

JVC

The Perfect Experience / —

24-inch native HD multi-format LCD monitor
(16:10, W-UXGA: 1920 x 1200 pixel array)

DT-V24L1D

20-inch HD multi-format LCD monitor
(16:10, W-SXGA+: 1680 x 1050 pixel array)

DT-V20L1D

JVC presents a native HD,
truly professional LCD studio monitor.



■The DT-V20L1D displays 1680 x 945 pixels.

Professional standard, high performance HD LCD monitors with convenient, user-friendly functions and user-orientated design

As high definition production becomes mainstream around the world, JVC is meeting the need for true HD monitors with the introduction of two high performance LCD monitors, which include an advanced 24" monitor featuring full native HD resolution. This superb pro-standard LCD monitor is ideal for use in production of broadcast-standard HD content, while its companion 20" LCD monitor is an excellent choice for a wide range of applications within HD post production and video production for corporates and event videographers.





Rack mounting is possible only with the 20" monitor.



High quality pictures

■ Native HD resolution

The DT-V24L1D 24" LCD monitor features W-UXGA resolution, making it a true HD monitor. As the flagship of JVC's range of HD production equipment, the DT-V24L1D can reproduce native HD video images (1920 x 1080 pixels) in their original form without any loss of quality due to scaling. Excellent high definition imaging performance is also available from the 20" DT-V20L1D monitor. With W-SXGA+ resolution, this model displays HD video images with a resolution of 1680 x 945 pixels.

■ Comprehensive HD signal inputs

Ready to work with most types of HD signal input, these monitors include inputs for HD SDI / SDI and DVI with HDCP. To assure maximum quality at all times and to prevent corrosion and signal loss, the HD SDI connector is gold-plated.

■ High-performance LCD panel

JVC's proprietary algorithm performs the highest level of de-interlacing and scaling and so produces sharp, clear images with totally faithful colour reproduction. Image quality is further enhanced by the panel itself, which permits high brightness and wide viewing angles and which displays crystal-clear video pictures with excellent focus and contrast. Also, the delay

between input signal and monitor image is minimal and so enables precise and reliable checking of the image.

■ Colour Temperature

Colour temperature can be set as required thanks to a 3-setting temperature memory of 9,300K and 6,500K, plus one user-definable temperature.

■ IP mode

Conversion to IP can be selected whilst operating in the following modes: NORMAL (frame complement and vertical filter), FIELD (field complement) and CINEMA (24p).

■ Image processor



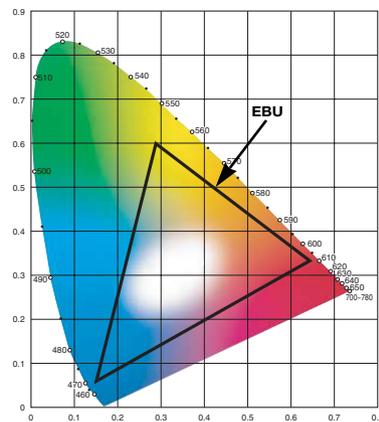
JVC's new 10-bit, real time digital image processor



Refined and enhanced over many years, JVC's advanced image estimation technology has now been digitally applied. Reproducing image quality which is totally faithful to the input signals, this new 10-bit, real time processor delivers the performance that professionals require. With this processor, the high quality HD signals used in production can be reproduced with absolute fidelity on the LCD display, resulting in crisp, clear, high resolution images. With motion picture content, processing of original pictures is minimised while IP conversion is optimised to maintain sharp and clear images. What's more this unique technology overcomes various image problems which are inherent in digital circuitry, such as jaggies, block noise and mosquito noise. An exclusive enhancer which compensates for image contours is also incorporated.

Faithful colour reproduction

The matrix parameters for HDTV and SDTV inputs are set for colour reproduction that conforms to the ITU

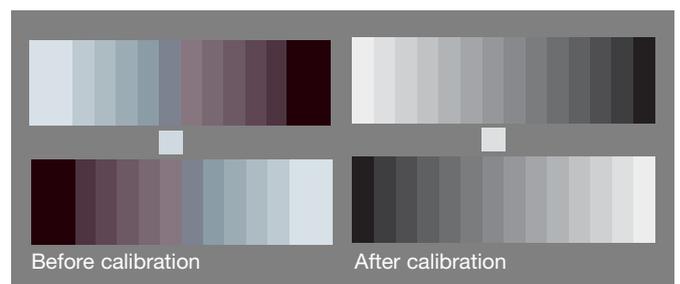


standard without resorting to colour signal processing. Furthermore, the LCD panel has a chromatic range equivalent to EBU 100%, ensuring that colour reproduction remains faithful to the original.

INPUT SIGNAL FORMAT	Standard Setting	Preset Format
SDTV	ITU-R BT.601	PAL, NTSC, SECAM: 480i, 576i, 480p, 576p
HDTV	ITU-R BT.709	720p, 1035i, 1080i, 1080p

Gamma calibration for each monitor

Each monitor's gamma setting is calibrated at the factory to optimise display of moving pictures. Because such precise adjustment of all the key display parameters is done at the factory, the result is truly excellent grey scale characteristics.



User-friendly functions

■ Built-in HD-SDI

With two built-in multi-format HD SDI / SDI inputs with auto-switching, most types of HD signal used within the HD production environment can be input. embedded SDI audio is also available.



Gold-plated connectors

■ 1:1 pixel scanning option

This useful function enables direct pixel-by-pixel display. Input signals are displayed in their original format without any scaling being applied. Thus, during editing, images can be checked with total accuracy.

● 1:1 pixel scanning on 24" monitor



Showing 1080p signal



Showing 480i signal

■ Similar front panel operability as JVC's CRT series

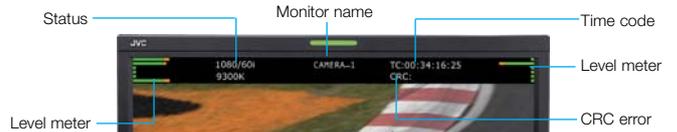
With front panel controls that will be immediately familiar to users of JVC's CRT monitors, the controls are identical and therefore very easy to use and present no difficulties to new users. The rotary volume controls enhance speed and efficiency.

Front Panel Controls



■ Status display area

Having a 16:10 pixel array means that when displaying 16:9 images a black horizontal area is available for data display. Status information can be displayed in this blank area. A 10-character monitor name can be inserted. Time code (SDI superimposed), audio level meter (12 channels) and CRC error check are also accommodated. This means that no part of the image ever has to be obscured by super-imposed text and data.



Status off/auto Large text ON

Wide range of functions to support creative work

■ Various video production functions

Functions that support video production include an area marker for cinema production and a safety marker. Aspect switch allows you to select between 4:3 and 16:9 for squeeze images, while screen check allows more accurate image checking by toggling between R, G and B signals. Two tally lamps (red and green) are also provided.



Aspect (16:9)



Safety marker (16:9)



Area marker (16:9)



Aspect (16:9) with area marker (4:3) in the halfsize mode



Aspect (4:3)



Safety marker (4:3)

■ No sync signal power-saving mode

This screen mode is activated when either no signal is detected or the power-saving mode is engaged. The resultant effect is selected from Suspend, Grey Back and Off.

■ Time code on / off function

The time code superimposed on HD SDI & SDI signal inputs can be switched on or off, as required.



Time code ON



Time code OFF

System flexibility

■ 4-way remote control system

The remote control system can be selected from MAKE contact system, TRIGGER PULSE system, RS-485 and RS-232C. The RS-232C system can be converted to RS-485 within the monitor for cascaded signal output.

■ Functions controlled by MAKE/TRIGGER system

Display	Functions to be controlled
COLOUR OFF	Colour off
ASPECT	Changes the aspect ratio.
A.MARKER	AREA MARKER display
S.MARKER	SAFETY MARKER display
TIME CODE	Time code display
1:1	Displays in 1:1 mode.
SCR CHECK*	Screen check
I/P MODE*	IP MODE
SDI 1	Changes the input to SDI 1.
SDI 2	Changes the input to SDI 2.
DVI	Changes the input to DVI.
COMP./RGB	Changes the input to COMPO./RGB.
VIDEO 1	Changes the input to VIDEO 1.
VIDEO 2	Changes the input to VIDEO 2.
EXT.SYNC	Changes the sync signal.
TALLY	Controls the tally lamp.
TALLY SEL	Selects the colour of the tally lamp.
MONI. NAME	MONITOR NAME
MUTING	Muting on/off
MARK.SEL	Selects the items of AREA MARKER.
L.METER	Audio level meter display
STATUS	Status display
- - -	No function



For customization, select 8 functions and assign them to 8 pin terminals.
*TRIGGER pulse control only



Photo: DT-V24L1D

Showing the gold-plated connectors on the DT-V24L1D model
* On the 20" monitor, only the SDI connectors are gold-plated.

Easy installation

■ Compact, rectangular, one-piece design



This slim, spacesaving, one-piece design enables easy installation on a flat surface or in a 19" EIA rack. For further convenience, VESA standard 100 x 100 mounting holes are provided. A dual-role metal stand is provided as standard.

■ Adjustable stand



As a conventional desktop stand, showing 6° of tilt in both directions



As a rear support when monitor is resting directly on a flat surface

The stand provided, when used in desktop mode, can be tilted up 6° in either direction for easier viewing and more flexible positioning. You can also install the monitor directly on a flat surface, using the stand as a rear steadying support.

Rugged, durable design

■ LCD screen protecting filter (optional)

To keep the LCD panel clean and protect it from scratches and other external damage, a protective screen accessory is an available option. This screen also filters out any reflections which would otherwise come off the panel.

■ Rear panel metal cabinet

The metal rear cabinet provides excellent protection against radiation and other possible interference and at the same time adds to the monitor's rugged durability.

■ Protection of speakers, controls and connectors

Speaker grills and protruding front & rear panel controls and connectors are all physically shielded from damage and accidental operation. The rear of the monitor has a concave design which also helps to protect the connectors. The design is both attractive and practical at the same time.

Others

■ Built-in stereo speakers

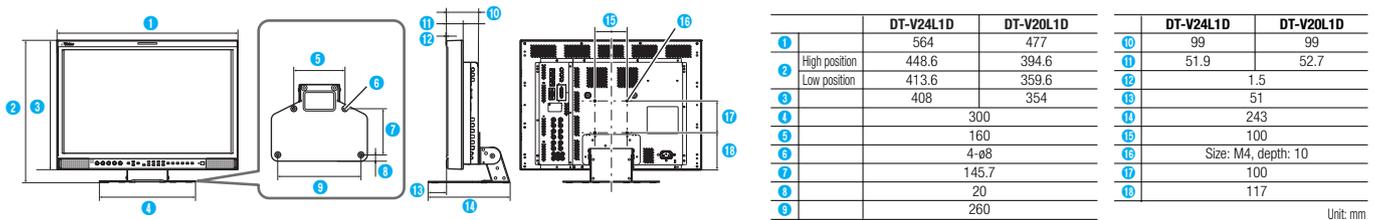
■ Optional EIA rack mount adapter (DT-V20L1D only)

SPECIFICATIONS

General		DT-V24L1D	DT-V20L1D
Model		Multi-format HDTV/SDTV LCD display monitor	
Type		Type 24 wide format	Type 20 wide format
Screen Size		16:10	
Aspect Ratio		24" wide, active matrix TFT	
LCD Panel		20" wide, active matrix TFT	
Effective Screen Size (W x H)		51.84 x 32.4 cm	43.34 x 27.09 cm
Pixels		1920 x 1200 (W-UXGA)	1680 x 1050 (W-SXGA+)
Display Colours		16.7 million	
Viewing Angle	Horizontal	176°	170°
	Vertical	176°	170°
Brightness		400 cd/m ²	
Contrast Ratio		1000:1	800:1
Response Time		8 msec.	
Horizontal/Vertical Frequency (PC signals)	Horizontal	31.469 kHz to 75.000 kHz	
	Vertical	60 Hz ± 5 Hz	
Applicable Standard		Depending on the signal within the range of these frequencies, some signals may not be displayable, in which case, "Out of range" is shown. HD SDI: BTA S-004B, SMPTE292M SD SDI: ITU-R BT.656: 525/625, SMPTE259M: 525 EMBEDDED AUDIO: SMPTE299M, SMPTE272M	
Audio Output		Internal: 1.0 W + 1.0 W (L/R)	
Environmental Conditions	Operating temperature	5°C to 35°C	
	Operating humidity	20% to 80% (non condensing)	
Power Requirements		AC 120/220-240 V, 50/60 Hz	
Rated Current		0.67 A	0.60 A
Dimensions (WxHxD) excluding protrusions)	With desktop stand	564 x 448.6 x 243 mm	477 x 394.6 x 243 mm
	Without stand	564 x 408 x 99 mm	477 x 354 x 99 mm
Weight	Excluding stand	8.7 kg	7.4 kg
	Including stand	11.6 kg	10.3 kg
Provided Accessories		AC power cord, power cord holder, screw x 2 (for power cord holder)	
Input/Output Terminals			
Video		Composite video signal input/output: 1 line, BNC x 2, 1 V (p-p), 75 ohms (IN and OUT are connected with a bridge connection (auto termination))	
Video 1		DVI-D signal input (compatible with HDCP): DVI-D connector x 1 (compatible with DDC2B)	
Video 2		Analogue component signal/analogue RGB signal input/output: 1 line, BNC x 6	
DVI-D (HDCP) COMPO./RGB (G/Y, B/Pb/B-Y, R/Pr/R-Y)		Video signal: G/Y: 1 V (p-p), 75 ohms (sync signal included), B/Pb/B-Y, R/Pr/R-Y: 0.7 V (p-p), 75 ohms (IN and OUT are connected with a bridge connection (auto termination))	
EXT. SYNC (CS)		Composite sync signal input/output: 1 line, BNC x 2, 0.3 V (p-p) to 4 V (p-p), 75 ohms (bipolar tri-signal, negative pole binary signals, BB) (video signals excluded) (IN and OUT are connected with a bridge connection (auto termination))	
HD/SD SDI (IN 1)		Digital signal input (compatible with EMBEDDED AUDIO): Auto detection, 1 line, BNC x 1	
HD/SD SDI (IN 2)		Digital signal output (compatible with EMBEDDED AUDIO): 1 line (switched out), BNC x 1	
HD/SD SDI (SWITCHED OUT)			
Audio		Analogue audio signal input: 1 line, RCA x 2, 500 mV (rms), high impedance	
AUDIO ASSIGN (IN 1)			
AUDIO ASSIGN (IN 1)			
AUDIO ASSIGN (MONITOR OUT)		Analogue audio signal output: 1 line, RCA x 2, 500 mV (rms)	
External Control		RJ-45 x 1 (8-pin)	
MAKE/TRIGGER		RJ-45 x 2 (IN/OUT) (8-pin)	
RS-485		D-sub (9-pin) x 1	
RS-232C			

Input format	
Video	PAL, SECAM, NTSC, BW 50/60Hz
Component/RGB	576/50i, 480/60i, 576/50p, 480/60p, 720/24p, 25p, 30p, 50p, 60p, 1035/60i, 1080/50i, 60i, 1080/24psf, 30psf, 1080/24p, 25p, 30p
HD SDI/SDI	576/50i, 480/60i, 720/24p, 25p, 30p, 50p, 60p, 1035/60i, 1080/50i, 60i, 1080/24psf, 30psf, 1080/24p, 25p, 30p
DVI-D with HDCP (Video)	480/60i, 576/50i, 480/60p, 576/50p, 720/50p, 60p, 1035/60i, 1080/50i, 60i, 1080/24p, 25p, 30p, 50p, 60p, 640 x 480@60
DVI-D (PC)	VGA60, W-VGA60, SVGA60, XGA60, W-XGA60 (1280 x 768), SXGA60 (1280 x 1024), 1920 x 1080@60, 1280 x 720@60, W-SXGA+60 (1680 x 1050), U-XGA60 (1600 x 1200), W-UXGA60 (1920 x 1200)

DIMENSIONS



OPTIONS

- EIA Rack Mount Adapter
RK-C20D1
(20" monitor)
- Protective Screens
TS-W24F1 (24" monitor)
TS-W20F1 (20" monitor)
- GY-HD251
- ProHD Compact Shoulder Camcorder for Studio and ENG Applications
■ HDV and DV compatible
■ True 24p recording
■ Uncompressed 720p/50, 60 live signal output
■ Interchangeable HD lenses
■ 3-CCD camera system with 720p HD CCDs

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