

24-inch 3D LCD Monitor



## **Revolutionizing 3D Content Creation**



### **3D Monitor Features**

- Xpol® Circular Polarizing System compatible with widely available RealD 3D eyeglasses
- 3D Cursor and Grid Modes for easy binocular disparity adjustment
- Camera-assist functions: Mirror/Rotation, Split, R Shift, Anaglyph, LR Sequential, Individual, and LR Swap
- Dual Time Code, Waveform and Vectorscope displays
- 3D Mixing function
- Supports Line-by-Line and Side-by-Side 3D formats

### **Basic Monitor Features**

- Supports 3G-SDI, dual HD-SDI, and DVI
- WUXGA (1920 x 1200p) professional monitor
- ITU-709 color gamut
- Gamma 2.2, 2.35, 2.45, and 2.6 presets
- Supplied with tilt stand
- DC 24V power supply capability



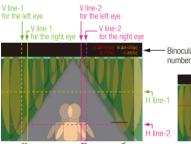
# Ready to Answer the Call: On Location, in the Studio, Wherever and Whenever.

### Shooting on location

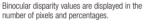
### Easy binocular disparity adjustment on-screen

The DT-3D24G1 helps ease the process in 3D content production with the 3D Cursor mode and variable Grid mode, which assure intuitive and efficient 3D scaling with displays of pixels and percentages for negative and positive depth.

• **3D Cursor Mode** ensures the easy checking and adjustment of binocular disparity during recording or editing and even provides warnings when the value exceeds established tolerance levels. On the screen, 3D Cursors or the line markers of L (dash dot), R (solid line) and H (dashes) are shown. There are two sets of Cursors, A in green and B in purple, either of which can be used to finely adjust levels of depth or pop-up; the H line is used as a horizontal guide.



To check binocular disparity, the H line is first set to the center of a desired object or scene to apply 3D effects. One of the V lines for the left eye is then set to a position where binocular disparity is to be subsequently checked and the V line for the right eye is shifted to the left or right. As the R line is shifted, binocular disparity values in the number of pixels and percentages will be displayed on the top-right of the screen.

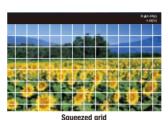




Warning color: The color of the Cursors will turn red if the amount of binocular disparity surpasses a tolerance level. Although the perception of 3D images will vary with individuals, binocular disparity should be maintained within a certain range.

Note: When deciding upon the amount of effects to apply for 3D content, creators must always try to avoid excessive binocular disparity as this can prove to be detrimental to the health of viewers.

• **Grid Mode** with variable scaling helps in determining the approximate positions of left and right images instantaneously by displaying grid lines over the screen with pixel values shown on the top right corner of the screen.





Stretched grid

Pixel/grid values are displayed.

The variable grid lines can be adjusted by turning the POSITION knob on the front panel to stretch or squeeze grids into desired sizes.

Images can also be shown through the grid lines to enable a window section without grids to be selected.

### • Xpol<sup>®</sup> method with RealD 3D glasses

The monitor adopts the Xpol<sup>®</sup> circular polarizing system together with widely available, lightweight RealD-compatible 3D eyeglasses, which are popular among studio professionals and creators.

### Monitor performance

### • 3G-SDI and Dual Link

The monitor is compliant with the SMPTE 424M standard and compatible with dual link HD-SDI, as well as 3G-SDI in six formats (see below chart) for serial transmission of 1080p video.

### Compatible 3G-SDI Input Formats

The following signal information can be displayed when a 3G-SDI signal comes in.

Resolution	Frame rate	Color range	Rate	Level	3G-SDI mapping structure	
	60P/50p	YCbCr=4:2:2	10-bit	AB	1	
i i	30p/25p 24p 1080 30psF 25psF 24pSF 60i 50i	YCbCr=4:2:2	10-bit	В	Dual stream	
			12-bit	A	4	
				В		
		YCbCr=4:4:4	10-bit 12-bit	A	2	
1080				В		
				A	3	
				В		
		RGB	10-bit	A	2	
			TOPDIL	В		
			12-bit	A	3	
				В		
	60p/50p	YCbCr=4:2:2	10-bit	В	Dual stream	
720p	30p/25p	YCbCr=4:4:4	10-bit	A	2	
ſ	24p	RGB	10-bit	A	2	

### Gamma preset mode

Hard-button front control panel

Four gamma preset modes are featured, allowing users to calibrate the gamma settings according to usage conditions and situations.

Gamma 2.35 Gamma 2.45	Conventional CRT (NTSC) Reference monitors, recommended by El HD reference monitors, recommended b Digital Cinema environment			
More features:				

Supplied with tilt stand (adjustable ±6 degrees)
Dual power supply: DC (24V) and AC



JVC's new DT-3D24G1 will change how 3D content is created as it is compact enough to take along on location and offers intuitive on-screen binocular disparity adjustment modes. The DT-3D24G1 also has a number of camera-assist functions that support the checking and adjustment of 3D effects immediately on-site. What's more, it adopts the Xpol® circular polarizing system that uses widely available RealD-compatible passive glasses to ensure cost-effective advantages, while a built-in mixer function allows 3D checking in real-time. The JVC DT-3D24G1 — it's ready to revolutionize 3D content creation.

## Versatile camera-assist functions

• Rig settings: The Mirror/Rotation function is designed to work with any type of 3D camera rig. This function reverts one of the two images laterally and/or vertically to a normal viewing position and adds automatic delay to non-rotated images one at a time to synchronize both images.



Half-mirror

(beam splitter)

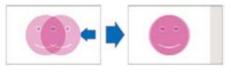






Image on the right is inverted.

• R Shift: In order to check vertical misalignment or color discrepancy, the right camera image can be shifted to the left to overlap with the left camera image, which is static.



• Anaglyph: For creators who are accustomed to working in anaglyph mode, the amount of parallax can be checked using traditional red (for L images) and blue (for R images) colors.

3D camera setup is even easier by using the Anaglyph mode together with the R Shift mode.



TC1

• Split: Images on the left of the vertical line in the screen are from the left camera and accordingly, right images are from the right camera. Split is useful for fine-tuning requirements such as setting recording positions in the vertical direction, L/R iris differences, and white balance adjustment.





recording position



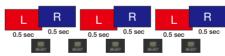
white balance

iris adiustment

The vertical line can be shifted freely to the left or right and the horizontal line position can also be adjusted.

• LR Sequential: Left and right images are displayed alternatively at 0.5-sec. intervals.

• Individual: Left and right images can be switched manually with a press on the SELECT button.





• LR Swap: Allows left and right images to be swapped, which helps in checking whether the cables are properly connected.



### Double time codes and scopes

### • Dual time code

The time code of both left and right signals as well as the time gap between the two signals are displayed.



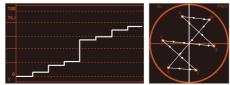
Dual display mode



3D Display Mode: Left signal time code will be displayed at the top right.

### · Waveform and vector scopes

The two built-in oscilloscopic wave signals of Waveform (W.F.M.) and Vectorscope (V.S.) are available in Single, Parallel and Balance modes.



Waveform (W.F.M.)



Vectorscope (V.S.)



0.5 sec



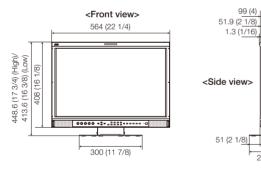
0.5 sec

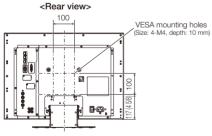
### ■ Video Signal Compatibility

			Input terminals				
		Signal format shown in	E. AUDIO SDI (IN 1, IN 2)*1			DVI-D	
No.	Signal name	the status display	SD/HD (1.5G)	3G SDI	DUAL LINK	MIX	(HDCP) (Digital component/ Digital RGB)
1	480/60i	480/60i	-	-	-	-	•
2	480/59.94i	480/59.94i	•	-	-	-	•
3	576/50i	576/50i	•	-	-	-	•
4	480/60p	480/60p	-	-	-	-	•
5	480/59.94p	480/59.94p	-	-	_	-	•
6	576/50p	576/50p	-	-	-	-	•
7	640*480/60p	640*480/60p	-	-	-	-	•
8	640*480/59.94p	640*480/59.94p	-	-	-	-	•
9	720/60p	720/60p	•	•	-	•	•
10	720/59.94p	720/59.94p	•	•	-	•	•
11	720/50p	720/50p	•	•	-	•	•
12	720/30p	720/30p	•	•	-	•	-
13	720/29.97p	720/29.97p	•	•	_	•	-
14	720/25p	720/25p	•	•	_	•	-
15	720/24p	720/24p	•	•	_	•	-
16	720/23.98p	720/23.98p	٠	•	_	•	-
17	1080/60i	1080/60i	٠	•	۲	٠	•
18	1080/59.94i	1080/59.94i	٠	•	•	٠	•
19	1035/60i	1035/60i	٠	-	_	-	-
20	1035/59.94i	1035/59.94i	٠	-	_	-	-
21	1080/50i	1080/50i	٠	•	۲	•	•
22	1080/60p	1080/60p	-	•	۲	•	•
23	1080/59.94p	1080/59.94p	-	•	۲	•	•
24	1080/50p	1080/50p	_	•	٠	•	•
25	1080/30p	1080/30p	٠	•	۲	•	•
26	1080/29.97p	1080/29.97p	•	•	٠	•	•
27	1080/25p	1080/25p	•	•	•	•	•
28	1080/24p	1080/24p	٠	•	•	٠	•
29	1080/23.98p	1080/23.98p	٠	•	٠	•	•
30	1080/30psf	1080/30psf	●*2	●*2	*2	●*2	-
31	1080/29.97psf	1080/29.97psf	*3	●* <sup>3</sup>	*3	●*3	-
32	1080/24psf	1080/24psf	•	•	•	•	-
33	1080/23.98psf	1080/23.98psf	•	•	•	•	-
34	1080/25psf	1080/25psf	●*4	•*4	•*4	•*4	-

\*1 Compatible with EMBEDDED AUDIO signals. \*2 If there is no payload ID, signal is regarded as 1080/60i. \*3 If there is no payload ID, signal is regarded as 1080/59.94i. \*4 If there is no payload ID, signal is regarded as 1080/59.94i. \*4 If there is no payload ID, signal is regarded as 1080/50i.

### Dimensions [Unit: mm (inches)]





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243 (9 5/8)

### Specifications

		DT-3D24G1				
Туре		Multi-format 3D LCD Monitor				
Screen size		Type 24 wide format				
LCD SECTION						
LCD type		24" wide, active matrix TFT				
Effective screen size: W x H x Diagonal		518.4 x 324 x 611.3 mm				
Effective screen size:	W X H X Diagonal	(20-1/2" x 12-7/8" x 24-1/4")				
Number of pixels disp	blayed	1920 x 1200				
Number of colors dis	played	16.77 million				
Contrast ratio (TYP.)		1000:1				
Aspect ratio		16:10				
Format		3G SDI: SMPTE424M/SMPTE425M DUAL LINK HD SDI: SMPTE372M HD SDI: BTA S-004C, SMPTE292M SD SDI: ITU-R BT.656: 525/626; SMPTE259M: 525 EMBEDDED AUDIO: SMPTE299M, SMPTE272M				
INPUT/OUTPUT TEP	RMINALS					
	DVI-D	DVI-D signal input (compatible with HDCP): DVI-D connector x 1 (compatible with DDC2B)				
Video input	E. AUDIO 3G SDI/HD SDI/SD SDI (IN 1/L) E. AUDIO 3G SDI/HD SDI/SD SDI (IN 2/R)	Digital signal input (compatible with EMBEDDED AUDIO DUAL LINK signals): Auto detection, 2 line, BNC connector x 2				
	E. AUDIO 3G SDI/HD SDI/SD SDI (ACTIVE OUT)	Digital signal output (compatible with EMBEDDED AUDIO signals): 2 line reclocked out, BNC connector x 2				
Audio input	AUDIO (IN)	Analog audio signal input: 1 line, RCA connector x 2, 500 mV (rms), high impedance				
Audio Input	AUDIO (MONITOR OUT)	Analog audio signal input: 1 line, RCA connector x 2, 500 mV (rms)				
Audio output		Internal speaker: 1.0 W + 1.0 W				
	REMOTE (MAKE/TRIGGER: 8 pins)	Female: PIN1, 2, 3, 4, 5, Tally on/off, External control valid/invalid, and GND				
External controls	REMOTE (RS-485: 8 pins for IN/OUT)	Female: TXD+, TXD-, RXD+, NC, NC, RXD-, NC, and GND				
	REMOTE (RS-232C: 9 pins)	Female: NC, RXD, TXD, NC, GND, NC, RTS, CTS, and NC (Note: the 7th and 8th terminals are connected				
GENERAL						
Operation environment		Operating temperature: 5°C – 35°C (41°F – 95°F) Operating humidity: 20% – 80% (non-condensing) (Slightly variable depending on ambient conditions for installation.)				
Power requirements		AC 120 V/AC 220 – 240 V, 50 Hz/60 Hz, or DC 24 V (Voltage range: DC 23.3 V – DC 25.5 V)				
Rated current		1.15 A (AC 120 V) 0.67 A (AC 220 – 240 V) 4.8 A (DC 24 V)				
External dimensions: W x H x D; excluding	With stand	564 x 448.6 x 243 mm (22-1/4" x 17-3/4" x 9-5/8")				
protrusions	Without stand	564 x 408 x 99 mm (22-1/4" x 16-1/8" x 4")				
Mass With stand / Wi	thout stand	12.0 kg (26.4 lbs) / 9.1 kg (20.0 lbs)				
Accessories		AC power cord, Power cord holder x 1, Screw x 2 (for power cord holder), Circular polarizing glasses x 2 (for 3D viewing, not under warranty)				

#### Notes about viewing 3D video content

- Perception of 3D images will vary with individuals. However, stop viewing 3D images immediately if any discomfort such headaches, dizziness, eye fatigue, etc. occur.
- Viewing of 3D images by children under the age of five is not recommended.
   Deed the Setab Dream time in the User Manual serafully before viewing any
- Read the Safety Precautions in the User Manual carefully before viewing any 3D source.

### Front Control



### Rear Terminal

