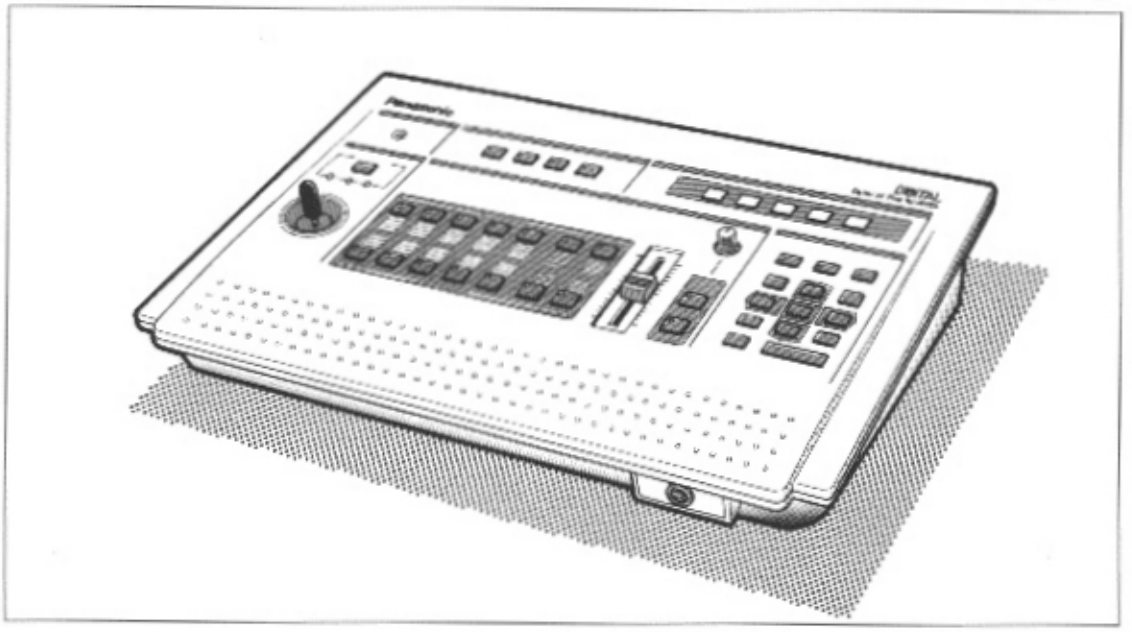
Operating Instructions

Digital AV Mixer

WJ-AVE55

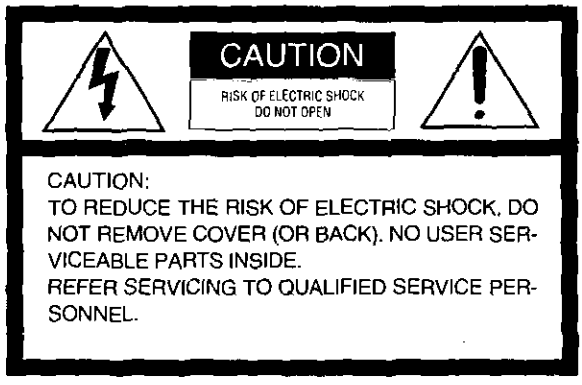


Panasonic®

Before attempting to connect or operate this product, please read these instructions completely

CAUTION:

Before attempting to connect or operate this product, please read the label on the bottom.



SA 1965

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

SA 1966

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

For U.S.A

Warning:
This equipment generates and uses radio frequency energy and if not installed and used properly, i.e., in strict accordance with the instruction manual, may cause harmful interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment.

The serial number of this product may be found on the bottom of the unit.
You should note the serial number of this unit in the space provided and retain this book as a permanent record of your purchase to aid identification in the event of theft.

Model No. _____

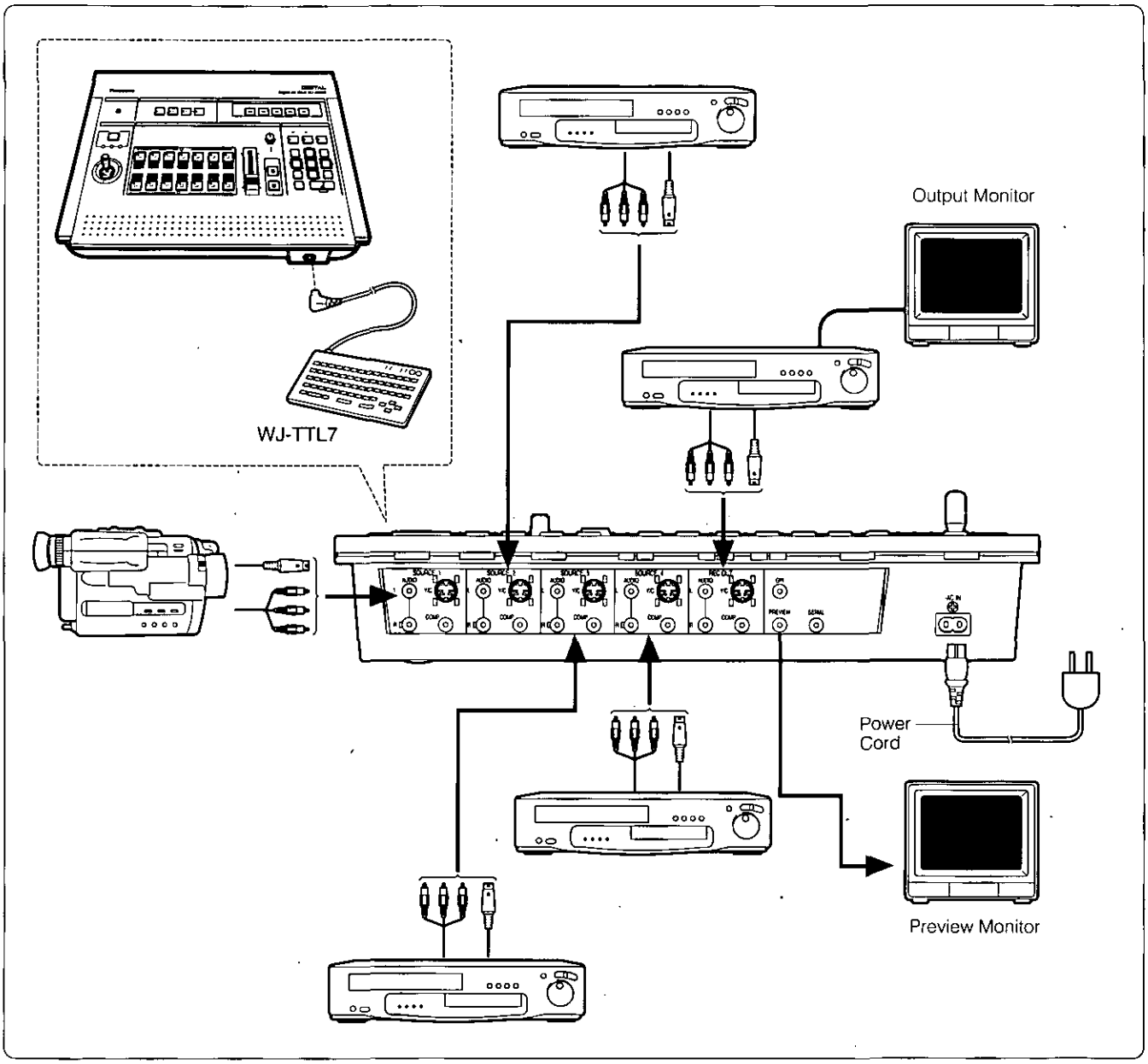
Serial No. _____

WARNING:
TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

Quick Start

CONNECTION

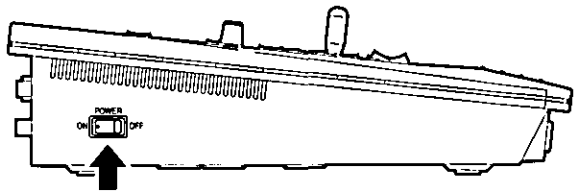
Precaution: When supplying the composite video signal and S-video signal simultaneously, the S-video signal has a priority.



Power On

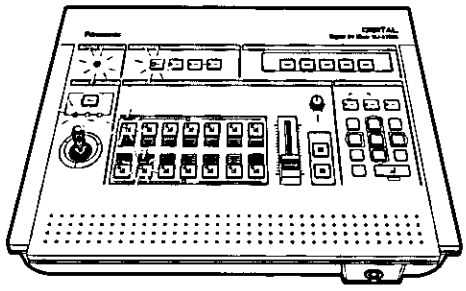
Precaution: Be sure to connect the Power Cord firmly between the AC IN of the rear panel of this unit and local AC Outlet.

- **Press the Power Switch on the side panel to the ON position.**



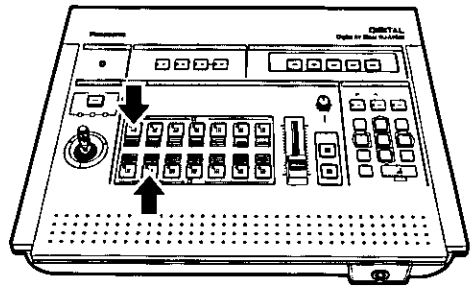
Initial Mode

The LED's on the operation panel light up as shown and the unit is now in initial mode for operation.



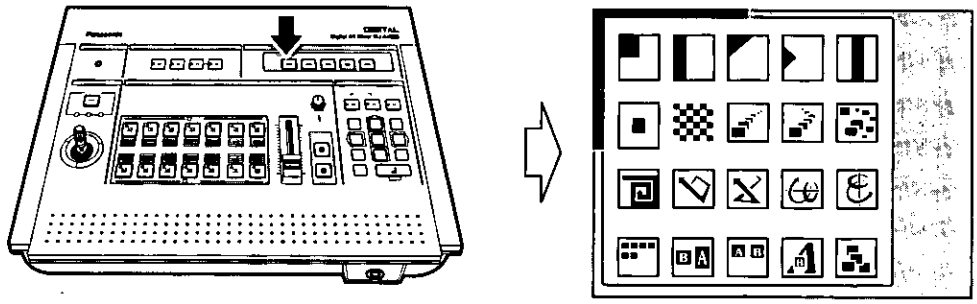
Video Source Selection

Press the desired button for A-bus video source.
Press the desired button for B-bus video source.

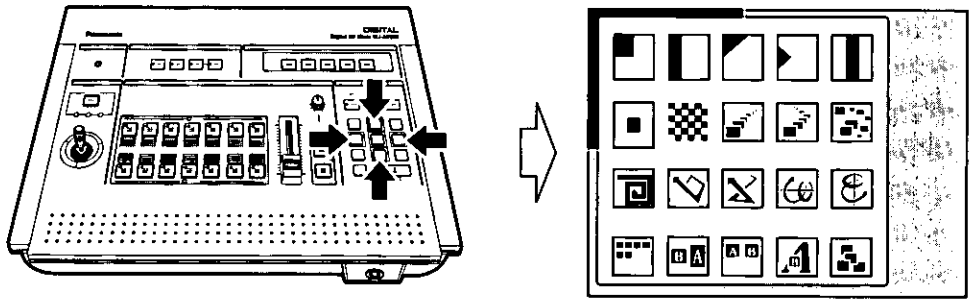


Wipe

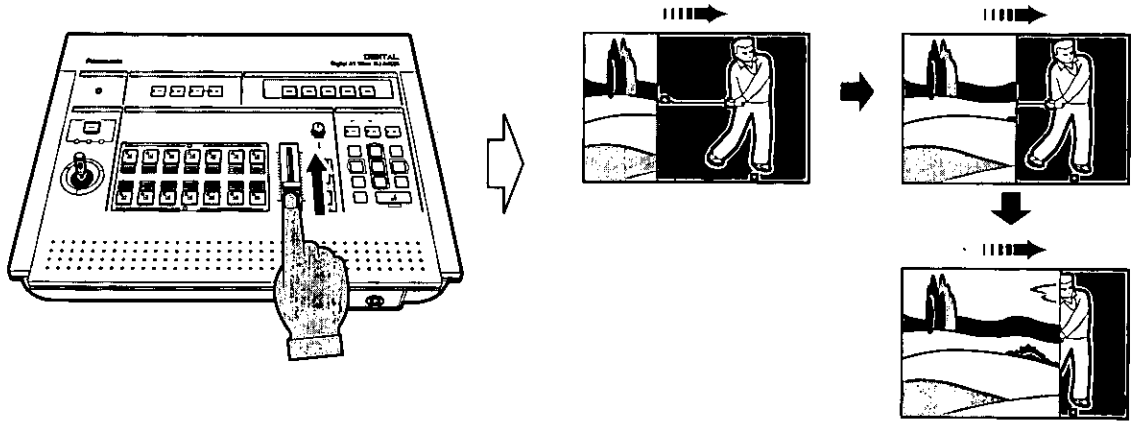
- **Press WIPE button.** The wipe patterns are displayed on the preview monitor.



- **Select ◧ by using the Up/Down/Left/Right button.**

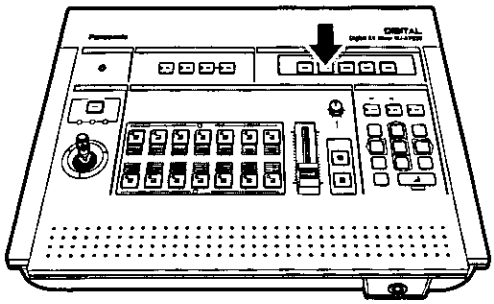


- **Slide the Wipe/Mix Control to the A-bus position.**



Ex.: MOSAIC effect to the B-bus

- **Press EFFECT button.** The EFFECT menu is displayed on the preview monitor.

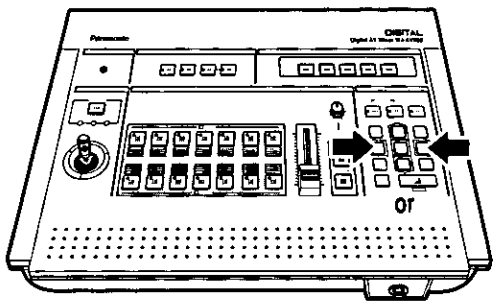


```
■EFFECT :A B

□STROBE :0 1 2 3 4 5
□MOSAIC :0 1 2 3 4 5
□PAINT  :0 1 2 3 4
□STILL  :FLD FRM
□NEGA   :OFF ON
□CHROMA :OFF ON

□C.LEVEL:
```

- **Select the B by using the Left/Right button.**

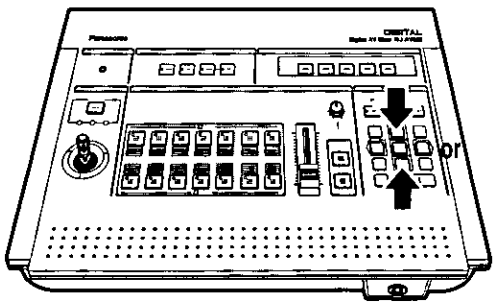



```
■EFFECT :A B

□STROBE :0 1 2 3 4 5
□MOSAIC :0 1 2 3 4 5
□PAINT  :0 1 2 3 4
□STILL  :FLD FRM
□NEGA   :OFF ON
□CHROMA :OFF ON

□C.LEVEL:
```

- **Move the cursor to the MOSAIC position by using the Up/Down button.**

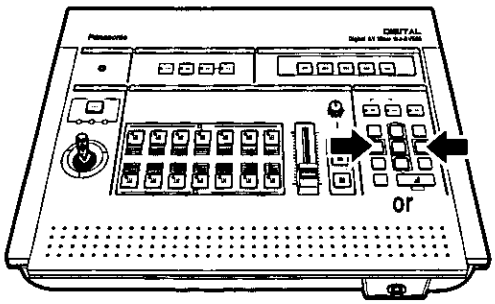



```
□EFFECT :A B

□STROBE :0 1 2 3 4 5
■MOSAIC :0 1 2 3 4 5
□PAINT  :0 1 2 3 4
□STILL  :FLD FRM
□NEGA   :OFF ON
□CHROMA :OFF ON

□C.LEVEL:
```

- **Select the desired level (in this case, 3) by using the Right/Left button.**

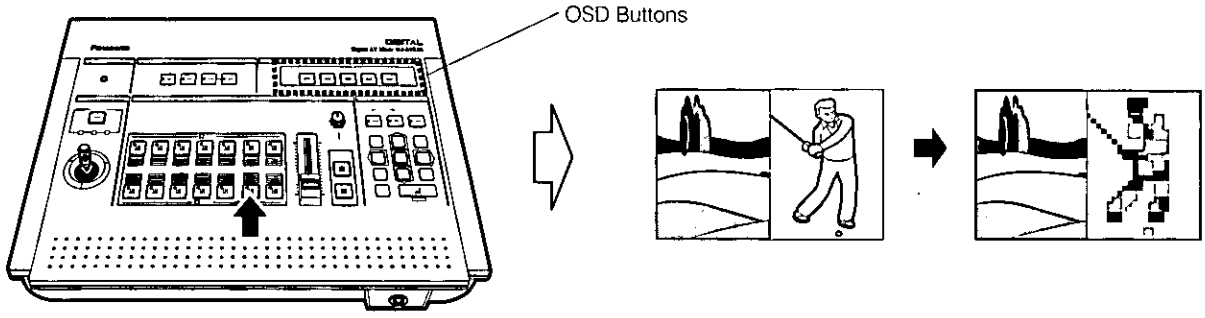



```
□EFFECT :A B

□STROBE :0 1 2 3 4 5
■MOSAIC :0 1 2 3 4 5
□PAINT  :0 1 2 3 4
□STILL  :FLD FRM
□NEGA   :OFF ON
□CHROMA :OFF ON

□C.LEVEL:
```

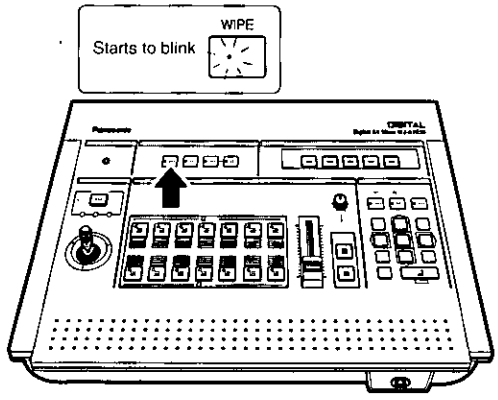
Press the Effect Output button on B-bus.



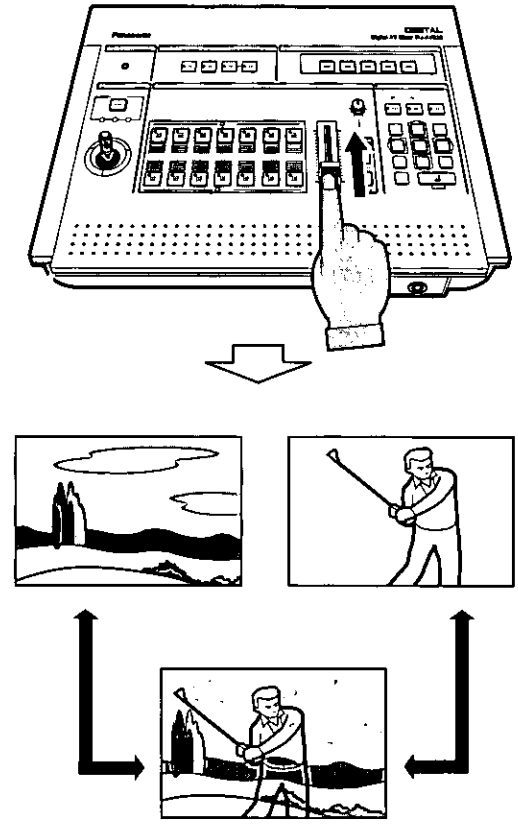
Note: To close the menu of the OSD buttons, press the same button again.

Mix

Press the Mix/Wipe button.
The LED on this button starts to blink.



Slide the Wipe/Mix control to the A-bus position.



Dear Customer

We would like to take this opportunity to thank you for purchasing a Panasonic Digital AV Mixer.

Please read this Operating Instructions carefully and keep it for later reference, in case you want to see something in the future.

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Preface

Two channel digital frame synchronization permits special effects in each of the A/B program busses. Four sources can be switched, and any two of them are routed to the program busses. The A/B program busses can be monitored at the A/B program recording output can be selected at the EFFECT switch in the PROGRAM OUT section. There is an external Editing Controller Input for RS-232C serial controls. Also, a GPI input is featured. This means the WJ-AVE55 is compatible with a wide variety of video editing devices to complementary video editing system.

Main Features

- Digital effect - Still, Strobe, Mosaic, Paint, Negative
- Chroma Key, Luminance Key
- 191 wipe patterns
- Back color
- Joystick control for picture position and color correction
- Fade control for video and audio
- Audio mixing
- External video titler inputs
- Four audio/video source inputs

Precautions

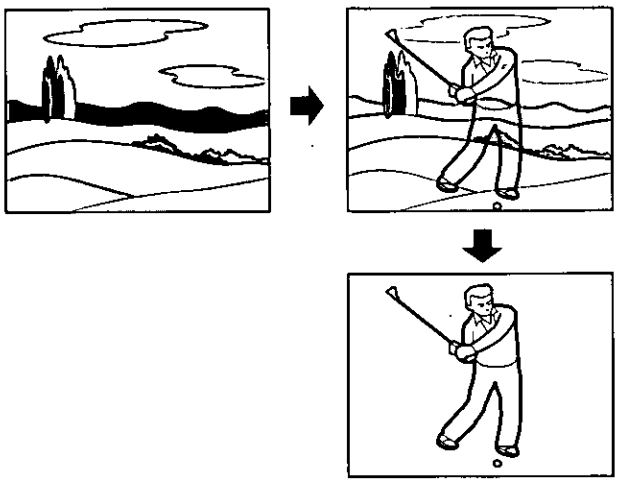
The WJ-AVE55 is a sensitive, high quality and should be handled as such. Because it is an electric shock exists if it is used carelessly.

DON'T	DO'S
• Do not attempt to disassemble the unit. In order to prevent electric shock, do not remove screws or covers. There are no user-serviceable parts inside. • Do not abuse the unit. Avoid striking, shaking etc. It could be damaged by improper handling or storage. • Do not use strong or abrasive detergents when cleaning the unit body. • Do not expose the unit to water or moisture, and do not operate it in wet or humid areas. • Do not use the unit it an extreme environment of high temperature or high humidity.	• Refer all servicing to qualified service personnel. • Handle the unit with care. • Use a dry cloth to clean the unit when dirty. In case dirt is hard to remove, use a mild detergent and wipe gently. • Take immediate action if ever the unit should become wet. Turn the power off and refer servicing to qualified service personnel. Moisture can damage the unit and also create the danger of electric shock. • Use the unit at ambient temperature from 0°C to 40°C (32°F - 104°F) and humidity below 90%.

FUNCTIONS

Video Mix ..... Refer to page 16.

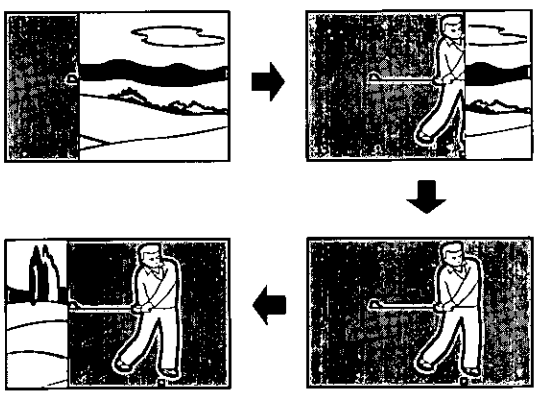
The two video signals can be replaced each other after mixing.



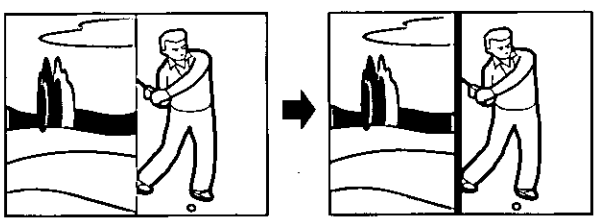
Video Wipe ..... Refer to page 17.

A process in which one image is electronically "wiped" off the screen and replaced by another.

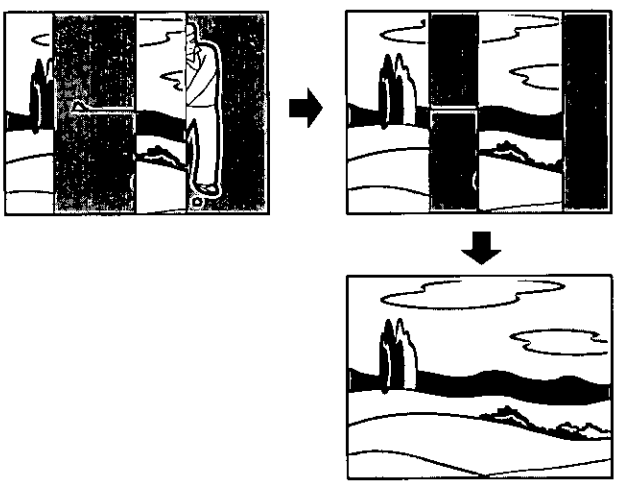
• Wipe Direction mode



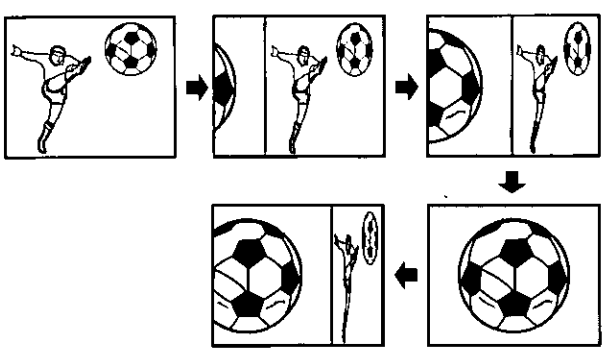
• Edge mode



• Multi mode



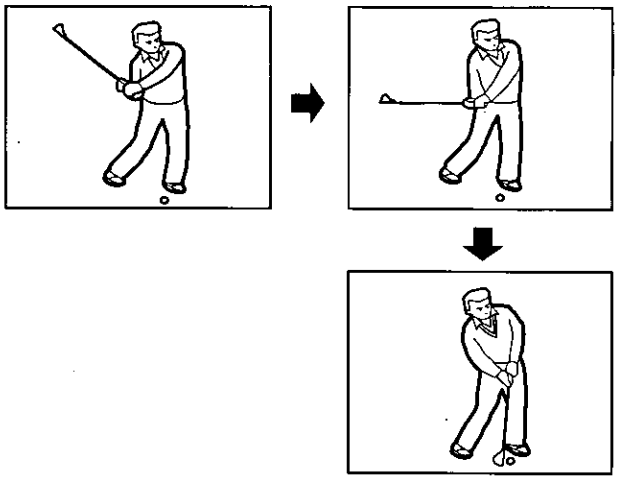
• Special mode



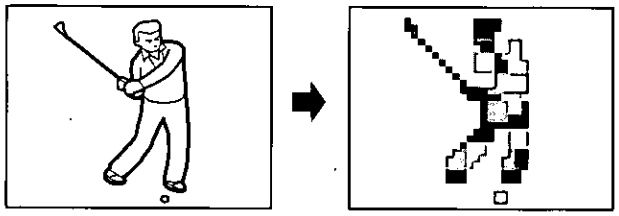
Digital Effect ..... Refer to page 26.

The following is a detailed description of the function of DIGITAL EFFECT section which generates digital special effects for the A-bus and B-bus source video signals. The selected effect(s) can be added to either the A-bus or B-bus at one time.

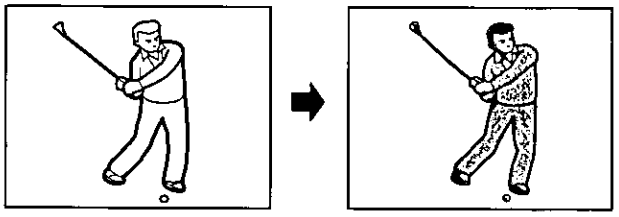
■ Strobe



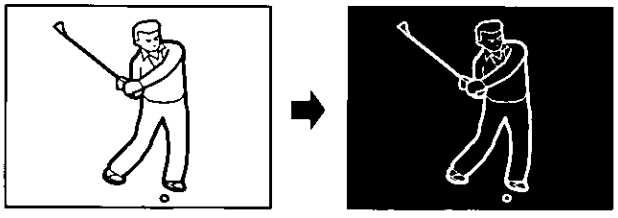
■ Mosaic



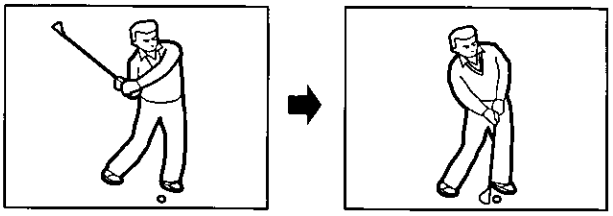
■ Paint



■ Nega

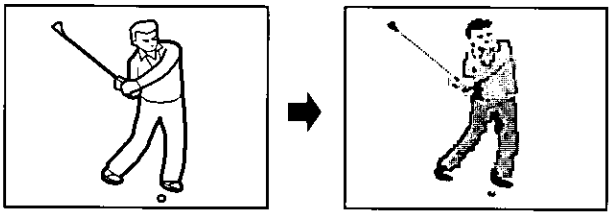


■ Still



■ Chroma

Alters a video signal to affect the colors.



■ Chroma Level

Selects the desired chroma level.

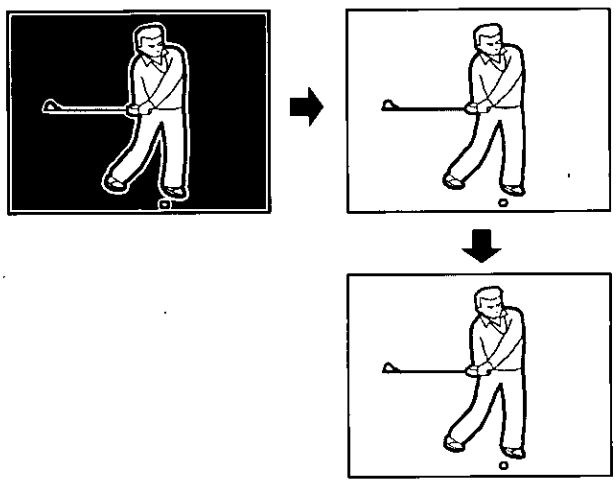
Color Setting ..... Refer to page 31.

This function allows color adjustment of a selected input source, as well as compensation for excessive color.

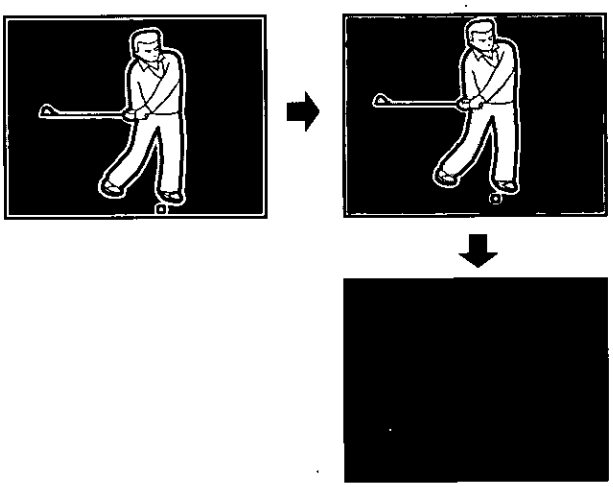
Fade In/Fade Out ..... Refer to page 35.

The video title and audio fades together or in any combination is available.

To white



To Black

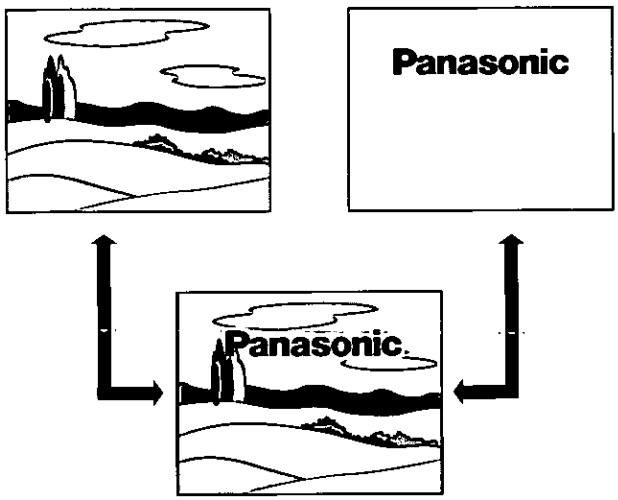


Audio Mix ..... Refer to page 37.

Mix the audio source between the selected two sources via the Mix/Wipe Control according to the ratio of sources.

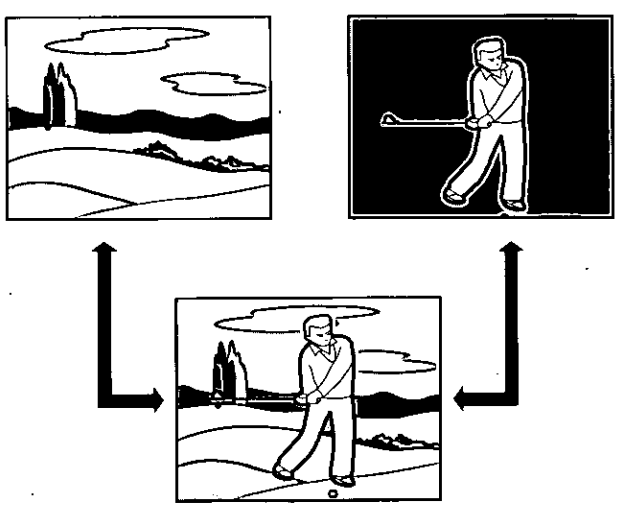
Luminance Key ..... Refer to page 39.

Replacement of portions of one picture with another, based on brightness.



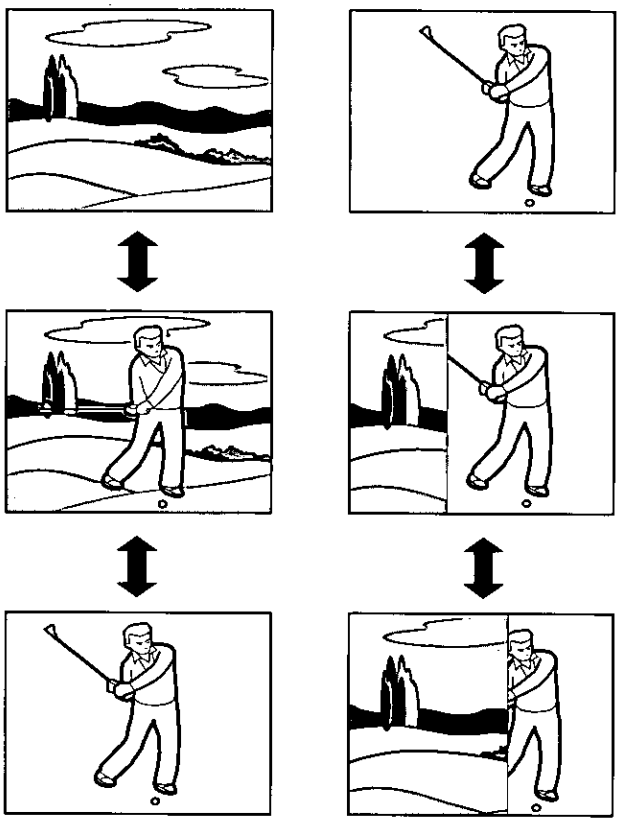
Chroma Key ..... Refer to page 40.

The process of overlaying one video signal over another by replacing a range of colors with the second signal.



Auto Take/Fade ..... Refer to page 41.

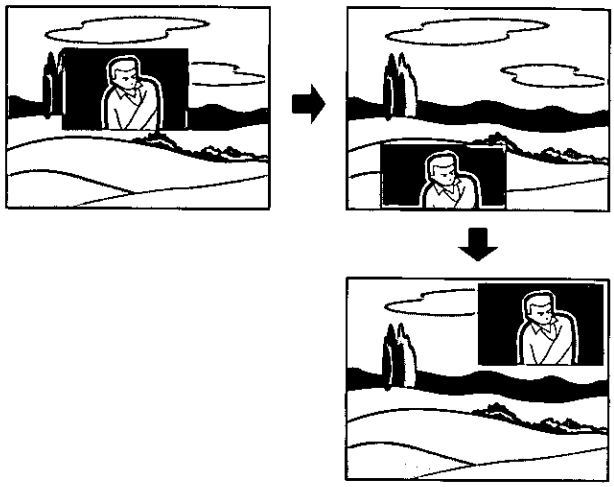
Instead of the slide controlled Mix and Wipe using the Mix/Wipe Control, automatic Mix and Wipe operation can be performed using the Auto Take function.



Event Memory ..... Refer to page 41.

Up to four preset functions can be memorized and recalled.

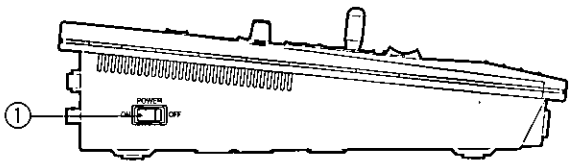
Scene Grabber ..... Refer to page 44.



MAJOR OPERATING CONTROLS AND THEIR FUNCTIONS

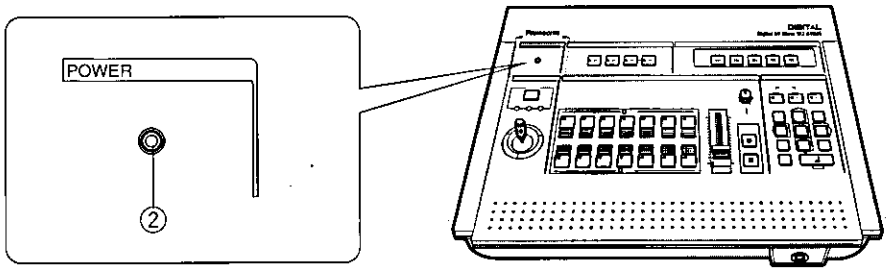
■ Side View

(1) Power Switch (POWER ON/OFF)

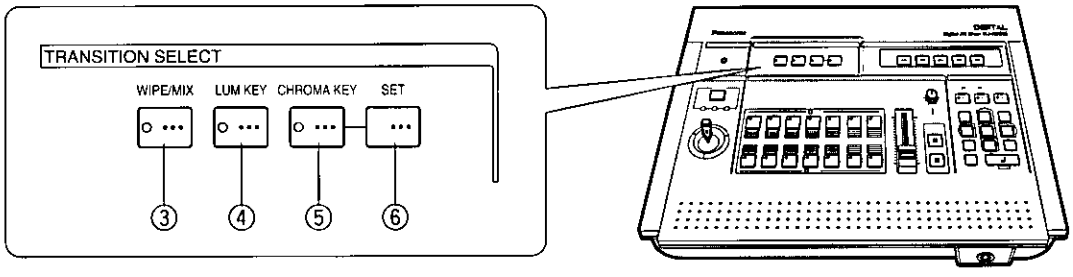


■ POWER Section

(2) Power Indicator



■ TRANSITION SELECT Section



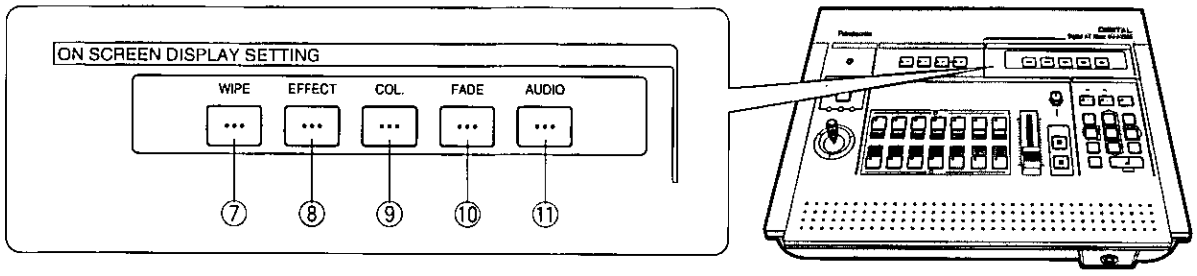
(3) Wipe / Mix Selection Button (WIPE/MIX)
Used to select either the Wipe or Mix Effect.
Lighting : shows the Wipe selection
Blinking : shows the Mix selection

(4) Luminance Key Button
Used to replace certain luminance of one picture with a second picture.

(5) Chroma Key Button
Used to replace certain color of one picture with a second picture.

(6) Set Button
Used to select the position for the chroma key function.

■ ON SCREEN DISPLAY SETTING Section



(7) Wipe Button (WIPE)
Used to display the Wipe menu on the preview monitor.

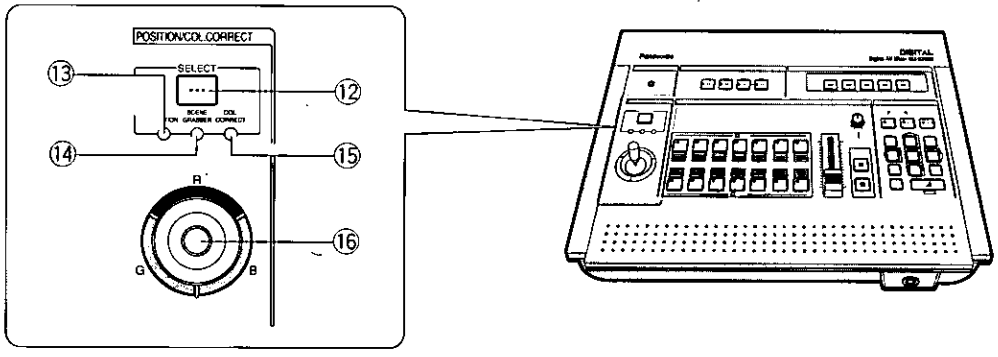
(8) Effect Button (EFFECT)
Used to display the Effect Setting menu on the preview monitor.

(9) Color Button (COL.)
Used to select the color for the back screen or wipe edge.

(10) Fade Button (FADE)
Used to display the Fade Setting menu on the preview monitor.

(11) Audio Button (AUDIO)
Used to display the Audio Setting menu on the preview monitor.

■ POSITION/COL. CORRECT Section



(12) Select Button (SELECT)
Used to select the POSITION, SCENE GRABBER or COL CORRECT.
Notes :
1. Scene Grabber is available in ▣ pattern.
2. When selecting the CHROMA ON mode and press the desired Effect Output Button, color correction is available.

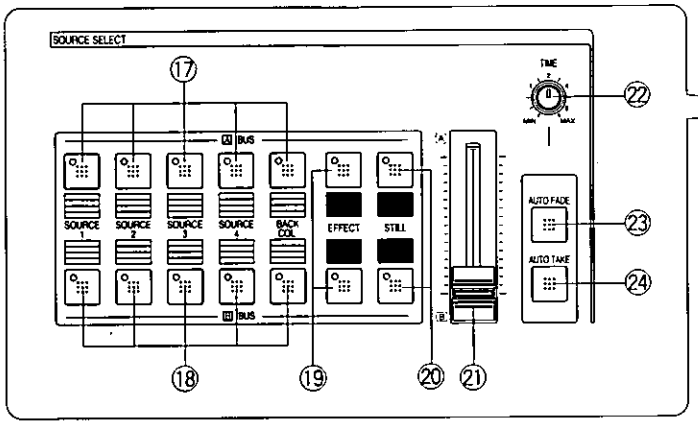
(13) Position Indicator (POSITION)

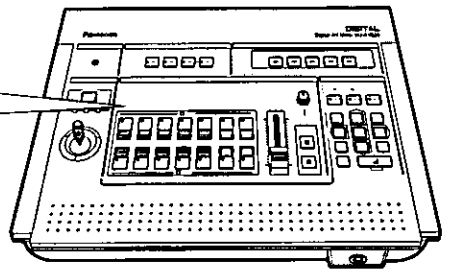
(14) Scene Grabber Indicator (SCENE. GRA.)

(15) Color Correct Indicator (COL CORRECT)

(16) Joystick Control
This joystick Control has two functions - setting the position of the specified wipe pattern , moving the cursor for setting the chroma key and correcting the Color A-bus / B-bus.

■ SOURCE SELECT Section





(17) A-bus Selection Buttons (A)

SOURCE 1: Used to select Source 1 Audio/Video Signals (35)(36)(37) supplied to the rear panel.

SOURCE 2: Used to select Source 2 Audio/Video Signals (38)(39)(40) supplied to the rear panel.

SOURCE 3: Used to select Source 3 Audio/Video Signals (41)(42)(43) supplied to the rear panel.

SOURCE 4: Used to select Source 4 Audio/Video Signals (44)(45)(46) supplied to the rear panel.

BACK COL: Used to select the Back Color.

(18) B-bus Selection Buttons

Same selection can be available as mentioned in the A-bus Selection buttons (17).

(19) Effect Out Buttons (EFFECT)

Used to supply the effect signal to the preview and Rec Out connectors.

(20) Still Out Buttons (STILL)

An instant still or frozen image can be obtained by pressing this button.

(21) Mix/Wipe Control (MIX WIPE EFFECT)

Mix and wipe can be performed by operating this control.

(22) Time Control (TIME)

For adjusting the transition time of Auto Fade Function and Auto Take Function.

(23) Auto Fade Button (AUTO FADE)

Automatic fade can be executed according to the time set by TIME Control.

(24) Auto Take Button (AUTO TAKE)

Automatic wipe or mix can be executed according to the time set by TIME Control (22).

■ MODE SETTING Section

(25) Event Memory Button (EVENT MEMORY)

Used to memorize the present status.

(26) Call Button (CALL)

Used to recall the memorized status.

(27) Number Button (No.)

(28) Up Button

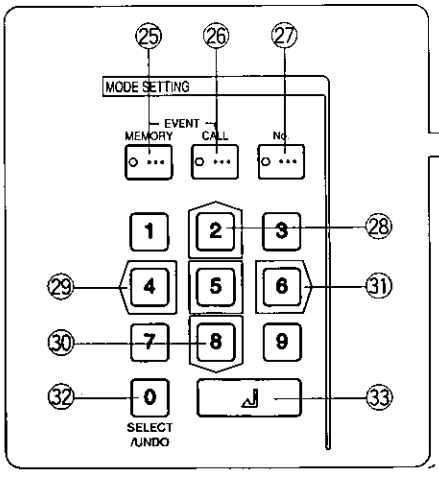
(29) Left Button

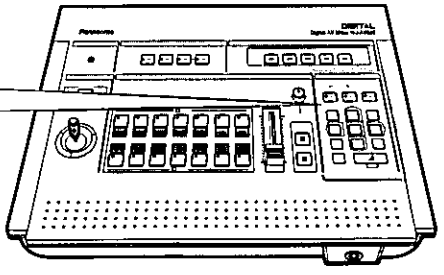
(30) Down Button

(31) Right Button

(32) SELECT/UNDO Button

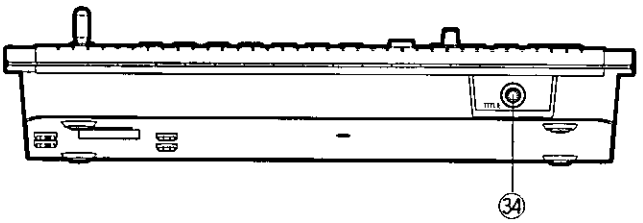
(33) Enter Button (⏎)



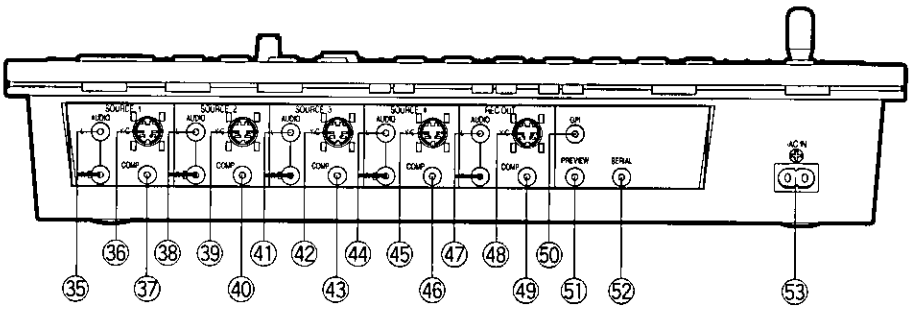


■ Front Panel

(34) Titler Connector (TITLE)



■ Rear Panel



(35) Source 1 Audio Input Jack (SOURCE 1 AUDIO)

(36) Source 1 S-video Input Connector (Y/C)

(37) Source 1 Composite Video Signal Input Jack

(38) Source 2 Audio Input Jack (SOURCE 2 AUDIO)

(39) Source 2 S-video Input Connector (Y/C)

(40) Source 2 Composite Video Signal Input Jack

(41) Source 3 Audio Input Jack (SOURCE 3 AUDIO)

(42) Source 3 S-video Input Connector (Y/C)

(43) Source 3 Composite Video Signal Input Jack

(44) Source 4 Audio Input Jack (SOURCE 4 AUDIO)

(45) Source 4 S-video Input Connector (Y/C)

(46) Source 4 Composite Video Signal Input Jack

(47) Recording Out Audio Output Jack (REC OUT AUDIO)

(48) Recording Out S-video Output Connector (REC OUT Y/C)

(49) Recording Out Composite Video Signal Output Jack

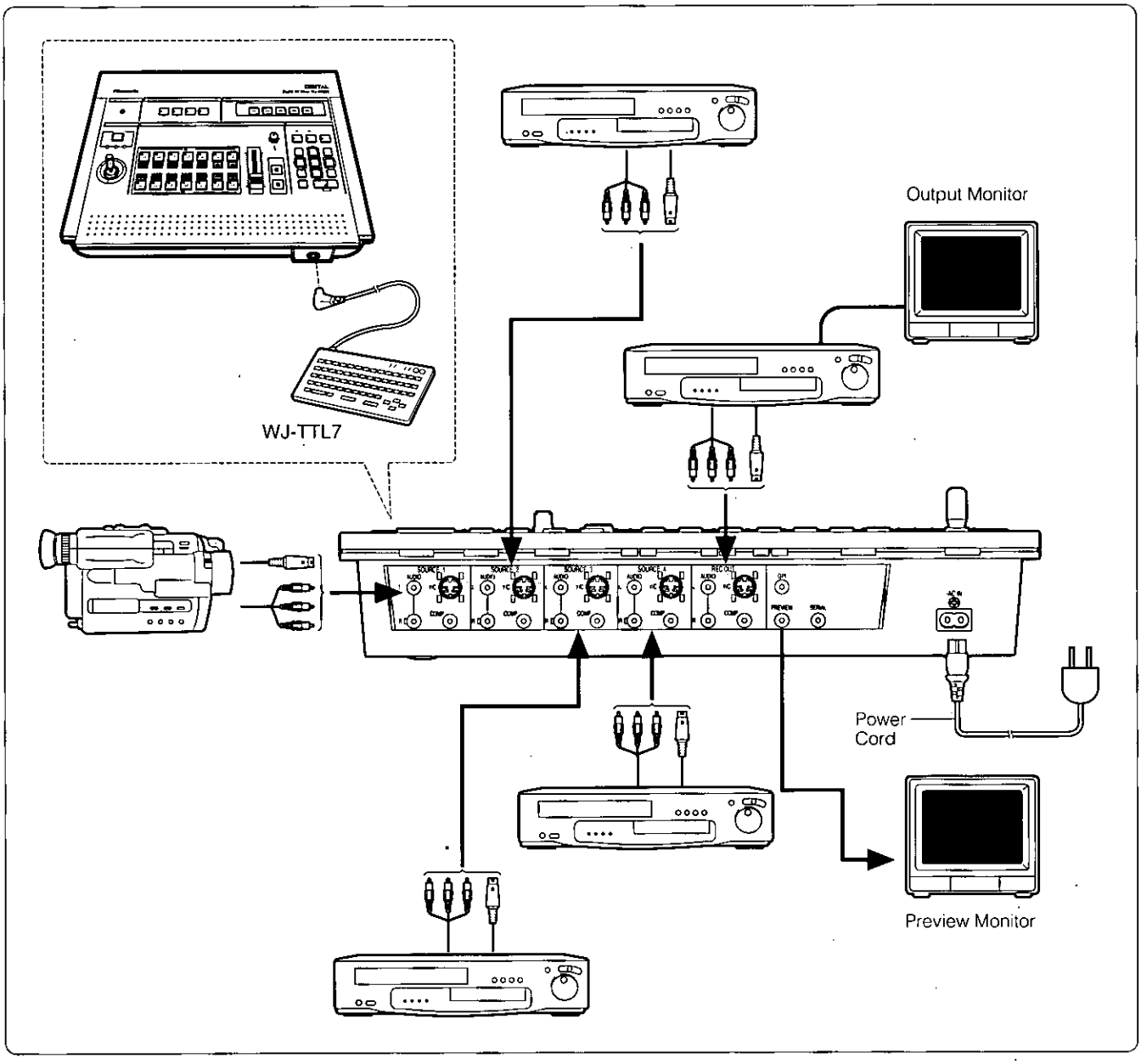
(50) GPI Connector (GPI)
Refer to the qualified service personel or system installers for this connection.

(51) Preview Output Connector
Connect to video input connector of the preview monitor.

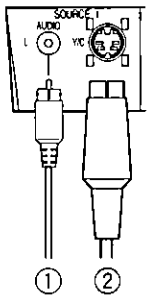
(52) Serial Connector (SERIAL)
Refer to the qualified service personel or system Installers for this connection.

(53) Power Socket (AC IN)
Connect the Power Cord (provided) to this socket.

SYSTEM CONNECTION



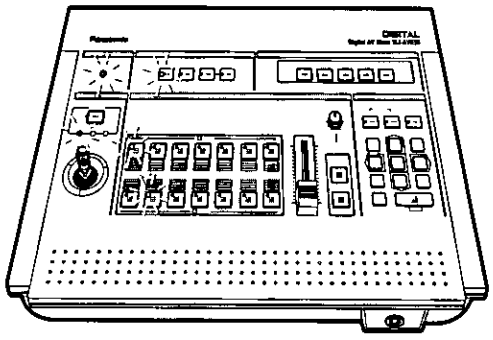
Types of Input and Output



① Composite (RCA-style) video and audio
② S-video (Y/C)

BASIC OPERATIONS

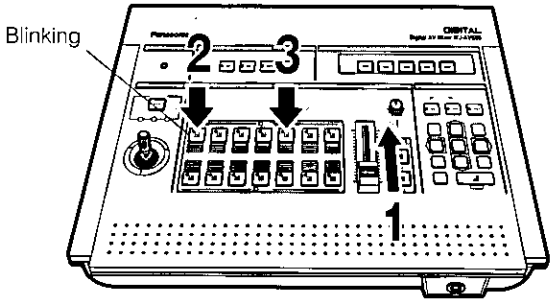
Press the Power Switch on the side panel to the ON position.
The LED's on the operation panel light up as shown and the unit is now in initial mode for operation.



■ Input Signal Selection

1. **Slide the Mix/Wipe Control to the A-bus position.**
2. **Press any of the SOURCE 1, SOURCE 2, SOURCE 3, SOURCE 4 and BACK COL. buttons.**
   You will see each picture on the screen.
3. **Press BACK COL. button.**
   The LED on the other button, which was selected last time, starts blinking.

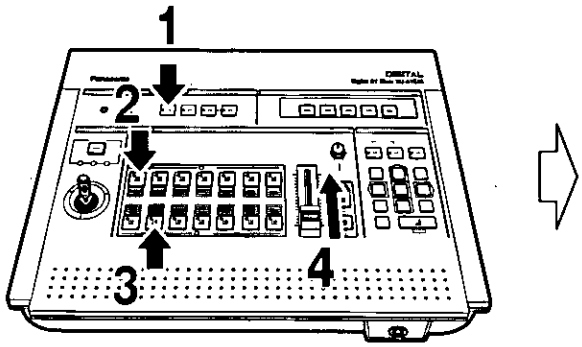
   As for the Back Color Selection, see to "Back Color Setting" on page 31.

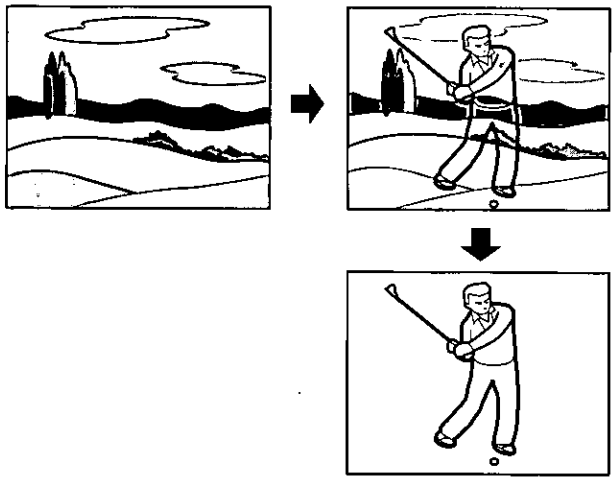


The same procedures apply to the B-bus.

■ Video Mix

1. **Press WIPE/MIX button.**
2. **Press one of the A-bus Selection buttons.**
3. **Press one of the B-bus selection buttons.**
4. **Operate the Mix/Wipe Control.**



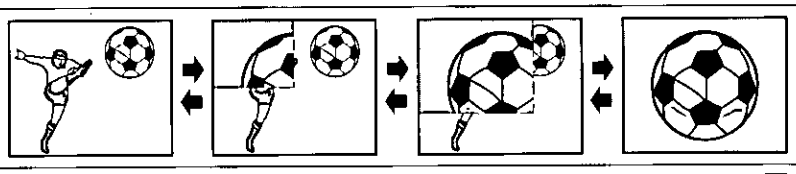
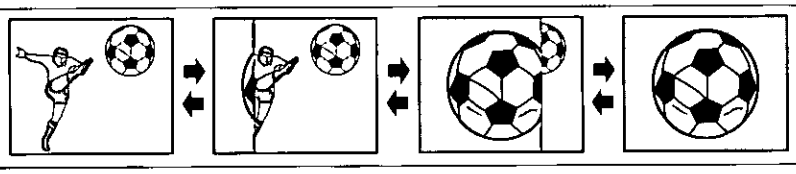
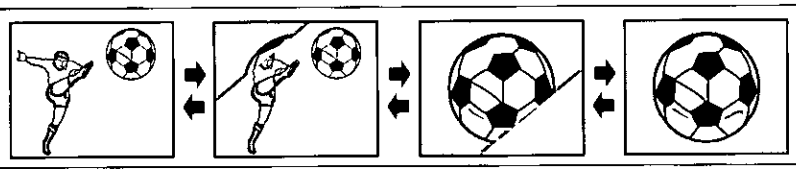
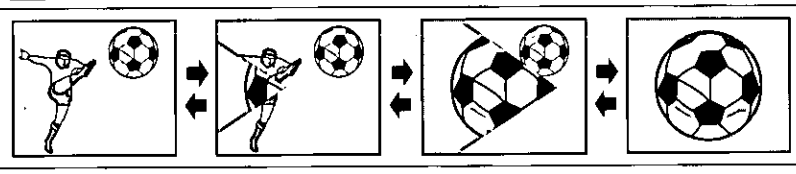
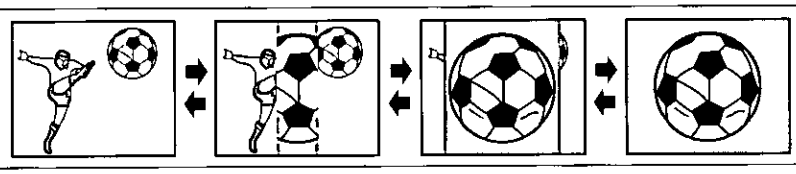
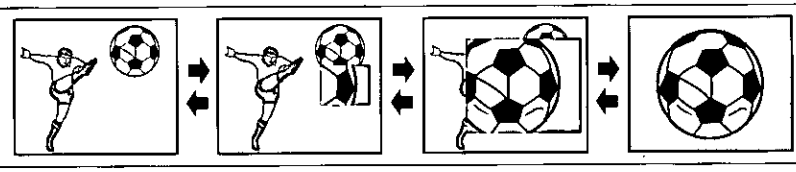
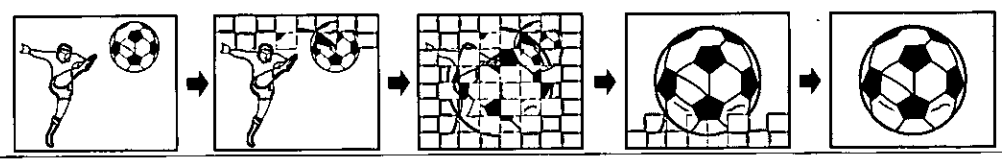
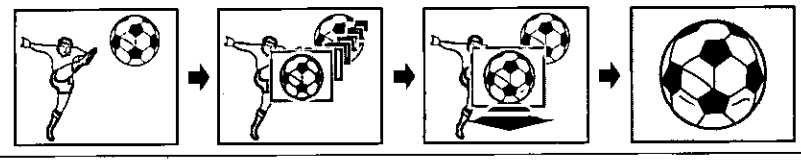
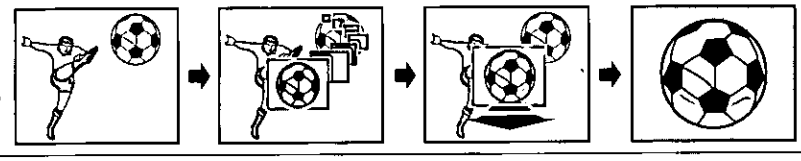
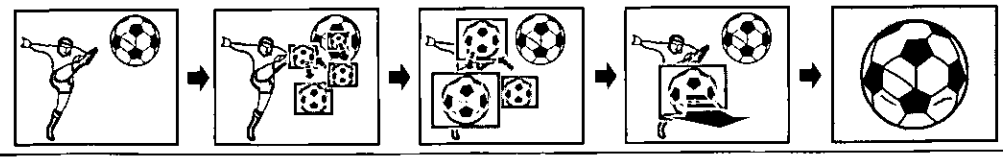


ON-SCREEN DISPLAY OPERATIONS

■ Video Wipe

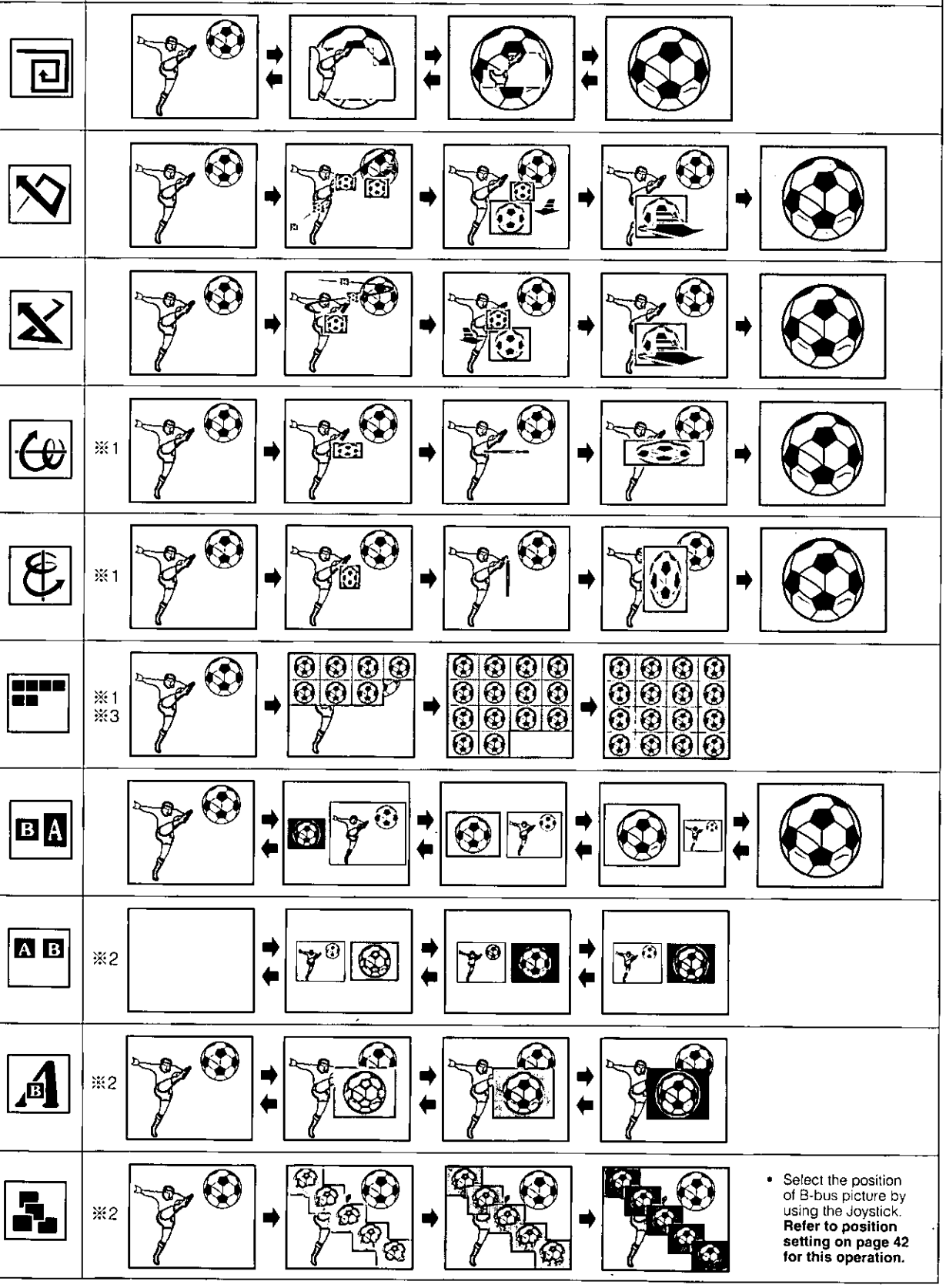
● Wipe Description

※1: This pattern should be controlled with Auto Take Button only.
※2: Desolve operation ※3: Back color selection is not possible.

Wipe Pattern		Images (change from A-bus image to B-bus image)
Basic Wipe Pattern		
		
		
		
		
		
Special Wipe Pattern		
	※1 ※3	
	※1 ※3	
	※1	

※1: This pattern should be controlled with Auto Take Button only.
※2: Desolve operation ※3: Back color selection is not possible.

Wipe Pattern	Images (change from A-bus image to B-bus image)
Special Wipe Pattern	

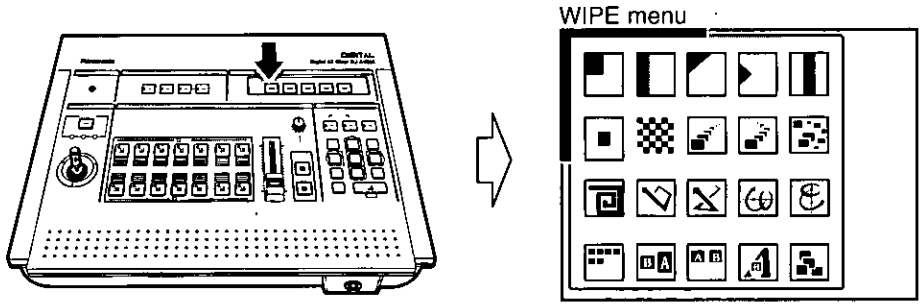


- Select the position of B-bus picture by using the Joystick. **Refer to position setting on page 42 for this operation.**

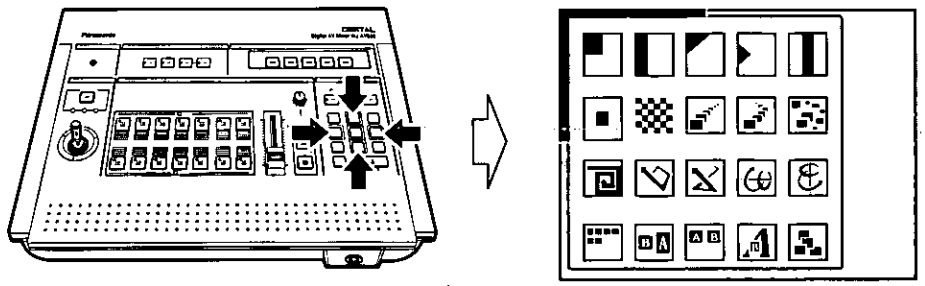
● Wipe Pattern Setting

1. Press WIPE button.

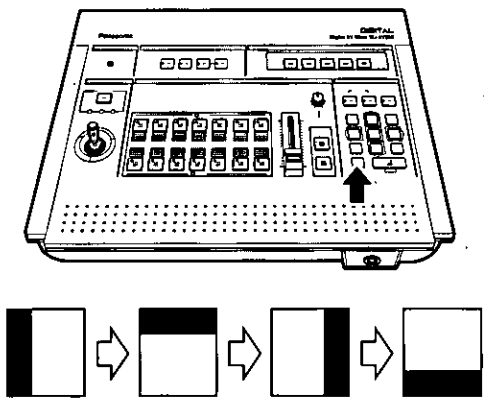
The following WIPE menu is displayed on the preview monitor.



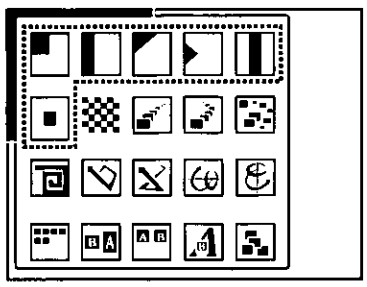
2. Select the desired wipe pattern by using the Up/Down/ Right/ Left Button.



3. Press SELECT/UNDO button repeatedly to select the Pattern modes.



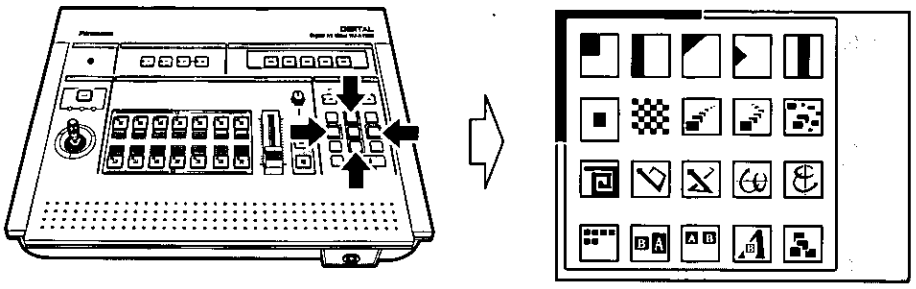
The following wipe patterns have Pattern modes.



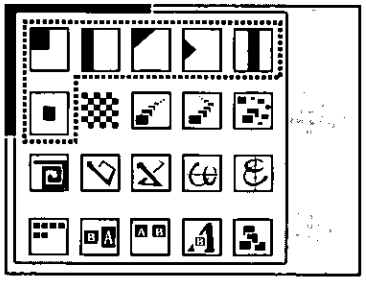
● Wipe Direction Setting

1. Press WIPE button.
Wipe patterns are displayed on the preview monitor.

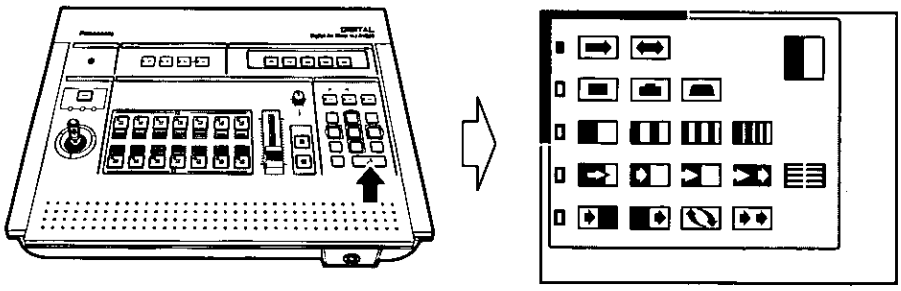
2. Select the desired wipe pattern by using the Up/Down/ Right/ Left Button.



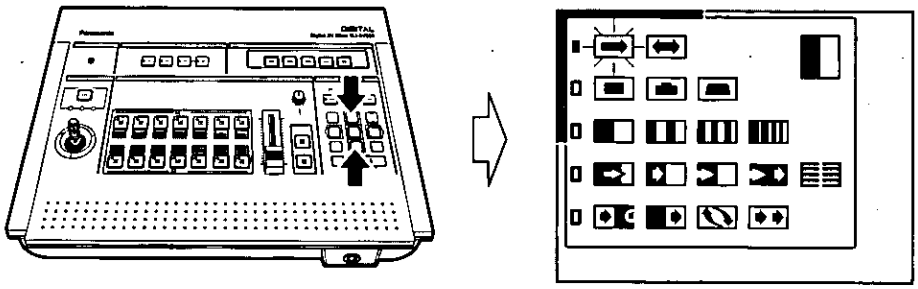
This setting is available in the following patterns.



3. Press ↵ button.
Mode Table is displayed on the preview monitor.
Notes:
1. The Color setting of the wipe edge is available when selecting the ▭ position.
2. The Blue Color modes on the Mode Table can be selected.



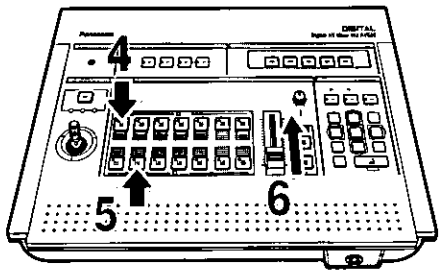
4. Select ▭ / ▭ by using the Up/Down/Right/Left button.

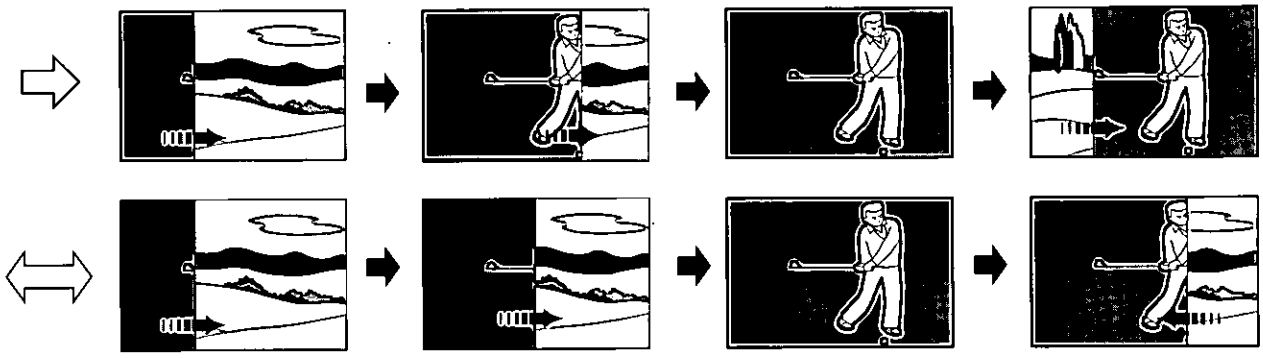


5. **Press one of the A-bus Selection buttons.**

6. **Press one of the B-bus Selection buttons.**

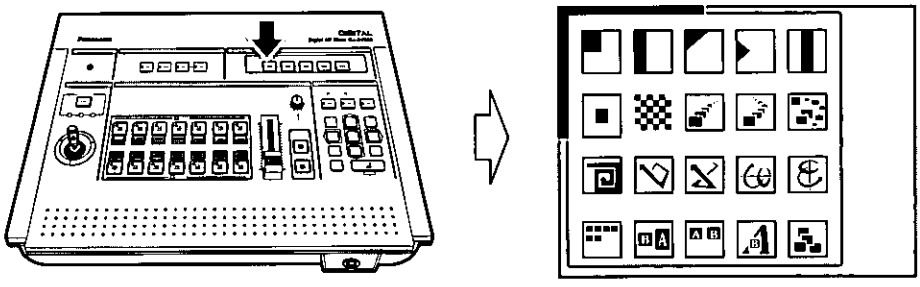
7. **Operate the Mix/Wipe control.**





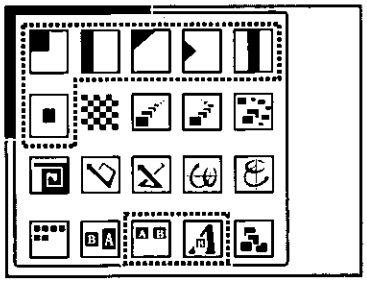
● Wipe Edge

1. **Press WIPE button.**
Wipe Patterns are displayed on the preview screen.



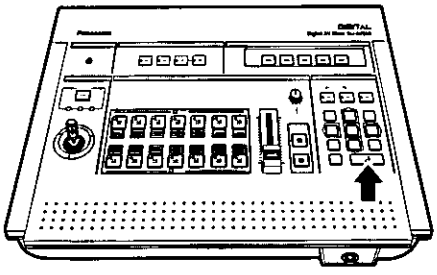
Edge selection is available in the following patterns.

Note: When selecting [A] or [B] pattern, Mode Table is shown in the following.

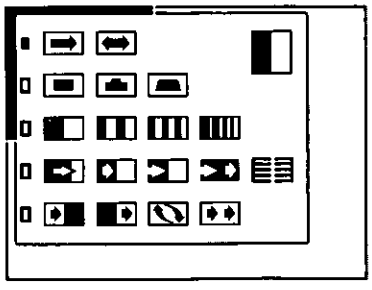


2. **Press the ⊿ button to display the Mode Table.**
Notes:

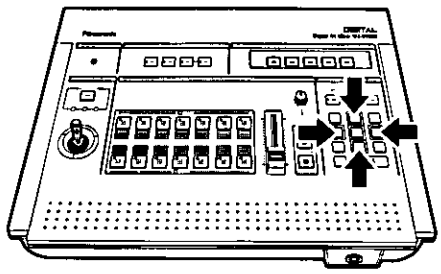
1. The Color setting of the wipe edge is available when selecting the [B] position.
2. The Blue Color modes on the Mode Table can be selected.

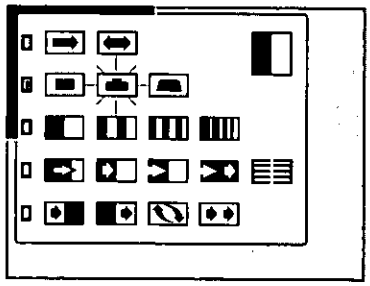


Mode Table



3. **Select the desired edge by using the Left/Right button.**



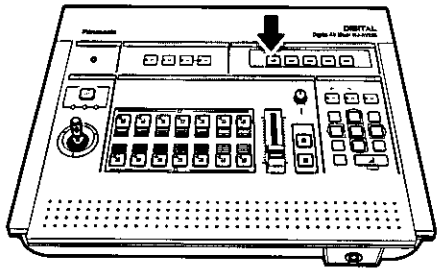


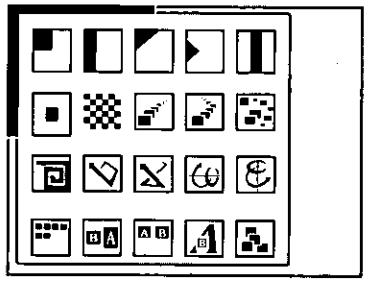
: No Edge
: Edge
: Soft Edge

Note: when the wipe edge has been selected, it effects to the other wipe patterns automatically .

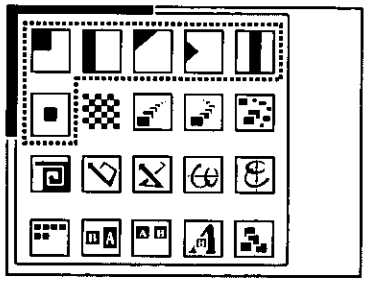
● Multiple Wipe

1. **Press WIPE button.**

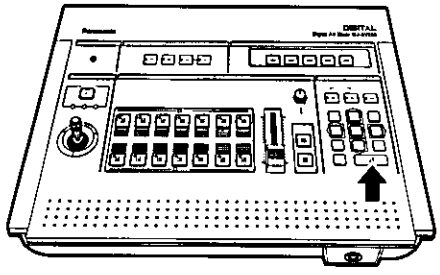


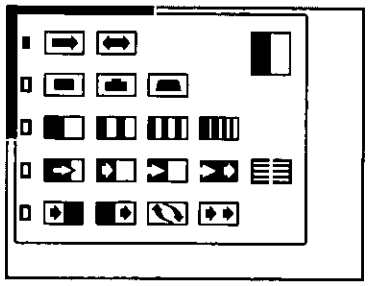


The following wipe patterns are available.

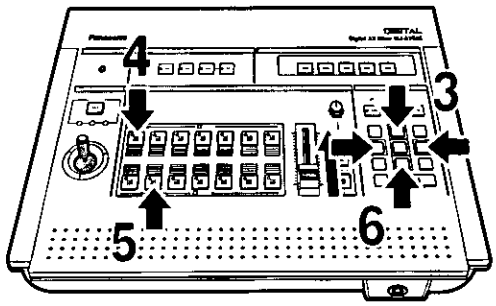


2. **Press ↲ button.**
The Mode Table is displayed on the preview monitor.





Note: The Black Color modes on the Mode Table can not be selected.
(The Blue Color modes on the Mode Table can be selected.)

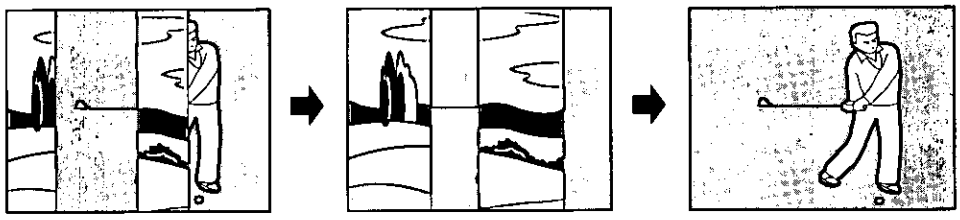


3. **Select the desired multi pattern by using the Up/ Down/Right/Left button.**

4. **Press one of the A-bus Selection buttons.**

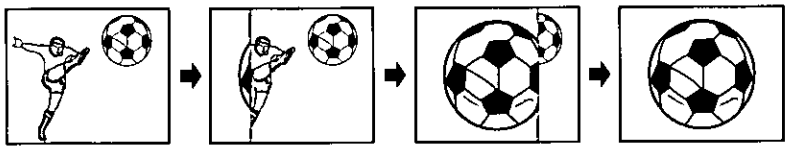
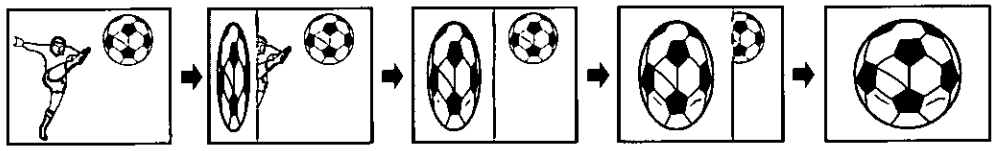
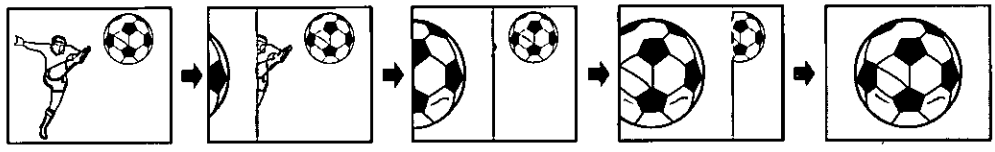
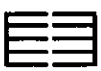
5. **Press one of the B-bus Selection buttons.**

6. **Operate the Mix/Wipe Control.**

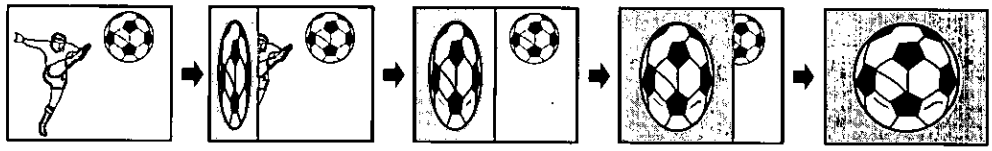
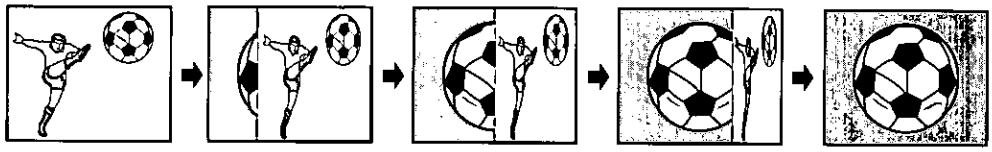
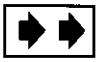
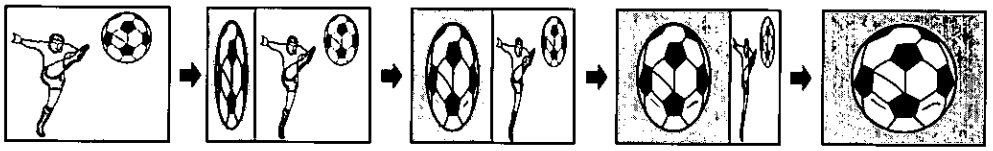


Special Mode

Special Mode Description

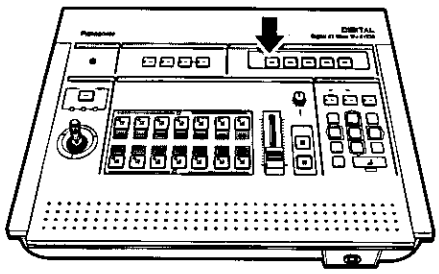
Wipe Mode	Images (change from A-bus image to B-bus image)
	
	
	
	

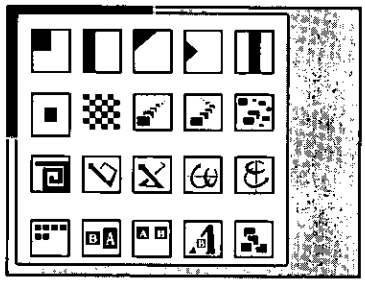
Note : The following images are displayed when ◘□ has been selected.

Wipe Operation	Images (change from A-bus image to B-bus image)
	
	
	※
	

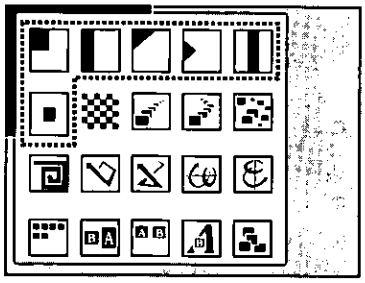
※ : Black color should be changed to the desired color. Refer to the Back Color Setting for this selection.

1. Press WIPE button.





The following patterns have this function.

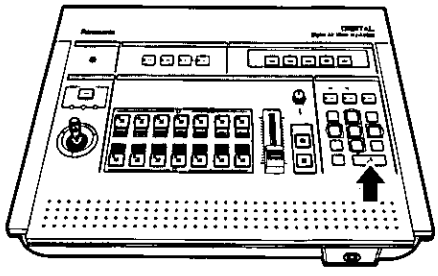


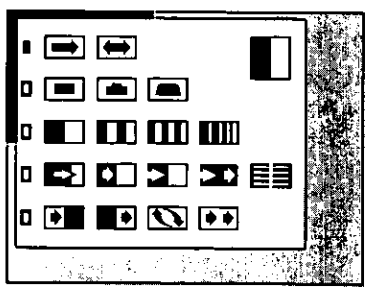
2. Press ⊿ button.

The Mode Table is displayed on the preview screen.

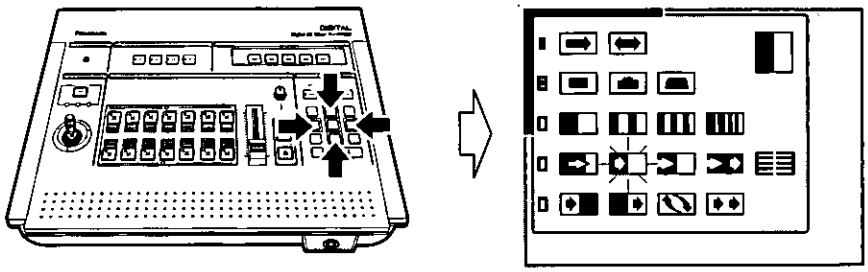
Notes:

1. The Black Color modes on the Mode Table can not be selected..
2. The Blue Color modes on the Mode Table can be selected.





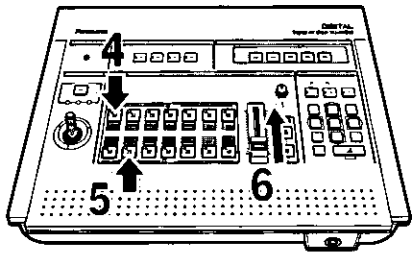
3. **Select the desired special mode by using the Up/Down/ Left/Right button.**

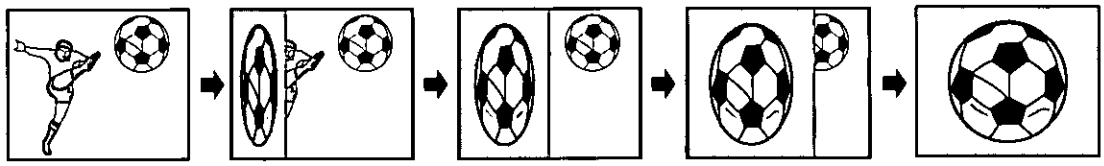


4. **Press one of the A-bus Selection buttons.**

5. **Press one of the B-bus Selection buttons.**

6. **Operate the Mix/Wipe Control.**



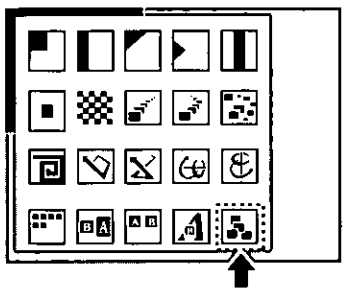


Notes:

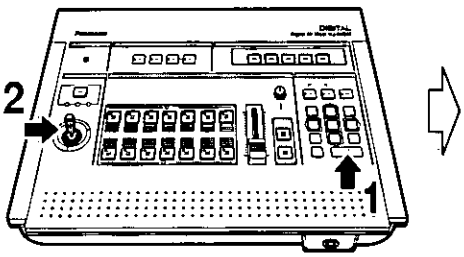
1. The Black Color modes on the Mode Table can not be selected. (The Blue Color modes on the Mode Table can be selected.)
2. The Still and Strobo functions are not available in the compression picture.

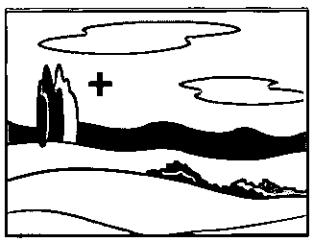
In case of selecting the pattern,

1. **Select the pattern and press the button.** The WIPE menu is disappeared and the cursor is displayed.



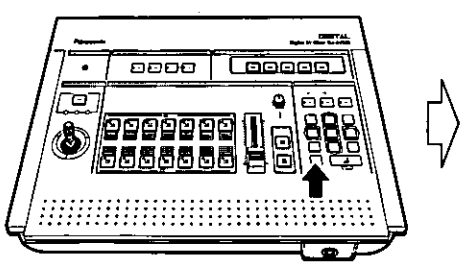
2. **Select the desired position by using the joystick.**

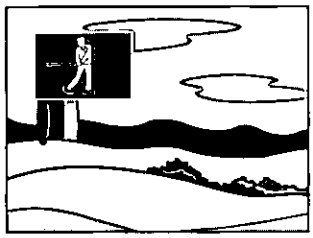




3. **Press the button to set the position.**

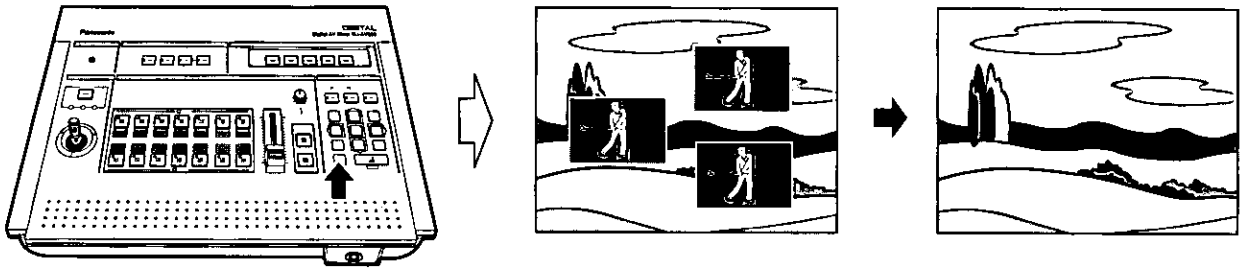
4. **Press the WIPE button on OSD section.**





5. **Operate the Mix/Wipe Control.**

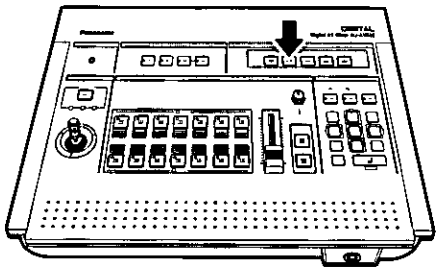
6. **To cancel these settings, press the SELECT/UNDO button.**
All of the setting in this pattern are canceled.

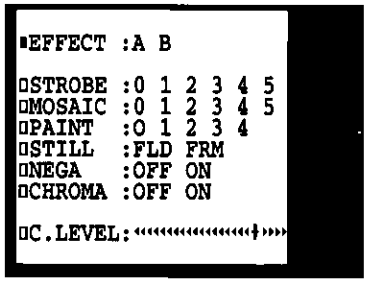


■ Digital Effect

● Strobe Mode Setting

1. **Press the EFFECT button.**
The EFFECT menu is displayed on the preview monitor.

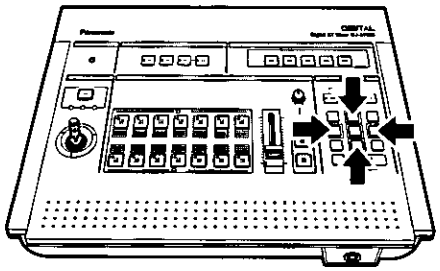


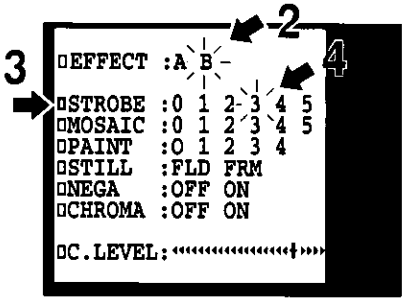


2. **Select the A or B-bus for strobe effect by using the Up/Down/Right/Left button.**

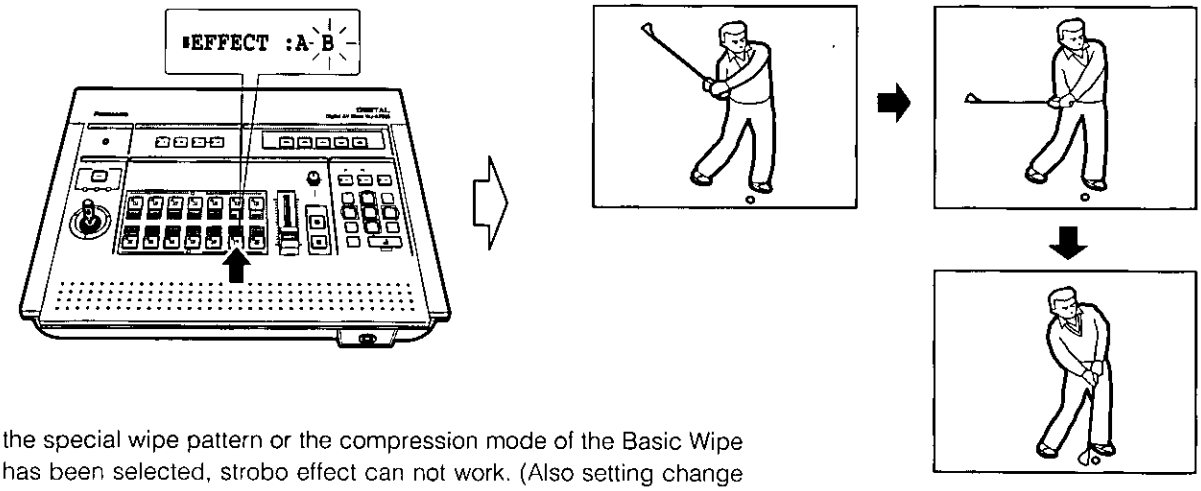
3. **Move the cursor to the STROBE by using the Up/Down button.**

4. **Set the strobe level to the desired position by using the Right/Left button.**





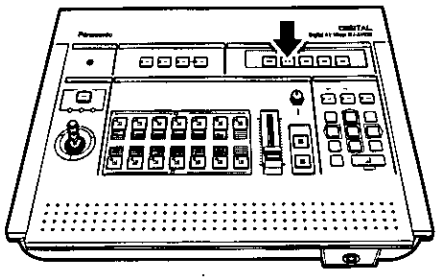
5. **Press the EFFECT Output button of your selected bus in step 2.**

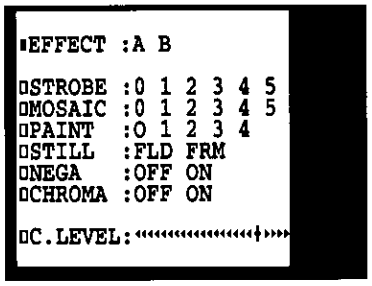


Note: When the special wipe pattern or the compression mode of the Basic Wipe Pattern has been selected, strobo effect can not work. (Also setting change is not possible.)

● Mosaic Setting

1. Press the EFFECT button.
The **EFFECT** menu is displayed on the preview monitor.

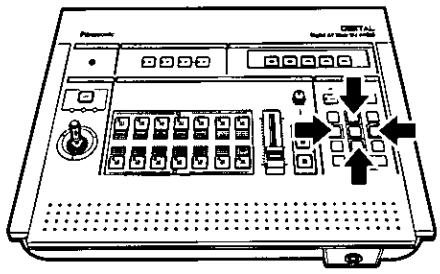


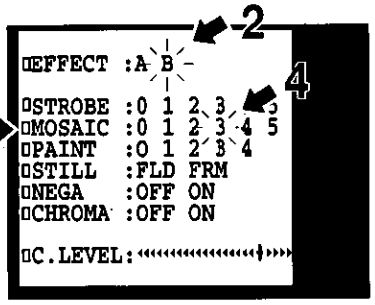


2. Select the A or B-bus for mosaic effect.

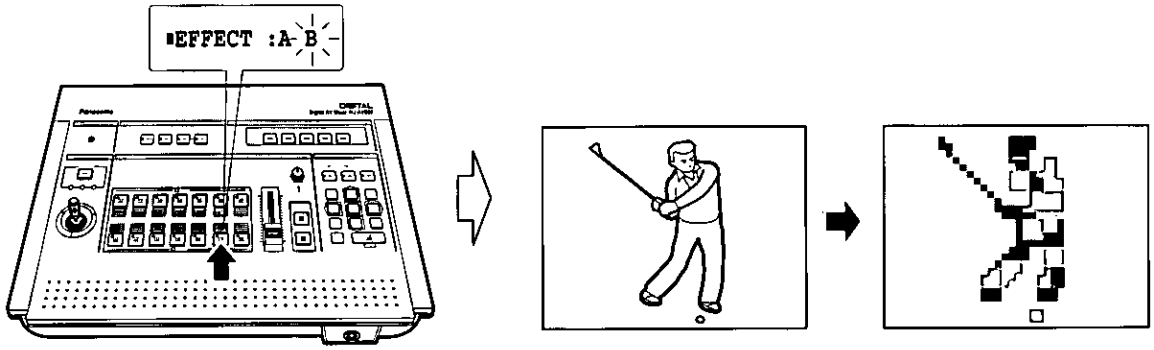
3. Move the cursor to the MOSAIC position by using the Up/Down button.

4. Set the mosaic level to the desired position by using the Right/Left button.



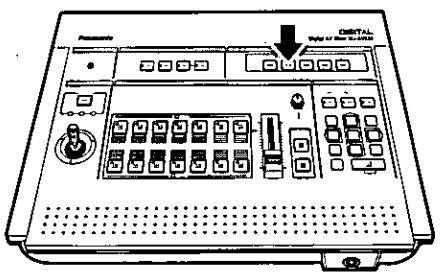


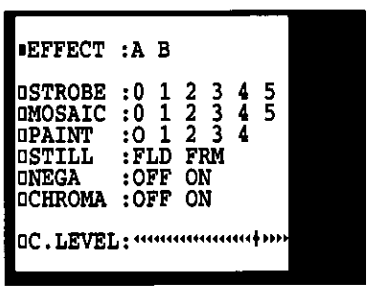
5. Press the EFFECT Output button of your selected bus in step 2.



● Paint Setting

1. Press the EFFECT button.
The EFFECT menu is displayed on the preview monitor.

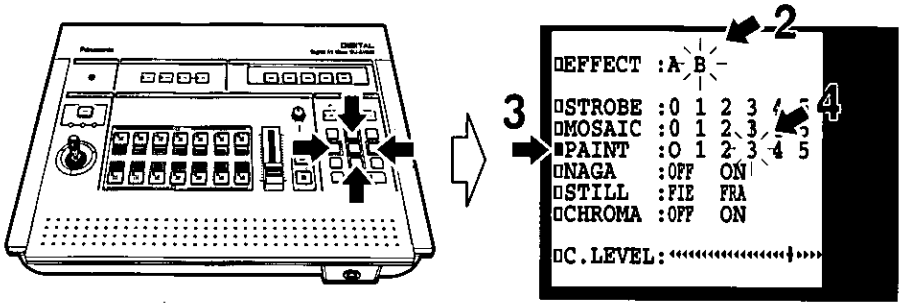




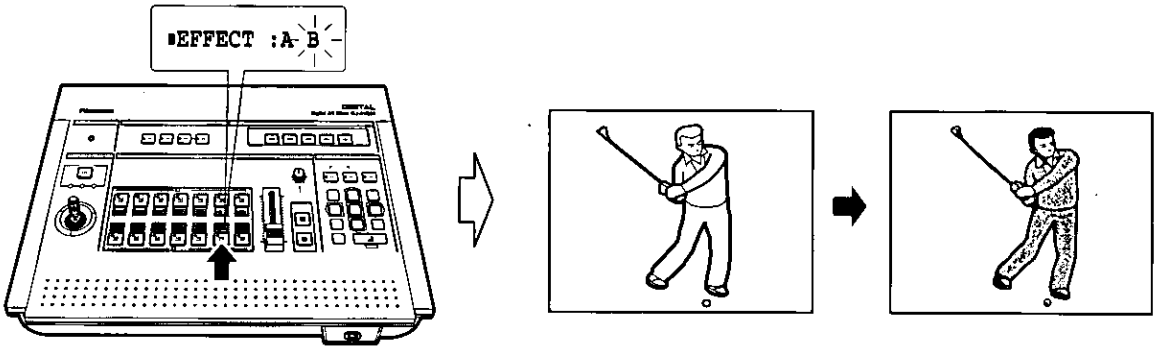
2. Select the A or B-bus for paint effect by using the Right/Left button.

3. Move the cursor to the PAINT position by using the Up/Down button.

4. Set the paint level to the desired position by using the Right/Left button.

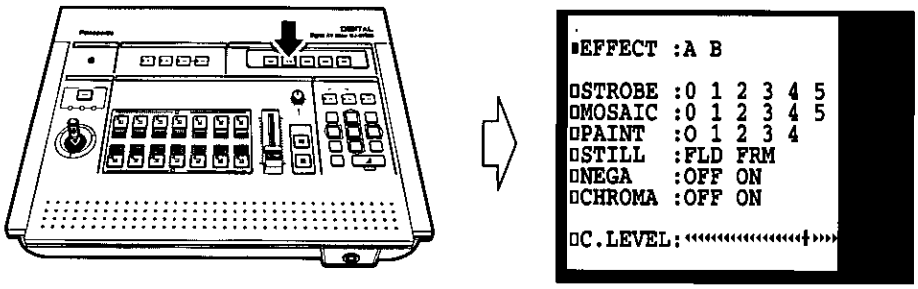


5. Press the EFFECT Output button of your selected bus in step 2.



● Still Setting

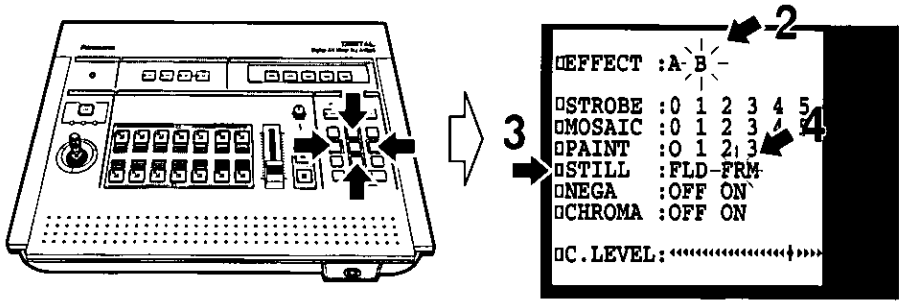
1. **Press the EFFECT button.**
The EFFECT menu is displayed on the preview monitor.



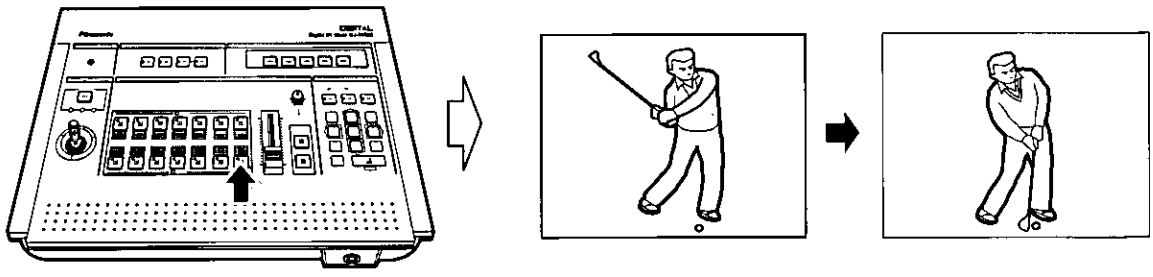
2. Select the A or B-bus for still effect.

3. Move the cursor to the STILL position by using the Up/Down button.

4. Select the FLD/FRM mode by using the Right/Left button.



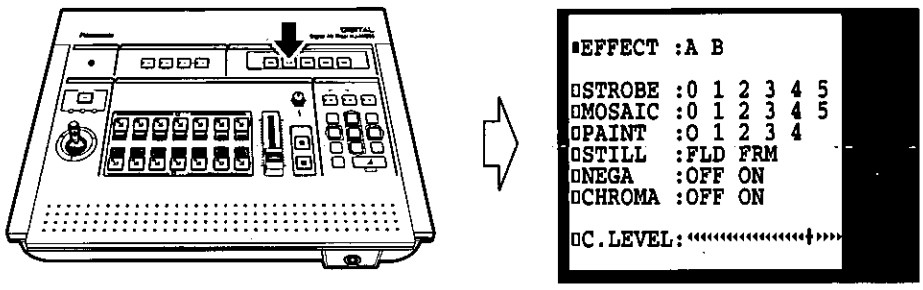
5. **Press the STILL button of your selected bus in step 2.**



Note: The selection of FLD/FRM should be made while observing the output monitor.

● Nega Setting

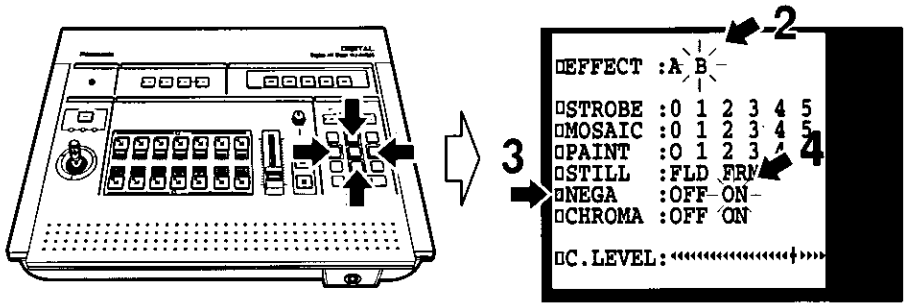
1. **Press the EFFECT button.**
The EFFECT menu is displayed on the preview monitor.



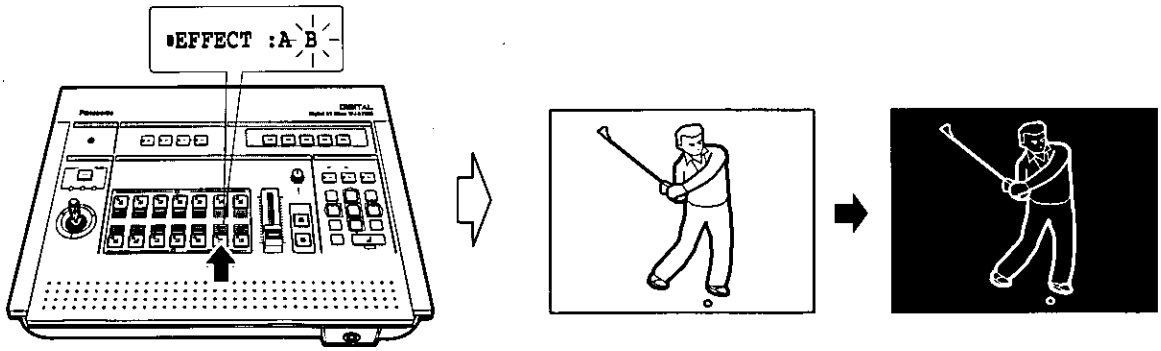
2. **Select the A or B-bus for nega effect.**

3. **Move the cursor to the NEGA position by using the Up/Down button.**

4. **Select the ON position by using the Right/Left button.**

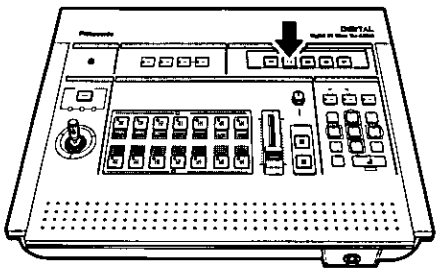


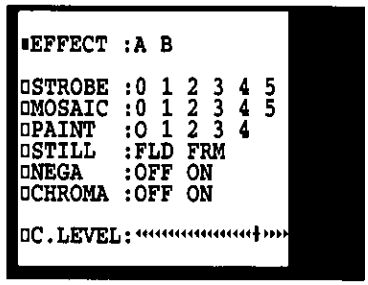
5. **Press the EFFECT Output button of your selected bus in step 2.**



● Color Correction

1. Press the EFFECT button.
The EFFECT menu is displayed on the preview monitor.

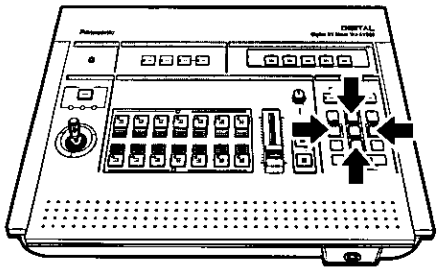


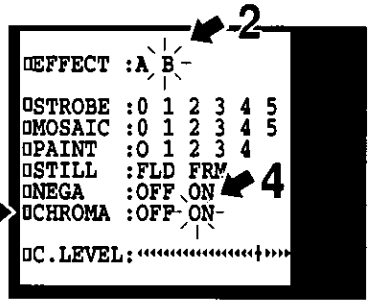


2. Select the A or B-bus for chroma effect.

3. Move the cursor to the CHROMA position by using the Up/Down button.

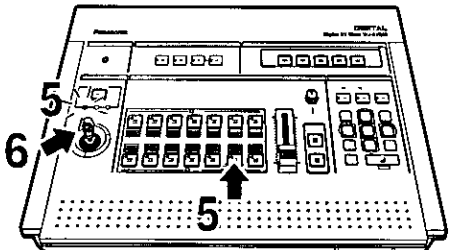
4. Select the ON mode by using the Right/Left button.





5. Press the EFFECT Output button of your selected bus in step 2.
The COL. CORRECT Indicator lights.

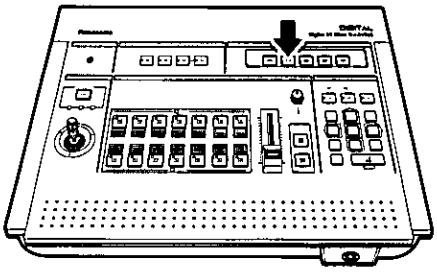
6. Correct the color by using the Joystic Control.

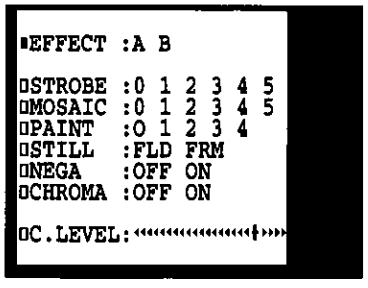


Note: The picture is displayed with the preset condition whenever you select CHROMA ON mode.

● Chroma Level

1. Press the EFFECT button.
The EFFECT menu is displayed on the preview monitor.

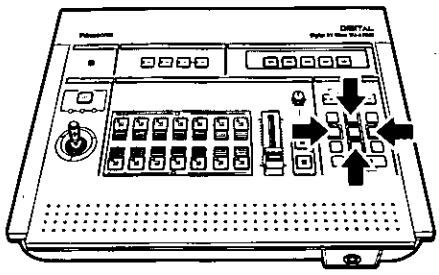


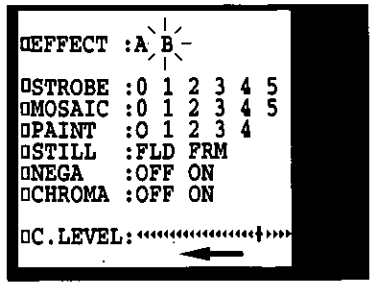


2. Select the A or B-bus for color level effect.

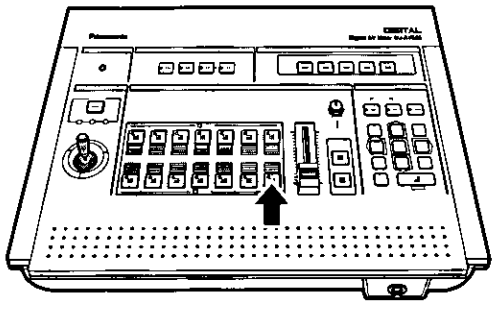
3. Move the cursor to the C. LEVEL position.

4. Set the chroma level to the desired position.





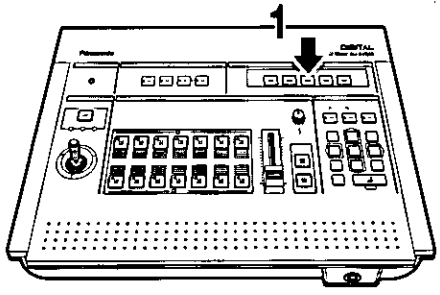
5. Press the EFFECT Output button of your selected bus in step 2.

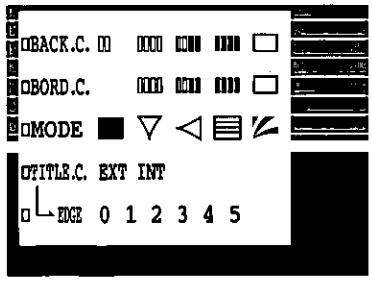


■ Color Setting

● Back Color Setting

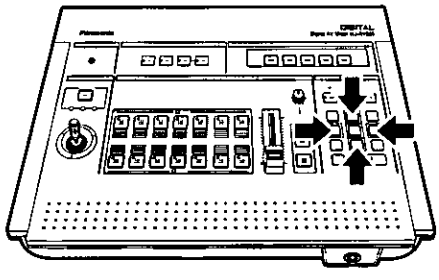
1. Press the COL button.
COL. menu is displayed on the preview screen.

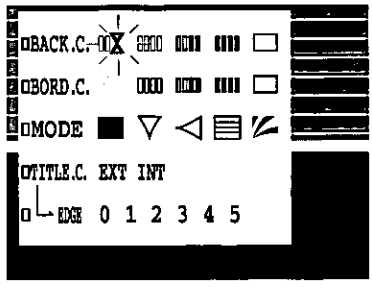




2. Move the cursor to the BACK.C. position by using the Up/Down button.

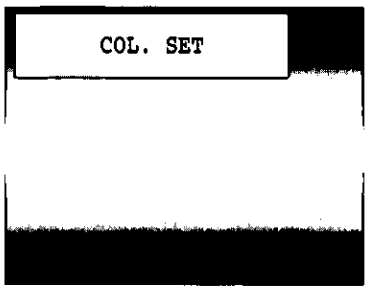
3. Set the desired color by using the Left/Right button.



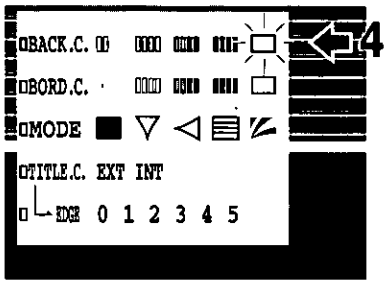


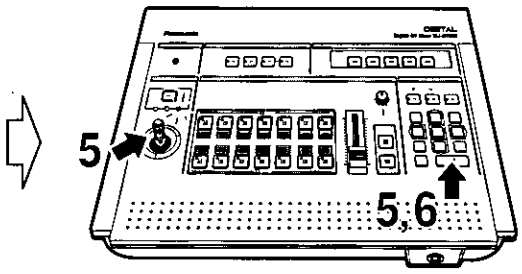
4. **When you want a color except the preset one, select the ☐ position by using the Right /Left button.**

5. **Press the ↵ button.**
The **COL.SET** is displayed and the color selection can be made with the **joystick.**



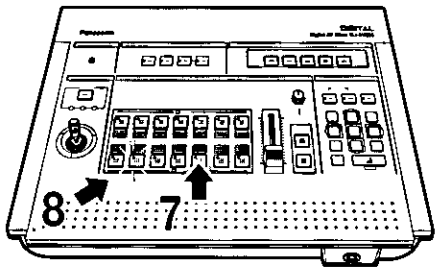
6. **After selecting the desired color, press the ↵ button.**
The color selection is completed.





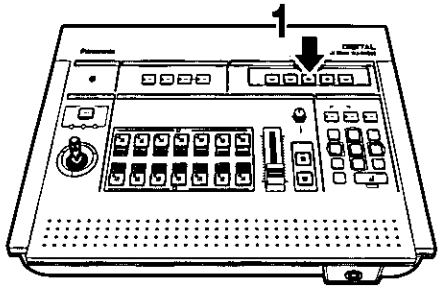
7. **Press the BACK COL. button of your desired bus.**
The LED on the SOURCE button, which is selected last, starts blinking.

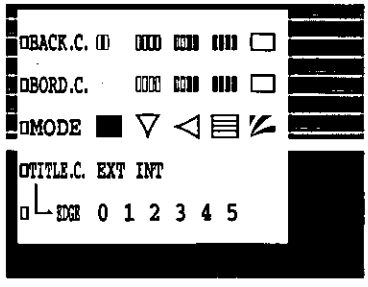
8. **To exit this function, press the other SOURCE Button.**



● Border Color Setting

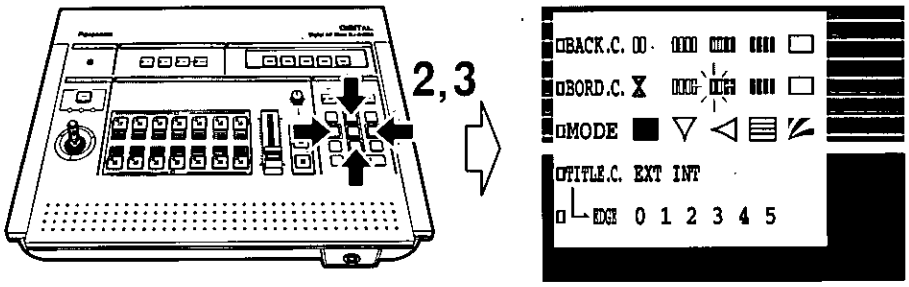
1. **Press the COL button.**
COL. menu is displayed on the preview monitor.





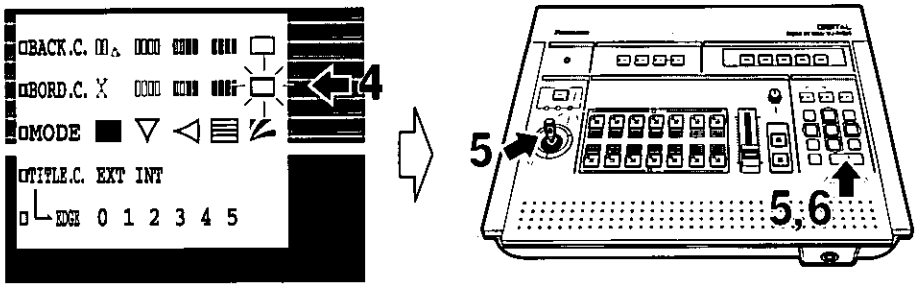
2. **Move the cursor to the BORD.C. position by using the Up/Down button.**

3. **Set the desired color by using the Left/Right button.**



4. **When you want to select a color except the preset one, select the ▭ position.**

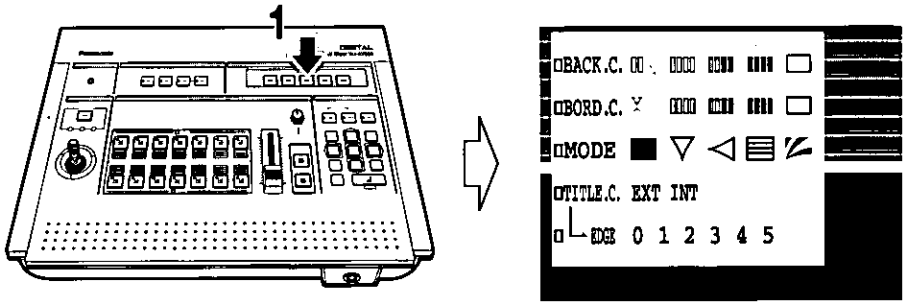
5. **Press the ⊿ button.**
The **COL.SET** is displayed and the color selection can be made with the **joystick**.



6. **After selecting the desired color, press the ⊿ button.**
The color selection is completed.

● Color Mode Setting

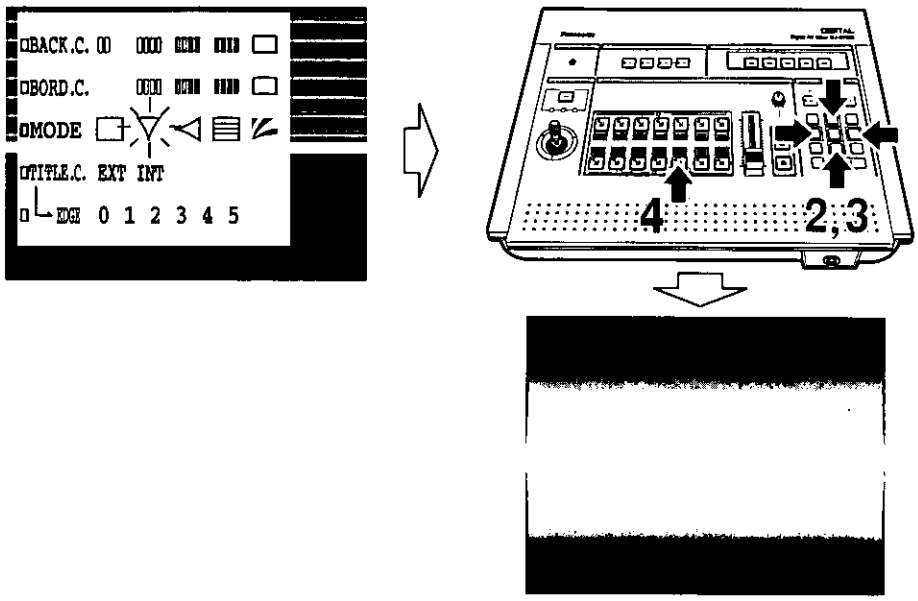
1. **Press the COL. button.**
The COL. menu is displayed on the preview monitor.



2. **Move the cursor to the MODE position by using the Up/Down button.**

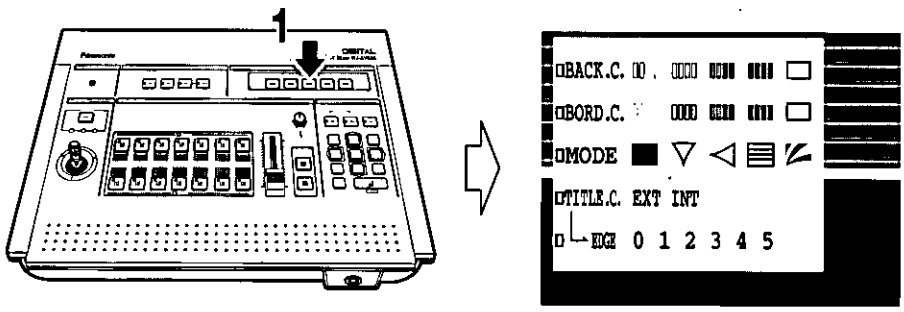
3. **Select the desired mode by using the Left/Right button.**

4. **Press the desired BACK COL. button.**



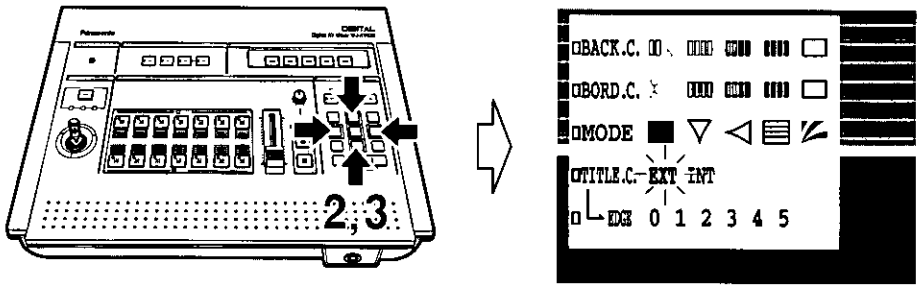
● Title Color Setting

1. **Press COL. button.**
The COL. menu is displayed on the preview monitor.



2. **Move the cursor to the TITLE.C. position by using the Up/Down button.**

3. **Select the EXT/INT position by using the Left/Right button.**

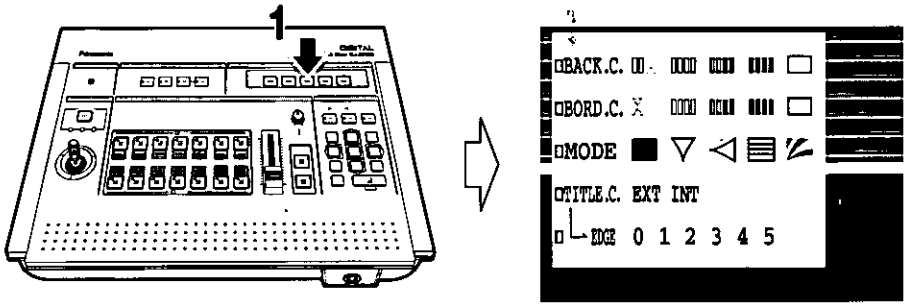


EXT: When connecting the optional Character Generator WJ-TTL7, color setting can be made from external.
Note: Incase of the optional Character Generator WJ-TTL5 connection, title color is only white.

INT: Color of the title is set with internally.

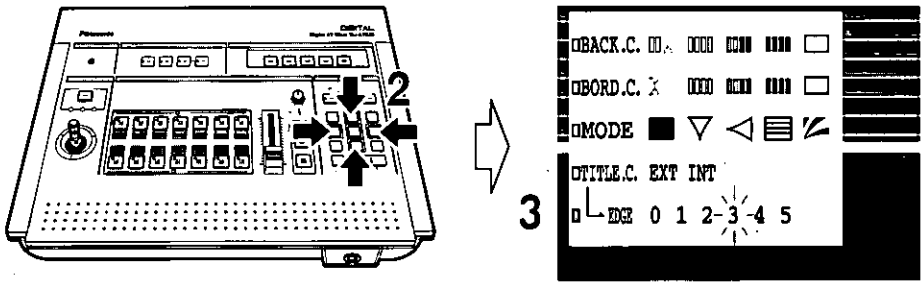
● Title Edge Setting

1. **Press the COL. button.**
The COL. menu is displayed on the preview monitor.



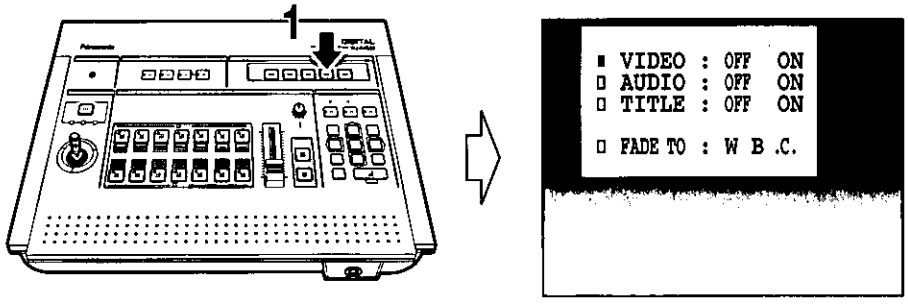
2. **Move the cursor to the EDGE position by using the Up/Down button.**

3. **Select the desired edge width from 5 steps.**



● Fade-out (in) Setting

1. **Press the FADE button.**
The FADE menu is displayed on the preview monitor.

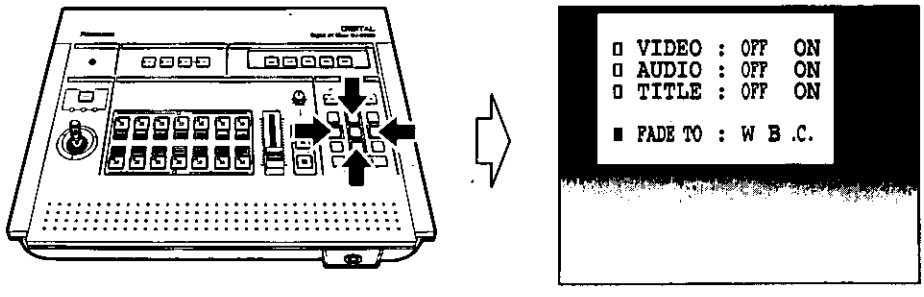


2. **Move the cursor to the VIDEO, AUDIO and/or TITLE position by using the Up/Down button.**

3. **Select the ON position of the each item by using the Left/Right button.**

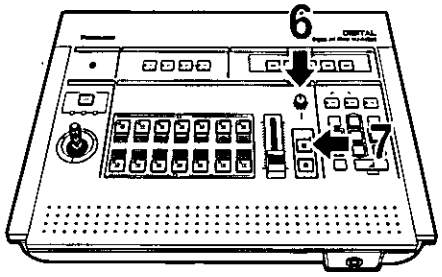
4. **For fade-on (or in) of the video signal to the white, black or desired color, move the cursor to the FADE TO position.**

5. **Select the desired color to fade-out(or in) by using the Left/Right position.**
W : to White color
B : to Black color
C : to back color selected in COL. menu.

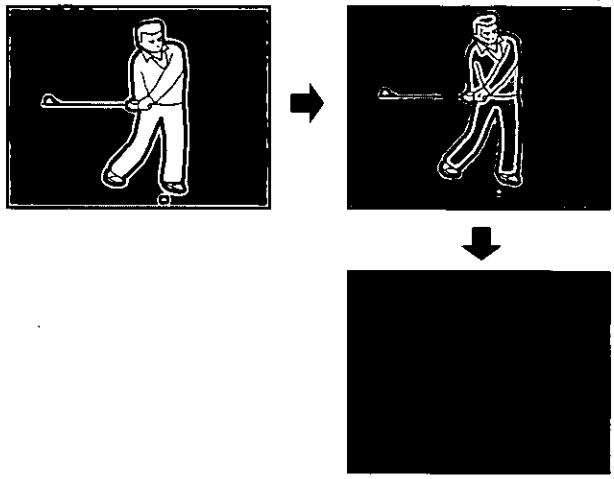


6. **Adjust the TIME control.**

7. **Press the AUTO FADE button.**
The picture start fading-out to the selected color.

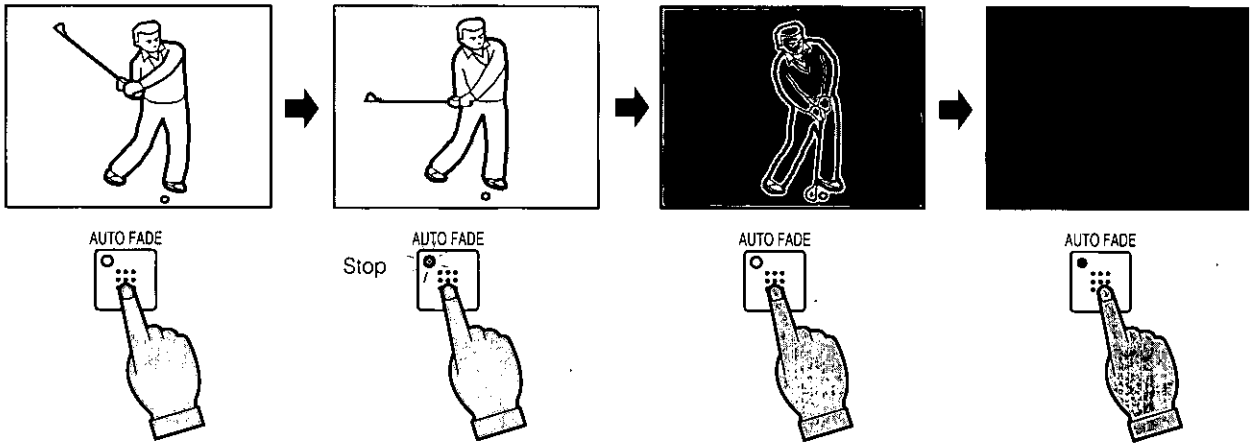


Fade to Black



Notes :

1. If you press the **AUTO FADE** button again before the fade is over, the fade stop. The LED's for AUTO FADE button start blinking. Press the button again to start the fade again.
2. After fade-out is completed, the LED on the AUTO FADE button only remains blinking.



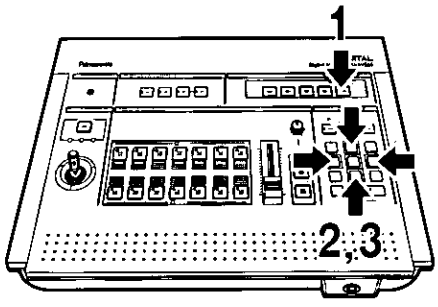
8. **Press the AUTO FADE button again.**
The picture starts fading-in from the selected color.

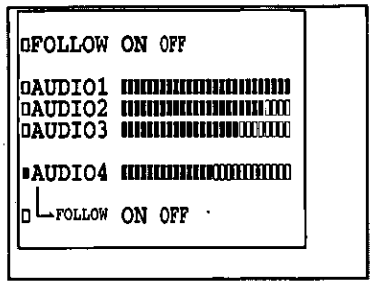
Note: The title is displayed on the preview monitor during executing the Title Fade Operation. (No title display in VIDEO ON mode.)

■ Audio Mix

● Audio Follow Setting

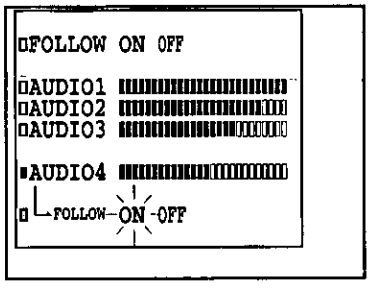
1. **Press the AUDIO button. AUDIO menu is displayed on the preview menu.**
2. **Move the cursor to the FOLLOW by using the Up/ Down button.**
3. **Select ON position by using the Right/Left button.**
   The four audio signals from source 1,2,3 and 4 can be followed simultaneously.





Note: Audio follow is shown below according to the menu setting.

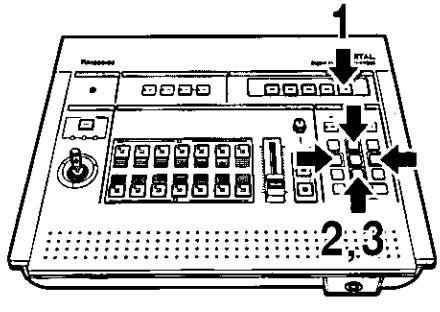
	FOLLOW		
■AUDIO4 └FOLLOW		ON	OFF
	ON	All	Independent
	OFF	Audio 1, 2 and 3	Independent

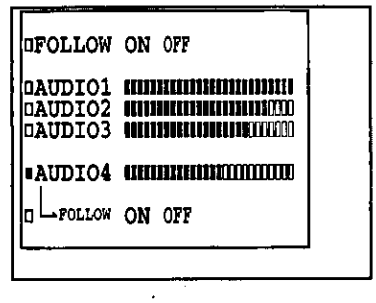


Audio follow in the wipe mode should be operated as shown next page.

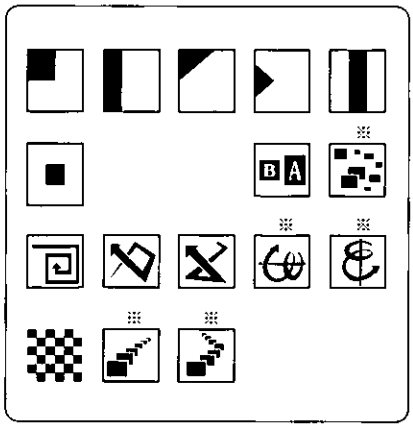
● Audio Level Setting

1. **Press the AUDIO button.**
   The AUDIO menu is displayed on the preview screen.
2. **Move the cursor to the AUDIO1, AUDIO2 , AUDIO3 or AUDIO4 position by using the Up/Down button.**
3. **Select the desired level by using the Left/Right button.**

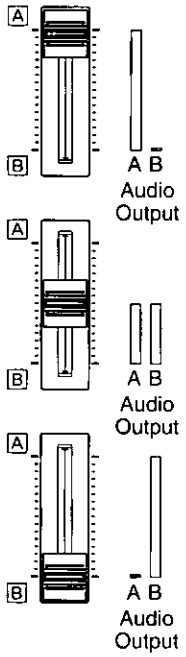




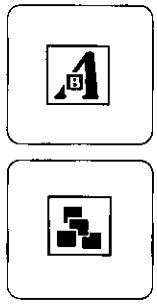
Audio Follow Effect

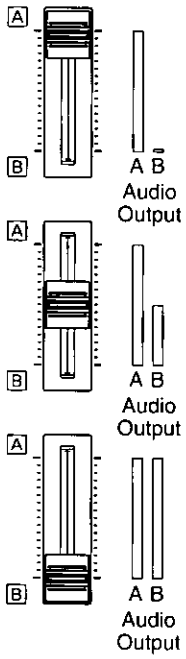


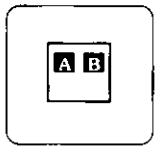
※ mark shows the "Auto Take" only.

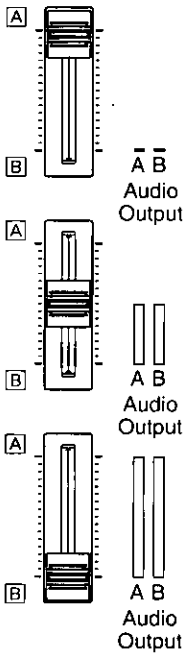


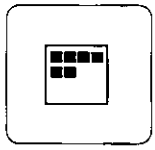
Luminance, Chroma Key Function and



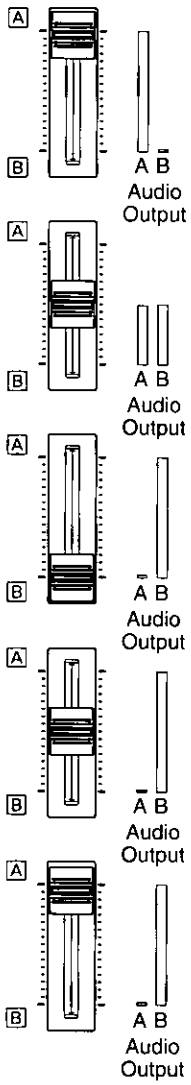








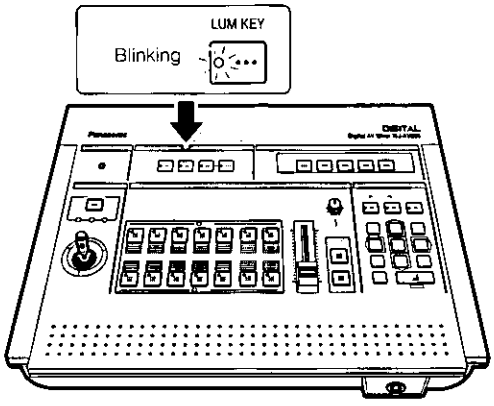
This pattern is operated with Auto Take only.



ADVANCED OPERATIONS

■ Luminance Setting

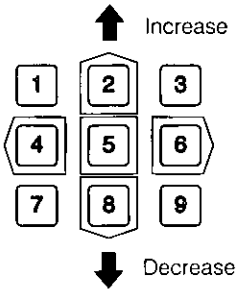
This function can effect to the B-bus video source.



1. Press the LUM KEY button.
The LED on this button is blinking.

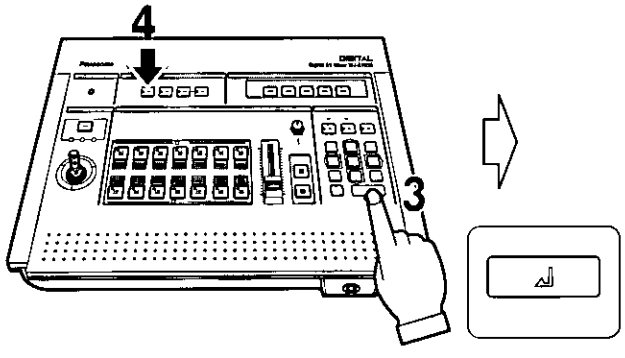
2. Adjust the luminance to the desired level by using the Up/Down button.

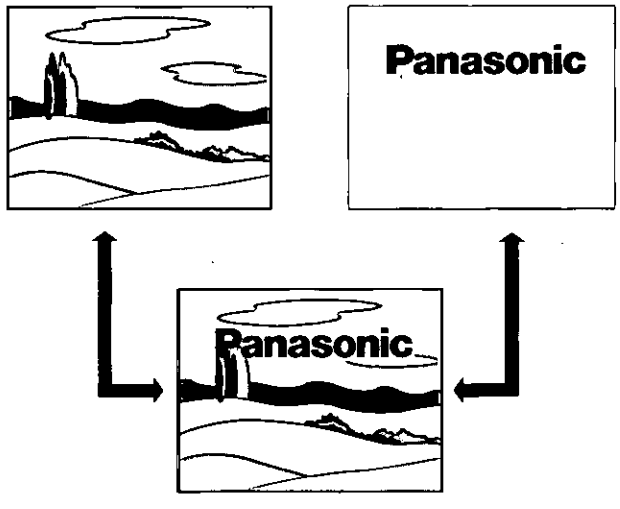
Pressing the Up button increases the level.
Pressing the Down button decreases the level.
When the Up/Down button is kept pressing, this level is increased/decreased continuously.



3. Press the ↵ button to execute this function.
The LED on the LUM KEY Button lights on from blinking.

4. To exit this function, press the other button on the TRANSITION SELECT section.



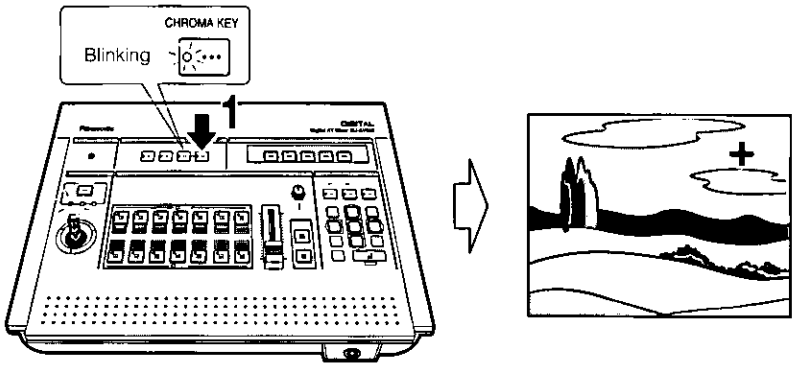


Note: The preset condition of the chroma key cannot be kept after setting the luminance key.

■ Chroma Level Setting

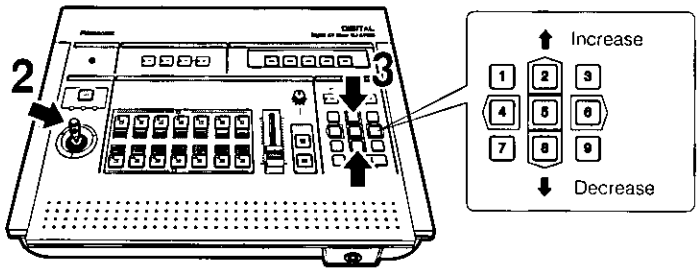
This function can effect to the B-bus video source.

1. Press the SET button.
The LED on the CHROMA KEY starts blinking.
The picture of B-bus and the cursor is displayed on the preview monitor. The POSITION Indicator starts blinking.



2. Move the cursor to the desired position for the chroma key function by using the Joystick Control.

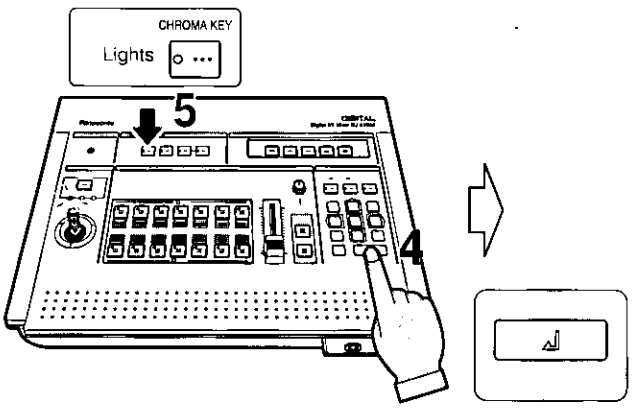
3. Press the ↵ button.
The chroma level setting is completed.

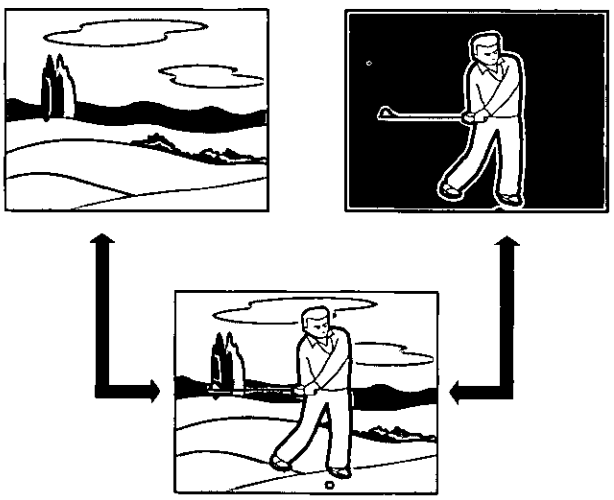


4. Adjust the chroma level to the desired one by using the Up/Down button.

Note:
Up to 3 positions can be set to the desired chroma level.
The cursor is disappeared when the setting reaches three.
The level adjustment for selected positions is not possible independently.

5. Press the CHROMA KEY button to execute this function.
The LED on the CHROMA KEY button lights on from blinking.



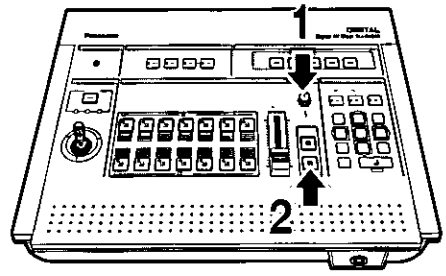


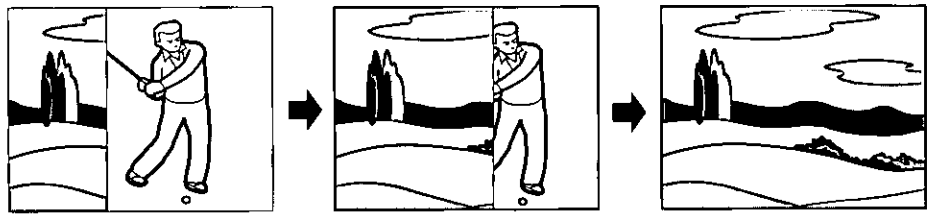
Notes :
1. The preset condition of the luminance key cannot be kept after setting the chroma key.
2. To cancel the setting level, press the **SELECT/UNDO** button.
   The latest setting is canceled.
   When you want to cancel two or three settings, press SET button and press UNDO button.
3. The chroma level is not changed if you keep pressing the Up/Down button.To change the level, press the Up/Down button repeatedly.

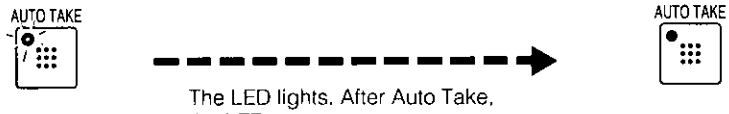
■ Auto Take Setting

1. Set the transition time by adjusting the TIME Control.
Transition time can be adjusted from 0 to 10.2 sec. approximately.

2. Press the AUTO TAKE button.







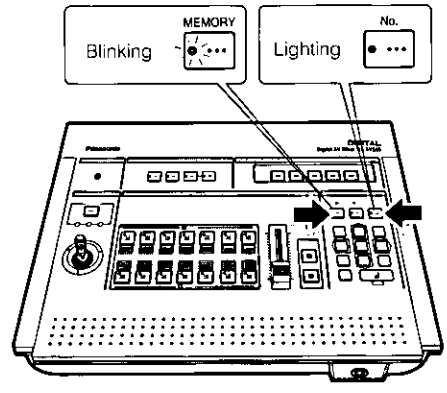
The LED lights. After Auto Take, the LED goes out.

Notes:
1. If you press the button before Auto Take is completed, it stops and the LED starts blinking. If you want to start it again, press the button again.
2. To release Auto Take mode, slide the MIX/Wipe Control Fully to either the A-bus or B-bus position.

■ Event Setting

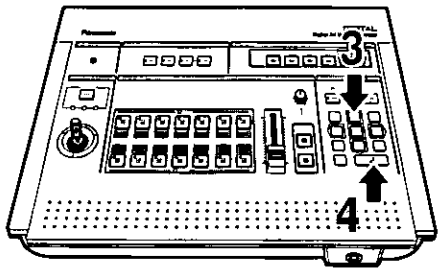
1. Select the desired condition for event setting.

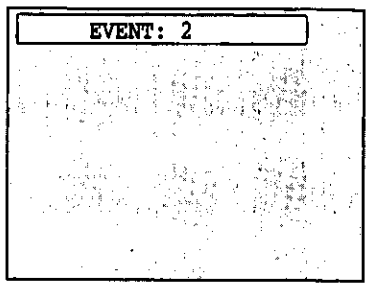
2. Press the MEMORY button.
The LED on the MEMORY starts blinking.



Notes:
1. When selecting [A] mode, event setting is not available.
2. When selecting the specified wipe patterns (which can be operated with Auto Take button only), 1 take only should be memorized.

3. **Press the desired number from 1 to 4.**
Ex.: Press number 2 .
"EVENT : 2" is displayed on the preview monitor.





4. **Press ⊿ button.**
"EVENT : 2" is disappeared on the preview monitor and this condition can be memorized in number 2.

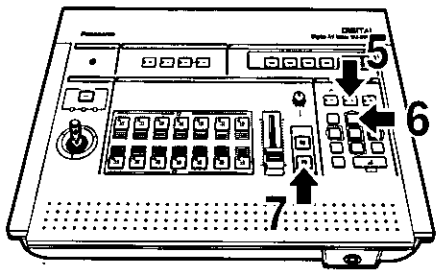
— To Call the Memory Function ———

To Call the Memory Function

5. **Press the CALL button.**
The LEDs on the CALL and No. buttons light.

6. **Press 2.**
The picture memorized number 2 is displayed on the preview monitor.

7. **Press ⊿ button.**



8. **To execute this function, press AUTO TAKE button.**

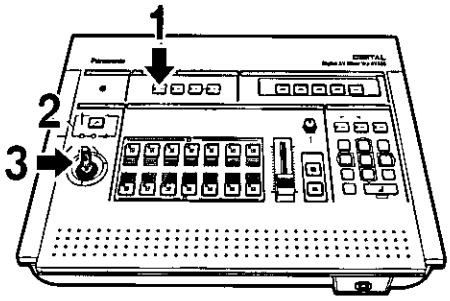
9. **To exit this function, press CALL button.**

■ Position Setting ———————————————

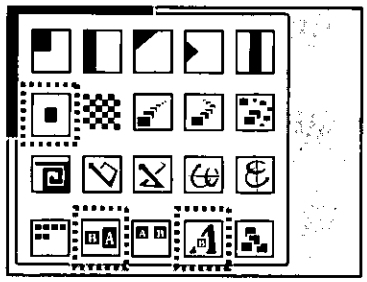
1. **Press the WIPE button and select the desired wipe pattern.**

2. **The POSITION Indicator lights.**

3. **Move the wiped picture by using the joystick.**

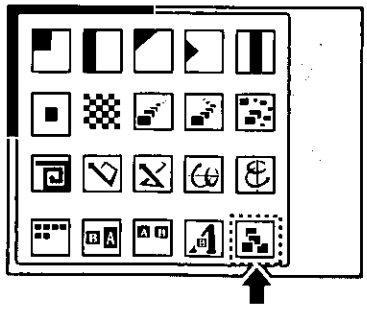


The function is available in the following wipe patterns.

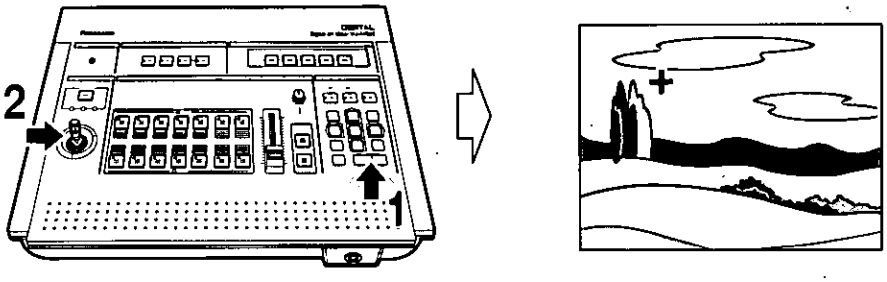


In case of selecting the [pattern] pattern,

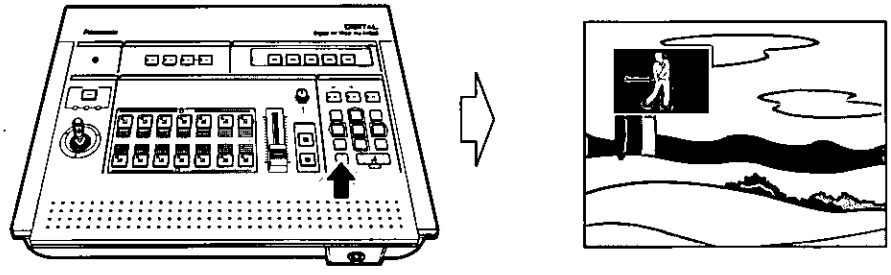
1. **Select the [pattern] pattern and press the ⊿ button.**
The WIPE menu is disappeared and the cursor is displayed.



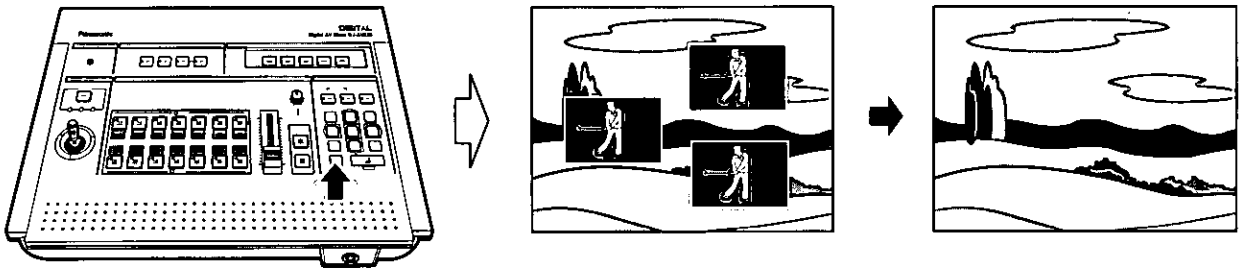
2. **Select the desired position by using the joystick.**



3. **Press the ↵ button to set the position.**

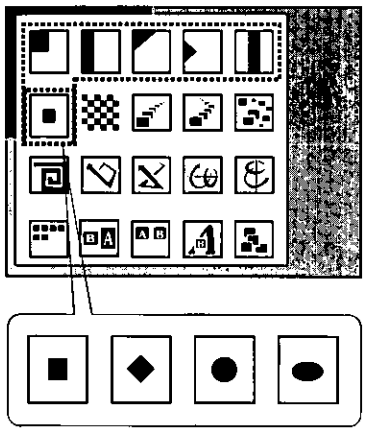


4. **To cancel these settings, press the SELECT/UNDO button.**
All of the setting in this pattern are canceled.



■ Scene Grabber

This function is available in four patterns as shown below.

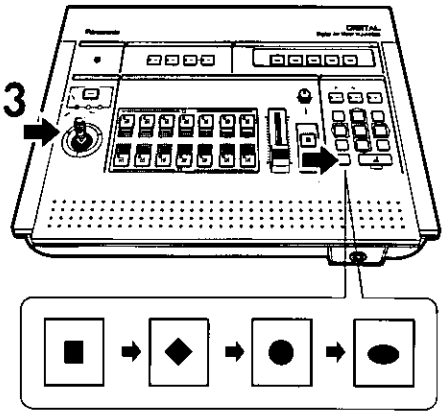


1. Press the WIPE button.
WIPE menu is displayed on the preview monitor.

2. Select the [■] Pattern by using the Up/Down/Right/ Left button and select the Pattern Mode by using the SELECT/UNDO button.
The LED on the SCENE GRABBER Indicator lights.

3. Select SCENE GRABBER position by using the select button.

4. Select the desired position by using the joystick.



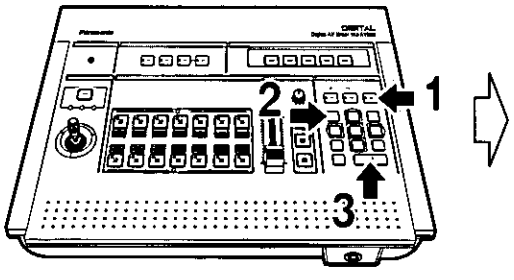
■ No. (Number) Function

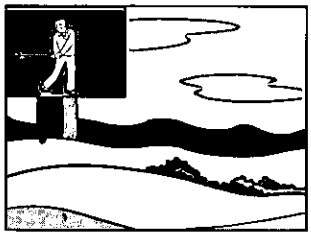
If your monitor is not provided two video input connectors, use this function.
You can work the preset function (refer to the number of wipe patter table on pages 45 and 46.) without the preview screen.

1. Press No. button.

2. Press the desired number.

3. Press the ⊿ button.
The preset function executes.



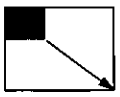
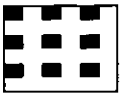
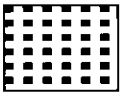
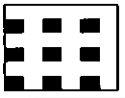
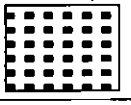
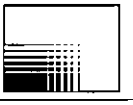
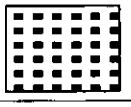
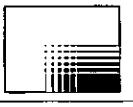
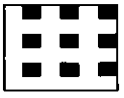
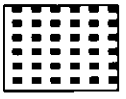
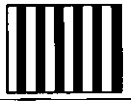
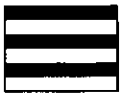
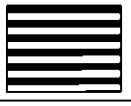
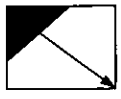
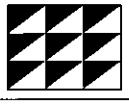
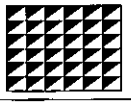
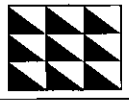
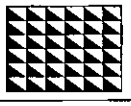
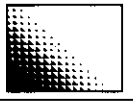
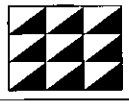
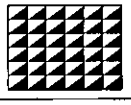
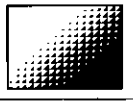
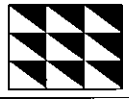
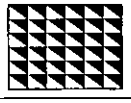
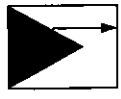
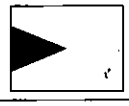
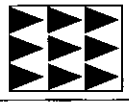
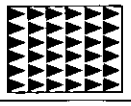
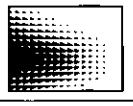
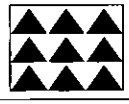
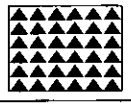
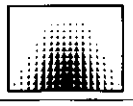
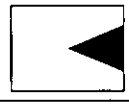
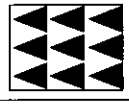
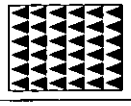
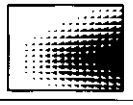
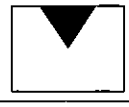
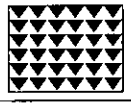
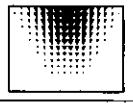


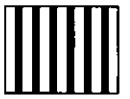
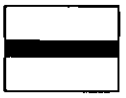
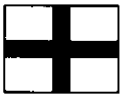
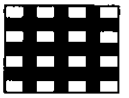
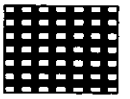
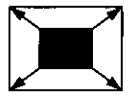
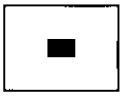
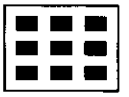
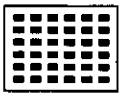
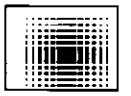
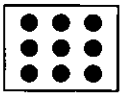
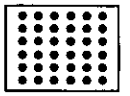
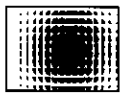
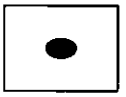
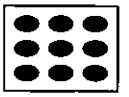
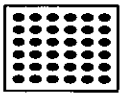
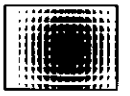
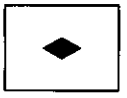
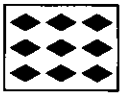
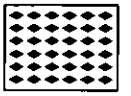
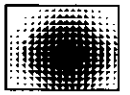
Note: When selecting number 197, the video signal of on-screen display is supplied from Rec Out Connector.
(Press the number 198 to exit from this 197 function.)

■ Reboot

Turn on the Power While keeping to press ⊿ button.
This unit is in initial mode.

■ Basic Wipe Pattern/Number Input Table

Wipe Patterns	Times of Pressing UNDO Button	BASIC	Input No.	MULTI 1	MULTI 2	MULTI 3
	0 time		(1)			
	1 time		(2)			
	2 times		(3)			
	3 times		(4)			
	0 time		(5)			
	1 time		(6)			
	2 times		(7)			
	3 times		(8)			
	0 time		(9)			
	1 time		(10)			
	2 times		(11)			
	3 times		(12)			
	0 time		(13)			
	1 time		(14)			
	2 times		(15)			
	3 times		(16)			

Wipe Patterns	Times of Pressing UNDO Button	BASIC	Input No.	MULTI 1	MULTI 2	MULTI 3
	0 time		(21)	(12)		
	1 time		(22)			
	2 times		(23)			
	3 times					
	0 time		(17)			
	1 time		(18)			
	2 times		(19)			
	3 times		(20)			

■ Special Wipe Pattern

Wipe Pattern	Input No.	Wipe Position Movable	Wipe Pattern	Input No.	Wipe Position Movable	Wipe Pattern	Input No.	Wipe Position Movable
	32	○		24	—		26	—
	33	○		25	—		27	—
	34	—		28	—		30	—
	35	—		29	—		31	○
	36	—		37	—			

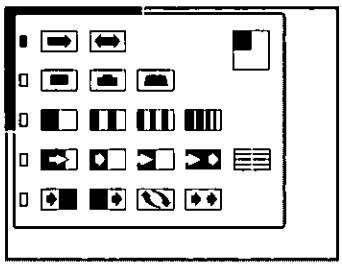
Note: The numerical orders shown above are provided for Number Function.

■ Number Input Table

This table show input numbers entered with the numeral keys and their corresponding functions to be called on the corresponding setting screen.

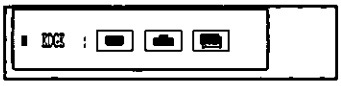
● Wipe

For wipe pattern numbers, refer to the wipe pattern tables on pages 45 and 46.

Input Number	Corresponding Function			Corresponding Setting Screen
40	Wipe Direction	: One way	( )	Mode Setting Screen 
41		: Reverse	( )	
42	Edge	: None	( )	
43		: Border	( )	
44		: Soft	( )	
45	Multi Wipe	: Basic	( )	
46		: Multi 1	( )	
47		: Multi 2	( )	
48		: Multi 3	( )	
49	Wipe Mode	: Normal	( )	
50		: Compression	( )	
51		: Slide	( )	
52		: Pair	( )	
53		: Slide Compression	( )	
54	Wipe Operation	: Over	( )	
55		: Remove	( )	
56		: Flip	( )	
57		: Push	( )	
0	Video Mix			

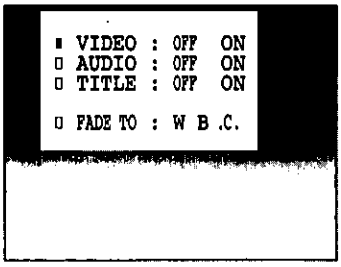
* Numbers and characters in parentheses are shown on the setting screen.

● Special Edge

Input Number	Corresponding Function			Corresponding Setting Screen
61	Edge	: None	( )	Special Edge Setting Screen 
62		: Border	( )	
63		: Soft	( )	

* Numbers and characters in parentheses are shown on the setting screen.

● Fade

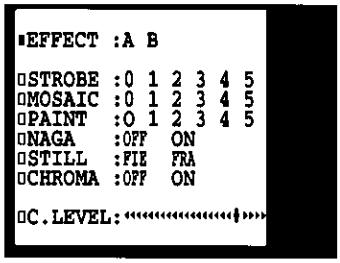
Input Number	Corresponding Function			Corresponding Setting Screen
130	Video	: On	(ON)	Fade Setting Screen 
131		: Off	(OFF)	
132	Audio	: On	(ON)	
133		: Off	(OFF)	
134	Title	: On	(ON)	
135		: Off	(OFF)	
136	Fade Color	: White	(W)	
137		: Black	(B)	
138		: Setting Color of Back Color	(.C.)	

* Numbers and characters in parentheses are shown on the setting screen.

● Effect

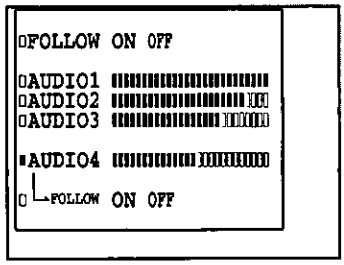
Input Number	Corresponding Function			Corresponding Setting Screen
70	A-bus strobo	: Off	(0)	
71		: Step 1	(1)	
72		: Step 2	(2)	
73		: Step 3	(3)	
74		: Step 4	(4)	
75		: Step 5	(5)	
76	A-bus Mosaic	: Off	(0)	
77		: Step 1	(1)	
78		: Step 2	(2)	
79		: Step 3	(3)	
80		: Step 4	(4)	
81		: Step 5	(5)	
82	A-bus Paint	: Off	(0)	
83		: Step 1	(1)	
84		: Step 2	(2)	
85		: Step 3	(3)	
86		: Step 4	(4)	
87	A-bus Nega	: Off	(OFF)	
88		: On	(ON)	
89	A-bus Still	: Field	(FLD)	
90		: Frame	(FRM)	
91	A-bus Color Correct	: Off	(OFF)	
92		: On	(ON)	
93	A-bus Chroma Level			
94	B-bus strobo	: Off	(0)	
95		: Step 1	(1)	
96		: Step 2	(2)	
97		: Step 3	(3)	
98		: Step 4	(4)	
99		: Step 5	(5)	
100	B-bus Mosaic	: Off	(0)	
101		: Step 1	(1)	
102		: Step 2	(2)	
103		: Step 3	(3)	
104		: Step 4	(4)	
105		: Step 5	(5)	
106	B-bus Paint	: Off	(0)	
107		: Step 1	(1)	
108		: Step 2	(2)	
109		: Step 3	(3)	
110		: Step 4	(4)	
111	B-bus Nega	: Off	(OFF)	
112		: On	(ON)	
113	B-bus Still	: Field	(FLD)	
114		: Frame	(FRM)	
115	B-bus Color Correct	: Off	(OFF)	
116		: On	(ON)	
117	B-bus Chroma Level			

Effect Setting Screen



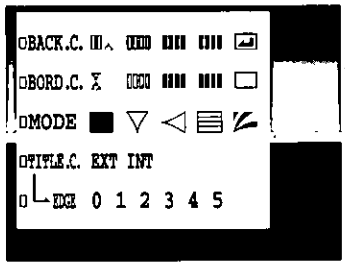
* Numbers and characters in parentheses are shown on the setting screen.
The shaded parts ▭ indicate level adjustments to be made with key [4](left) and key [6](right) of the number keys.

● Audio

Input Number	Corresponding Function			Corresponding Setting Screen
120	Audio Follow	: On	(ON)	Audio Setting Screen 
121		: Off	(OFF)	
122	Audio Level	: Audio 1	(AUDIO 1)	
123		: Audio 2	(AUDIO 2)	
124		: Audio 3	(AUDIO 3)	
125		: Audio 4	(AUDIO 4)	
126	Audio 4/Audio Follow	: On	(ON)	
127		: Off	(OFF)	

* Numbers and characters in parentheses are shown on the setting screen.
The shaded parts ▭ indicate level adjustments to be made with key [4](left) and key [6](right) of the number keys.

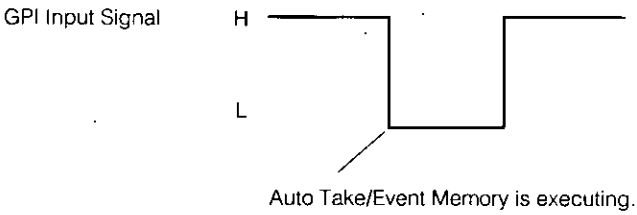
● Color

Input Number	Corresponding Function			Corresponding Setting Screen
140	Back Color	: White		Color Setting Screen 
141		: Yellow		
142		: Cyan		
143		: Green		
144		: Magenta		
145		: Red		
146		: Blue		
147		: Black		
148		: Setting Color		
150	Edge Color	: White		
151		: Yellow		
152		: Cyan		
153		: Green		
154		: Magenta		
155		: Red		
156		: Blue		
157		: Black		
158		: Setting Color		
160	Mode	: Normal	(■)	
161		: Pattern 1	(▽)	
162		: Pattern 2	(◁)	
163		: Pattern 3	(▤)	
164		: Pattern 4	(◣)	
165	Title Color	: INT	(INT)	
166		: EXT	(EXT)	
167	Edge	: 0	(0)	
168		: 1	(1)	
169		: 2	(2)	
170		: 3	(3)	
171		: 4	(4)	
172		: 5	(5)	
174	Setting of Back Color		(□)	
175	Setting of Edge Color		(□)	

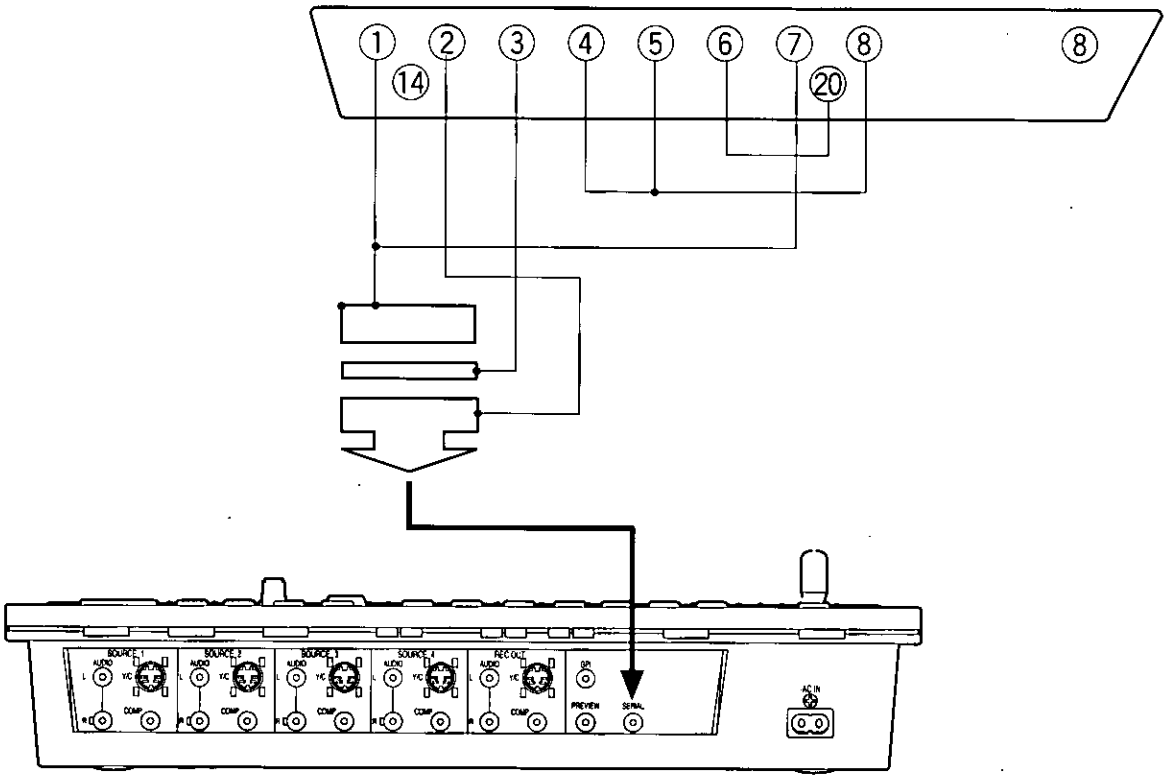
*Numbers and characters in parentheses are shown on the setting screen.

GPI Connector Information

The external equipment which is connected with this unit can execute the Auto Take or Event Memory function.
Its timming should be at a Falling Edge of GPI signal.



SERIAL Connector Information

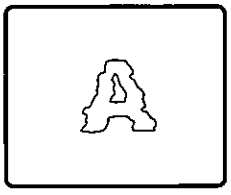


Protocol

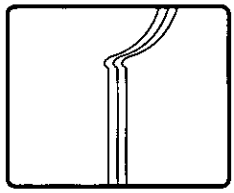
Baud rate:	9600 bps
Character length:	8-bit
Parity:	None
Stop bit:	1 bit

Important Notes on Video Input Signal

1. If the input video signal does not meet the PAL Color standard, it can cause a disturbance in synchronization.
2. If the signal-to-noise ratio (S/N) of the input signal is too low, it may result in a low quality picture.
3. A jittery source input video signal from a VTR, for example, can cause a disturbance in synchronization or color.
4. Tracking noise on the TV monitor can cause a disturbance in synchronization . It is necessary to adjust the tracking control of the input VTR.



5. Flab waving (top of picture curls) mat appear due to AFC time constant when input signals are supplied from a certain type of VTR.



6. Wipe in circle wipe mode has a zigzag edge, but it is normal, not a sign of failure.
7. In case a video signal with a VITC-signal is available at Recording Output.

Glossary

Luminance :	The back/white component of a video signal
Chrominance (Chroma) :	The color component of a video signal
Composite Video Signal :	Standard video signal
S-video Signal :	A signal at the S-VHS connector

SPECIFICATIONS

Source Input :	x4 (SOURCE 1/4)
Video Input :	1.0 V[p-p]/75Ω NTSC composite signal, pin-jack
Y/C input:	Y signal : 1.0 V[p-p]/75Ω, C signal : 0.286 V[p-p]/75Ω Mini Din 4-pin connector
Audio Input :	–6 dBs 20 kΩ pin jack (L/R)
Character Input :	x1 (TITLE) ; 10-pin connector for optional Character Generator WJ-TTL7
Recording Output :	x1 (REC OUT)
Video Output :	1.0 V[p-p]/75Ω NTSC Composite signal, pin-jacks
Y/C Output :	Y signal ; 1.0 V[p-p]/75Ω, C signal ; 0.286 V[p-p]/75Ω Mini Din 4-pin connector
Audio Output :	–6 dBV/1 kΩ, pin jacks (L/R)
Preview Output	
Video Output :	1.0 V[p-p]/75Ω NTSC Composite signal, pin-jacks
Back Color :	White, Yellow, Cyan, Green, Magenta, Red, Blue,Black and Useable
Wipe Patterns :	191 patterns
Video Gain :	Unity
S/N (typical) :	Video 50 dB (composite), 50 dB (Y/C)
	Audio ; 60 dB
Power Source :	120V AC, 60 Hz
Power Consumption :	Approx 15W
Ambient Operating Temperature :	0°C - 40°C (32°F - 104°F)
Ambient OPerating Humidity :	Less than 90%
Dimensions	420 (W) x 300 (H) x 88 (D) mm
Weight	2.5 kg

Weight and dimensions indicated above are approximate.
Specifications are subject to change without notice.

Standard Accessory

Power Cord ..... 1 pc.

Optional Accessory

Character Generator WJ-TTL7

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