

**MODEL**

**VFL201A**

**HDTV Analog 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.

	<b>Warning</b>	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.
	<b>Caution</b>	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 Δ 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 accident.
	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: <ul style="list-style-type: none"> <li>Putting the unit upside down; toppling it over sideways; or inverting it.</li> <li>Pushing unit onto a narrow place with poor ventilation.</li> <li>Placing the unit on a soft material such as carpet.</li> <li>Covering the unit with a piece of table cloth, etc.</li> </ul>
---	---

## To Use the Product Proficiently

### When you use the product:

<ul style="list-style-type: none"> <li>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.</li> </ul>
<ul style="list-style-type: none"> <li>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.</li> </ul>
<ul style="list-style-type: none"> <li>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.</li> </ul>
<ul style="list-style-type: none"> <li>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.</li> </ul>

### When you install the product:

<ul style="list-style-type: none"> <li>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.</li> </ul>
<ul style="list-style-type: none"> <li>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.</li> </ul>

### Concerning Maintenance of the Product:

<ul style="list-style-type: none"> <li>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.</li> </ul>
<ul style="list-style-type: none"> <li>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.</li> </ul>
<ul style="list-style-type: none"> <li>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.</li> </ul>

## 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't 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.

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.

### 7. Do not display the same pattern for a long time.

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 when not in use.

### 8. 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.

**9. 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.

**10. Avoid use or storage of the unit in a corrosive gas environment.**

Use or storage of this product at a location or the vicinity where 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.

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

**12. Do not disassembly and remodel.**

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

**13. 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.

**Warranty**

In case the product should malfunction in the course of normal operations within one year 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.

### ***Notice for Burning of the LCD Panel***

This viewfinder employs a high-resolution QHD LCD Panel with 960x540 pixels, and it is possible to burn the LCD panel due to focused strong light, such as sunlight, through the eye-piece.

**Please do not turn the eye-piece of the viewfinder toward the sun.**

**Pay attention the direction of the eye-piece relative to the sun, when not looking into the eye-piece for a period of time.**

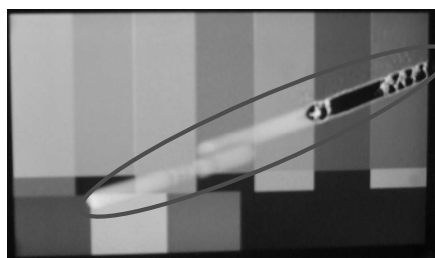
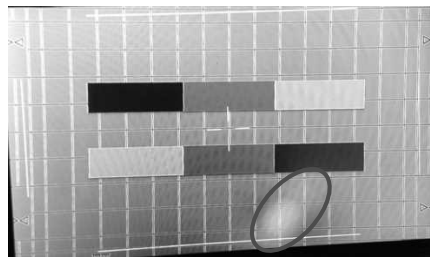
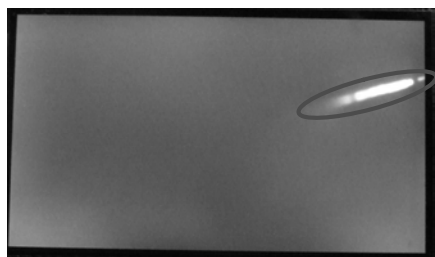
- **If the LCD panel gets burned**

Please contact your Ikegami service agency.

\* You are liable for the cost of repair.

- **The Images of Burned LCD panel**

If the LCD panel gets burned due to focused sunlight, it may look like the images below (where circled in red).



## Preface

### ●Accessories

The following accessories are available for the product. Check each item:

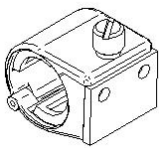
- **Operation manual (1)**
- **Mounting bracket (1)**

### ●Options

The following Options are available for the product. The “Offset hardware”, by which you can adjust the position of mic holder, is supplied for each mic holder.

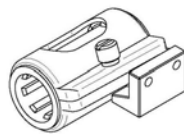
#### **Mic holder**

Type No. :XM-164  
(small antivibration ø21)



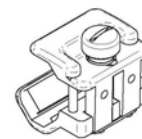
#### **Mic holder**

Type No. :XM-174A  
(large antivibration ø19~21)



#### **Mic holder**

Type No. :XM-254  
(large ø19~26.5)



### ●How to Read the Operation Manual

This page explains general notes on reading the VFL201A Operation Manual, and the symbols and notations used in the manual.

#### **Notes on the Manual**

- This manual is written for readers with a basic knowledge of handling broadcast cameras.
- The contents of this manual are subject to change without notice in the future.

#### **Symbols**

The meanings of the symbols used in this manual are as follows:

<b>CAUTION:</b>	Things you have to be careful during operation. Be sure to read.
<b>Note:</b>	Supplementary information or guidance.
<b>Term:</b>	Explains the meaning of a term you need to know.

#### **Notations**

This following notations are used in this manual

This product, viewfinder, VF	Indicates VFL201A
------------------------------	-------------------

#### **Illustrations and Displays**

The illustrations and displays in the text are provided for explanation and may be slightly different from the actual equipment or image.





# MODEL VFL201A

## HDTV Analog I/F LCD Color Viewfinder

### Table of Contents

<b>Safety Precautions</b> .....	i	<b>4. Function switch</b> .....	E-24
<b>Precautions for Use</b> .....	ii	<b>5. Specifications</b> .....	E-25
<b>Preface</b> .....	v	5-1. General specifications .....	E-25
<b>1. Outline</b> .....	E-1	5-2. Rates performance .....	E-25
1-1. Outline .....	E-1	5-3. LCD module specifications .....	E-26
1-2. Features and Functions .....	E-1	<b>6. Functions</b> .....	E-27
<b>2. Names and Functions</b> .....	E-2	6-1. Front operations .....	E-27
2-1. Front side .....	E-2	6-2. Marker function .....	E-27
2-2. Back side .....	E-3	6-3. Shadow function .....	E-27
2-3. Escutcheon .....	E-3	6-4. User marker function .....	E-28
2-4. Mounting/Removing VFL201A to/from the Mount Attachment for UNICAM XE series cameras .....	E-4	6-5. Video MAG function .....	E-28
2-5. Installation of microphone holder .....	E-4	6-6. Peaking function .....	E-28
2-6. Detaching and installation of eyepiece .....	E-5	6-7. Touch sensor function .....	E-28
<b>3. Menu Operation</b> .....	E-6	6-8. Screen saver function .....	E-28
3-1. Menu List (VF MENU) .....	E-6	6-9. Screen OFF function .....	E-28
3-2. How to operate and functional descriptions of menus (VF MENU) .....	E-8	<b>7. Applicable Standards</b> .....	E-29
(1) VF MENU (1/7) TOP MENU .....	E-10	7-1. Radio noise .....	E-29
(2) VF MENU (2/7) VF SETTING .....	E-12	7-2. Environmental standards .....	E-29
(3) VF MENU (3/7) VIDEO SETTING .....	E-13	<b>8. Exterior Drawing</b> .....	JE-30
(4) VF MENU (4/7) PEAKING .....	E-16		
(5) VF MENU (5/7) MARKER .....	E-18		
(6) VF MENU (6/7) USER MARKER .....	E-20		
(7) VF MENU (7/7) INFORMATION .....	E-23		



## **1. Outline**

### **1-1. Outline**

VFL201A is a 2-inch LCD viewfinder developed for HDTV. It has a high resolution QHD LCD with 960 (H) X 540 (V) pixels. It is possible for users to confirm high resolution video with the full color.

It has been developed as a successor to the VFL200HD which had been used for our UNICAM HD camera series. By improving its functions and operation, it achieves the performance required for a viewfinder for broadcast cameras.

### **1-2. Features and Functions**

#### **The LCD with the heater is used**

A transparent heater is installed right under the liquid crystal layer. The ambient temperature can be detected and the image without deterioration due to the low response speed at the low temperature can be observed.

#### **Full-color display of 16.7 million colors**

16.7 million colors (8bits color) are achieved by a full-color display and a high definition image is supplied.

#### **Abundant peaking features**

This viewfinder supplies the abundant peaking features, "ZOOM UP PEAKING" which is synchronized with the camera zoom operation and "COLOR PEAKING" which can add the color on the peak signal, which support the good adjustment of focus.

#### **Abundant markers with shadow**

In addition to the area marker, center marker, shadow feature and cross hatch marker, there are 6 (maximum) user markers for each scene, on which users can set them freely. And also, 5 this kinds of scenes are prepared.

#### **Image magnification display feature**

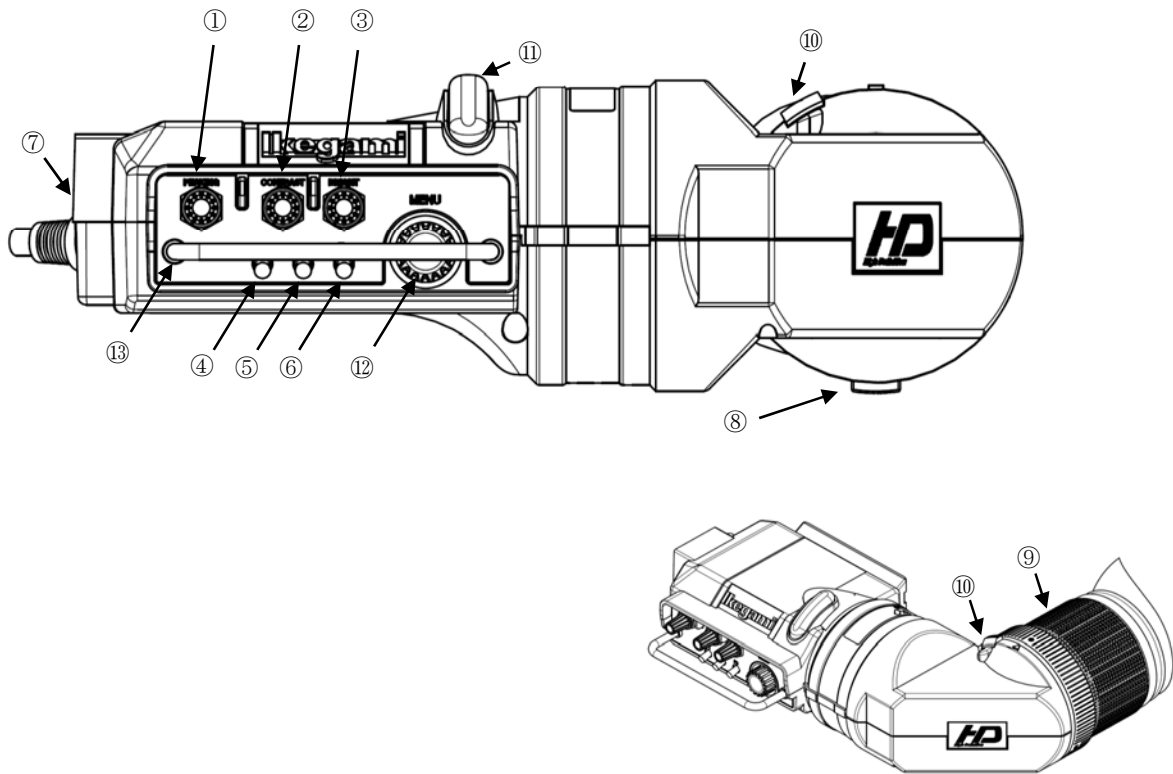
This viewfinder can display the magnified image and support the accurate focusing.

#### **Touch sensor function**

It detects as soon as a FUNCTION switch is touched, and it displays the function name of the touched switch on the screen. (Patent pending)

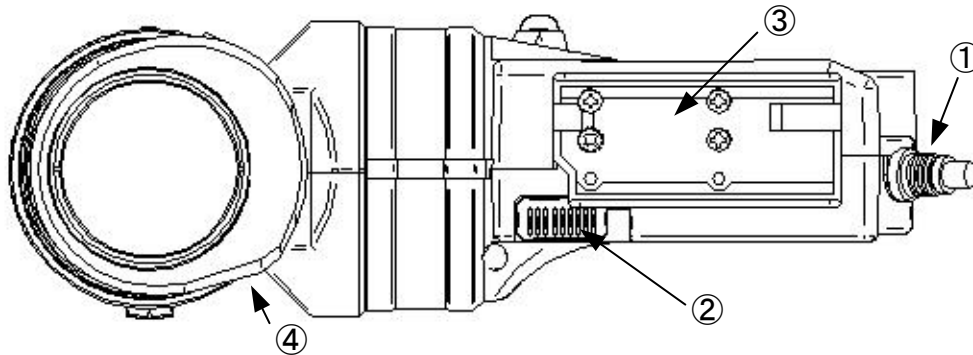
## 2. Names and Functions

### 2-1. Front side



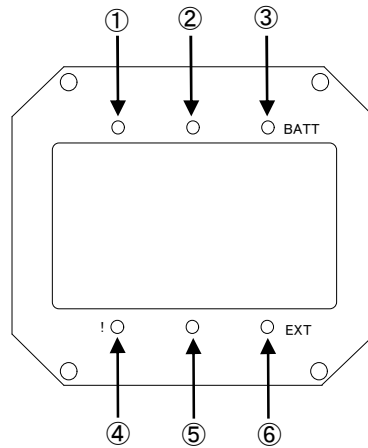
No.	NAME	FUNCTION
①	PEAKING VR	The edge amount of peaking for the image is adjusted.
②	CONTRAST VR	The contrast of the image is adjusted.
③	BRIGHT VR	The brightness of the image is adjusted.
④	FUNCTION F1	This switch can change the setting of a function, which is assigned on the MENU. The default function is "USRMK".
⑤	FUNCTION F2	This switch can change the setting of a function, which is assigned on the MENU. The default function is "TALLY".
⑥	FUNCTION F3	This switch can change the setting of a function, which is assigned on the MENU. The default function is "MONO".
⑦	Mike holder fixation hole	It is a screw hole to install the mike holder.
⑧	Diopter movement lever	It is a lever for the diopter movement.
⑨	Eyepiece positioning ring	When the back and forth adjustment for the position of the eye cup is needed, this ring is turned.
⑩	Eyepiece detaching lever	When the eye cup is detached from VF, this lever is pushed.
⑪	Front Tally lamp	This will be turned on by the control signal from the camera. Turning on can be prohibited by MENU.
⑫	Menu switch	This is used for setting the items of MENU.
⑬	Protection bar	Some front switches and volumes are protected from the external impact.

## 2-2. Back side



No.	NAME	FUNCTION
①	VF cable	The VF cable for UNICAM HD series cameras.
②	Rear tally with a cover	This tally will be turned on by the control signal from the camera. The turning on of this tally can't be prohibited. A cover can cut off the light of this tally, if needed.
③	Attachment for camera	This is the mounting hardware in order to install the VFL201A on the camera.
④	Eyepiece	This is an eyepiece to observe the VF image. Also, it has the dioptic lens feature.

## 2-3. Escutcheon



No.	NAME	FUNCTION
①	G TALLY	It receives a G tally signal from the camera, and the green LED lights up.
②	R TALLY (TOP)	It receives a R tally signal from the camera, and the red LED lights up.
③	BATT LED	It receives a battery warning signal from the camera, and the orange LED lights up.
④	[ ! ] LED	It receives a control signal from the camera, and the orange LED lights up. Refer to the instruction manual of the camera for the setting procedure and other details. In addition, while the screen saver or the screen OFF function is on, this LED blinks.
⑤	R TALLY (BOTTOM)	It receives a R tally signal from the camera, and the red LED lights up.
⑥	EXT LED	While the lens extender is in use, the orange LED lights up.

## 2-4. Mounting/Removing the VFL201A to/from the Mount Attachment for UNICAM HD series cameras

### ■Mounting the VFL201A to the Mount Attachment

This section explains how to mount the VFL201A to the VF mounting attachment of the HDK-99. (The mounting method is the same for other cameras.)

#### **CAUTION:**

At first, please confirm whether the mounting hardware for VF is installed in the camera.  
If there is no mounting hardware in the camera, you can't install this VF.

- 1 The slide guide of VF is aligned with V shape edge of the mounting hardware for VF in the camera.  
And VF is mounted on the camera by sliding it while pushing the pin for blocking the VF falling out in.

#### **CAUTION:**

Please put the camera on a stable place and install VF to the camera.

- 2 Please turn VF fixing knob on the mounting hardware in the camera clockwise and fix VF firmly.

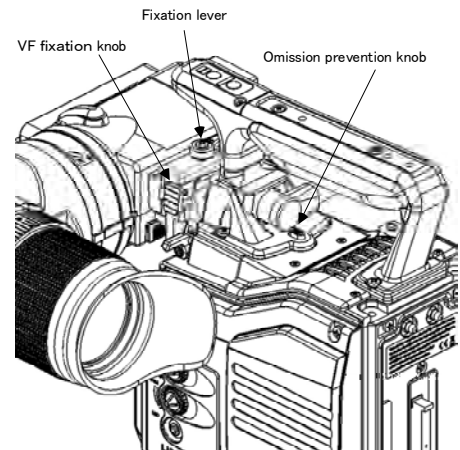
#### **MEMO:**

Please operate positioning in the horizontal direction of VF after loosening the VF fixing knob.

- 3 The VF connector is connected with the VF connector of the camera.

#### **CAUTION:**

Please pay attention to the direction of the connector.



### ■Removing VFL201A from the Mount Attachment

This section explains how to remove the VFL201A from the Mount Attachment.

Please remove the VF by the reverse procedure comparing with the mounting one.

#### **CAUTION:**

Please put the camera on a stable place and remove VF from the camera.

## 2-5. Installation of microphone (mike) holder

### ■The mike holder installation

This section explains the method of mounting the mike holder in VFL201A

At first, the off-set metal plate is fixed at the installation part of mike holder by the special screw.

The mike holder is installed at the installation part of the off-set metal plate by the special screw which is attached with the mike holder

#### **CAUTION:**

Please pay attention not to lose the above special screw after removing the mike holder.

## **2-6. Detaching and installation of eyepiece**

### **■The eyepiece detaching**

The detaching lever in the root of the VF eyepiece is pushed, the eyepiece is turned anti-clockwise and it will be detached.

### ***CAUTION:***

Please take care that dust doesn't enter VF inside after detaching it.

### **■The eyepiece installation**

Please align the mountain sign displayed in the root of the VF eyepiece with the mountain sign displayed on the VF side and turn it clockwise while pressing it until you hear it clicks.

### 3. Menu Operation

#### 3-1. Menu List (VF MENU)

VF MENU	MENU(1/7) (TOP MENU)	1. FUNC DISABLE	ON/OFF setting of the FUNCTION switch function
		→TOUCH DISP.	ON/OFF setting of the FUNCTION switch function displays by the touch sensor
		2. ASSIGN F1	Function allocation setting of F1 FUNCTION switch
		3. ASSIGN F2	Function allocation setting of F2 FUNCTION switch
		4. ASSIGN F3	Function allocation setting of F3 FUNCTION switch
		5. VOLUME INDICATOR	ON/OFF setting of the indication of MANUAL volume indicator
		6. FRONT TALLY	ON/OFF setting of the LED brightness and indication of the front tally
		7. SCREEN SAVER	ON/OFF setting of the screen saver function
	→TIMER	Time duration setting until the screen saver starts operating	
	8. SCREEN OFF	Execution of screen OFF	
	MENU(2/7) (VF SETTING)	1. VOLUME PRESET	ON/OFF setting of VOLUME PRESET
		→CONTRAST	Setting of CONTRAST PRESET value
		→BRIGHT	Setting of BRIGHT PRESET value
		2. H.POSITION	Setting of horizontal direction position
		3. V.POSITION	Setting of vertical direction position
		4. REVERSE SCAN	ON/OFF setting of REVERSE SCAN
	MENU(3/7) (VIDEO SETTING)	5. COLOR TEMP.	Setting of color temperature
		6. RGB/YPbPr	Setting of RGB/YPbPr
		1. COLOR/MONO	Setting of COLOR/MONO switching
		2. CHROMA UP	ON/OFF setting of Chroma gain up
		3. GAMMA SELECT	Settings of gamma 1.4/1.8/2.2/2.6/3.0
		4. ZEBRA	ON/OFF setting of ZEBRA
		5. VIDEO MAG.	ON/OFF setting of screen magnification function
		→MAG.POSITION	Setting of video magnification position
		→MAG.RATIO	Setting of video magnification ratio
		→MAG.TIMER	Timer setting of video magnification function
	MENU(4/7) (PEAKING)	6. VIDEO CAPTURE	Execution of capturing input video
		→CAPTURE DISPLAY	ON/OFF setting of display of captured video
		→DISP.INTERVAL	Setting of switching interval of captured video
		1. PEAKING	ON/OFF setting of PEAKING
		→PEAKING MODE	Setting of PEAKING edge direction
		→PEAK WIDTH	Setting of PEAKING edge width
→PEAKING UP		Settings of x2/x4/x8 of PEAKING amount	
→NOISE SUP		Setting of coring level in PEAKING	
→COLOR PEAKING	Function to color PEAKING edges		
2. ZOOM UP PEAKING	ON/OFF setting of ZOOM UP PEAKING		
	→ZOOM UP PEAK-MAX	Telephoto end max. value of ZOOMUP PEAKING	
	→ZOOM UP PEAK-MIN	Wide-angle end min. value of ZOOMUP PEAKING	



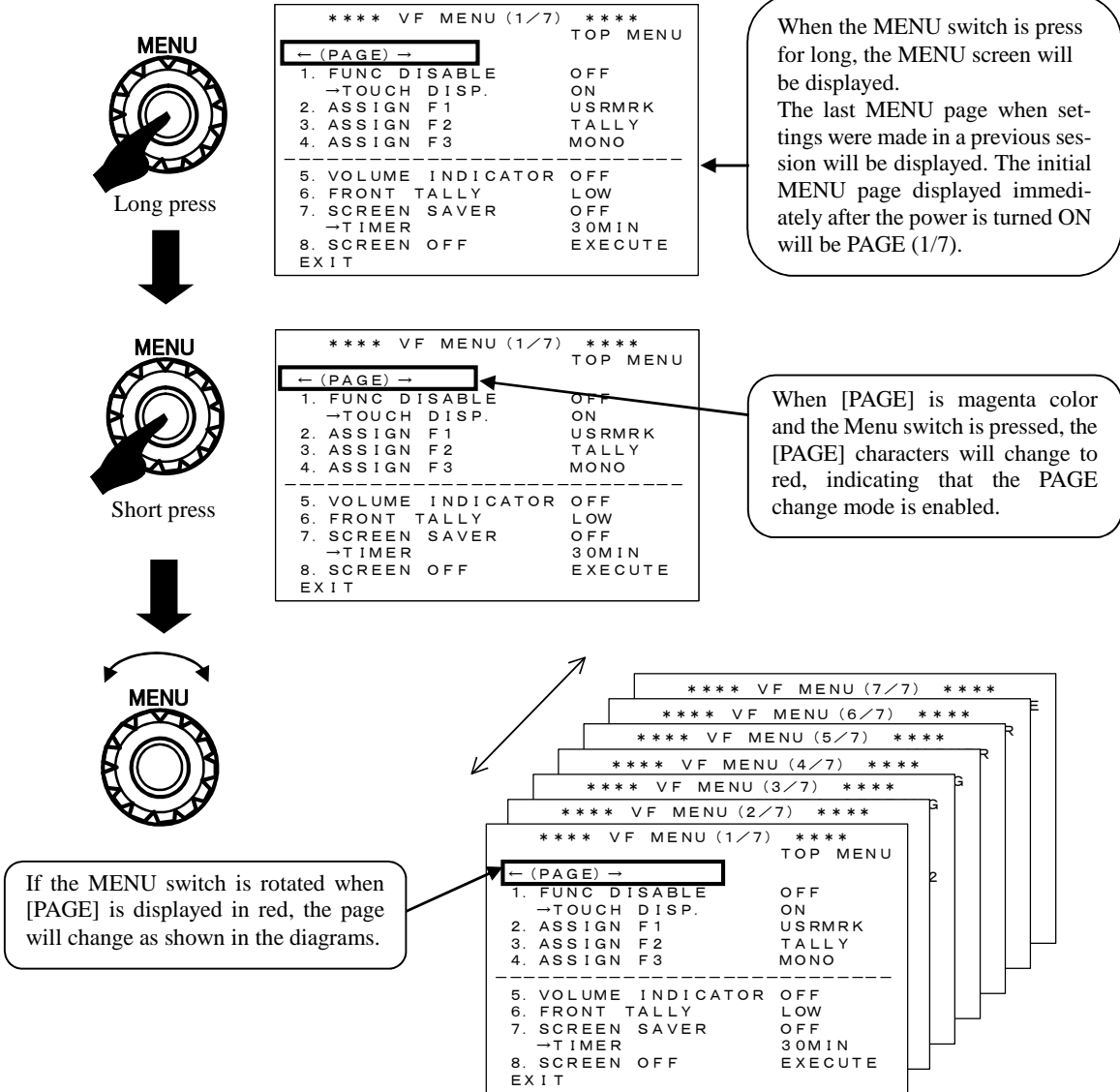
MENU(5/7) (MARKER)	1. MARKER ON/OFF	ON/OFF setting of display of MARKER
	→MARKER SELECT	Setting of marker type
	→ASPECT MARKER	Setting of aspect marker type
	→SAFETY MARKER	Setting of safety marker in "80% to 100% (on 1% basis)"
	→SHADOW MODE	Setting of shadow display mode
	→SHADOW LEVEL	Setting of shadow level
	2. CENTER MARKER	ON/OFF setting of display of center marker
	3. MARKER COLOR	Setting of marker display color
	4. MARKER LEVEL	Setting of marker display level
	MENU(6/7) (USER MARKER)	1. USER MARKER
2. MARKER LEVEL		Setting of user marker display level
3. SCENE SELECT		Setting of five types of scenes
→RESET SCENEx		Execution of resetting the setting scene display
<SCENEx>		Display of currently selected scene number
MRK1: ON <input type="checkbox"/> ····		Setting of display/color/execution of user marker 1
MRK2: ON <input type="checkbox"/> ····		Setting of display/color/execution of user marker 2
MRK3: ON <input type="checkbox"/> ····		Setting of display/color/execution of user marker 3
MRK4: ON <input type="checkbox"/> ····		Setting of display/color/execution of user marker 4
MRK5: ON <input type="checkbox"/> ····		Setting of display/color/execution of user marker 5
MRK6: ON <input type="checkbox"/> ····	Setting of display/color/execution of user marker 6	
MENU(7/7) (INFORMATION)	1. MPU VERSION	Display of MPU version
	2. H/W VERSION	Display of hardware version
	3. WORKING TIME	Display of working time
	4. LOAD FACTORY	Execution of initialization to default data at shipping from the factory

### 3-2. How to operate and functional descriptions of menus (VF MENU)

#### ◆ Basic operations of the menu switch

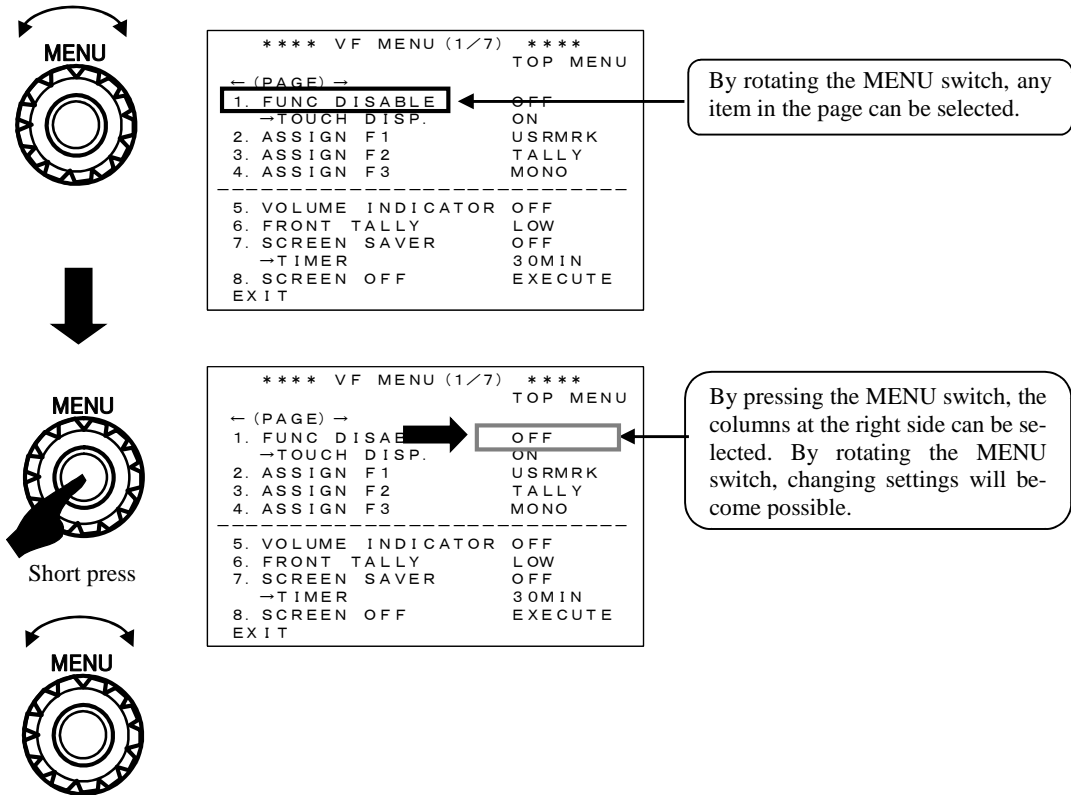
The MENU operation by using MENU switch is explained below.

#### ① Changing MENU pages



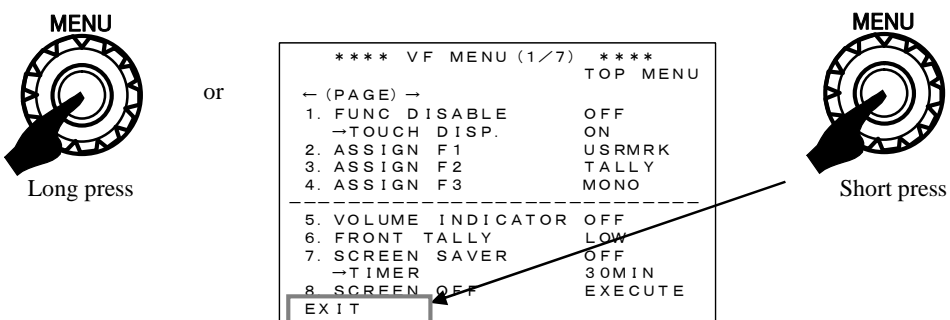
## ② Setting the MENU

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 the MENU switch for long or by press [EXIT] for short.



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

(1) VF MENU (1/7) TOP MENU

**** VF MENU (1/7) ****		TOP MENU
← (PAGE) →		
1. FUNC DISABLE	OFF	①
→TOUCH DISP.	ON	②
2. ASSIGN F1	USMRK	③
3. ASSIGN F2	TALLY	
4. ASSIGN F3	MONO	
-----		
5. VOLUME INDICATOR	OFF	④
6. FRONT TALLY	LOW	⑤
7. SCREEN SAVER	OFF	⑥
→TIMER	30MIN	⑦
8. SCREEN OFF	EXECUTE	⑧
EXIT		

① FUNC DISABLE

It will disable the FUNCTION switch operation in order to prevent accidental setting changes. It is applicable to all FUNCTION switches from F1 to F3.

In order to disable only a particular FUNCTION switch, leave this setting at “OFF” and select “BLANK” for the setting in Item ③.

The default value is “OFF”.

\*The FUNCTION switches can be turned ON/OFF by pressing the MENU switch for a couple of seconds, as well as, the operation of this menu setting.

② TOUCH DISPLAY

It turns ON/OFF the display of the function allocated to each FUNCTION switch on the screen when a corresponding FUNCTION switch is touched.

The default value is “ON”.

\*When “BLANK” is allocated to the FUNCTION switch, nothing is displayed on the screen even with this setting “ON.”

③ ASSIGN F1~F3

Sets up the various functions to be assigned to Function Switches F1 to F3.

◆Items that can be set up:

- USMRK: ON/OFF switchover of USER MARKER display
- TALLY: OFF/LOW/HIGH setting of Front Tally
- SCR OFF: SCREEN OFF function (Long press)
- SCENE: Switchover of individual scenes of user marker

- REVERSE: Switches ON/OFF of the video inverting display function
- PRESET: Sets a preset value to CONTRAST and BRIGHT
- PEAKING: ON/OFF switchover of PEAKING
- PEAK-UP: Switchover of PEAKING magnification
- NOISESUP: Switchover of Coring levels
- MONO: COLOR/MONO switchover of display
- MARKER: ON/OFF switchover of marker
- MAG.: ON/OFF switchover of Video MAG. function
- GAMMA1.4: Switches between a value set at GAMMA SELECT and “GAMMA1.4”
- GAMMA: Switchover of GAMMA setting value
- CPT-DISP: ON/OFF switchover of CAPTURE operation
- CHROMA: COLOR/MONO switchover of display
- CAPTURE: Image capturing operation
- ZM-PEAK: ON/OFF switchover of ZOOM UP PEAKING
- ZEBRA: Switches ON/OFF of ZEBRA
- BLANK: Allocates no function

The default value is as follows.

F1: “USMRK”

F2: “TALLY”

F3: “MONO”

#### ④ VOLUME INDICATOR

Sets up ON/OFF of the manual volume indicator display and the zoom indicator display. When adjusting the PEAKING, CONTRAST, 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.

It also displays the indicator linked to the zoom position of the camera.

The default value is "OFF".

#### ⑤ FRONT TALLY

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

The default value is "OFF".

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

#### ⑥ SCREEN SAVER

The screen can be automatically turned off under the following conditions in order to protect the LCD panel from deterioration: no operation is conducted for a period set in Item ⑦, and there is no change in the input video signal. In this section, this function is set ON/OFF.

After activation, the screen saver function can be cancelled when a switch and/or VR is operated or when the tally is illuminated by the control system. Then the video display restarts. The screen saver function is not cancelled with moving video.

While the screen saver function is working, the [!] LED blinks.

After cancelling the screen saver function, it may take a moment to stabilize the screen brightness.

The default value is "OFF".

#### ⑦ TIMER

⑥ When the screen saver is set to ON, it sets the time required to start the screen saver function.

When there is no VF operation and when the same still picture is continuously displayed for the duration set here, the screen automatically turns off.

The set values of the timer are "5MIN", "10MIN", "15MIN", "30MIN", and "60MIN".

The default value is "30MIN".

#### ⑧ SCREEN OFF

When the VF is not used for a certain time, the screen can be forcibly turned off in order to protect the LCD panel from deterioration.

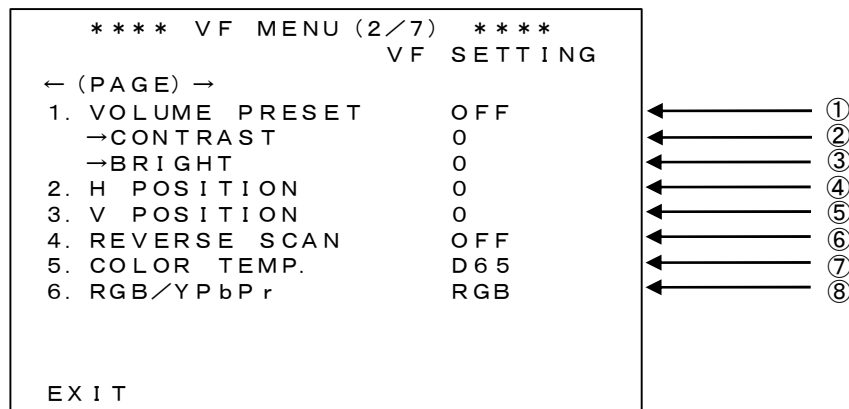
The screen OFF is cancelled when a switch and/or VR is operated or when the tally is illuminated by the control system.

While the screen OFF function is working, the [!] LED blinks.

After cancelling the screen OFF function, it may take a while to stabilize the screen brightness.

\* When [SCR OFF] is set to a FUNCTION switch, the screen can be turned off by keep pressing the FUNCTION switch for a couple of seconds. The screen OFF is cancelled when a switch and/or VR is operated or when the tally is illuminated by the control system.

## (2) MENU (2/7) VF SETTING



### ① VOLUME PRESET

“CONTRAST” and “BRIGHT” are set on the setting value of ② and ③ respectively as the preset values.

The default value is “OFF”.

\* Setting [PRESET] on a FUNCTION switch will enable CONTRAST and BRIGHT value.

### ② CONTRAST

Sets up the Contrast PRESET value.

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

The default value is “0”.

### ③ BRIGHT

Sets up the Brightness PRESET value.

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

The default value is “0”.

### ④ H POSITION

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

The default value is “0”.

### ⑤ V POSITION

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

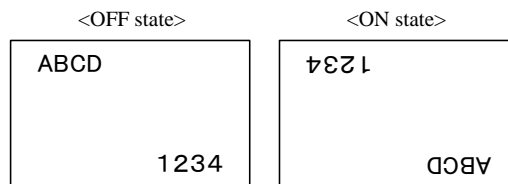
The default value is “0”.

### ⑥ REVERSE SCAN

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

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

The default value is “OFF”.



\*Setting [REVERSE] on a FUNCTION switch will enable ON/OFF switchover of Image Reversing Display function.

### ⑦ COLOR TEMP.

Sets up the COLOR Temperature.

The setting value is “D65” or “PANEL”.

When this is set on “D65”, the color temperature will be set to 6500K. When on “PANEL”, the image quality, whose contrast is prior, will be realized

The default value is “D65”. (“D65” means 6500K.)

### ⑧ RGB/YPbPr

It sets RGB/YPbPr for the input signal.

The default value is “RGB”.

### (3) VF MENU (3/7) VIDEO SETTING

**** VF MENU (3/7) ****		
VIDEO SETTING		
← (PAGE) →		
1. COLOR/MONO	COLOR	①
2. CHROMA UP	OFF	②
3. GAMMA SELECT	GAMMA2. 2	③
4. ZEBRA	OFF	④
5. VIDEO MAG.	OFF	⑤
→MAG. POSITION	CENTER	⑥
→MAG. RATIO	X2	⑦
→MAG. TIMMER	3 s e c .	⑧
6. VIDEO CAPTURE	EXECUTE	⑨
→CAPTURE DISPLAY	OFF	⑩
→DISP. INTERVAL	2 FRAME	⑪
EXIT		

#### ① COLOR/MONO

Sets up the COLOR/MONO display.

The default value is "COLOR".

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

#### ② CHROMA UP

ON/OFF switchover of CHROMA UP. In ON mode, the color level is increased.

The default value is "OFF".

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

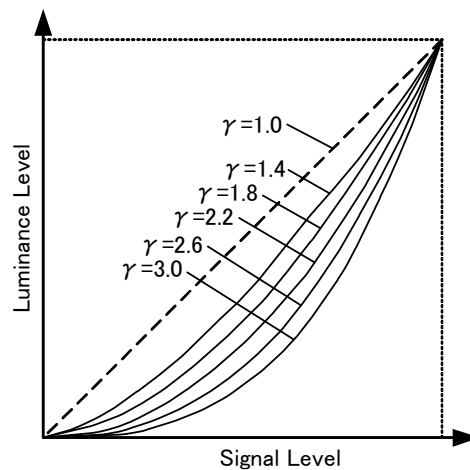
#### ③ GAMMA SELECT

Sets up the Gamma value.

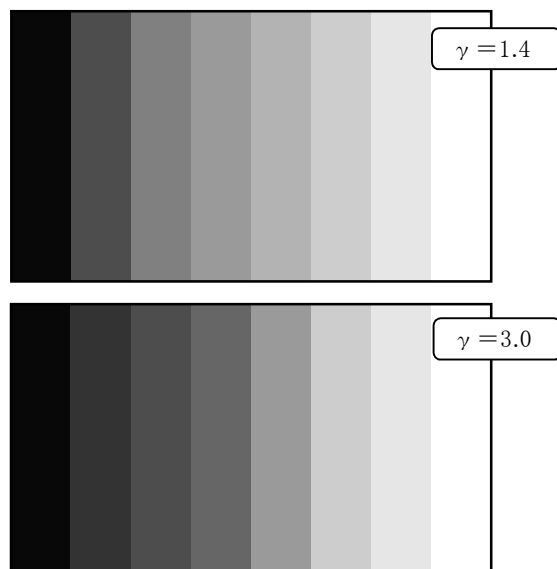
The normal Gamma setting is "2.2" as a standard. This is a function to increase the quality of the gradation in the dark section in images by lowering that Gamma's value to "1.4", "1.8", "2.2", "2.6", and "3.0".

The default value is "GAMMA2.2".

\* Setting [GAMMA] on a FUNCTION switch will enable GAMMA setting switchover.



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



#### ④ ZEBRA

It sets ON/OFF of ZEBRA.

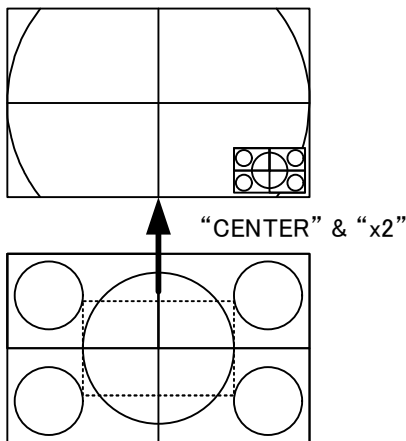
The default value is "OFF".

\* When [ZEBRA] is set to a FUNCTION switch, the ZEBRA can be switched ON/OFF.

#### ⑤ VIDEO MAG

It sets ON/OFF of the screen magnification.

Video set to MAG. POSITION and MAG. RATIO is displayed on the entire screen, and the image of the entire video area is displayed small at the lower right corner.



The default value is "OFF".

\* When [MAG] is set to the FUNCTION switch, the screen magnification function can be switched ON/OFF. (Switching ON/OFF is only available when [MAG] is set to the FUNCTION switch.)

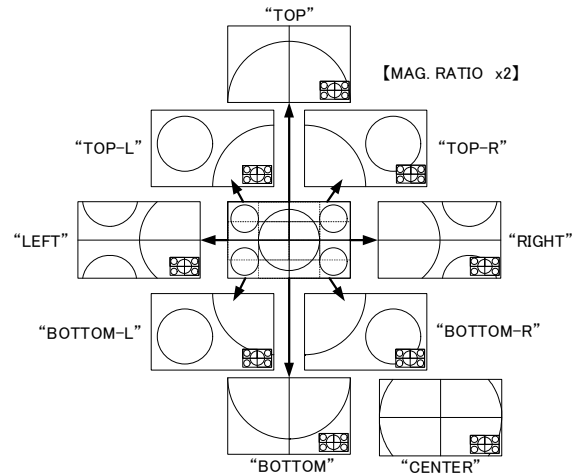
#### ⑥ MAG. POSITION

It sets a position of the screen to be magnified.

The following positions are available for setting.

"CENTER", "TOP", "BOTTOM", "LEFT", "RIGHT",  
 "TOP-L" (TOP LEFT),  
 "TOP-R" (TOP RIGHT),  
 "BOTTOM-L" (BOTTOM LEFT),  
 "BOTTOM-R" (BOTTOM RIGHT)

The default value is "CENTER".



\* Above figure is the figure applicable when MAG. RATIO: "x2".

#### ⑦ MAG. RATIO

It switches the magnification ratio of the screen.

The set values of "x2" (twofold), "x4" (fourfold), and "x8" (eightfold) are available.

The default value is "x2" (twofold).

#### ⑧ 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 "1sec." and "7sec.", and "OFF".

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

The default value is "3sec.".

#### ⑨ VIDEO CAPTURE

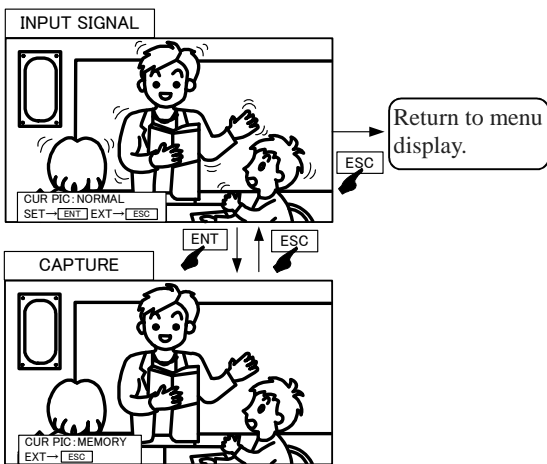
It captures the input video in the entire screen.

When EXECUTE is executed, the MENU is displayed at the lower left section of the screen. Pressing the ENT switch in this condition captures the entire screen.

When the ESC switch is pressed, it returns to the input signal.

\* When [CAPTURE] is set to the FUNCTION switch, the input video is captured in the entire screen.





### ⑪ 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 switchovers will occur automatically in the case of the “FRAME” mode.

In the “HOLD” mode, manual switching is available with [CPT-DISP] set to the FUNCTION switch.

The default value is “2FRAME”.

### ⑩ CAPTURE DISPLAY

Sets up ON/OFF of the Screen Capture function.

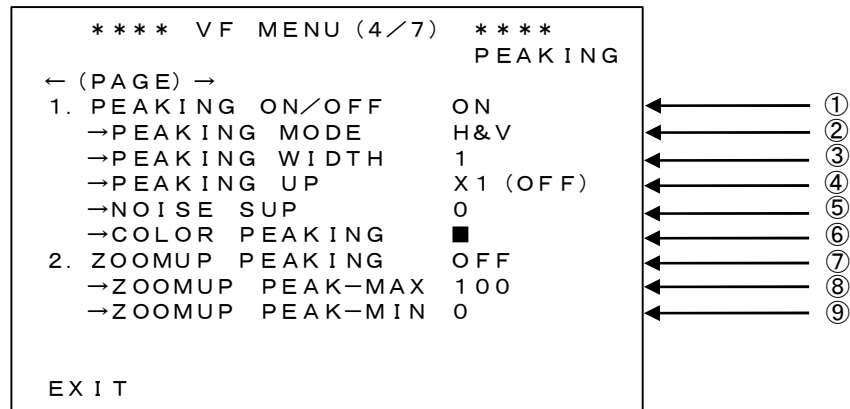
In the mode set up under item ⑪, ON/OFF switchover of the camera image and the capture image can be performed.

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

The default value is “OFF”.

\* When [CPT-DISP] is set to the FUNCTION switch, switching between the video on the camera and the captured image is conducted in the mode set in ⑪.

#### (4) VF MENU (4/7) PEAKING



##### ① PEAKING

Sets up ON/OFF of PEAKING function.

The default value is "ON".

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

##### ② PEAKING MODE

This sets the directions 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", the peaking edge flicker may be found in the moving picture. In this case, this phenomenon will be improved by changing the setting to "H-ONLY".

The default value is "H&V".

##### 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).

The default value is "1".

##### ④ 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 "×1" (OFF), "×2", "×4", and "×8".

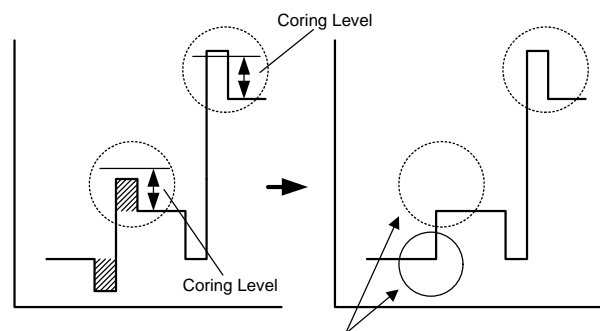
The default value is "×1" (OFF).

\*Setting [PEAK-UP] on a FUNCTION switch will enable switching of the Peaking Magnification.

##### ⑤ 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 the 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.



Edges below the Coring Level will be cut off.

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

The setting value is a value between "0" and "9".

The default value is "5".

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

\* When the peaking color is set to a color other than “White” in ⑨, the NOISE SUP function does not work. The characteristic becomes the same as the set value “0”.

## ⑥ COLOR PEAKING

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

The default value is “White”.

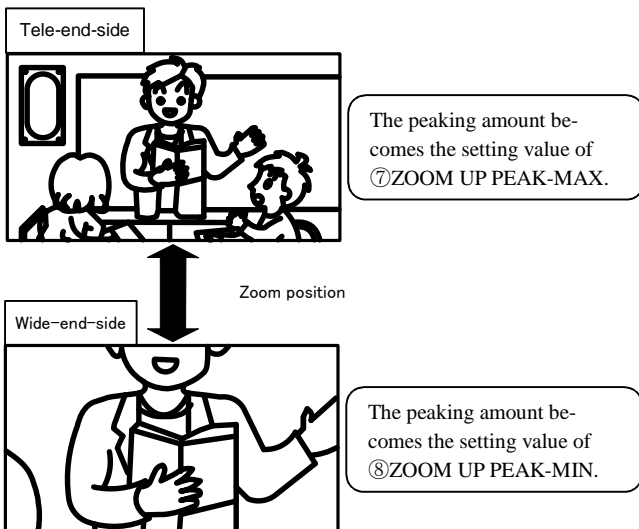
\* Functions and characteristic of the peaking color is limited by colors.

- In case the color is “White”, the variable peaking amount becomes 128 tones. In case of other colors, it becomes 64 tones. The minimum and maximum values are the same.

- When the color is other than “White”, the ④ NOISE SUP function does not work.

## ⑦ ZOOM UP 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.



The default value is “OFF”.

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

## ⑧ ZOOM UP PEAK-MAX

When ZOOM UP PEAKING is “ON”, you can set the value of the peaking amount in the Tele-end side from the setting value in ⑨ to “100”.

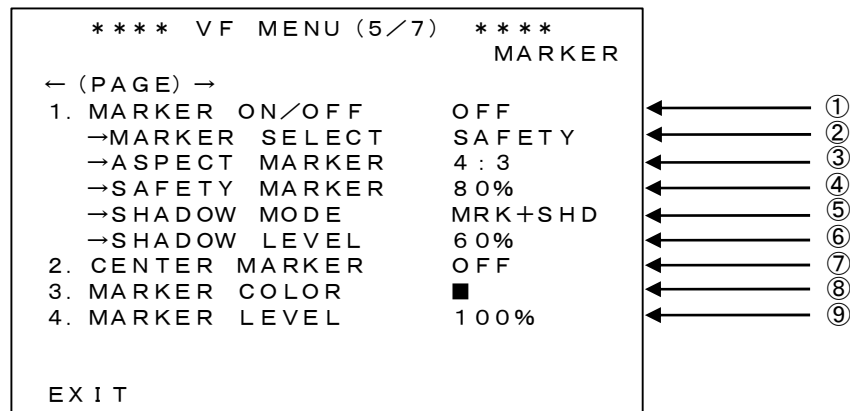
The default value is “100”.

## ⑨ ZOOM UP PEAK-MIN

When ZOOM UP PEAKING is ON, you can set the value of the peaking amount in Wide-end side from “0” to the setting value in ⑧.

The default value is “0”.

## (5) VF MENU (5/7) MARKER

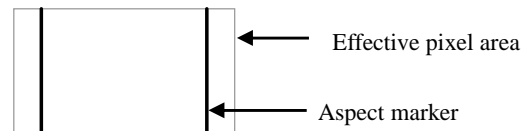


### ① MARKER ON/OFF

Sets up ON/OFF of the Marker Display.

The default value is "OFF".

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

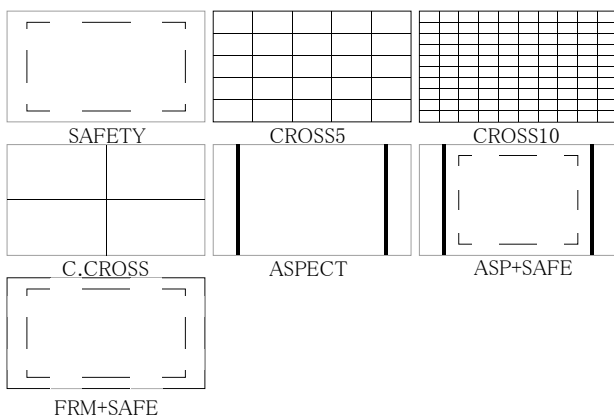


### ② MARKER SELECT

Switches over the Marker to be displayed.

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

The default value is "SAFETY".



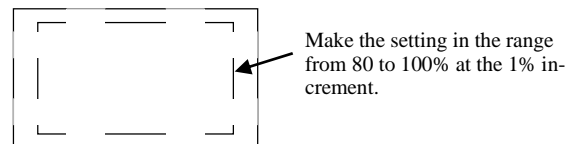
### ④ SAFETY MARKER

Switches the Safety Area of the Safety Marker.

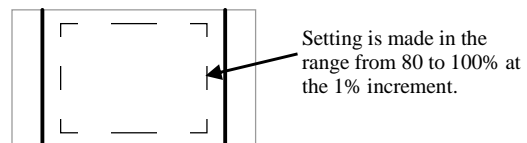
The setting values that can be selected are between "80%" and "100%" (set at the 1% increment).

The default value is "80%".

<In the case of SAFETY MARKER Display>



<In the case of SHADOW display>

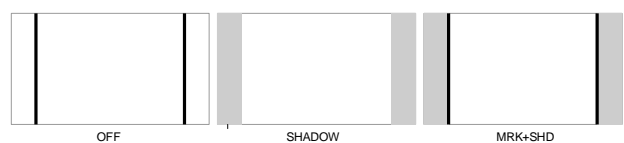


### ⑤ SHADOW MODE

Switches the Display mode of the Aspect Marker.

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

The default value is "MRK+SHD".



### ③ 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".

The default value is "4:3".

### ⑥ SHADOW LEVEL

Switches the Shadow Level of the Aspect Marker.

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

The default value is “60%”.

### ⑦ CENTER MARKER

“OFF”, “Type-A” (with center intersection), and “Type-B” (no center intersection) are available for the center marker indication setting.

The default value is “OFF”.



OFF

Type A

Type B

### 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”, “Red”, “Blue”, “Green”, “Cyan”, and “Magenta”.

The default value is “White”.

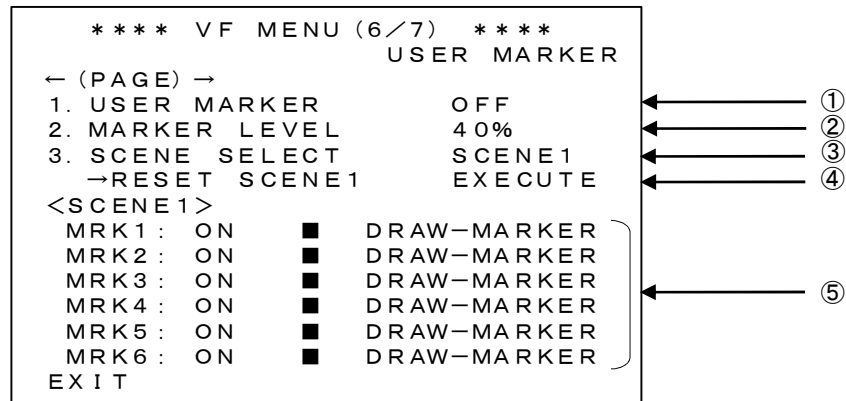
### ⑨ MARKER LEVEL

Switches the brightness level of Marker.

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

The default value is “100%”.

## (6) VF MENU (6/7) USER MARKER



### ① USER MARKER

Sets up ON/OFF of the USER MARKER display.

The default value is "OFF".

\* 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%".

The default value is "40%".

### ③ SCENE SELECT

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

The default value is "SCENE1".

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

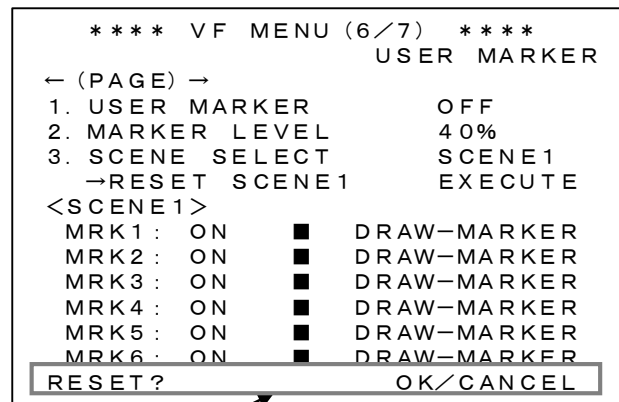
### ④ RESET SCENE\*

The drawn USER MARKERS are erased by each SCENE.

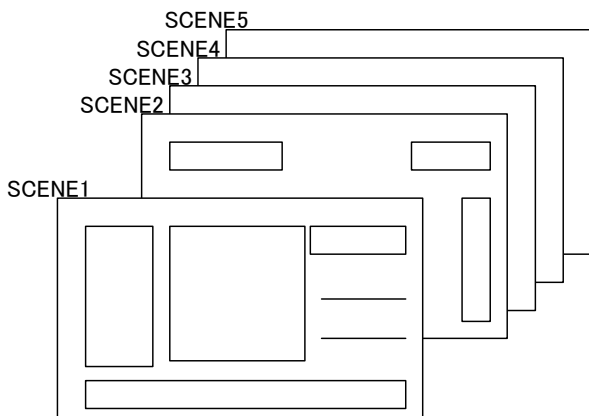
Select a SCENE to be erased in item ③ first. Then, press the MENU switch at RESET.

At this time, a dialog message asking for a confirmation for erasing is displayed.

At this time, selecting OK and pressing the MENU switch erase the USER MARKER of the SCENE.

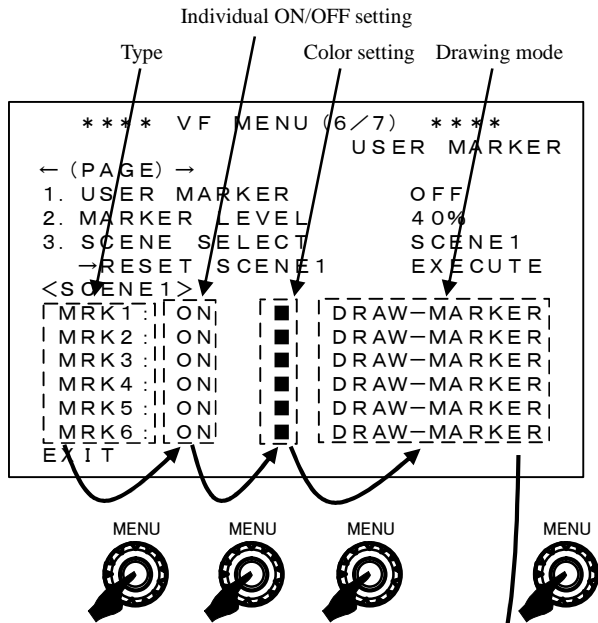


The confirmation message



## ⑤ MARKER1~6

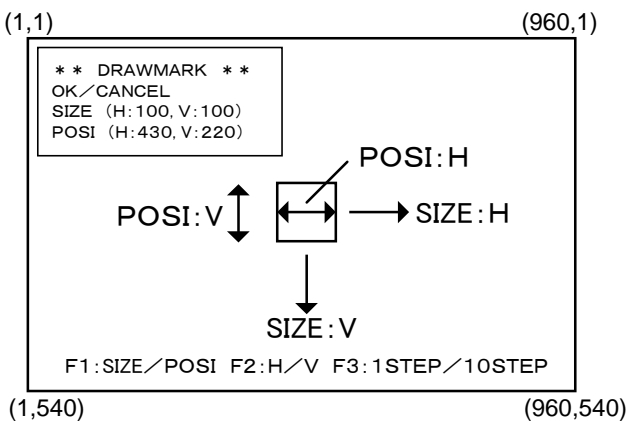
In a single scene, 6 types of User Marker can be set for making individual ON/OFF settings, display color settings (for white, yellow, cyan, green, magenta, red, and blue), and the setting for drawing.



### ◆USER MARKER Drawing Mode

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

Numbers indicate coordinates of pixels in 960 × 540.



### ●Selection of drawing item and how to draw the USER MARKER

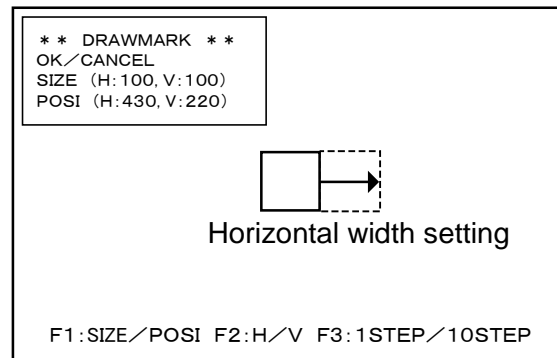
Before start drawing, the drawing item will be selected by turning the MENU switch and you can decide the drawing item by pressing the MENU switch. The value will be selected by turning the MENU switch and that value can be decided by pressing the MENU switch.

Regarding the drawing items, you can change them cyclically like below by turning the MENU switch:

SIZE:H→SIZE:V→POSI:H→POSI:V

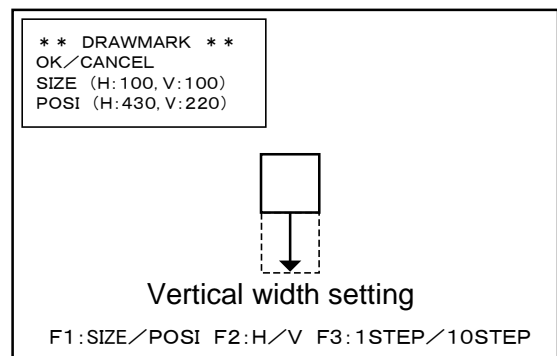
### ● Drawing for SIZE:H

Horizontal width of a BOX or a LINE can be changed by turning the MENU switch. And also, every time when you click the toggle switch F3, you can change this drawing width unit to 1 or 10 pixels cyclically.



### ● Drawing for SIZE:V

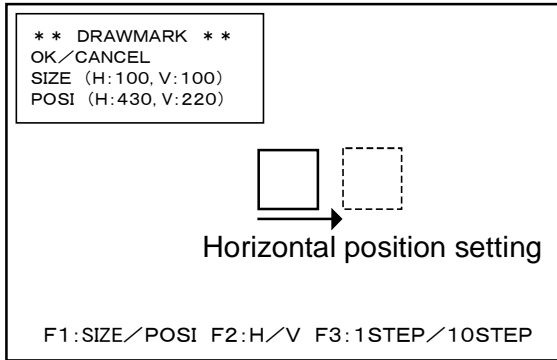
Vertical width of a BOX or a LINE can be changed by turning the MENU switch. And also, every time when you click the toggle switch F3, you can change this drawing width unit to 1 or 10 pixels cyclically.



- Drawing for POSI:H

A BOX or a LINE can be moved in the horizontal direction by turning the MENU switch.

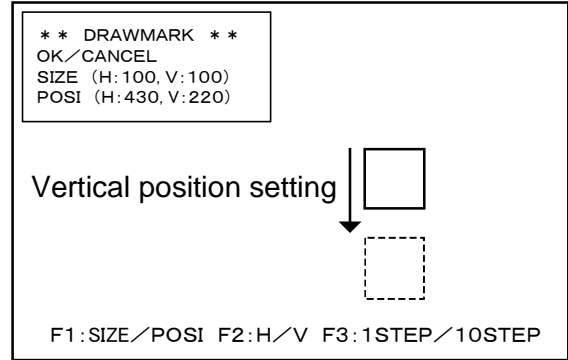
And also, every time when you click the toggle switch F3, you can change the position movement unit to 1 or 10 pixels cyclically.



- Drawing for POSI:V

A BOX or a LINE can be moved in the vertical direction by turning the MENU switch.

And also, every time when you click the toggle switch F3, you can change the position movement unit to 1 or 10 pixels cyclically.



- How to use F1 and F2 toggle switches during the drawing of MARKER

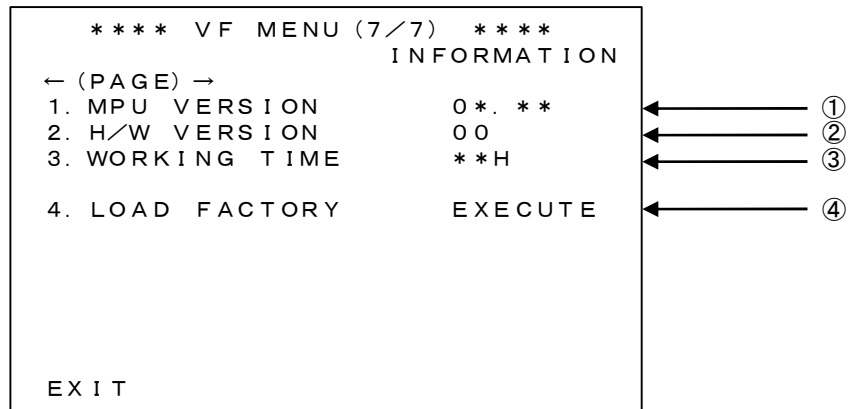
During your drawing MAKER, every time when you click the toggle switch F1 or F2, you can change the drawing item, SIZE and POSI or H and V respectively easily.

F1: SIZE ⇔ POSI

F2: H ⇔ V



**(7) VF MENU (7/7) INFORMATION**



**① MPU VERSION**

Displays the MPU version.

**② HW VERSION**

Display the Hard Ware version

**③ WORKING TIME**

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

**④ LOAD FACTORY**

Returns all settings to the Factory Settings.

#### 4. Switching “Valid/Invalid” operation of the FUNCTION Switches

◆ “Valid/Invalid” operation of the FUNCTION switches can be switched by holding the MENU switch for a couple of seconds, as well as, by setting with the MENU.



##### (1) When the MENU is not displayed

When the MENU switch is pressed, the MENU is displayed. Then, if the MENU switch is continuously pressed for two seconds or so, the MENU disappears, and “Valid/Invalid” operation of the FUNCTION switches is possible.

##### (2) When the MENU is displayed

When the MENU switch is pressed, the MENU disappears. Then, if the MENU switch is continuously pressed for two seconds or so, “Valid/Invalid” operation of the FUNCTION switches is possible.

\* When the FUNCTION switch operation is set to “Invalid”, the function name is also not displayed by the touch sensor.

## 5. Specifications

### 5-1. General specifications

#### (1) Power-supply voltage

+12 V DC (10.5~18 V)

#### (2) Power consumption

4.1 W (+12V DC, Color bar ON (1080i/59.94), Heater OFF, Tally OFF)

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

In operation: -20°C ~ +45°C

20%~85% (non-condensing)

For storage: -20°C ~ +60°C

20%~85% (non-condensing)

Maximum wet-bulb temperature: 29°C

#### (4) Outside dimensions

Main unit: 225 (W) × 76 (H) × 155 (D) mm

(not including protrusions and the mounting bracket)

#### (5) Mass

780 g or less

#### (6) Accessories

The mounting bracket (1)

Operation manual (1)

### 5-2. Rated performance

#### (1) Camera video signal

##### a) Input terminal

Input: camera interface 1 system

##### b) Input signal format (automatic recognition)

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

##### c) Input signal

Analog RGB/YPbPr signal

##### d) Input level

G/Y: 1Vp-p (including SYNC) positive polarity

B/R/Pb/Pr: 700 mVp-p positive polarity

##### e) Input impedance

75 Ω

### 5-3. LCD module specifications

**(1) Pixels number**

960(H) x 540 (V) dot

**(2) Pixel pitch**

0.0155mm (W) x 0.0465mm (H)

**(3) Screen size (display area)**

44.64mm x 25.11mm (51.2mm diagonal)

**(4) Screen brightness (Only LCD specification)**

220cd/m<sup>2</sup>

**(5) Drive method**

a-TFT active matrix, non-interlace,  
normally white

**(6) Pixel arrangement**

RGB vertical stripe

**(7) Response speed**

T<sub>on</sub>+T<sub>off</sub>:16ms(typ.) (Ta=25°C)

**(8) Contrast ratio**

200:1 (Typ.)

**(9) Number of display colors**

16.77 million colors (Each of RGB at 8 bits)

**(10) Angle of visibility**

45° (up and down, left and right) (contrast ratio 10:1 more)

## 6. Functions

### 6-1. Front operations

#### (1) Menu Switch

Rotary encoder (Moving cursor and enter)

#### (2) FUNCTION switch (F1 to F3)

Functions can be allocated to the toggle switches from the MENU.

In order to prevent erroneous operation, it is also possible to allocate "BLANK" which allows no operation or to disable the toggle switch operation itself.

#### (3) Volume

PEAKING, CONTRAST, BRIGHT

### 6-2. Marker function

#### (1) Center marker

- Type-A (with a center intersection point)
- Type-B (without a 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 aspect marker area

- a) Types
  - Various aspect markers + shadows
  - Various aspect markers only
  - Shadows only
- b) Shadow contrast level
  - Setting in 4 steps of 0%, 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 per 1 scene: 6
- c) Color: 7 colors (Individual settings allowed)
- d) Marker level: 5-step setting in 20%, 40%, 60%, 80%, and 100%
- e) Size allowed for drawing: 960 × 540 pixels
- f) Drawing method: By using the switch

\* Patent registered

#### 6-5. Video-MAG. function

The input images are magnified to x2, x4, and x8. The section to be magnified can be selected from the center, top, bottom, left, right, upper left, upper right, lower left, and lower right. Because of this function, the visibility of pixels improves even in a high-resolution LCD, and confirmation of focusing becomes easier.

#### 6-6. Peaking function

##### (1) Edge width

The setting value is 1 (thin) ~ 4 (thick).

##### (2) NOISE SUP

This is a function for cutting off the edges below the 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.

##### (3) PEAKING UP

The amplification of peaking level can be set on x1, x2, x4, and x8 according to the difference of luminance. The peaking will be effect for the pixels whose difference of luminance is low.

##### (4) ZOOM UP PEAKING

The peaking amount can be variable by being linked with zoom position. The peaking amount will be maximum in tele-end and minimum in tele-wide.

##### (5) COLOR PEAKING

This function adds the color on the edge of video when the peaking setting is ON. It will be easy to get the fine focusing.

#### 6-7. Touch Sensor Function

When a FUNCTION switch is touched, it immediately detects and displays the function name of the touched switch on the screen. Because of this function, functions allocated to FUNCTION switches and the configuration becomes easy to recognize. Hiding the touch sensor function name is also possible by the menu.

\* Patent pending

#### 6-8. Screen Saver Function

When no operation is conducted, or the same image is displayed for a certain period, the screen can be turned off automatically. Because of this function, the screen can be protected from image burn-in, and the lifetime of the LCD can be extended.

#### 6-9. Screen Off Function

With the screen OFF function allocated to a FUNCTION switch, the screen can be turned off if not used for a certain period. Because of this function, the screen can be protected from image burn-in, and the lifetime of the LCD can be extended.

## 7. Applicable Standards

### 7-1. Radio noise

- FCC Class-A
- EN55032 Class-A
- EN55103-2 E4

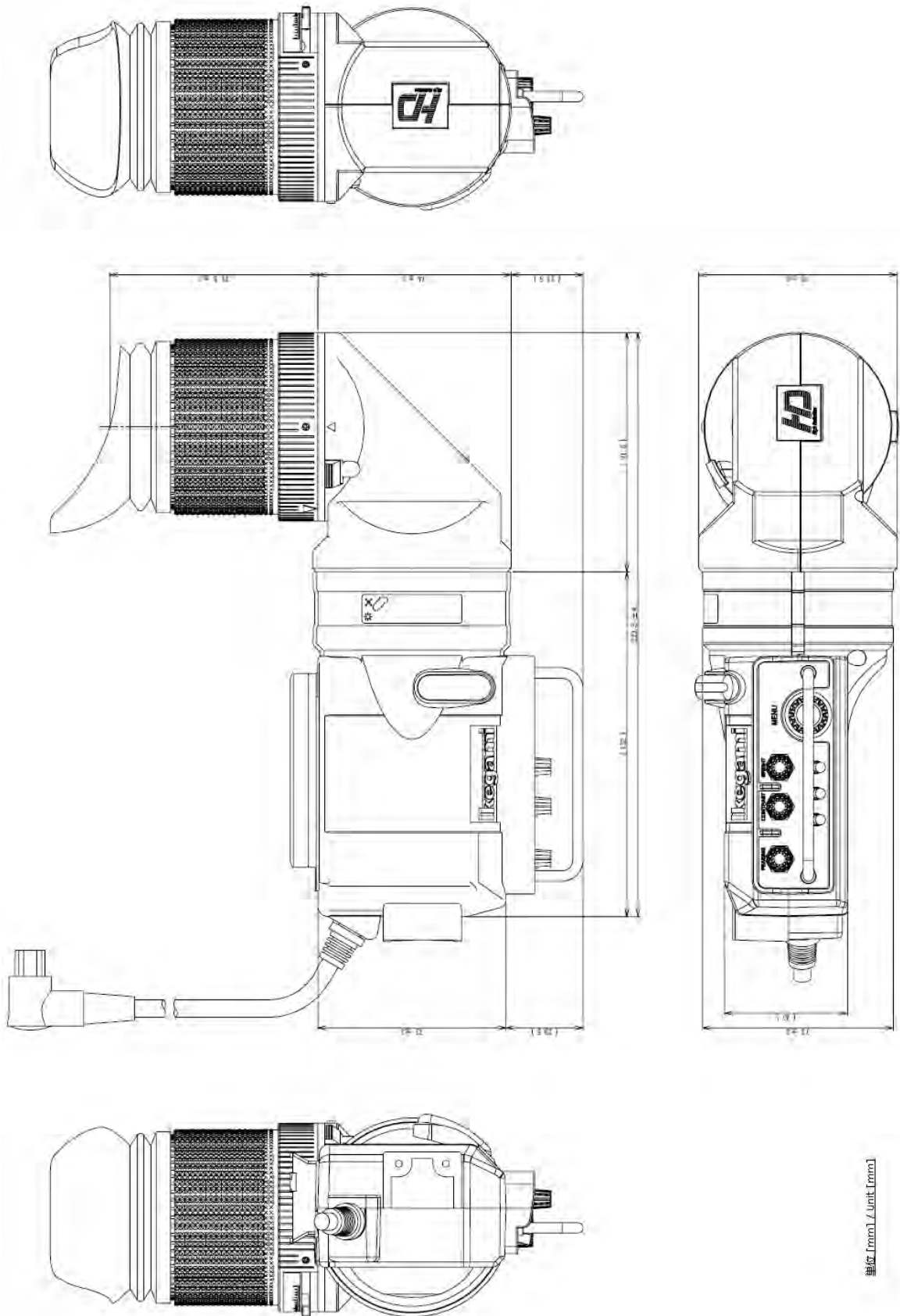
### 7-2. Environmental standards

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. 本体外観図 / Exterior Drawing





# Ikegami

## 池上通信機株式會社

本社：〒146-8567 東京都大田区池上 5-6-16 TEL(03)5700-1111(大代)  
5-6-16, Ikegami, Ohta-ku, Tokyo, 146-8567 Japan  
Phone: 03-5700-1111, Fax: 03-5700-1137 <http://www.ikegami.co.jp>

### ご連絡先

□国内営業グループ	〒146-8567 東京都大田区池上 5-6-16	電話 03-5748-2211
□大阪支店	〒564-0052 大阪府吹田市広芝町 9-6 第1江坂池上ビル	電話 06-6389-4466
□名古屋営業所	〒465-0051 愛知県名古屋市名東区社が丘 1-1506 加藤第2ビル	電話 052-705-6521
□福岡営業所	〒812-0016 福岡県福岡市博多区博多駅南 3-7-10 STビル 4F	電話 092-451-2521
□仙台営業所	〒983-0869 宮城県仙台市宮城野区鉄砲町西 1-14 富士フィルム仙台ビル 6F	電話 022-292-2420
□札幌営業所	〒060-0051 北海道札幌市中央区南一条東1-3 パークイースト札幌 8F	電話 011-231-8218
□テクノイケガミ	〒210-0826 神奈川県川崎市川崎区塩浜 4-13-15	電話 044-270-5471
□テクノイケガミ(大阪カスタマーサービス)	〒564-0052 大阪府吹田市広芝町 9-6 第1江坂池上ビル	電話 06-6389-2051

### □Ikegami Electronics (U.S.A.), Inc.

300 Route 17 South, Mahwah, NJ 07430, U.S.A

Phone: (201) 368-9171, FAX (201) 569-1626

[www.ikegami.com](http://www.ikegami.com)

### □Ikegami Electronics (Europe) GmbH

Ikegami Strasse 1, D-41460 Neuss, Germany

Phone: 02131-1230, FAX 02131-102820

[www.ikegami.de](http://www.ikegami.de)

### □Ikegami Electronics (Europe) GmbH (U.K. Branch)

1 Windmill Business Village, Brooklands Close, Sunbury on Thames, TW16 7DY, England

Phone: 01932-769700 FAX 01932-769710

[www.ikegami.co.uk](http://www.ikegami.co.uk)

### □Ikegami Electronics Asia Pacific Pte.LTD.

1 Tampines Central 5, #3-3 CPF Tampines Building, Singapore 529508

Phone: (+65) 6260-8820 FAX:(+65) 6260-8896

本書の全部または一部を無断で転載、複写することを禁じます。  
改良のためお断りなく、製品の仕様を変更することがあります。

**MODEL VFL201A**  
HDTV Analog I/F LCD Color Viewfinder  
**オペレーションマニュアル**

第二版：2018年 8月

発行：池上通信機株式会社  
© 2018年 7月 池上通信機株式会社

**MODEL VFL201A**  
HDTV Analog I/F LCD Color Viewfinder  
**Operation Manual**

2nd Edition: Aug 2018

Published in Ikegami Factory of Ikegami Tsushinki Co., Ltd.  
© July 2018 Ikegami Tsushinki Co., Ltd.

**Ikegami**