JVC

MULTI FORMAT 3D LCD MONITOR

DT-3D24G1

INSTRUCTIONS

3D X₂ₒₗ real D 3D
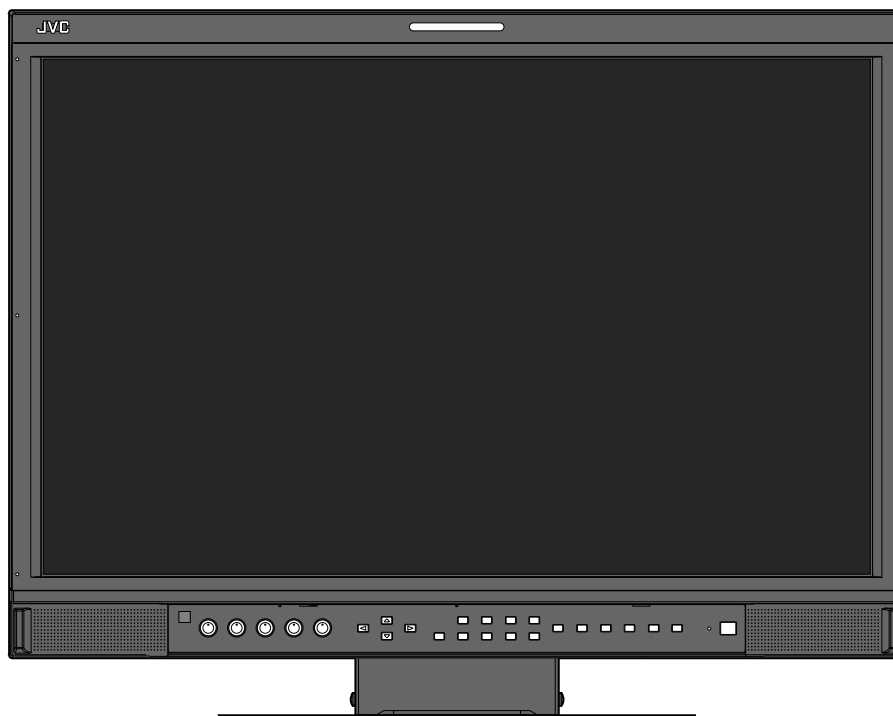
For Customer Use:
Enter below the Serial No. which is located on the rear of the cabinet. Retain this information for future reference.

Model No.   :   **DT-3D24G1**
Serial No.   :

LCT2655-001A-H

Safety Precautions

IMPORTANT SAFEGUARDS

Electrical energy can perform many useful functions. This unit has been engineered and manufactured to assure your personal safety. But **IMPROPER USE CAN RESULT IN POTENTIAL ELECTRIC SHOCK OR FIRE.** In order not to defeat the safeguards incorporated into this product, observe the following basic rules for its installation, use, and service. Please read these "IMPORTANT SAFEGUARDS" carefully before use.

- All the safety and operating instructions should be read before the product is operated.
- The safety and operating instructions should be retained for future reference.
- All warnings on the product and in the operating instructions should be adhered to.
- All operating instructions should be followed.

POWER CONNECTION
The power supply voltage rating of this product is AC 120 V (For U.S.A. and Canada) and AC 220 – 240 V (For European countries, Asian countries, and United Kingdom).
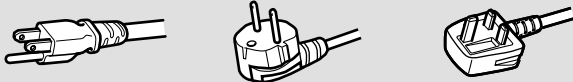The power cord attached conforms to the following power supply voltage and countries. Use only the power cord designated to ensure safety and EMC regulations of each country.
- Not all types of power cords are supplied to this product.

For U.S.A. and Canada: AC 120 V

For European and Asian countries: AC 220 – 240 V

For United Kingdom: AC 220 – 240 V

This plug will fit only into a grounded power outlet. If you are unable to insert the plug into the outlet, contact your electrician to install the proper outlet. Do not defeat the safety purpose of the grounded plug.
- This product should be operated only with the type of power source indicated on the label. If you are not sure of the type of power supply of your home, consult your product dealer or local electric power company.
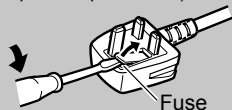
Warning:
- Do not use the same power cord for AC 120 V as for AC 220 – 240 V. Doing so may cause malfunction, electric shock or fire.

Note for United Kingdom power cord only
The plug of United Kingdom power cord has a built-in fuse. When replacing the fuse, be sure to use only a correctly rated approved type, re-fit the fuse cover. (Consult your dealer or qualified personnel.)

How to replace the fuse
Open the fuse compartment with the blade screwdriver, and replace the fuse.

Fuse

Warning: This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

- Before connecting other products such as VCR's and personal computers, you should turn off the power of this product for protection against electric shock.
- Do not use attachments not recommended by the manufacturer as they may be hazardous.
- **When replacement parts are required,** be sure the service technician has used replacement parts specified by the manufacturer or equivalents. Unauthorized substitutions may result in fire, electric shock, or other hazards.
- **Upon completion of any service or repairs to this product,** ask the service technician to perform safety checks to determine that the product is in proper operating condition.

Under the following conditions,
1. **Turn off the power.**
2. **Unplug this product from the wall outlet.**
3. **Refer service to qualified service personnel.**
a) When the product emits smoke or unusual smell.
b) When the product exhibits a distinct change in performance —for example, no picture or no sound.
c) If liquid has been spilled, or objects have fallen on the product.
d) If the product has been exposed to rain or water.
e) If the product has been dropped or damaged in any way.
f) When the power supply cord or plug is damaged.

- Do not install this product in the following places:
  – in a damp or dusty room
  – where the product is exposed to soot or steam, such as near the cooking counter or a humidifier
  – near heat sources
  – where condensation easily occurs, such as near the window
  – in a location exposed to direct sunlight or strong light
- Do not place this product on an unstable cart, stand, or table. The product may fall, causing serious injury to a child or adult, and serious damage to the product. The product should be mounted according to the manufacturer's instructions, and should use a mount recommended by the manufacturer.
- Do not use this product near water.
- Be sure to install the product in the place where proper temperature and humidity are kept (→ "Operation environment" on page 32). This product becomes hot during its use. Take enough care when handling the product.

Do not attempt to service this product yourself, as opening or removing covers may expose you to dangerous voltages and other hazards. Refer all service to qualified service personnel.

Do not use the product for a long time if the sound is distorted.

Use only the power source specified on the unit.
- AC power: 120 V/220 – 240 V, 50 Hz/60 Hz
- DC power: 24 V

- The AC power supply is controlled by turning on/off the POWER switch on the rear panel. If the product is installed in a place where you cannot easily turn on/off the POWER switch, control the AC power supply by plugging/unplugging the power cord into/from the AC outlet. In this case, install the product as close to the AC outlet as possible, and leave enough space for plugging/unplugging the power cord. If the product is installed in a place where you cannot easily plug/unplug the power cord, equip an easily accessible device to the wiring of the building for turning on/off the power.
- When the product is left unattended and unused for a long period of time, unplug it from the wall outlet and disconnect the cable system.
- Do not overload wall outlets, extension cords, or convenience receptacles on other equipment as this can result in a risk of fire or electric shock.
- Use only the accessory cord designed for this product to prevent shock.

The Mains Plug is used as the disconnect device, the disconnect device shall remain readily operable.
To completely disconnect this apparatus from the AC mains, disconnect the power supply cord plug from the AC receptacle.

- Slots and openings in the cabinet are provided for ventilation. These ensure reliable operation of the product and protect it from overheating. These openings must not be blocked or covered.
- Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-circuit the parts, which could result in a fire or electric shock.
- Never spill liquid of any kind on the product.
- Never place anything on the product. (Placing liquids, naked flames, cloths, paper, etc. on the product may cause a fire.)
- Do not apply any strong shock to the LCD panel. (Do not hit any object against it or push it with a sharp-pointed tool.)
- Do not put heavy objects on the product.
- Do not step on or hang on the product.

To prevent an accidental fall
Fix the monitor to a wall by using strings.

Fixing the monitor
Attach the hook (not provided) to the VESA mounting holes on the rear panel (use the two holes on the upper side) using M4 x 10 mm screws (not provided). Bind the hooks on the rear panel of the monitor to a wall or a pillar using durable string.

VESA mounting holes

Hook and screw (M4 x 10 mm) (not provided)

Hook (not provided)
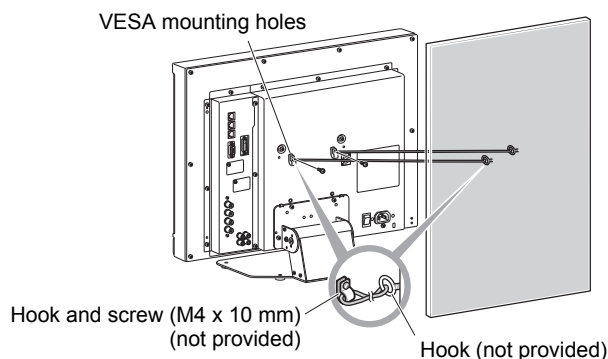
U.S.A. only

FCC NOTICE
CAUTION: Changes or modifications not approved by JVC could void the user's authority to operate the equipment.
NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

IMPORTANT RECYCLING INFORMATION
This product has a fluorescent lamp that contains mercury. Disposal of these materials may be regulated in your community due to environmental considerations. For disposal or recycling information, please contact your local authorities or for USA, the Electronic Industries Alliance: http://www.eiae.org

WARNING: TO PREVENT FIRE OR SHOCK HAZARDS, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE.
WARNING: THIS APPARATUS MUST BE CONNECTED TO A MAINS SOCKET OUTLET WITH A PROTECTIVE EARTHING CONNECTION.
CAUTION: DANGER OF EXPLOSION IF BATTERY IS INCORRECTLY REPLACED. REPLACE ONLY WITH THE SAME OR EQUIVALENT TYPE.

IMPORTANT SAFETY INSTRUCTIONS
1) Read these instructions.
2) Keep these instructions.
3) Heed all warnings.
4) Follow all instructions.
5) Do not use this apparatus near water.
6) Clean only with dry cloth.
7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9) 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 are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11) Only use attachments/accessories specified by the manufacturer.
12) Use only with the 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.
13) Unplug this apparatus during lightning storms or when unused for long periods of time.
14) 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.
15) Apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.
16) Batteries shall not be exposed to excessive heat such as sunshine, fire or the like.
17) When discarding batteries, environmental problems must be considered and the local rules or laws governing the disposal of these batteries must be followed strictly.

Safety Precautions (cont.)

Dear Customer,

This apparatus is in conformance with the valid European directives and standards regarding electromagnetic compatibility and electrical safety.

European representative of Victor Company of Japan, Limited is:
JVC Technical Services Europe GmbH
Postfach 10 05 04
61145 Friedberg
Germany

Information for Users on Disposal of Old Equipment

[European Union]
This symbol indicates that the electrical and electronic equipment should not be disposed as general household waste at its end-of-life. Instead, the product should be handed over to the applicable collection point for the recycling of electrical and electronic equipment for proper treatment, recovery and recycling in accordance with your national legislation.

Attention:
This symbol is only valid in the European Union.

By disposing of this product correctly, you will help to conserve natural resources and will help prevent potential negative effects on the environment and human health which could otherwise be caused by inappropriate waste handling of this product. For more information about collection point and recycling of this product, please contact your local municipal office, your household waste disposal service or the shop where you purchased the product.

Penalties may be applicable for incorrect disposal of this waste, in accordance with national legislation.

(Business users)
If you wish to dispose of this product, please visit our web page http://www.jvc.eu/ to obtain information about the take-back of the product.

[Other Countries outside the European Union]
If you wish to dispose of this product, please do so in accordance with applicable national legislation or other rules in your country for the treatment of old electrical and electronic equipment.

EMC Supplement

This equipment is in conformity with the provisions and protection requirements of the corresponding European Directives. This equipment is designed for professional video appliances and can be used in the following environments:
• Controlled EMC environment (for example purpose built broadcasting or recording studio), and rural outdoors environment (far away from railways, transmitters, overhead power lines, etc.)
In order to keep the best performance and ensure electromagnetic compatibility, we recommend to use cables not exceeding the following length:

Cable	Length
Power cord (attached cable (H05VV-F 3 x 0.75 mm^2))	2.0 m
Video signal cable (coaxial cable)	2.0 m
Audio signal cable (shielded cable)	1.5 m
DVI cable (shielded cable) with core filter	2.0 m
RS-232C cable (shielded cable) (A straight cable with a D-sub 9-pin connector)	2.0 m
RS-485 cable (twist pair cable) (A straight LAN cable)	2.0 m
REMOTE cable (twist pair cable) (A straight LAN cable)	2.0 m

The inrush current of this apparatus is 15.44 ampere.

CAUTION
In case where the strong electromagnetic waves or magnetism are near the audio cable or the signal cable, the sound or the picture will contain noise. In such cases, please keep the cable away from the sources of the disturbance.

Operating Precautions

The LCD panel and backlight have life expectancy. Due to the basic characteristics of the LCD panel, an afterimage or uneven display may occur. It is recommended that you change images occasionally, activate the power saving function, or often turn off the power to reduce the load on the LCD panel. Charges will apply for repairs resulting from deterioration due to the passage of time.

● Caution for use of the product for many hours

In the case that you use the monitor for many hours, we recommend that you set "NO SYNC ACTION" in "SYNC FUNCTION" to "P.SAVE" in MAIN MENU. This will reduce power consumption and relieve strain on the monitor. (→ page 22)

● Caution for use of the product in the high temperature

Do not use the product in places of high temperature; otherwise, parts of this product or the LCD panel may be damaged. This product is equipped with a temperature sensor to give warning if the temperature becomes too high. If the temperature exceeds the range of normal use, "TEMP. OVER" is displayed, and the power is turned off automatically if the temperature becomes any higher. In this case, move the product to a place of low temperature to let it cool down.

● Maintenance

Screen

To avoid irreparable change in appearance of the screen such as uneven color, discoloration, scratches, be careful about the following:
● Do not paste or stick anything using any glues or adhesive tapes.
● Do not write anything on the screen.
● Do not strike the screen with a hard object.
● Avoid condensation on the screen.
● Do not wipe the screen with any liquid such as water. In addition, wiping the screen with water-diluted neutral detergent or solvent such as alcohol, thinner, or benzine may affect the anti-reflection treatment of the screen.
● Do not wipe the screen forcefully.

Wipe stains off the screen with a soft cloth.

Ventilation openings

Use a vacuum cleaner to get rid of the dust around the intakes (all the openings). If a vacuum cleaner is not available, use a cloth and wipe it off. Leaving the dust around the intakes may prevent proper temperature control and cause damage to the product.

Cabinet

To avoid the deterioration or damages of the cabinet such as its paint's peeling away, be careful about the following:
● Do not wipe the cabinet using solvent such as alcohol, thinner, or benzine.
● Do not expose the cabinet to any volatile substance such as insecticides.
● Do not allow any rubber or plastic in contact for a long time.
● Do not wipe the cabinet forcefully.

Wipe stains off the cabinet with a soft cloth. If the cabinet gets heavily stained, wipe it with a soft cloth soaked in water-diluted neutral detergent and wrung well, then wipe with a soft dry cloth.

Glasses

Wipe the glasses with a dry, soft cloth.

Note: Be sure to read "When viewing in 3D" on page 12 for proper viewing beforehand.

Flicker-free 3D images by circular polarizing
- Compatible with side-by-side and line-by-line formats to provide flicker-free 3D images

3D mixer converting L/R dual signals to a 3D mixed format
- Mixes and converts images taken with a stereo camera rig to 3D images

Various functions useful on the spot
- **CAMERA ASSIST MENU:** 7 menus useful in various shooting scenes
- **3D cursor: "Cursor mode"** for displaying the visual difference between left and right eyes in pixels/percentage; **"Grid mode"** for checking the visual difference by grid lines

Table of Contents

Installation

- ● Do not rest your arm on the monitor or lean against the monitor.
- ● Do not touch the LCD panel when installing the monitor.
- ● Be sure to install the monitor securely to prevent the monitor from falling over, which may cause damage to the monitor or injury.

● How to set up 1

You can tilt the monitor as follows.

When the monitor is not tilted (0°), the guidelines align as illustrated below.

Guidelines

Monitor

Approx. 6°
0°
Approx. 6°
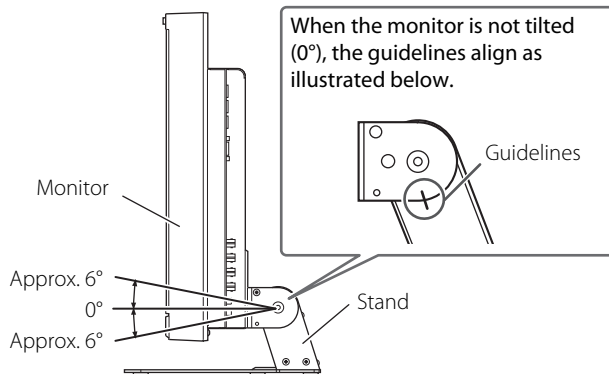
Stand

- ● Be careful not to pinch your fingers in the gap between the monitor and the stand.
- ● When the stand plate is attached to the lower position of the stand body, you cannot tilt the monitor downward.

● How to set up 2

When the stand plate is attached to the higher position of the stand body, you can place the monitor as illustrated below.

1 Remove the screws on the sides of the stand (see the following illustration), and lift up the stand by approximately 148 degrees.

Screw (silver)

Approx. 148°

2 Attach the removed screws and place the monitor as illustrated below.
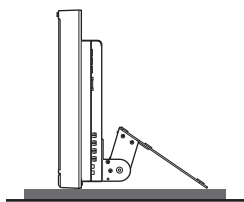
- ● To place the monitor as shown in "How to set up 1" again, remove the screws on the sides of the stand, align the guidelines, and then reattach the screws.

Cautions

- ● When lifting up the stand…
  - - Lay the monitor on a cloth with the LCD panel facing down to prevent the LCD panel from being damaged.
  - - Be careful not to pinch your fingers in the moving parts.
- ● Make sure of lifting the stand up until it stops (Approx. 148°); otherwise the monitor may fall over.
- ● Place the monitor on a mat to avoid scratching the table surface.
- ● Do not lift up the stand when the stand plate is attached to the lower position of the stand body.

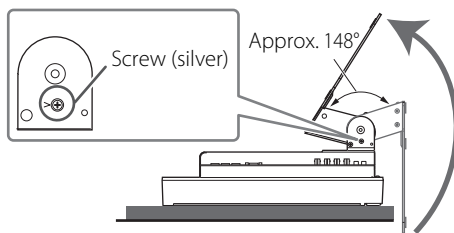## ● To detach the stand

Lay the monitor on a cloth with the LCD panel facing down to prevent the LCD panel from being damaged.

Attachment screws

Screw holes for stand attachment

Stand body
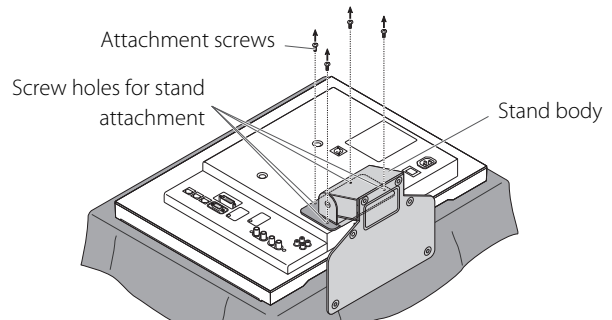
● To install the stand

When attaching the stand to the monitor, insert the guides of the stand plate into the guide holes on the monitor to place the stand in the correct position. Then fix the stand firmly with the attachment screws.

Guide holes

Guides

Monitor

Screw holes for stand attachment

Stand plate

Stand body
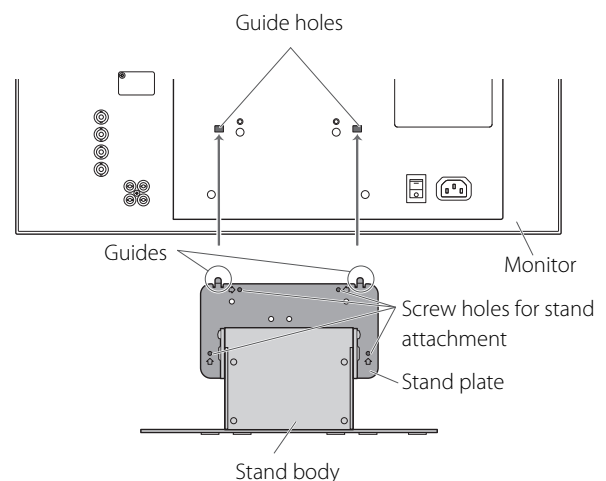
● To adjust the stand height

To change the stand height, detach the stand from the monitor. Then, change the position of the stand plate according to the stand height you want by choosing the screw holes to use.

<Higher position>

Screw holes for higher position

<Lower position>

Screw holes for lower position

Stand plate

Connections

◆ Rear panel

Security slot
Attach a security wire to this slot.

Note for connections
- Before making any connections, turn off all the equipment.
- Use a cord whose plugs correctly match the terminals on this monitor and the equipment.
- Plugs should be firmly inserted; poor connections could cause noise.
- When unplugging a cord, be sure to grasp its plug and pull it out.
- DO NOT connect the power cord until all connections are complete.
- Refer also to the user manual of each piece of equipment.

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1 **DC IN 24V terminal**
Terminal for DC 24V power supply (Voltage range: DC 23.3V – DC 25.5V).

When using the DC 24V power supply (Voltage range: DC 23.3V – DC 25.5V), check the pin number, signal, and polarity of the DC IN 24V terminal. A wrong connection may cause fire or injuries.

- When both AC power and DC 24V power are connected, the AC power has priority. When the AC power is switched off, the power automatically switches to the DC 24V power.

  1: – (GND)   4: + (DC 24V)
  2: NC   3: NC

- Use the DC power equipped with LPS (Limited Power Sources).
- Use the DC 24V power that supplies 4.8 A.

2 **AC POWER switch**
Turns AC power on or off.
- You need to press ⏻ / I button (→ 21 on page 9) to use the monitor after turning on the AC POWER switch.

3 **AC IN terminal**
AC power input connector. Connect the provided AC power cord to an AC outlet.
- Attach the provided power cord holder to prevent accidental disconnection of the AC power cord. (→ below)
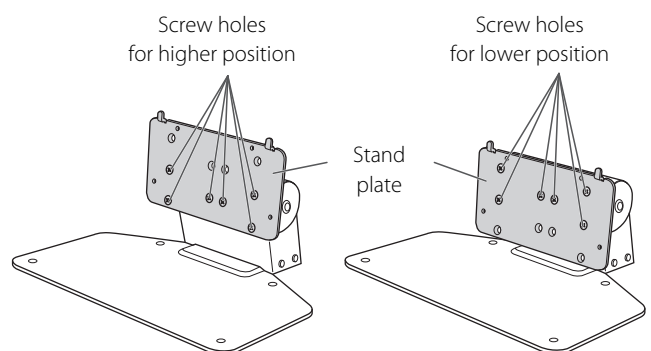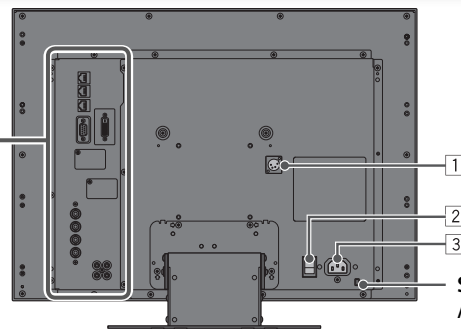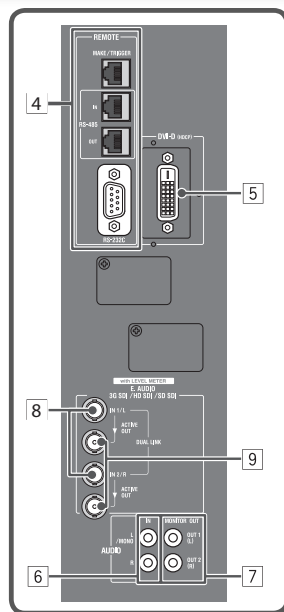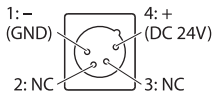**Caution:** Do not connect the power cord until all other connections are completed.

4 **REMOTE terminal**
Terminal for controlling the monitor by an external control (→ "External Control" on page 26).

5 **DVI-D (HDCP) terminals**
Input terminal for the DVI-D signal compatible with HDCP.
- When the picture is not displayed correctly, change the setting of "DVI INPUT SEL." (→ page 25)

6 **AUDIO (IN) terminals (pin jack)**
Input terminals for the analog audio signals.
- Use this terminal for the analog audio connection of the SDI. When a superimposed signal (EMBEDDED AUDIO signal on an SDI signal) is input, analog audio signals cannot be input.

7 **AUDIO MONITOR OUT (OUT 1(L), OUT 2(R)) terminals (pin jack)**
Output terminals for the analog audio signal.
- The terminals emit the audio signals through the AUDIO (IN) terminal or EMBEDDED AUDIO signals through the E. AUDIO 3G SDI/HD SDI/SD SDI (IN 1/L or IN 2/R) input terminal.
- The signal is output from this terminal only when the monitor is on or in "P.SAVE" (power save) mode (→ "NO SYNC ACTION" on page 22).
- The EMBEDDED AUDIO signal…
  - is decoded into an analog signal, then emitted.
  - is emitted only when "SDI 1/L" or "SDI 2/R" is selected, and when EMBEDDED AUDIO signals come in to the E. AUDIO 3G SDI/HD SDI/SD SDI (IN 1/L or IN 2/R) terminal.

8 **E. AUDIO 3G SDI/HD SDI/SD SDI (IN 1/L, IN 2/R) terminals (BNC)**
Input terminals for the 3G SDI/HD SDI/SD SDI signals.
- The terminals accept also EMBEDDED AUDIO signals including up to 12 audio channels with a sampling frequency of 48 kHz.
- Use SDI IN 1/L and SDI IN 2/R terminal when selecting DUAL LINK SDI for the input.
- In the stereo camera rig shooting, the L image is input into the SDI IN 1/L terminal, and the R image into the SDI IN 2/R terminal. In the case of 3G SDI LEVEL B, the image is input into the SDI IN 1/L terminal. For 3G SDI LEVEL B Dual Stream, input into the SDI IN 1/L terminal. For 3G SDI LEVEL B DUAL LINK mapping, input into the SDI IN 1/L and SDI IN 2/R terminals.

9 **E.AUDIO 3G SDI/HD SDI/SD SDI (ACTIVE OUT) terminal (BNC)**
Output terminal for the 3G SDI/HD SDI/SD SDI signals.
- The SDI IN 1/L and SDI IN 2/R input signals are reclocked and output.
- The signals are emitted from this terminal only when the monitor is on or in "P.SAVE" (power save) mode.

Attaching the power cord holder
The provided power cord holder prevents accidental disconnection of the AC power cord from the AC IN terminal. The holder consists of two parts: the cord case and the case cover.

1 cord case   AC IN terminal   **2** case cover   **3**
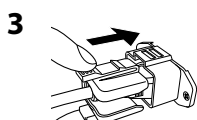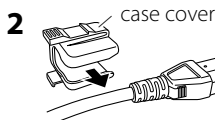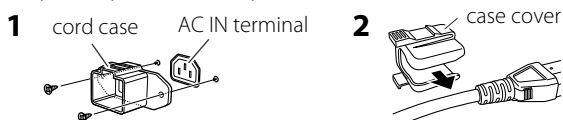
To take off the case cover
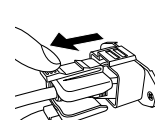
- Do not use any screws other than those supplied.
- Push the case cover into the cord case and check that the power plug is connected firmly.

Daily Operations

◆ Front panel

Tally lamp
This lamp is controlled by the tally function of the MAKE/TRIGGER terminal.
  • You can select the color of the tally lamp from "GREEN" or "RED."
    (→ "TALLY SELECT" in "FUNCTION SETTING" on page 23 and "External Control" on page 26)
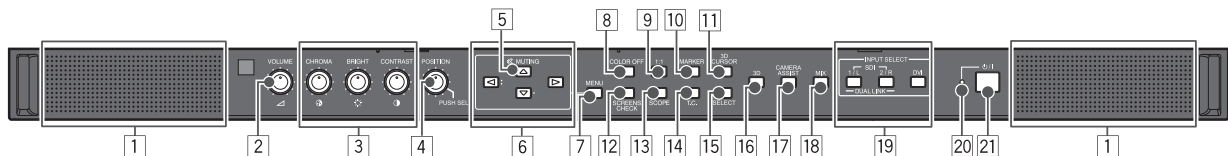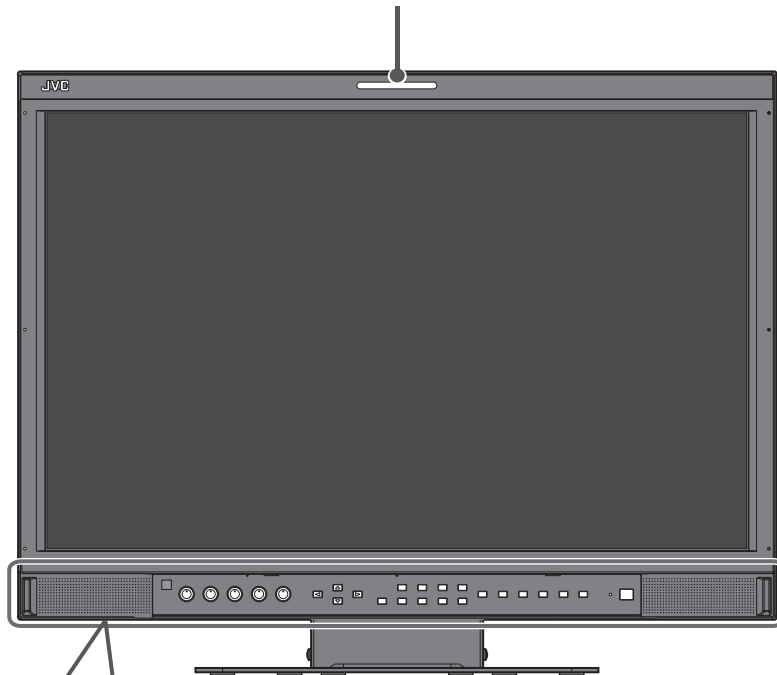
• "NO EFFECT" is displayed when you press a button which is not available for the current input or signal format (the lamp lights even when the function does not actually work).
• You cannot use the buttons for the items controlled by the MAKE system ("REMOTE ON" appears, and the lamp does not light up).

1 **Speakers (stereo)**
The speakers emit the same audio signal emitted from the AUDIO MONITOR OUT terminals.
(→ 7 "AUDIO MONITOR OUT(OUT (L), OUT (R)) terminals" on page 7)

2 **VOLUME adjustment knob**
Adjusts the volume.

3 **Picture adjustment knob**
  CHROMA: Adjusts the picture color density.
  BRIGHT: Adjusts the picture brightness.
  CONTRAST: Adjusts the picture contrast.
  ● CHROMA cannot be adjusted for certain signal
     formats.

4 **POSITION knob/PUSH SEL. button**
  POSITION knob: Adjusts the positions of the display line
                       and R image.
    Used for the following functions
    • 3D cursor (→ page 16)
    • SPLIT (→ page 15)
    • LR SEQ. (→ page 15)
    • R SHIFT (→ page 15)
    • ANAGLYPH (→ page 15)
    • INDIVIDUAL (→ page 15)
  PUSH SEL. button: Switches the display line.
    Used for the following functions
    • 3D cursor (→ page 16)
    • SPLIT (→ page 15)
    ●To reset the displayed line and R image to default,
     press and hold the PUSH SEL. button for 3 seconds
     or longer.

[5] **MUTING button**

Turns off the sound when no menu screen is displayed (Muting).
● To cancel the function, press the button again or turn the VOLUME adjustment knob.
● Muting function is also canceled when "BALANCE" of "AUDIO SETTING" in the MAIN MENU is changed (→ page 21).

[6] ◁ / ▷ / △ / ▽ **buttons**

When a menu screen is displayed
Selects or adjusts menu items (→ "Menu Operations" on page 18).
When no menu screen is displayed
Selects the audio channels of EMBEDDED AUDIO signals (→ "Audio Channel Selection" on page 10).
● Pressing ◁ button while holding ▽ button displays the SET-UP MENU (→ "Menu Operations" on page 18).

[7] **MENU button**

Activates/deactivates the display of the MAIN MENU (→ "Menu Operations" on page 18).

[8] **COLOR OFF button/lamp**

Displays only the luminance signal.
● This function does not work for RGB input signals.

[9] **1:1 button/lamp**

Displays the picture in the original resolution of the input signal.
● The aspect ratio of the picture may change depending on the input signal.

[10] **MARKER button/lamp**

Displays/Hides the area marker/safety marker.
● Configure the setting in "MARKER" of the MAIN MENU (→ page 20).
● Available when both the 3D and MIX modes are "OFF."
● Not activate when picture is displayed in the 1:1 mode.
● The area marker can only be displayed in 16:9 display mode.

[11] **3D CURSOR button/lamp**

Displays/Hides the cursor for measuring the visual difference during 3D display (→ page 16).
● Each time you press this button, the display mode changes in the following order.

```
┌──→ No display ──→ Cursor mode ──┐
│          Grid mode          ◀──┘
└──────────────────────────────┘
```

[12] **SCREENS CHECK button/lamp**

Displays only the selected element (R, G, or B) of the video signal.
● This function does not work for RGB input signals.
● Each time you press this button, the picture changes in the following order.

```
┌──→ RGB (Normal screen) ──→ Red screen ──┐
│       Blue screen ◀── Green screen ◀──┘
└───────────────────────────────────────┘
```
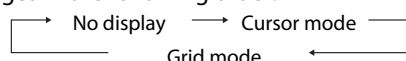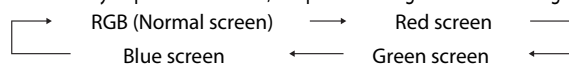
[13] **SCOPE button/lamp**

Displays/hides the indication of the wave form monitor and vector scope (→ "SCOPE SETTING" on page 22).
● Each time you press this button, the window changes in the following order.
• **When the MIX mode is "OFF" or invalid**

```
┌──→ No display ──→ Wave form monitor ──┐
│          Vectorscope          ◀──────┘
└────────────────────────────────────┘
```
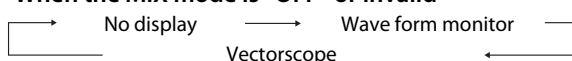
• **When the MIX mode is "ON" (→ page 16)**

```
┌──→ No display
│   Parallel wave form monitor
│         ↓
│   Parallel vector scope
│         ↓
│   Difference wave form monitor
│         ↓
│   Difference vector scope
```
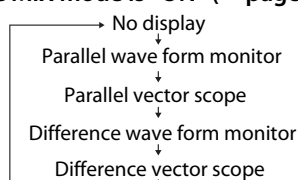
[14] **T.C. (time code) button/lamp**

Activates/deactivates the display of the time data (time code) contained in the SDI signal (→ "On the Information Display" on page 10).
● Select the time code type in "INFORMATION" of SET-UP MENU (→ page 24).

[15] **SELECT button**

Selects/Changes items.
Used for the following item/function.
• 3D format (→ page 19)
• 3D cursor (→ page 16)
• INDIVIDUAL (→ page 15)

[16] **3D button/lamp**

Activates/Deactivates the 3D mode.
● Corrects images for 3D viewing with circular polarizing glasses.

[17] **CAMERA ASSIST button/lamp**

Displays/Hides the CAMERA ASSIST MENU (→ page 14).
● Only works for images available in MIX mode.

[18] **MIX button/lamp**

Activates/Deactivates the MIX mode.
● Mixes L and R images and converts to side-by-side images (→ page 13).

[19] **INPUT SELECT buttons/lamps**

Selects an input.

SDI 1/L:	Input from the E. AUDIO 3G SDI/HD SDI/ SD SDI (IN 1/L) terminal
SDI 2/R:	Input from the E. AUDIO 3G SDI/HD SDI/ SD SDI (IN 2/R) terminal
DUAL LINK:	Input from the E. AUDIO 3G SDI /HD SDI/ SD SDI (IN 1/L, IN 2/R) terminals
DVI:	Input from the DVI-D (HDCP) terminal

● The lamp for the selected input lights.
● The SDI 1/L and SDI 2/R lamps light up in MIX mode. (Only the SDI 1/L lights up in 3G SDI LEVEL B Dual Stream input.)

[20] **Power lamp**

Off:	The power is turned off
Green:	The monitor is on
Orange:	The monitor is turned off (standby), or the DC power voltage is reduced while working and the monitor is shut down
Orange blinking:	P.SAVE (Power saving) mode ("NO SYNC ACTION" in "SYNC FUNCTION") (→ page 22)

● You cannot turn on the monitor if the DC power is shut down while the power lamp lights up in orange. Disconnect the DC connector, set up the DC power within the operating range, and then connect the connector again.

[21] ⏻ / I **button**

Turns on and off (on standby) the monitor.
● The AC power switch is equipped on the rear panel of the monitor (→ [2] on page 7).

9

Daily Operations (cont.)

◆ Audio Channel Selection

Select audio channels emitted from the speakers (L/R) and the AUDIO MONITOR OUT(OUT1(L)/OUT2(R)) terminals, when EMBEDDED AUDIO signals come in to the SDI terminal and SDI input is selected.
- You have to choose a group of selectable audio channels before the channel selection (→ "E.AUDIO GROUP" in "AUDIO SETTING" on page 21).
- The setting is memorized for each input (SDI 1/L and SDI 2/R).
- Works as SDI 1/L in MIX mode and DUAL LINK SDI input.

1   Press ◁ or ▷ button when a menu is not displayed.

The screen for audio channel selection is displayed.
- The screen for audio channel selection automatically disappears in about 30 seconds after the previous operation.

Audio channel selection screen

Selected item ——— ▶ E. AUDIO L ch: 1
E. AUDIO R ch: 2
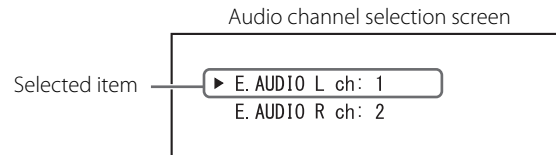
2   Press △ ▽ buttons to select the left (L ch) or right (R ch).

3   Press ◁ ▷ buttons to select an audio channel.

- Each time you press the button, the audio channel changes according to the settings of "E.AUDIO GROUP." (→ page 21)

4   Press MENU button.

- The screen for audio channel selection disappears.

◆ On the Information Display

The monitor displays the information below.
- Configure the show/hide setting of each item in the menu. Use the T.C. button (→ ⑭ on page 9) to configure ⑤ and ⑥.
- Select the position of the information display (→ "POSITION" in "INFORMATION" on page 24).
- When any information of ① ② ③ or ④ above is displayed while signals come in from equipment other than a computer, the picture is displayed without overlapping the information display area. However, the information display will overlap with the picture when...
  – Displaying the picture with higher resolution than the resolution of the panel in 1:1 mode.
  – "SD4:3 LARGE" in the "FUNCTION SETTING" of SET-UP MENU is set to "ON." (→ page 23)
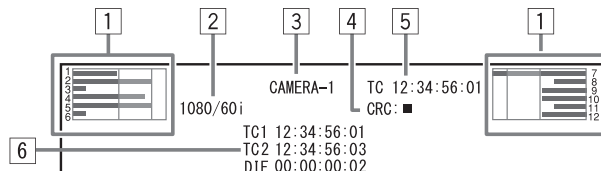
① Audio level meter
- You can check the conditions of the EMBEDDED AUDIO signals when "LEVEL METER ch" is set to "LINE" or "DIVIDE."
- Not displayed when "LEVEL METER ch" is set to "OFF." (→ "AUDIO SETTING" on page 21)

② Signal format
- Displayed when "STATUS DISPLAY" is set to "ON." (→ "INFORMATION" on page 24)
- For the contents displayed, see "Available signals" on page 33 and "On the signal format" on page 11.

③ Source name assigned in "CHARACTER SET."
- Displayed when "SOURCE ID" is set to "ON" or "AUTO."
- Displayed in large letters when "STATUS DISPLAY" is set to "OFF" or "AUTO." (→ "INFORMATION" on page 24)

④ CRC error indication
- Displayed when "CRC ERROR" is set to "ON." (→ "INFORMATION" on page 24)
- A red square is displayed when an error occurs.

⑤ Time code
- When the input signal includes no time code, "TC – –:– –:– –:– –" is displayed (→ ⑭ on page 9).

⑥ Time code (When the 3D button is "OFF" in MIX mode or the CAMERA ASSIST MENU is displayed)

TC1: For SDI IN 1/L input signals
TC2: For SDI IN 2/R input signals
DIF: Difference of TC2 from TC1
- When the CAMERA ASSIST MENU is "R SHIFT", the time code of SDI IN 1/L input signals is displayed in the ⑤ position.
- It is not displayed when the CAMERA ASSIST MENU is "ANAGLYPH."

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🔷 On the Status Display

If you press the INPUT SELECT button (→ ⑲ on page 9) currently lit, the status of the input signal and setting of MUTING are displayed for about 3 seconds.

● Make the setting to display/hide the status in "STATUS DISPLAY" of the "INFORMATION." (→ page 24)
● When "STATUS DISPLAY" is set to "AUTO" or "ON," the status below is also displayed in the following cases:
  – When you change the input
  – When the signal condition of the current input changes
  – When you turn on the monitor
● When "STATUS DISPLAY" is set to "ON," the signal format will remain displayed 3 seconds after the status is displayed.

```
1080/59.94i ·········································· 1
3G  A-2      SbS－HD－RL ·················· 2
4:4:4  RGB  10bit ···························· 3
MUTING ON ····································· 4
FRAME SYNC. ································· 5
```

1 Signal format
● For the contents displayed, see "Available signals" on page 33 and "On the signal format" below.

> **On the signal format**
> The following messages appear depending on the type of input signals and their conditions.
> **When a DVI-D signal protected with HDCP is input**
> ➔ "*" (at the end of the indication)
> **When no video signal comes in**
> ➔ "NO SYNC"
> **When a noncompliant video signal comes in**
> ➔ "Out of range"
> **When a signal that does not meet the MIX operating conditions is input in MIX mode**
> ➔ "Unsupported"

2 Signal format of DVI input
→ On page 25 "DVI INPUT SEL."

Status indication of DUAL LINK/3G SDI signal information
● "DUAL LINK" appears when the MAIN MENU "SDI DUAL LINK" (→ page 19) is set to "ON" in SDI input, and the 3G SDI signal information appears when the MAIN MENU "SDI DUAL LINK" is set to "OFF." However in MIX mode, the 3G SDI signal information appears even when the MAIN MENU "SDI DUAL LINK" is set to "ON."

> **Status indication of 3G SDI signal information**
> Following signal information can be displayed when a 3G SDI signal comes in.
> **3G A-1:** Level A mapping structure 1
> **3G A-2:** Level A mapping structure 2
> **3G A-3:** Level A mapping structure 3
> **3G A-4:** Level A mapping structure 4
> **3G B-DS1:** Level B data stream 1
> **3G B-DS2:** Level B data stream 2
> **3G B-DUAL:** Level B DUAL LINK
> **3G B-DS1/2:** Level B Dual stream mapping (in MIX mode)

3D format conversion method
● The 3D format conversion method appears when the 3D mode is activated while the MIX mode is "OFF."
  (→ page 19 "SDI FORMAT"/"DVI FORMAT" in the MAIN MENU "3D SETTING.")
● Displayed left-justified when not in 3G SDI input or DVI input.

3 Detailed information on 3G SDI/HD SDI DUAL LINK input
● Displays the sampling structure/color space/pixel resolution of the signal format.
● Displayed when the 3G SDI or HD SDI DUAL LINK signal is input.

4 Setting of "MUTING"
● Displayed only when muting is activated (→ 5 on page 9).

5 Setting of FRAME SYNC.
● Only displayed when "FRAME SYNC." in the MAIN MENU "3D SETTING" is set to "ON." (→ on page 19)

Viewing 3D images

Basic 3D principle

This product is a 3D LCD Monitor which adopts the Xpol® circular polarizing method.

By having a filter of different polarization on every alternate scan line on the monitor, and projecting the left eye image (left circular polarization) and the right eye image (right circular polarization) through the filters, users can enjoy a realistic three dimensional view by viewing the left and right images simultaneously through the circular polarizing glasses.

As the left and right images are always displayed together on the screen, users can view flicker-free 3D images.
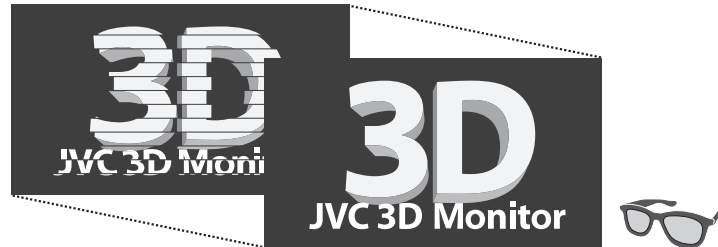
Compatible 3D format

The following 3D formats are supported: LINE BY LINE, SIDE BY SIDE HD, and SIDE BY SIDE SD.
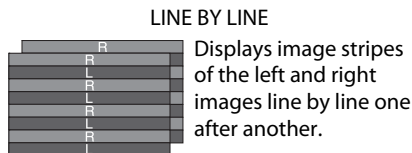
LINE BY LINE
Displays image stripes of the left and right images line by line one after another.
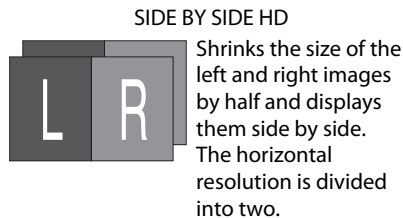
SIDE BY SIDE HD
Shrinks the size of the left and right images by half and displays them side by side. The horizontal resolution is divided into two.
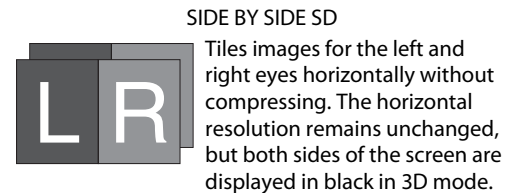
SIDE BY SIDE SD
Tiles images for the left and right eyes horizontally without compressing. The horizontal resolution remains unchanged, but both sides of the screen are displayed in black in 3D mode.

When viewing in 3D

- View 3D images at the recommended viewing distance (Recommended viewing distance : Approx. 65cm(25 5/8")).
- To view in 3D, change to a suitable mode before putting on the circular polarizing glasses to view the 3D images.
- Every individual will have a different experience when viewing 3D images. Viewing at a close distance may cause disorders and discomfort.
- The 3D effects may differ when viewing the screen from different angles.
- Avoid viewing 3D images if you are in bad shape.
- Stop using the product and rest immediately if you experience eyestrain, dizziness, vomiting, headaches or any other discomforts.
- If the symptoms persist even after resting, please consult a doctor.
- Take periodic breaks and rest even if you do not experience any discomfort. (Recommended viewing time : about 30 to 60 minutes).
- For users with past experiences of PSS (Photo Sensitive Seizure) or users with heart problems, please consult a doctor before using this monitor.
- For children 6 and under still in the visual development stage, please consult a doctor and have an adult guardian accompany the child.
- Though ghosting may occur when viewing 3D images, this is not due to a malfunction but to a characteristic of the LCD panel.

Cautions on using the circular polarizing glasses

- Use the circular polarizing glasses only when viewing 3D images.
- Use the circular polarizing glasses provided or compatible with RealD™.
- For users who wear spectacles, cover the spectacles with the circular polarizing glasses.
- Do not use the circular polarizing glasses as sunglasses.
- Please consult a doctor if allergies appear on the areas that come into contact with the circular polarizing glasses.

NOTE

- When purchasing additional circular polarizing glasses, please select RealD™-compatible ones or contact the dealer where you purchased your monitor.
- Though some faint black lines may appear on the screen when viewing 2D images, this is not due to a malfunction but to a characteristic of the LCD panel.

- Xpol® is a registered trademark of Arisawa Manufacturing Co., Ltd.
- RealD™ is a trademark of RealD Inc. (US)

⬛ To view 3D images

To view in 3D, enter the 3D mode. The procedures differ between viewing existing 3D images and mixing L and R images taken by two cameras.

⚪ To view existing 3D images

View already 3D-processed images.

1 Input existing 3D images into the SDI IN 1/L, 2/R terminals or DVI-D terminal.

> ➜ Also compatible with DUAL LINK.

2 Press the INPUT SELECT button corresponding to the input images.

3 Press the 3D button.

4 Press the SELECT button to select a 3D format.

> ➜ Select a 3D format configured under "SDI FORMAT 1"/"SDI FORMAT 2" or "DVI FORMAT 1"/"DVI FORMAT 2" in the MAIN MENU "3D SETTING."

- Put on the circular polarizing glasses to view in 3D. Press the 3D button to enter the 3D mode that corrects images for viewing with the circular polarizing glasses.
- 3D viewing is not available if the 3D images are not based on LINE BY LINE or SIDE BY SIDE.
- If the SIDE BY SIDE images in DVI input do not seem to be in the right position, adjust the image position under "3D H POSITION" in the SET-UP MENU "H POSITION ADJ." beforehand.
- If necessary, configure the settings such as the MAIN MENU "3D SETTING."
- When inputting LINE BY LINE 3D images in a signal format that scales the screen vertically, use the 1:1 display mode.

⚪ To view images taken by two cameras

Mix L and R images taken by two cameras and convert them to 3D images.

1 Input L images into the SDI IN 1/L terminal and R images into the SDI IN 2/R terminal.

> ➜ Input L and R images in the same format corresponding to the MIX mode.
> (For 3G SDI LEVEL B Dual Stream, input into the SDI IN 1/L terminal. For 3G SDI LEVEL B DUAL LINK mapping, input into the SDI IN 1/L and SDI IN 2/R terminals.)

2 Press SDI 1/L or SDI 2/R (INPUT SELECT button).

> ➜ In the case of 3G SDI LEVEL B Dual stream, press SDI 1/L.

3 Press the MIX button.

> ➜ Images in SIDE BY SIDE format.

4 Press the 3D button.

- Put on the circular polarizing glasses to view in 3D. Press the 3D button to enter the 3D mode that corrects images for viewing with the circular polarizing glasses.
- If necessary, configure the settings such as the MAIN MENU "3D SETTING" or CAMERA ASSIST MENU.

Setting the CAMERA ASSIST MENU

This product is equipped with various camera rig adjustment assist functions for 3D viewing. Use the functions for camera adjustment in shooting.

Menu Operations

CAMERA ASSIST MENU

```
< CAMERA ASSIST MENU >
▶ RIG SETTING           : OFF
  SPLIT
  LR SEQ.
  R SHIFT
  ANAGLYPH
  INDIVIDUAL
  LR SWAP               : OFF


ADJUST : ◀▶   SELECT : ⬍   EXIT : MENU
```

1 Press the CAMERA ASSIST button.

→ The CAMERA ASSIST MENU appears.

● Only works when the SDI input is selected and images available for the MIX mode are input.

● When the CAMERA ASSIST button is pressed while "MARKER" is displayed, "MARKER" disappears and the CAMERA ASSIST MENU appears.

2 Press the △ ▽ button to select an item,

and then the ▷ button to proceed to the next screen.

● For some items, adjustments will be made by pressing ◁ ▷.

3 Press the CAMERA ASSIST button to finish the menu operation.

● Alternetively, press the MENU button to close the menu screen.
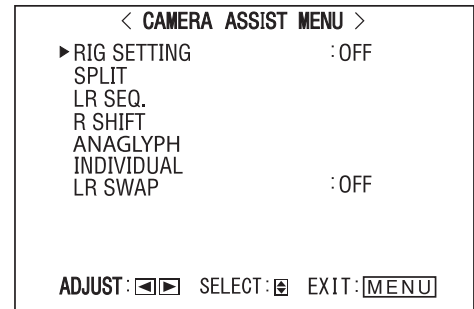
CAMERA ASSIST MENU

RIG SETTING

Depending on the stereo camera rig condition, configure the horizontal flip/vertical flip/180-degree rotation settings of an image.
● The settings are retained even when the CAMERA ASSIST MENU closes.

Half mirror	Half mirror	Parallel twin-flex
Half of the image is flipped horizontally.	Half of the image is flipped vertically.	Half of the image is rotated 180 degrees.
● Select "R-H-MIRROR."	● Select "R-V-MIRROR."	● Select "R-ROTATION."
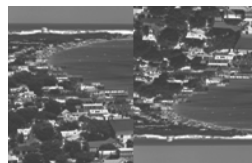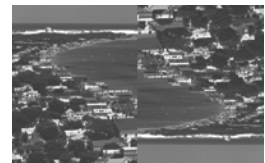
Setting value	Content
OFF	Does not rotate or flip the image
R-H-MIRROR	Horizontally flips images input into the SDI IN 2/R terminal
R-V-MIRROR [*1]	Vertically flips images input into the SDI IN 2/R terminal
L-H-MIRROR	Horizontally flips images input into the SDI IN 1/L terminal
L-V-MIRROR [*1]	Vertically flips images input into the SDI IN 1/L terminal
R-ROTATION [*1]	Rotates images input into the SDI IN 2/R terminal by 180 degrees
L-ROTATION [*1]	Rotates images input into the SDI IN 1/L terminal by 180 degrees

[*1] Vertical flip and 180-degree rotation delay the image by 2 frames. The other image will also be delayed and synchronized.

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SPLIT

L image is displayed on the left of the SPLIT line, and R image on the right. You can check the difference between the images from the two cameras.
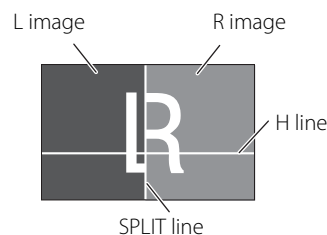
LR SEQ.

Images for the left and right eyes are displayed alternately at 0.5-second interval.
- A marker appears on the upper part of the screen, which distinguishes between L and R images.
    L image: Upper left
    R image: Upper right
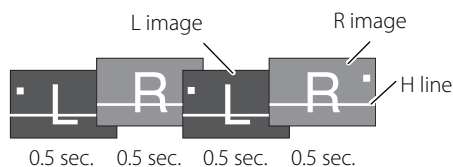
R SHIFT

L and R images are overlapped. You can move the R image horizontally and check the difference between the images.
- While "R SHIFT" is active, the images are corrected according to the check using the circular polarizing glasses.

L and R images not correspondent   L and R images correspondent

ANAGLYPH

L and R images colored red and blue separately are overlapped. You can move the R image horizontally and check the difference between the images.

+015p
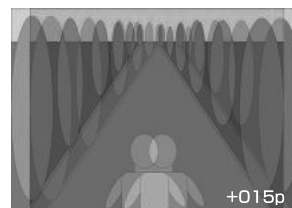
INDIVIDUAL

Either L image or R image is displayed.
- Each time you press SELECT button, the picture changes in the following order.
- A marker appears on the upper part of the screen, which distinguishes between L and R images.
    L image: Upper left
    R image: Upper right

L image   R image

LR SWAP

L and R images are exchanged and then displayed. You can exchange the images without repluging the terminals.
- The setting is retained even when the menu closes. Note that L and R images have been exchanged when the setting is set to "ON."
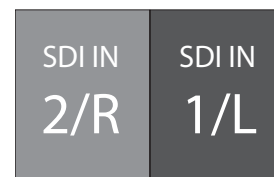
LR SWAP "OFF"   LR SWAP "ON"

POSITION knob/PUSH SEL. button

You can move the displayed SPLIT line/H line/R image (only in "R SHIFT" or "ANAGLYPH") by turning the POSITION knob.

To move right/up: Turn the POSITION knob clockwise.

To move left/down: Turn the POSITION knob counterclockwise.

To select a line to move: Press the PUSH SEL. button.
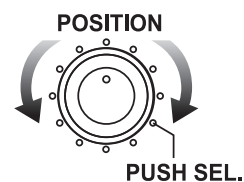
- Pressing and holding the PUSH SEL. button for 3 seconds or longer resets the lines and R image to the default positions.
- The intensities of the SPLIT and H lines can be changed in "L. INTENSITY" under the MAIN MENU "3D SETTING." (→page 19)

Other 3D functions

SCOPE button/lamp

You can display the wave form monitor or vector scope, and compare and check the SDI IN 1/L and SDI IN 2/R input signals.
● Works in MIX mode. The operation to be performed differs in other modes. (→ page 9)
● Each time you press the SCOPE button, the display mode changes in the following order.

No display	:	Does not display the wave form monitor/vector scope.
↓		
Parallel wave form monitor	:	Tiles the wave form monitors of the images input into the SDI IN 1/L and SDI IN 2/R terminals.
↓		
Parallel vector scope	:	Tiles the vector scopes of the images input into the SDI IN 1/L and SDI IN 2/R terminals.
↓		
Difference wave form monitor	:	Select this to display the differential of the signals from the SDI IN 1/L and SDI IN 2/R terminals in wave form monitor.
↓		
Difference vector scope	:	Select this to display the differential of the signals from the SDI IN 1/L and SDI IN 2/R terminals in vector scope.

Parallel wave form monitor   Parallel vector scope   Difference wave form monitor   Difference vector scope

- When the CAMERA ASSIST MENU "LR SWAP" is set to "ON", L and R images of the parallel wave form monitor and vector scope are exchanged and then displayed.
- The positions of the wave form monitor and vector scope can be changed in "POSITION" under the MAIN MENU "SCOPE SETTING."
- The wave form monitor and vector scope are not displayed in "R SHIFT" or "ANAGLYPH" of the CAMERA ASSIST MENU.
- The vector scope is not displayed when the input signals are RGB.

3D CURSOR button/lamp

When 3D is "ON", the L and R lines measuring the visual difference between L and R images, and the pixels and percentage between the lines, are displayed. The following two modes are available for the line display: "Cursor mode" and "Grid mode."
● Each time you press the 3D CURSOR button, the line display mode changes in the following order.

No display → Cursor mode
Grid mode ←

● The information (→ page 10) and SCOPE are not displayed in "Cursor mode" or "Grid mode."
● The positions of the pixels and percentage can be changed in "POSITION" under the MAIN MENU "INFORMATION."

Cursor mode

The L, R, and H lines appear, which measure the visual difference.
● The H and L lines are fined dotted lines, and the R line a coarse dotted line. The selected line is displayed as a solid line.

L line (Group A)   R line (Group A)   Pixels/Percentage between L and R lines

A:ΔX= 87[P] B:ΔX= 94[P]
+4.53[%]   -4.89[%]

H line (Group B)

H line (Group A)
(selected line)

R line (Group B)   L line (Group B)
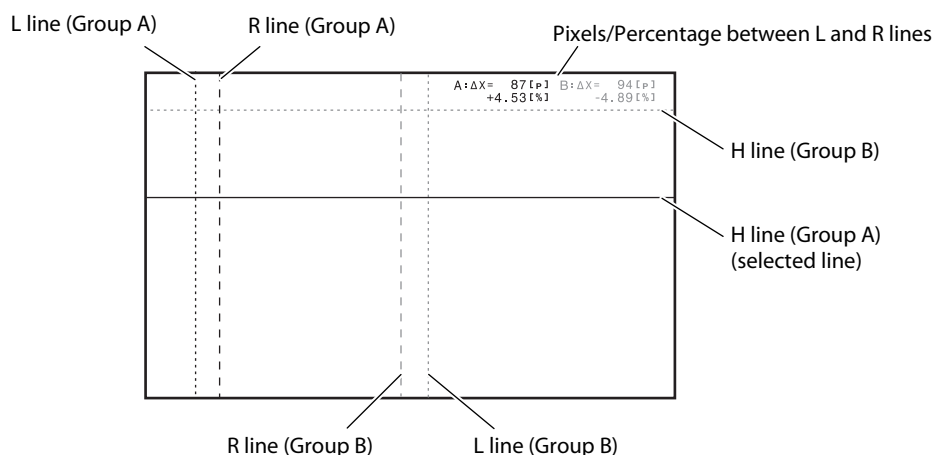
● The line color changes when the line goes beyond "FAR LIMIT" or "NEAR LIMIT" under the MAIN MENU "3D SETTING."
● The ratio of the difference between the L and R lines to the horizontal pixels appears in the percentage display.
● In the percentage display, "+" indicates the pop-up level (when the L line is placed on the right of the R line), and "−" the depth (when the L line is placed on the left of the R line).

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● In Cursor mode, the lines of the following two groups are displayed:

Group A: L line/R line/H line (Normal: Green   / Over the LIMIT: Red)

Group B: L line/R line/H line (Normal: Magenta   / Over the LIMIT: Orange)

- You can change a group to display by pressing the SELECT button. Each time you press the SELECT button, the group changes as shown on the right.
- The line color turns to a color to be used when the LIMIT is exceeded when it goes beyond "FAR LIMIT" or "NEAR LIMIT" under the MAIN MENU "3D SETTING."

```
    ┌─→ A ──→ B ─┐
    └─── A+B ←───┘
```
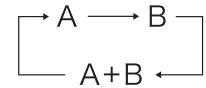
● You can move the L, R, and H lines by turning the POSITION knob.

To move right/up: Turn the POSITION knob clockwise.

To move left/down: Turn the POSITION knob counterclockwise.

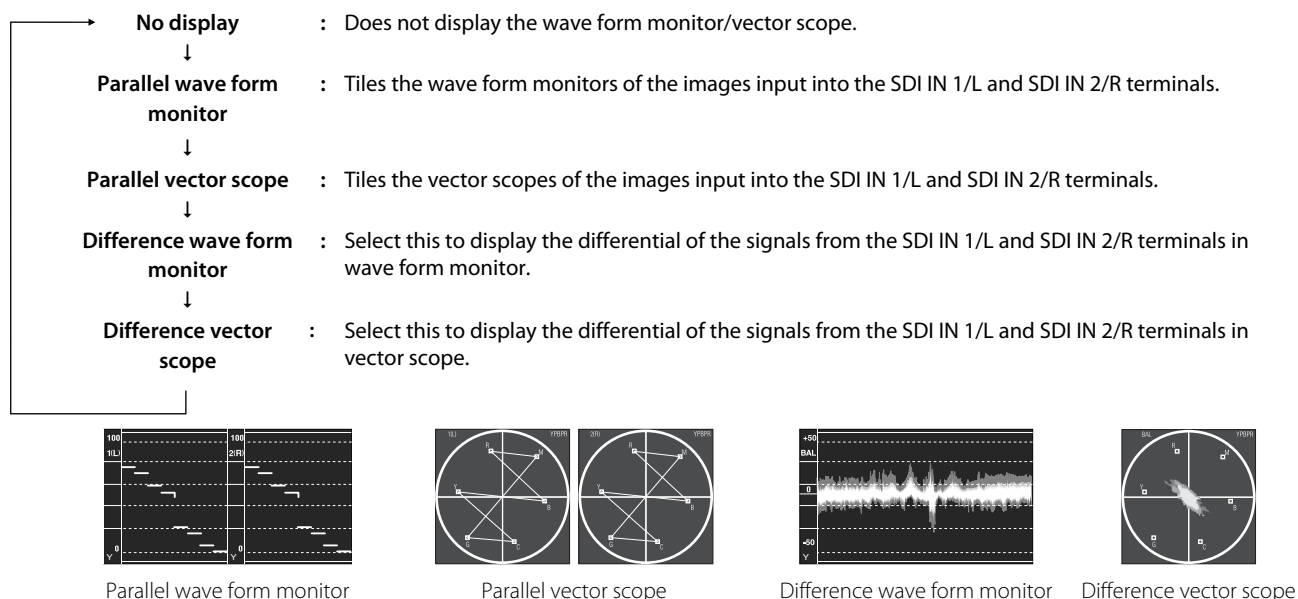**To select a line to move:** Press the PUSH SEL. button. Each time you press the button, the selected line changes in the following order.

```
  ┌──→  L line  ──────────→  R line  ──┐
  │                                     │
  └──  H line  ←──────────  L+R line  ←─┘
```
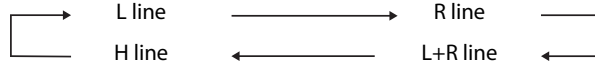
- When you select a line while both Group A and B are displayed, the selection is performed for Group A first, and then for Group B.
- When both L and R lines are selected, the lines cannot be moved separately.
- Pressing and holding the PUSH SEL. button for 3 seconds or longer resets the displayed lines to the default positions.

Grid mode

The grid lines appear, which measure the visual difference.

ΔX= 100 [P]
5. 20 [%]

Pixels/Percentage between the grid lines
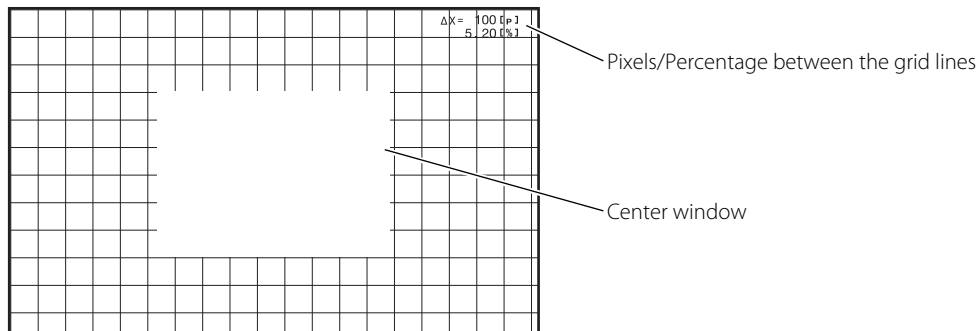
Center window

● The following two types of the grid mode display are available: Normal display and Center window display.
You can change the display by pressing the SELECT button.
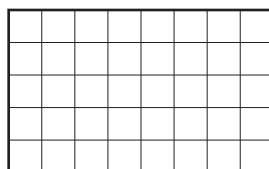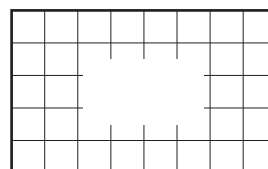
Normal display   Center window display

● The width of the grid line can be changed. Turning the POSITION knob enlarges/reduces the width based on the upper left of the screen as the datum point.
To enlarge: Turn the POSITION knob clockwise.
To reduce: Turn the POSITION knob counterclockwise.
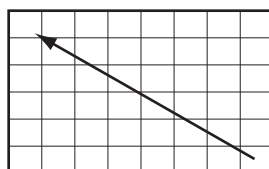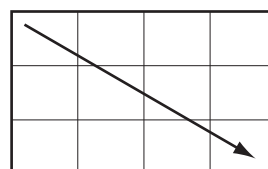
Reduce the width   Enlarge the width

- The ratio of the difference between the grid lines to the horizontal pixels appears in the percentage display.
- Pressing and holding the PUSH SEL. button for 3 seconds or longer resets the grid width to 100 pixels (default).
- When "L. INTENSITY" under the MAIN MENU "3D SETTING" is set to "LOW", the grid line is displayed translucent.

Setting the menu (MAIN MENU/SET-UP MENU)

Menu Operations

1 Display the menu.

To display the MAIN MENU
➔ Press MENU button.

To display the SET-UP MENU
➔ Press ◁ button while holding ▽ button.

2 Press △▽ buttons to select an item, then press ▷ button.
● For some items, adjustments will be made by pressing ◁▷.

3 Press △▽ buttons to select an item, then press ◁▷ buttons to make adjustments.

4 Press MENU button to finish the menu operation.
● Pressing MENU button repeatedly deactivates the display of the menu.

MAIN MENU
```
< MAIN MENU >
▶PICTURE FUNCTION
 BACK LIGHT        : 00
 3G SDI LEVEL B    :DS1
 SDI DUAL LINK     :OFF
 3D SETTING
 ASPECT            :4:3
 MARKER
 AUDIO SETTING
 SCOPE SETTING
 SYNC FUNCTION
ENTER:▶  SELECT:▣  EXIT:MENU
```
Item being selected

Operation guide

SET-UP MENU
```
< SET-UP MENU >
▶FUNCTION SETTING
 PICTURE SUB ADJ.
 H POSITION ADJ.
 WHITE BALANCE SET.
 REMOTE SETTING
 INFORMATION
 CONTROL LOCK      :OFF
 DVI INPUT SEL.    :AUTO
 SDI FORMAT        :AUTO
 ↷ all reset
ENTER:▶  SELECT:▣  EXIT:MENU
```

MAIN MENU
Ex. When "MARKER" is
selected.
```
< MARKER > 1 / 2
▶ AREA MARKER       :OFF
  MARKER ASPECT     :4:3
  SAFETY MARKER     :OFF
  SAFETY AREA       : 80%
  FRAME             :OFF
  CENTER MARKER     :OFF
  LINE BRIGHTNESS   :HIGH
```

Menu Transition Diagram

MAIN MENU

PICTURE FUNCTION ——— APERTURE
APERTURE LEVEL
I/P MODE
sub menu
reset

—— SDI FORMAT 1
SDI FORMAT 2
DVI FORMAT 1
DVI FORMAT 2
SINGLE IMAGE
FRAME SYNC.
FAR LIMIT
NEAR LIMIT
L. INTENSITY

BACK LIGHT

3G SDI LEVEL B

SDI DUAL LINK

3D SETTING

ASPECT

MARKER

—— AREA MARKER
MARKER ASPECT
SAFETY MARKER
SAFETY AREA
FRAME
CENTER MARKER
LINE BRIGHTNESS
R-AREA MARKER
R-MARKER ASPECT
R-SAFETY MARKER
R-SAFETY AREA

AUDIO SETTING ——— BALANCE
E.AUDIO GROUP
LEVEL METER SETTING

—— LEVEL METER ch
BAR TYPE
REFERENCE LEVEL
OVER LEVEL
BAR BRIGHTNESS
PEAK HOLD

SCOPE SETTING

—— GAIN
SIZE
POSITION
TRANSPARENT
AUTO OFF
WAVE DISPLAY
WAVE FILTER
WAVE OVER LEVEL —— MARKING
LEVEL

SYNC FUNCTION

—— NO SYNC ACTION
DELAY TIME
LOW LATENCY

SET-UP MENU

FUNCTION SETTING ————————————————— sub menu POSI.
TALLY SELECT
SD4:3 LARGE
DIMMER

PICTURE SUB ADJ. ——— CONTRAST
BRIGHT
CHROMA
sub menu
reset

H POSITION ADJ. ——— 3D H POSITION
sub menu
reset

WHITE BALANCE SET.

—— GAMMA
COLOR TEMP.
R DRIVE
G DRIVE
B DRIVE
R CUT OFF
G CUT OFF
B CUT OFF
sub menu
reset

REMOTE SETTING

—— SERIAL TYPE
PARALLEL TYPE
PIN1
PIN2
PIN3
PIN4
PIN5
PIN6
PIN7
PIN8

INFORMATION

—— POSITION
SOURCE ID
CHARACTER SET.
STATUS DISPLAY
TIME CODE
CRC ERROR
SUB HOUR METER
MODEL
VERSION
HOUR METER

CONTROL LOCK

DVI INPUT SEL.

SDI FORMAT

all reset

● The menu automatically disappears in about 30 seconds after the previous operation.
● Some items may not appear on the menu depending on the input or the input signal.
● The items controlled by the MAKE system do not appear on the menu.

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📦 MAIN MENU

PICTURE FUNCTION

Setting for the picture quality.

Item	Content	Setting value
APERTURE [1]	Activates/deactivates the function at the level set in "APERTURE LEVEL."	OFF, ON
APERTURE LEVEL [1]	Simultaneously corrects the frequency characteristics of the RGB colors.	01 – 10
I/P MODE	Selects a proper mode corresponding to the input picture.	NORMAL, CINEMA, FIELD
sub menu	Display the sub menu which enables you to adjust the items of "PICTURE FUNCTION" while viewing the actual picture.	
reset	Restore the default settings for all the items in "PICTURE FUNCTION."	

[1] Memorized for each input.

BACK LIGHT   Setting value: -20 – +20

Adjusts the brightness of the display.

3G SDI LEVEL B   Setting value: DS1, DS2

Selects the data stream from two HD SDI signals multiplexed when a 3G SDI LEVEL B signal comes in.
● The setting value will be invalid if a 3G SDI LEVEL B DUAL LINK signal is input.

SDI DUAL LINK   Setting value: OFF, ON

Activates/deactivates the DUAL LINK function of SDI signals.
● "DUAL LINK" is displayed when the setting is set to "ON." (→ "Status indication of DUAL LINK/3G SDI signal information" on page 11)
● Set this setting to "OFF" when an SDI signal other than DUAL LINK SDI is input.

3D SETTING

3D function settings.

Item	Content	Setting value
SDI FORMAT 1 [1]	Set the first choice for 3D format in SDI input. The setting values and features are as follows. **LbL-RL** : LINE BY LINE, the first line: R image **LbL-LR** : LINE BY LINE, the first line: L image **SbS-HD-LR** : SIDE BY SIDE compressed horizontally, L image on the left **SbS-HD-RL** : SIDE BY SIDE compressed horizontally, R image on the left **SbS-SD-LR** : SIDE BY SIDE not compressed, L image on the left **SbS-SD-RL** : SIDE BY SIDE not compressed, R image on the left • When the 3D mode is "ON" in 3D input, pressing the SELECT button switches between "FORMAT1" and "FORMAT2."	LbL-RL LbL-LR SbS-HD-LR SbS-HD-RL SbS-SD-LR SbS-SD-RL
SDI FORMAT 2 [1]	Set the second choice for 3D format in SDI input.	
DVI FORMAT 1 [1]	Set the first choice for 3D format in DVI input.	
DVI FORMAT 2 [1]	Set the second choice for 3D format in DVI input.	
SINGLE IMAGE [1]	Select a channel to be displayed when the 3D mode is "ON." **OFF** : Normal 3D (Left and right images) **LEFT** : L image only **RIGHT** : R image only	OFF LEFT RIGHT
FRAME SYNC.	Synchronize the left and right input signals by forcibly locking the SDI IN 2/R input for the SDI IN 1/L input in MIX mode. • The time base cannot be corrected on this product. To take 3D images strictly, perform GENLOCK on the shooting device, and set this setting to "OFF." • When "ON" is selected, the playback proceeds one frame later than when "OFF" is selected.	OFF ON
FAR LIMIT	Set the limit of the depth in Cursor mode of "3D cursor." • The line color changes when the difference between the vertical lines goes beyond the specified range.	– 0.1% – – 4.0%
NEAR LIMIT	Set the limit of the pop-up level in Cursor mode of "3D cursor." • The line color changes when the difference between the vertical lines goes beyond the specified range.	+01% – +20%
L. INTENSITY	Set the intensity of lines displayed in the CAMERA ASSIST MENU and "3D cursor." • When "LOW" is selected, the grid lines are displayed translucent in Grid mode of "3D cursor."	HIGH LOW

[1] Works when the MIX mode is "OFF" or invalid.

Menu Configuration (cont.)

ASPECT Setting value: 4:3, 16:9

Set the aspect ratio of images.
● Not activate when picture is displayed in the 1:1 mode.

MARKER*1*2

Settings for marker functions.

	Item	Content	Setting value
1/2	**AREA MARKER** *3	Activate/deactivate the area marker and select the style of it. The setting values and features are as follows. **OFF** : Deactivate the marker. **LINE** : Displays the area with an outline. **HALF** : The area outside the specified aspect ratio of the screen is displayed at 50% transparency. **HALF+L** : The area of the specified aspect ratio of the screen is indicated by an outline, and the area outside of that is displayed at 50% transparency. **BLK.** : The area outside the specified aspect ratio of the screen is black. Only the portion of the picture within the designated area is displayed. **BLK.+L** : The area of the specified aspect ratio of the screen is indicated by an outline, and the area outside of that becomes black so that only the area inside the line is displayed.	OFF LINE HALF HALF+L BLK. BLK.+L
	MARKER ASPECT *3	Select the aspect ratio of the area marker.	4:3, 14:9, 13:9, 2.35:1, 1.85:1, 1.66:1
	SAFETY MARKER	Activate/deactivate the safety marker and select the style of it. *4	OFF, LINE, HALF, HALF+L, BLK., BLK.+L
	SAFETY AREA	Adjust the area of the safety marker.	80% – 100%
	FRAME	Displays/hides the frame indicating the area of the specified aspect ratio.	OFF, ON
	CENTER MARKER	Displays/hides the marker indicating the center position of the picture.	OFF, ON
	LINE BRIGHTNESS	Adjust the brightness of the marker.	HIGH, LOW
2/2	**R-AREA MARKER** *3	Display/Hide the area marker and select a type. *4	OFF, LINE, HALF, HALF+L, BLK., BLK.+L
	R-MARKER ASPECT *3	Select the aspect ratio of the area marker.	4:3, 14:9, 13:9, 2.35:1, 1.85:1, 1.66:1
	R-SAFETY MARKER	Activate/deactivate the safety marker and select the style of it. *4	OFF, LINE, HALF, HALF+L, BLK., BLK.+L
	R-SAFETY AREA	Adjust the area of the safety marker.	80% – 100%

● The area marker or the safety marker is displayed by using AREA MARKER or SAFETY MARKER button, or external control.
● Select either non-"R-" items or "R-" items to activate by using external control (→ "External control" on page 26).
● When a picture is displayed in 4:3 aspect ratio, the safety marker for the 4:3 area is displayed.
● To display the safety marker for the area of a picture displayed in 16:9 aspect ratio, hide the area marker.
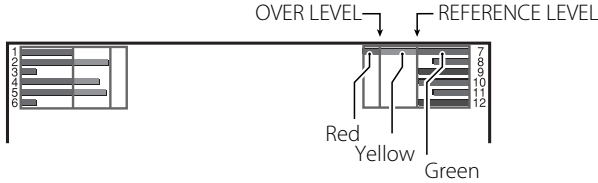
*1 Memorized for each input.
*2 Not displayed in 1:1 mode or when "SD4:3 LARGE" under the SET-UP MENU "FUNCTION SETTING" is set to "ON" and 4:3 format signals are input.
*3 Displayed only when picture is displayed in 16:9 aspect ratio.
*4 The setting values are the same as that of "AREA MARKER."

AUDIO SETTING

Settings for the audio output balance, EMBEDDED AUDIO signals and level meter.
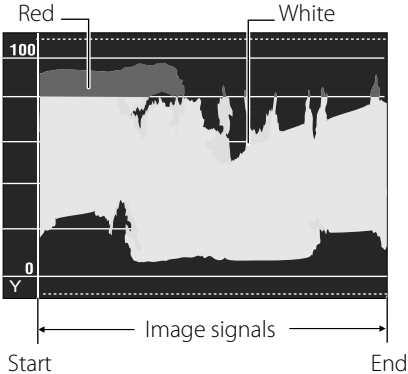
Item	Content	Setting value
BALANCE	Adjust the balance between the right and left speakers.	L5 – L1, 0, R1 – R5
E.AUDIO GROUP [*1]	Select the audio channel group of the EMBEDDED AUDIO signals. The setting values and selectable audio channels of EMBEDDED AUDIO signals are as follows. **1G** : Channel 1/2/3/4/1+2/3+4/1 – 4 (1G) **2G** : Channel 5/6/7/8/5+6/7+8/5 – 8 (2G) **1-2G** : Channel 1/2/3/4/5/6/7/8/1+2/3+4/5+6/7+8/1 – 4 (1G)/5 – 8 (2G)/1 – 8 (1G+2G) **3G** : Channel 9/10/11/12/9+10/11+12/9 – 12 (3G) **1-3G** : Channel 1/2/3/4/5/6/7/8/9/10/11/12/1+2/3+4/5+6/7+8/9+10/11+12/ 1 – 4 (1G)/5 – 8 (2G)/9 – 12 (3G)/1 – 8 (1G+2G)/1 – 12 (1-3G) • G means GROUP	1G 2G 1-2G 3G 1-3G
LEVEL METER SETTING [*1]	Adjust the level meter display for the EMBEDDED AUDIO signals. **Example of the level meter display** —Level meter position and audio channels Ex.: When "LEVEL METER ch" is set to "LINE" and "BAR TYPE" is set to "3COLORS" OVER LEVEL REFERENCE LEVEL Red Yellow Green • The level meter with no audio signal input is displayed in white for "3COLORS", and in gray for "W.100." • You can select the position of the level meter display—top or bottom of the screen (→ "POSITION" in "INFORMATION" on page 24). • When "PEAK HOLD" is set to "ON," the maximum level meter value will remain displayed for a set period of time.	
– **LEVEL METER ch**	Select how the audio channels are displayed on the level meter. **LINE** : Displays the channels 1 – 6 at the left of the screen and 7 – 12 at the right. **DIVIDE** : Displays the odd channels at the left of the screen and the even channels at the right.	OFF LINE DIVIDE
– **BAR TYPE**	Select the color of the level meter display. **3COLORS** : Coloring for each level **W.100** : White	3COLORS W.100
– **REFERENCE LEVEL**	Select the standard input level indicated on the level meter.	−20dB, −18dB
– **OVER LEVEL**	Select the input level's lower limit indicated in red for the "3COLORS" display.	−10dB, −8dB, −6dB, −4dB, −2dB
– **BAR BRIGHTNESS**	Select the brightness of the level meter.	LOW, HIGH
– **PEAK HOLD**	Activates/deactivates the peak hold function of the level meter.	OFF, ON

[*1] Memorized for each input. In MIX mode, the setting only applies to audio signals input into SDI IN 1/L.

Menu Configuration (cont.)

SCOPE SETTING[*1]

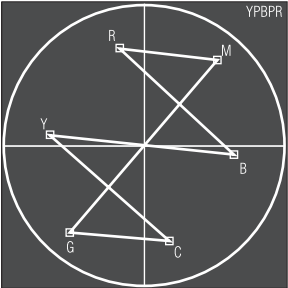Configure the settings for the wave form monitor and vector scope.

Item	Content	Setting value
GAIN	Adjust the input gain level.	−10 – +10
SIZE [*2][*3]	Set the window size.	NORMAL, LARGE
POSITION [*2]	Select the window position.	1 (Lower right), 2 (Lower left) 3 (Upper left), 4 (Upper right)

TRANSPARENT [*3]	Make the background of the window translucent.
	  ON : Translucent
	  OFF : Normal
		ON
		OFF

AUTO OFF	Set the function to turn off the window automatically 15 minutes after displayed.	ON, OFF
WAVE DISPLAY	Select a wave form to be displayed for the wave form monitor.	Y, Pb, Pr (HD signal) Y, Cb, Cr (SD signal) R, G, B (RGB signal)
WAVE FILTER	Turn on/off the lowpass filter to put over the input wave form data.	FLAT (No filter) LOWPASS
WAVE OVER LEVEL [*3]	Set the over levels of the luminance signals (Y) and RGB signals. **Example of the wave form monitor** Ex.: When the luminance signal is Y, "MARKING" is set to "ON" and "LEVEL" is set to "080" • The wave form color of signals over the value specified in "LEVEL" turns red. • The display differs depending on the input signal or the "WAVE DISPLAY" setting. **Example of the vector scope** Ex.: When the color bar is displayed 	
– MARKING	Turn on/off the function to change the wave form color of signals over the value specified in "LEVEL." (→ below)	OFF, ON
– LEVEL	Adjust the lower limit for the over level.	070 – 109

[*1] The wave form monitor is not displayed when the input signals are DVI (input from a computer). The vector scope is not displayed when the input signals are RGB.
[*2] When "SIZE" is set to "LARGE," the window is displayed in the center of the screen regardless of the "POSITION" setting.
[*3] Not displayed in MIX mode or when the CAMERA ASSIST button is "ON."

SYNC FUNCTION

Settings for the synchronization with signals.

Item	Content	Setting value

NO SYNC ACTION	Select the screen status when no signal is coming in.
	  STANDBY : The monitor is off (on standby)
	  P.SAVE : Power save mode
	  GRAY B. : Gray screen
		OFF
		STANDBY
		P.SAVE
		GRAY B.

DELAY TIME	Select the period until the screen status changes as selected in "NO SYNC ACTION" after signals stop coming in.	30sec., 5min., 15min.
LOW LATENCY	Activates/deactivates the function to shorten the time taken to display the picture. • If the picture is not displayed steadily while "ON" is selected, select "OFF." • While "ON" is selected, the displayed picture may become unstable when an operation using buttons on the front panel or the menu is performed, or when the signal format changes.	ON OFF

● When setting "NO SYNC ACTION" to "GRAY B.," the screen color changes to gray and the power consumption of the back light is saved by half. Selecting "P.SAVE" (power save mode) saves more power consumption by turning off the back light.
● In the initial setting, "NO SYNC ACTION" is set to "P.SAVE", and "DELAY TIME" set to "15min." Change the settings if necessary. (U.S.A. only)

🔷 SET-UP MENU

FUNCTION SETTING

Configure the sub menu display, the lighting color of the tally lamp, the size of images, the brightness of the button lamps.

Item	Content	Setting value

sub menu POSI.	Select the contents and displaying position of "sub menu."
	 The setting values and features are as follows.
	    LOWER1 : Displays the current setting and adjustment bar at the lower part of the screen.
	    UPPER1 : Displays the current setting and adjustment bar at the upper part of the screen.
	    LOWER2 : Displays the current setting at the lower part of the screen.
	    UPPER2 : Displays the current setting at the upper part of the screen.
	 • The adjustment bar is not displayed for some items.
		LOWER1
		 UPPER1
		 LOWER2
		 UPPER2

TALLY SELECT	Select the color of the tally lamp.	GREEN, RED

SD4:3 LARGE	Selects the picture size when the input signal format is 4:3.
	 The setting values and features are as follows.
	    OFF : Matches the vertical picture size to the number of pixels.
	    ON : Matches the horizontal picture size to the horizontal size of the screen.
		OFF
		 ON

DIMMER	Select the intensity of the button lamps.	NORMAL, DARK

PICTURE SUB ADJ.

Configure the standard level of image adjustment.

Item	Content	Setting value
CONTRAST [1]	Adjust the standard level for the contrast adjusted with the CONTRAST knob on the front panel.	– 20 – +20
BRIGHT [1]	Adjust the standard level for the brightness adjusted with the BRIGHT knob on the front panel.	– 20 – +20
CHROMA [1]	Adjust the standard level for the chroma adjusted with the CHROMA knob on the front panel.	– 20 – +20
sub menu	Display the sub menu which enables you to adjust the items in "PICTURE SUB ADJ." while viewing the actual picture.	
reset	Restore the default settings for all the items in "PICTURE SUB ADJ." (You cannot select items to reset.)	

[1] Memorized for each input.

H POSITION ADJ.

Adjust the center position of SIDE BY SIDE images.

Item	Content	Setting value
3D H POSITION	Display the center line to adjust the horizontal image position. • The setting will be valid when the 3D mode is "ON" and MIX mode is "OFF" or invalid.	– 032 – +031
sub menu	Display the sub menu which enables you to adjust the items in "H POSITION ADJ." while viewing the actual picture.	
reset	Restore the default settings for all the items in "H POSITION ADJ."	

WHITE BALANCE SET.

Selects the gamma correction value, color temperature and adjusts the drive level and cutoff point of each color (R/G/B).

Item	Content	Setting value
GAMMA	Select a gamma correction.	2.2 (equivalent to γ2.2), 2.35 (equivalent to γ2.35) 2.45 (equivalent to γ2.45), 2.6 (equivalent to γ2.6)
COLOR TEMP.	Select the color temperature. • The color temperature is corrected when the 3D mode is "ON."	9300K, 6500K, USER
R DRIVE **G DRIVE** **B DRIVE** [1]	Adjust the drive level of each color (red, green, and blue).	MIN – 000 – MAX (in 256 grades)
R CUT OFF **G CUT OFF** **B CUT OFF** [1]	Adjust the cutoff point of each color (red, green, and blue).	MIN – 000 – MAX (in 256 grades)
sub menu	Display the sub menu which enables you to adjust the items in "WHITE BALANCE SET." while viewing the actual picture.	
reset	Restore the default settings for the drive levels and cutoff points of the selected color temperature. (You cannot select items to reset.)	

[1] Memorized for each color temperature.

Menu Configuration (cont.)

REMOTE SETTING (→ "External Control" on pages 26)

Settings for the external control.

Item	Content	Setting value
SERIAL TYPE	Select the input terminal used for external control by serial communication.	RS232C RS485
PARALLEL TYPE	Select the external control method for the MAKE/TRIGGER terminal.	MAKE, TRIGGER, SET
PIN1 **PIN2** **PIN3** **PIN4** **PIN5**	Assign the control functions to the pins of the MAKE/TRIGGER terminal. • Assign a function to each pin terminal by selecting "SET" in "PARALLEL TYPE" mentioned above.	→ \<Functions controlled by the MAKE/TRIGGER system\> on page 27.
PIN6 **PIN7** **PIN8**	The functions are assigned for "PIN6" – "PIN8" and you cannot change the assignment of these functions.	→ "Using the MAKE/TRIGGER system" on page 26

INFORMATION

Settings for the information display of the monitor.

Item	Content	Setting value
POSITION	Select the position to show the information display (→ "On the Information Display" on page 10).	UPPER LOWER
SOURCE ID	Select whether the name assigned in "CHARACTER SET." is displayed on the screen (→ "On the Information Display" on page 10). • When "AUTO" is selected, the display color synchronizes with the color of the tally lamp while the tally lamp is lit.	OFF ON AUTO
CHARACTER SET. [1]	Assign a name to each video source as you like (10 characters at maximum). You can also enter a name using the RS-232C system. **Setting of "CHARACTER SET."** **1** Change the input to one that you want to assign a video source name for. **2** Select "CHARACTER SET." **3** Press the △▽ buttons to select a character to enter at first. ● Each time you press the △ button, the characters change in the following order. Press ▽ button to reverse the order. space ⟶ 0～9 ⟶ A～Z ⟶ a～z ⟶ &()＊+,–./:<>_ **4** Press ▷ button to move the arrow to the next space. ● The characters entered before moving the arrow are memorized. **5** Repeat steps **3** and **4** (10 characters at maximum). **6** Press MENU button to store the name.	
STATUS DISPLAY	Select whether the status of the current input and the setting of MUTING are displayed on the screen (→ "On the Status Display" on page 11).	AUTO, OFF, ON
TIME CODE	Select the type of the TIME CODE display.	VITC [2], LTC [2], D-VITC
CRC ERROR	Select whether the CRC error indication for the input HD SDI signal is displayed on the screen (→ "On the Information Display" on page 10).	OFF ON
SUB HOUR METER	Display the hours of use (unit: hour). You can reset this item.	
MODEL	Display the model name of the monitor.	
VERSION	Display the version of the monitor.	
HOUR METER	Display the total hours of use (unit: hour). This item is used for maintenance of the monitor. You cannot reset this item.	

[1] Memorized for each input.
[2] Ancillary time code

CONTROL LOCK   Setting value: OFF, VOL.LOCK, ALL LOCK

Settings for disabling the buttons on the front panel.
● The following operations are not available when "VOL.LOCK" is selected.
  – VOLUME adjustment knob
  – Picture adjustment knob
● The "ALL LOCK" function disables to control the buttons on the front panel. But following operations are available.
  – Turning on/off (on standby) the monitor.
  – Press the ▽ button and ◁ button to display the SET-UP MENU, and set "CONTROL LOCK" to "OFF."
  – Operate this product by external control.
  When you perform operations other than the above, "⚿ Control lock on!" appears.

DVI INPUT SEL.   Setting value: AUTO, COMPO., RGB, PC

Settings for formats of signals input into the DVI-D (HDCP) terminal.
● Automatically distinguishes signals when set to "AUTO." (Normally, select "AUTO")
● Select "COMPO.", "RGB" or "PC" when the picture is not displayed correctly with "AUTO."
● DVI-D input of the monitor is compatible with HDCP.

SDI FORMAT   Setting value: AUTO, MS1YCbCr, MS2YCbCr, MS3YCbCr, MS4YCbCr, MS2 RGB, MS3 RGB, 3G-B-DS

Settings for formats of signals for 3G SDI/HD SDI DUAL LINK input.
● Automatically distinguishes signals when set to "AUTO." (Normally, select "AUTO")
● If the picture is unstable with "AUTO", select the setting value according to the input signal format.
● When "AUTO" is not selected, "M" appears in the status display.

all reset

Restores all the settings and adjustments of the monitor to the default.
● "HOUR METER" and the settings done by using the adjustment knobs on the front panel will not be reset.
● If reset while the AC power is on, the monitor turns off (standby), and then turns on automatically.
● If reset while the DC power is on, the monitor turns off (standby).

External control

🔲 About the external control

This monitor has three external control terminals.

● **MAKE/TRIGGER terminal** (RJ-45): The following external control systems are available.

  ① **MAKE (make contact) system:**
    Controls the monitor by short-circuiting the corresponding pin terminal to the GND pin terminal, or disconnecting (opening) it.

  ② **TRIGGER (trigger) system:**
    Controls the monitor by sending the pulse signal instantaneously to the corresponding pin terminal.
    → "Using the MAKE/TRIGGER system" on the right.

● **RS-485 terminal** (RJ-45): Controls the monitor with the RS-485 system (→ "Using the serial communication" on page 28).

● **RS-232C terminal** (D-sub 9-pin): Controls the monitor with the RS-232C system (→ "Using the serial communication" on page 28).

Set the following items of "REMOTE SETTING" in SET-UP MENU according to the external control terminal and control system (→ "SERIAL TYPE," "PARALLEL TYPE" on page 24).

Control terminal	Control system		The settings of this unit	
			"SERIAL TYPE" setting	"PARALLEL TYPE" setting
MAKE/ TRIGGER terminal	**MAKE**		—	MAKE
	TRIGGER		—	TRIGGER
RS-485 terminal	Serial communication	**RS-485**	RS485 [*1]	—
RS-232C terminal		**RS-232C**	RS232C [*1]	—

[*1] For a monitor connected to a personal computer etc, select the terminal the equipment is actually connected to. For other monitors, select "RS485."

Control priority is as follows.

MAKE > TRIGGER = serial communication = buttons and menu on the monitor

● You can use external control even when "CONTROL LOCK" is set to "VOL.LOCK" or "ALL LOCK." (→ page 25)

● When the monitor is off (on standby), external control is not available. But certain external controls (starting/terminating communication, turning on the monitor) are available through the serial communication. (→ page 29)
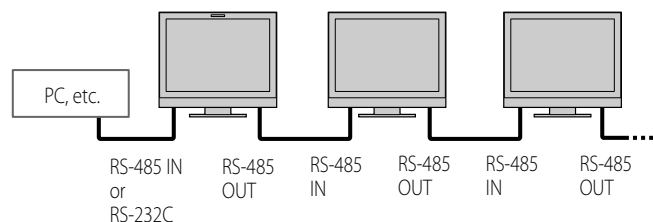
<MAKE/TRIGGER system>

You can control the monitor by a personal computer or dedicated controller[*2].

● "Using the MAKE/TRIGGER system" on the right.

[*2] The controller is not commercially available. Consult your dealer if you need it.
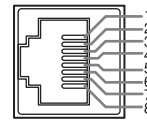
<Serial communication>

● For the details, see page 28.

🔲 Using the MAKE/TRIGGER system

The MAKE/TRIGGER terminal is configured as follows.
You can assign a function to each pin terminal in "REMOTE SETTING." (→ "PIN1, PIN2, PIN3, PIN4, PIN5" in "PARALLEL TYPE" on page 24)

● You cannot change the functions assigned to the pin terminals from 6th to 8th.

This is a female terminal.

Pin No.	Pin name
1	PIN1
2	PIN2
3	PIN3
4	PIN4
5	PIN5
6	TALLY [*1]
7	ENABLE [*2]
8	GND

[*1] The 6th pin terminal controls turning on or off the tally lamp (available to control even when the 7th pin terminal is invalid).

[*2] The 7th pin terminal makes the external control valid/invalid. Make sure to control the terminal by the MAKE system.

To assign the functions to the pin terminals

For the operation procedure, see page 18.

1. Select "REMOTE SETTING" on the SET-UP MENU.
2. Set "PARALLEL TYPE" to "SET."
3. Select a pin name ("PIN1" – "PIN5") for which you want to assign a function, then select the function you want to assign.

  For the selectable functions, see the table on page 29.

Operation of the external control

1. Set "PARALLEL TYPE" of "REMOTE SETTING" to "MAKE" or "TRIGGER" in the SET-UP MENU.
2. Short-circuit the 7th pin terminal (ENABLE) to the 8th pin terminal (GND) so that the monitor can be controlled by the external control.
3. **When the "MAKE" system is selected:**
   Operate each function by short-circuiting the corresponding pin terminal to the 8th pin terminal (GND) or opening it.
   When the "TRIGGER" system is selected:
   Operate each function by pulse control, that is short-circuiting the corresponding pin terminal to the 8th pin terminal (GND) for about 1 second and opening it.

● When changing the input with MAKE system, only one pin terminal must be short-circuited. (Other pin terminals must be opened.)

● When selecting the "TRIGGER" system, you can operate only one function at a time. Operate the functions one by one.

<Functions controlled by the MAKE/TRIGGER system>

Display	Functions to be controlled	Opening	Short-circuiting
TALLY SEL	Selects the color of the tally lamp	Green	Red
SDI 1/L	Changes the input to "SDI 1/L"	Invalid	Valid
SDI 2/R	Changes the input to "SDI 2/R"	Invalid	Valid
DVI	Changes the input to "DVI"	Invalid	Valid
3D	Activates/Deactivates the 3D mode	Off	On
MIX	Activates/Deactivates the MIX mode	Off	On
3D FORMAT	3D format 1/3D format 2 change [3]	FORMAT1	FORMAT2
3G-B.DS	Selects the data stream of "3G SDI LEVEL B"	DS1	DS2
DUAL LINK	Turns on or off "SDI DUAL LINK"	Off	On
MARKER	Displays the area and safety markers	Off	On
FRAME	Indication of the area of the specified aspect ratio	Off	On
C.MARKER	The center marker indication	Off	On
MARK.SEL	Selects the items of "MARKER" [4]	Non-"R-" items	"R-" items
ASPECT	Changes the aspect ratio	4:3	16:9
1:1	Displays in 1:1 mode	Off	On
STATUS	Status display [5]	→ "On the Status Display" on page 11	
L.METER	Audio level meter display	[6]	
TIME CODE	Time code display	Off	On
SOURCE ID	→ "SOURCE ID" in "INFORMATION" on page 24	[7]	
PARA.WFM	Displays the wave form monitor (Normal or Parallel)	[8]	
PARA.VS	Displays the vector scope (Normal or Parallel)		
BAL.WFM	Displays the wave form monitor (Normal or Difference)		
BAL.VS	Displays the vector scope (Normal or Difference)		
COLOR OFF	Color off	Color	Monochrome
SCR CHECK	Screens check	[9]	
I/P MODE	Change a mode according to the input picture	[10]	
MUTING	Muting on/off	Off	On
DIMMER	Change the intensity of the button lamps	NORMAL	DARK
———	No function	—	—

[3] The 3D format changes in the same way as the SELECT button pressed in 3D mode.
[4] Selects which functions in "MARKER" are activated, non-"R-" items or "R-" items (→ "MARKER" on page 20).
[5] Displays the information shown when INPUT SELECT button of the current input is pressed (→ "On the Status Display" on page 11). While controlling with the MAKE system, the information is displayed only at the moment of short-circuiting.
[6] While controlling with the MAKE system, the level meter is switched between displayed (short-circuiting) and hidden (opening). When "LEVEL METER ch" is set to "OFF," the level meter is not displayed ("NO EFFECT" appears). While controlling with the TRIGGER system, the pattern of the audio channel display is switched.
[7] While controlling with the MAKE system, the available set-up options will be the setting value currently selected in "SOURCE ID" ("ON" or "AUTO" [short-circuiting]) and "OFF" (opening). While controlling with the TRIGGER system, uses the same set-up option as those in the SET-UP MENU (→ "SOURCE ID" in "INFORMATION" on page 24).
[8] While controlling with the TRIGGER system, the display mode changes in the same way as for the normal SCOPE function. (→ 13 on page 9)
While controlling with the MAKE system, the displayed (short-cirtuiting)/hidden (opening) operations are performed as follows regardless of the MAIN MENU "AUTO OFF" setting:

		[PIN 1] − [PIN 5] settings				Priority when the settings a re configured simultaneously				
Display		PARA.WFM	PARA.VS	BAL.WFM	BAL.VS					
MIX mode	Invalid	Wave form monitor	Vector scope	Wave form monitor	Vector scope	Wave form monitor > Vector scope				
	Valid	Parallel wave form monitor	Parallel vector scope	Difference wave form monitor	Difference vector scope	Parallel wave form monitor	>	Difference wave form monitor	>	Parallel vector scope	>	Difference vector scope

[9] While controlling with the MAKE system, the screen is switched between normal screen (opening) and blue screen (short-circuiting). While controlling with the TRIGGER system, the screen changes in the same way as when pressing SCREENS CHECK button (→ 12 on page 9).
[10] Must be controlled with the TRIGGER system. The mode changes in the order of "NORMAL" → "CINEMA" → "FIELD" (This function cannot be controlled with the MAKE system).

● You cannot assign the same function to different pin terminals.
● The TRIGGER system switches each function by short-circuiting the pin terminal for about 1 second and opening it.

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External Control (cont.)

▮ Using the serial communication

You can control the monitor from a personal computer etc. via the RS-485 or RS-232C terminal.
● Consult your dealer for the details of the external control specification.

<Communication specifications>

Input terminal	Cable	Terminal specification	Communication specifications
RS-485	A straight LAN cable	→ See below	Baud Rate: 4800 bps Data Bits: 8 bits Parity: No parity Stop Bits: 1 bit Flow Control: No control Communication Code: ASCII Code
RS-232C	A straight cable with a D-sub 9-pin connector (male for the monitor, female for the personal computer etc.)		

<Specifications of the RS-485 terminal>
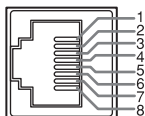
This is a female terminal.

Pin No.	IN terminal signal	OUT terminal signal
1	TXD +	TXD +
2	TXD −	TXD −
3	RXD +	RXD +
4	NC	NC
5	NC	NC
6	RXD −	RXD −
7	NC	NC
8	GND	GND

<Specifications of the RS-232C terminal>
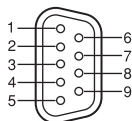
This is a female terminal.

Pin No.	Signal
1	NC
2	RXD
3	TXD
4	NC
5	GND
6	NC
7	RTS
8	CTS
9	NC

● The 7th terminal and the 8th terminal are connected.

<Command outline>

All commands consist of the following segments.

Header	Monitor ID	Command ID	Function	Data	Cr (0Dh)

On Header

"!" : Operation commands from the personal computer, etc. (→ <Basic command list> on page 29)

"?" : Reference commands from the personal computer, etc.

"@" : Status returns from the monitor

To start communication, send the connection command from the personal computer etc. To terminate the communication, send the termination command from the personal computer etc.

Example of communication procedures

① Starting the communication: connection command (!00BCN1Cr)
② Monitor's status (@00BOKCr)

③ Selecting "SDI 1/L" input (!00BINACr)
④ Monitor's status (@00BOKCr)

⑤ Terminating the communication: termination command (!00BCN0Cr)
⑥ Monitor's status (@00BOKCr)

PC, etc.

Monitor

<Basic command list>
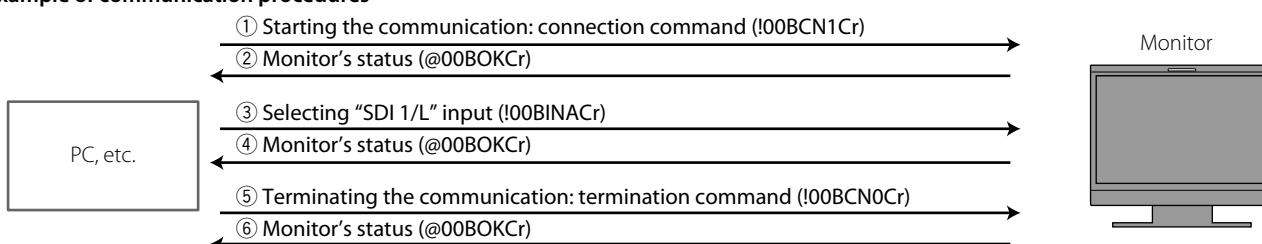
No.	Commands	Functions	Data
1	! * *[1] B C N 1 Cr	Starts communication (connection)	No data
2	! * *[1] B C N 0 Cr	Terminates communication (termination)	No data
3	! * *[1] B I D S E T x x[2] Cr	Assigns the control ID	01 – 99
4	! * *[1] B I D R E T Cr	Initializes the control ID	No data
5	! * *[1] B I D D S P x x[2] Cr	Displays/hides the ID	00: Hide 01: Display
6	! * *[1] B I D C H K x x[2] Cr	Flashes/hides the selected ID No. of the monitor	00: Hide 01: Display
7	! * *[1] B M E N U Cr	Displays the MAIN MENU/Quits the menu operation	No data
8	! * *[1] B U P Cr	Moves the cursor downward (△)	No data
9	! * *[1] B D O W N Cr	Moves the cursor downward (▽)	No data
10	! * *[1] B A D J R Cr	Makes setting/adjustment (▷)	No data
11	! * *[1] B A D J L Cr	Makes setting/adjustment (◁)	No data
12	! * *[1] B S E T U P Cr	Displays the SET-UP MENU	No data
13	! * *[1] B P W 1 Cr	Turns on the monitor	No data
14	! * *[1] B P W 0 Cr	Turns off the monitor (on standby)	No data
15	! * *[1] B I N A Cr	Selects "SDI 1/L" input	No data
16	! * *[1] B I N B Cr	Selects "SDI 2/R" input	No data
17	! * *[1] B I N C Cr	Selects "DVI" input	No data
18	! * *[1] B D I S P Cr	Displays the status *[3]	No data
19	! * *[1] B A M U T E x x[2] Cr	Turns muting on/off	00: Off 01: On
20	! * *[1] B A S P x x[2] Cr	Changes the aspect ratio	00: 4:3 01: 16:9
21	! * *[1] B R O P O S I x x x x[2] Cr	Configures POSITION settings	−999 – +999
22	! * *[1] B R O P U S H x x[2] Cr	Configures PUSH SEL. settings	00: Change selection, 01: Reset the position
23	! * *[1] B S E L E C T Cr	Operates the SELECT keys	No data
24	! * *[1] B 3 D S C A L E x x[2] Cr	Changes 3D cursor mode	00: Off 01: Cursor mode 02: Grid mode
25	! * *[1] B 3 D x x[2] Cr	Changes 3D mode	00: Off 01: On
26	! * *[1] B C A M E R A Cr	Displays the CAMERA ASSIST MENU	No data
27	! * *[1] B M I X x x[2] Cr	Changes MIX mode	00: Off 01: On

● "Cr" is 0Dh.
● The commands for starting communication (connection) (No. 1), terminating communication (termination) (No. 2), and turning on the monitor (No. 13) can be used while the monitor is off (on standby).

[1] Enter the monitor's ID for "**." The initial setting of the monitor's ID is "00." When connecting several monitors, "00" is a command for controlling all monitors at once.
[2] Enter the appropriate data to "xx."
[3] Displays the information shown when the INPUT SELECT button currently lit is pressed (→ "On the Status Display" on page 11).

Troubleshooting

Solutions to common problems related to the monitor are described here. If none of the solutions presented here solve the problem, unplug the monitor and consult an authorized dealer or service center.

Symptom	Probable cause and corrective action	Page
Cannot turn on the unit.	● Press the ⏻ / I button to turn it on. ● Plugs should be firmly inserted. ● Turn on the AC power switch on the back of this product. ● If you do not turn on the monitor by pressing the ⏻ / I button while the DC power is turned on, disconnect the DC connector, set up the DC power within the operating range, and then connect the connector again.	9 7 7
No picture with the power on.	● Select the correct input using the INPUT SELECT buttons. ● Connect the signal cable firmly. ● Turn on the power of the connected component and set the output correctly. ● Check whether the input signal format is acceptable on the monitor.	9 7 — 33, 34
No sound.	● Adjust the volume level. ● Deactivate the muting function. ● Connect the signal cable firmly. ● Turn on the power of the connected component and set the output correctly.	8 9 7 —
"Out of range" appears.	● Input a signal compatible with the unit.	11, 33, 34
"NO SYNC" appears.	● Select the correct input using the INPUT SELECT buttons. ● Connect the signal cable firmly. ● Turn on the power of the connected component and output video signals. Or, check whether the video output of the component (video output setting of the VCR or graphic board of the computer) is set correctly.	9 7 —
Wrong color, no color.	● Adjust each picture adjustment knob on the front panel or adjust the items of "PICTURE SUB ADJ." in the SET-UP MENU. Or, perform "reset" in "PICTURE SUB ADJ." ● Check whether the setting of COLOR OFF or SCREENS CHECK buttons are appropriate. ● Adjust the items of "WHITE BALANCE SET." in the SET-UP MENU. Or, perform "reset" in "WHITE BALANCE SET."	8, 23 9 23
The picture becomes blurred.	● Adjust the picture contrast or brightness by using the adjustment knobs on the front panel. Or, adjust "CONTRAST" or "BRIGHT" of "PICTURE SUB ADJ." in the SET-UP MENU.	8, 23
Wrong picture position, wrong picture size. For some signals, the picture cannot be displayed fully in the effective screen area. There is no sure method to solve this problem.	● Check whether the setting of 1:1 is appropriate. ● Check "ASPECT" of the MAIN MENU, and " SD4:3 LARGE " under the SET-UP MENU "FUNCTION SETTING." ● Check whether the input signal format is acceptable on the monitor.	9 20, 23 33, 34
Some items do not appear on the menu.	● The items which are not available for the current input or the current input signal are not displayed on the menu. Change the input or the input signal. ● The items controlled by the MAKE system do not appear on the menu.	— 26
Buttons on the monitor do not work.	● Set "CONTROL LOCK" in the SET-UP MENU to "OFF." ● You cannot use the buttons for the items controlled by the MAKE system. Disable the external control.	25 26, 27
3D viewing is not available.	● Press the 3D button to enter the 3D mode. ● Press the SELECT button to change the 3D viewing format (when inputting existing 3D images). ● Set the 3D format compatible with input images in "SDI FORMAT 1/SDI FORMAT 2" or "DVI FORMAT 1/ DVI FORMAT 2" under the MAIN MENU "3D SETTING."	9, 13 9, 13 19
Cannot enter the MIX mode.	● Press the MIX button to enter the MIX mode. ● Input L and R images in the same format compatible with the MIX mode. ● Input 3G SDI LEVEL B Dual Stream into the SDI IN 1/L terminal.	9, 13 33 —
The image is distorted or cannot be synchronized in MIX mode.	● Set "FRAME SYNC." under the MAIN MENU "3D SETTING" to "ON" or "OFF."	19

○ **The following are not malfunctions.**
- When a still image is displayed for a long time, it may remain indistinctly on the screen after the picture has changed. Though the remaining picture will disappear after a while, there may be a case that it remains for a long period depending on the length of time the still image was displayed for. This is due to the characteristics of the LCD display and is not a malfunction.
- Red spots, blue spots and green spots on the panel surface are a normal characteristic of LCD displays, and not a problem. The LCD display is built with very high precision technology; however, be aware that a few pixels may be missing or constantly lit.
- The following symptoms are problems only when pictures or sounds are not played back normally.
  - A slight electric shock occurs when you touch the monitor.
  - The top and/or rear panel of the monitor becomes hot.
  - The monitor emits a cracking noise.
  - The monitor emits a mechanical noise.

■ Self-check program

This monitor has a self-check function, which allows it to detect malfunctions and alert you. This makes troubleshooting easier. Whenever a problem occurs, one or some of the INPUT SELECT lamps will flash. If this happens, follow the steps below and contact your dealer to resolve the problem.

When the screen goes blank, and one or some of the INPUT SELECT lamps (SDI 1/L, SDI 2/R, DVI) on the front control panel start flashing...

1 **Check which lamps are flashing.**

2 **Press ⏻/l button to turn off (on standby) the monitor.**

3 **Turn off the AC power switch on the rear panel.**

4 **Disconnect the AC power cord from the AC outlet.**

5 **Contact your dealer with the information about which lamps were flashed.**

● If you turn on the monitor soon after turning it off (or after a short-term power failure), the INPUT SELECT lamps may flash and no image may be displayed.
When this happens, turn off power and wait at least 10 seconds before turning on the monitor again.
If the INPUT SELECT lamps do not flash, you can use the monitor as normal.

Specifications

⬛ General

Model name	DT-3D24G1
Type	MULTI FORMAT 3D LCD MONITOR
Screen size	Type 24 wide format
Aspect ratio	16:10
Compliant video signal format	→ "Available signals" on page 33
Format	3G SDI : SMPTE424M/SMPTE425M DUAL LINK HD SDI : SMPTE372M HD SDI : BTA S-004C, SMPTE292M SD SDI : ITU-R BT.656: 525/625 SMPTE259M: 525 EMBEDDED AUDIO : SMPTE299M, SMPTE272M
Audio output	Internal speaker: 1.0 W + 1.0 W
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 24V)
External dimensions (excluding protruding parts)	Width: 564 mm (22 1/4˝) 564 mm (22 1/4˝) Height: 448.6 mm (17 3/4˝) 408 mm (16 1/8˝) Depth: 243 mm (9 5/8˝) 99 mm (4˝) (with the stand) (without the stand)
Mass	12.0 kg (26.4 lbs) (with the stand) 9.1 kg (20.0 lbs) (without the stand)
Accessories	AC power cord, Power cord holder × 1, Screw × 2 (for power cord holder), Circular polarizing glasses × 2 (for 3D viewing, not under warranty)

LCD panel

Type	24˝ wide, active matrix TFT
Effective screen size	Width: 518.4 mm (20 1/2˝) Height: 324 mm (12 7/8˝) Diagonal: 611.3 mm (24 1/4˝)
Number of pixels displayed	1920 × 1200
Number of colors displayed	16.77 million
Contrast ratio (TYP.)	1000:1

Input/output terminals

Video	DVI-D (HDCP)	DVI-D signal input (compatible with HDCP): DVI-D connector x 1 (compatible with DDC2B)
Video	E. AUDIO 3G SDI/HD SDI/SD SDI (IN 1/L)	Digital signal input (compatible with EMBEDDED AUDIO/DUAL LINK signals): Auto detection, 2 line, BNC connector x 2
Video	E. AUDIO 3G SDI/HD SDI/SD SDI (IN 2/R)	
Video	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	AUDIO (IN)	Analog audio signal input: 1 line, RCA connector x 2, 500 mV (rms), high impedance
Audio	AUDIO (MONITOR OUT)	Analog audio signal input: 1 line, RCA connector x 2, 500 mV (rms)
External control	REMOTE (MAKE/TRIGGER)	→ "Using the MAKE/TRIGGER system" on page 26
External control	REMOTE (RS-485)	→ "Using the serial communication" on page 28
External control	REMOTE (RS-232C)	

Available signals

The following signals are available for this monitor.

√ : Acceptable
— : Not acceptable

Video signals

No.	Signal name	Signal format shown in the status display (→ page 11)	E. AUDIO SDI (IN 1, IN 2)[*1]				DVI-D (HDCP) (Digital component/Digital RGB)
			SD/HD (1.5G)	3G SDI	DUAL LINK	MIX	
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	√	√	—	√	—
17	1080/60i	1080/60i	√	√	√	√	√
18	1080/59.94i	1080/59.94i	√	√	√	√	√
19	1035/60i	1035/60i	√	—	—	—	—
20	1035/59.94i	1035/59.94i	√	—	—	—	—
21	1080/50i	1080/50i	√	√	√	√	√
22	1080/60p	1080/60p	—	√	√	√	√
23	1080/59.94p	1080/59.94p	—	√	√	√	√
24	1080/50p	1080/50p	—	√	√	√	√
25	1080/30p	1080/30p	√	√	√	√	√
26	1080/29.97p	1080/29.97p	√	√	√	√	√
27	1080/25p	1080/25p	√	√	√	√	√
28	1080/24p	1080/24p	√	√	√	√	√
29	1080/23.98p	1080/23.98p	√	√	√	√	√
30	1080/30psF	1080/30psf	√ [*2]	√ [*2]	√ [*2]	√ [*2]	—
31	1080/29.97psF	1080/29.97psf	√ [*3]	√ [*3]	√ [*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, the signal is regarded as 1080/60i, and "1080/60i" and the status appear.
[*3] If there is no payload ID, the signal is regarded as 1080/59.94i, and "1080/59.94i" and the status appear.
[*4] If there is no payload ID, the signal is regarded as 1080/50i, and "1080/50i" and the status appear.

Notice on transportation

This monitor is precision equipment and needs dedicated packing material for transportation.
Never use any packing material supplied from sources other than JVC or JVC-authorized dealers.

- For easy understanding, pictures and illustrations are emphasized, omitted or composed, and may be slightly different from actual products.
- Design and specifications are subject to change without notice.
- All company names and product names mentioned herein are used for identification purposes only, and may be the trademarks or registered trademarks of their respective companies.

Specifications (cont.)

Computer signals (preset)
DVI-D (HDCP) terminals

No.	Signal name	Resolution		Frequency		Scan system
		Horizontal	Vertical	Horizontal (kHz)	Vertical (Hz)	
1	VGA60	640	480	31.5	59.9	Non-interlace
2	WVGA60	852	480	31.5	59.9	Non-interlace
3	SVGA60	800	600	37.9	60.3	Non-interlace
4	XGA60	1024	768	48.4	60.0	Non-interlace
5	WXGA (1280)	1280	768	47.8	60.0	Non-interlace
6	WXGA+60	1440	900	55.9	60.0	Non-interlace
7	SXGA60	1280	1024	64.0	60.0	Non-interlace
8	WSXGA+60	1680	1050	65.2	60.0	Non-interlace
9	UXGA60	1600	1200	75.0	60.0	Non-interlace
10	WUXGA60	1920	1200	74.0	60.0	Non-interlace
11	720/60p	1280	720	45.0	60.0	Non-interlace
12	1080/60p	1920	1080	67.5	60.0	Non-interlace
13	720/50p	1280	720	37.5	50.0	Non-interlace
14	1080/50p	1920	1080	56.25	50.0	Non-interlace

● Non-preset signals may not be displayed normally.
● When a preset signal comes in, the signal format is shown on the status display. For other signals, the resolution is shown.
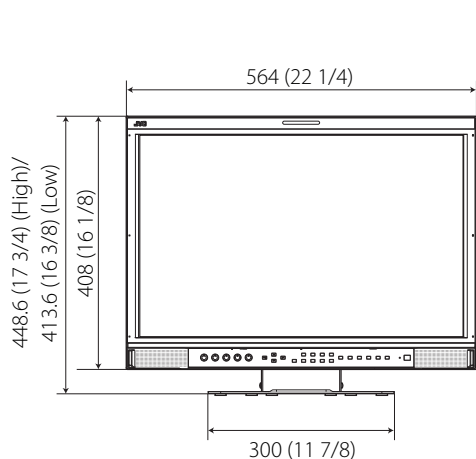
Specification of the DVI-D (HDCP) terminal

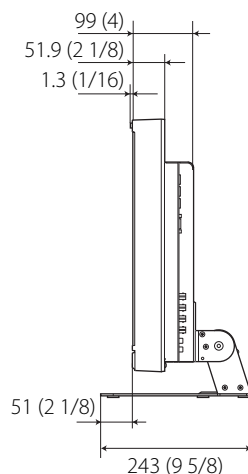Connect it to the DVI-D output terminal on a personal computer.

Pin No.	Input signal	Pin No.	Input signal	Pin No.	Input signal
1	T.M.D.S Data 2–	9	T.M.D.S Data 1–	17	T.M.D.S Data 0–
2	T.M.D.S Data 2+	10	T.M.D.S Data 1+	18	T.M.D.S Data 0+
3	T.M.D.S Data 2 shield	11	T.M.D.S Data 1 shield	19	T.M.D.S Data 0 shield
4	NC	12	NC	20	NC
5	NC	13	NC	21	NC
6	DDC Clock	14	+5 V Power	22	T.M.D.S Clock shield
7	DDC Data	15	GND	23	T.M.D.S Clock+
8	NC	16	Hot Plug Detect	24	T.M.D.S Clock–

🖵 Dimensions Unit: mm (inch)

<Front view>

564 (22 1/4)

448.6 (17 3/4) (High)/
413.6 (16 3/8) (Low)

408 (16 1/8)

300 (11 7/8)

<Side view>

99 (4)
51.9 (2 1/8)
1.3 (1/16)

51 (2 1/8)

243 (9 5/8)

<Rear view>

VESA mounting holes
(Size: 4-M4, depth: 10 mm)

100

100

117 (4 5/8)

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