)

3. Center Maker

- "+" Marker on center of screen

4. Marker Width

-Marker line thickness setting. (0-10)

5. Marker Color



- Marker Line Color: Select Marker line color (White, Yellow, Blue, RED, Black)
- Safety Line Color: Select Safety line color (White, Yellow, Blue, RED, Black)
- Marker Back Color: Select Marker Back Color. (None, Gray, White, Blue, Black)
- Safety Back Color: Select Safety Back Color. (None, Gray, White, Blue, Black)
- Marker BK Blend Color: Select Marker blending level. (0 ~ 5)
- Safety BK Blend Color: Select Safety blending level. (0 ~ 5)

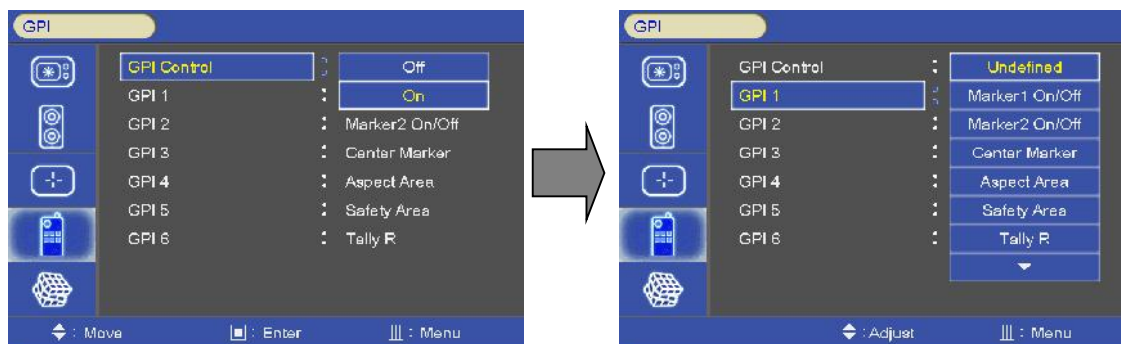


6. Preset1 & Preset2

- Markers can be set as preset 1 & 2 and be triggered by GPI controller.
- GPI preset markers can only be utilized by GPI controller

11. GPI MENU OPTIONS

1. GPI Control & GPI#



- For programming selected functions to particular GPI ports.
- GPI Controller can be utilized to remotely control the monitor.
- GPI Control: GPI function Enable/Disable
- GPI 1 ~ 7

GPI Function	Description
Undefined	Not set (no function allocated)
Marker1 On/Off, Marker2 On/Off	Displays the markers which have been set by the GPI PRESET1, 2 items.
Center Marker	Displays the center marker.
Aspect Area	For setting the aspect ratio.
Safety Area	Displays the Safety Area.
Tally R, Tally G	For displaying the Red, Green or Amber (if you select R & G at the same time) tally LED.
Input SDI1, SDI2, SFP, HDMI	Switches the input source.
Menu Key, Enter Key, Up Key, Down Key Left Key, Right Key	Use the key function by GPI.
Function key1 ~ 6	Function key1 ~ 6
H/V delay	H delay, V delay, HV delay, Off
Aspect	Full Screen, 16:9, 4:3, 14:9, 13:9, 1.85:1, 2.35:1
GPI 7 : Power Key(Fixed)	



12. SETUP MENU OPTIONS

1. Factory Default

- Factory: User Reset.
- Setup Load: Load user saved values or default value
- Setup Save: Save user setting values at user 1, 2, 3.



2. Function 1~3

- Function 1~3: Select the required function to be allocated to the FUNCTION Keys 1, 2, 3.



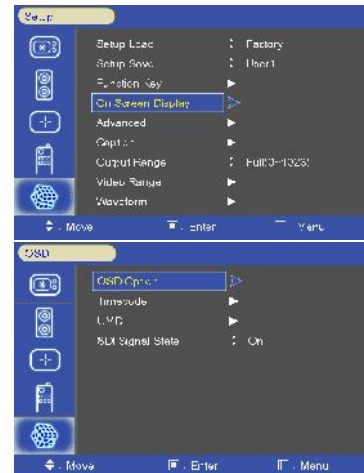
Function1-6 button	Description
UNDEF	Not set (no function allocated)
Aspect	Sets the aspect ratio
Audio Lv Meter	Audio Lv Meter On / Off
Audio Group	Select the embedded audio Group in SDI input.
Audio Channel	Select the embedded audio channel in SDI input.
Audio mute	Toggles between mute & un-mute speaker/headphone.
H/V delay	H delay, V delay, HV delay, Off
Mono/Blue Only	Execute Mono color or Blue Only
Gamma Select	Select Gamma curve.
Marker size	Select Marker size
Safety Marker size	Select Safety Marker size
Marker Prese1/2	Marker Preset 1/2 on/off
Waveform	Waveform on/off
Peaking	Peaking on/off
False Color	False Color on/off
UMD	UMD on/off
Caption	Caption on/off
HDR	HDR on/off (Available in selected models ONLY)
Time Code	Time Code on/off



3. On Screen Display

OSD Option

- OSD Transparency: Disable blending OSD background with video image.
- OSD Time out: OSD gone time setting. (3-200)
- OSD Position: L-T, R-T, C, L-B, R-B



Time code



- Time code Enable: Time code Display (off/LTC/DVITC, SDI only)
- Time code size: Time code size select. (Small, Middle, Large)
- Time code Position: Time code display position selects (L-T, C-T, R-T, L-B, C-B, R-B)
- Time code Transparency: Disable blending Timecode background with video image. (0%, 25%, 50%, 75%, 100%)

Under Monitor Display (color: Tally R/G mode action)



UMD



Tally Red



Tally Green

- UMD: UMD display on/off
- UMD Character: UMD Character Select
- UMD Position: UMD display positions select (L-T, C-T, R-T, L-B, C-B, R-B)
- UMD FG Color: UMD Character color Select (RGB_255_192_128_ Transparent)
- UMD BG Color: UMD BG color Select (RGB_255_192_128_ Transparent)

SDI Signal State

- SDI Signal State: on/off

4. Advanced



- Information, Control, Screen Control, Network Config, Fan Control, Set ID, Protocol Setting



Information



- Version, Firmware Version, Release time, Operating time, FPGA Version, Calibration ID

Control

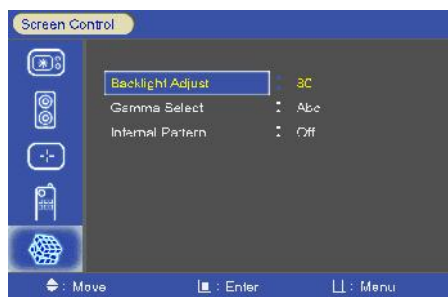


- FRONT LED: Front LED on/off

- Local Enable: Power, up and down key is only operational, if Local enable is off.

- Remote Enable: Select the controller of local or remote. If remote controller is selected, both local (front key) and remote are operational. However, when local is selected, local key only operational.

Screen Control



-Backlight Adjust

→Inverter dimming Level select (0-100)

-Gamma Select

→Gamma Level Select (0.8 ~ 3.0)

- Internal Pattern

→Auto Run, White, RED, Green, Blue, Yellow, Cyan, Magenta

Config LAN / Ember+(Optional)



-Plura System Controller (PSC-400) Network setting.

→DHCP: DHCP on/off (Manual IP settings – DHCP on)

* “Apply” to confirm all settings were applied.

Protocol Setting

-PLURA PSC, TSL 5.0, TSL 4.0



Set ID



- Set ID is required for remote control. Set ID range (01-99).

Fan Control

- Fan Control: Internal Fan Control option based on temperature sensor **Auto** / force **on** / force **off**
- Fan Active Temperature: Adjusts fan based on temperature in Celsius degree. ONLY applicable when the Fan Control setting is set to Auto.
- Hysteresis: Adjusts fan hysteresis temperature in Celsius degree. (1-10°)
- Shutdown: Monitor protection, monitor will shut down if temperature exceeds 75° .

5. Caption For North American Market



- Closed Caption Mode: 608 Line21, 608 ANC, 608 Transcoded, 708 modes selection
- 608 Caption channel: C/C1, C/C2, C/C3, C/C4, TEXT1, TEXT2, TEXT3, TEXT4
- 708 Caption Service: Service 1/Service 2

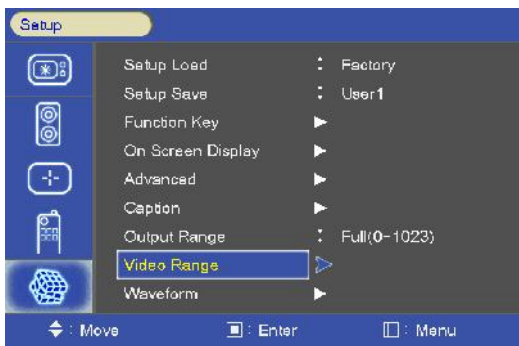
6. Output Range



- Normal (16-235)/Full (0-255)



7. Video Range



- Range Check: on/off.
- Y Max: Maximum luminance level.
- Y Min: Minimum luminance level.
- C Max: Maximum chroma level.
- C Min: Minimum chroma level.
- Color: Black/Blue/Red/Green
- Grid: Grid line on/off
- Blink: Y/C Min-Max to blink. (0~7)

8. Waveform



- Waveform Enable: Waveform, Vector Display on/off. (SD only)
- Waveform Format: Waveform Mode select. (Rotation, Y, Cb, Cr, Y+Cb+Cr, G, B, R, G+B+R)
- Line Select: Used to select specific Vertical Line for Waveform/Vector scope.
- Line Number select: In WAVEFORM/VECTOR, use the Up/Down button or Adjust by Turning Right/Left to select User's desired line.
- Line Display: off/on/5 sec
- Intensity: 1~63

Press the WAVEFORM button to display the WAVEFORM Mode

Y-Pb-Pr Waveform



Y_Pb_Pr WAVEFORM & Audio Level Meter

Y-Waveform + Vector Scope



WAVEFORM & Vector Scope & Audio Level



& info Window & time code Display.

Double



SDI 1, 2 & WAVEFORM & Vector Scope & Audio Lever Meter & info Window & time code Display.

Meter & info Window & time code Display.

Y-Waveform + Vector Scope trans



WAVEFORM & Vector Scope trans.

13. PIP (Picture IN Picture)

-Display two programs or sources at the same time. Set up PIP size and position.

1. PIP ON/Off

-control PIP function on/off.

2. Input Source

- PIP input Source can operate with different signal and type.
- Analog (composite1, 2, 3, Y.Pb.Pr, GBR, Pc) inputs + Digital (DVI, HDMI) + SDI (SDI1, SDI2) inputs
- SDI + SDI input PIP
- ex) AV + S-Video (X), DVI + SDI (o), Pc + DVI (o), SDI1+SDI2 (o)



3. Aspect Ratio

-choose PIP size of Small/POP1/POP2



PIP Small



PIP1



POP2



4. *Position*

-choose the PIP position on each corner of the panel



5. *PIP Blend*



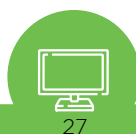
-Blend to PIP

6. *PIP Swap*

-using Swap option, you can exchange two programs or sources at the same time.

7. *Audio Select*

-using Audio Swap option, you can exchange the audio of two programs or sources at the same time.



8. Sub Window Function

- full Sub Window: Display the same full images on POP1 screen.
- Part Sub Window: first image scale 4:3 aspect ratio and then display on POP2 screen.
- full, Part function is only used in Digital input (SDI1, SDI2, DVI or HDMI).



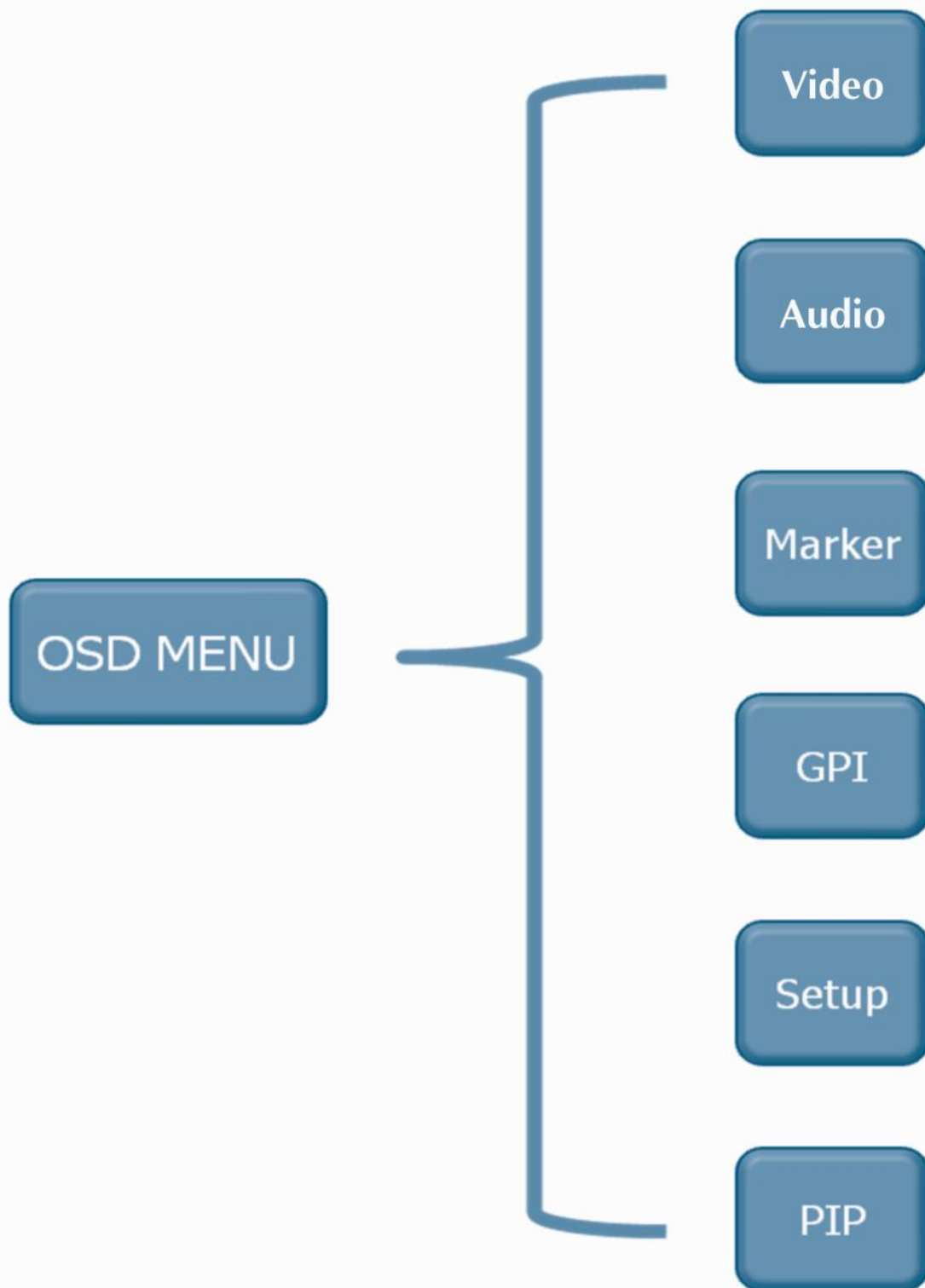
Sub Window Full



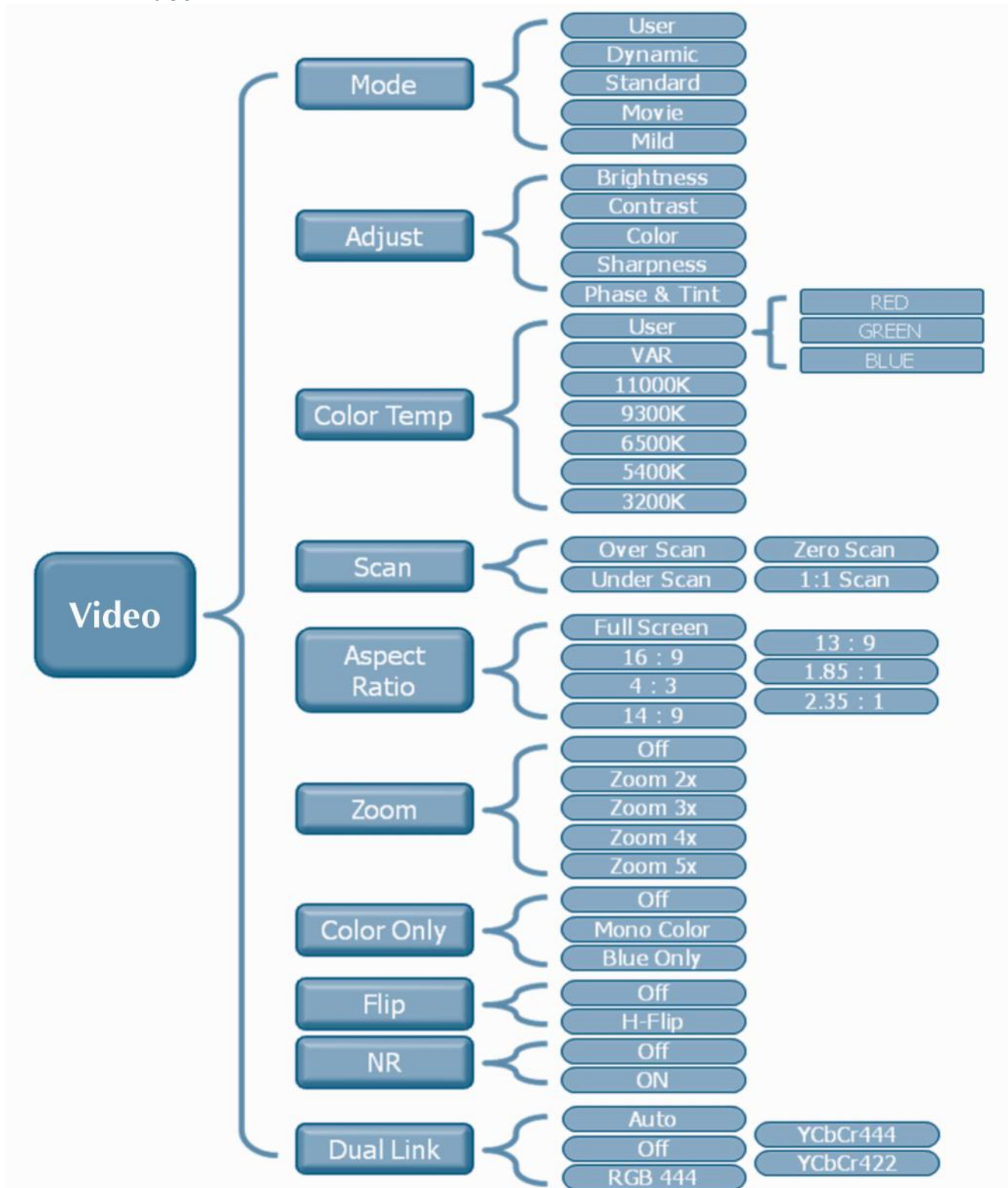
Sub Window Part



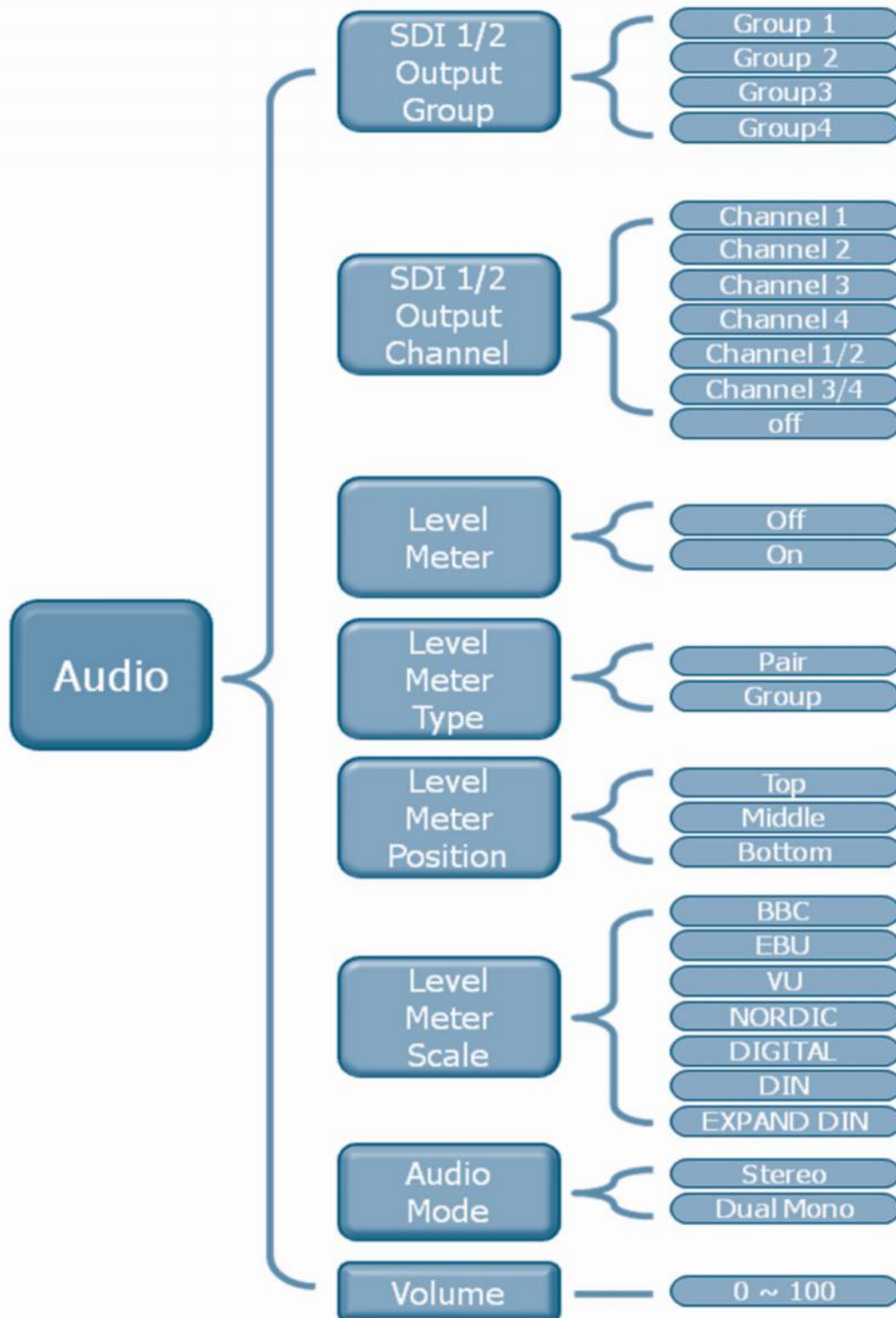
14. OSD TREE



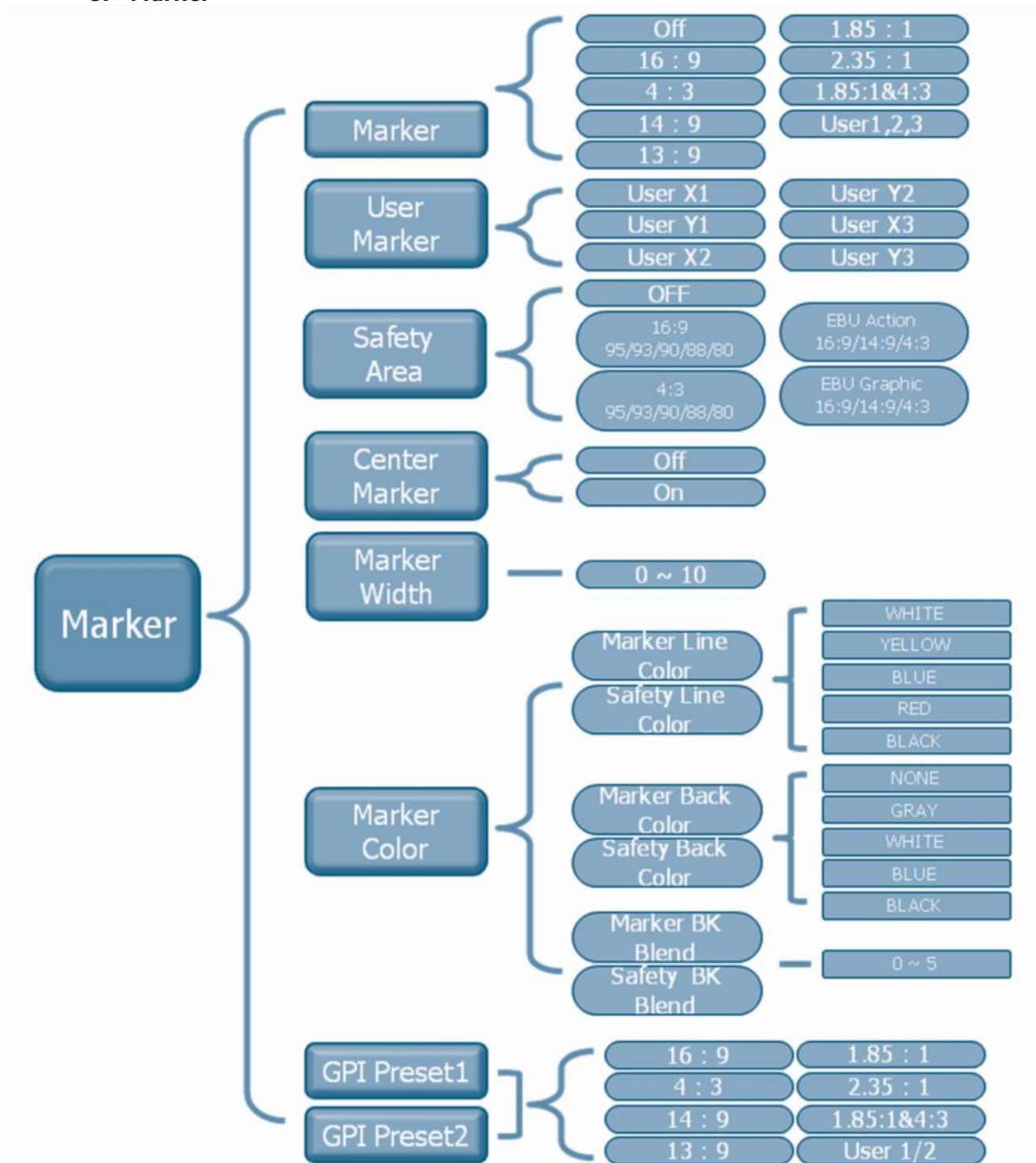
1. Video

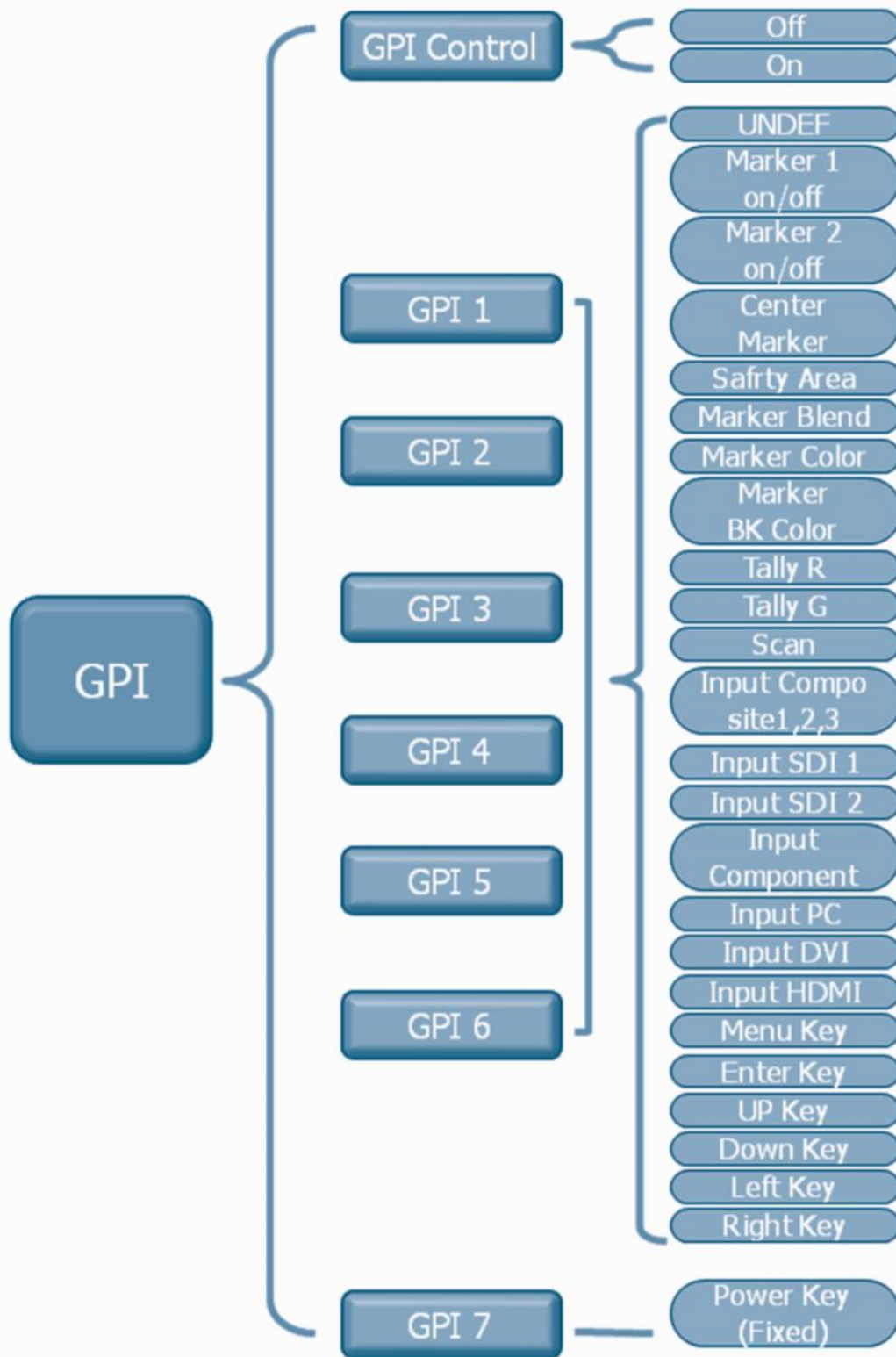


2. Audio

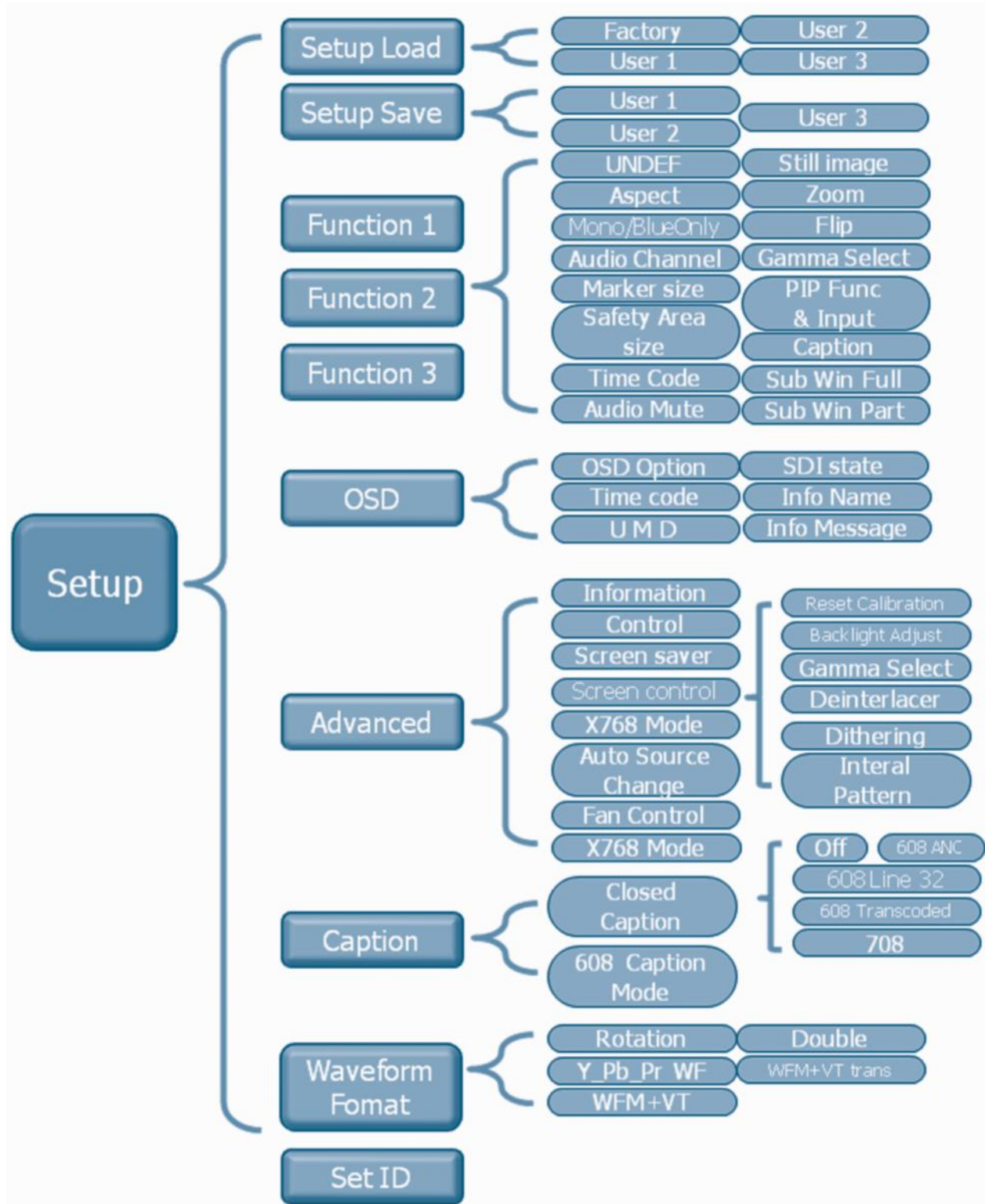


3. Marker

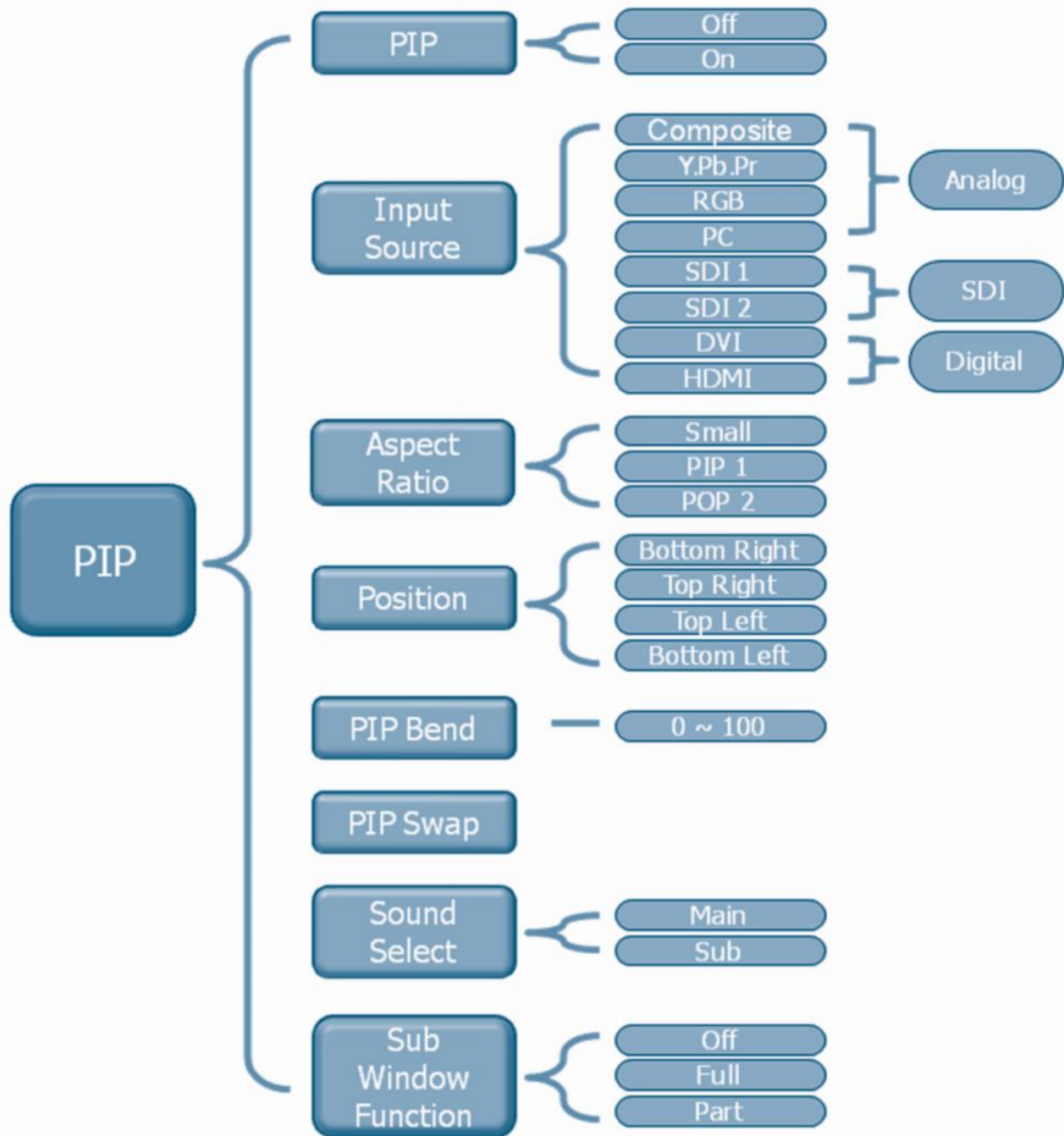


4. GPI

5. Setup



6. PIP



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