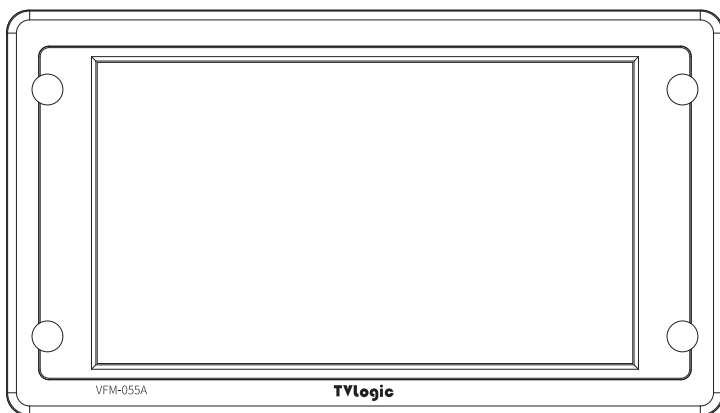




5.5" FHD Multi Format Viewfinder Monitor

Operation Manual_ver 1.1

VFM-055A

2. Main Features

VFM-055A Monitor contains the following features :

- **Compatible with various SDI signals formats (SD/HD/3G)**

- This product is compatible with various SDI signals - 480i, 576i, 720p, 1080i, 1080p, 1080psf

- **HDMI(with HDCP) Signal**

- This product is compatible with various HDMI signals.

- **HDMI To SDI / SDI To HDMI Conversion Output**

- This product features an HDMI To SDI conversion output so that video source from HDMI In terminal can be output through SDI Out terminal.
- The SDI To HDMI conversion output is also supported. The video source from SDI In terminal can be output through HDMI Out terminal.

- **All-in-one type system**

- Slim and all-in-one type monitor that requires no additional accessories, for optimized space utilization..

- **Waveform/Vectorscope/Audio Level Meter Function**

- Waveform & Vector Scope
- Embedded Audio Level Meter

- **Audio Out**

- Stereo Audio Out through phone Jack

- **Knob Control**

- Easy to adjust user configuration using the control knob on the top of the monitor.

- **BLUE ONLY / MONO / Focus Assist/ H/V Delay Function**

- **Range Error/Luma(Y') Zone Check(Color/ Zebra Type) Function**

- **Internal Pattern Generator (0~100% Gray/ ColorBar+Pluge)**

- **Various Markers & Safety Areas**

- Center Marker, Safety Area Marker, Marker Mat, Marker Size, Fit Marker, Thickness Adjustment function

- **Pixel To Pixel/Zoom Function**

- Used to display the original image resolution without scaling to match a certain resolution or an aspect ratio.
- Select 'Pixel to pixel' to display unscaled images, and select 'Zoom' to enlarge the original image.
- Zoom Scroll Function (Left/Right, Top/Bottom)

- **Power**

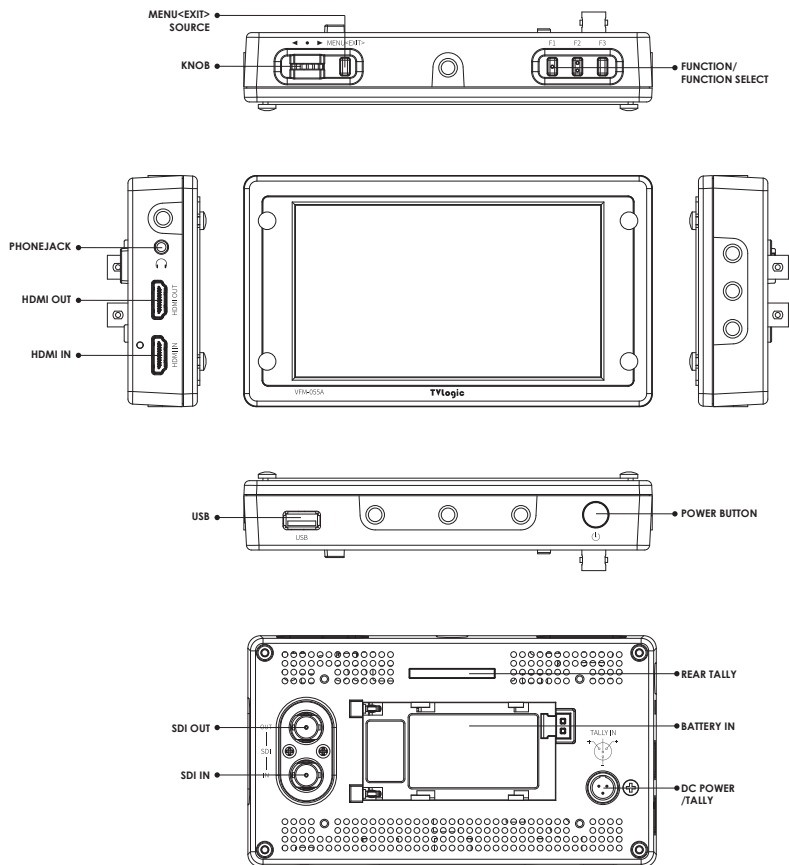
- Basically, the product is powered by a normal DC source.
- The product can be battery-powered.
- * DC 6.8~12V (Typical)

- **Additional features**

- Camera Mounting Hole x 8, Screen Tally Function, VESA Mounting Standard, 350cd/ m² Brightness, 17,000 : 1 Contrast, OSD user interface.

3. Controls & Functions

FRONT/SIDE/REAR/TOP



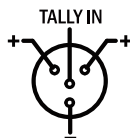
3. Controls & Functions

REAR

- **[HDMI IN]**
 - Signal input terminal for HDMI signal.
- **[HDMI OUT]**
 - Signal output terminal for HDMI signal.
 - Video source from SDI input terminal can be converted to HDMI format.
- **[HEADPHONE] (Phonejack)**
 - Used for Stereo Audio Output through Phone Jack. (video signals with embedded audio only)

REAR

- **[REAR TALLY]**
 - Activates same as [SCREEN TALLY].
- **[DC POWER / TALLY] (XLR 4P)**
 - Tally Signal In Level DC5V $\pm$ 2V
 - Battery Power Input terminal for DC 12V
 - Rated Power Input : DC 12V (1.5A)
 - * When using a DC Adapter other than the one supplied by the manufacturer, please be advised that the adapter with DC 12V/3A ~ 6A can be compatible with the monitor.



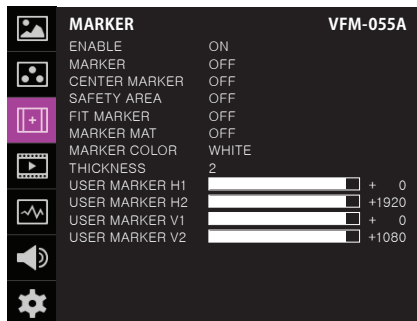
- **[Battery In]**
 - Battery Power Input :DC 6.8~12V
- **[SDI IN] (BNC)**
 - Signal input terminal for HD/SD/3G SDI signal.
- **[SDI OUT] (BNC)**
 - Signal output terminal for HD/SD/3G SDI signal.
 - Video source from HDMI input terminal can be converted to SDI format.

<Warning!!>

When using the product make sure to ground, whenever possible, before connecting the input signal cable in order to prevent any possible damage to the product or connected devices. The damage may include signal noise, malfunction of main board or display panel. And the connected devices such as camera or video source player may also be influenced through signal cable. Please check if the AC power source and the power extender or power distributor is grounded.

5. Menu Operations

[3] MARKER



• ENABLE

- Used to activate the Marker function.

• MARKER

- Available Marker types are OFF, 16:9, 4:3, 4:3 ON AIR, 15:9, 14:9, 13:9, 1.85:1, 2.35:1, 1.85:1 & 4:3 and USER.

• CENTER MARKER

- Displays the Center Marker on the screen.

• SAFETY AREA

- Used to select to display and controls the size and availability of the Safety Area.
- Available sizes are 80%, 85%, 88%, 90%, 93%, 100%, EBU ACTION 16:9, EBU GRAPHIC 16:9, EBU ACTION 14:9, EBU GRAPHIC 14:9, EBU ACTION 4:3 and EBU GRAPHIC 4:3.

• FIT MARKER

- Used to activate or inactivate the Fit Marker function.
- When the Marker type is selected in the Marker menu, a border line of the Safety Area will be displayed inside the Marker. Images below show the difference between Fit Marker ON and OFF.



MARKER : 4:3
SAFETY AREA : 90%
FIT MARKER : OFF



MARKER : 4:3
SAFETY AREA : 90%
FIT MARKER : ON

• Marker Mat

- Used to set the darkness level outside of the MARKER area from OFF(transparent) to 7(Black).
- The bigger the value, the darker the color.

• Marker Color

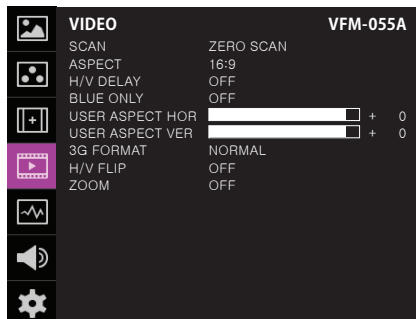
- Used to set the color of the MARKER lines.
- Available colors are white, gray, black, red, green and blue.

• Thickness

- Used to set the thickness of the MARKER lines.
- Thickness level is from 1 to 7 by the pixel unit.

5. Menu Operations

[4] VIDEO



• SCAN

- Used to change the Scan mode. Scroll up and down using the Knob and the mode will change as the following sequence. [Zero Scan] -> [Over Scan] -> [Pixel-To-Pixel] -> [User Aspect]
- * [USER ASPECT]: User can control the aspect ratio by adjusting width and height of the display.
- See section "7. Other Functions [1] User Aspect" for more information.

• ASPECT

- Used to change the Aspect Ratio.
- Regardless of the original Aspect ratio of the Input Signal, the Aspect Modes are changed in the following sequence. : [16:9][4:3][2.35:1][1.85:1][15:9][16:10][Auto]
- * [Auto] mode enables the Aspect Ratio of the output signal to be synchronized to the original Aspect Ratio of the input signal.

• H/V DELAY

- Used to monitor the Blanking area of H sync and V sync.

• BLUE ONLY

- Used to switch in the order of [Off]-[Blue Only]-[Mono]-[Off].
- Press the button to remove red and green components from the input signal and display blue component only.
- Press the button again to switch to mono-chrome mode which has no chroma signal.

• USER ASPECT HORIZONTAL/USER ASPECT VERTICAL

- Activated only when the [SCAN] mode is set to [User Aspect] .
- User can adjust the Horizontal and Vertical size of the screen.
- See section "7. Other Functions [1] User Aspect" for more information.

• 3G FORMAT

- Used to select 3G-SDI A/B input format among NORMAL MODE(AUTO - A 422 10BIT_YCbCr 50/60P), A 444 10/12BIT_YCbCr, A 444 10/12BIT_RGB, A 422 12BIT_YCbCr, B 444 10/12BIT_RGB, B 422 12BIT_YCbCr, B 422 10BIT_YCbCr 50/60P.
- In NORMAL MODE, automatically detected when Payload signal is contained.

• H/V FLIP

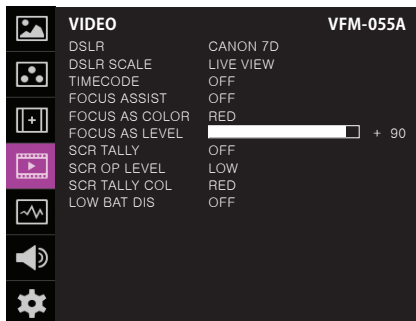
- Allows the displayed image to be flipped horizontally or vertically.
- This feature provides flexible mounting options for camera operators.
- Activates in the order : [H Flip]-[V Flip]-[H/V Flip]

• ZOOM

- Used to magnify the image up to 90% on a pixel basis and display on full screen.
- * (e.g., 10% Zoom : If the input signal's resolution is 1920 x 1080, only 90% (1728(H) x 976(V)) of the image would be shown on full screen without the remaining 10% (192(H) x 108(V)) of the image.)
- * See section "7. Other Functions -> [4] Zoom" for more information.

5. Menu Operations

[4] VIDEO



• DSLR

- Select the DSLR camera to be used with the monitor. Available mode is [CANON 7D].

* DSLR cameras' screen size and aspect ratio of Live / Record / Playback modes vary depending to their manufacturer.

• DSLR SCALE

- This is a special function for CANON/NIKON DSLR cameras.

- Used to scale the image with different resolution as to the operation mode(Live View/ Record/ PlayBack) of the camera to fulfill the screen.

* See section "7. Other Functions [8] DSLR SCALE" for more information.

• TIMECODE

- Used to set the Time Code.

- Available modes are [Off], [VITC], and [LTC].

• FOCUS ASSIST

- Focus Assist helps the shooters to easily find out the exact area in the picture with good focus, simply by adding colors on the shape or boundaries of the object in the picture.

- Activates in order of [Mono On]-[Color On]-[Off]

*[Color On] : Only the boundary of the area with good focus is displayed with the designated color.

*[Mono On] : The boundary of the area with good focus is colored with the designated color, while the rest of the areas(pixels) have only Y'(Luma) signals to be black & white image.

* See section "7. Other Functions [6] Focus Assist" for more information.

• FOCUS ASSIST COLOR

- Used to select a color for Focus Assist among red, green and blue.

- This feature is available only when the Focus Assist mode is activated.

• FOCUS ASSIST LEVEL

- Used to set the edge difference value between the edges in an image.

- Available values are from 0 to 100. Larger the value the more sophisticated the detail detection.

- Designated color is displayed when the difference of the edges exceeds the previously set value.

- This feature is available only when the FOCUS ASSIST mode is activated.

10. Product Specifications

		VFM-055A
LCD	Size	5.5"
	Resolution	1920×1080(16:9)
	Pixel Pitch	0.063(H) X 0.063(W) mm
	Color Depth	16.7M (True)
	Viewing Angle	H : 160 degrees / V : 160 degrees
	Luminance of white	350 cd / m ² (Center)
	Contrast Ratio	17000 : 1
Input	Display Area	121.4(H)×68.3(V) mm
	1 X HDMI	HDMI V1.2 Input 1Ch
Output	1 X BNC	3G/HD/SD SDI Input 1Ch
	1 X HDMI	HDMI-HDMI, SDI-HDMI (Conversion)
Output	1 X BNC	3G/HD/SD SDI Output 1Ch, HDMI-SDI (Conversion)
	1 X HDMI	HDMI-HDMI, SDI-HDMI (Conversion)
Input Signal	3G-SDI	2.970Gbps
	HD-SDI	1.485Gbps
	SD-SDI	270 Mbps
	HDMI	480i / 480p / 576i / 576p / 720p / 1080i / 1080p
SDI Input Signal Formats	SMPTE-425M-A/B	1080p(60/59.94/50/30/29.97/25/24/23.98/30sF/29.97sF/25sF/24sF/23.98sF) 1080i(60/59.94/50)
	SMPTE-274M	1080i (60/59.94/50)
	SMPTE-296M	1080p (30/29.97/25/24/24sF/23.98/23.98sF)
	SMPTE-125M	720p (60/59.94/50)
	ITU-R BT.656	480i (59.94)
Audio In		576i (50)
Audio Out		SDI Embedded Audio (Group, Ch Selectable)
Power		External Output Port (3.5m Phone Jack)
Power Consumption (Approx.)		DC 6.8~12V
Tally Signal In/Out Level		TBD
Operating Temperature		DC5V ±2V
Storage Temperature		0℃ to 40℃ (32°F to 104°F)
Main Body Dimensions (mm/inch)		-20℃ to 60℃ (-4°F to 140°F)
Box Dimensions (mm/inch)		162.5 X 92 X 35.8 (6.4 X 3.62 X 1.41)
Weight		225 X 155 X 128 (8.85 X 6.10 X 5.03)
Basic Accessories		0.42Kg / 0.92 lbs
Optional Accessories		Acylic Filter, DC Power adapter, AC Power Cord, BNC Connector (Angle Type), Camera Mount
		Carrying Case, Sun-Hood, Tripod Ball Head, HDMI Bracket, Battery Bracket, Battery Adapter, D-Tap cable

* The specification above may be changed without notice.

* When using a DC Adapter other than the one supplied by the manufacturer, please be advised that the adapter with DC 12V/3A ~ 6A can be compatible with the monitor.