

Multi-Format Broadcast Monitor

**BXM-183L3G, BXM-243L3G,
BXM-243T3G, BXM-323L3G**



User's Guide



BON ELECTRONICS
<http://www.bon.co.kr>

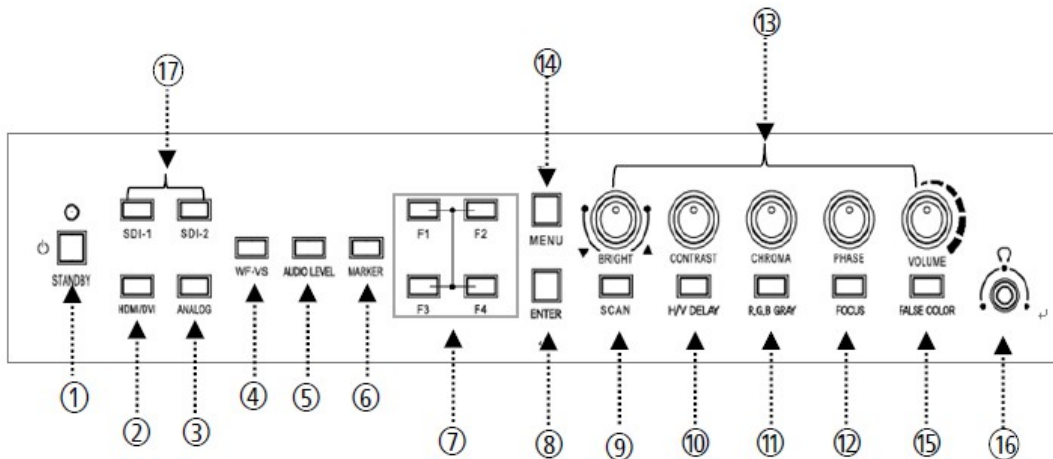
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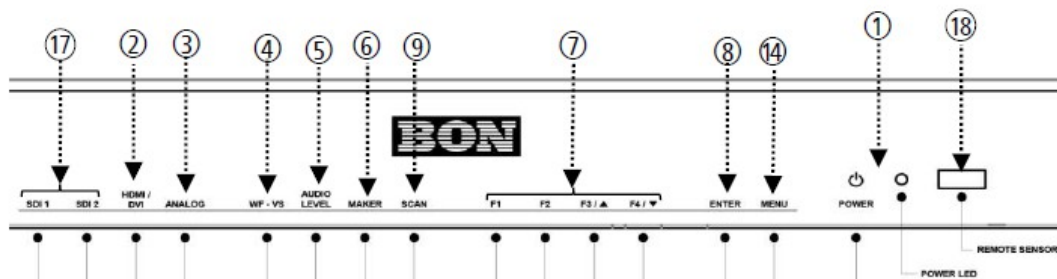
Safety Instructions

- To help avoid damaging your monitor, connect only one power (AC or DC) in operation.
- Rough handling of product may cause physical damage or malfunction.
- Never insert anything metallic into the monitor openings. Doing so may create the danger of electric shock.
- To avoid electric shock, never touch the inside of the monitor. Only a qualified should open the monitor's case.
- Openings in the monitor cabinet are provided for ventilation. To prevent overheating, these openings should not be blocked or covered.
- Put your monitor in a location with low humidity and a minimum of dust. Avoid places like damp basement or dusty hallways.
- Place the monitor on a solid surface and treat it carefully. The screen is made of glass and can be damaged if dropped or sharply hit.
- Do not attempt to remove the back cover, as you will be exposed to a shock hazard. The back cover should only be removed by qualified service personnel.
- Unplug the monitor power before you connect external devices to the monitor.
- If your monitor does not operate normally, or if there are any unusual sounds or smells coming from it, unplug it immediately and contact us.
- Please do not disassemble the monitor. No service will be provided in that case.
- Displaying fixed picture for a long time may cause an afterimage or dead spots. To recover LCD pixels, display whole white picture on screen for a n hour or two and pixels will be recovered.
- No service will be provided for user's own color calibration.

Front



BXM-183L3G, 243L3G, 243T3G Front



BXM-323L3G Front

1) Power (Standby)

2) HDMI/DVI Input

3) Analog

Switches to an analog input in the order of CVBS1, CVBS2, CVBS3, SVIDEO, RGB, YpbPr, VGA by pressing the button.

4) WF/VS

Displays Waveform or Vector Scope. The scope sizes such as normal size and double size are rotated by pressing the button.

5) Audio Level Meters Display

6) Marker

Displays a marker. Marker type can be selected on the Menu.

7) Function Keys

User can assign a function on each function key on the Menu.

8) Enter

Selection button on the Menu.

9) Scan

Change scan mode in the order of Zero(Normal) Scan, Under Scan, Over Scan, and Pixel to Pixel.

In SD mode, the order is Zero Scan, Under Scan, Over Scan, Zoom Scan.

10) H/V Delay

Displays auxiliary data for monitoring by H/V delay. This function displays for SDI, CVBS, S-Video, YpbPr, RGB Input Only.

11) R/G/B Gray

Displays R,G,B or Gray only.

12) Focus Assist

Mark focus area to help focusing.

13) Video Attribute

Brightness, Contrast, Chroma, Volume adjustment knobs.

14) MENU

15) False Color

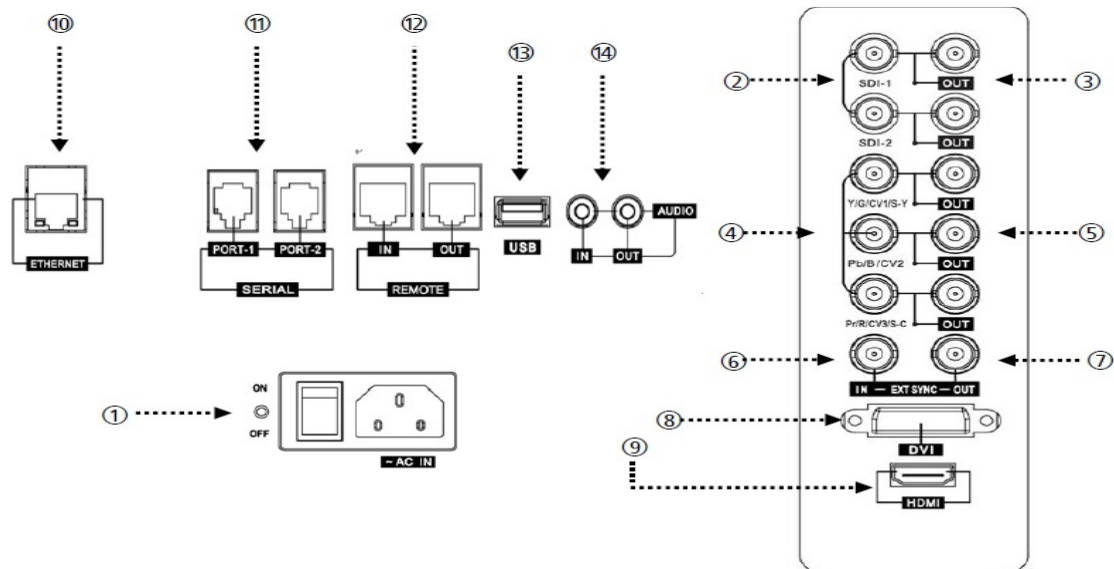
Displays False Color to help user inspect exposed area.

16) Audio Out

17) Remote Sensor

Infrared remote control sensor. (Should not be blocked)

Rear



1) AC Power

2) SDI Input

3) SDI Loop-Through Out

4) Component YPbPr/RGB or CVBS 1,2,3 Port

5) Component YPbPr/RGB or CVBS 1,2,3 Port Loop-Through Out

6) External Sync

7) External Sync Loop-Through Out

8) DVI

9) HDMI Port

10) Ethernet Port

External control via PC is able with this port by using 'Wall Control Program'.

11) Update Port

The Serial communication terminal that for changing the operating program(Firmware) of the body or controlling the monitor.

12) Remote Ethernet Port

13) USB Update Port

14) Audio In/Out Port

MENU Description

General Cautions for OSD menu or Display

The menu may not be displayed even when user pressed Menu button if there's No Signal, or in unclear signal status.

The menu selection may be saved for each input signal mode, so sometimes user should do menu selection again.

VIDEO

MENU	SDI1	Unknown Format
VIDEO	Bright	0
DISPLAY1	Contrast	0
DISPLAY2	Chroma	0
DISPLAY3	Phase	0
COLOR	Sharpness	10
MARKER	NTSC Setup	7.5 IRE
OSD	SDI Switching	Normal
AUDIO	Dithering	Off
GPI	VGA Color Set	Default
SYSTEM	VGA Display Set	Default

▲ ▼ : Move ENTER : Select MENU : Exit

Brightness, Contrast, Chroma, Phase, Sharpness

Adjust color representation values.

NTSC Setup

Select IRE among 0 or 7.5 (Default)

SDI Switching

Normal : Use Normal in general condition but the screen might be blinking on screen change when you use Matrix or Routing Switcher.

Fast : Use Fast to minimize blinking on screen change.

Dithering

Turn this mode on to view motion pictures smoothly when the source has low quality.

DISPLAY 1

MENU	SDI 1	Unknown Format
VIDEO	PC Scan	Aspect
DISPLAY1	Aspect	Native Ratio
DISPLAY2	Pixel to Pixel(1:1)	Off
DISPLAY3	Anamorphic	Off
COLOR	AFD	Off
MARKER	SDI Mode	Single
OSD	SDI 3G Mode	Normal
AUDIO	Dual Link Mode	YCbCr 422
GPI	Fast Mode	Off
SYSTEM	Sync Mode	Internal

▲ ▼ : Move ENTER : Select MENU : Exit

Aspect

Set the aspect ratio of the screen. 16:9, 4:3, Native(Original) are selectable.

Pixel to Pixel 1:1 Scan

Set this on to display picture in 1:1 pixel mapping.

AFD

Set this mode to set aspect ratio.

SDI Mode

Select Single Mode normally. Select Dual Mode for using two SDI(SDI1/SDI2) input ports for a single screen.

SDI 3G Mode

Turn it on for 3G SDI.

Dual Link Mode

Select waveform display mode. Choose Normal to analyze whole screen, choose Line Select to analyze a specific line of the screen.

Fast Mode

Turn this on to make smoother movement on fast motion in an interlace input.

DISPLAY 2

MENU	SDI1	Unknown Format
VIDEO	P & P Menu	▶
DISPLAY1	Force Psf	Off
DISPLAY2	WF Display Mode	Normal
DISPLAY3	WF Line Select	256
COLOR	Wide/Full WF Select	Y
MARKER	WF Color Mode	Single
OSD	WF Intensity	10
AUDIO	WF & Vector Size	Medium
GPI	WF & Vector Blend	2
SYSTEM		

▲ ▼ : Move ENTER : Select MENU : Exit

P&P MENU

Displays two pictures in a screen in the way of Picture in Picture, Picture by Picture, or Blending.

On its sub menu, user can select Main picture and Sub picture, and the position for Picture-in-Picture mode. Blending transparency can be adjusted when Blending selected.

Some signals cannot be used for P&P function. Refer to the combination table on the bottom of the section.

Waveform Display Mode

Select whether to display waveform for whole picture or for just for a line.

Waveform Line Select

Select waveform line to display among Y, Cb, Cr.

Wide/Full WF Select

Switches to wide waveform scope or full screen waveform scope.

Waveform Color Mode

Select Single color or Mixed color.

WF Intensity

Adjust color saturation of the waveform between 0 to 63.

WF & Vector Size

Select size of Waveform or Vector Scope.

WF & Vector Blend

Adjust transparency of the scope.

NO	SDI1	SDI2	YCbCr 4:2:2	YCbCr 4:4:4	RGB 4:4:4	CVBS1	CVBS2	CVBS3	Y/C	YPbPr	RGB	VGA	DVI	HDMI
SDI1	○	○	×	×	×	○	○	○	○	○	○	○	○	○
SDI2	○	○	×	×	×	○	○	○	○	○	○	○	○	○
YCbCr 4:2:2	×	×	○	×	×	○	○	○	○	○	○	○	○	○
YCbCr 4:4:4	×	×	×	○	×	○	○	○	○	○	○	○	○	○
RGB 4:4:4	×	×	×	×	○	○	○	○	○	○	○	○	○	○
CVBS1	○	○	○	○	○	○	×	×	×	×	×	○	○	○
CVBS2	○	○	○	○	○	×	○	×	×	×	×	○	○	○
CVBS3	○	○	○	○	○	×	×	○	×	×	×	○	○	○
Y/C	○	○	○	○	○	×	×	×	○	○	○	○	○	○
YPbPr	○	○	○	○	○	×	×	×	○	○	×	×	×	×
RGB	○	○	○	○	○	×	×	×	○	×	○	×	×	×
VGA	○	○	○	○	○	○	○	○	○	×	×	○	×	×
DVI	○	○	○	○	○	○	○	○	○	×	×	×	○	×
HDMI	○	○	○	○	○	○	○	○	○	×	×	×	×	○

P&P Combination Table

DISPLAY3

MENU	SDI 1	Unknown Format
VIDEO	Exposure Range Check	Off
DISPLAY1	Y Range Max	940
DISPLAY2	Y Range Min	64
DISPLAY3	C Range Max	940
	C Range Min	64
COLOR	Blink Color	Red
MARKER	Blink Time	1
OSD	False Color	Off
AUDIO	Focus Assist Menu	▶
GPI		
SYSTEM		

▲ ▼ : Move ENTER : Select MENU : Exit

Exposure Range Check (Video Range Check)

Checks Y, C level and displays over-exposed or under-exposed area on screen.
The base value can be Y, Cb, or Cr.

Y Range Max / Min

Set Y range value for range check.

C Range Max / Min

Set C range value for range check.

Blink Color

The filled area color by range check can be either Black, Blue, Green or Red.

Blink Time

Set blinking time of the area between 1 to 5 seconds.

False Color

Turn False Color mode on to check exposure levels of the picture.

Focus Assist Menu

Displays Focus Assist sub menus below.

Focus Assist Display

Turns on Focus Assist mode. This mode can be set also by pressing Focus Assist button in front.

Focus Assist Level

The sensitivity of the focus assist function can be set between 0 to 48.

Focus Assist Color

Set brush color of focus assist mode among Blue, Green, and Red.

COLOR

MENU	SDI 1	Unknown Format
VIDEO	Color Temperature	6500K
DISPLAY1	Adjust Temperature	
DISPLAY2	Red Gain	121
DISPLAY3	Green Gain	119
COLOR	Blue Gain	114
MARKER	Red Bias	127
OSD	Green Bias	127
AUDIO	Blue Bias	127
GPI		
SYSTEM		

▲ ▼ : Move ENTER : Select MENU : Exit

Color Temperature

Select color temperature among 3200K, 5400K, 6500K, 9300K or USER. (Gain and Offset menu are displayed on USER temperature only)

Red/Green/Blue Gain (USER mode only)

R,G,B gains are adjustable on User mode.

Red/Green/Blue Bias (USER mode only)

R,G,B bias are adjustable on User mode.

ADDITIONAL COLOR MENU for BXM-243T3G

MENU	SDI	1920 x 1080 / 60p
VIDEO	Gamma Select	G2.2
DISPLAY1	Gamma Adjust	2.20
DISPLAY2	Color Space Select	ITU-R BT.709
DISPLAY3	Color Temperature	6500K
COLOR	Adjust Temperature	
MARKER	Red Gain	128
OSD	Green Gain	127
AUDIO	Blue Gain	124
GPI	Red Bias	127
SYSTEM	Green Bias	127
	Blue Bias	127
▲ ▼ : Move ENTER : Select MENU : Exit		

Gamma Select

Gamma selectable between 2.2, 2.35, 2.6, DICOM, Adjust(User). The common value is 2.2.

Color Space Select

Color Space is selectable between Auto, NTSC, PAL/EBU3213, SMPTE-C/240M, BT.709(Rec.709), Native, Adjust(User). D-Cinema mode is also selectable but its color range is smaller than original D-Cinema.

MARKER

MENU	SDI1	Unknown Format
VIDEO	Marker Ratio	4:3
DISPLAY1	Safety Area 16:9	88 %
DISPLAY2	Safety Area 4:3	88 %
DISPLAY3	Center Marker	On
COLOR	Marker Color	Red
MARKER	Marker Mat	Normal
	Marker Thickness	4
OSD	User Marker H1	0
AUDIO	User Marker H2	1920
GPI	User Marker V1	0
SYSTEM	User Marker V2	1200

▲ ▼ : Move ENTER : Select MENU : Exit

Marker Ratio

Select one of preset markers or user marker. To display marker, press Marker button in front of the monitor.

Safety Area 16:9

Adjust size of the safety area when marker displayed on 16:9 screen.

Safety Area 4:3

Adjust size of the safety area when marker displayed on 4:3 screen.

Center Marker

Set preference to display center marker or not.

Marker Color

Select marker's color among White, Red, Green, Blue, Gray and Black.

Marker Mat

Set how to display outside of the safety area. Normal, Half(Gray), Black are selectable.

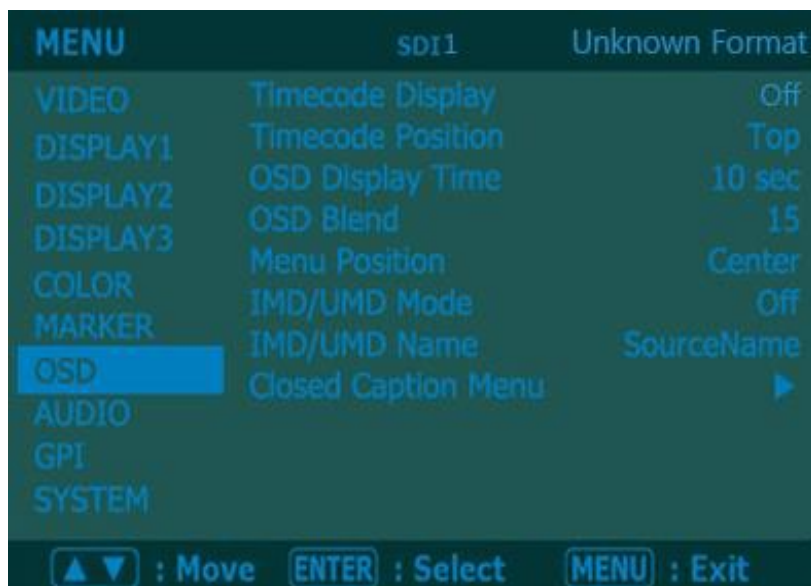
Marker Thickness

Set marker thickness between 1 to 10.

User Marker H1 / User Marker H2 / User Marker V1 / User Marker V2

Set user marker's position. H1 for left, H2 for right, V1 for top, V2 for bottom. The positions are saved as the selected marker name such as USER1.

OSD



Timecode Display On/Off

Timecode Position

Set the position of timecode.

OSD Display Time

Set menu display time (seconds)

OSD Blend

Set transparency of the menu.

MENU Position

Set menu position among Left Top, Right Top, Left Bottom, Right Bottom and Center.

IMD/UMD Mode

Display IMD/UMD. The screen aspect ratio will turn to 16:9 on this mode.

IMD/UMD Name

The text to display using IMD/UMD.

Closed Caption

Select one of 608 Line 21, 608 VANC, 608 Transcoded, 708 to display Closed

Captions. In special condition such as menu display status, captions are not displayed. The list of its sub menus are below.

V-Chip

SD-SDI, Composite signal might contain V-Chip data. Turn this mode on to display V-Chip information on screen.

CC708 Service

Select one of CC service as your preference.

Service 1: general captions.

Service 2: translated captions.

Service 3,4: not assigned.

CC608 StartLine

Display line of captions are selectable by user. (e.g. 13)

Evertz HD9084 : HD-SDI / CC 608 transcoded – CC Line Select																			
	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1035i	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	
1080i	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	NS	NS	NS	NS	
1080p	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	
720p	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	
Evertz HD9084 : SD-SDI / CC 608 Line21 – CC Line Select																			
	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
480/59.94i				OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
576/50i				OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK

Closed Caption Display Chart

AUDIO

MENU	SD11	Unknown Format
VIDEO	Audio Group	Gr.1
DISPLAY1	Play Channel [L]	Ch 1
DISPLAY2	Play Channel [R]	Ch 2
DISPLAY3	Level Meter Select	Off
COLOR	Level Meter Size	Normal
MARKER	Level Meter Position	Top
OSD	Level Meter Direction	Horizontal
OSD	Peak Decay Time	3
AUDIO	3G Level B Audio	Stream 1
GPI	Speaker Source	Auto
SYSTEM	Speaker Volume	0

▲ ▼ : Move ENTER : Select MENU : Exit

Audio Group

Audio group can be assigned between 1 to 4.

Play Channel L

Select audio channel for left

Play Channel R

Select audio channel for right

Level Meter Select

Turns on/off audio level meters.

Level Meter Size

Select the size of the meters : Small or Large.

Level Meter Position

Select the position of the meters : Upper or Lower.

Level Meter Direction

Select Level Meter orientation among Horizontal or Vertical.

Peak Decay Time

Adjusts decay time of meters.

3G Level B Audio

Select one Audio source if 3G SDI is used, which has two audio sources.

Speaker Source

Select the speaker output among Auto / SDI / Line In. For HDMI, use Auto mode.

Speaker Volume

Set volume of speaker. Be noted that Line Out level won't be affected.

GPI



GPI Control

Turns on/off external monitor control function.

GPI Port 1,2,3,4,5,6

Assigns each GPI port's function. (e.g. SDI 1 input, HDMI input, Tally Red) See **EXTERNAL REMOTE CONTROLLING** section for details.

Remote ID Number

Assigns the ID for the monitor to control through serial port. 0 to 99 can be assigned.

Serial Remote

Turns serial remote function on. All front buttons are locked on this mode. To exit from this mode, press and hold Menu button for 3 seconds.

Network Connection

To connect to a network, user should set 'Serial Remote' to Network and use this menu. Choose DHCP (Auto IP) or Static IP here.

To use Static IP, type all the information including IP Address, Subnet Mask and Gateway. Otherwise to use DHCP, connect network cable to a proper Router that can handle all the connection automatically.

Connection Port

This port should be assigned to each monitor device differently to distinguish each

one. If you use a single monitor to control, you can leave it unchanged.

MAC Address

This address is unique address for each network device. User does not need to change it.

SYSTEM

MENU	SDI1	Unknown Format
VIDEO	Function Menu	▶
DISPLAY1	Back Light	41
DISPLAY2	Test Pattern	Off
DISPLAY3	Front Button LED	On
COLOR	Front Button Lock	Off
MARKER	Setup Load	Factory Default
OSD	Setup Save	User 1
AUDIO	F/W Update	No
GPI	F/W Version	0.66D08 1.25
SYSTEM	Operating Time	235 Hours
▲ ▼ : Move ENTER : Select MENU : Exit		

Function 1,2,3,4

Assigns a function to each function button. See **FRONT** section for detail.

Backlight

Set the backlight intensity from 0 to 40. An LCD panel requires more than 30 minutes to be settled to a new backlight value.

Test Pattern

Displays selected test pattern in 1080/30P.

Front Button LED

Set front LEDs on/off status.

Font Button Lock

Locks front buttons not to work. Press and hold Menu button for 3 seconds to exit from this mode.

Setup Load

Load monitor settings from Factory Default, User 1/2/3/4.

Setup Save

Save current monitor setting to use later. 4 settings can be saved.

F/W Update

Turns update mode on. Select Serial or USB port for update. After firmware update, the monitor should be turned off/turned on, and Factory Default should be loaded before use.

Firmware Version

This version number is required when you request for service.

Operating Time

This indicates total hours that the monitor operated.

USB Firmware Update

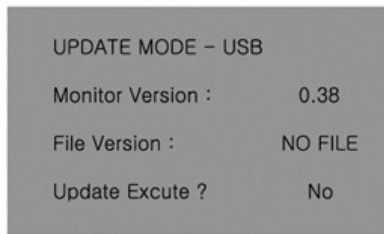
To update your monitor's firmware, request for a new firmware file to your local reseller or to BON Electronics.

Move the file on a USB flash memory, insert it to your monitor. Please beware the file should be located in the root(top folder level), not in any folder.

Also, the USB flash memory **should have** FAT32 or FAT file system. (General USB memory has FAT32 file system, usually)

Set Update Firmware item as USB from SYSTEM menu.

Some part of firmware cannot be updated by USB updating procedure, so please get help from your local dealer or expert before you update firmware with USB memory.



*Error Message when USB access
or file not exist*



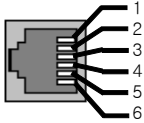
*Message when file on USB
detected*

You can also use Serial Port and your PC to update the firmware. Please request for help to your local dealer or directly to BON Electronics.

External Remote Control

Connecting GPI Port(RJ-45)

Update Port (RJ-11)

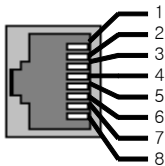


Update (RJ-11)

Update Terminal Assignment			
1 PIN	NC	4 PIN	GND
2 PIN	RX+	5 PIN	TX+
3 PIN	RX-	6 PIN	TX-

* Turn power off first and connect update cable when you update monitor firmware.

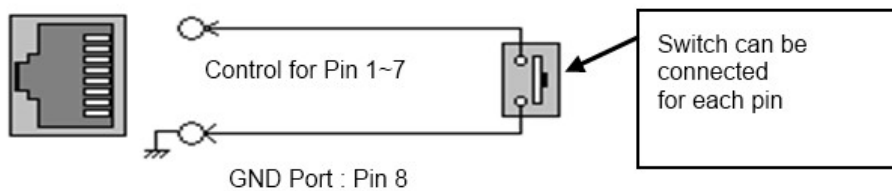
Remote Control / GPI Port Pin Assignments



Remote (RJ-45)

Remote PIN Assignment			
1 PIN	GPI Port 1	5 PIN	GPI Port 5
2 PIN	GPI Port 2	6 PIN	GPI Port 6
3 PIN	GPI Port 3	7 PIN	GPI Port 7(FIXED) (TALLY OUT)
4 PIN	GPI Port 4	8 PIN	COMMON(GND)

Each pin's functionality can be assigned on OSD System Menu, GPI Control section.



Assignable functions are listed below.

Function Name	Description
SDI-1 Input	Switches the input to SDI-1
SDI-2 Input	Switches the input to SDI-2
HDMI Input	Switches the input to HDMI
YPbPr Input	Switches the input to YPbPr
CVBS-1 Input	Switches the input to CVBS-1
CVBS-2 Input	Switches the input to CVBS-2
CVBS-3 Input	Switches the input to CVBS-3
KEY-UP ▲	CURSOR UP on Menu Control.
KEY-DOWN ▼	CURSOR DOWN on Menu Control.
KEY- MENU	Menu On/Off
KEY-ENTER	Enter Button
Aspect	Aspect On/Off
1:1 Scan On/Off	1:1 SCAN Function On/Off
H/V Delay On/Off	H/V Delay Function On/Off
TC Display On/Off	TC Display On/Off
ALM Display On/Off	Audio Level Meters Display On/Off
Freeze On/Off	Freeze Frame On/Off
Front Button LED On/Off	Front Button LED On/Off.
Tally Red On/Off	Tally Red LED On/Off
Tally Green On/Off	Tally Green LED On/Off

List of Compatible Video Formats (VGA/DVI)

NO	Input Signal Names	Screen Resolution	VGA (PC-RGB)	DVI	Vertical Frequency
1	VGA	640*480	√	√	60Hz ~ 100Hz
2	SVGA	800*600	√	√	56Hz ~ 85Hz
3	XGA	1024*768	√	√	86Hz ~ 100Hz
4	WXGA	1280*768	√	√	50Hz ~ 85Hz
5	SXGA	1280*1024	√	√	60Hz ~ 76Hz
6	WSXGA+	1680*1050	√	√	50Hz~60Hz
7	UXGA	1600*1200	√	√	60Hz Only
8	WUXGA*	1920*1080	-	√	60Hz
9	WUXGA	1920*1200	-	√	60Hz, (PC Only)

The output resolution can be automatically changed in DVI by PC Graphic Card settings.

List of Compatible Video Formats (SDI)

NO	Input Signal Formats	Composite / S-Video	Component		HD/SD-SDI				DVI/ HDMI
			Y, Pb, Pr	R, G, B	Single	Dual YUV4:2:2	Dual YUV4:4:4	Dual RGB444	
1	NTSC	✓	-	-	-	-	-	-	-
2	PAL	✓	-	-	-	-	-	-	-
3	525/60i (SD)	-	✓	✓	✓	-	✓	✓	-
4	625/50i (SD)	-	✓	✓	✓	-	✓	✓	-
5	720*480/59.94p	-	✓	-	-	-	-	-	✓
6	720*576/50p	-	✓	-	-	-	-	-	✓
7	1280*720/23.98p	-	-	-	✓	-	✓	✓	✓
9	1280*720/24p	-	-	-	✓	-	✓	✓	✓
9	1280*720/50p	-	✓	-	✓	-	✓	✓	✓
10	1280*720/59.94p	-	✓	-	✓	-	✓	✓	✓
11	1280*720/60p	-	✓	-	✓	-	✓	✓	✓
12	1920*1035/59.94i	-	-	-	✓	-	✓	✓	✓
13	1920*1035/60i	-	-	-	✓	-	✓	✓	✓
14	1920*1080/50i	-	✓	-	✓	✓	✓	✓	✓
15	1920*1080/59.94i	-	✓	-	✓	✓	✓	✓	✓
16	1920*1080/60i	-	✓	-	✓	✓	✓	✓	✓
17	1920*1080/23.98p	-	✓	-	✓	-	✓	✓	✓
18	1920*1080/23.98psf	-	✓	-	✓	-	✓	✓	-
19	1920*1080/24p	-	✓	-	✓	-	✓	✓	✓
20	1920*1080/24psf	-	✓	-	✓	-	✓	✓	-
21	1920*1080/25p	-	✓	-	✓	-	✓	✓	✓
22	1920*1080/25psf	-	-	-	✓	-	✓	✓	-
23	1920*1080/29.97p	-	✓	-	✓	-	✓	✓	✓
24	1920*1080/29.97psf	-	-	-	✓	-	✓	✓	-
25	1920*1080/30p	-	✓	-	✓	-	✓	✓	✓
26	1920*1080/30psf	-	-	-	✓	-	✓	✓	-
27	1920*1080/50p	-	✓	-	-	✓	-	-	✓
28	1920*1080/59.94p	-	✓	-	-	✓	-	-	✓
29	1920*1080/60p	-	✓	-	-	✓	-	-	✓
30	2048*1080/23.98p	-	-	-	✓	-	-	✓	-
31	2048*1080/23.98psf	-	-	-	✓	-	-	✓	-
32	2048*1080/24p	-	-	-	✓	-	-	✓	-
33	2048*1080/24psf	-	-	-	✓	-	-	✓	-
34	2048*1080/25p	-	-	-	✓	-	-	✓	-
35	2048*1080/25psf	-	-	-	✓	-	-	✓	-
36	2048*1080/29.97p	-	-	-	✓	-	-	✓	-
37	2048*1080/30p	-	-	-	✓	-	-	✓	-

The output resolution can be automatically changed in DVI.

The input signal frame rate displayed on screen can be different.

The edge of the picture might be cut by one or two lines on some modes.

Specifications

ITEM		BXM-183L3G	BXM-243L3G	BXM-243T3G	BXM-323L3G
Input	2 x BNC	HD/SD-SDI, 3G/1.485G/270M			
	3 x BNC	Analog(YPbPr/CVBS/S-Video/RGB)			
	1 x HDMI	HDMI, (with HDCP v.1.1), 19pin Female			
	1 x DVI	DVI-I, 24pin, Female			
	1 x BNC	External Sync, Black Burst & Tri-sync, 1.0Vp-p			
Output	2 x BNC	SDI-1/2 Active Loop Output			
	3 x BNC	Analog(YPbPr/CVBS/S-Video/RGB)			
	1 x BNC	For External Synchronization			
Analog Input Level	Composite	1.0Vp-p(with sync), NTSC/PAL			
	YC(S-Video)	Y :1.0Vp-p, C:0.286Vp-p			
	Component(Y/Pb/Pr)	Y :1.0Vp-p, Pb :0.7Vp-p, Pr :0.7Vp-p			
	Component (R/G/B)	G :1.0Vp-p(with Sync), B :0.7Vp-p, R :0.7Vp-p			
	PC-RGB,Sync Level	R, G, B : 0.7Vp-p, H/V Sync : 4V ± 1Vp-p			
Input Signal Format	SMPTE 425M AB	Level A MS1, MS2, MS3, MS4			
		Level B MS1, MS2, MS3, MS4			
	SMPTE 372M	Dual HD-SDI YCbCr (4:2:2), 1080p			
		Dual HD-SDI YCbCr/RGB (4:4:4), 1080i, 1080p, 720p			
	SMPTE 274M/292M	1080i (60/59.94/50)			
		1080p(30/29.97/25/24/24sF/23.98/23.98sF)			
	SMPTE 296M	720p(60/59.94/50)			
	SMPTE 260M	1035i(60/59.94)			
	SMPTE 125M/259M	480i(60/59.94), 576i(50)			
	2K, SMPTE 428M	2048 x 1080p(24/24sF/23.98/23.98sF)			
	ITU R-BT.656	576i(50)			
	HDMI	~ 1080p(60)			
	DVI	~ 1080p(60)			
Audio In/Out	1 x Phone Jack In	Line In(Stereo)			
	2 x Phone Jack Out	Line Out(Stereo), H/P Out(Front, Stereo)			
	2 x Speaker Out	2W+2W, Stereo			

		BXM-183L3G	BXM-243L3G
LCD	Size	18.5"	24"
	Resolution	1366 x 768	1920 x 1200
	Pixel Pitch	0.1 x 0.3 mm	0.270mm
	Color	16.7M(8bit) Colors	8 bit
	Viewing Angle	178(H), 178(V)	178(H), 178(V)
	Luminance of White	250 cd/m ²	350d/m ²
	Contrast	1000 : 1	1000 : 1
	Display Area (H x V)	409.8 x 230.4 mm (16.1 x 9.0 inches)	518.4 x 324.0 (mm)
	Back Light	LED	LED
General	1 x Ethernet	Control/Update, GPI-7 Port, RJ-45P Jack	Control/Update, GPI-7 Port, RJ-45P Jack
	2 x GPIO	GPI-7 Port, RJ-45P Jack	GPI-7 Port, RJ-45P Jack
	2 x Serial	RS-422, RJ-11P Jack	RS-422, RJ-11P Jack
	1 x USB	For firmware update	For firmware update
	Power Requirements	DC 12V/24V AC(100-230V, 50/60Hz)	AC(100-230V, 50/60Hz)
	Power Consumption	41W	56W
	Operating Temperature	0°C ~ 40°C(32°F~104°F)	0°C ~ 40°C(32°F~104°F)
	Operating Humidity	20% ~ 80% RH	20% ~ 80% RH
	Accessories	• Power Cable •Manual(CD) • Cleaner	• Power Cable •Manual(CD) • Cleaner
	Option	• Sun Hood • V-Mount • Anton Bauer Mount • Rack Mount Kit • Protect	• Rack Mount Kit Carrying Case

		BXM-243T3G	BXM-323L3G
LCD	Size	24"	32
	Resolution	1920 x 1200	1920 x 1080
	Pixel Pitch	0.270mm	0.36375mm
	Color	10 bit	10-bit
	Viewing Angle	178(H), 178(V)	178(H), 178(V)
	Luminance of White	400d/m ²	500d/m ²
	Contrast	1000 : 1	1300 : 1
	Display Area (H x V)	518.4 x 324.0 (mm)	698.4 x 392.85 (mm)
	Back Light	LED	LED
General	1 x Ethernet	Control/Update, GPI-7 Port, RJ-45P Jack	Control/Update, GPI-7 Port, RJ-45P Jack
	2 x GPIO	GPI-7 Port, RJ-45P Jack	GPI-7 Port, RJ-45P Jack
	2 x Serial	RS-422, RJ-11P Jack	RS-422, RJ-11P Jack
	1 x USB	For firmware update	For firmware update
	Power Requirements	AC(100-230V, 50/60Hz)	AC(100-230V, 50/60Hz)
	Power Consumption	109W	61.5W
	Operating Temperature	0°C ~ 40°C(32°F~104°F)	0°C ~ 40°C(32°F~104°F)
	Operating Humidity	20% ~ 80% RH	20% ~ 80% RH
	Accessories	<ul style="list-style-type: none"> • Power Cable • Manual(CD) • Cleaner 	<ul style="list-style-type: none"> • Power Cable • Manual(CD) • Cleaner
	Option	<ul style="list-style-type: none"> • Rack Mount Kit • Handle • V-Mount • Anton Bauer Mount 	<ul style="list-style-type: none"> • Stand

Dimensions

BXM-183L3G

438 x 310 x 60 (mm)

17.3 x 12.2 x 2.3 (inch)

BXM-243L3G

554 x 406 x 63 (mm)

22 x 16 x 2.5 (inch)

BXM-243T3G

552 x 408 x 91 (mm)

21.7 x 16.0 x 3.5 (inch)

BXM-323L3G

783 x 494 x 91 (mm)

30.8 x 19.5 x 3.6 (inch)

Troubleshooting

Try these if you have trouble in using the monitor. Call for Service if you can't solve the problem even after you tried these solutions.

Symptom	Solution
Power isn't turned on	Check Connectivity of Power Cable between Outlet and the Monitor. Press and Hold Power button for more than one second. Try with Other Monitor or Electric Device using the same Power Cable.
Screen is Black and All Button Lights are On in startup process	Reconnect the Power and Restart the Monitor. (Call for Service if the Symptom appeared more than 3 times)
Screen is Black on Startup and there's neither BON Logo nor "No Signal" Display, but Buttons are Working	Reconnect the Power and Restart the Monitor. (Call for Service if the Symptom appeared more than 3 times)
There's a delay in BON Logo Display on Startup	It is normal and No Reaction Required.
BON Logo appeared on Startup, but No Screen Output when Input Signal Connected	Remove Input Cable and Check if "No Signal" appears on Screen. <ul style="list-style-type: none"> - restart the Monitor if you can't see "No Signal" - Make Monitor "Factory Default" and Try again and Try again - Check the Cable Connectivity - Try with Different Cable - Check the Input Format and Frequency - Try with Different Input Device. If successful, the Failed Input Device may Generate Non-Standard Signal (Please Inform Us its Model Name).
"No Signal" appears on the Screen	Check the Input Selection. Make Monitor "Factory Default" and Try again. Try with Different Input Cable. Check the Cable Connection. Check if the Input Format and Frequency is Supported. Try with Different Input Device. If successful, the Failed Input Device may Generate Non-Standard Signal (Please Inform Us its Model Name).

Strange Color on BON Logo on Startup	Reconnect the Power and Restart the Monitor. (Call for Service if the Symptom appeared more than 3 times)
the Startup Logo Color was ok but Strange Color on Active Screen	Make Monitor "Factory Default" and Try again. Select Test Pattern(Internal Pattern) in the menu and See if R,G,B Color is Correct. Check the Input Selection. Try with Different Cable. Check if Each Cable is correctly Connected when you use Component as Input.
Screen Position Mismatch	Make Monitor "Factory Default" and Try again. Reconnect the Power and Restart the Monitor. Try with Different Input Device. If successful, the Failed Input Device may Generate Non-Standard Signal (Please Inform Us its Model Name).
No Audio Output	Check if the Volume level is 0. Display the Audio Level Meters and See its output.
Colors look different between different models	Give your Monitor 1 hour warmup time. Because Different Panels have different Characteristics, Colors might look Different.
Colors look different between same models	Give your Monitor 1 hour warmup time. Same Panels are not exactly same but they have a tolerance range among them by the Panel Manufacturer, so Colors might look Different. * The tolerance range is in Panel Standard Document included in CD

Warranty Information

Free Service

If the product needs to be repaired in 12 months from the purchase.

Exceptions

- damage caused by accident, abuse, misuse, water, flood, fire, or other acts of nature or external causes
- damage caused by service performed by anyone who is not an authorized service provider
- damage to a product that has been modified or altered without the written permission of BON

Service to be Charged

If the product needs to be repaired after 12 months from the purchase.

Modification of Product

Dimensions, specifications or design of the product are subject to change without prior notice for product improvement.

Caution on Menu Operation

OSD Menu might be freezed or broken on very high-quality or complicated pictures input. In that case, turn off the power for 5 seconds and turn it on to make Menu works.

Caution for Monitor Placement

For long lifetime and proper operation of the monitor, all surface of the monitor should not be blocked by any material for ventilation.

Caution for Usage

This monitor designed to be used for broadcasting purpose. Using it as PC monitor is not recommended.



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