MODEL

VFE741D

Digital I/F OLED Color Viewfinder

MODEL

VFL701D

Digital I/F LCD Color Viewfinder

Operation Manual

English

Ikegami

Safety Precautions

Please follow the safety instructions below:

Before you use this unit, be sure to familiarize yourself with this “Safety Precautions” and the “Operation Manual” to use the unit in the proper manner.

After reading these documents, be sure to keep them in a safe place for your reference whenever the information is required.

Concerning Pictographic Symbols

The pictographic symbols contained in this “Safety Precautions” and placed on the units are provided by using various pictographs to ensure that you use this unit in the safe manner and to protect yourself or other persons from any hazards and to prevent any damages occurring from this unit.

The pictographic indications and their meanings are given below. Please thoroughly understand these indications and their meanings before using this unit.

Please understand that there may be some pictographic symbols that may not apply to the unit you purchased.

⚠ Warning	This symbol indicates a content that any erroneous handling of this unit committed by ignoring this symbol may cause an accident resulting in death or serious injury.
⚠ Caution	This symbol indicates a content that any erroneous handling of this unit committed by ignoring this symbol may cause an accident resulting in serious injury or in property loss or damage.

(Note) The △ symbol indicates a content to call for the user’s attention.

Example of Symbols

	The ○ symbol indicates that the action is prohibited. In the diagram or in its vicinity, the concrete contents of prohibition is illustrated. (In the diagrams at left, it is a caution against disassembly of the unit.)
	The ● symbol indicated that the action must be carried out in a coercive manner. In the diagram, the concrete content of caution is illustrated (In the diagrams at left, the power plug must be pulled out.)

⚠ Warning

When you use the product:

	Do not place any container containing water or any liquid or small metallic pieces on the unit! Spilt liquid entering inside the unit may cause a fire or an electric shock accident.
	Do not use the unit by applying any voltage other than the specified voltage! Application of an unspecified voltage to the unit may cause a fire or an electric shock accid1ent.
	Do not allow any metallic or combustible material to enter or be dropped into the unit from an opening! This may cause a fire or an electric shock accident.
	Do not make any alterations to this unit! This may cause a fire or an electric shock accident.

When you install the product:

	Do not install this unit on an unstable position! By doing so, the unit may be dropped or fall down, causing a personal injury.
	Do not use the unit by applying any voltage other than the specified voltage! Application of an unspecified voltage to the unit may cause a fire or an electric shock accident.
	Be sure to employ a specialized engineering constructor to install the unit in place! This unit must be securely installed in place by using the specified method. Otherwise, it may be dropped or fall down, causing a fire, an electric shock, or a personal injury. If the unit is to be installed on the wall or on the ceiling, be sure to employ a specialized engineering constructor for the work.
⚠	Do not make any alterations to this unit! This may cause a fire or an electric shock accident.

When a trouble has occurred:

⚠	If an abnormal condition should occur, indicated by smoke, strange odor, or noise, be sure to turn off the power switch and unplug the power plug from the outlet! If you keep using the unit as is, a fire or an electric shock accident may occur. Make sure that the smoke has gone out and contact our sales agent or the sales person in charge.
⚠	If water or any foreign object has entered inside the unit, turn off the power switch and unplug the power plug from the outlet! If you keep using the unit as is, a fire or an electric shock accident may occur. Contact our sales agent or the sales person in charge.
⚠	If the unit is dropped down or its case is broken, turn off the power switch and unplug the power plug from the outlet! If you keep using the unit as is, a fire or an electric shock accident may occur. Contact our sales agent or the sales person in charge.
⚠	If this unit should go out of order, turn off the power switch and unplug the power plug from the outlet! If you keep using the unit as is, a fire or an electric shock accident may occur. Contact our sales agent or the sales person in charge.
⚠	Do not use any damaged (with the core wire exposed or broken) power cord! If you keep using the unit as is, a fire or an electric shock accident may occur. Contact our sales agent or the sales person in charge.

⚠ Caution

When you use the product:

	Do not place any heavy object on this unit! By doing so, the unit may lose the balance and fall down or be dropped down, causing personal injury.
	Do not get on or sit on this unit or the carrying case! The unit may be broken or fall down, resulting in personal injury.
	Before moving the unit, be sure to turn off the power switch and unplug the power plug from the outlet and disconnect the connecting cables between devices! If you fail to do so, the power cord may be damaged, causing a fire or an electric shock accident.
	If the unit is not to be used for a long time, be sure to unplug the power plug from the outlet for safety. Failure to do so may cause a fire.

When you install the product:

	Do not block the ventilation holes of this unit! Blocking the ventilation hole may cause heat to build up inside the unit, causing a fire. Do not use the unit in the following manner: • Putting the unit upside down; toppling it over sideways; or inverting it. • Pushing unit onto a narrow place with poor ventilation. • Placing the unit on a soft material such as carpet. • Covering the unit with a piece of table cloth, etc.

To Use the Product Proficiently

When you use the product:

• When using the unit at a watery location such as near a bath or poolside, do not allow water to enter this unit or the cables. The water that has entered the unit or the cables may cause an electric accident. Please be especially careful when you use it when it is raining or snowing; near the beach; or in the kitchen.
• If thunder is heard, be sure to use the unit by considering the operating environment and the situation. If required, interrupt the use of the unit, and keep off the unit, or else you may receive an electric shock.
• Do not connect any device to an AC outlet with a power rating (W) exceeding the rating allowed for the outlet. Be sure to check the power rating value indicated near the AC outlet or the Instruction Manual, or the Operation Manual.
• Do not use the power cord or connecting cables by forcefully bending (or twisting or pulling) them. By doing so, the insulation of the cord or cables may be damaged, causing an electric shock accident to occur.

When you install the product:

• Install the unit by keeping it away from a location exposed to excessive humidity or dust, oily smoke, or steam. Installation of the unit on such a location may cause an electric shock. Do not place the unit near a cooking table or a humidifier.
• Make sure that the unit is securely protected from falling by a sudden earthquake or a shock. Be sure to carry out a falling prevention measure for safety to ensure that no personal injury will occur by falling of this unit.

Concerning Maintenance of the Product:

• For safety, be sure to turn off the power switch and unplug the power plug from the outlet before carrying out the maintenance of this unit. Failure to do so may cause an electric shock.
• To ensure that the unit will maintain its performance in a stable manner for a long time, it is recommended that a “Periodic Inspection” should be carried out. Please consult with the sales person in charge for Periodic Inspections.
• This unit contains some high voltage sections inside. Any inspection, maintenance or repair work of this unit must be carried out by a knowledgeable expert of this type of product, otherwise an electric shock accident may occur.

Precautions for Use

Read this document carefully and take precautions regarding the following issues to ensure the safe use of this Viewfinder.

1. **Use of a power supply other than the specified supply (DC) is strictly forbidden.**

2. **Do not apply any shock on the view finder.**
   Take necessary precautions against shock, as glass materials are used inside OLED / LCD.

3. **Don’t apply strong external force against the screen of the viewfinder.**
   Don not press the screen strongly. Be careful not to apply strong external force to the screen of the viewfinder.
   The screen may be damaged, causing a trouble.

4. **Avoid using or storing the unit at following locations:**
   Locations with temperatures outside the specified range
   In the open air environment, necessary precautions must be taken against radiation as heat may build up inside the unit by direct sunlight, even if the surrounding temperature may be within the specified range. (Be sure to protect the unit from direct sunlight.)
   Make sure that the exhaust and the intake ports on the rear of the Viewfinder is never blocked. Check the exhaust port in particular to confirm that it is not blocked by the black-out curtain and the like.

   Rainy, Snowy, and Excessively Humid Locations
   May cause an electric leakage or malfunction of the unit.

5. **Be careful of operation at low temperature**
   Keep in mind that the function of the backlight will be lower and the life will become short at low temperature. It is recommendable to use the unit at normal temperature.

6. **Avoid direct sunlight to the screen of the viewfinder**
   Keep in mind that there is a possibility of spoiling the display performance when the screen of the viewfinder is exposed to the direct sunlight for a long period of time.

7. **Precaution regarding the OLED / LCD panel**
   Avoid directly touching the surface of the OLED / LCD panel as much as possible. For cleaning the surface, use a piece of dry and soft cloth to wipe off the dirt without harshly rubbing the surface. Do not use any solvent such as thinner or benzene.

8. **Do not display the same pattern for a long time (VFE741D only)**
   Precautions should be taken as displaying the same pattern for a long time may cause burn-in on the screen.
   • Turn off the power when the unit is not used.
   • Change the displayed pattern regularly.
   • Turn off the marker, WFM or VSC when not in use.

9. **Precautions against dew condensation**
   If the unit is used in an environment exposed to sudden temperature changes, dew condensation may occur on the panel surface or inside the unit. Precautions must be taken as operating the unit while condensation is remaining may cause deterioration of the display quality or malfunction of the unit. If dew condensation should occur, do not turn on the power before the dew condensation is eliminated.

10. **Do not touch crystalline liquid leaked from the screen of the viewfinder.**
    When the screen of the viewfinder is accidentally broken and the liquid (crystalline liquid) leaks, do not touch it with your mouth, do not inhale or do not get it to your skin.
    If the crystalline liquid gets in your eye or mouth, rinse it immediately with water. If your skin or clothes are stained with it, wipe off with alcohol etc. immediately and wash in cold water with soap.
    If left stained, your skin or clothes may be damaged.
    If it gets in your eye or mouth, rinse it immediately with water and receive medical treatment from a doctor.

11. **Avoid use or storage of the unit in a corrosive gas environment.**
    Use or storage of this product at a location or the vicinity here corrosive gas including sulfur dioxide, hydrogen sulfide gas, or ammonia gas is generated will not only significantly reduce the service life of the product but also may cause malfunction or an electric leakage. Also, avoid using the unit in an environment exposed to the strong salt winds.

12. **When storing the viewfinder for a long period of time, do so in a cool, dark place at constant temperature and humidity.**

13. **Do not disassembly and remodel.**
    Do not disassemble and remodel the viewfinder, otherwise causing a trouble or damage.

14. **Do not use this product for a space apparatus, a nuclear energy controlling device, or a medical instrument involved with human life.**

Concerning the Quality of the OLED / LCD Panel

An extremely high precision technology is used to produce the OLED / LCD panel built in this product, providing 99.99% or higher effective pixels. Please understand, however, that there may be missing pixels or always illuminating pixels at a rate of 0.01% or lower.

Concerning the Built-in Fan (VFE741D only)

The built-in fan operates not always but automatically when the Viewfinder internal temperature rises. Therefore, there may be cases when it does not operate when the environmental temperature such as on the table is low. The fan is not malfunctioning at such a time.

The fan may start to operate with the rise of the Viewfinder internal temperature even when the surrounding temperature is low in such an operating environment as in the open air.
If the fan does not operate normally when the temperature is high, STATUS LED will light up. (See section 2-1 for details.)

Please contact the sales agent or TECHNO IKEGAMI Co., Ltd. if the FAN alarm LED should light up. (Flashing of the LED indicates a battery alarm.)

Warranty

In case the product should malfunction in the course of normal operations within two years from the date of delivery, the product will be repaired free of charge. However, any repair for the following cases has to be paid even within the warranty period:

1. Any malfunction or damage that has occurred due to one of the following causes:
   - An improper use
   - A repair or an alteration carried out by the customer
   - Transportation, movement, or falling that has occurred after purchase of the product
   - An external factor including an extraordinary natural phenomenon or application of abnormal voltages
2. Aged deterioration of OLED /LCD panel
   (Including changes in brightness; increases of light spots or unlit defects, etc.)
3. Damage, discoloration, or deterioration of the housing including the front surface of the panel

If it seems that the product is malfunctioning even after performing daily adjustments, indicated by a phenomenon such as no image available, please contact our sales agent or TECHNO IKEGAMI Co., Ltd.

Accessories

Be sure to check the following accessories accompanying this Viewfinder product:

1. Operation manual (1)
2. Studio hood (1)
3. VF Cable (1)
4. Camera number (1-9) plate (1)

MODEL VFE741D/VFL701D

Digital I/F OLED/LCD Color Viewfinders

Table of Contents

1. Outline

1-1. Outline

The VFE741D model provides various features including high resolution, high brightness, high contrast ratio, wide view angles and high-speed response by adopting a 7.4-inch QHD OLED (organic EL) to implement the high performance required for a viewfinder.

And the VFL701D model provides a visual image which has high resolution and is suitable for a viewfinder which can be mounted on 4K cameras, adopting a 7-inch Full-HD LCD.

By utilizing all of the IKEGAMI knowhow accumulated through years of producing CRT/LCD viewfinders, these products have achieved optimum performance and comfortable user-friendliness demanded for a viewfinder.

1-2. Features

(1) 7.4 inch QHD OLED panel (VFE741D)

The product has adopted a 7.4-inch QHD organic EL panel (10 bit), providing superb basic performance including high resolution, high brightness, wide view angles, and excellent color reproduction capability.

With the high contrast ratio reproducing the black infinitely close to pure black, and the response capability comparable to that of CRT models, the product materializes the optimum focusing function for the intended use of the viewfinder.

(2) 7.0-inch Full-HD LCD panel (VFL701D)

The product has a 7-inch type Full-HD LCD panel whose basic performance, providing high resolution, high brightness, wide view angles and good color reproduction capability, is excellent. The focus performance, which is rich in accuracy, is realized by representing the image of a 4K camera on this LCD panel as efficiently as possible.

(3) Multi-format accommodation

The product can accommodate the following formats as a standard. The formats of various input signals will be automatically detected at the viewfinder.

1080i/60, 59.94, 50
720p/60, 59.94, 50, 30, 29.97, 25, 24, 23.98
1080PsF/30, 25, 24, 23.98
1080p/60, 59.94, 50, 30, 29.97, 25, 24, 23.98

(4) Various built-in markers

This unit can display 4:3, 13:9, 14:9 and 15:9 markers. The safety marker for the entire effective screen can also be set at 1% increments within 80% to 100% range.

Various convenient 5-division and 10-division cross-hatching markers are provided as a standard for ease of location alignment.

(5) User marker display function

As user markers, 6 types of LINE or BOX markers per scene can be set at any location with any size for up to 5 scenes. This is an ideal function for the positioning of the camera.

Switching marker displays on various scenes can be performed instantly by assigning FUNCTION switches in accordance with the shooting situations.

Drawing which is difficult to perform through switch operation can be carried out by using a commercially available USB mouse. In addition, the drawing data can be stored on a USB memory for copying onto another VFE741D (VFL701D) unit or for managing on a PC.

* An application for the patent of this feature has already been filed.

(6) Waveform monitor/vector scope display function

A waveform monitor for luminance and a vector scope can be displayed. The size can be specified for 2 types: NORMAL and SMALL. The display luminance can be specified for 3 levels of brightness. Also, 3 types of waveform display positions and 2 types of display colors including GREEN and WHITE can be selected.

(7) Video Mag. (Magnification) display function

This is a function for displaying the magnified image of the center area of the original image. You can set the magnification to twice, 4 times and 8 times. The visibility will become better. By using this feature, accurate focusing will be possible regarding the image which is shot in 4K resolution.

(8) External memory function

Various data (for menu settings, user markers and captured images) can be stored on a USB memory for managing the data on a PC. It is also possible to copy the data onto another VFE741D/VFL701D model.

(9) Controlling by a USB mouse

By connecting a commercially available USB mouse to the USB (Universal Serial Bus) terminal on this unit, it is possible to carry out the menu operation using the mouse. Also, use of a commercially available wireless mouse will allow remote operation of the viewfinder.

(10) Updates through USB

MPU (micro-processing unit) and FPGA (field-programmable gate array) programs can be easily updated using the USB port.

(11) Capture function

This function allows a camera image to be instantly captured, quickly switching over the captured image with the currently photographed camera image by using a switch or through automatic operation (the switchover time to be specified on the MENU) for detailed comparisons and adjustments including location alignment and color adjustments at the shooting site through the use of only this viewfinder unit.

Since the captured image can be stored on a USB memory and downloaded to the viewfinder, it is possible to reproduce an image at the same view angle. The data (*) can also be used on another VFE741D/VFL701D unit.

* An exclusive file format is used.

(12) Using the unit as a monitor

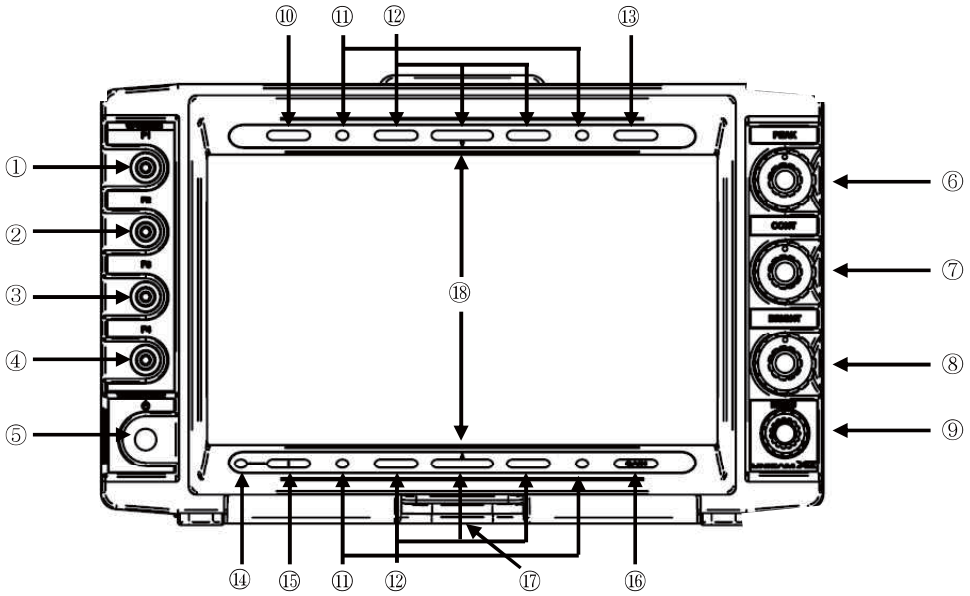
Since the product provides facilities for HD/3G-SDI input and DC input, it is possible to use the unit not only as a viewfinder but also as a VF for a jib camera or as a self-contained monitor. R/G/Y tally control is possible through the contact points of the VF cable.

(13) Peaking function

When there is some difference of the luminance signal between neighboring pixels, this function emphasizes that luminance difference (edge component).When the focusing is correct, the visibility of the image will become much better by using this function. As the decision whether the focus is correct or not is possible by confirming the image on the display, more accurate focus becomes possible. The many functions regarding this peaking operation, for example, changing the width and level of peaking and the synchronizing operation of peaking with the zoom position, are introduced into these models. This peaking function can be applied for the focusing operation in various situations.

2. Names and Functions of Parts

2-1. Front

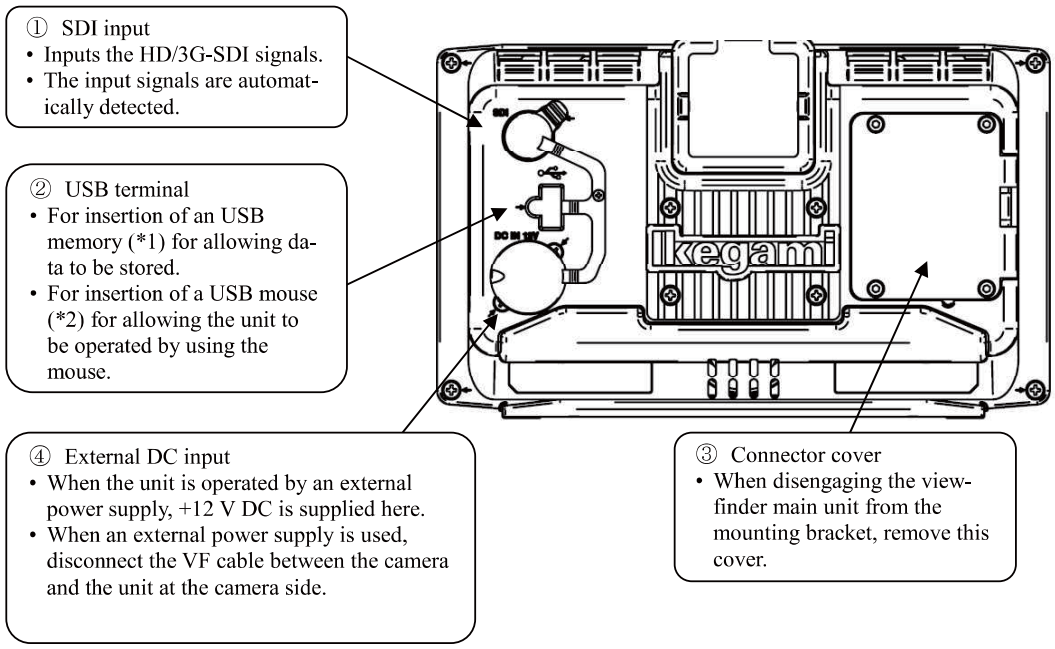


No	Name	Function
①	F1 switch/LED	Switches for functions assigned by using the Menu. The LED will light up when the assigned function is turned ON.
②	F2 switch/LED	
③	F3 switch/LED	
④	F4 switch/LED	
⑤	POWER switch/LED	Turns ON/OFF the power supply to the VF and the image display. To turn OFF the power, press it for 2 seconds and the LED will go off. When an image is displayed (green LED turned ON), press the switch and the image will go OFF (green LED blinking). Press the switch in this state again, the image will be displayed (green LED turned ON). * To prevent burn-in from occurring (VFE741D only) and the back light from deteriorating (VFL701D only), keep the image in the OFF state when you are not viewing the image.
⑥	PEAK volume	Is also used as the switch for turning peaking ON/OFF. When it is ON (LED turned ON), it is used for adjusting the edge amount of peaking.
⑦	CONT volume	Is used also as the MANUAL/PRESET selector switch for contrast. When it is set to MANUAL (LED turned ON), it is used for adjusting the contrast.
⑧	BRIGHT volume	Is used also as the MANUAL/PRESET selector switch for brightness. When it is set to MANUAL (LED turned ON), it is used for adjusting the brightness.
⑨	MENU switch	Press and hold the switch to display the MENU. Press and hold it when the MENU is displayed, and the display will go off.
⑩	EXT LED	When the lens extender is used, the LED will light up.
⑪	VF YELLOW TALLY LED	When the Y tally signal from the camera is received, the yellow LED will light up.

No	Name	Function
⑫	VF R/G TALLY LED	When the R tally signal/G tally signal from the camera is received, the red/green LED will light up. Display setting of the R/G tally can be carried out discretionally (Please see page E-18).
⑬	EFF LED	Lights up when the effect filter is used on the camera.
⑭	STATUS LED †	● Lighting: FAN alarm (indicating the FAN not working properly) Slow blinking: Battery alarm (indicating low battery level) Quick blinking: Battery shut down (the power coercively turned OFF 30 seconds later)
⑮	<!> LED	This LED is controlled by the camera. Please confirm with the camera manual regarding how to set it and more information.
⑯	GAIN LED	Lights up when GAIN setting on the camera is not zero.
⑰	Screw hole for securing the hood	Screw hole for securing the hood in place.
⑱	▼▲(Center mark)	Indicates the center of the screen as a guide.

† The FAN alarm feature is equipped for VFE741D only.

2-2. Rear



♦Precaution

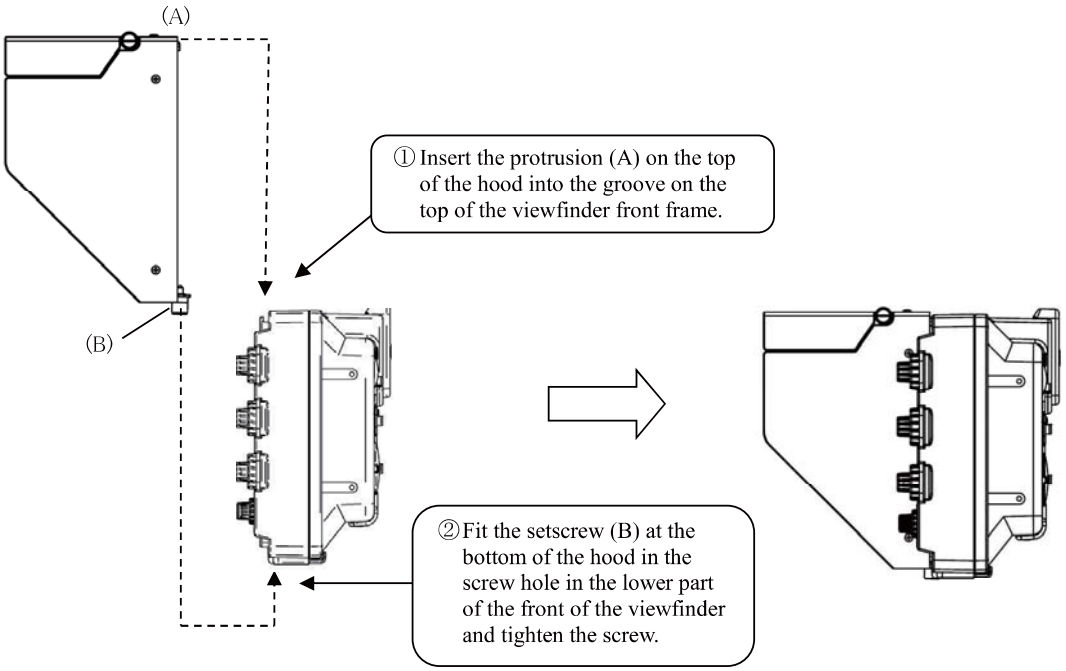
***1: USB memory**

The connector cannot accept a USB memory with the security function that requires an exclusive driver.

***2: USB mouse**

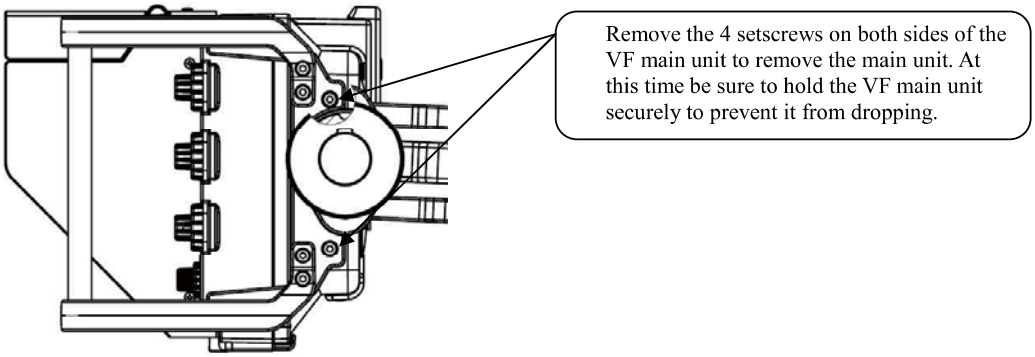
As for USB mouse to be used, the unit can accept any general-purpose mouse compliant with the HID standard incorporated in Windows, but not any mouse that requires a special exclusive driver.

2-3. How to install the hood

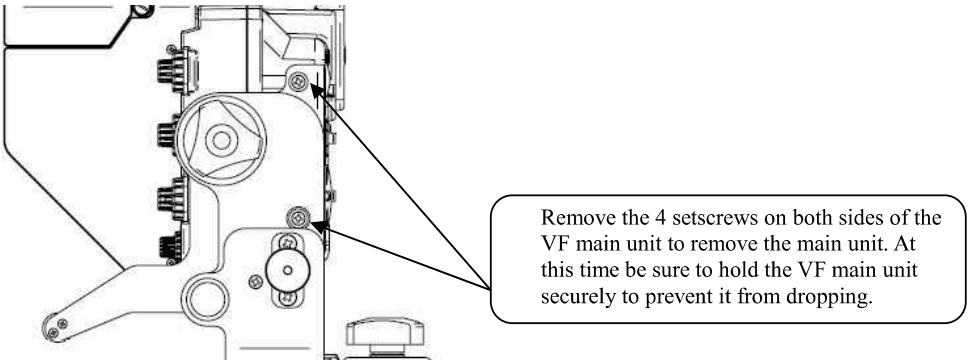


2-4. How to remove the mounting bracket

(1) How to remove the mounting bracket (XVF741D-021) of VFE741D

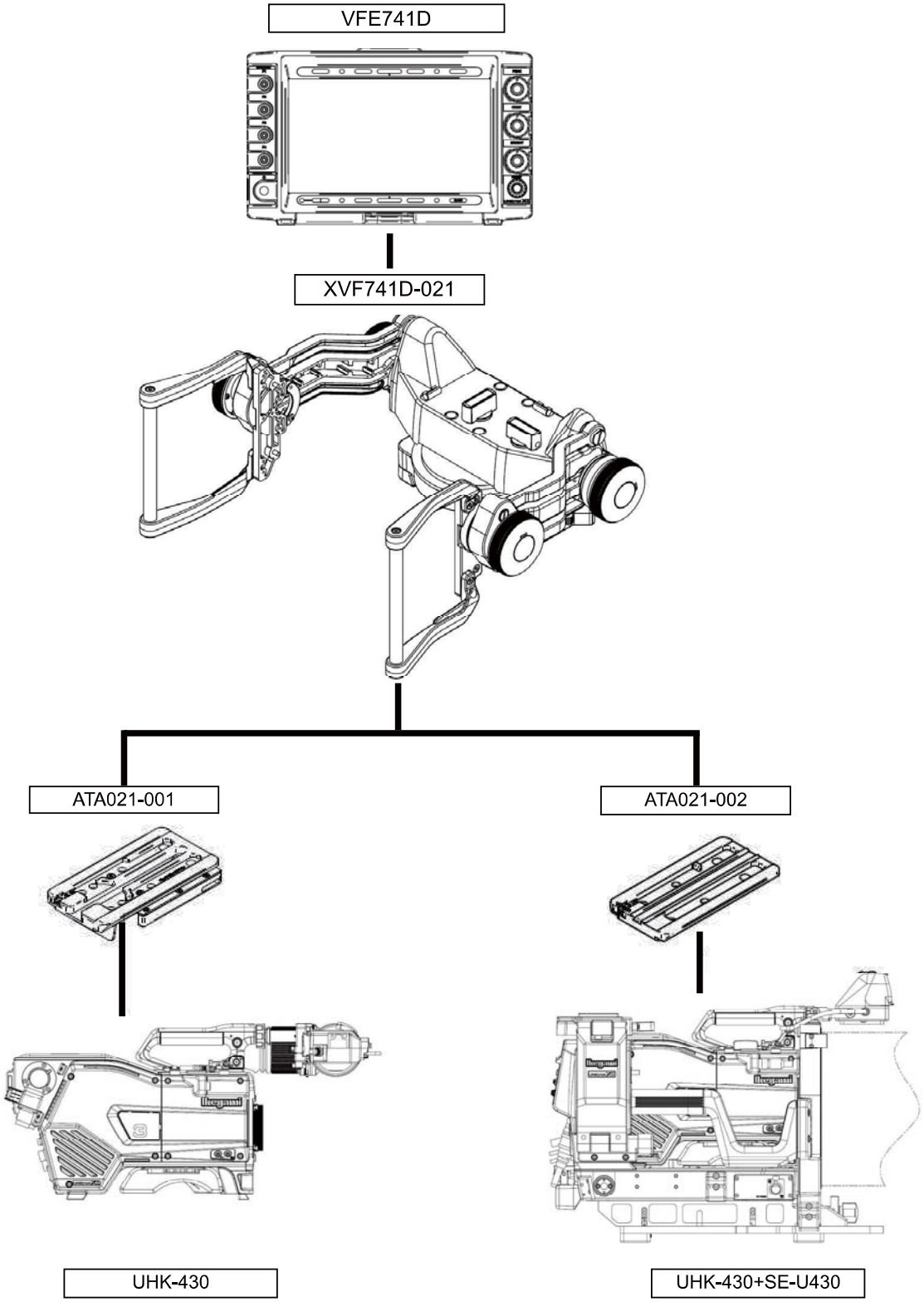


(2) How to remove the mounting bracket (XVF701D-018) of VFL701D

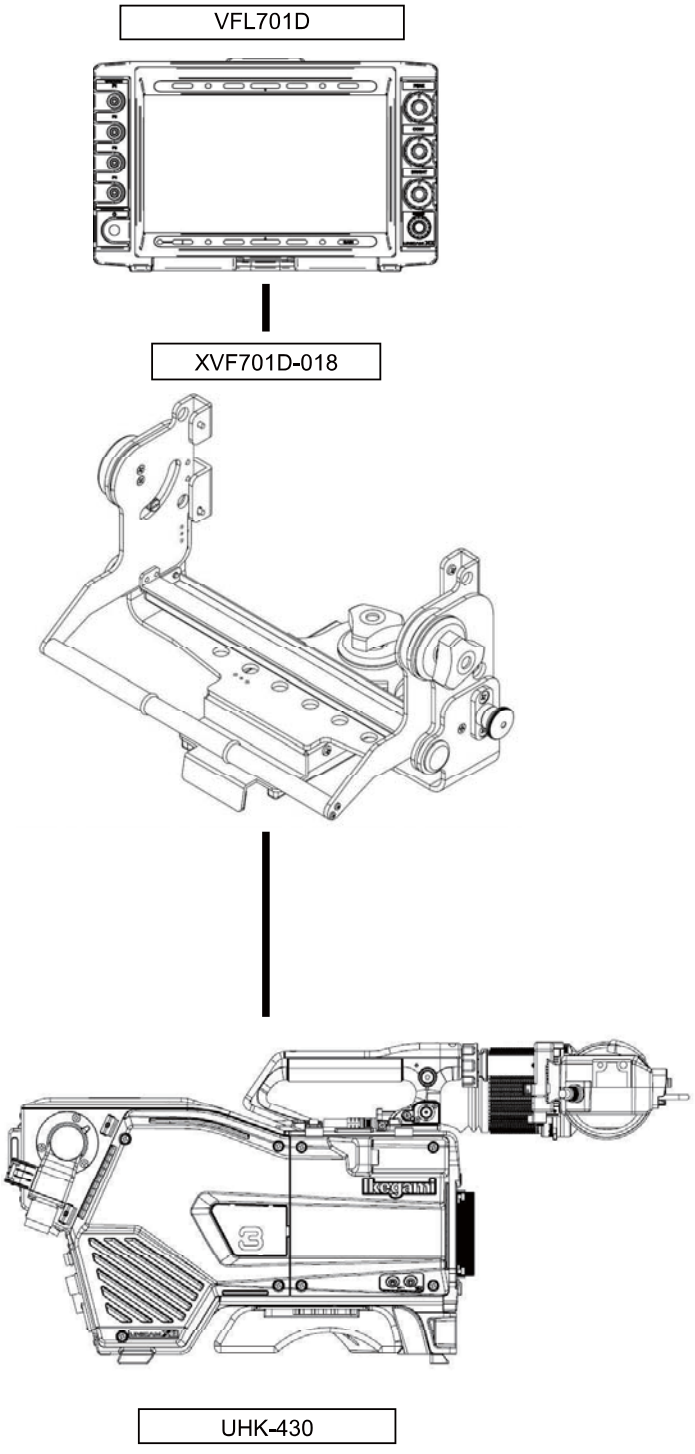


2-5. Construction of the mounting bracket

(1) Mounting bracket (XVF741D-021) for VFE741D

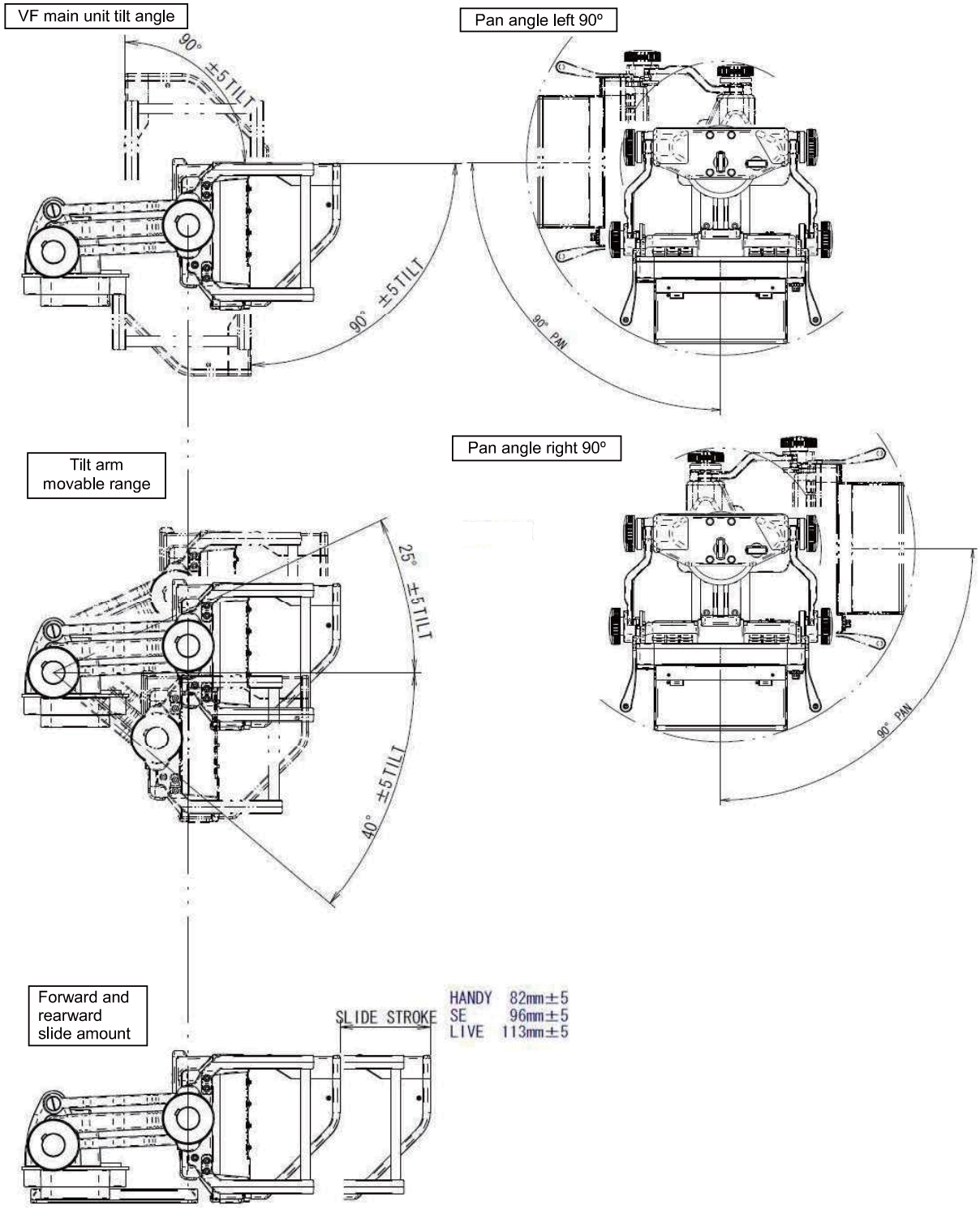


(2) Mounting bracket (XVF701D-018) for VFL701D



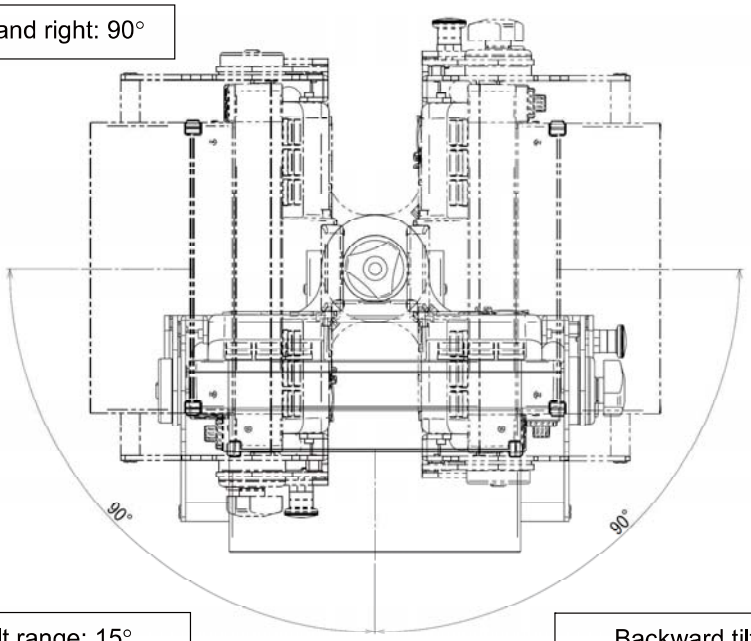
2-6. Movable range of the mounting bracket

(1) Movable range of the mounting bracket (XVF741D-021) for VFE741D

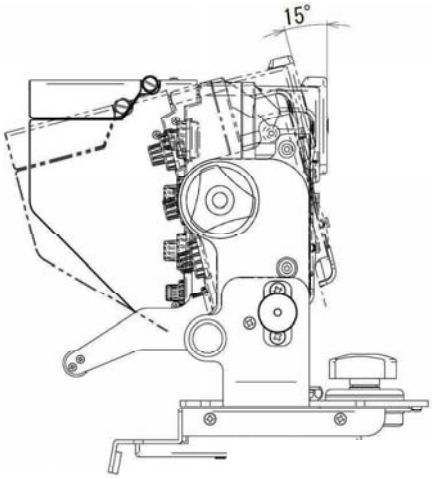


(2) Movable range of the mounting bracket (XVF701D-018) for VFL701D

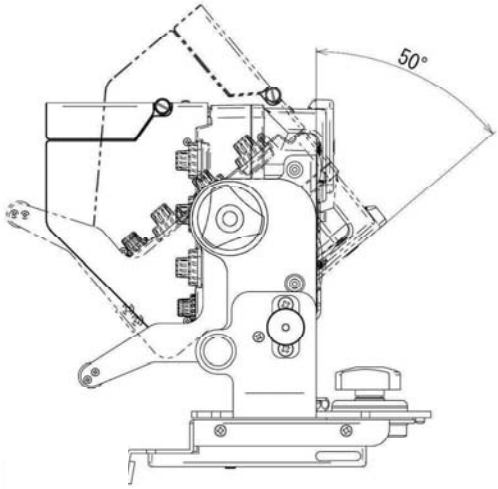
Pan angle left and right: 90°

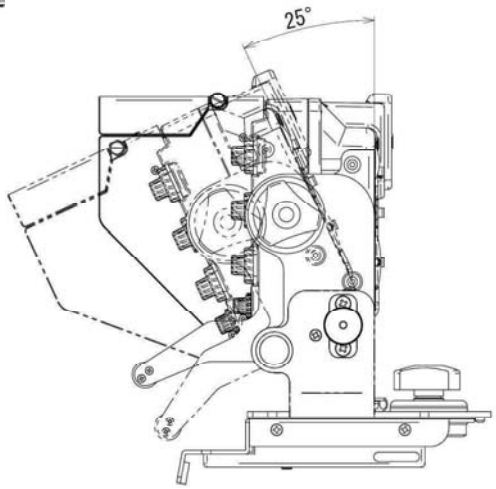


Frontward tilt range: 15°



Backward tilt range: 50°





Frontward tilt range of arm: 25°

3. Two-way communication for combination with camera

3-1. The summary of this two-way communication

To improve operation, two-way data communication with our camera is established. This permits consolidation of camera and viewfinder menu into a single menu navigated at either the camera or the viewfinder. Also better integration of control, for example, VF DTL level adapted by the zoom position of the lens.

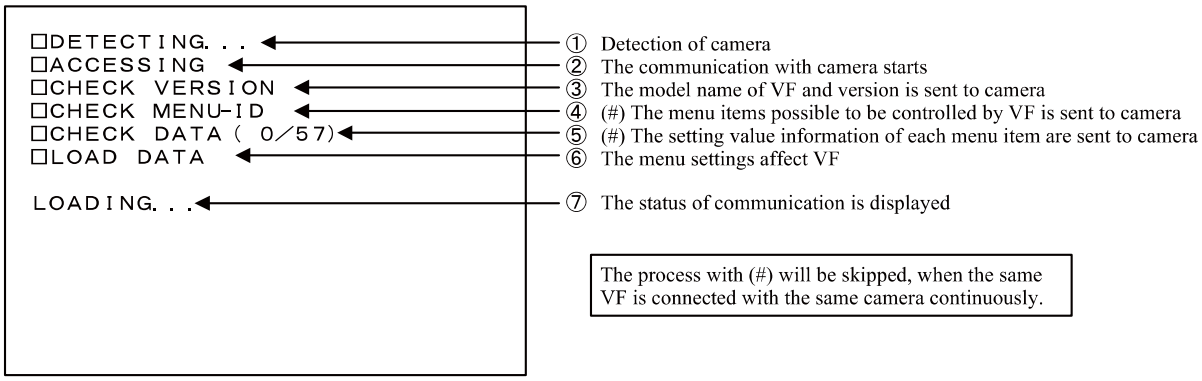
3-2. The function and combination with camera which is possible by this two-way communication

The below function and combination with camera are realized :

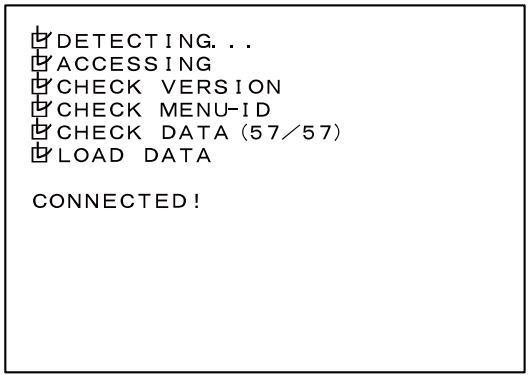
- The function for the camera setting menu (4-1. CAMERA MENU) activation and setting
- The function which drives some LEDs (EXT, EFF, GAIN, <!>) which are mounted on VF and show camera status
- The function that sends " VF model name", "version", "temperature", "FAN status" (VFE741D only) to the camera
- ZOOM INDICATOR Please confirm [4-2.(1)]
- FOCUS INDICATOR Please confirm [4-2.(1)]
- ZOOMUP PEAKING Please confirm [4-2.(4)]

3-3. The initial start up process for the two-way communication

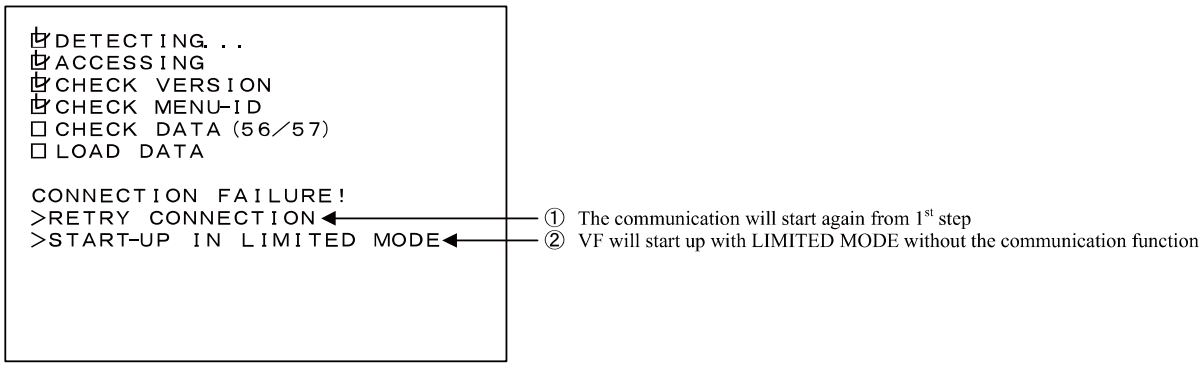
When the product is connected with our camera, the two-way communication will start automatically.



When the communication is finished correctly, the below message will be displayed and the product is operational.



When the communication is not finished correctly, the below message will be displayed:

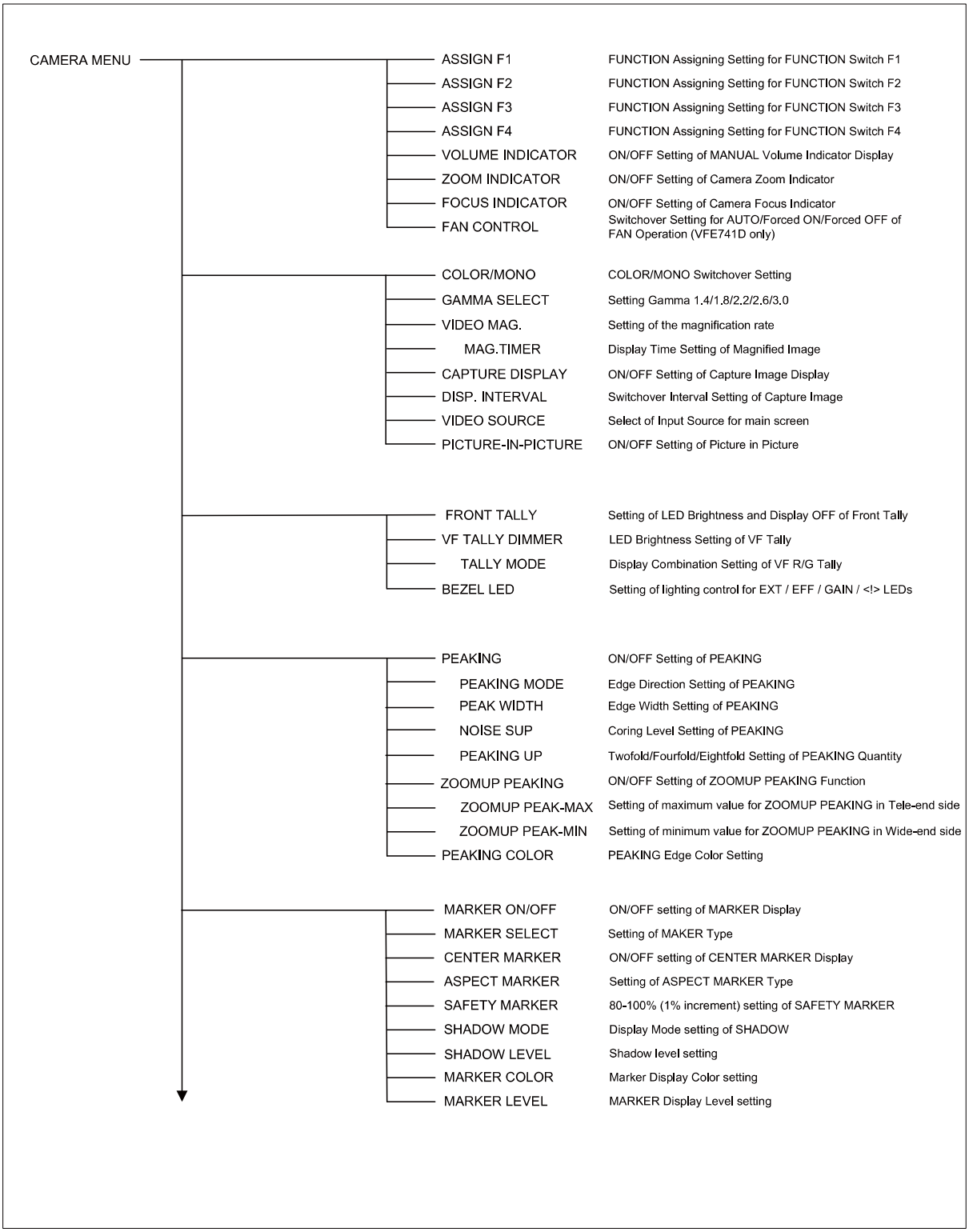


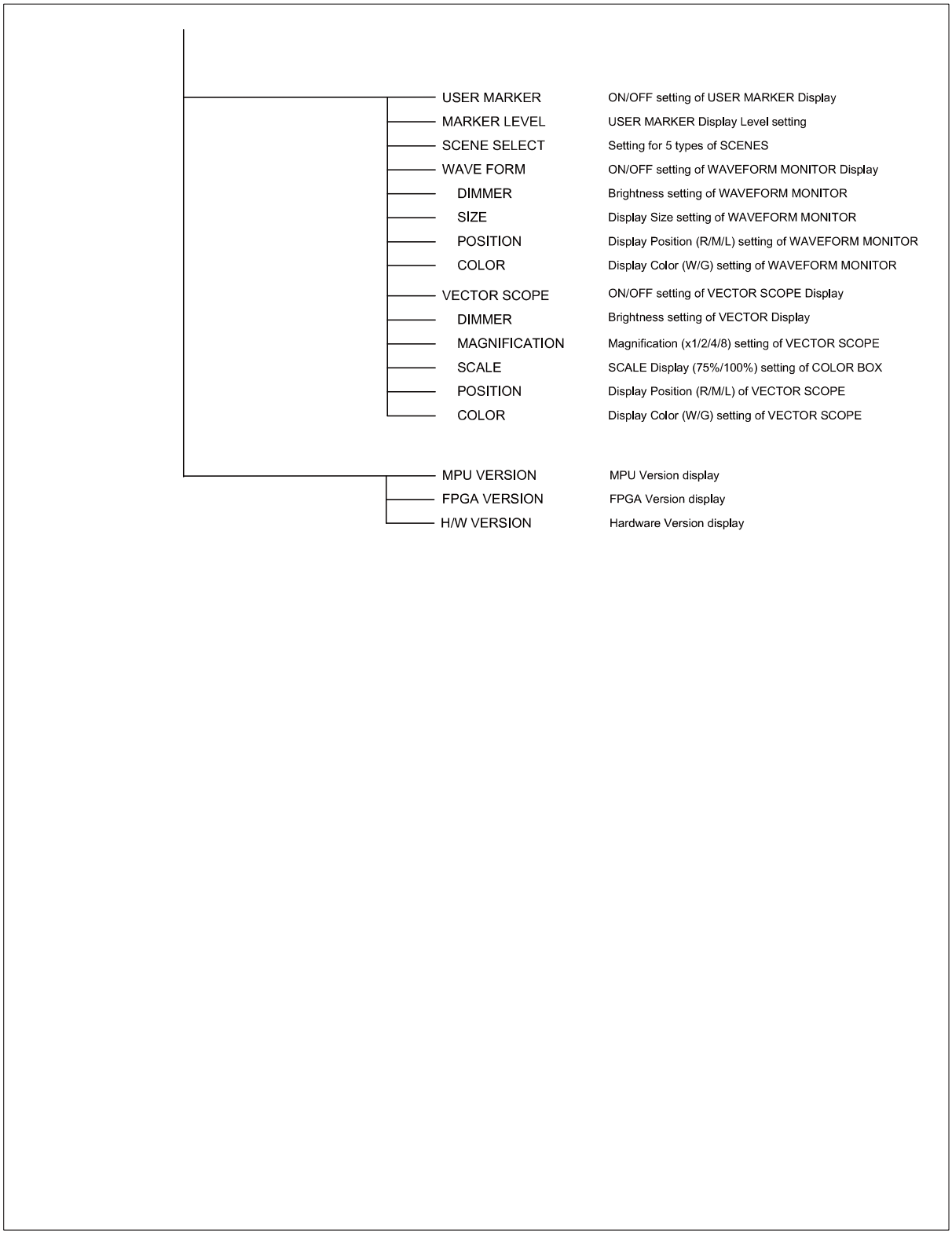
In this case, please retry the start up. Even after the retrial, when the communication can not be established correctly, please select the LIMITED MODE and start up the product. In this case, some functions and combinations are not available.

Concerning the TALLY function
The Tally function is realized by the different line from the communication one with camera. So, even when the product starts up in the LIMITED MODE, there is the possibility for you to use this TALLY function. In this case, please confirm whether the TALLY function is available or not.

4. Menu Function

4-1. Menu List (CAMERA MENU)




USER MARKER
ON/OFF setting of USER MARKER Display
MARKER LEVEL
USER MARKER Display Level setting
SCENE SELECT
Setting for 5 types of SCENES
WAVE FORM
ON/OFF setting of WAVEFORM MONITOR Display
DIMMER
Brightness setting of WAVEFORM MONITOR
SIZE
Display Size setting of WAVEFORM MONITOR
POSITION
Display Position (R/M/L) setting of WAVEFORM MONITOR
COLOR
Display Color (W/G) setting of WAVEFORM MONITOR
VECTOR SCOPE
ON/OFF setting of VECTOR SCOPE Display
DIMMER
Brightness setting of VECTOR Display
MAGNIFICATION
Magnification (x1/2/4/8) setting of VECTOR SCOPE
SCALE
SCALE Display (75%/100%) setting of COLOR BOX
POSITION
Display Position (R/M/L) of VECTOR SCOPE
COLOR
Display Color (W/G) setting of VECTOR SCOPE
MPU VERSION
MPU Version display
FPGA VERSION
FPGA Version display
H/W VERSION
Hardware Version display

4-2. Functional description of CAMERA MENU

Long pressing

♦There are some items in the CAMERA MENU (section 4.1) which will only be displayed by pressing and holding the MENU button. In this manual, only items in 4-1, which are related to the VFE741D and VFL701D, are explained. For other items refer to the manual of your camera.

(1) TOP MENU ("FUN CONTROL" function is available for VFE741D only)

Item	Default	Setting value	Explanation
ASSIGN F1	MONO	described below	FUNCTION Assigning Setting for FUNCTION Switch F1
ASSIGN F2	USRMRK	described below	FUNCTION Assigning Setting for FUNCTION Switch F2
ASSIGN F3	TALLY	described below	FUNCTION Assigning Setting for FUNCTION Switch F3
ASSIGN F4	ZMPEAK	described below	FUNCTION Assigning Setting for FUNCTION Switch F4
VOLUME INDICATOR	OFF	ON, OFF	ON/OFF Setting of MANUAL Volume Indicator Display
ZOOM INDICATOR	OFF	ON, OFF	ON/OFF Setting of Camera Zoom Indicator
FOCUS INDICATOR	OFF	ON, OFF	ON/OFF Setting of Camera Focus Indicator
FAN CONTROL	AUTO	AUTO, ON, OFF	Switchover Setting for AUTO/Forced ON/Forced OFF of FAN Operation (VFE741D only)

(1) ASSIGN F1~F2

Sets up the various functions to be assigned to Function Switches F1 to F4.

♦Items that can be set up:

- CAPTURE: Image capturing operation
- CHROMA: COLOR/MONO switchover of display
- CPTDISP: ON/OFF switchover of CAPTURE operation
- FAN: Switchover of FAN operation
- GAMMA: Switchover of GAMMA setting value
- MAG:ON/OFF switchover of Video MAG. function
- MARKER: ON/OFF switchover of marker
- MONO: COLOR/MONO switchover of display
- NOISESUP: Switchover of Coring levels
- PEAKING: ON/OFF switchover of PEAKING
- PEAKUP: Switchover of PEAKING magnification
- REVERSE: ON/OFF switchover of reversing display function
- SCENE: Switchover of individual scenes of user marker
- SDI: ON/OFF switchover of SDI input
- TALLY: OFF/LOW/HIGH setting of Front Tally
- USRMRK: ON/OFF switchover of USER MARKER display
- VSC: ON/OFF switchover of Vector Scope display
- WFM: ON/OFF switchover of WFM display
- ZMPEAK: ON/OFF switchover of ZOOMUP PEAKING

(2) VOLUME INDICATOR

Sets up ON/OFF of the manual volume indicator display. When adjusting the PEAK, CONT, or BRIGHT volume at the right of the front on the MANUAL side, the setting level is displayed by the VOLUME INDICATOR on the Display.

(3) ZOOM INDICATOR

Sets up ON/OFF of the camera zoom position indicator display.

(4) FOCUS INDICATOR

Sets up ON/OFF of the camera focus position indicator display.

(5) FAN CONTROL (VFE741D only)

Sets up the operation mode of the FAN.

- AUTO: The FAN will operate automatically on be basis of the temperature detected by the Temperature Sensor.
- ON: The FAN will be turned ON manually.
- OFF: The FAN will be turned OFF manually.

♦Precautions

- The FAN should be operated in the AUTO mode as much as possible as its temperature is controlled to prolong the service life of its built-in electrolytic capacitors and of the OLED panel.
- If the setting for forced [OFF] is to be used, it should be remembered that the unit can only be used in an environment in which the room temperature is controlled by means of an air conditioner, etc. The unit should never be operated in the [OFF] mode under the blazing sun of the summer season.

(2) VIDEO SETTING MENU

Item	Default	Setting value	Explanation
COLOR/MONO	OFF	ON, OFF	COLOR/MONO Switchover Setting
GAMMA SELECT	GAMMA2.2	GAMMA 1.4, 1.8, 2.2, 2.6, 3.0	Setting Gamma 1.4/1.8/2.2/2.6/3.0
VIDEO MAG.	x2	x2, x4, x8	Setting of the magnification rate
MAG. TIMER	OFF	OFF, 1-7 sec	Display Time Setting of Magnified Image
CAPTURE DISPLAY	OFF	ON, OFF	ON/OFF Setting of Capture Image Display
DISP. INTERVAL	1 FRAME	1, 2, 3, 5, 10, 30, 60 FRAME, HOLD	Switchover Interval Setting of Capture Image
VIDEO SOURCE	CAMERA	CAMERA, SDI	Select of Input Source for main screen
PICTUR-IN-PICTURE	OFF	OFF, ON(R), ON(L)	ON/OFF Setting of Picture in Picture

(1) COLOR/MONO

Sets up the COLOR/MONO display.

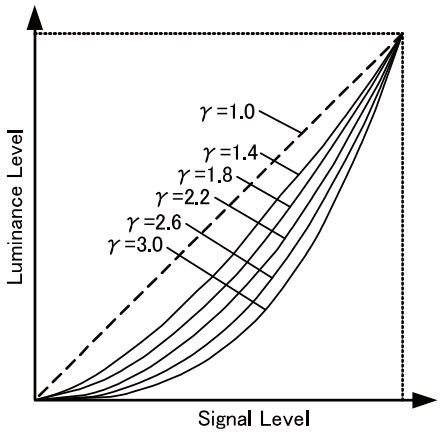
* Setting [MONO] on a FUNCTION switch will enable ON/OFF switchover of COLOR/MONO.

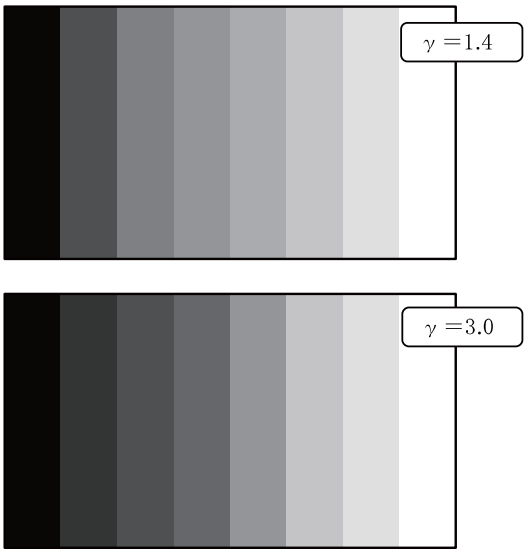
(2) GAMMA SELECT

Sets up the Gamma value.

The normal Gamma setting is "2.2" as a standard. This is a function to increase the quality of the gradation in the dark section in images by lowering the Gamma value to “1.4”.

By using this function, it becomes possible to support focusing operation while shooting a dark scene or when focusing on a dark subject.

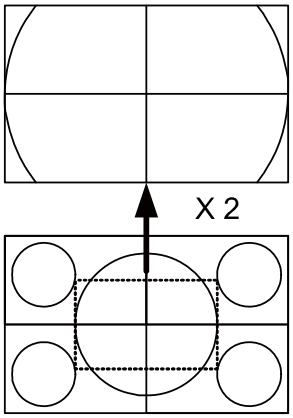




(3) VIDEO MAG. (Magnification)

Sets up the magnification rate of the image in the center area. The setting values that can be selected are x2, x4 and x8.

*Setting [MAG.] on a FUNCTION will be enable to switch over ON/OFF of the video magnification function.
(Only when [MAG] is set on one of FUNCTION switch F1~F4, switching ON/OFF of this function is enabled.)



(4) MAG. TIMER

Sets up the timer for VIDEO MAG.

The setting is made here for specifying the length of time between the point when the display is turned ON and the point when it is automatically turned OFF.

The setting value is a value between 1 and 7 seconds and OFF.

If OFF is specified, the VIDEO MAG. function will always be set to the ON status.

(5) CAPTURE DISPLAY

Sets up ON/OFF of the Screen Capture function.

In the mode set up under item (6), ON/OFF switchover of the camera image and the captured image can be performed.

No switchover operation can be performed if the format of the Captured Image and that of the Camera Image differ. Make sure that both images are of the same format before executing switchover operation.

Setting [CAPDISP] on a FUNCTION switch will enable the camera Image and the preserved captured image to operate in the mode set under item (6).

(6) DISP. INTERVAL

Sets up the switchover interval between the captured image and the camera image in frame units.

The setting values that can be selected are 1 FRAME, 2 FRAMES, 3 FRAMES, 5 FRAMES, 10 FRAMES, 30 FRAMES, 60FRAMES, and HOLD (manual switchover).

Sets up the number of FRAMES after which switchover will occur automatically in the case of the FRAME mode.

In the HOLD mode, switchover will be executed manually.

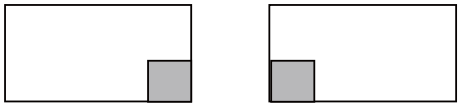
(7) VIDEO SOURCE

This function is to select Video source for the main screen.

(8) PICTURE-IN-PICTURE

Switches ON/OFF the Picture in Picture. In ON status, the setting values that can be selected are ON(R) and ON(L).

<ON(R)> <ON(L)>



(3) TALLY/LED MENU

Item	Default	Setting value	Explanation
FRONT TALLY	LOW	LOW, HIGH, OFF	Setting of LED Brightness and Display OFF of Front Tally
VF TALLY DIMMER	7	1~10	LED Brightness Setting of VF Tally
TALLY MODE	G-R-G	G-R-G, R-G-R R-R-R	Display Combination Setting of VF R/G Tally
BEZEL LED	ENABLE	ENABLE, DISABLE	Setting of lighting control for EXT / EFF / GAIN / <!> LEDs

(1) FRONT TALLY

Sets up the brightness and OFF for the Front Tally display. The setting can be made for LOW, HIGH or OFF.

* Setting [TALLY] on a FUNCTION switch will enable switching the setting to LOW, HIGH, or OFF.

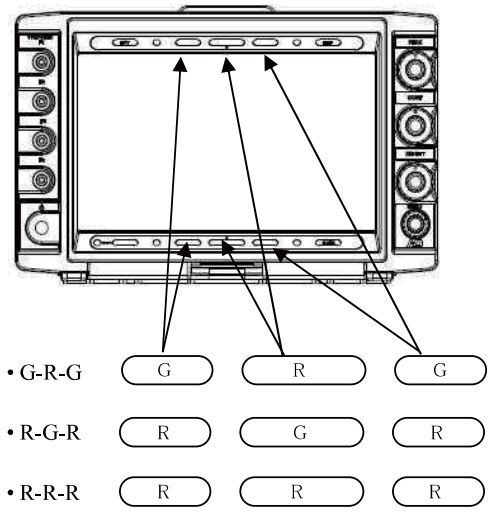
(2) VF TALLY DIMMER

Sets up the brightness of the displays of R Tally and G Tally.

The setting values that can be selected are 1~10.

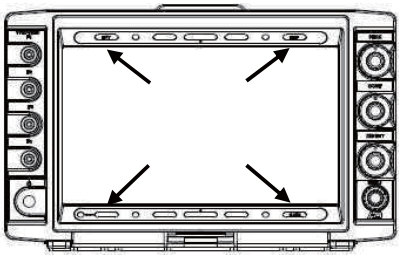
(3) TALLY MODE

Sets up the display positions of R Tally and G Tally.



(4) BEZEL LED

Sets up the lighting control of EXT / EFF / GAIN / <!> LEDs on the front bezel.



ENABLE: These LEDs' lighting is permitted.
DISABLE: These LEDs' lighting is prohibited.

(4) PEAKING MENU

Item	Default	Setting value	Explanation
PEAKING	OFF	ON, OFF	ON/OFF Setting of PEAKING
PEAKING MODE	H&V	H&V, H-ONLY	Edge Direction Setting of PEAKING
PEAK WIDTH	1	1~4	Edge Width Setting of PEAKING
NOISE SUP.	0	0~9	Coring Level Setting of PEAKING
PEAKING UP	X1(OFF)	X1(OFF), X2, X4, X8	Twofold/Fourfold/Eightfold Setting of PEAKING Quantity
ZOOMUP PEAKING	OFF	ON, OFF	ON/OFF Setting of ZOOMUP PEAKING Function
ZOOMUP PEAK-MAX	100	MIN~100 (1 step)	Setting of maximum value for ZOOMUP PEAKING in Tele-end side
ZOOMUP PEAK-MIN	0	0~MAX (1 step)	Setting of minimum value for ZOOMUP PEAKING in Wide-end side
PEAKING COLOR	White	White, Yellow, Green, Red, Blue	PEAKING Edge Color Setting

(1) PEAKING

Sets up ON/OFF of Peaking.

The operation is interlocked with the ON/OFF switch of PEAK Volume at the Front.

(2) PEAKING MODE

This sets the direction of the Peaking edge.
H&V: The Peaking edges are added to both the horizontal and vertical direction.
H-ONLY: The Peaking edges are added to the horizontal direction only.
When the setting is "H&V", peaking edge flicker may be found in moving pictures. In this case, this phenomenon will be improved by changing the setting to "H-ONLY".

(3) PEAK WIDTH

Sets up the edge width of Peaking when Peaking is ON.

The setting value is a value between 1 (thin) and 4 (thick).

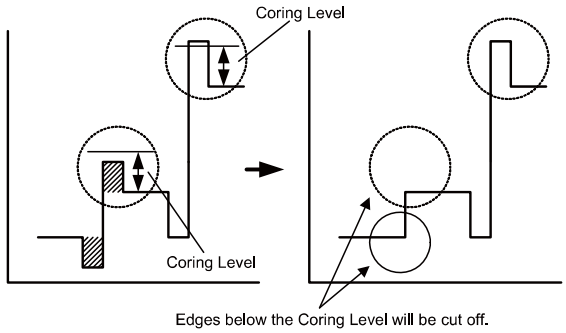
(4) NOISE SUP (NOISE SUPPRESS)

Sets up the Coring Level of Peaking when Peaking is ON.

This is a function for cutting off the weak edges below a specified threshold value in the edge elements of images. In other words, this function eliminates the edge elements attached to the noise elements in images, allowing a clearer peaking to be realized.

It should be remembered, however, that some weak elements normally attached to the image elements will also be cut off.

*Setting [CORING] on a FUNCTION switch will enable switching of the Coring Level between 0 and 9.



(5) PEAKING UP

When Peaking is ON, sets up the magnification of the Peaking Level according to the differences in brightness.

By increasing the magnification, it will become easier for peaking to attach to those portions that are difficult for edges to attach because of a small difference in brightness.

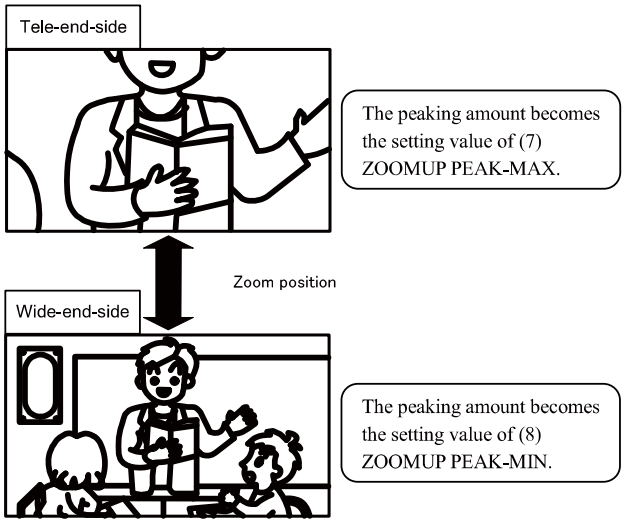
In this case, however, peaking will attach even to the noise elements in the image. Therefore, a clear peaking can be realized by using this feature in conjunction with the preceding feature described under (4) NOISE SUP.

The setting values that can be selected are OFF (×1), ×2, ×4, and ×8.

*Setting [PEAKUP] on a FUNCTION switch will enable switching of the Peaking Magnification.

(6) ZOOMUP PEAKING

When Peaking is ON, the ON/OFF setting for the function of varying the Peaking amount in conjunction with the zoom position of the camera is carried out here.



*Setting [ZM-PEAK] on a FUNCTION switch will enable ON/OFF switchover of ZOOMUP PEAKING.

♦Precautions

- This function allows the Peaking amount to be corrected automatically in conjunction with the Zoom position of the camera. This means that the operation of the PEAKING volume on the Front is not effective even when the volume is ON. Please note that this is not a malfunction.
- This feature is effective only for the cameras that supply Zoom Control to the VF side.

(7) ZOOMUP PEAK-MAX

When ZOOMUP PEAKING is ON, you can set the value of the peaking amount in the Tele-end side from the setting value in (8) to 100.

(8) ZOOMUP PEAK-MIN

When ZOOMUP PEAKING is ON, you can set the value of the peaking amount in Wide-end side from 0 to the setting value in (7).

(9) PEAKING COLOR

The color for peaking can be selected among White, Yellow, Green, Red and Blue.

(5) MARKER MENU

Item	Default	Setting value	Explanation
MARKER ON/OFF	OFF	ON, OFF	ON/OFF setting of MARKER Display
MARKER SELECT	SAFETY	described below	Setting of MAKER Type
CENTER MARKER	OFF	OFF, TYPE-A, B	ON/OFF setting of CENTER MARKER Display
ASPECT MARKER	4:3	4:3, 13:9, 14:9, 15:9	Setting of ASPECT MARKER Type
SAFETY MARKER	80%	80~100%	80-100% (1% increment) setting of SAFETY MARKER
SHADOW MODE	OFF	OFF, SHADOW, MRK+SHD	Display Mode setting of SHADOW
SHADOW LEVEL	60%	60, 40, 20%	Shadow level setting
MARKER COLOR	White	white, yellow, cyan, green, magenta, red and blue	Marker Display Color setting
MARKER LEVEL	60%	20, 40, 60, 80, 100%	MARKER Display Level setting

(1) MARKER ON/OFF

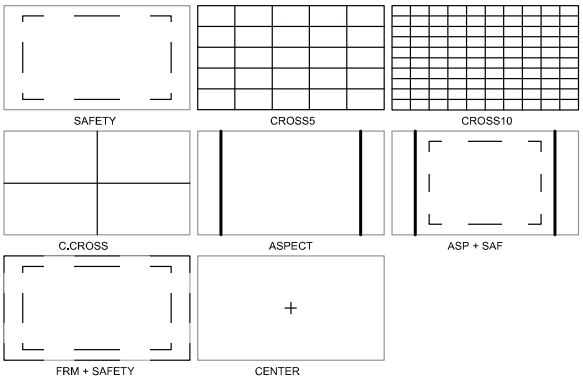
Sets up ON/OFF of the Maker Display.

* Setting [MARKER] on a FUNCTION switch will enable ON/OFF switchover of MARKER.

(2) MARKER SELECT

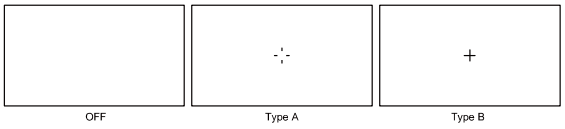
Switches over the Marker to be displayed.

The setting values that can be selected are SAFETY, CROSS5, CROSS10, C.CROSS, ASPECT, ASP+SAF, FRM＋SAFE, and CENTER.



(3) CENTER MARKER

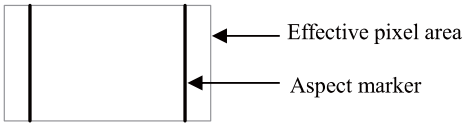
Turns ON/OFF the Center Marker display.



(4) ASPECT MARKER

Switches over the Aspect of the Aspect Marker.

The setting values that can be selected are 4:3, 13:9, 14:9, and 15:9.

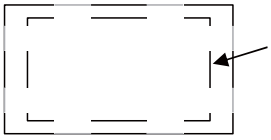


(5) SAFETY MARKER

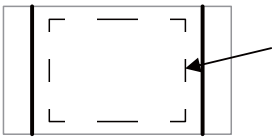
Switches the Safety Area of the Safety Marker.

The setting values that can be selected are between 80% and 100% (set at 1% increments).

<In the case of SAFETY MARKER Display>



<In the case of SHADOW display>



(6) SHADOW MODE

Switches the Display mode of the Aspect Marker.

The setting values that can be selected are OFF, SHADOW, and MRK+SHD.

(7) SHADOW LEVEL

Switches the Shadow Level of the Aspect Marker.

The setting values that can be selected are 0% (black), 20%, 40% and 60%.

(8) MARKER COLOR

Sets up the Marker Color.

The feature is in common with Aspect Marker, Safety Marker, Cross-hatching Marker, and Center Marker.

The setting values that can be selected are White, Yellow, Cyan, Green, Magenta, Red and Blue

(9) MARKER LEVEL

Switches the brightness level of Markers.

The setting values that can be selected are 20%, 40%, 60% 80% and 100%.

To prevent burn-in from occurring, it is recommended that the unit should be used at a low brightness level as much as possible (VFE741D only).

(6) USER MARKER MENU

Item	Default	Setting value	Explanation
USER MARKER	OFF	OFF, ON	ON/OFF setting of USER MARKER Display
MARKER LEVEL	60%	20, 40, 60, 80, 100%	USER MARKER Display Level setting
SCENE SELECT	SCENE1	SCENE1~SCENE5	Setting for 5 types of SCENES

(1) USER MARKER

Sets up ON/OFF of the USER MARKER display.

- Setting [USRMRK] on a FUNCTION switch will enable ON/OFF switchover of USER MARKER.

(2) MARKER LEVEL

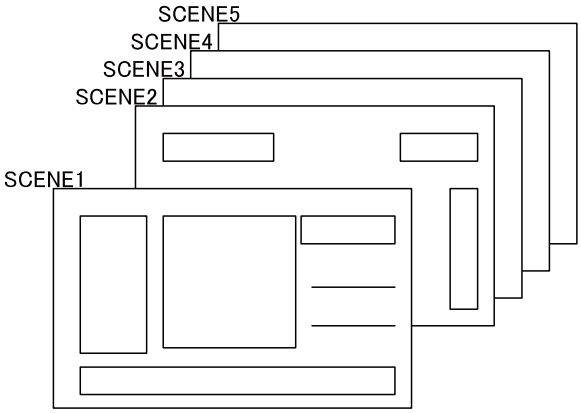
Sets up the brightness level of USER MARKER.
The setting values that can be selected are 20%, 40%, 60%, 80% and 100%.

♦Precautions (VFE741D only)

- As a Marker is of a fixed pattern, using a Marker at a level of 80% or more for a long time may cause a burn-in failure to occur. Accordingly, it is recommended that the Marker should be turned OFF when it is not in use, or that the Marker Level should be maintained low.

(3) SCENE SELECT

Sets up the USER MARKER to be displayed from among SCENE1 through 5.



*Setting [SCENE] on a FUNCTION switch will enable switchover of individual SCENES of the USER MARKER.

(7) WFM/VSC MENU

Item	Default	Setting value	Explanation
WAVE FORM	OFF	ON, OFF	ON/OFF setting of WAVEFORM MONITOR Display
DIMMER	MID	LOW, MID, HIGH	Brightness setting of WAVEFORM MONITOR
SIZE	NORMAL	NORMAL, SMALL	Display Size setting of WAVEFORM MONITOR
POSITION	RIGHT	RIGHT, CENTER, LEFT	Display Position setting of WAVEFORM MONITOR
COLOR	WHITE	WHITE, GREEN	Display Color (W/G) setting of WAVEFORM MONITOR
VECTOR SCOPE	OFF	ON, OFF	ON/OFF setting of VECTOR SCOPE Display
DIMMER	MID	LOW, MID, HIGH	Brightness setting of VECTOR Display
MAGNIFICATION	X1	X1, X2, X4, X8	Magnification (x1/2/4/8) setting of VECTOR SCOPE
SCALE	100%	75%, 100%	SCALE Display (75%/100%) setting of COLOR BOX
POSITION	RIGHT	RIGHT, CENTER, LEFT	Display Position (R/M/L) of VECTOR SCOPE
COLOR	WHITE	WHITE, GREEN	Display Color (W/G) setting of VECTOR SCOPE

(1) WAVE FORM

Sets up ON/OFF of the Wave Form Monitor.

*Setting [MARKER] on a FUNCTION switch will enable ON/OFF switchover of the WFM display.

(2) DIMMER

Adjusts the brightness of wave form.

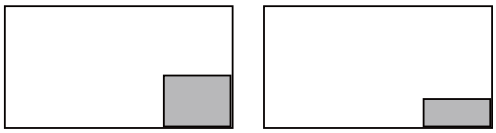
The setting values that can be selected are HIGH, MID, and LOW.

(3) SIZE

Adjusts the size of the Wave Form Monitor.

The setting values that can be selected are NORMAL, and SMALL

<NORMAL> <SMALL>

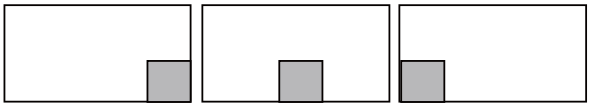


(4) POSITION

Sets up the display Position of the Wave Form Monitor.

The setting values that can be selected are RIGHT, CENTER, and LEFT.

<RIGHT> <CENTER> <LEFT>



(5) COLOR

Sets up the Color of the Wave Form Monitor.

The setting values that can be selected are WHITE and GREEN.

(6) VECTOR SCOPE

Turns ON/OFF the Vector Scope.

*Setting [VSC] on a FUNCTION switch will enable ON/OFF switchover of the Vector Scope display.

(7) DIMMER

Adjusts the brightness of the Vector Scope.

The setting values that can be selected are HIGH, MID, and LOW.

(8) MAGNIFICATION

Sets up the Display Magnification of the Vector Scope.

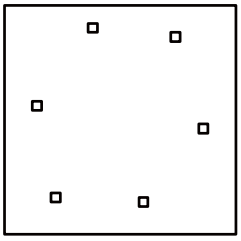
The setting values that can be selected are X1, X2, X4, and X8.

(9) SCALE

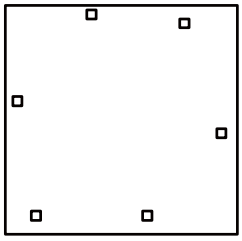
Switches the COLOR BOXES of the Vector Scope.

The setting values that can be selected are 100% and 75%.

Specify 75% for the 75% color-bar signal and 100% for the 100% color-bar signal.



75%SCALE

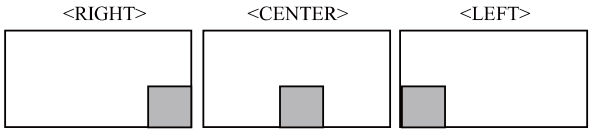


100%SCALE

(10) POSITION

Set up the display Position of the Vector Scope.

The setting values that can be selected are RIGHT, CENTER, and LEFT.



(11) COLOR

Specifies the Color of the Vector Scope.

The setting values that can be selected are WHITE and GREEN.

♦Precaution (VFE741D only)

The WFM display and the Vector Scope display are of fixed patterns. Therefore, using these displays for a long time may cause a burn-in to occur. Accordingly, it is recommended that these displays should be turned OFF when they are not in use, or that their use should be limited as much as possible.

(8) INFO/UPDATE MENU

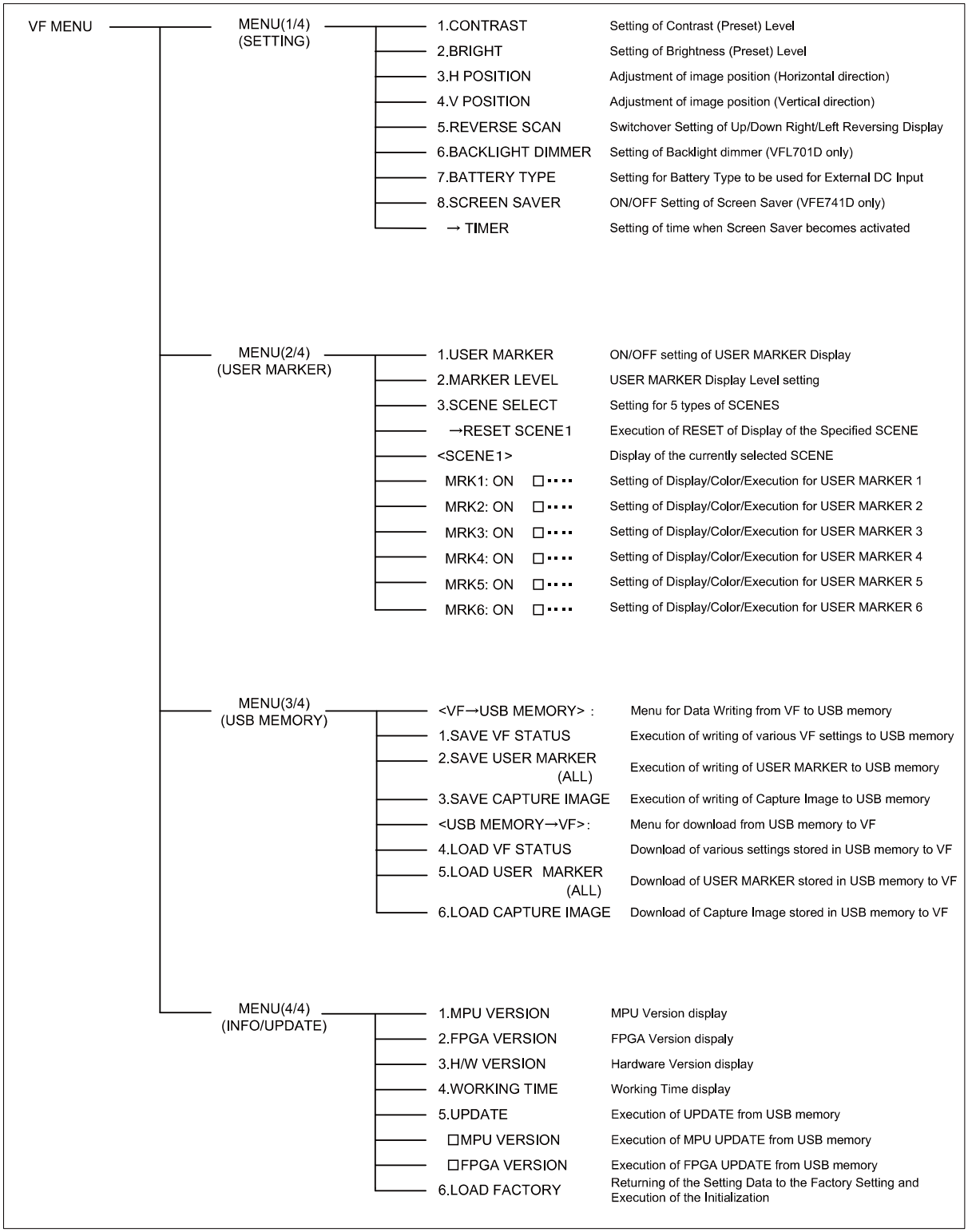
Item	Default	Setting value	Explanation
MPU VERSION	–	–	MPU Version display
FPGA VERSION	–	–	FPGA Version display
H/W VERSION	–	–	Hardware Version display

(1) MPU VERSION
Displays the MPU version.

(2) FPGA VERSION
Displays the FPGA version.

(3) H/W VERSION
Displays the hardware version.

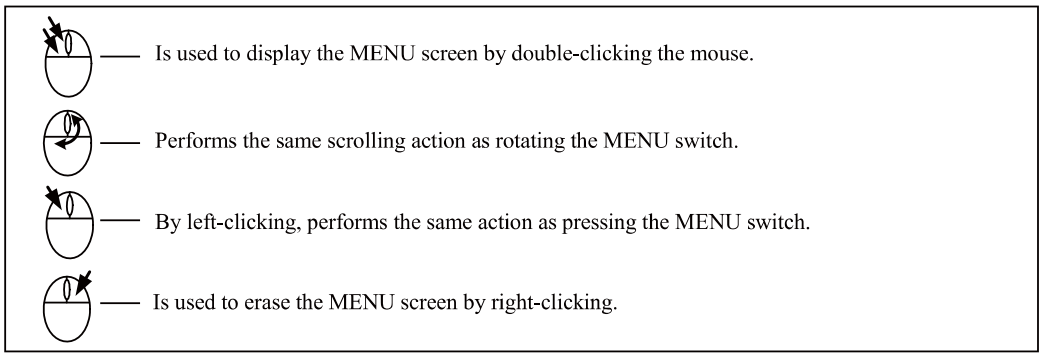
4-3. Menu List (VF MENU)



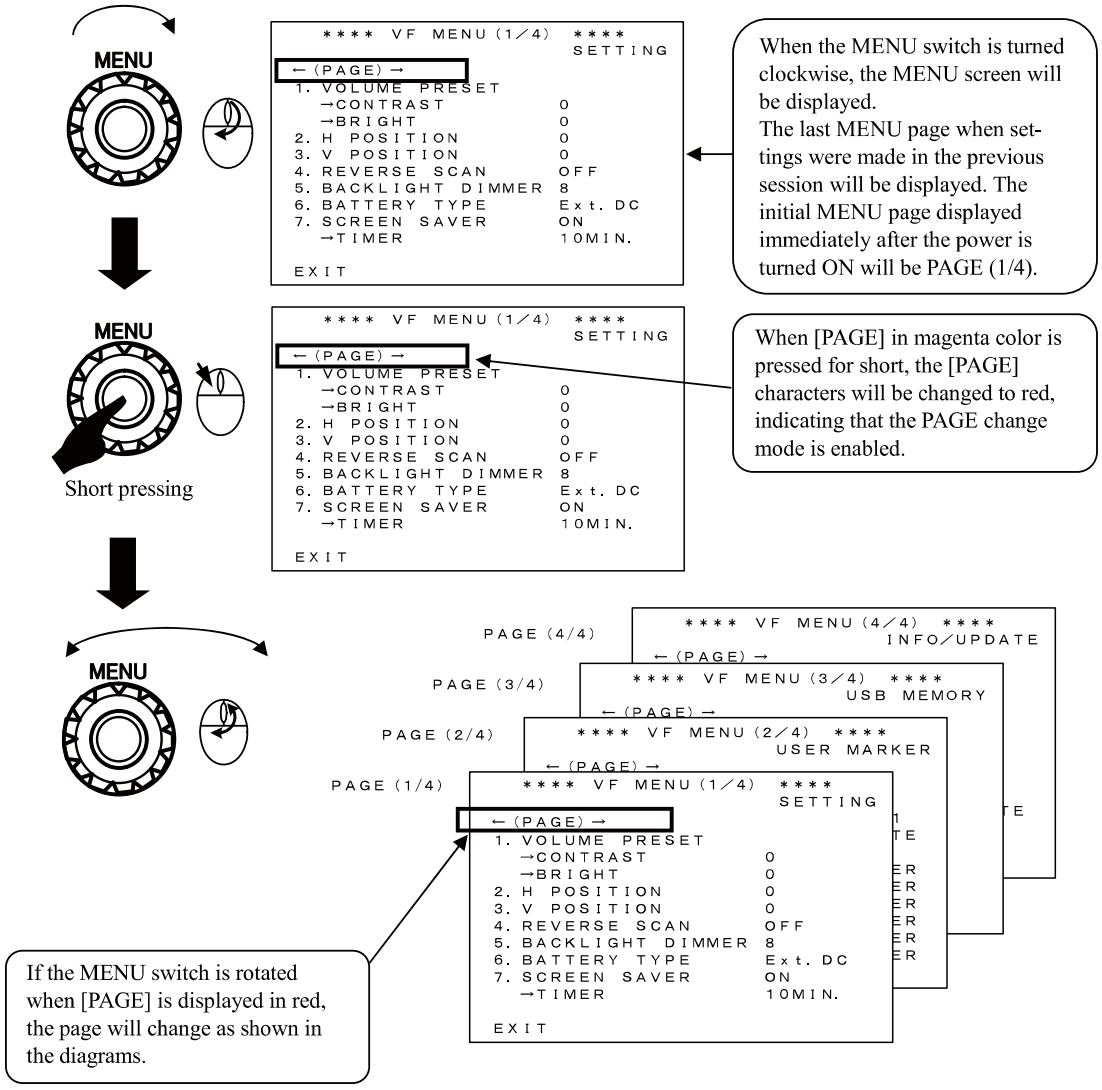
4-4. How to operate and the functional descriptions of menus (VF MENU)

◆ **Basic operations of the menu switch**

The MENU operation can be performed also by using a USB mouse in addition to the MENU switches. The diagram below shows the mouse operations described in this document.

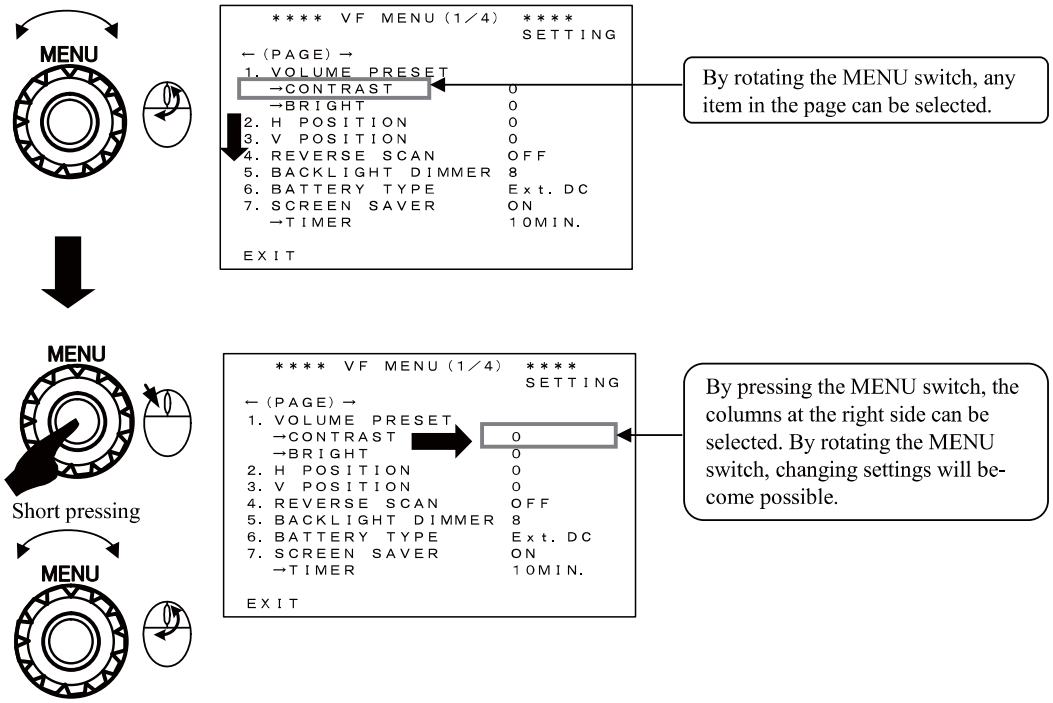


① Changing MENU pages



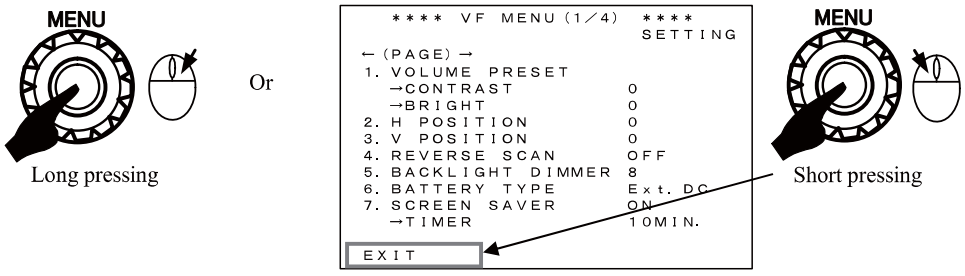
② Setting the MENU

When characters of [PAGE] are displayed in red after the MENU screen display has started, pressing the MENU switch will cause the color of [PAGE] to turn to magenta. This indicates that the setting mode within the page is enabled, permitting changes to be made.



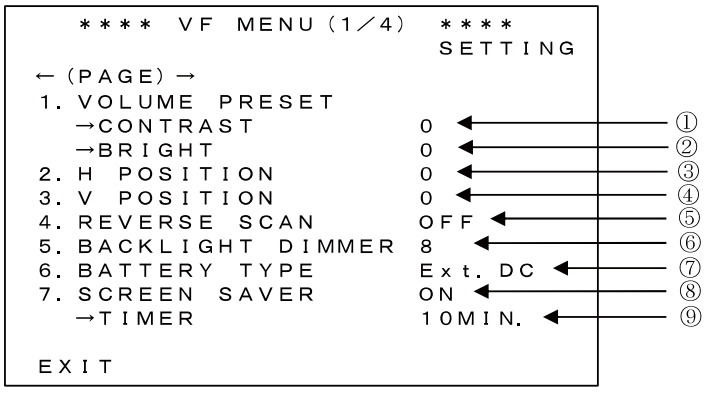
③ Turning OFF the MENU screen

To erase the MENU, press and hold the MENU switch or press [EXIT].



(#) While a User Marker is being drawn, describing the User Marker can be performed.

(1) MENU (1/4): SETTING



① CONTRAST

Sets up the Contrast PRESET value (when LED of the CONT volume is OFF).

The setting value is a value between -10 and +10.

The default value is “0”.

② BRIGHT

Sets up the Brightness PRESET value (when LED of the (BRIGHT volume is OFF).

The setting value is a value between -10 and +10.

The default value is “0”.

③ H POSITION

Sets up the adjustment of the image position for horizontal direction. The setting value is a value between -10 and +10.

④ V POSITION

Sets up the adjustment of the image position for vertical direction. The setting value is a value between -10 and +10.

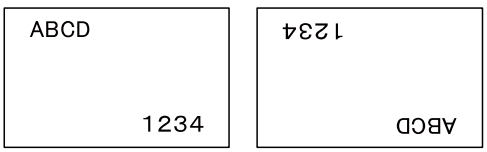
⑤ REVERSE SCAN

Sets up the Image Reversing Display function (rotation by 180º).

The setting value that can be selected is OFF or ON.

The default value is “OFF”.

<OFF state> <ON state>



⑥ BACKLIGHT DIMMER (VFL701D only)

Sets up the back light dimmer value. The setting value is a value between 1 and 10.

The default value is “8”.

⑦ BATTERY TYPE

In battery usage for the power supply, for appropriate settings of the warning display voltage and discharge termination voltage of the battery, be sure to set up the mode corresponding to the nominal voltage of the battery being employed.

The setting values that can be selected are Ext. DC, DC +13.2V and DC +12V.

- Ext. DC: Stable DC power supply
- DC+13.2V: Battery with a nominal voltage of +13.2V
- DC+12V: Battery with a nominal voltage of +12V

For the nominal voltage of a battery, see the indication on the battery main unit or the Instruction Manual of the battery.

The default value is “Ext. DC”.

⑧ SCREEN SAVER (VFE741D only)

As in the case of CRT, the OLED panel is a self-light emitting device. Therefore, if a highly luminous image is displayed on the panel for a long time, the service life of the pixels will advance only in the bright image section, possibly causing a burn-in to occur.

In order to avoid this kind of situation, a screen saver function is implemented.

This menu sets up the SCREEN SAVER function. The setting value that can be selected is ON or OFF.

The default value is “OFF”

⑨ TIMER (VFE741D only)

When the setting of ⑧ is ON, the time when the SCREEN SAVER function becomes active can be set here.

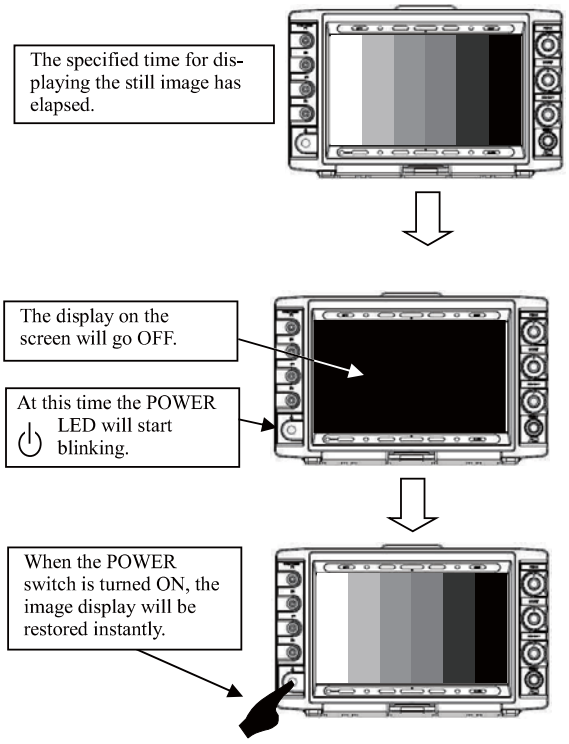
After the specified time has elapsed, the continuous display of the same image on the panel screen will cause the panel to be turned OFF. At this time, the POWER LED will be in the blinking state.

If the POWER switch is pressed when the POWER LED is blinking, the Screen Saver function will be cleared.

The setting values that can be selected are 5MIN, 10MIN, 15MIN, 30MIN and 60MIN.

The default value is “10MIN”.

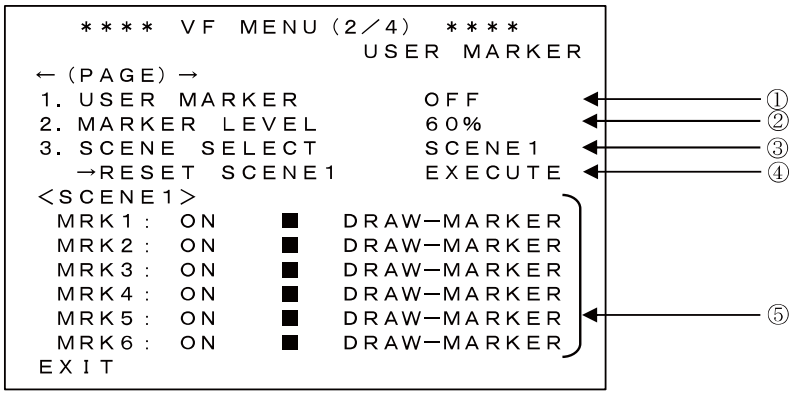
♦Operation of the Screen Saver



♦Operation for resetting the Screen Saver

- The Screen Saver will not operate when the R/G/Y tally is lit.
- The timer for activating the Screen Saver will be reset while the front switch or a volume is operated or when a control is received from the Camera.

(2) VF MENU (2/4): USER MARKER



① USER MARKER

Sets up ON/OFF of the USER MARKER display.

- Setting [USRMRK] on a FUNCTION switch will enable ON/OFF switchover of USER MARKER.

② MARKER LEVEL

Sets up the brightness level of USER MARKER.

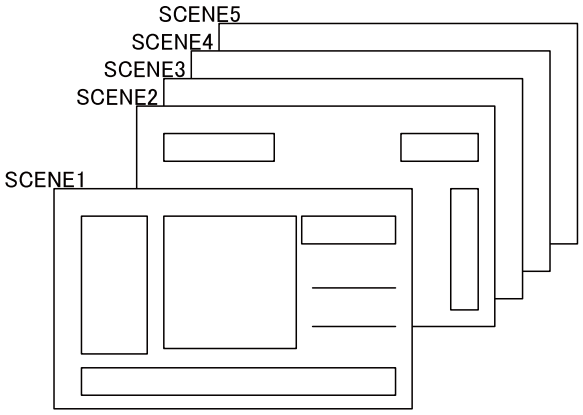
The setting values that can be selected are 20%, 40%, 60%, 80% and 100%.

◆Precautions (VFE741D only)

- As a Marker is of a fixed pattern, using a Marker at a level of 80% or more for a long time may cause a burn-in to occur. Accordingly, it is recommended that the Marker should be turned OFF when it is not in use, or that the Marker Level should be maintained low.

③ SCENE SELECT

Sets up the USER MARKER to be displayed from among SCENE1 through 5.



- Setting [SCENE] on a FUNCTION switch will enable switchover of individual SCENES of the USER MARKER.

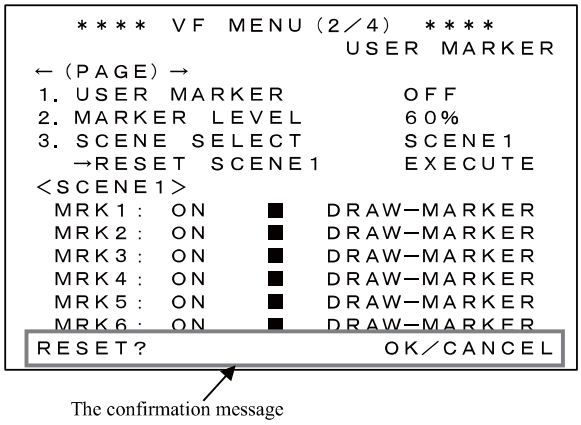
④ RESET SCENE DATA

Erases the USER MARKERS being drawn by individual SCENES.

First, select the SCENE to be erased according to item 3. Then press the MENU switch at [RESET SCENE DATA.]

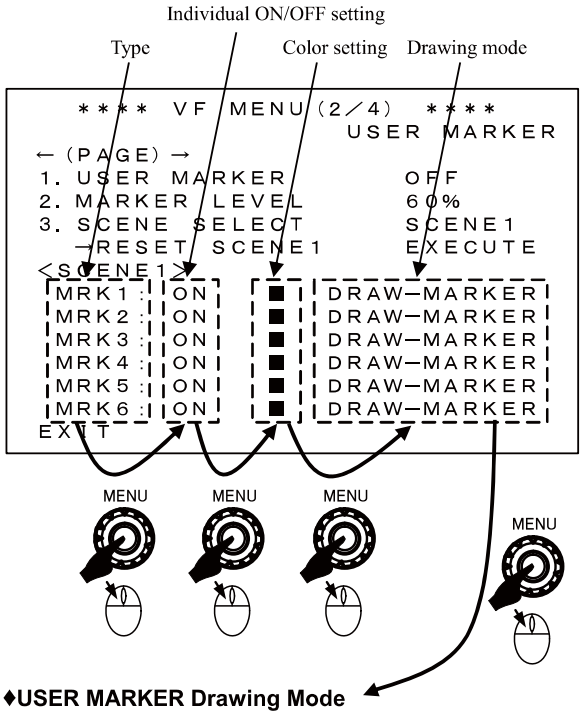
At this time, a confirmation message will be displayed at the next MENU to check if it is all right to erase the selected SNENE.

By selecting OK at this time and pressing the MENU switch, the erasure of the drawing will be executed.



⑤ MARKER1～6

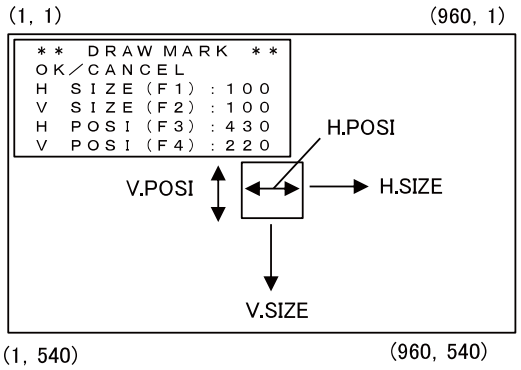
In a single scene, 6 types of User Marker can be set for making individual ON/OFF settings, display color settings (for white, yellow, cyan, green, red, and blue), and the setting for drawing.



♦USER MARKER Drawing Mode

The USER MARKER drawing mode is enabled and drawing actions are performed.

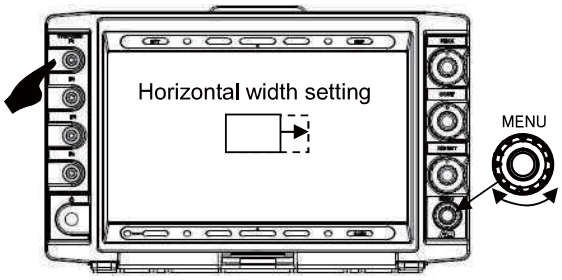
Numbers indicate coordinates of pixels in 960x540 (VFE741D) or 1920x1080 (VFL701D).



• **Drawing for [H.SIZE]**

Horizontal width of a BOX or a LINE can be altered.

In the drawing mode, pressing the F1 switch will switch the mode to the [H.SIZE] setting. The horizontal width of a BOX or a line can be altered by rotating the MENU switch while pressing the F1 switch in increments of 10 pixels (VFE741D) or 20 pixels (VFL701D).

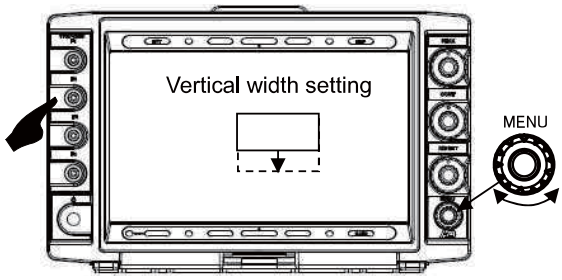


• **Drawing for [V.SIZE]**

Vertical width of a BOX or a LINE can be altered.

If the width is set to 1, a horizontal line will be drawn.

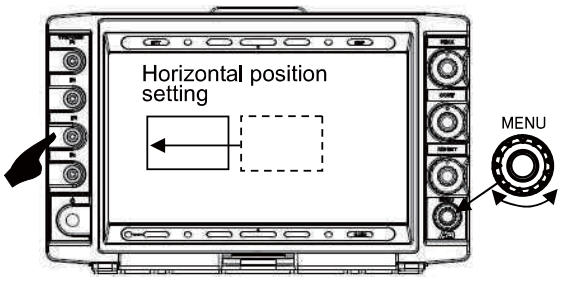
In the drawing mode, pressing the F2 switch will switch the mode to the [V.SIZE] setting. The vertical width of a BOX or a line can be altered by rotating the MENU switch while pressing the F2 switch in increments of 10 pixels (VFE741D) or 20 pixels (VFL701D).



▪ Drawing for [H.POSI]

A BOX or LINE can be moved in the horizontal direction.

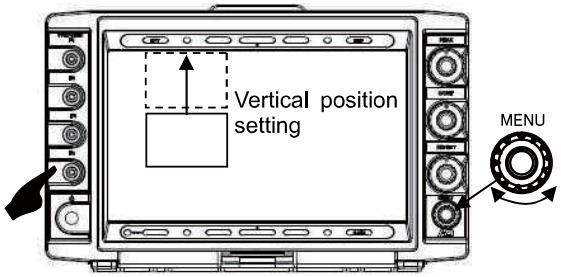
In the drawing mode, pressing the F3 switch will switch the mode to the [H.POSI] setting. The horizontal position of a BOX or a LINE can be altered by rotating the MENU switch while pressing the F3 switch in increments of 10 pixels (VFE741D) or 20 pixels (VFL701D).



▪ Drawing for [V.POSI]

A BOX or LINE can be moved in the vertical direction.

In the drawing mode, pressing the F4 switch will switch the mode to the [V.POSI] setting. The vertical position of a BOX or a LINE can be altered by rotating the MENU switch while pressing the F3 switch in increments of 10 pixels (VFE741D) or 20 pixels (VFL701D).



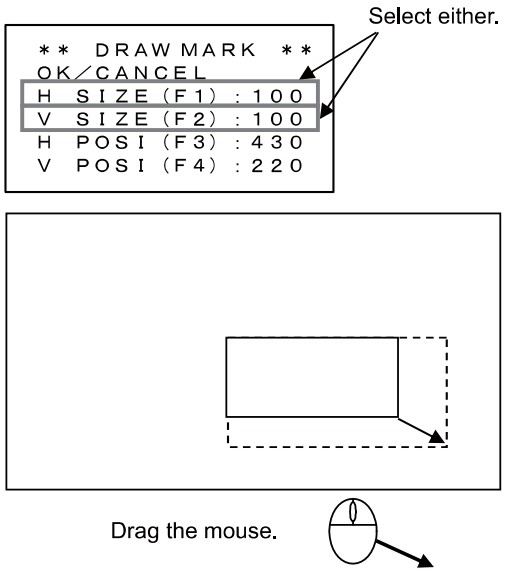
♦Drawing by using a USB mouse

By using a USB mouse, it is possible to draw in a simple and a quick manner.

When changing the size of an object, drawing can be performed both in the horizontal and the vertical direction simultaneously by using the mouse. Changing the position of the object can also be performed by simply dragging the mouse in the horizontal and the vertical direction.

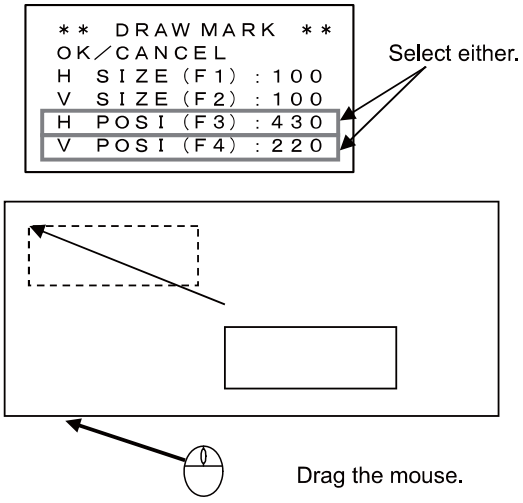
▪ Drawing for [H.SIZE] or [V.SIZE]

Select either [H.SIZE] or [V.SIZE], and drag the mouse to determine the size.

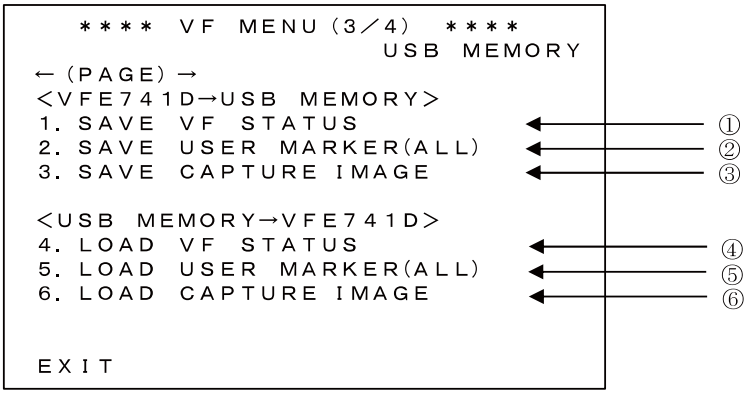


▪ Drawing for [H.POSI] or [V.POSI]

Select either [H.POSI] or [V.POSI], and drag the mouse to determine the position.



(3) VF MENU (3/4) USB MEMORY (When you use VFL701D, please recognize VFE741D (vfe741d) which are described in the below diagrams and text as VFL701D (vfl701d))



Writing from VFE741D to USB Memory

◆Structure of File generated in USB MEMORY

Ikegami VF

This folder is automatically generated in the USB memory when writing is performed.

vf_status_vfe741_001.txt

This is a file for storing various setting data of the MENU (excluding the USER MARKER and CAPTURE data), and the status of Switches.

- Data volume: Approx. 2 Kbytes

user_marker_vfe741_001.txt

This is a file for storing various setting data of the MARKER.

- Data volume: Approx. 4 Kbytes

capture_vfe741_001.bin

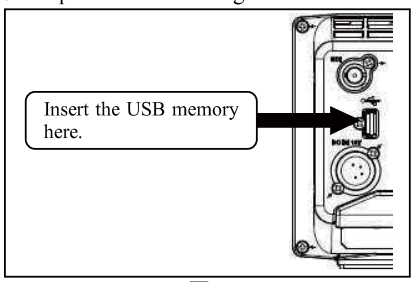
- This is a file for storing the data of captured images.
- Data volume:
  Approx. 2.8 Mbytes (VFE741D)
  Approx. 9.6 Mbytes (VFL701D)

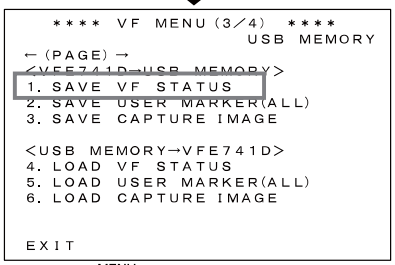
① SAVE VF STATUS

Writes various setting data of VFE741D to the USB MEMORY.

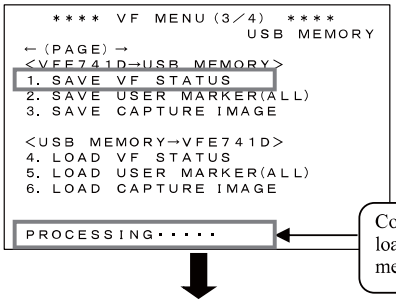
The time required for writing is approximately 2 seconds.

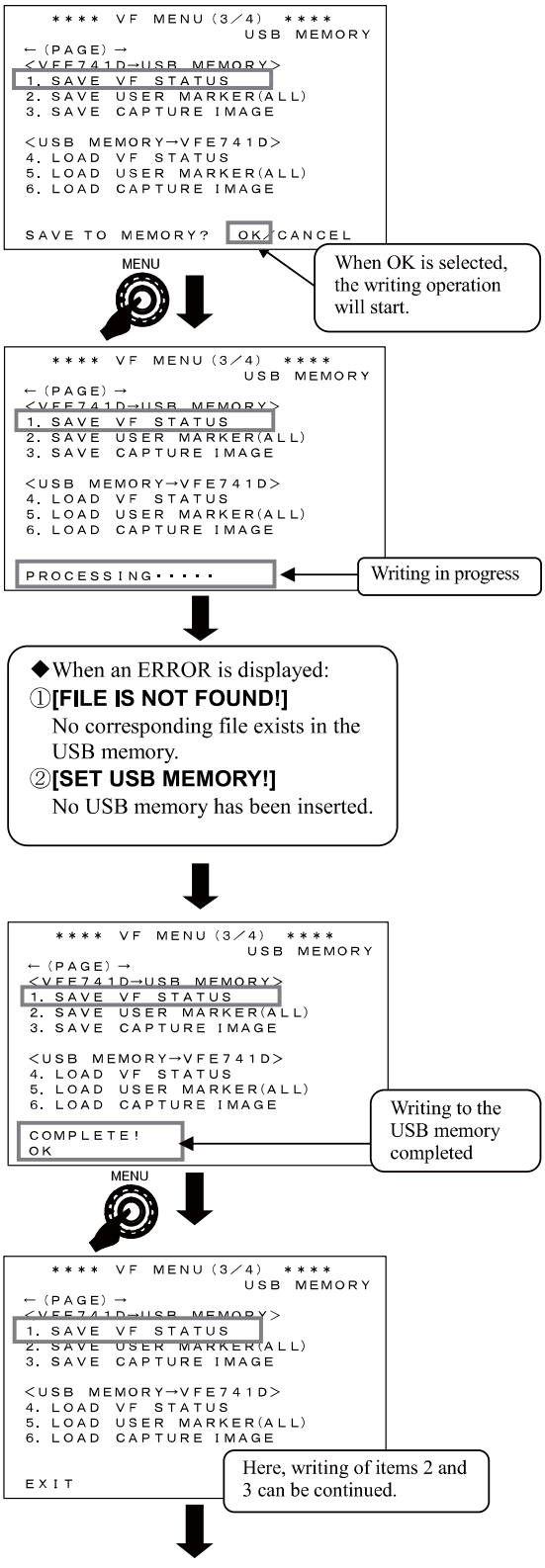
◆The procedure of writing to the USB memory

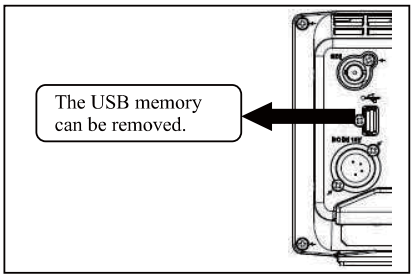




MENU







◆Precautions

- After inserting the USB memory, do not remove the USB memory or turn OFF the power before the writing process is completed.
  Removal of the memory while the data is being accessed may cause damage to the memory.
- Some USB memories may not be written by the product. In this case, please try again with another USB memory.

② SAVE USER MARKER(ALL)

Writes the User Marker settings to the USB memory.

The same procedure as described under item ① can be used.

The time required for writing is approximately 2 seconds.

③ SAVE CAPTURE IMAGE

Writes the captured image to the USB memory.

The same procedure as described under item ① can be used.

If no Image Capture function has been activated after the Power is turned ON, there is no Captured Image data existing. Therefore, an error message, **[NO CAPTURE DATA!],** will be displayed when writing is attempted.

The time required for writing will be a few minutes depending on the USB memory.

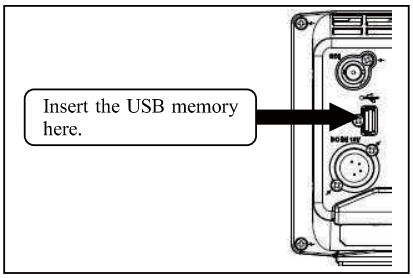
Download from USB Memory to VFE741D

④ LOAD VF STATUS

Downloads the data stored in the USB memory to the Viewfinder side.

The time required for downloading is approximately 2 seconds.

◆Procedure for Downloading to the Viewfinder




```
    **** VF MENU (3/4)  ****
                    USB MEMORY
← (PAGE) →
<VFE741D→USB MEMORY>
1. SAVE VF STATUS
2. SAVE USER MARKER(ALL)
3. SAVE CAPTURE IMAGE

<USB MEMORY→VFE741D>
4. LOAD VF STATUS
5. LOAD USER MARKER(ALL)
6. LOAD CAPTURE IMAGE

EXIT
```

MENU

```
    **** VF MENU (3/4)  ****
                    USB MEMORY
← (PAGE) →
<VFE741D→USB MEMORY>
1. SAVE VF STATUS
2. SAVE USER MARKER(ALL)
3. SAVE CAPTURE IMAGE

<USB MEMORY→VFE741D>
4. LOAD VF STATUS
5. LOAD USER MARKER(ALL)
6. LOAD CAPTURE IMAGE

PROCESSING·····
```

Confirming loading of the memory and the file

◆When an ERROR is displayed:

①**[FILE IS NOT FOUND!]**
No corresponding file exists in the USB memory.

②**[SET USB MEMORY!]**
No USB memory has been inserted.

```
    **** VF MENU (3/4)  ****
                    USB MEMORY
← (PAGE) →
<VFE741D→USB MEMORY>
1. SAVE VF STATUS
2. SAVE USER MARKER(ALL)
3. SAVE CAPTURE IMAGE

<USB MEMORY→VFE741D>
4. LOAD VF STATUS
5. LOAD USER MARKER(ALL)
6. LOAD CAPTURE IMAGE

SAVE TO MEMORY? OK/CANCEL
```

If there is no problem in the file, the display will appear as shown here. If OK is selected, the downloading operation will start.

MENU

```
    **** VF MENU (3/4)  ****
                    USB MEMORY
← (PAGE) →
<VFE741D→USB MEMORY>
1. SAVE VF STATUS
2. SAVE USER MARKER(ALL)
3. SAVE CAPTURE IMAGE

<USB MEMORY→VFE741D>
4. LOAD VF STATUS
5. LOAD USER MARKER(ALL)
6. LOAD CAPTURE IMAGE

PROCESSING·····
```

This indicates that downloading is being carried out.
After download of only item 4, all LEDs of TALLY will light up to indicate rebooting of the system.

```
    **** VF MENU (3/4)  ****
                    USB MEMORY
← (PAGE) →
<VFE741D→USB MEMORY>
1. SAVE VF STATUS
2. SAVE USER MARKER(ALL)
3. SAVE CAPTURE IMAGE

<USB MEMORY→VFE741D>
4. LOAD VF STATUS
5. LOAD USER MARKER(ALL)
6. LOAD CAPTURE IMAGE

COMPLETE!
OK
```

Download to the Viewfinder completed.

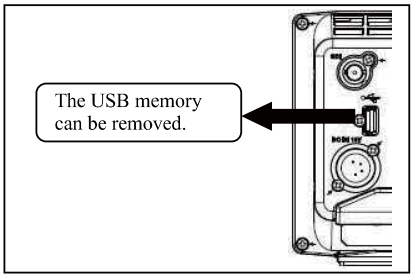
MENU

```
    **** VF MENU (3/4)  ****
                    USB MEMORY
← (PAGE) →
<VFE741D→USB MEMORY>
1. SAVE VF STATUS
2. SAVE USER MARKER(ALL)
3. SAVE CAPTURE IMAGE

<USB MEMORY→VFE741D>
4. LOAD VF STATUS
5. LOAD USER MARKER(ALL)
6. LOAD CAPTURE IMAGE

EXIT
```

Here, writing of items 5 and 6 can be continued.



♦**Precautions**

- After inserting the USB memory, do not remove the USB memory or turn OFF the power before the download process is completed.
  Removal of the memory while the data is being accessed may cause damage to the memory.
- The product may not read some USB memories. In this case, please try again with another USB memory. In order to do this trial, we recommend that you backup your data beforehand.

⑤ LOAD USER MARKER (ALL)

Downloads all of the User Markers stored in the USB memory to the Viewfinder.

The same procedure as described under item ④ can be used.

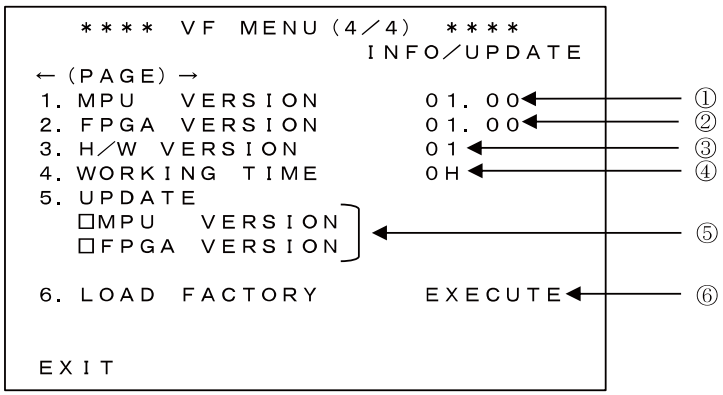
The time required for downloading is approximately 2 seconds.

⑥ LOAD CAPTURE IMAGE

Downloads all of the captured images stored in the USB memory to the Viewfinder side.

The time required for downloading will be a few minutes depending on the USB memory.

(4) VF MENU (4/4) INFO / UPDATE



① MPU VERSION

Displays the MPU version.

② FPGA VERSION

Displays the FPGA version.

③ H/W VERSION

Display the hardware version

④ WORKING TIME

Displays the accumulated Working Time in which the Viewfinder has been operated in increments of hours.

⑤ UPDATE

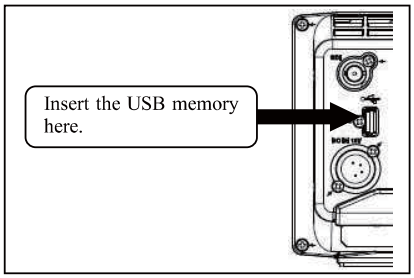
MPU VERSION

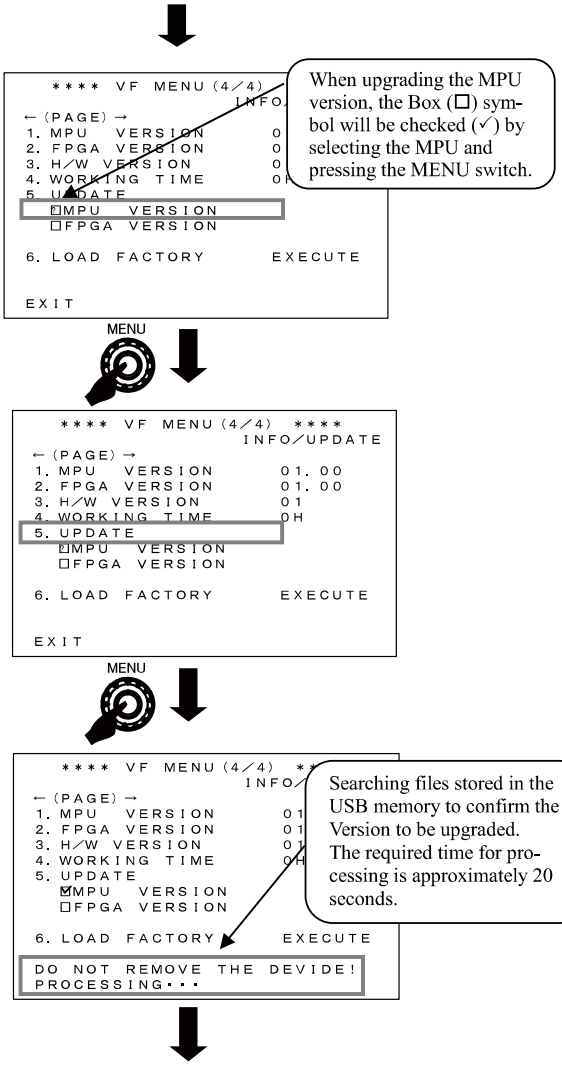
The Version will be upgraded to the MPU program stored in the USB memory.

FPGA VERSION

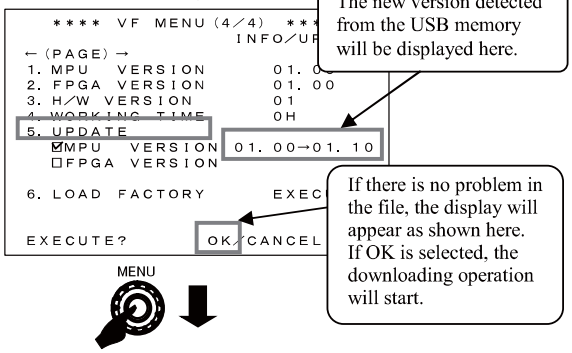
The Version will be upgraded to the FPGA program stored in the USB memory.

◆Procedure for Upgrading the MPU

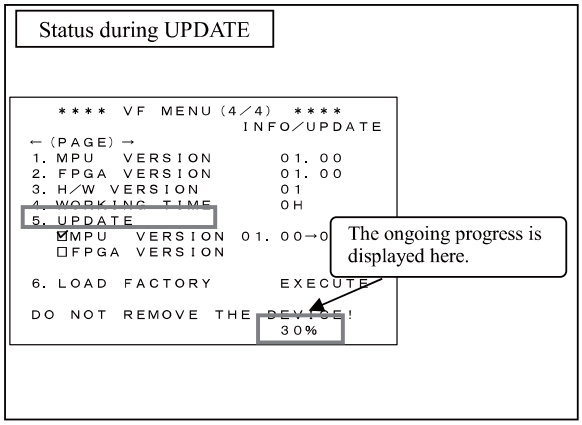


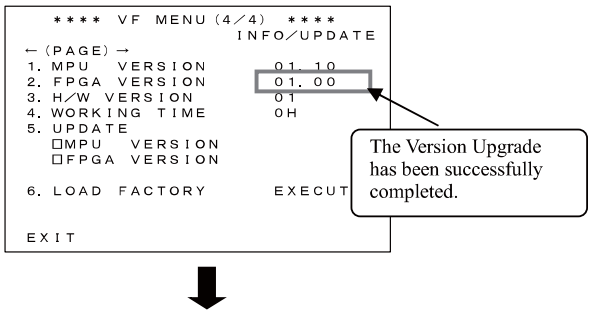


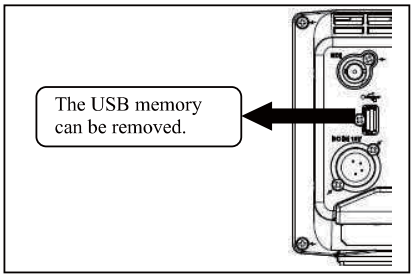
◆When an ERROR is displayed:
①**[FILE IS NOT FOUND!]**
No corresponding file exists in the USB memory.
②**[SET USB MEMORY!]**
No USB memory has been inserted.



MENU



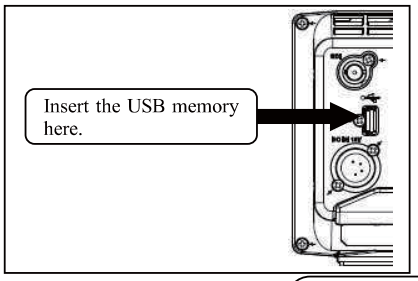




◆Precautions

- After inserting the USB memory, do not remove the USB memory or turn OFF the power before the download process is completed.
  Removal of the memory while the data is being accessed may cause damage to the memory.
- If the process is not terminated in the normal manner, the previous version before the version upgrade will be written, and the normal operation will be resumed.

◆Procedure for Upgrading the FPGA



When upgrading the FPGA version, the Box (☐) symbol will be checked (✓) by selecting the FPGA and pressing the MENU switch.

```
    **** VF MENU (4/4)
                    INFO/
← (PAGE) →
1. MPU   VERSION        0
2. FPGA  VERSION        0
3. H/W VERSION          01
4. WORKING TIME         0H
5. UPDATE
   ☐MPU   VERSION
   ☑FPGA  VERSION

6. LOAD FACTORY         EXECUTE


EXIT
```

MENU

```
    **** VF MENU (4/4)  ****
                    INFO/UPDATE
← (PAGE) →
1. MPU   VERSION        01. 00
2. FPGA  VERSION        01. 00
3. H/W VERSION          01
4. WORKING TIME         0H
5. UPDATE
   ☐MPU   VERSION
   ☑FPGA  VERSION

6. LOAD FACTORY         EXECUTE


EXIT
```

MENU

```
    **** VF MENU (4/4)  ***
                    INFO/U
← (PAGE) →
1. MPU   VERSION        01.
2. FPGA  VERSION        01.
3. H/W VERSION          01
4. WORKING TIME         0H
5. UPDATE
   ☐MPU   VERSION
   ☑FPGA  VERSION

6. LOAD FACTORY         EXECUTE

DO NOT REMOVE THE DEVIDE!
PROCESSING・・・
```

Searching files stored in the USB memory to confirm the Version to be upgraded. The required time for processing is approximately 5 seconds.

◆When an ERROR is displayed:

①**[FILE IS NOT FOUND!]**
No corresponding file exists in the USB memory.

②**[SET USB MEMORY!]**
No USB memory has been inserted.

```
    **** VF MENU (4/4)  *
                    INFO/
← (PAGE) →
1. MPU   VERSION        01. 00
2. FPGA  VERSION        01. 00
3. H/W VERSION          01
4. WORKING TIME         0H
5. UPDATE
   ☐MPU   VERSION
   ☑FPGA  VERSION  01. 00→01. 10

6. LOAD FACTORY         EXECUTE


EXECUTE?          OK/CANCEL
```

The new Version No. detected from the USB memory will be displayed here.

MENU

If there is no problem in the display, the display will appear as shown here. If OK is selected, the downloading operation will start.

Status during UPDATE

```
    **** VF MENU (4/4)  ****
                    INFO/UPDATE
← (PAGE) →
1. MPU   VERSION        01. 00
2. FPGA  VERSION        01. 00
3. H/W VERSION          01
4. WORKING TIME         0H
5. UPDATE
   ☐MPU   VERSION
   ☑FPGA  VERSION  01. 00→0

6. LOAD FACTORY         EXECUTE

DO NOT REMOVE THE DEVICE!
                        30%
```

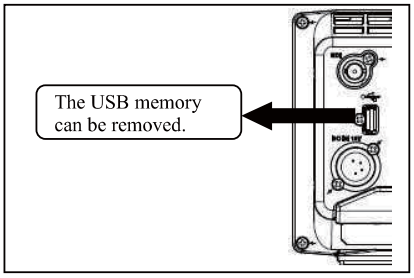
The ongoing progress is displayed here.

```
    **** VF MENU (4/4)  ****
                    INFO/UPDATE
← (PAGE) →
1. MPU   VERSION        01. 00
2. FPGA  VERSION        01. 10
3. H/W VERSION          01
4. WORKING TIME         0H
5. UPDATE
   ☐MPU   VERSION
   ☐FPGA  VERSION

6. LOAD FACTORY         EX

EXIT
```

The Version Upgrade has been successfully completed and the New Version has been installed.

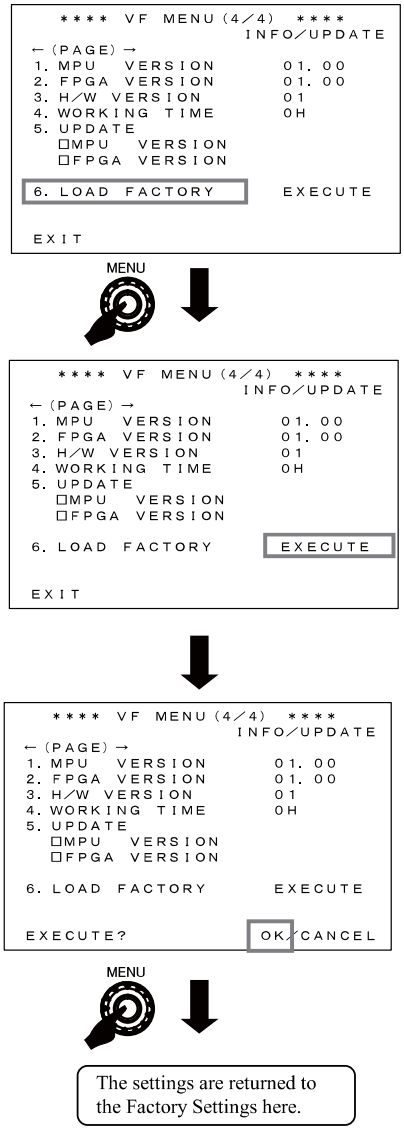


◆Precautions

- After inserting the USB memory, do not remove the USB memory or turn OFF the power before the download process is completed.
  Removal of the memory while the data is being accessed may cause damage to the memory.
- If TALLY blinks in red, it indicates that the process has abnormally terminated. Please contact our sales agent in this case.

⑥ LOAD FACTORY

Returns all settings to the Factory Settings.



5. Specifications

5-1. General specifications

(1) Power-supply voltage

+12 V DC (10.5~18 V)

* Supplied from camera I/F or DC IN connector

(2) Power consumption

VFL701D: 14 W max

VFE741D: 22 W max

(3) Operating ambient temperature/humidity: Storage ambient temperature/humidity

In operation: -10ºC ~ +45ºC
20% ~ 85% (non-condensing)

For storage: -20ºC ~ +60ºC
5% ~ 85% (non-condensing)

Maximum wet-bulb temperature: 29ºC

(4) Outside dimensions

Main unit: 235 (W) × 143.5(H) × 76.5 (D) mm
(not including protrusions)

Main unit + hood + mount:
302 (W) × 148 (H) × 308 (D) mm
(D indicating the maximum size)

(5) Mass

(VFE741D)

Main unit: Approx. 1.6 kg

Main unit + studio hood + mounting bracket:
Approx. 3.8kg

(VFL701D)

Main unit: Approx. 1.5 kg

Main unit + studio hood + mounting bracket:
Approx. 3.7kg

(6) Accessories

Complete each set of:

- Studio hood (1)
- VF cable (1)
- Operation manual (1)
- Camera number (1-9) plate (1)

5-2. Rated performance

(1) Camera signal (Standard support)

a) Input terminal

Input: Camera I/F 1 system

b) Input signal format (automatic recognition)

1080i/ 59.94, 50

1080p/ 29.97, 25, 24, 23.98

1080PsF/30, 25, 24, 23.98

720p/ 59.94, 50

c) Input signal

LVDS

d) Transmission system

Differential system

e) Transmission rate

1.485 [Gb/s]

1.484/1.001 [Gb/s]

f) Quantifying bit number

10 bits

g) Input Impedance

100 Ω

(2) SDI signal (External input)

a) Input terminal

Input: BNC 1 system

b) Input signal format (automatic recognition)

3G-SDI: SMPTE425M-A/B

1080p/60, 59.94, 50

HD-SDI : SMPTE292M

1080i/60, 59.94, 50

720p/60, 59.94, 50, 30, 29.97, 25, 24, 23.98

1080psF/30, 29.97, 25, 24, 23.98

1080p/30, 29.97, 25, 24, 23.98

c) Input level

Rating: 800 mVp-p±10%

d) Transmission rate

3G-SDI: 2.970 Gb/s

HD-SDI: 1.485Gb/s

e) Quantifying bit number

10 bits

f) Input impedance

75 Ω

g) Transmission distance

100 m or more (at 5 CFB, 2.970 Gb/s)

5-3. Organic EL (OLED) module Specifications (VFE741D)

(1) Number of pixels

960 (H) × 540 (V) dots

(2) Pixel pitch

0.171 (W) × 0.171 (H) mm

(3) Screen size (display area)

164.160 mm × 92.340 mm (Diagonal: 19.8 cm)

(4) Screen brightness (Brightness performance of Organic EL single unit)

350 cd/m^2 (Inputs by Window)

* The brightness on individual sets may differ, depending on the color temperature setting values)

(5) Structure

AMOLED top emission

(6) Contrast ratio

100000:1 (typ.)

(7) Number of display colors

1.07 billion colors (Each of RGB at 10 bits)

5-4. LCD module specifications (VFL701D)

(1) Number of pixels

1920 (H) × 1080 (V) dots

(2) Pixel pitch

0.027 (W) × 0.081 (H) mm

(3) Screen size (display area)

155.52mm × 87.48mm (Diagonal: 17.48cm)

(4) Screen brightness (Brightness performance of LCD single unit)

400cd/m^2

* The brightness on individual sets may differ, depending on the color temperature setting values)

(5) Structure

a-TFT

(6) Contrast ratio

1000:1 (typ.)

(7) Number of display colors

16.77 million colors (Each of RGB at 8 bits)

6. Functions

6-1. Front operations

(1) Switches

POWER (ON/OFF switching): LED display

F1 (Assigned function: ON/OFF switching): LED display

F2 (Assigned function: ON/OFF switching): LED display

F3 (Assigned function: ON/OFF switching): LED display

F4 (Assigned function: ON/OFF switching): LED display

MENU (also used for MENU jog)

* F1 ~ F4 can be assigned with a function by MENU.

(2) Volume

PEAKING, CONTRAST, BRIGHT

6-2. Marker function

(1) Center marker

•Type-A (with center intersection point)

•Type-B (without center intersection point)

(2) Safety marker

a) Types

- Safety area marker (80% ~ 100%)
- 5 × 5 division cross-hatch
- 10 × 10 division cross-hatch
- Cross
- Aspect marker (15:9/4:9/13:9/4:3)
- Aspect marker + safety marker
- Frame marker + safety marker

b) Marker level

- Setting in 5 steps of 20%, 40%, 60%, 80% and 100%

6-3. Shadow function

Function for shadowing outside the safety marker area or the aspect marker area.

a) Types

- Various markers + shadows

- Various markers only
- Shadows only

b) Shadow contrast level
- Setting in 3 steps of 20%, 40% and 60%

6-4. User marker function

Function for the user to draw a box at any location with any size in increments of pixels.

a) Number of scenes: 5

b) Number of types of markers: 6

c) Color: 7 colors (Individual settings allowed)

d) Size allowed for drawing: 960 (H) × 540 (V) step

e) Drawing method: By using the switch or the USB mouse

* Patent registered

6-5. USB memory function

a) Memory contents
- MENU setting
- User marker
- Captured image

b) Stored image
- Resolution: 960 × 540 (VFE741D)
- Resolution: 1920 × 1080 (VFL701D)
- File type: Binary files exclusively used by VF

6-6. Camera I/F connector

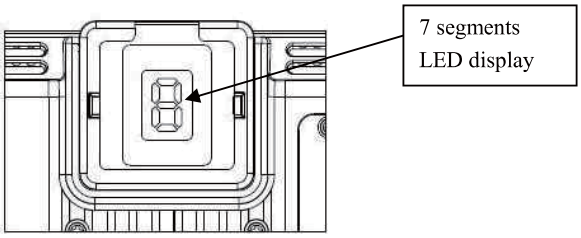
Connected to the camera via the exclusive VF cable to accommodate with all connections, including the power, video signals and control.

• usage connecter : HDR-EA26 type

6-7. Optional Feature

The camera No. can be displayed on the FRONT TALLY as the optional feature.

Please contact our sales agent for more information.



7. Applicable Standards

7-1. Radio noise

・FCC Class-A

・EN55103-1 E4

・EN55103-2 E4

7-2. Environmental standards

Compliant with RoHS Directive

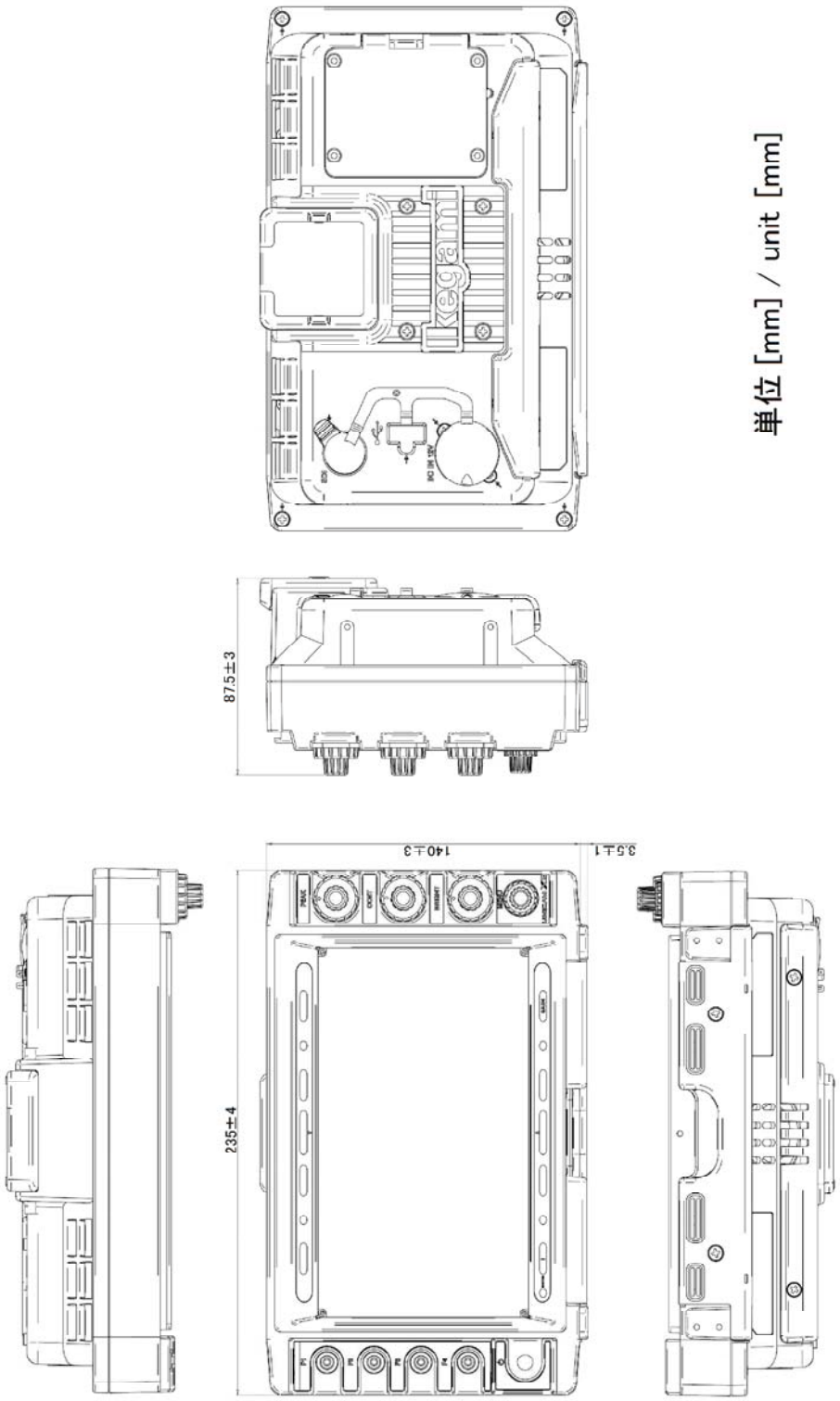
◆Precautions

* Please understand that the specifications and the appearance of this product are subject to changes without notice for improvements.

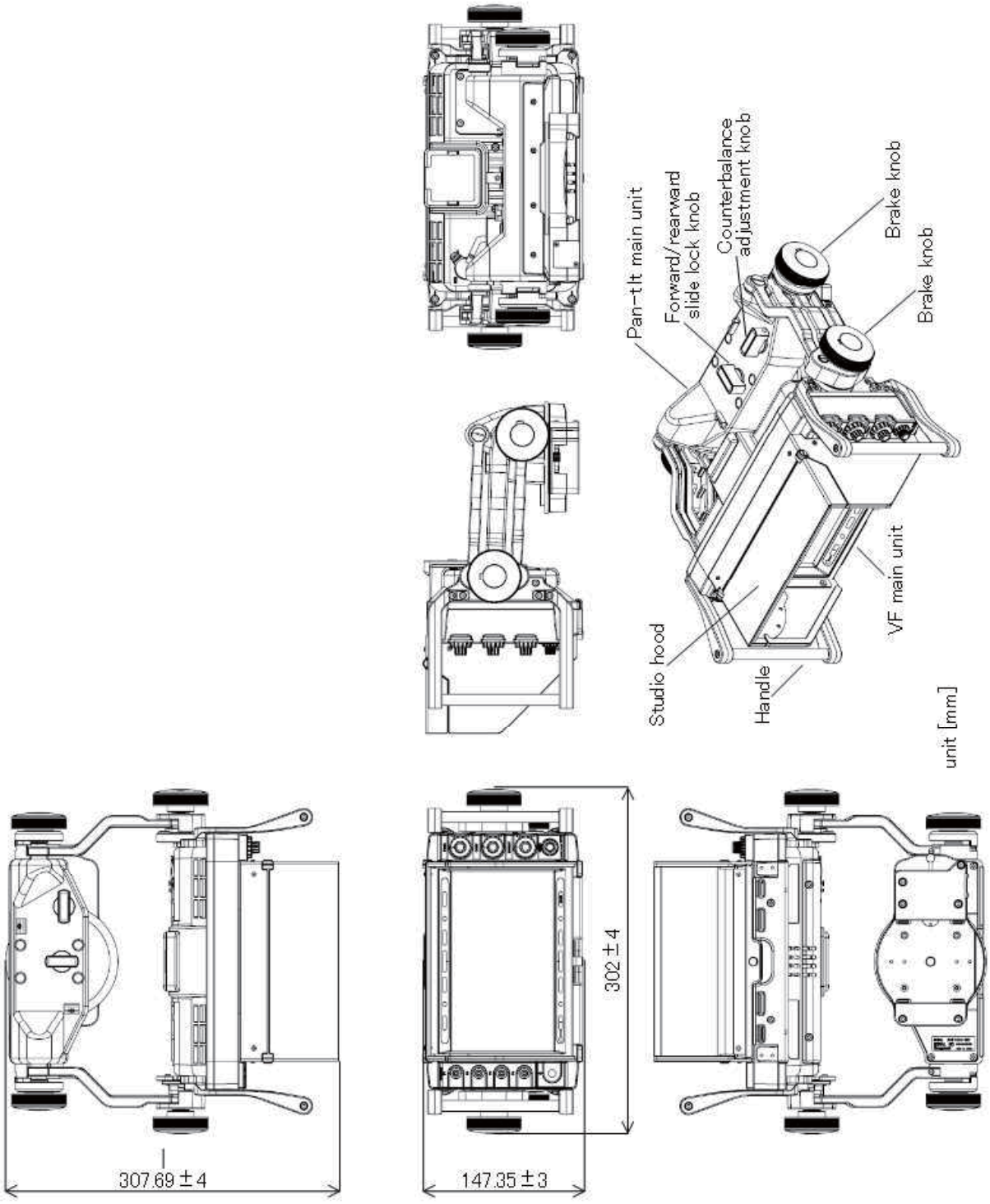
* Missing or bright spots may occur on this product at a rate of 0.01% or lower. Please understand that this phenomenon is not a malfunction of the product.

8. Exterior Drawings

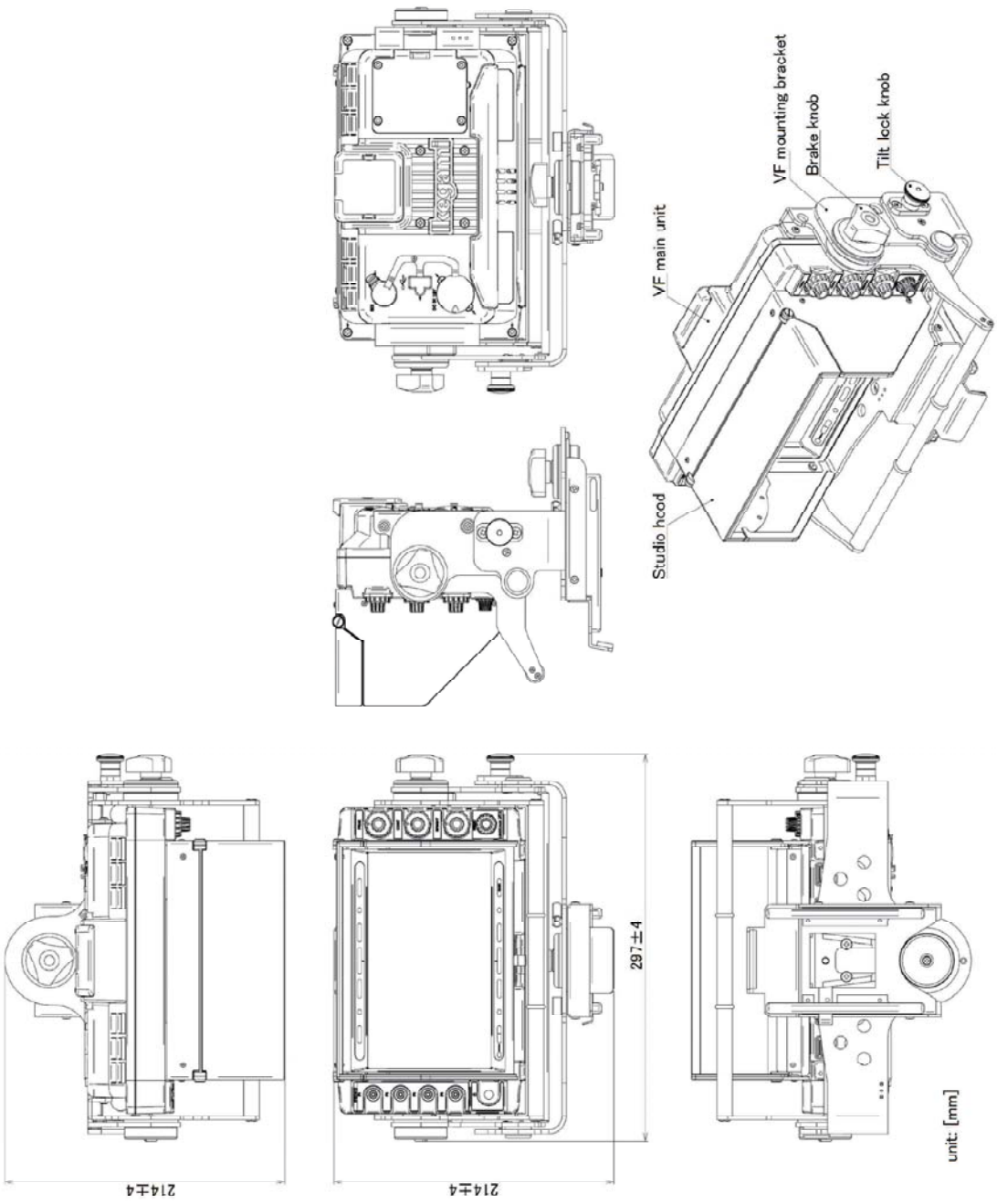
(1) Exterior drawing of the main unit (This is common for both models.)



(2) Main unit (VFE741D) + studio hood + mounting bracket (XVF741D-021)



(3) Main unit (VFL701D) + studio hood + mounting bracket (XVF701D-018)



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MODEL **VFE741D/VFL701D**
HDTV OLED/LCD COLOR VIEWFINDER
オペレーションマニュアル

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HDTV OLED/LCD COLOR VIEWFINDER
Operation Manual

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