

# Operating Instructions

Broadcasting Monitor User guide



 Monitor Operation Manual v1.1

OBM-050-TBBSV

OBM-056-TBBSV

OBM-070-TBBSV

OBM-097-TSBSV

OBM-185-TSBSV

OBM-215-TSBSV

OBM-240-TSBSV

**3G**

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# Getting Started

## Caution

### ■ Caution

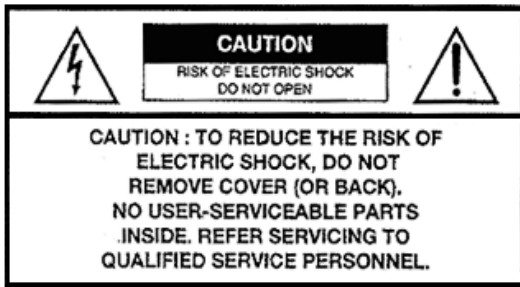
It is highly recommended to read and understand the cautions listed below thoroughly before you start using the product. And if you are unclear with any parts of the cautions or have questions, please contact us.

- Apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.
- WARNING – TO PREVENT FIRE OR SHOCK HAZARD DO NOT EXPOSE THE SET TO RAIN OR MOISTURE.
- "IMPORTANT SAFETY INSTRUCTIONS"
  - Read these instructions
  - Keep these instructions
  - Heed all warnings
  - Follow all instructions
  - Do not use this apparatus near water
  - Clean only with a dry cloth
  - Do not block any of the ventilation openings. Install in accordance with the manufacturer's instructions
  - Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
  - Do not defeat the safety purpose of the polarized or grounding type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. When the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet
  - Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus
  - Only use the attachments/accessories specified by the manufacturer.
  - Use only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.



- Unplug this apparatus during lightning storms or when unused for long periods of time
- Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- the apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus
- Shall be connected to a MAINS socket outlet with a protective earthing Connection
- the disconnect device shall remain readily operable
- The socket-outlet shall be installed near the equipment and shall be easily accessible

- Explanation of Safety Related Symbols



This symbol 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.



This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

- Manual contents are subject to change without notice

# Product Features

## Product features

- Waveform** Displays the luma (Y) and Chroma (Cb/Cr) components of the input video signal as a form of waves.
- Vectorscope** Displays an X-Y plot of two signal, which can reveal details about the relationship between two signals.
- 16ch** 16Channel, De-Embedded Audio Selected Out.
- 1:1 Pixel** 1:1 pixel mode displays the original image resolution without scaling to match a certain resolution or an aspect ratio.
- H/V Delay** View the blanking area and synchronize signals by displaying the horizontal and vertical intervals in the center of the screen.
- Screen Color Mode** Blue, Red, Green and Mono      **Programable Function key** Source Alias Text Edit
- IPS LCD Panel** Wide view Angle      **Maximum Brightness**      **RJ-45 Remote Control**
- Tally Lamp** Red, Green Support & UMD Tally Support
- Marker** 4:3, 14:9, 15:9 and 16:9 area, line, safety, center markers display
- UMD** This monitor supports UMD(Under Monitor Display) function which displays Ancillary data at the bottom of the screen.
- ZOOM** Select extension where you want to zoom(left or right).
- Jog Dial Switch** Select an image of input signal & control on/off & switch to full screen.

## Converter Solution

- 1 SDI to HDMI
- 2 SDI to SDI
- 3 HDMI to SDI
- 4 HDMI to HDMI
- 5 YPBPR to SDI
- 6 YPBPR to HDMI
- 7 CVBS to SDI
- 8 CVBS to HDMI
- 9 DSUB to SDI
- 10 DSUB to HDMI

- **Complete**
- **ing**
- **Not support**

## Monitor Display

		SDI_A	SDI_B	HDMI	YPBPR	DSUB	CVBS
SDI Output Source	SDI_A	●	●	●	●	●	●
	SDI_B	●	●	●	●	●	●
	HDMI	●	●	●	-	-	●
	YPBPR	○	○	-	○	-	-
	DSUB	○	○	-	-	○	○
	CVBS	○	○	○	-	○	○

▶ HDMI and DSUB VIDEO MODE ONLY

## Monitor Display

		SDI_A	SDI_B	HDMI	YPBPR	DSUB	CVBS
HDMI Output Source	SDI_A	●	●	●	●	●	●
	SDI_B	●	●	●	●	●	●
	HDMI	●	●	●	-	-	●
	YPBPR	○	○	-	○	-	-
	DSUB	○	○	-	-	○	○
	CVBS	○	○	○	-	○	○
	Display	●	●	●	●	●	●

# Getting Started

## Viewing the Control Panel

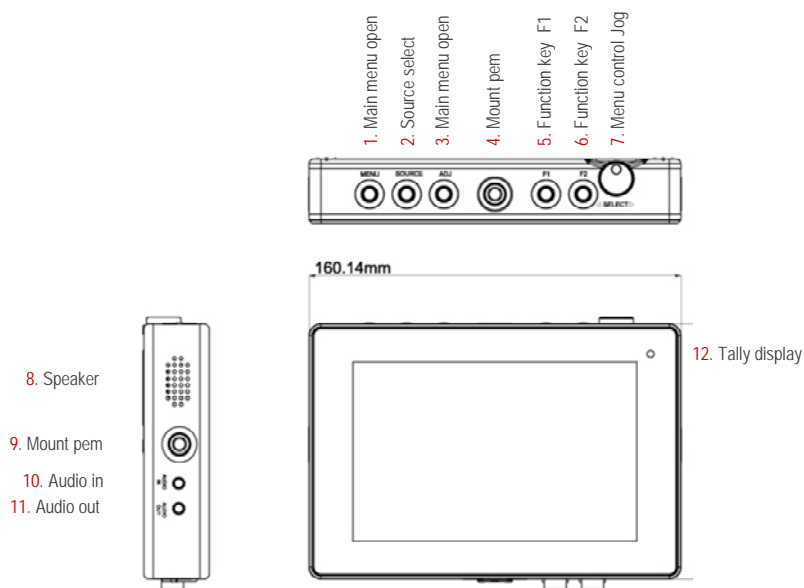
### ■ monitor info

OBM-056-XXXXX

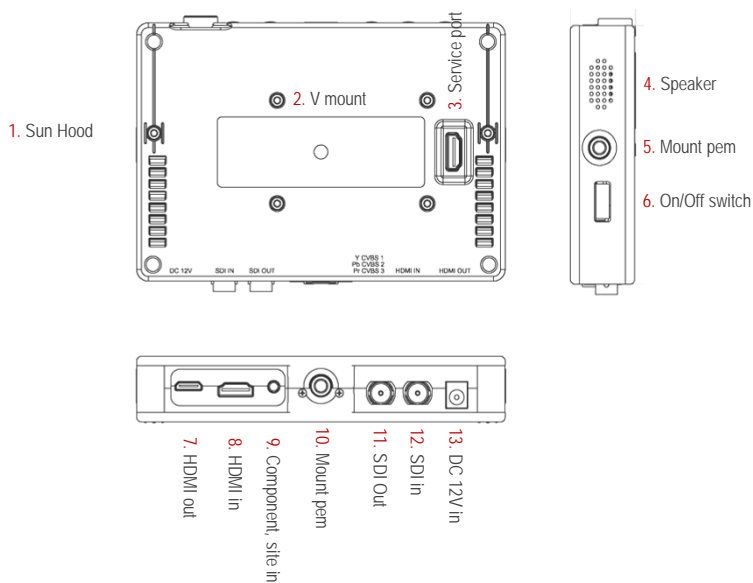
**monitor** 160.4 x 113.9 (mm)

**Stand** 160.4 x 113.9 (mm)

### Front



### Rear



# Viewing the Control Panel

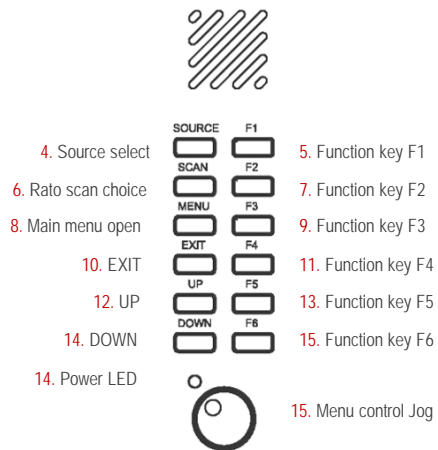
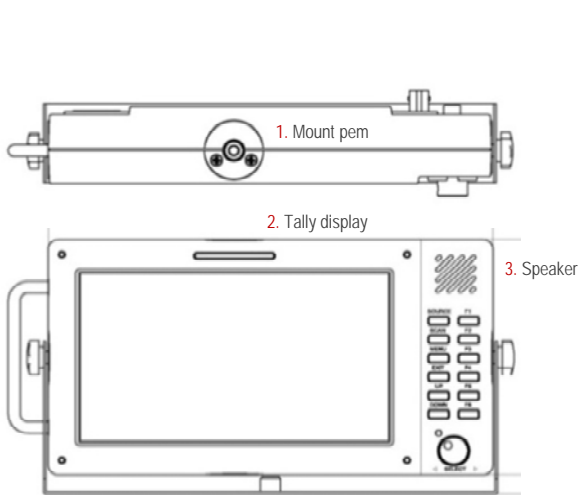
■ monitor info

OBM-070-XXXXX

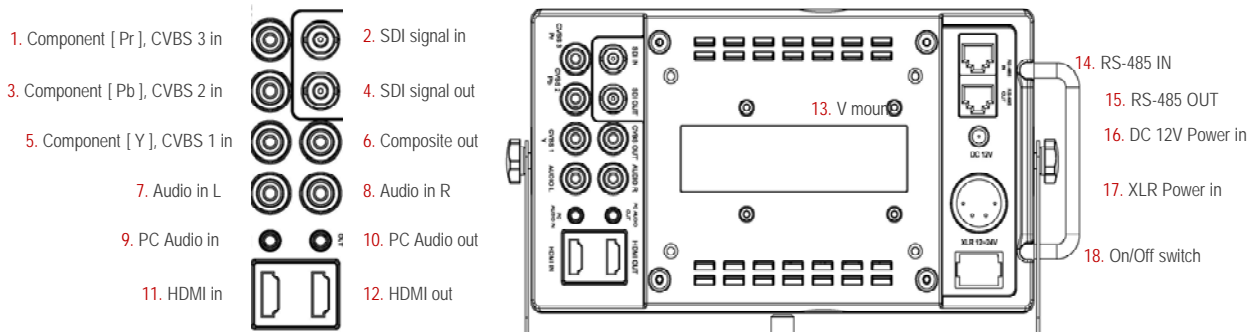
monitor 221.5 x 126 (mm)

Stand 221.5 x 136 (mm)

Front



Rear



# Getting Started

## Viewing the Control Panel

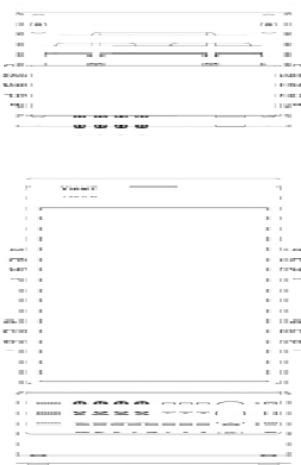
### ■ monitor info

OBM-097-XXXXX

**monitor** 221.5 x 218.5 (mm)

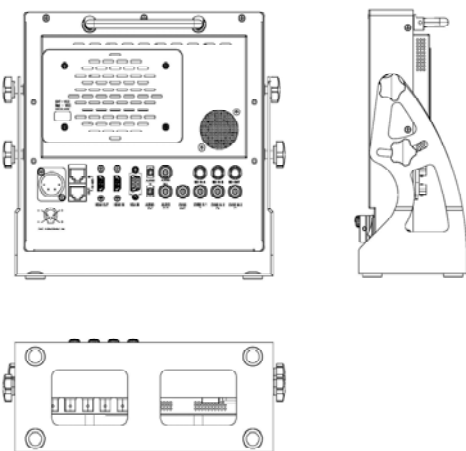
**Stand** 221.5 x 230.5 (mm)

### Front



- 1. Bright control
- 2. Contrast control
- 3. Chroma control
- 4. Volume control
- 5. Function F1
- 6. Function F2
- 7. Function F3
- 8. Power LED
- 9. Speaker out
- 10. Source select
- 11. Main menu open
- 12. EXIT
- 13. UP
- 14. DOWN
- 15. Function F4
- 16. Function F5
- 17. Function F6
- 18. Menu control JOG
- 19. IR Sensor
- 20. On/Off switch

### Rear



- 1. RS-485 IN
- 2. Audio in
- 3. Audio in L
- 4. SDI in A
- 5. SDI in B
- 6. SDI out
- 7. XLR Power in
- 8. RS-485 out
- 9. HDMI out
- 10. HDMI in
- 11. VGA in
- 12. Audio out
- 13. Audio in R
- 14. Composite out
- 15. CVBS IN 1, Component [Y]
- 16. CVBS IN 2, Component [Pb]
- 17. CVBS IN 3, Component [Pr]



# Viewing the Control Panel

■ monitor info

OBM-185-XXXXX

**monitor** 443 x 308 (mm)

**Stand** 443 x 318 (mm)

**Front**

1. Brightness control  
2. Contrast control  
3. Chroma control  
4. Volume control

5. MENU  
6. EXIT  
7. UP

8. Function FA1  
9. Function FA2  
10. Function FA3  
11. Function FA4

12. Power LED

13. Speaker out

14. Source  
15. Scan  
16. Down

17. Function FA5  
18. Function FA6  
19. Function FA7  
20. Function FA8

21. Menu control JOG  
22. IR Sensor  
23. On/Off switch

24. Speaker out

**Rear**

1. RS-485 IN  
2. Audio in  
3. Audio in L  
4. SDI in A  
5. SDI in B  
6. SDI out

7. XLR Power in  
8. RS-485 out  
9. HDMI out  
10. HDMI in  
11. VGA in  
12. Audio out  
13. Audio in R  
14. Composite out  
15. CVBS IN 1, Component [ Y ]  
16. CVBS IN 2, Component [ Pb ]  
17. CVBS IN 3, Component [ Pr ]

# Getting Started

## Viewing the Control Panel

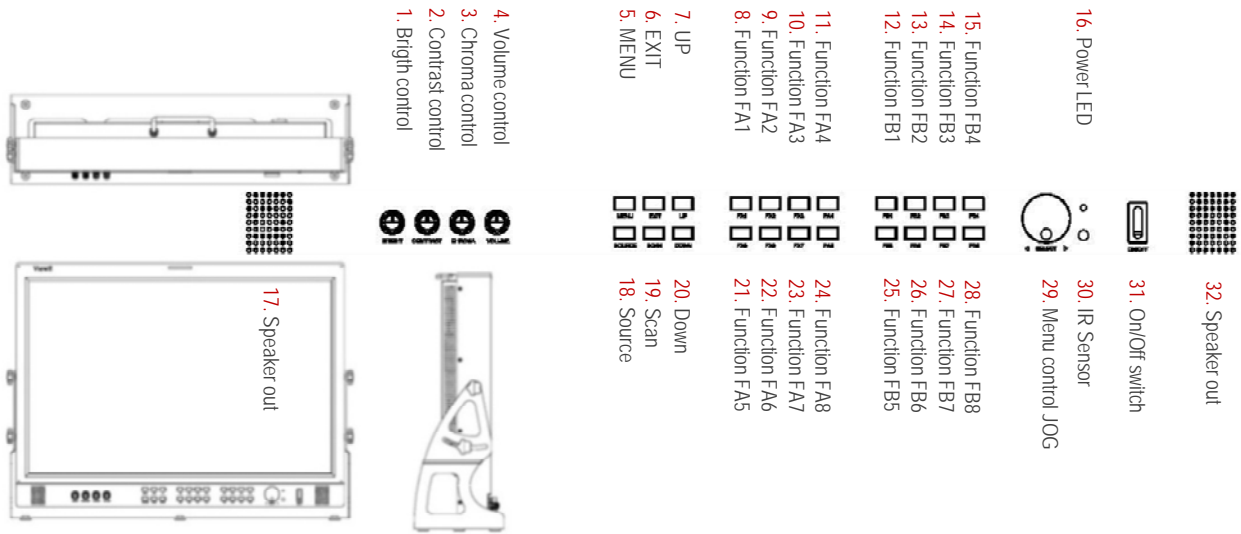
### ■ monitor info

OBM-240-XXXXX

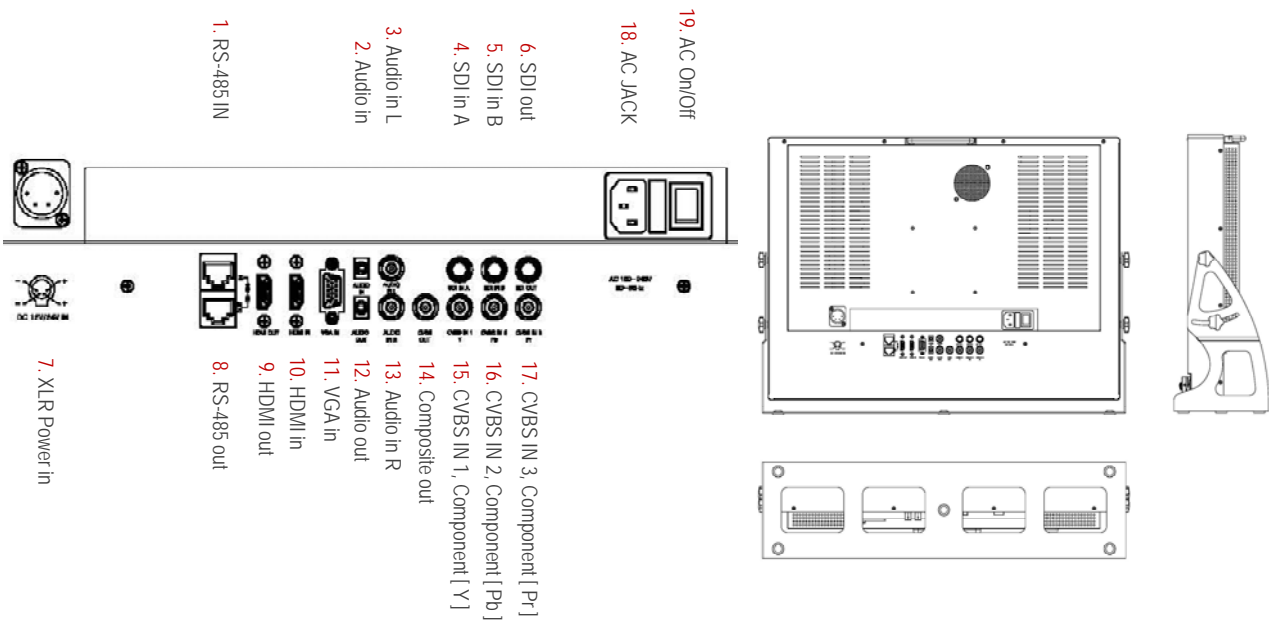
**monitor** 563 x 410 (mm)

**Stand** 563 x 420 (mm)

### Front



### Rear



## Basic Information

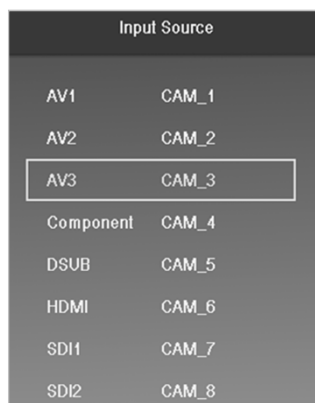
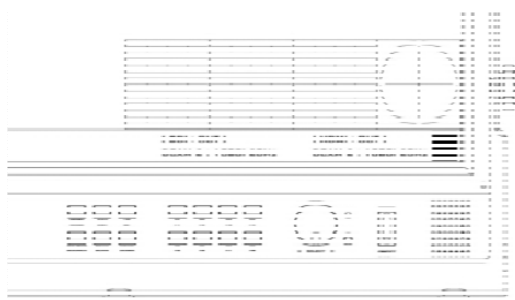
### ■ Initial setup

When the monitor is initially turned on, follow the instruction below by first pressing the MENU button.

- 1 Selecting a language** Press the **UP** or **DOWN** to control, then press **SOURCE** to select the desired **Language**.  
To reset this feature.

**MENU** ▶ **Setting** ▶ **Load Sys Default**

- 2 Selecting Input** To select a source, please press **External key**.



- 3 Function key** The monitor is **Default Function key**.

OBM-240-XXXXX

FA1	HDMI Output	FA2	Aspect	
FA3	Center Maker	FA4	Safety Area	
FA5	Marker	FA6	Waveform	
FA7	Vectorscope	FA8	UMD	
FB1	Audio Lvl Meter	FB2	Timecode	
FB3	HDMI CSC	FB4	Zoom Mode	Programmable key
FB5	Blue/Mono	FB6	H/V Delay	
FB7	Max Bright	FB8	SDI Output	Fixed Key

OBM-185-XXXXX

F1	Blue/Mono	F2	H/V Delay	
F3	Max Bright	F4	SDI Output	
F5	HDMI Output	F6	Aspect	
F7	Center Maker	F8	Safety Area	Programmable Key

OBM-097-XXXXX, OBM-070-XXXXX

F1	Blue/Mono	F2	H/V Delay	
F3	Max Bright	F4	SDI Output	
F5	HDMI Output	F6	Aspect	Programmable Key

OBM-056-XXXXX

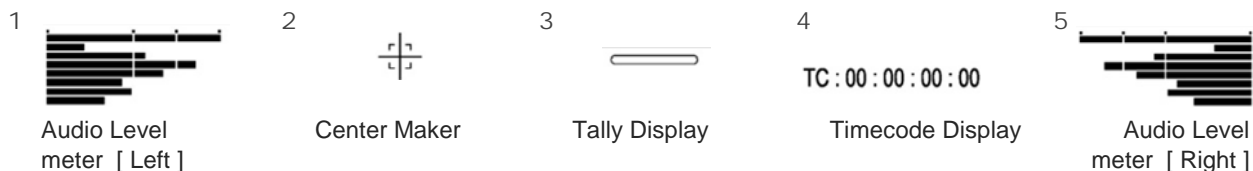
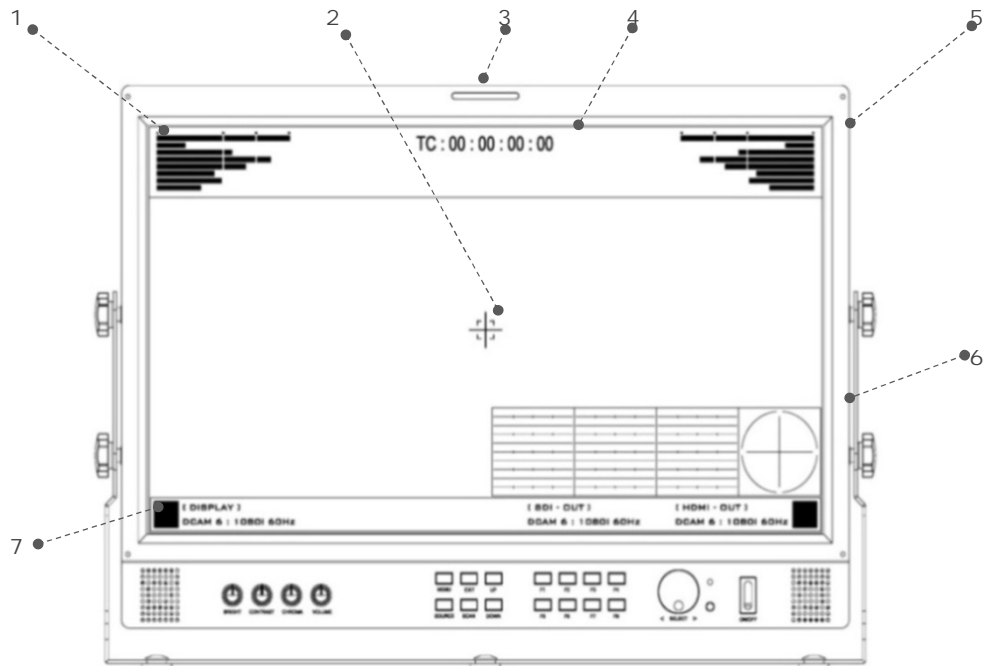
F1	Blue/Mono	F2	H/V Delay	Programmable Key
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# Getting Started

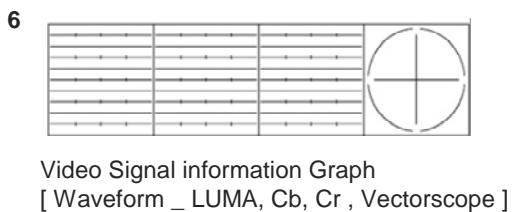
## Basic Information

### ■ Display information

- Setting information you have entered are displayed on the screen with graphs and texts.



CH-1  
CH-3  
CH-5  
CH-7  
CH-9  
CH-11  
CH-13  
CH-15



CH-2  
CH-4  
CH-6  
CH-8  
CH-10  
CH-12  
CH-14  
CH-16



UMD Monitor Source Action Information

## Connecting to BNC Signal Device

■ BNC

BNC SDI Input signal 3Gbps ~ 270Mbps

Input Signal Formats		OBM-056	OBM-070	OBM-097	OBM-185	OBM-240
<b>425M(3G)</b> 4 : 2 : 2	1080 60P	○	○	○	○	○
	1080 50p	○	○	○	○	○
<b>425M(3G)</b> 4 : 4 : 4	720 24p	○	○	○	○	○
	720 25p	○	○	○	○	○
	720 50p	○	○	○	○	○
	720 60p	○	○	○	○	○
	1080 23.98p	○	○	○	○	○
	1080 23.98Psf	○	○	○	○	○
	1080 24p	○	○	○	○	○
	1080 25p	○	○	○	○	○
	1080 30p	○	○	○	○	○
	1080 50i	○	○	○	○	○
1080 60i	○	○	○	○	○	
<b>260M(1.5G)</b> 4 : 2 : 2	1035 60i	○	○	○	○	○
<b>274M(1.5G)</b> 4 : 2 : 2	1080 24psf	○	○	○	○	○
	1080 24p	○	○	○	○	○
	1080 23.98p	○	○	○	○	○
	1080 23.98Psf	○	○	○	○	○
	1080 25p	○	○	○	○	○
	1080 30p	○	○	○	○	○
	1080 50i	○	○	○	○	○
1080 60i	○	○	○	○	○	
<b>296M(1.5G)</b> 4 : 2 : 2	720 60p	○	○	○	○	○
	720 50p	○	○	○	○	○
	720 30p	○	○	○	○	○
	720 25p	○	○	○	○	○
	720 24p	○	○	○	○	○
<b>125M(270M)</b> 4 : 2 : 2	720 X 487 60i	○	○	○	○	○
	720 x 507 60i	○	○	○	○	○

# Connections

## Connecting to BNC Signal Device

■ BNC

BNC SDI Output signal 3Gbps ~ 270Mbps

Output Signal Formats		OBM-056	OBM-070	OBM-097	OBM-185	OBM-240
<b>425M(3G)</b> 4 : 2 : 2	1080 60P	○	○	○	○	○
	1080 50p	○	○	○	○	○
<b>425M(3G)</b> 4 : 4 : 4	720 24p	○	○	○	○	○
	720 25p	○	○	○	○	○
	720 50p	○	○	○	○	○
	720 60p	○	○	○	○	○
	1080 23.98p	○	○	○	○	○
	1080 23.98Psf	○	○	○	○	○
	1080 24p	○	○	○	○	○
	1080 25p	○	○	○	○	○
	1080 30p	○	○	○	○	○
	1080 50i	○	○	○	○	○
1080 60i	○	○	○	○	○	
<b>260M(1.5G)</b> 4 : 2 : 2	1035 60i	○	○	○	○	○
<b>274M(1.5G)</b> 4 : 2 : 2	1080 24psf	○	○	○	○	○
	1080 24p	○	○	○	○	○
	1080 23.98p	○	○	○	○	○
	1080 23.98Psf	○	○	○	○	○
	1080 25p	○	○	○	○	○
	1080 30p	○	○	○	○	○
	1080 50i	○	○	○	○	○
1080 60i	○	○	○	○	○	
<b>296M(1.5G)</b> 4 : 2 : 2	720 60p	○	○	○	○	○
	720 50p	○	○	○	○	○
	720 30p	○	○	○	○	○
	720 25p	○	○	○	○	○
	720 24p	○	○	○	○	○
<b>125M(270M)</b> 4 : 2 : 2	720 X 487 60i	○	○	○	○	○
	720 x 507 60i	○	○	○	○	○

## Connecting to HDMI Signal Device

■ HDMI

HDMI Input signal

Output Signal Formats	OBM-056	OBM-070	OBM-097	OBM-185	OBM-240
1080 60P	○	○	○	○	○
1080 50p	○	○	○	○	○
720 24p	○	○	○	○	○
720 25p	○	○	○	○	○
720 50p	○	○	○	○	○
720 60p	○	○	○	○	○
1080 24p	○	○	○	○	○
1080 25p	○	○	○	○	○
1080 30p	○	○	○	○	○
1080 50i	○	○	○	○	○
1080 60i	○	○	○	○	○
1035 60i	○	○	○	○	○
1080 24psf	○	○	○	○	○
1080 24p	○	○	○	○	○
1080 25p	○	○	○	○	○
1080 30p	○	○	○	○	○
1080 50i	○	○	○	○	○
1080 60i	○	○	○	○	○
720 60p	○	○	○	○	○
720 50p	○	○	○	○	○
720 30p	○	○	○	○	○
720 25p	○	○	○	○	○
720 24p	○	○	○	○	○
720 X 487 60i	○	○	○	○	○
720 x 507 60i	○	○	○	○	○
640 X 480	○	○	○	○	○
720 X 400	○	○	○	○	○
800 X 600	○	○	○	○	○
1024 X 768	○	○	○	○	○
1280 X 768	○	○	○	○	○
1360 X 768	○	○	○	○	○
1920 X 1080	○	○	○	○	○
1920 X 1200	○	○	○	○	○

# Connections

## Connecting to HDMI Signal Device

### ■ HDMI

HDMI Output signal

Output Signal Formats	OBM-056	OBM-070	OBM-097	OBM-185	OBM-240
1080 60P	○	○	○	○	○
1080 50p	○	○	○	○	○
720 24p	○	○	○	○	○
720 25p	○	○	○	○	○
720 50p	○	○	○	○	○
720 60p	○	○	○	○	○
1080 24p	○	○	○	○	○
1080 25p	○	○	○	○	○
1080 30p	○	○	○	○	○
1080 50i	○	○	○	○	○
1080 60i	○	○	○	○	○
1035 60i	○	○	○	○	○
1080 24psf	○	○	○	○	○
1080 24p	○	○	○	○	○
1080 25p	○	○	○	○	○
1080 30p	○	○	○	○	○
1080 50i	○	○	○	○	○
1080 60i	○	○	○	○	○
720 60p	○	○	○	○	○
720 50p	○	○	○	○	○
720 30p	○	○	○	○	○
720 25p	○	○	○	○	○
720 24p	○	○	○	○	○
720 X 487 60i	○	○	○	○	○
720 x 507 60i	○	○	○	○	○
640 X 480	○	○	○	○	○
720 X 400	○	○	○	○	○
800 X 600	○	○	○	○	○
1024 X 768	○	○	○	○	○
1280 X 768	○	○	○	○	○
1360 X 768	○	○	○	○	○
1920 X 1080	○	○	○	○	○
1920 X 1200	○	○	○	○	○



## Connecting to VGA Signal Device

■ VGA

VGA Input signal 1.0Vpp (G with Sync), 0.7Vpp (B,R)

Input Signal Formats	Frequency	HF	VF	OBM-097	OBM-185	OBM-240
640 X 400	59.779Hz	29.531	59.779	○	○	○
720 X 400	85.038Hz	37.927	85.038	○	○	○
800 X 600	60Hz	37.879	60.317	○	○	○
1024 X 768	49.866Hz	39.444	49.866	○	○	○
1024 X 768	60Hz	47.712	60.015	○	○	○
1152 X 720	60Hz	44.398	59.916	○	○	○
1152 X 864	75Hz	67.500	75.000	○	○	○
1280 X 720	30Hz	22.500	30.000	○	○	○
1280 X 768	60Hz	47.396	59.935	○	○	○
1280 X 1024	60Hz	63.981	60.020	○	○	○
1360 X 768	50Hz	39.499	49.936	○	○	○
1360 X 768	75Hz	60.143	74.999	○	○	○
1400 X 1050	60Hz	64.744	59.948	○	○	○
1440 X 480	60Hz	15.734	59.939	○	○	○
1680 X 1050	59.94Hz	64.742	59.946	○	○	○
1600 X 1200	60Hz	75.000	60.000	○	○	○
1920 X 1080	60Hz	66.647	59.988	○	○	○
1920 X 1200	60Hz	74.099	59.999	○	○	○

# Connections

## Connecting to Component Signal Device

### ■ Component

Component Input signal 1.0Vpp (Y with Sync), 0.7Vpp (Pb,Pr)

Input Signal Formats	OBM-056	OBM-070	OBM-097	OBM-185	OBM-240
480 50i	○	○	○	○	○
480 60i	○	○	○	○	○
480 60p	○	○	○	○	○
576 50i	○	○	○	○	○
576 50p	○	○	○	○	○
720 50p	○	○	○	○	○
720 60p	○	○	○	○	○
1080 50i	○	○	○	○	○
1080 60i	○	○	○	○	○
1080 50p	○	○	○	○	○
1080 60p	○	○	○	○	○

## Connecting to Composite Signal Device

### ■ Composite

Composite Input signal 1.0Vpp (with Sync)

Input Signal Formats	OBM-056	OBM-070	OBM-097	OBM-185	OBM-240
NTSC	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
PAL	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
SECAM	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

# Connections

## RJ-45 Remote Control

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■ RJ-45 Buyer Option

Customer's option

## VIDEO

### ■ Mode Main ▶ Video ▶ Mode

Select your preferred picture type.

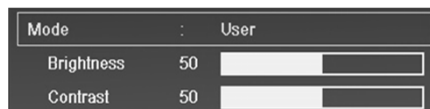
[ User, Dynamic, Standard, Movie, Mild ]

#### Brightness

Controls the degree of brightness between [ 0min ~ 100max ]

#### Contrast

Controls the contrast ratio between [ 0min ~ 100max ]



### ■ Color Temp Main ▶ Video ▶ Color Temp

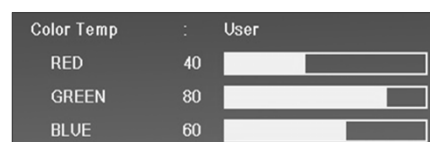
Select your preferred Temp type.

[ User, 9300K, 7500K, 6500K ]

**RED** Controls RED, GREEN, BLUE color.

**GREEN** The value is selectable between [ 0min ~ 100max ]

**BLUE** Adjusts R, G, B color of bright section.



### ■ Color Only Main ▶ Video ▶ Color Only

Select your preferred Color type.

[ Red, Green, Blue, Mono ]



### ■ DSUB Main ▶ Video ▶ DSUB

Select DSUB( VGA ) Function

**Auto Progress** Auto Detect position & phase

**H Posi** Controls the H Position between [ -100min ~ 100max ]

**V Posi** Controls the V Position between [ -100min ~ 100max ]

#### Frequency

Controls the contrast ratio between [ -100min ~ 100max ]

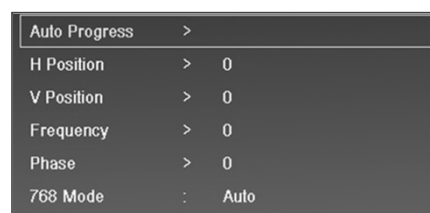
#### Phase

Controls PHASE value (hue) between [ -32min ~ 31max ]

#### 768 Mode

Forcibly change the input resolution

[ Auto, 1024x768, 1224x768, 1280x768, 1360x768, 1366x768 ]



### ■ NTSC Setup Main ▶ Video ▶ NTSC Setup

This item sets IRE value under NTSC mode between

Off ( 0 IRE ) and On ( 7.5 IRE )



# Aspect

## ■ Scan Main ▶ Aspect ▶ Scan

▶ EX monitor - 0BM-185 Display Panel & Source 16 : 9

This product supports various scan modes.  
[ Zreoscan, Underscan, Overscan ]

Scan : Zeroscan

### Zreoscan

Zooms in/out of the image without changing the aspect ratio.



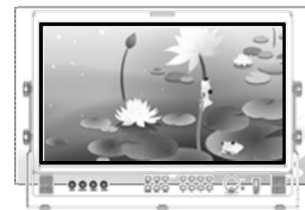
### Underscan

Zooms in/out of the image without changing the aspect ratio. Also, displays the data at the top of the horizontal blanking block.



### Overscan

Zooms in/out of the image to 96% of its original size without changing the aspect ratio of.



## ■ Aspect Main ▶ Aspect ▶ Aspect

▶ EX monitor - 0BM-185 Display Panel & Source 16 : 9

Used to change the Aspect between.  
[ fullscreen, 16:9, 4:3, 1:1 ]

Aspect : Fullscreen

### Fullscreen

Enlarges the aspect ratio of the picture to fit the entire screen.



### 16 : 9

Stretches the image in "4:3 mode" to fit to 16:9 aspect ratio.



### 4 : 3

Cuts left and right of the original image to fit to 4:3 aspect ratio.



### 1 : 1

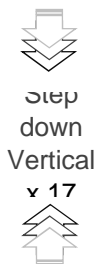
1:1 pixel mapping of original image. This feature is available only when the size of the original image is bigger than the screen size.



## Aspect

■ **Anamorphic**    Main ▶ Aspect ▶ Anamorphic  
Select your preferred Anamorphic type.

▶ EX monitor -OBM-185 Display Panel & Source 16 : 9



Anamorphic		:	Off
1	1.37 : 1	10	2.35 : 1
2	1.50 : 1	11	2.37 : 1
3	1.55 : 1	12	2.39 : 1
4	1.60 : 1	13	2.40 : 1
5	1.66 : 1	14	2.55 : 1
6	1.75 : 1	15	2.59 : 1
7	1.85 : 1	16	2.76 : 1
8	2.00 : 1	17	3.56 : 1
9	2.20 : 1		

■ **Zoom Mode**    Main ▶ Aspect ▶ Zoom Mode  
Used to change the display ratio between.  
[ zoom,Pixel To Pixel, Disable ]

▶ EX monitor - OBM-185 Display Panel & Source 16 : 9

### Pixel To Pixel

Display Panel reduced the input signal on the screen (Scale) as it does not appear on the screen to the size of the input feature.



### Zoom

#### Zoom Ratio

Used to change the Zoom Ratio between. [ 0min ~ 50max ]

#### H Position

adjust the horizontal position of image.  
[ 0min ~ 50max ]

#### V Position

adjust the vertical position of image.  
[ 0min ~ 50max ]



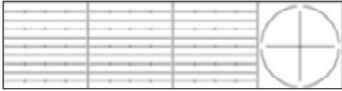
Zoom Mode	:	Disable
Zoom Ratio	:	100%
H Position	:	0
V Position	:	0

# Sound

**TBD**

## ■ SDI Audio Main ▶ Sound ▶ SDI Audio

Pri-Group  
Sec-Group  
Output Channel



## ■ Speaker Out Main ▶ Sound ▶ Speaker Out

## ■ Volume Main ▶ Sound ▶ Volume

SDI Audio

Pri-Group	:	Group1
Sec-Group	:	Group1
Output Channel	:	Channel 1/2
Speaker Out	:	Both
Volume	2	<input type="text"/>

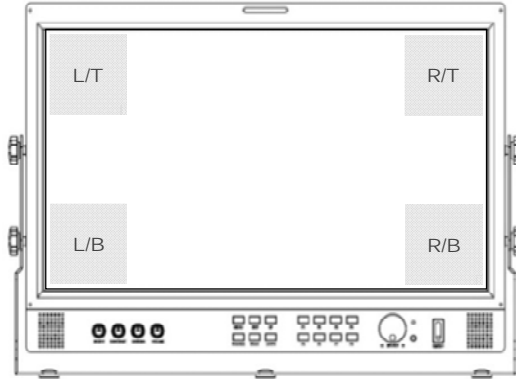


# A/V Scope

**Scope Position** Main ▶ A/V Scope ▶ Scope Position

Scope Position : R/B

Select in Scope location



**Scope Mode** Main ▶ A/V Scope ▶ Mode

Scope Mode : Line

TBD

**Line Number** Main ▶ A/V Scope ▶ Line Number

Line Number : 0

TBD

**Waveform Enable** Main ▶ A/V Scope ▶ Waveform Enable

Waveform Enable : On

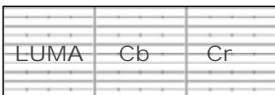
Select Waveform [ On, Off ]



**Waveform Source** Main ▶ A/V Scope ▶ Waveform Source

Waveform Source : Luma

[ LUMA, Cb, Cr, LUMA+Cb+Cr ]



**Vector Enable** Main ▶ A/V Scope ▶ Vector Enable

Vector Enable : On

Select Vector [ On, Off ]



**Audio Level Meter** Main ▶ A/V Scope ▶ Audio Level Meter

Audio Level Meter : On

Select Audio Level Meter [ On, Off ]



# Setting

## ■ Language Main ▶ Setting ▶ Language

language Selection

## ■ Osd Blend Main ▶ Setting ▶ Osd Blend

OSD the transparency selection

## ■ Load Sys Default Main ▶ Setting ▶ Load Sys Default

Initializ monitor

## ■ Background Gray Main ▶ Setting ▶ Background Gray

SOURCE BLANK section, select grayscale [ 0min ~ 7max ]

## ■ Gamma Main ▶ Setting ▶ Gamma

TBD

## ■ Gamma Curve Main ▶ Setting ▶ Gamma Curve

TBD

## ■ Bklight Dimming Main ▶ Setting ▶ Bklight Dimming

Backlight brightness control [ 0min ~ 100max ]

## ■ Volume Lock Main ▶ Setting ▶ Volume Lock

Select outside Volume lock function.  
[ Brightness, Contrast, Color ]

## ■ Power Saving Main ▶ Setting ▶ Power Saving

TBD

## ■ Temperature Ctrl Main ▶ Setting ▶ Temperature Ctrl

### Hysteresis

Shutdown Ref and Auto Fan Ref for Hysteresis temperature settings  
[ 2.0°C min ~ 6.0°C max ]

### Shutdown Ref

panel shutdown temperature setting. [ 70°Cmin ~ 90°Cmax ]

### Auto Fan Ref

Fan On / Off Standard temperature setting. [ 40°Cmin ~ 60°Cmax ]

### Fan On/Off

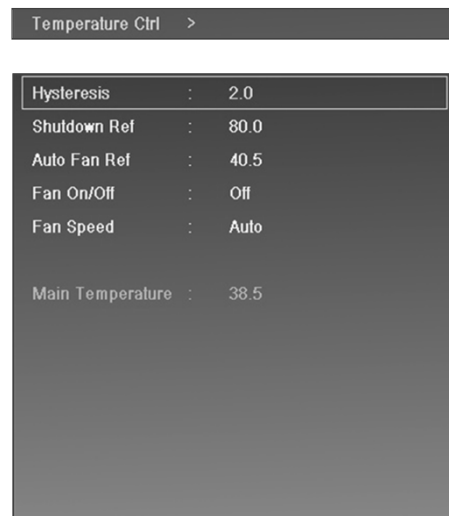
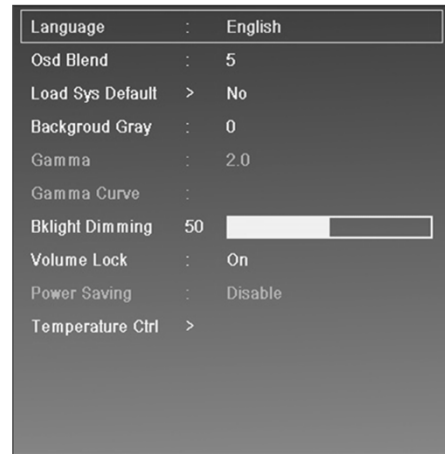
Fan function select [ Auto, Off, On ]

### Fan Speed

Fan speed selection [ auto, Slow, Nomal, Fast ]

### Main Temperature

Check the internal temperature of the monitor



## Advanced

### ■ HDMI Output Main ▶ Advanced ▶ HDMI Output

Select the output source from the HDMI Output port

#### Source

Select output signal [ Disable, SDI, Display, HDMI/ADC ]

#### Color Format

Select color space [ RGB, 4:2:2, 4:4:4 ]

#### RGB Range

Select color range of RGB color format  
[ 0-255, 16-235 ]

#### YCbCr Range

Select color range of 422 or 444 color format  
[ Video(16~235), Extended(1~254), Full(0~255) ]

### ■ HDMI Input Main ▶ Advanced ▶ HDMI Input

Select input source from HDMI input port

#### RGB Range

Select color range with HDMI input format of RGB [ 0-255, 16-235 ]

#### YCbCr Range

Select color range with HDMI input format of 422 or 444 [ Video(16~235), Extended(1~254), Full(0~255) ]

### ■ SDI Output / Input Main ▶ Advanced ▶ SDI Output / Input

Select in/output source from SDI port

#### Output Source

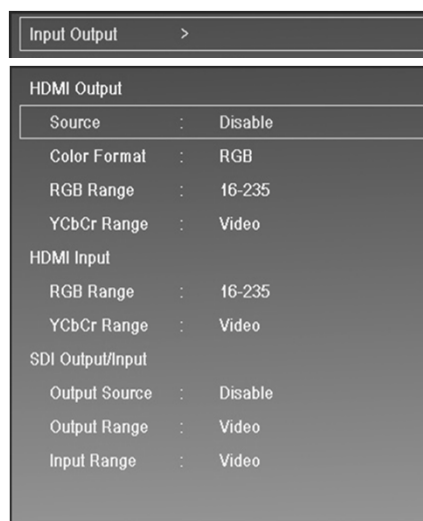
Select output signal [ Disable, SDI, HDMI/ADC ]

#### Output Range

Select color range of output signal [ Video(16~235), Extended(1~254), Full(0~255) ]

#### Input Range

Select color range of input signal [ Video(16~235),  
Extended(1~254), Full(0~255) ]



### ■ Timecode Main ▶ Advanced ▶ Timecode

Select Timecode [ On, Off ]

### ■ Source Alias Main ▶ Advanced ▶ Source Alias

Enter an alias for the input source.

▶ Source alias modifications automatically reflected on UMD

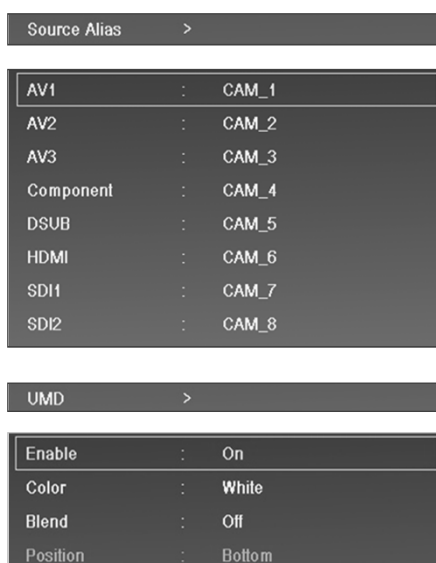
### ■ Timecode Type Main ▶ Advanced ▶ Timecode Type

TBD

### ■ UMD Main ▶ Advanced ▶ UMD

This monitor supports UMD(Under Monitor Display) function which displays Ancillary data at the bottom of the screen.

- Enable**    UMD function On / Off
- Color**    UMD Color Selection
- Blend**    Blend (UMD Transparency ) On/ Off
- Position**    UMD slot selection



## Function key

### ■ **Function Key** Main ► Function Key

All front function keys are programmable with any features that included in the product, but only one feature can be assigned per one function key.

[ Blue/ mono, H/V Delay, Max Bright, SDI Output, HDMI Output, Aspect, Center Marker, Safety Area, Marker, Waveform, Vectorscope, UMD, Audio Lvl Meter, Timecode, HDMI CSC, Zoom mode, Still, HDMI, SDI CH1, SDI CH2, DSUB ]

Func Key 1	:	Blue/Mono
Func Key 2	:	H/V Delay
Func Key 3	:	Max Bright
Func Key 4	:	SDI Output
Func Key 5	:	HDMI Output
Func Key 6	:	Aspect
Func Key 7	:	Center Marker
Func Key 8	:	Safety Area

## Marker

### ■ **Marker** Main ► Marker

Lines input on the screen according to certain percentage

<b>Marker Type</b>	based on the percentage of panel [ Off, 16:9, 4:3, 15:9, 14:9, 13:9, 1.85:1, 2.35:1 ]
<b>Safety Area</b>	Select input of the Safety Resolution rate [ Off, 95%, 93%, 90%, 88%, 85%, 80%, EBU Action, EBU Graphic ]
<b>Center Marker</b>	On / Off Center Marker
<b>Marker Property</b>	TBD
<b>Safety Wide</b>	TBD
<b>Safety to Marker</b>	TBD

Marker Type	:	Off
Safety Area	:	Off
Center Marker	:	Off
Marker Property	>	
Safety to Wide	>	
Safety to Marker	>	

# Accessory

## ■ Accessory

Wallmount Hardware



19" Rack Mountable



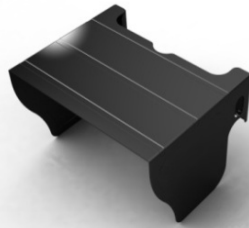
Camera Mount



Protective Carrying Bag



Protective Sun Visor



Battery Mount



AC Power Cable



ND Filter



AR Glass



Adaptor



## Specifications

### ■ Specifications

Product		OBM-056	OBM-070	OBM-097	OBM-185	OBM-240
Lcd spec	Size	5.6 inch	7 inch	9.7 inch	18.5 inch	24 inch
	Resolution	1280 x 800 (16:10)	1024 x 600 (16:9)	1024 x 768 (4:3)	1366 X 768 (16:9)	1920 X 1200 (16:10)
	Back light Type	LED	LED	LED	LED	CCFL
	Color Depth	16.7M (Dither 8 Bit)	16.7M ( 8 Bit )	16.7M (Dither 8 Bit)	16.7M (8 Bit)	1.07B (10 Bit)
	viewing Angle (Typ.)	170°(H) / 170°(V)	170°(H) / 170°(V)	178°(H) / 178°(V)	178°(H) / 178°(V)	178°(H) / 178°(V)
	Luminance (Max.)	300 cd/m <sup>2</sup>	400 cd/m <sup>2</sup>	400 cd/m <sup>2</sup>	250 cd/m <sup>2</sup>	400 cd/m <sup>2</sup>
	Contrast Ratio	500 : 1	800 : 1	600 : 1	1000 : 1	1000 : 1
	Display Area					
Case features	monitor Dim	160.4 x 113.9 (mm)	221.5 x 126 (mm)	221.5 x 218.5 (mm)	443 x 308 (mm)	563 x 410 (mm)
	Stand Dim	160.4 x 113.9 (mm)	221.5 x 136 (mm)	221.5 x 230.5 (mm)	443 x 318 (mm)	563 x 420 (mm)
	Weight (g)	627.5	916.5	2750	6500	8040
Convertor features	SDI to HDMI	○	○	○	○	○
	SDI to SDI	○	○	○	○	○
	HDMI to SDI	○	○	○	○	○
	HDMI to HDMI	○	○	○	○	○
	Comp to SDI	○	○	○	○	○
	Comp to HDMI	○	○	○	○	○
	CVBS to SDI	○	○	○	○	○
	CVBS to HDMI	○	○	○	○	○
	VGA to SDI	-	-	○	○	○
	VGA to HDMI	-	-	○	○	○
INPUT Connector	SDI BNC	1	1	2	2	2
	HDMI	1	1	1	1	1
	D-SUB	-	-	1	1	1
	Analog BNC ( CVBS,Component )	3 (Phone jack gender)	3 ( RCA JACK )	3	3	3
	Audio Phone jack (Analog Stereo )	2 (Phone jack gender)	1	1	1	1
	Audio BNC jack (Component audio L, R )	-	2 ( RCA JACK )	2	2	2
OUTPUT Connector	SDI BNC	1	1	1	1	1
	HDMI	1( MINI HDMI )	1	1	1	1
	Composite BNC	-	-	1	1	1
	Audio Phone jack (Analog Stereo )	1	1	1	1	1
Speaker	Built in Speaker	1W X 2	2W X 1	2W X 1	2W X 2	2W X 2
INPUT POWER	AC 100~240V	-	-	○	○	○
	DC 12V/24V ( XLR, DC JACK )	○ 12V ( DC JACK )	○ 12V/24V ( DC JACK , XLR )	○ 12V/24V ( DC JACK , XLR )	○ 24V ( XLR )	○ 24V ( XLR )

# Operating Instructions

Broadcasting Monitor User guide

Thank you