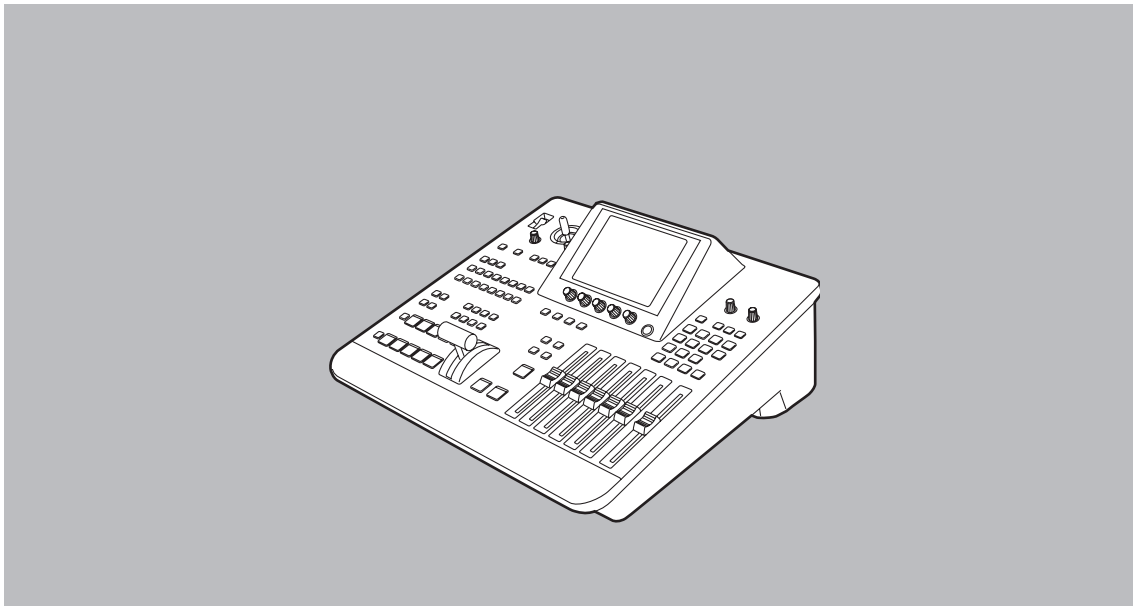


Operating Instructions

Digital AV Mixer

AG-MX70P



Panasonic[®]

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

 **DYNAMIC
ROUNDING**



CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER SERVICEABLE PARTS INSIDE.
REFER TO SERVICING TO QUALIFIED SERVICE PERSONNEL.



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.



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

WARNING:

TO REDUCE THE RISK OF FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE.

WARNING:

TO REDUCE THE RISK OF FIRE OR SHOCK HAZARD, KEEP THIS EQUIPMENT AWAY FROM ALL LIQUIDS—USE AND STORE ONLY IN LOCATIONS WHICH ARE NOT EXPOSED TO THE RISK OF DRIPPING OR SPLASHING LIQUIDS, AND DO NOT PLACE ANY LIQUID CONTAINERS ON TOP OF THE EQUIPMENT.

CAUTION:

TO REDUCE THE RISK OF FIRE OR SHOCK HAZARD, REFER MOUNTING OF THE OPTIONAL INTERFACE BOARD TO QUALIFIED SERVICE PERSONNEL.

FCC Note:

This device complies with Part 15 of the FCC Rules. To assure continued compliance follow the attached installation instructions and do not make any unauthorized modifications.


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

CAUTION:

TO REDUCE THE RISK OF FIRE OR SHOCK HAZARD AND ANNOYING INTERFERENCE, USE THE RECOMMENDED ACCESSORIES ONLY.

CAUTION:

Do not install or place this unit in a bookcase, built-in cabinet or any other confined space in order to maintain adequate ventilation. Ensure that curtains and any other materials do not obstruct the ventilation to prevent risk of electric shock or fire hazard due to overheating.

 indicates safety information.

Overview

This digital audio mixer is designed for a host of applications including cases where the video signals of video equipment are combined through digital processing or where many different kinds of effects are added. It incorporates two frame synchronizers, a feature which makes it unnecessary for two video signals to be synchronized. Its dedicated software program, the MX-Navi, enables titles to be downloaded from a PC to facilitate the insertion of titles. In addition to the wipe, mix and digital effects, this unit comes with built-in chroma key and luminance key functions. Since its downstream keys, fade controls and audio mixers can also be used, the effects required for AB roll editing can be added by just this one unit. Connectors for connecting an external controller are also provided.

- **AB roll editing**

AB roll editing is made possible by the unit's two built-in frame synchronizers.

- **Connection of external editing controller**

The unit is equipped with GPI and RS-422A/RS-232C connectors to enable an external editing controller to be connected.

- **Digital effect functions**

By using the unit's internal digital memory, it is possible to mobilize the still, strobe, negative, mono, multi-strobe (division into 4, 9 or 16), mirror, mosaic and paint functions. Field/frame switching is possible for the still, strobe and multi functions. Ripple, multi, spark and other effects can also be provided by adding the 3D optional board (AG-VE70).

- **Audio mixing**

The unit comes with four sets of input facilities.

- **Mixed effects**

The unit provides a range of mixed effect functions enabling chroma key, luminance key, mix, wipe and DVE combinations as well as DSK and fading.

- **Internal event memory**

The unit has a built-in memory that accommodates 100 patterns.

- **Advanced reference 1 output featured**

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AG-MX70

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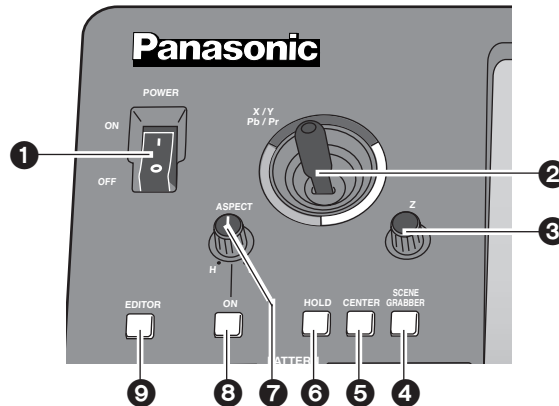
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Parts and their functions

Front panel controls



1 POWER switch

This is used to switch the AC power on and off. Select "Power" from the "Setup" initial setting screen: "Reset" is selected to establish the default setting when the power is turned ON, and "Preset" is selected to start operation using the same settings which were in effect upon conclusion of the previous operation. When [Demo] is selected, the demo mode is established after the power is turned on. The demo mode can be exited by selecting [Enter].

When the power is off, the operation panel settings are stored in the memory.

2 Joystick

The joystick is used both as the XY positioner and the controller for the color settings. It is switched as required. It can set X, Y and Z for patterns that can be positioned.

It can also set the color corrector UV white balance and chroma saturation.

It can be used as the position X/Y controller for the selection of the blue background when the chroma keys are set.

3 Rotary Z control

This control is used to set the key size Z during the key position settings and the luminance setting Y among the color settings.

4 SCENE GRABBER button

When this is set to ON with a specific key pattern, it can paste the image in the key onto the pattern and move it.

<Note>

It is possible to select either the multi-strobe or scene grabber (but not both). Whichever one was selected last takes precedence, and the previously selected effects are canceled.

5 CENTER button

Centering is performed when this button is set to ON.

In the case of color settings, the color saturation is set to zero.

In the case of position settings, the pattern is centered.

6 HOLD button

The joystick operation is stopped when this button is set to ON. However, even when this button is set to ON, the center button can be used.

Updating to the joystick value occurs when this button is set to OFF.

7 ASPECT ratio control

This control is used to set the aspect ratio for key patterns whose aspect ratio can be set. When it is turned in the H direction, the width (horizontal) is increased; when it is turned in the V direction, the height (vertical) is increased.

8 Aspect ON button

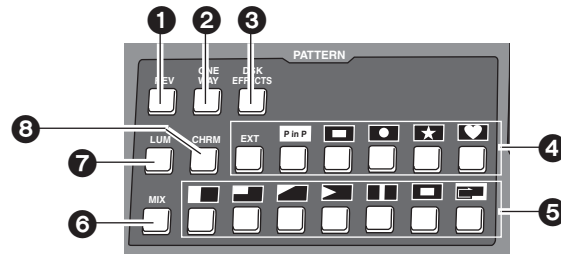
When this button is at ON, the setting performed by the aspect ratio control takes effect. When it is at OFF, the default aspect ratio (center value) is established.

9 EDITOR enable button

Editor enable can enable or disable control using RS-422A, and when control is disabled, settings can be performed by manual operations even during editing operations using RS-422A.

When the lamp of this button is lighted (ON), the settings from the editor are accepted; when it is off (OFF), the settings are canceled, and the settings can be performed manually.

Parts and their functions



① REV (reverse) button

This button is used to reverse the keys and transition key patterns, reverse the frame in/out, and reverse the chroma key, luminance key, external key and title α key signals.

The button's lamp flashes with patterns that have no reverse operations, indicating that these patterns cannot be reversed.

② ONE WAY button

At the AB bus setting stage, this button sets the transition pattern to a pattern from one direction.

The button's lamp flashes with preset bus or program bus or with patterns that have no reverse patterns, indicating that the effects cannot be executed.

③ DSK EFFECTS button

When this button is set to the ON position, the transition pattern and 3D-DVE are used for DSK. ME is set to Diss.

When the DSK effects are ON, the chroma key and luminance key cannot be selected.

This button is set to OFF as the default setting, and some patterns cannot be used for the DSK effects.

<Note>

If DSK-Effects has been set to ON for a pattern which is not supported by DSK using a wipe pattern number, the button's lamp flashes to indicate that DSK effects cannot be applied.

④ Direct key pattern buttons

These buttons are used to call the key patterns directly. With the setup initial settings, key patterns can be set from the default settings to any patterns.

The settings accompanying borders are also stored in the memory for each button.

⑤ Direct transition pattern buttons

These buttons are used to directly call the transition patterns directly. With the setup initial settings, transition patterns can be set from the default settings to any patterns.

The settings accompanying borders are also stored in the memory for each button.

⑥ MIX button

This is used to call mix transitions.

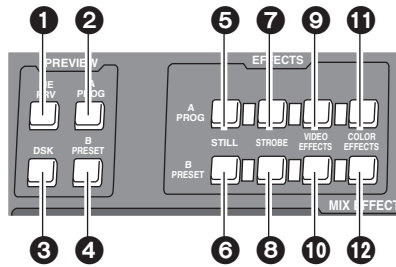
⑦ LUM (luminance) key button

This is used to call the luminance key. When it is called, the previous setting is stored in the memory.

⑧ CHRM (chroma) key button

This is used to call the chroma key. When it is called, the previous setting is stored in the memory.

Parts and their functions



Preview output selection area

The controls in this area are used to determine which images among the transition preview, DSK preview and A/B bus images are to be output from the PREVIEW output connector on the rear panel.

1 ME PRV selector button

This button is used to select ME preview as the image to be output to the preview connector. With transitions, the image of the transition destination can be previewed; with keys, combined images can be previewed.

2 A/PROG bus selector button

This button is used to select the A/PROG bus as the image to be output to the preview connector.

3 B/PRESET bus selector button

This button is used to select the B/PRESET bus as the image to be output to the preview connector.

4 DSK selector button

This button is used to select the DSK combined image as the image to be output to the preview connector.

Effect execution button area

5 A/PROG bus / STILL execution button

This button forcibly applies the still effect to the A/PROG bus.

When it is pressed, the A/PROG video effect setting page appears on the LCD screen.

6 B/PRESET bus / STILL execution button

This button forcibly applies the still effect to the B/PRESET bus.

When it is pressed, the B/PRESET video effect setting page appears on the LCD screen.

7 A/PROG bus / STROBE execution button

This button forcibly applies the strobe effect to the A/PROG bus. The setting is performed as a [Video Effects] setting screen.

When the button is pressed, the A/PROG video effect setting page appears on the LCD screen.

8 B/PRESET bus / STROBE execution button

This button forcibly applies the strobe effect to the B/PRESET bus.

When the button is pressed, the B/PRESET video effect setting page appears on the LCD screen. The still and strobe field/frame setting is performed using the time effect settings of [Video Effects].

<Note>

Both still and strobe cannot be selected at the same time. Whichever one was selected last takes precedence. In the case of manual strobe, the effect is applied by pressing the button together with "Shift."

9 A/PROG bus / VIDEO EFFECTS execution button

This applies the mosaic, decay and other video effects set by [Video Effects] to the A/PROG bus.

When the button is pressed, the A/PROG video effect setting page appears on the LCD screen. When it is pressed together with the Shift button, the A/PROG video effect setting page can be displayed on the LCD screen without changing the ON/OFF setting of the effects.

10 B/PRESET bus / VIDEO EFFECTS execution button

This applies the mosaic, decay and other video effects set by [Video Effects] to the B/PRESET bus.

When it is pressed together with the Shift button, the A/PROG video effect setting page can be displayed on the LCD screen without changing the ON/OFF setting of the effects.

11 A/PROG bus color effect execution button

This applies the white balance, brightness adjustment and other color effects set by [Color Effects] to the A/PROG bus.

When it is pressed together with the Shift key, the A/PROG color effect setting page can be displayed on the LCD screen without changing the ON/OFF setting of the effects.

12 B/PRESET bus / COLOR EFFECTS execution button

This applies the white balance, brightness adjustment and other color effects set by [Color Effects] to the B/PRESET bus.

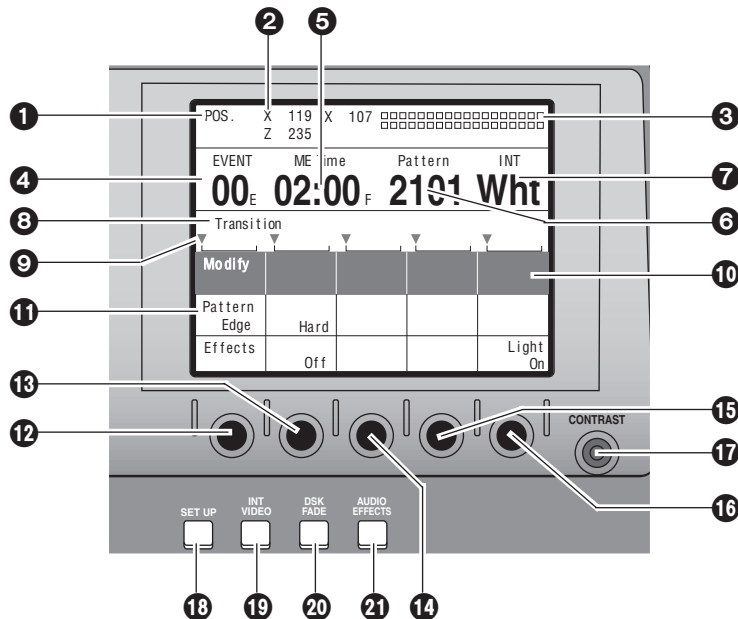
When it is pressed together with the Shift key, the B/PRESET color effect setting page can be displayed on the LCD screen without changing the ON/OFF setting of the effects.

<Note>

Both the color effects and mono effects cannot be selected at the same time. If both are selected, the mono effects always take precedence.

Parts and their functions

Setting panel area



1 LCD (liquid crystal) display

The effect parameters, time settings and other information are shown on this display.

2 Joystick, Z parameter display area

During positioning, the X/Y/Z parameters are displayed here; during the color settings, the Pb/Pr/Y parameters are displayed.

3 Audio level meter

This indicates the level of the output sound.

4 Event number display area

The event numbers are displayed here.

5 Time display area

The ME, DSK and FADE transition times are displayed here.

6 Pattern number display area

The transition and key numbers are displayed here.

7 Internal (internally generated) video display area

The settings for the internal video signals are displayed here.

8 Setting page display area

The name of the page which has been set by the button operations is displayed here.

9 Rotary control setting position display area

The currently set positions of the rotary 1, 2, 3, 4 and 5 controls are displayed here.

10 Scroll bar

This displays the position on the page of the item currently displayed.

11 Item, parameter setting area

The details which are set using the setting pages are switched and displayed here. The selected settings are displayed negatively, and the parameters can each be changed using the rotary 1, 2, 3, 4 and 5 controls.

12 Rotary 1 control

This control is used to set the parameter of a selected item.

13 Rotary 2 control

This control is used to set the parameter of a selected item.

14 Rotary 3 control

This control is used to set the parameter of a selected item.

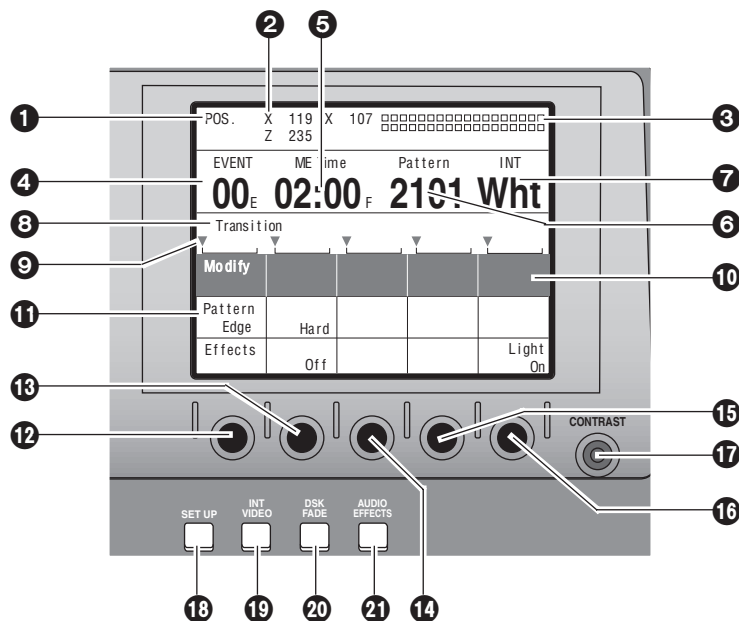
15 Rotary 4 control

This control is used to set the parameter of a selected item.

16 Rotary 5 control

This control is used to set the parameter of a selected item.

Parts and their functions



17 LCD CONTRAST control

This control is used to adjust the contrast of the LCD display.

18 SET UP (initial setting page display) button

This button displays the initial setting page.

19 INT VIDEO (internal video setting page display) button

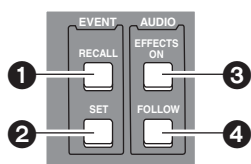
This button displays the internal video setting page.

20 DSK FADE (DSK/fade setting page display) button

This button displays the DSK/fade setting page.

21 AUDIO EFFECTS (audio effect setting page display) button

This button displays the audio effect setting page.



1 EVENT RECALL button

This button is used to read out events.

2 EVENT SET button

This button is used to store events in the memory.

3 AUDIO EFFECTS ON (audio effect execution) button

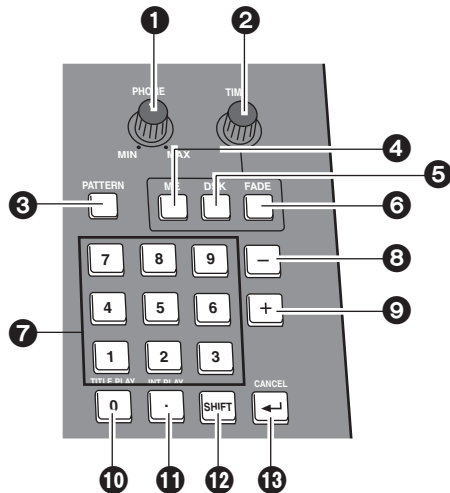
At the button's ON setting, the effects which were set on the audio effect setting page are executed.

4 AUDIO FOLLOW video button

This button enables the audio to be matched with the video during video ME transition or fading. Its function is supported at the ON position.

ON or OFF is preset for fading on the DSK/fade setting page.

Parts and their functions



1 PHONE (headphone volume) control

This control is used to adjust the level of the rear panel headphone (PHONE) output.

The sound of the portion to be faded using the DSK/Fade setting can be monitored before fading so that it can be heard even when AudioFade is used.

The sound is output from the rear panel. Since the audio meter displays the Prog output level, it will remain unchanged even when the headphone level is changed.

2 TIME (time setting) rotary control

This control is used to set the ME, DSK and FADE transition times.

3 PATTERN (transition/key pattern number setting) button

Set this button to ON to set the pattern numbers using the number keys. At its OFF position, the time can be set using the number keys.

4 ME (ME transition/key transition time) setting button

Set this button to ON to set the time to be applied to the ME transition/key using the time setting rotary control.

When the pattern number setting button is OFF, the time can be set using the number keys.

5 DSK (DSK transition time) setting button

Set this button to ON to set the time to be applied to DSK using the time setting rotary control.

When the pattern number setting button is OFF, the time can be set using the number keys.

6 FADE (fade transition time) setting button

Set this button to ON to set the time to be applied to the FADE using the time setting rotary control.

When the pattern number setting button is OFF, the time can be set using the number keys.

7 Number keys 1 to 9

These keys can be used to input numerical values for the event numbers when the event recall button or event setting button is ON, for the pattern numbers when the event recall button or event setting button is OFF and the pattern number setting button is ON, and for the transition times when the pattern number setting button is OFF.

8 "+" key

This key is used to increment the event numbers when the event recall button or event setting button is ON, the pattern numbers when the event recall button or event setting button is OFF and the pattern number setting button is ON, and the transition times when the pattern number setting button is OFF.

9 "-" key

This key is used to decrement the event numbers when the event recall button or event setting button is ON, the pattern numbers when the event recall button or event setting button is OFF and the pattern number setting button is ON, and the transition times when the pattern number setting button is OFF.

10 0 number key

This key is used to input zeros. When it is pressed together with the shift key, the animation in the title memory now selected starts playing.

11 Period key

This key is used to enter the seconds when inputting the time.

Example: [2].[5] → 2 seconds 5 frames

When it is pressed together with the shift key, the internal video movie now selected starts playing.

12 Shift key

When this key is pressed together with another key, the resulting effect differs from the one produced when the key concerned is pressed on its own.

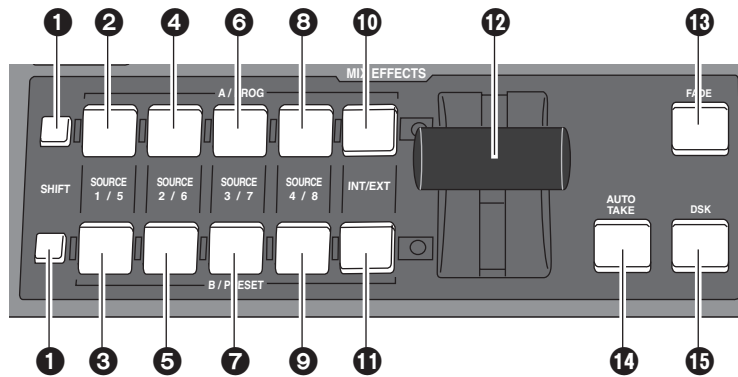
13 Enter key

This key is used to enter numerical values.

When "OK?" appears on the LCD display, press this key to enter the setting.

Entry is canceled when it is pressed together with the shift key.

Parts and their functions



1 SHIFT key

This key has the same function as the shift key for the number keys.

2 A/PROG /SOURCE 1/5 selector button

This button is used to select source 1 selected by the initial settings for the A/PROG bus. When it is pressed together with the shift key, source 5 is selected.

3 B/PRESET / SOURCE 1/5 selector button

This button is used to select source 1 selected by the initial settings for the B/PRESET bus. When it is pressed together with the shift key, source 5 is selected.

4 A/PROG / SOURCE 2/6 selector button

This button is used to select source 2 selected by the initial settings for the A/PROG bus. When it is pressed together with the shift key, source 6 is selected.

5 B/PRESET / SOURCE 2/6 selector button

This button is used to select source 2 selected by the initial settings for the B/PRESET bus. When it is pressed together with the shift key, source 6 is selected.

6 A/PROG / SOURCE 3/7 selector button

This button is used to select source 3 selected by the initial settings for the A/PROG bus. When it is pressed together with the shift key, source 7 is selected.

7 B/PRESET / SOURCE 3/7 selector button

This button is used to select source 3 selected by the initial settings for the B/PRESET bus. When it is pressed together with the shift key, source 7 is selected.

8 A/PROG / SOURCE 4/8 selector button

This button is used to select source 4 selected by the initial settings for the A/PROG bus. When it is pressed together with the shift key, source 8 is selected.

9 B/PRESET / SOURCE 4/8 selector button

This button is used to select source 4 selected by the initial settings for the B/PRESET bus. When it is pressed together with the shift key, source 8 is selected.

10 A/PROG / INT/EXT selector button

This button is used to select the image (INT) selected on the internal video setting page for the A/PROG bus. When it is pressed together with the shift key, the external input (EXT) is selected.

11 B/PRESET / INT/EXT selector button

This button is used to select the image (INT) selected on the internal video setting page for the B/PRESET bus. When it is pressed together with the shift key, the external input (EXT) is selected.

12 Transition lever

This lever enables transitions to be performed manually.

13 FADE (fade execution) button

This button enables fade-out into the color set on the [DSK/FADE] setting page. During execution, its lamp lights; during fade-out, it flashes.

14 AUTO TAKE button

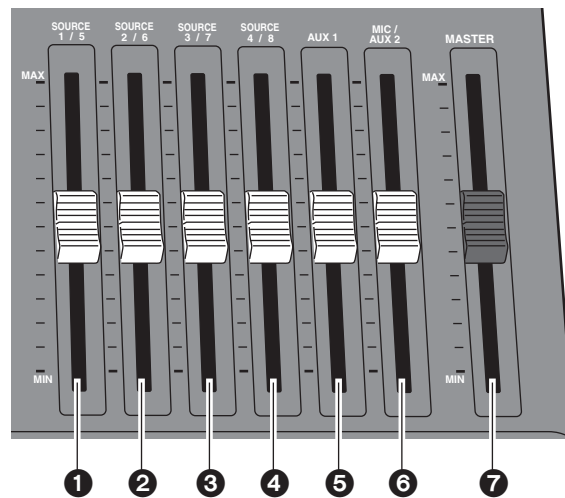
This button enables the ME transitions and keys to be transited automatically. During execution, its lamp lights. When it is pressed again during transiting, the transiting stops at the position where it was pressed. While the transiting is stopped, it flashes. When it is pressed again, the transiting resumes.

15 DSK execution button

This enables DSK which was set on the [DSK/FADE] setting page to be executed. During execution, its lamp lights; during DSK, it flashes.

Parts and their functions

Audio mixer area



① SOURCE 1/5 fader

This fader is used to adjust the audio level of input 1 which was set on the initial setting page; when it is operated together with the shift key, it is used to adjust the audio level of input 5.

The operation of the fader lever takes effect from where the internal level and lever position match or where the higher/lower relationship between them has been reversed when the input has been switched.

② SOURCE 2/6 fader

This fader is used to adjust the audio level of input 2 which was set on the initial setting page; when it is operated together with the shift key, it is used to adjust the audio level of input 6.

The operation of the fader lever takes effect from where the internal level and lever position match or where the higher/lower relationship between them has been reversed when the input has been switched.

③ SOURCE 3/7 fader

This fader is used to adjust the audio level of input 3 which was set on the initial setting page; when it is operated together with the shift key, it is used to adjust the audio level of input 7.

The operation of the fader lever takes effect from where the internal level and lever position match or where the higher/lower relationship between them has been reversed when the input has been switched.

④ SOURCE 4/8 fader

This fader is used to adjust the audio level of input 4 which was set on the initial setting page; when it is operated together with the shift key, it is used to adjust the audio level of input 8.

The operation of the fader lever takes effect from where the internal level and lever position match or where the higher/lower relationship between them has been reversed when the input has been switched.

<Note>

The adjusted sounds of 1 to 8 are selected at the cross points and combined.

When [FOLLOW] is ON, the transition is coupled with Video. When [FOLLOW] is OFF, the transition is not coupled with Video. The sounds of both A and B are combined.

The output level can be adjusted using the MASTER fader. The effects that have been set are executed using the Audio Effects ON button.

⑤ AUX 1 fader

This fader is used to set the audio level of input AUX 1.

⑥ MIC/AUX 2 fader

This fader is used to adjust the audio level of the input AUX2 selected on the initial setting page or of MIC (sound selected by Setup).

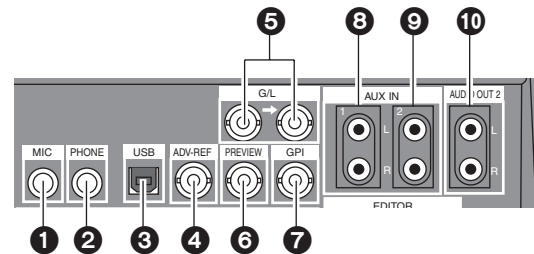
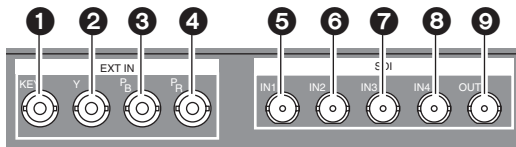
⑦ MASTER fader

This fader is used to adjust the output level.

It executes the effects which have been set by the Audio Effects ON button.

Parts and their functions

Rear panel connection area



EXT IN (external key input area)

① External key input connector

This connector can be used for key or DSK applications. It can also be used for genlock signal using the settings on the initial setting page.

② External input Y connector

The cross point EXT or DSK Y signal is input to this connector.

The DSK source can be set on the DSK/FADE setting page.

③ External input PB connector

The cross point EXT or DSK PB signal is input to this connector.

④ External input PR connector

The cross point EXT or DSK PR signal is input to this connector.

<Notes>

- Non-standard signals are not accepted.
- Since the input signals do not pass through the frame synchronizers, they must be synchronized with this unit.

SDI (SDI option area)

⑤ IN1 connector

⑥ IN2 connector

⑦ IN3 connector

⑧ IN4 connector

⑨ OUT connector

The connectors listed above are used when the optional board (AG-YA70) has been installed.

① MIC input connector

This connector can be set to MIC or AUX 2 on the initial setting page.

② PHONE (headphone) output connector

The headphones are connected to this connector.

③ USB interface connector

This connector is used to connect to a personal computer and download files.

④ ADV-REF (advanced reference) output connector

This connector outputs the reference signal with advanced vertical phase for source input uses.

⑤ G/L (genlock reference) input connectors

These are loop-through, automatically terminated connectors.

They supply signals to the source VTR or camera and initiate genlock.

They enable genlock for the G/L input or EXTKEY input by making a selection on the initial setting page.

⑥ PREVIEW output connector

The signals selected by the preview selector button are output from this connector.

⑦ GPI input connector

A trigger is applied and a transition is enabled for ME, DSK or fade as selected on the initial setting page. The effect is applied 3 frames later.

⑧ AUX IN (spare) 1 L and R input connectors

AND

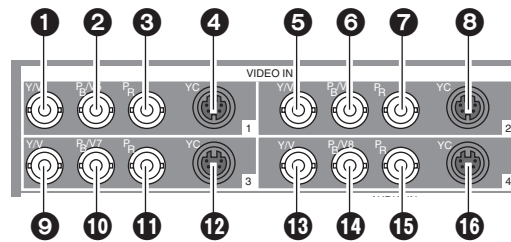
⑨ AUX IN (spare) 2 L and R input connectors

These connectors can be used by making a selection on the initial setting page.

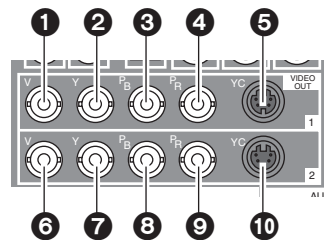
⑩ AUDIO OUT 2 L and R output connectors

These are unbalanced audio output connectors.

Parts and their functions

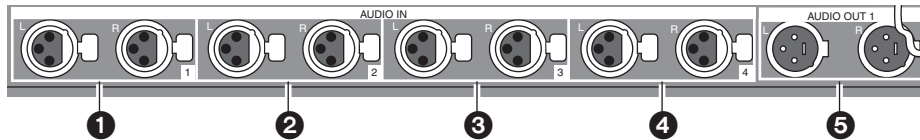


- | | |
|--|--|
| <ul style="list-style-type: none"> ❶ Composite/component Y input 1 connector ❷ Composite 5/component P_B input 1 connector ❸ Component P_R input 1 connector ❹ YC input 1 connector ❺ Composite/component Y input 2 connector ❻ Composite 6/component P_B input 2 connector ❼ Component P_R input 2 connector ❽ YC input 2 connector | <ul style="list-style-type: none"> ❾ Composite/component Y input 3 connector ❿ Composite 7/component P_B input 3 connector ⓫ Component P_R input 3 connector ⓬ YC input 3 connector ⓭ Composite/component Y input 4 connector ⓮ Composite 8/component P_B input 4 connector ⓯ Component P_R input 4 connector ⓰ YC input 4 connector |
|--|--|



- | | |
|---|---|
| <ul style="list-style-type: none"> ❶ Composite output 1 connector ❷ Component Y output 1 connector ❸ Component P_B output 1 connector ❹ Component P_R output 1 connector ❺ YC output 1 connector | <ul style="list-style-type: none"> ❻ Composite output 2 connector ❼ Component Y output 2 connector ❽ Component P_B output 2 connector ❾ Component P_R output 2 connector ❿ YC output 2 connector |
|---|---|

Parts and their functions



❶ Analog audio 1 input connectors

The audio signals supplied to these connectors are input to the cross point selected on the initial setting page.

❷ Analog audio 2 input connectors

The audio signals supplied to these connectors are input to the cross point selected on the initial setting page.

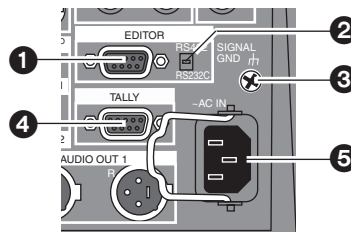
❸ Analog audio 3 input connectors

The audio signals supplied to these connectors are input to the cross point selected on the initial setting page.

❹ Analog audio 4 input connectors

The audio signals supplied to these connectors are input to the cross point selected on the initial setting page.

❺ Analog audio output connectors



❶ EDITOR interface connector (9-pin)

This connector is used to connect the unit with an RS-422A or RS-232C controller.

❷ RS-422A/RS-232C selector switch

This is used to switch between the RS-422A and RS-232C control protocols.

❸ SIGNAL GND (ground) terminal

❹ TALLY output connector

The rear panel tally is for the cross point 1, 2, 3, 4, 5, 6, 7 or 8 output.
The connector used by the cross point is turned ON.

❺ AC IN power socket

External interfaces

This unit comes with three connectors to support four external interfaces: a GPI input connector, RS-422A/RS-232 (9-pin) connector and a Tally output connector. Select the connector that suits the editing controller model used.

■ GPI (general purpose interface)

This enables the use of auto takes with the GPI output of the external controller. At the fall of the GPI signal, wipe/mix set on the panel or DSK or Fade is executed.

■ RS-422A

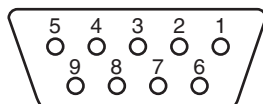
This enables the AG-A850 external editing controller to be connected to the unit and the VTR to be controlled from a remote location.

● Functions that can be controlled from the AG-A850

- Wipe settings
- Mixing
- Auto take time and auto fade time settings
- Downstream key fade-in and fade-out
- Cross point source 1/source 2 (source 2/source 3 or source 3/source 4) switching
(Cross mode switching is performed by the RS-422A/RS-232C selector switch on the rear panel. Support for the editing controller is shown below.)

● Connections

- 1) Set the RS-422A/RS-232C selector switch to "RS-422A."
- 2) Connect the connecting cable from the AG-A850 to the editing controller connector on this unit.
- 3) The pin layout of the editing controller connector is shown below.



Connector (9P)

| Pin No | Signal |
|--------|-----------------|
| 1 | FRAME GROUND |
| 2 | TRANSMIT A |
| 3 | RECEIVE B |
| 4 | RECEIVE COMMON |
| 5 | SPARE |
| 6 | TRANSMIT COMMON |
| 7 | TRANSMIT B |
| 8 | RECEIVE A |
| 9 | FRAME GROUND |

■ RS-232C

This enables the unit to be controlled using a personal computer. All of the unit's functions with the exception of AUX 1 and AUX 2 can be set.

● Connection of conversion cable

| RS-232C | AG-MX70 |
|---------|---------|
| 25-pin | 9-pin |
| 1 TXD | 1 SPARE |
| 3 RXD | 2 RXD |
| 4 RTS | 3 TXD |
| 5 CTS | 4 DTR |
| 6 DSR | 5 SIG.G |
| 7 SIG.G | 6 DSR |
| 20 DTR | 9 SPARE |

[DCE CONNECTION]

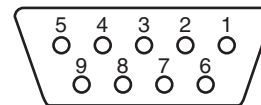
Use the above conversion with the 9-pin straight cable as well.

<Notes> Editing using the RS-422A, RS-232 and GPI interface connectors

- The commands are received and then executed 3 frames later.
- If, while the 3D optional board is installed, the 1-Frame Dly mode has been selected by the system 1 settings (see page 56) on the "Setup" initial setting screen, the pictures and sound from the source are always output with a 1-frame delay.
- When selecting a DVE pattern, set the transition time to more than 2 frames. No guarantees are made for frame accuracy if the time setting is lower than this.

■ Tally

An open connector is provided for outputting the tally lamp signals.



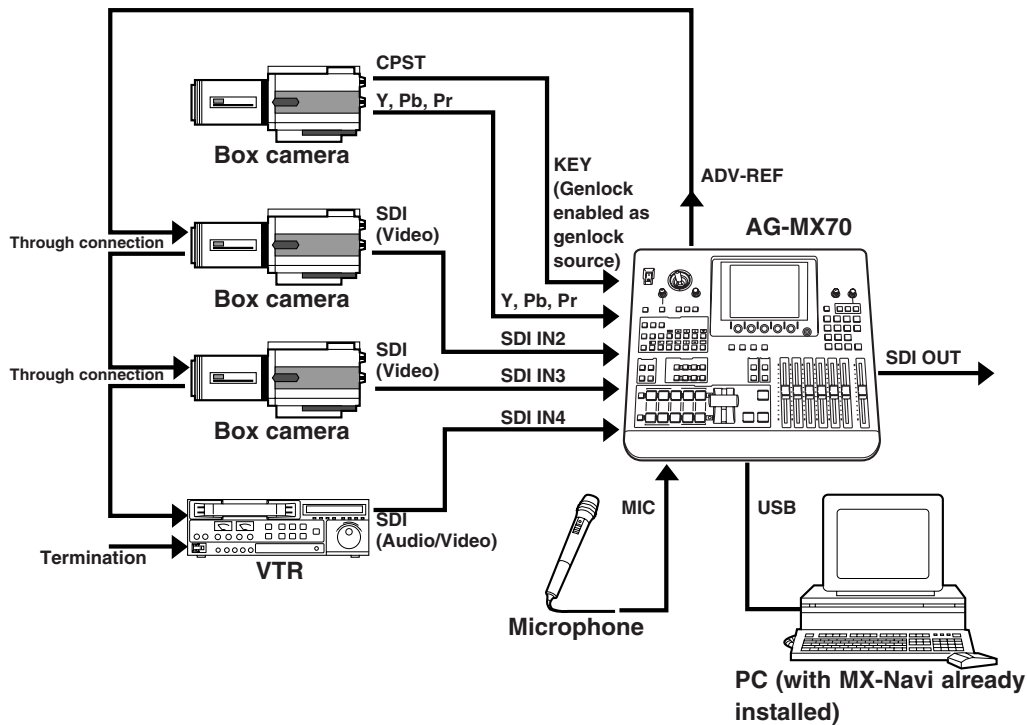
Connector (9P)

| Pin No | Signal |
|--------|---------------------------------|
| 1 | Output for cross point 1 |
| 2 | Output for cross point 2 |
| 3 | Output for cross point 3 |
| 4 | Output for cross point 4 |
| 5 | Output for cross point 5 |
| 6 | Output for cross point 6 |
| 7 | Output for cross point 7 |
| 8 | Output for cross point 8 or EXT |
| 9 | GND |

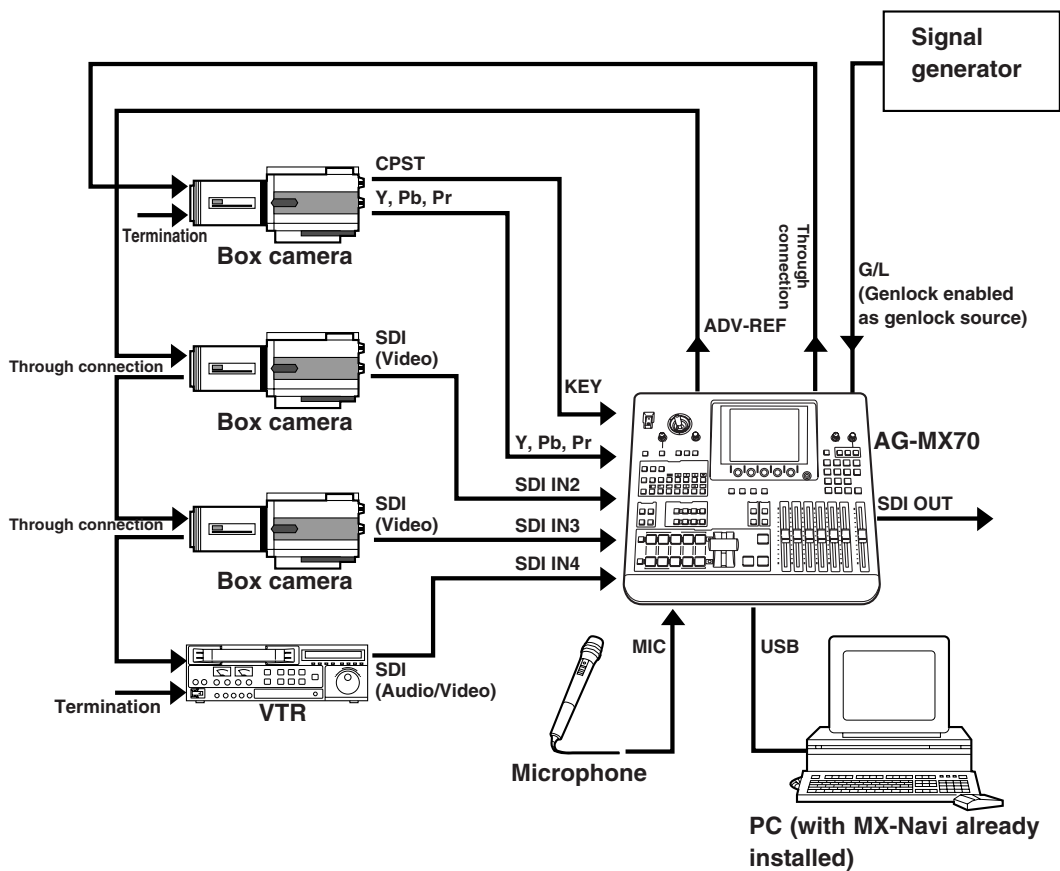
System Diagram

By connecting cameras, VTRs and other video components, this unit can digitally process the video signals of these components.

Example 1 Live application (1)

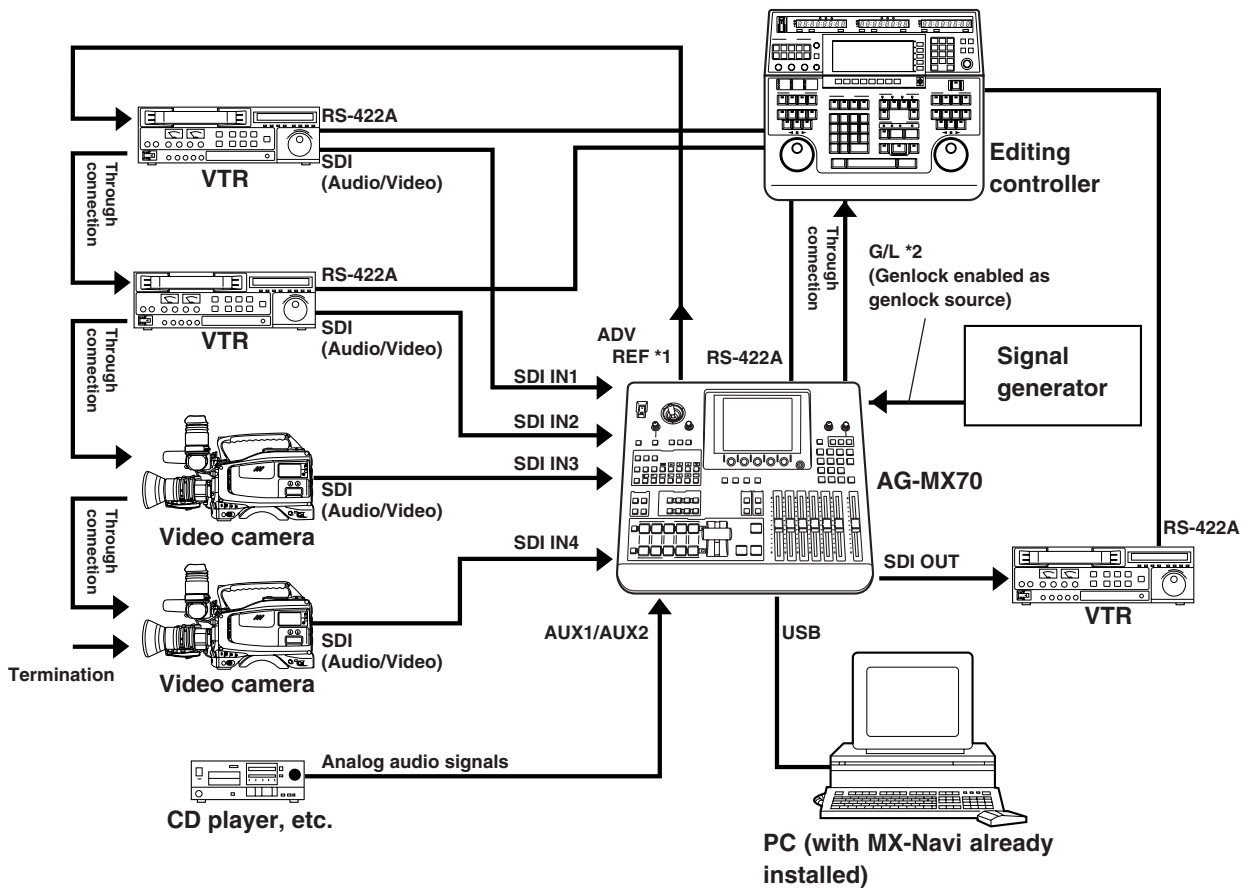


Example 2 Live application (2)



System Diagram

Example 3 Editing application



*1: Connection of the ADF REF signal is not absolutely essential but when this signal has been connected, "StillOff" can be selected by the bus setting (see page 56) on the "Setup" initial setting screen and input can be switched directly using the cross point button.

*2: ADV REF can also be used as an alternative to the G/L loop-through signal as the sync signal supplied to the AG-A850 editing controller.

[INTVideo] internal video setting screen

When [Back Matte] has been selected

The joystick XY and rotary Z control displays are set to Wash, and the wash color that is the companion color for gradation is set.

The joystick [X][Y] and rotary [Z] display change to [Pb], [Pr] and [Y], and the color can be set. [Pb][Pr] can be set to any value from 0 to 255 and [Y] to any value from 16 to 255 but only when [Custom1] or [Custom2] has been selected using rotary 2 control.

Colors are selected using the rotary 2 control. There are 10 choices: White, Yellow, Cyan, Green, Magenta, Red, Blue, Black, Custom1 and Custom2.

The color level (Y level for White) is set using the rotary 3 control. When [Custom1] or [Custom2] has been selected, either Back Matte or Wash is set.

[Pattern] (gradation pattern) is set using the rotary 4 control.

There are the following nine choices.

- [Off] : No gradation
- [H1] : Horizontal gradation 1
- [H2] : Horizontal gradation 2
- [H3] : Horizontal gradation 3
- [V1] : Vertical gradation 1
- [V2] : Vertical gradation 2
- [V3] : Vertical gradation 3
- [Diag1] : Diagonal gradation 1
- [Diag2] : Diagonal gradation 2

| R1 | R2 | R3 | R4 | R5 |
|-------------------|--------------------|------------------|-------------------|----------------|
| Back Matte | Color White | Level 255 | Pattern H1 | Grade 0 |
| | White | Level 0 - 255 | Off | 0 - 255 |
| | Yellow | | H1 | |
| | Cyan | Set BackM | H2 | |
| | Green | Wash | H3 | |
| | Magenta | | V1 | |
| | Red | | V2 | |
| | Blue | | V3 | |
| | Black | | Diag1 | |
| | Custom1 | | Diag2 | |
| | Custom2 | | | |

The [Grade] combined gradation level is set using the rotary 5 control. Any value from 0 to 255 can be set. The gradation position is set using [Shift] + rotary 5 control.

When [Custom1, 2] has been selected

The rotary 3 control is used to select whether BackM (back matte) or Wash is to be set using the joystick. With Set BackM, the joystick XY and rotary Z control at the top of the screen appear as "Matte," and with Set Wash, they appear as "Wash," enabling the respective colors to be adjusted.

The default color for Custom1 and Custom2 is black.

| R1 | R2 | R3 | R4 | R5 |
|--------------------|----------------------|------------------|-------------------|----------------|
| Black Matte | Color Custom1 | Set BackM | Pattern H1 | Grade 0 |
| | | Set BackM | Off | 0 - 255 |
| | | Wash | H1 | |
| | | | H2 | |
| | | | H3 | |
| | | | V1 | |
| | | | V2 | |
| | | | V3 | |
| | | | Diag1 | |
| | | | Diag2 | |

[INTVideo] internal video setting screen

When [Memory] has been selected

Described below are the write and preview procedures for “Still” (still picture) or “Movie” (moving picture). It is possible to set the number of frames (number of pages) that can be used to a maximum of 30 (NTSC) or 26 (PAL). However, if pages are allocated to titles, the number of pages will be reduced by the equivalent amount. The page allocation can be changed on the “Setup” initial setting screen.

- Write procedure

Use the rotary 5 control to set the mode to “Write.”

Use the rotary 2 control to select the page on which the images are to be written.

Use the rotary 3 control to set the number of frames to be written. Set 1 as the number of frames for Still writing and set a number greater than 1 for Movie writing.

Check the image to be written at the Prog output, and when the image to be written appears, write it using “Enter.” In the case of Movie, the images are written consecutively from the page designated by the rotary 2 control up to the page equivalent to the number of frames designated by the rotary 3 control. Any existing data will be deleted in the process of image writing.

- Preview procedure

Use the rotary 5 control to set the mode to “Preview.”

Use the rotary 2 control to select the page on which the images are to be previewed. To preview Still, use the rotary 4 control to select “Field” output or “Frame” output.

To preview Movie, use the rotary 3 control to set the number of frames to be previewed and the rotary 4 control to select “Repeat” (repeat) playback or “Once” (once-only) playback. If a value exceeding the number of frames written has been set by the rotary 3 control, the setting will be ignored.

Start the preview using “Enter.” Even when the page selected by the rotary 2 control is midway through the Movie, the Movie is played back from its beginning.

If the settings are acceptable, use the rotary 5 control to set the mode to “Exit”, then enter the settings using “Enter.” The page set is recalled by the “INTVideo” button and played back.

Even when another “Matte” or “CustomColor” selection has been set using “INTVideo” upon completion of the settings, the images previously stored in the memory can be read by selecting “Memory” again but they will be cleared after the power is turned off.

The playback trigger is applied using “Shift” + “.”.

The “Grade” setting which was set by “BackMatte” also takes effect for “Memory.”

<Note>

Images cannot be written during Movie playback. If images are to be written, first set [Mode] to [Exit] and press the [Enter] button to exit Movie playback, and then proceed.

When Frame = 1

| R1 | R2 | R3 | R4 | R5 |
|--------|-------------------------|-------------------------|----------------|--------------------------|
| Memory | Page 1 | Frame 1 | Field Frame | Mode Write |
| | 1 - 30/26 (NTSC/PAL) | 1 - 30/26 (NTSC/PAL) | Field Frame | Write Preview Exit |

When Frame > 1

| R1 | R2 | R3 | R4 | R5 |
|--------|-------------------------|-------------------------|----------------|--------------------------|
| Memory | Page 1 | Frame 5F | Repeat Once | Mode Write |
| | 1 - 30/26 (NTSC/PAL) | 1 - 30/26 (NTSC/PAL) | Repeat Once | Write Preview Exit |

[Color Effects] setting screen

| | | | | | | | |
|---------------|------------|---------|-------------|--------|--|--|--|
| Color | Pb 128 | Pr 128 | [Icons] | | | | |
| Effect | C Gain 128 | | [Icons] | | | | |
| Event | ME Time | Pattern | INT | | | | |
| 00E | 10:00F | 3015 | Blue | | | | |
| Color Effects | | | ch A | | | | |
| Y Setup | Y Gain | Pb | Pr | C Gain | | | |
| 128 | 128 | 128 | 128 | 128 | | | |
| R1 | R2 | R3 | R4 | R5 | | | |

This menu is selected using the A or B bus [Color Effects] button. If the status of the [Color Effects] button is not to be changed, press the [Color Effects] button of the bus to be set while holding down the [Shift] key.

Settings can be performed separately for the A bus and B bus.

Preview is set to A by pressing the [Color Effects] button for A.

Preview is set to B by pressing the [Color Effects] button for B.

The Y setup [0 to 255] can be set using the rotary 1 control. The default setting is 128.

The Y gain [0 to 255] can be set using the rotary 2 control (0dB=0). The default setting is 128.

The Pb and Pr color balance can be set using the joystick's X direction (for adjusting Pb) and rotary 3 control or using the joystick's Y direction (for adjusting Pr) and rotary 4 control, and the chroma gain can be set using the rotary Z and rotary 5 controls.

At this time, the XYZ display is switched to Pb/Pr/C Gain.

Using transition pattern numbers 200 to 211, 215 to 220 and 222, effects are applied to the B or Preset bus using the settings established for this channel, and the pattern is changed to MIX (56).

<Notes>

- In the case of pattern numbers 221, 222, 1068 and 1069, color effects can be applied to the B channel and transitions can be initiated. When this is done, the pattern is changed to MIX (56). (With the A bus/B bus)
With the preset bus/program bus, the effects are applied to preset, and they are turned off by setting the reverse button to ON.
- Color effects cannot be applied to the INT EXT inputs.

[Video Effects] setting screen

[Mosaic] setting

Select [On] or [Off] for this effect using the rotary 2 control. The default setting is [Off].

Select [XY] (both horizontal and vertical), [X] (horizontal only) or [Y] (vertical only) using the rotary 3 control.

Set the size using the rotary 4 control. Any setting from 0 to 30 can be set for Size, and the setting can be changed in 2-step increments. The default setting is 8.

This level setting is used for the level of transition numbers 1001, 1002 and 1003 (200, 201 and 202).

| R1 | R2 | R3 | R4 | R5 |
|---------------|------------|--------------|------------------|----|
| Mosaic | Off | XY | Size 8 | |
| | | X Y XY | 0 - 30 | |

[Defocus] setting

Select [On] or [Off] for this effect using the rotary 2 control. The default setting is [Off].

Select level 0 to 7 using the rotary 3 control. The default setting is 2.

This level setting is used for the level of transition number 1004 (203). It cannot be made to take effect at the same time as a 2-dimensionally compressed pattern.

| R1 | R2 | R3 | R4 | R5 |
|----------------|------------|-------------------|----|----|
| Defocus | Off | Level 2 | | |
| | | 0 - 7 | | |

<Note>

Either [Mosaic] or [Defocus] can be selected. The effect selected last takes precedence, and the previously selected effect is canceled.

[Mono] (monochrome) setting

Select [On] or [Off] for this effect using the rotary 2 control. The default setting is [Off].

This effect takes precedence over the setting initiated by [Color Effects].

| R1 | R2 | R3 | R4 | R5 |
|-------------|------------|----|----|----|
| Mono | Off | | | |
| | On Off | | | |

[Video Effects] setting screen

[Time Effects] still/strobe setting

Select the still or strobe effect with Video Effects ON using the rotary 2 control.

| R1 | R2 | R3 | R4 | R5 |
|--------------|------------------------|----------------|---|-------------------|
| Time Effects | Still | Field | Screen 1 | Time 10F |
| | Off Still Strobe | Field Frame | 1 @4 @9 @16 R4 R9 R16 | 2 - 124 Manual |

- When [Off] has been selected
The regular screen is output.

| R1 | R2 | R3 | R4 | R5 |
|--------------|-----|----|----|----|
| Time Effects | Off | | | |

- When [Still] has been selected
Either [Field] or [Frame] is selected as the type using the rotary 3 control. The default setting is [Field].

| R1 | R2 | R3 | R4 | R5 |
|--------------|-------|----------------|----|----|
| Time Effects | Still | Field | | |
| | | Field Frame | | |

- When [Strobe] has been selected
Set the number of strobe screens and the repeat operation using the rotary 4 control. The default setting is 1.
Select the strobe time setting from 2 to 124 using the rotary 5 control. The default setting is 20. The time setting can be changed in 2-step increments.
Select @4 to @16 for a once-only still operation. Select R4 to R16 for repeat operations. The number denotes the number of screens. At the Manual setting, the screen can be stopped by pressing the cross point [Strobe] button with the [Shift] key. This time setting is used for the level of transition numbers 1062, 1063, 1064 and 1065 (215, 216, 217 and 218). Still and strobe (including multi strobe) cannot be made to take effect at the same time as a 2-dimensionally compressed pattern.

| R1 | R2 | R3 | R4 | R5 |
|--------------|--------|----------------|---|-------------------|
| Time Effects | Strobe | Field | Screen 1 | Time 10F |
| | | Field Frame | 1 @4 @9 @16 R4 R9 R16 | 2 - 124 Manual |

<Notes>

- Only one of three effects—namely soft, border or soft border—for both multi strobe and pattern edges can be selected when any of the special patterns below have been selected. The effect selected last takes precedence, and the previously selected effect is canceled.
 - 1541 to 1550 (32 to 35, 130 to 133, 141 to 142)
 - 1601 to 2617
 - 3303, 3314, 3324, 3501 to 3378
 - 4601 to 6716
- Only multi strobe or scene grabber can be selected. The effect selected last takes precedence, and the previously selected effect is canceled.
- Noise may remain on the screen while the VHS is set to a special playback (such as fast forwarding or rewinding) mode.

[Video Effects] setting screen

[Decay] setting

The A and B multi strobe, transition, Key, DSK shadow and trail cannot be selected at the same time. Only one of these effects is valid at a time.

Select [On] or [Off] for the effect using the rotary 2 control.

Any time setting from 0 to 32 can be selected using the rotary 3 control. The default setting is 16.

This level setting is used for the level of transition number 1066 (219).

| R1 | R2 | R3 | R4 | R5 |
|-------|-----------|------------|----|----|
| Decay | Off | Time 16 | | |
| | On Off | 0 - 32 | | |

[Paint] setting

Select [On] or [Off] for the effect using the rotary 2 control.

Any level setting from 0 to 7 can be selected using the rotary 3 control. The default setting is 4.

This level setting is used for the level of transition number 1034 (211).

| R1 | R2 | R3 | R4 | R5 |
|-------|-----------|------------|----|----|
| Paint | Off | Level 4 | | |
| | On Off | 0 - 7 | | |

[Nega] (negative) setting

The Y negative setting and chroma key negative setting can be selected separately using the rotary 2 control and rotary 3 control, respectively. In both cases, the default setting is [Off].

| R1 | R2 | R3 | R4 | R5 |
|------|-----------|-----------|----|----|
| Nega | Y Off | C Off | | |
| | On Off | On Off | | |

[Mirror] setting

The H (horizontal direction) mirror setting and V (vertical direction) mirror setting can be selected separately using the rotary 2 control and rotary 3 control, respectively. In both cases, the default setting is [Off].

| R1 | R2 | R3 | R4 | R5 |
|--------|-----------|-----------|----|----|
| Mirror | H Off | V Off | | |
| | On Off | On Off | | |

<Note>

Only one of the effects—namely, multi strobe, decay, trail or shadow hardware—effect can be selected. The effect selected last takes precedence, and the previously selected effect is canceled.

[Video Effects] setting screen

[3D] setting

Select [OFF], [Ripple], [Multi] or [Spark] for 3D using the rotary 2 control. This setting is only effective when the 3D optional board (AG-VE70) has been installed. It cannot be made to take effect at the same time as 3D transition or key pattern. The default setting is [Off].

| R1 | R2 | R3 | R4 | R5 |
|----|---------------------------------|-------------|------------|------------|
| 3D | Ripple | Level 32 | Time 64 | Width 1 |
| | Off Ripple Multi Spark | 0 - 255 | 0 - 255 | 0 - 5 |

- When [Ripple] has been selected

The extent of the [Level] effect can be set to any value from 0 to 255 using the rotary 3 control. The default setting is 32.

[Time] can be set to any value from 0 to 255 using the rotary 4 control. The default setting is 64.

[Width] can be set to any value from 0 to 5 using the rotary 5 control. The default setting is 1.

The ripple position can be set using joystick XY.

This level and other settings are used as the transition number 1981 settings.

| R1 | R2 | R3 | R4 | R5 |
|----|--------|-------------|------------|------------|
| 3D | Ripple | Level 32 | Time 64 | Width 1 |
| | | 0 - 255 | 0 - 255 | 0 - 5 |

- When [Multi] (multi-screen) has been selected

[Size] can be set to any value from 0 to 15 using the rotary 3 control. The default setting is 8.

[Pitch] can be set to any value from 0 to 255 using the rotary 4 control. The default setting is 16.

[Reverse] can be set to [On] or [Off] using the rotary 5 control. The default setting is [Off].

This level and other settings are used as the transition number 1983 settings.

| R1 | R2 | R3 | R4 | R5 |
|----|-------|-----------|------------|----------------|
| 3D | Multi | Size 8 | Pitch 2 | Reverse Off |
| | | 0 - 15 | 0 - 255 | On Off |

- When [Spark] has been selected

[Width] can be set to any value from 0 to 255 using the rotary 3 control. The default setting is 32.

[Size] can be set to any value from 1 to 3 using the rotary 4 control. The default setting is 2.

[Time] can be set to any value from 0 to 255 using the rotary 5 control. The default setting is 255.

This level and other settings are used as the transition number 1982 settings.

| R1 | R2 | R3 | R4 | R5 |
|----|-------|-------------|-----------|-------------|
| 3D | Spark | Width 32 | Size 2 | Time 255 |
| | | 0 - 255 | 1 - 3 | 0 - 255 |

[Video Effects] setting screen

<Notes>

- In the case of pattern numbers 200 to 211, 1001 to 1034, 213 to 220, 222, 1060 to 1067 and 1069, transitions can be initiated with the DVE setting parameters applied to the B channel. When this is done, the pattern is changed to MIX (56). (With the A bus/B bus) With the preset bus/program bus, the effects are applied to preset, and they are turned off by setting the reverse button to ON.
- [Ripple], [Multi], [Spark] and other 3D patterns*¹ can be selected for one channel only, either A or B. The pattern selected last takes precedence, and the previously selected pattern is canceled.

*1 The "other 3D patterns" are as follows.

- | | |
|--|---------------------|
| • 1501 to 1533 (28 to 31, 36 to 42, 128 to 129) | 2Dcomp |
| • 1301 to 1333 (43 to 46, 51 to 54, 138 to 140) | Slide |
| • 1401 to 1498 (143 to 182) | 2Dcomp/Move |
| • 3301 to 3303, 3311 to 3313, 3321 to 3323, 3401 to 3478 | 2Dcomp Key |
| • 3601 to 3623 | Bounce keys |
| • 1601 to 2999 | Transition patterns |
| • 4601 to 6999 | Key patterns |

Execution of Effects

AB transition

1) Preparation

Slide the transition lever to the A side.

2) Input selection and preview

Select the input source of the transition destination using the B bus cross point button.

The preview selection can now be set as ME and the images of the transition destination can be previewed at the Preview connector.

3) Pattern selection

Select the pattern using the direct transition button or using the number keys. Patterns with numbers 2999 or lower are transition patterns.

Perform the border, shadow, trail and other settings on the LCD setting screen.

The separate border, trail and other settings are stored in each direct button and read out.

4) Execution

Slide the transition lever to the opposite side or set the ME transition time, and then press the Auto Take button.

To execute a transition from B to A, set the A bus input in step 2) and follow the same procedure.

Preset program transmission

1) Preparation

When the transition lever is slid all the way to one end, the cross point button setting is switched over by Prog/Preset.

2) Input selection and preview

Same as for AB transition.

3) Pattern selection

Same as for AB transition.

4) Execution

Same as for AB transition.

The transition can be executed by repeating steps 2), 3) and 4).

Key

1) Preparation

Slide the transition lever to the A side. The A bus now becomes the background.

2) Input selection and preview

Select the input source to be inlaid using the B bus cross point button.

The preview selection can now be set as ME and the keyed images can be previewed at the Preview connector. In the case of chroma keys, the colors are selected using the cursor on the preview screen.

3) Pattern selection

Select the pattern using the direct transition button or using the number keys. Patterns with numbers 3000 and up are key patterns.

Perform the border, shadow, trail and other settings on the LCD setting screen.

The separate border, trail and other settings are stored in each direct button and read out.

4) Key adjustment

Adjust the slice, slope and other settings on the LCD setting screen.

5) Execution

Slide the transition lever to the B side or set the ME transition time and press the Auto Take button.

DSK key

1) Preparation

Check that the DSK button's lamp is neither lighted nor flashing. If it is lighted or flashing, it means that the DSK ON status is already established so press the DSK button to turn off the lamp.

2) Setting

Select the input source of the transition destination using the Preset bus cross point button.

The preview selection can now be set as ME and the images of the transition destination can be previewed at the Preview connector.

3) Execution

Press the DSK/Fade button and perform the DSK/Fade settings.

Select the DSK source, and perform the slice and slope settings.

Set the DSK transition time.

When the button is pressed again, the transition is executed until the DSK ON status. To set DSK to OFF, press the DSK button to turn off its lamp.

Fade

1) Preparation

Perform the fade destination color and audio fade settings using the DSK/Fade settings.

2) Execution

Press the FADE button. When its lamp flashes, the fade-out status is established. For fade-in, press the FADE button to turn off its lamp.

Effect-by-effect setting screens

The settings for the transition and key patterns are performed on these screens. The items that can be set differ from one pattern to another. The LCD display changes as soon as one of the patterns is selected. The key slice, slope, key level, crop, edge, effects and DVEPlus settings are stored in the memory for each effect group. If the system was started using Reset, the default settings are established. Furthermore, the 3D modify settings are stored for each pattern group.

[Transition] wipe pattern settings

The transition wipe patterns (numbers 1 to 2999) are opened directly or when selected using the number keys.

<Note>

When transition numbers 200 to 222 (1001 to 1004, 1021 to 1023, 1030 to 1034 and 1059 to 1069) and 1981 to 1983 are selected, the pattern is changed to MIX (56).

| | | | | |
|------------------|---------|-------------------------|-------|----|
| Pos. X 128 Y 128 | | □ □ □ □ □ □ □ □ □ □ □ □ | | |
| Z 196 | | □ □ □ □ □ □ □ □ □ □ □ □ | | |
| Event | ME Time | Pattern | INT | |
| 00E | 10:00F | 0013 | Wht | |
| Transition | | | | |
| Modify | Off | | | |
| Pattern | Hard | Width | Color | |
| Edge | | 0 | White | |
| Effects | Off | | | |
| R1 | R2 | R3 | R4 | R5 |

[Modify] settings

The item to be changed in the pattern is selected from [Off], [Comp] (compression), [Slide], [Multi] and [Blinds] using the rotary 2 control. The default setting is [Off].

The levels applying when the settings are selected are set using the rotary 3 control.

- With the [Comp] setting: [Single] or [Both]
- With the [Slide] setting: [Single] or [Both]
- With the [Multi] setting: [H3], [V3], [HV3], [H6], [V6], [HV6], [Pair], [H3 Pair], [V3 Pair], [HV3 Pair], [H6 Pair], [V6 Pair], [HV6 Pair]

With the [Blinds] setting: None

Only the basic patterns and their related patterns can be set.

| | | | | |
|--------|--------|----|----|----|
| R1 | R2 | R3 | R4 | R5 |
| Modify | Off | | | |
| | Off | | | |
| | Comp | | | |
| | Slide | | | |
| | Multi | | | |
| | Blinds | | | |

Effect-by-effect setting screens

[Pattern Edge] setting

This is used to set edges for the patterns. The border color set here is used as the border matte for trail. It is updated by the color which is read out for the direct pattern.

Select [Hard], [Soft], [Border] or [Soft Border] using the rotary 2 control. The default setting is [Hard].

When [Soft] or [Soft Border] has been selected, No.2001 to 2195 and 6008 to 6010 patterns cannot be selected.

When [Soft Border] has been selected, the #701 to No.707 (24 to 27), 801 to 814 (183 to 196) patterns cannot be selected.

The [Width] thickness can be set to any value from 1 to 255 using the rotary 3 control. The default setting is 16. Only 1 or 2 can be set for [Width] if any of the following patterns have been selected:

- No.701 to 707 (24 to 27), 801 to 814 (183 to 196)

Select the [Color] border color using the rotary 4 control.

[White], [Yellow], [Cyan], [Green], [Magenta], [Red], [Blue], [Black], [Custom1] or [Custom2] can be selected. Custom1 and Custom2 are colors which have been set by INT Matte.

<Note>

When the PinP pattern has been selected and STILL is executed through B bus, the edge cannot be reflected.

| R1 | R2 | R3 | R4 | R5 |
|---------------------|---------------------------------------|-------------------|---|----|
| Pattern Edge | Hard | Width 0 | Color White | |
| | Hard Soft Border Soft Border | 1 - 255 | White Yellow Cyan Green Magenta Red Blue Black Custom1 Custom2 | |

Effect-by-effect setting screens

[Effects] setting

This is used to perform the DVE settings.

Select the [Off], [Shadow] or [Trail] effect using the rotary 2 control.

Set the [Light] (lighting) using the rotary 5 control. This is valid only when the 3D optional board (AG-VE70) has been installed for use.

- When [Shadow] has been set

When [Shadow] has been selected, the shadow position can be set by setting the position while holding down [Shift].

In this case, the center, scene grabber and hold buttons flash temporarily.

- When [Trail] has been set

Set the trail color and spark using the rotary 3 control. Select the [Self] original image, [Self-spark], [BodM] border color or [BodM-spark] border spark.

The time can be set to any value from 1 to 32 using the rotary 4 control.

When trail has been set, the trail offset position can be set by setting the position while holding down [Shift]. In this case, the center, scene grabber and hold buttons flash temporarily. Whichever trail or shadow effect was selected last among trail and shadow for DSK, and multi strobe and decay for A/B videoEffects takes effect, and the previous effect is canceled.

| R1 | R2 | R3 | R4 | R5 |
|---------|------------------------|----|----|--|
| Effects | Off | | | Light On |
| | Off Shadow Trail | | | Lights when 3D board has been installed. |

| R1 | R2 | R3 | R4 | R5 |
|---------|--------|----|----|--|
| Effects | Shadow | | | Light On |
| | | | | Lights when 3D board has been installed. |

| R1 | R2 | R3 | R4 | R5 |
|---------|-------|--|---------|--|
| Effects | Trail | Self | Time 16 | Light On |
| | | Self Self-spark BodM BodM-spark | 1 - 32 | Lights when 3D board has been installed. |

<Note>

Only one of three settings—namely, soft, border or soft border—for both multi strobe and pattern edges can be selected when a special pattern has been selected. For further details, refer to the note on page 26.

Effect-by-effect setting screens

[Chroma Key] setting

The chroma key is opened directly or when selected using the number keys. The RGB selected color display can be selected using [Shift] + rotary 2. Alternatively, the number of the selected color can be switched and written over the existing data. ME is automatically selected for the Preview output, and the chroma key cursor and keyed output are displayed.

| | | | | | |
|------------------|-------------|---|----------|--------------|---------|
| Pos. X 128 Y 128 | | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | | | |
| Z 196 | | | | | |
| Event 00E | | ME Time 10:00F | | Pattern 3101 | iNT Wht |
| Chroma Key 1 | | R = --- | G = --- | B = --- | |
| Key | | Slice 0 | Slope 0 | K Level 255 | |
| Color Cancel | Offset 0 | C Slice 0 | C-Area 0 | Mono L | |
| Crop | ▲ 6 | ▼ 2 | ◀ 12 | ▶ 12 | |
| Effects Off | | | | | |
| Border | Color White | | | | |
| DVE Plus | Off | | 6301 | | |
| 3D Modify | Rotate 0 | Amp 16 | Speed 16 | TransF 32 | |

R1 R2 R3 R4 R5

Scrolled display

Display of selected number: 1, 2 or 3 is selected.

Selected color display

Displayed only with 3Dop

Displayed by DVEPlus only with special patterns

[Key] setting

Align the cursor on the chroma key Preview screen with the color (blue) to be extracted using the joystick XY, and use [Enter] to enter it. Up to three colors can be stored in the memory, and the values are displayed for R, G and B.

When four or more colors have been selected, only the last three will be stored in the memory.

To cancel a selected color which is stored in the memory, select "Shift" + "Selected color number."

The [Slice] level can be set to any value from 0 to 255 using the rotary 3 control.

[Slope] can be set to any value from 0 to 15 using the rotary 4 control.

The [K Level] key (transparency) level can be set to any value from 0 to 255 using the rotary 5 control. This can be set separately from the other keys.

| | | | | |
|-----|----|-----------|----------|-------------|
| R1 | R2 | R3 | R4 | R5 |
| Key | | Slice 128 | Slope 15 | K Level 255 |
| | | 0 - 255 | 0 - 15 | 0 - 255 |

Effect-by-effect setting screens

[Color cancel] setting

This is used to perform the settings for color cancel.
 The offset from the [Offset] key can be set to any value from 0 to 255 using the rotary 2 control.
 The [C Slice] (cancel slice) can be set to any value from 0 to 255 using the rotary 3 control.
 The [C-Area] (cancel area) can be set to any value from 0 to 3 using the rotary 4 control.
 The [Mono L] (monochrome level) can be set to any value from 0 to 15 using the rotary 5 control.

| | R1 | R2 | R3 | R4 | R5 |
|---------------------|----|--------------------|---------------------|--------------------|--------------------|
| Color Cancel | | Offset 0 | C Slice 0 | C-Area 2 | Mono L 6 |
| | | 0 - 255 | 0 - 255 | 0 - 3 | 0 - 15 |

[Crop] setting

This is used to perform the crop settings for the keys. These settings can be performed separately with [LumKey], [EXTKey] and [PatternKey].
 The top part of the image can be set to any value from 2 to 230 (NTSC) or to 277 (PAL) using the rotary 2 control. The default setting is 6.
 The bottom part of the image can be set to any value from 2 to 230 (NTSC) or to 277 (PAL) using the rotary 3 control. The default setting is 2.
 The left part of the image can be set to any value from 0 to 680 using the rotary 4 control.
 The right part of the image can be set to any value from 0 to 680 using the rotary 5 control. The default setting in each case is 12.

| | R1 | R2 | R3 | R4 | R5 |
|-------------|----|---------------------------------------|---------------------------------------|---------|---------|
| Crop | | ▲ 6 | ▼ 2 | ◀ 12 | ▶ 12 |
| | | 2 - 230 (NTSC) 2 - 277 (PAL) | 2 - 230 (NTSC) 2 - 277 (PAL) | 0 - 680 | 0 - 680 |

If the top setting is changed, the bottom setting will change, and vice versa, in such a way that the total setting will not exceed 230 (NTSC) or 277 (PAL). Similarly, if the left setting is changed, the right setting will change, and vice versa, in such a way that the total setting will not exceed 680. The left and right settings can be changed in 2-step increments.

[Border] setting

Select the [Color] (border color) using the rotary 2 control. There are 10 choices: White, Yellow, Cyan, Green, Magenta, Red, Blue, Black, Custom1 and Custom2. The default setting is [White]. Custom1 and Custom2 are colors which have been set by INT Matte.

[Effects] setting

The effects can be added in the same way as with the basic patterns. The default setting is [Off].

[DVE Plus]

This takes effect only when the 3D optional board (AG-VE70) has been installed.
 It is possible to add the DVEs in key numbers 3401 to 3478, 3601 to 3623, 6001 to 6003, 6006, 6007, and 6009 to 6634.
 Select [On] or [Off] using the rotary 2 control. The default setting is [Off].
 The numbers are input using the rotary 3, 4 and 5 controls. The parameters for patterns with numbers 6001 to 6438 and 6601 to 6716 can be changed with [3D Modify].

Effect-by-effect setting screens

[Luminance Key] and [EXT Key] (external key) settings

The luminance key and external key are opened directly or when selected using the number keys.

| | | | | |
|------------------|---------|-------------------------|-------|---------|
| Pos. X 128 Y 128 | | □ □ □ □ □ □ □ □ □ □ □ □ | | |
| Z 196 | | □ □ □ □ □ □ □ □ □ □ □ □ | | |
| Event | ME Time | Pattern | INT | |
| 00E | 10:00F | 3102 | Wht | |
| Luminance Key | | | | |
| Key | | Slice | Slope | K Level |
| | | 0 | 0 | 255 |
| Crop | ▲ | ▼ | ◀ | ▶ |
| | 6 | 2 | 12 | 12 |
| Effects | Off | | | |
| Border | Color | | | |
| | White | | | |
| DVE | Plus | Off | 6301 | |
| 3D | Rotate | Amp | Speed | TransF |
| Modify | 0 | 16 | 16 | 32 |
| R1 | R2 | R3 | R4 | R5 |

Scrolled display

Luminance Key
Ext Key

Displayed only
with 3D option

Displayed by
DVEPlus only with
special patterns

[Key] setting

The [Slice] level can be set to any value from 0 to 255 using the rotary 3 control. The default setting is 0.

[Slope] can be set to any value from 0 to 15 using the rotary 4 control. The default setting is 15.

The [K Level] key level can be set to any value from 0 to 255 using the rotary 5 control. This can be set separately from the other keys. The default setting is 255.

The crop setting can also be set separately from the other keys. Effects can be added for the effect settings in the same way as for other patterns. The settings are performed as with the DVE's chroma key.

Effect-by-effect setting screens

[Basic Pattern Key] setting (numbers 3001 to 3046)

The basic pattern key is opened directly or when selected using the number keys.

| | | | | |
|--------------------------|---------|-------------------------|---------|--------|
| Pos. X 128 Y 128 | | □ □ □ □ □ □ □ □ □ □ □ □ | | |
| Z 196 | | □ □ □ □ □ □ □ □ □ □ □ □ | | |
| Event | ME Time | Pattern | INT | |
| 00E | 10:00F | 3002 | Wht | |
| Basic Pattern Key | | | | |
| Pattern | Width | Color | K Level | |
| Edge | Hard | 0 | White | 255 |
| Effects | Off | | | |
| DVE | Plus | Off | 6301 | |
| 3D | Rotate | Amp | Time | TransF |
| Modify | 0 | 16 | 16 | 32 |
| Key | Empty | Setup | | |
| Learn | 9000 | | | |
| | R1 | R2 | R3 | R4 |

Scrolled display

Displayed only with 3D option

Displayed by DVEPlus only with special patterns

Select [Hard], [Soft], [Border] or [Soft Border] using the rotary 2 control. The default setting is [Hard].

The thickness can be set to any value from 0 to 255 using the rotary 3 control. The default setting is 16.

Select the border color using the rotary 4 control. [White], [Yellow], [Cyan], [Green], [Magenta], [Red], [Blue], [Black], [Custom1] or [Custom2] can be selected. The default setting is [White].

The key level (transparency level) can be set to any value from 0 to 255 using the rotary 5 control. This can be set separately from the other keys. The default setting is 255.

The crop setting can also be set separately from the other keys. Effects can be added for the effect settings in the same way as for other patterns.

Effect-by-effect setting screens

[3Dmodify] setting

This takes effect only for the special 3D patterns (numbers 6001 to 6438 and 6601 to 6716) when the 3D optional board (AG-VE70) has been installed.

The parameters of the pattern for the 3D keys can be changed using the rotary 2, 3, 4 and 5 controls. They can be stored in the memory for each pattern.

- With the sphere group (numbers 6001, 6301 to 6438)

R2: [Rotate] (rotation) setting

R4: [Time] setting

R5: [TransF] (transformation) setting

| R1 | R2 | R3 | R4 | R5 |
|----------------------|--------------------------------------|----|--------------------------------------|--------------------------------------|
| 3D Modify | Rotate 128 | | Time 0 | TransF 255 |
| | <input type="text" value="0 - 255"/> | | <input type="text" value="0 - 255"/> | <input type="text" value="0 - 255"/> |

- With the flag group (numbers 6002, 6101 to 6139)

R2: [Width] (flag width) setting

R3: [Angle] setting

R4: [Time] (fluttering time) setting

R5: [Amp] (amplitude) setting

| R1 | R2 | R3 | R4 | R5 |
|----------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|
| 3D Modify | Width 192 | Angle 96 | Time 48 | Amp 32 |
| | <input type="text" value="0 - 255"/> | <input type="text" value="0 - 255"/> | <input type="text" value="0 - 255"/> | <input type="text" value="0 - 255"/> |

- With the accordion group (numbers 6003, 6201 to 6239)

R2: [Width] (accordion width) setting

R3: [Angle] setting

R5: [Amp] (amplitude) setting

| R1 | R2 | R3 | R4 | R5 |
|----------------------|--------------------------------------|--------------------------------------|----|--------------------------------------|
| 3D Modify | Width 160 | Angle 96 | | Amp 48 |
| | <input type="text" value="0 - 255"/> | <input type="text" value="0 - 255"/> | | <input type="text" value="0 - 255"/> |

- With perspectives (numbers 6006 and 6007, 6601 to 6634 and 6501 to 6532)

With door number 6004 to 6005, 6701 to 6716 groups

R2: [Rotate] (rotation) setting

R3: [Axis] (rotary axis) setting

R4: [View] (viewer) setting

R5: [Depth] setting

| R1 | R2 | R3 | R4 | R5 |
|----------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|
| 3D Modify | Rotate 128 | Axis 0 | View 128 | Depth 64 |
| | <input type="text" value="0 - 255"/> | <input type="text" value="0 - 255"/> | <input type="text" value="0 - 255"/> | <input type="text" value="0 - 255"/> |

6007 to 6007: All parameters can be set.

6601 to 6634: Only [View] and [Depth] can be set.

6501 to 6532: Only [View] and [Depth] can be set.

Door

6004 to 6005: Only [Depth] can be set.

6701 to 6716: Only [View] and [Depth] can be set.

Effect-by-effect setting screens

- With the page turn group (number 6008)

R2: [Rotate] (rotation) setting

R3: [Angle] setting

R4: [Turn] setting

R5: [Radius] setting

| R1 | R2 | R3 | R4 | R5 |
|---------------|---------------|--------------|-------------|---------------|
| 3D | Rotate | Angle | Turn | Radius |
| Modify | 128 | 32 | 64 | 3 |
| | 0 - 255 | 0 - 255 | 0 - 255 | 0 - 7 |

- With the ripple group (number 6031)

R2: [Level] (amplitude) setting

R3: [Time] setting

R4: [Width] setting

The position of the ripple center can be changed using [Shift] + XY.

| R1 | R2 | R3 | R4 | R5 |
|---------------|--------------|-------------|--------------|----|
| 3D | Level | Time | Width | |
| Modify | 32 | 64 | 1 | |
| | 0 - 255 | 0 - 255 | 0 - 5 | |

- With the spark group (number 6032)

R2: [Width] setting

R3: [Size] setting

R4: [Time] setting

| R1 | R2 | R3 | R4 | R5 |
|---------------|--------------|-------------|-------------|----|
| 3D | Width | Size | Time | |
| Modify | 32 | 2 | 255 | |
| | 0 - 255 | 1 - 3 | 0 - 255 | |

- With the melt group (numbers 6033 to 6034)

R2: [Level] setting

| R1 | R2 | R3 | R4 | R5 |
|---------------|--------------|----|----|----|
| 3D | Level | | | |
| Modify | 128 | | | |
| | 0 - 255 | | | |

- With the twist group (numbers 6009 to 6010)

R2: [Rotate] (rotation) setting

R3: [Turn] setting

R4: [Tilt] setting

| R1 | R2 | R3 | R4 | R5 |
|---------------|---------------|-------------|-------------|----|
| 3D | Rotate | Turn | Tilt | |
| Modify | 128 | 128 | 128 | |
| | 0 - 255 | 0 - 255 | 0 - 255 | |

Effect-by-effect setting screens

[Key Learn] setting

This is used to set key learn. It cannot be set for number 3001 to 3006, 3301 to 3305, 6001 to 6003 and 6006 to 6010 doors. The key XYZ, key level and 3D modify settings are stored in the memory for each key frame.

The key patterns are selected using the rotary 2 and 3 controls. Selection is made from 9000 to 9019.

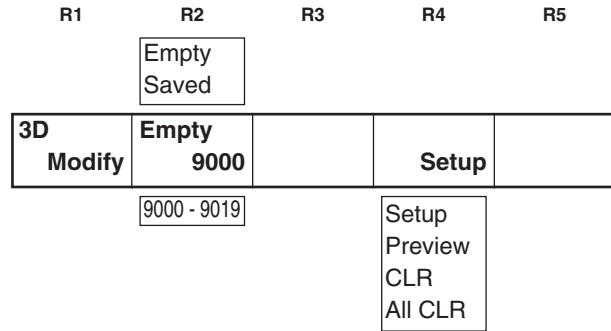
[Saved] is displayed for a pattern once set by the pattern number, and [Empty] is displayed for a pattern which has not yet been set.

Select [Setup], [Preview], [CLR] or [All CLR] using the rotary 4 control, and enter the selection using [Enter].

The operation of a set key is reproduced by selecting a pattern with the [Saved] display and then selecting [Preview] followed by [Enter].

When a pattern with the [Saved] display is selected and either [CLR] or [All CLR] is selected followed by [Enter], [OK?] appears. By selecting [Enter] at this point, the selected key learn pattern is cleared if [CLR] was selected or all the key learn patterns are cleared if [All CLR] was selected. Clearing is canceled using [Shift] + [Enter].

With either [Empty] or [Saved] patterns, the editing mode is established by selecting [Setup] followed by [Enter], and the display is switched. When a [Saved] pattern is to be set, [OK?] appears: use [Enter] to set the pattern or [Shift] + [Enter] to cancel the setting.



Effect-by-effect setting screens

With flag (#6002)

| | R1 | R2 | R3 | R4 | R5 |
|---------|---------|-------|------|----|---------|
| Insert | Flag | | | | |
| Replace | Flag | | | | |
| CLR KF | K Frame | | | | K Level |
| Copy | 00 | | | | 255 |
| Paste | Width | Angle | Time | | Amp |
| Exit | 192 | 64 | 48 | | 32 |

R2: [Width] (flag width) setting
 R3: [Angle] setting
 R4: [Time] (fluttering time) setting
 R5: [Amp] (amplitude) setting
 3D parameters are the same as with 3DModify.

With page turn (#6008)

| | R1 | R2 | R3 | R4 | R5 |
|---------|-----------|-------|------|----|---------|
| Insert | Page Turn | | | | |
| Replace | Page Turn | | | | |
| CLR KF | K Frame | | | | K Level |
| Copy | 00 | | | | 255 |
| Paste | Rotate | Angle | Turn | | Radius |
| Exit | 128 | 32 | 64 | | 3 |

R2: [Rotate] (rotation) setting
 R3: [Angle] setting
 R4: [Turn] setting
 R5: [Radius] setting
 3D parameters are the same as with 3DModify.

With accordion (#6003)

| | R1 | R2 | R3 | R4 | R5 |
|---------|-----------|-------|----|----|---------|
| Insert | Accordion | | | | |
| Replace | Accordion | | | | |
| CLR KF | K Frame | | | | K Level |
| Copy | 00 | | | | 255 |
| Paste | Width | Angle | | | Amp |
| Exit | 192 | 64 | | | 32 |

R2: [Width] (accordion width) setting
 R3: [Angle] setting
 R5: [Amp] (amplitude) setting
 3D parameters are the same as with 3DModify.

With twist group (#6009 to #6010)

| | R1 | R2 | R3 | R4 | R5 |
|---------|---------|------|------|----|---------|
| Insert | Twist | | | | |
| Replace | Twist | | | | |
| CLR KF | K Frame | | | | K Level |
| Copy | 00 | | | | 255 |
| Paste | Rotate | Turn | Tilt | | |
| Exit | 128 | 128 | 128 | | |

R2: [Rotate] (rotation) setting
 R3: [Turn] setting
 R4: [Tilt] setting

With the perspectives group (#6006 to #6007)

| | R1 | R2 | R3 | R4 | R5 |
|---------|-------------|------|------|----|---------|
| Insert | Perspective | | | | |
| Replace | Perspective | | | | |
| CLR KF | K Frame | | | | K Level |
| Copy | 00 | | | | 255 |
| Paste | Rotate | Axis | View | | Depth |
| Exit | 128 | 0 | 128 | | 64 |

R2: [Rotate] (rotation) setting
 R3: [Axis] (rotary axis) setting
 R4: [View] (viewer) setting
 R5: [Depth] setting
 3D parameters are the same as with 3DModify. Key learn is not possible for doors.

Effect-by-effect setting screens

<Notes>

When a compression effect has been applied to images, some of the effects may be automatically canceled.

- When applying 2D compression effects to channel A

Under the conditions below, the Still, Strobe and Multi Strobe for channel A are turned OFF when the Transition lever or key size adjustment Z has been changed or the compression rate has been changed by the aspect ratio.

Conditions: When [DSK-Effects] is OFF and any of the Rev or Dual PinP patterns below has been selected

- 2DcompKey (2D + 3Dcomp included) + Rev
- 2DcompTrans + Rev
- 2Dcomp2Trans (+ Rev)
- 2Dslide1Trans (+ Rev)
- 2Dslide2Trans (+ Rev)

- When applying 2D compression effects to channel B

Under the conditions below, the Still, Strobe and Multi Strobe for channel B are turned OFF when the Transition lever or key size adjustment Z has been changed or the compression rate has been changed by the aspect ratio.

Conditions: When [DSK-Effects] is OFF and any of the Norm or Dual PinP patterns below has been selected

- 2DcompKey (2D + 3Dcomp included) + Rev
- 2DcompTrans
- 2Dcomp2Trans
- 2Dslide1Trans
- 2Dslide2Trans

The processing procedure differs depending on whether the 3D optional board (AG-VE70) has been installed or not. Details are as follows.

- When the 3D optional board (AG-VE70) is not installed

| Pattern number selected | Processing after cancel operation |
|---|---|
| 1501 to 1533 (28 to 31, 36 to 42, 128 to 129) | 2Dcomp |
| 1541 to 1550 (32 to 35, 130 to 133, 141 to 142) | 2chComp |
| 1301 to 1333 (43 to 46, 51 to 54, 138 to 140) | 2Dslide1 (only Multi Strobe is set OFF) |
| 1341 to 1348 (47 to 50, 134 to 137) | 2Dslide2 (only Multi Strobe is set OFF) |
| 1401 to 1498 (143 to 182) | 2Dcomp/MoveKey |
| 3301 to 3303, 3311 to 3313, 3501 to 3578 | 2Dcomp Key |
| 3304, 3314, 3324, 3501 to 3378 | Dual PinP |
| 3401 to 3478 | 2DcompMoveKey (OFF when Z is changed) |
| 3601 to 3623 | Bounce Key (OFF when Z is changed) |

- When the 3D optional board (AG-VE70) is installed

| Pattern number selected | Processing after cancel operation |
|---|---|
| 1341 to 1348 (47 to 50, 134 to 137) | 2Dslide2 (only Multi Strobe is set OFF) |
| 1541 to 1550 (32 to 35, 130 to 133, 141 to 142) | 2chComp |
| 3304, 3314, 3324, 3501 to 3378 | Dual PinP |
| 4601 to 5614, 6031 to 6037 | 3D + 2Dcomp Key (OFF when Z is changed) |

DSK/Fade settings

These settings are opened when the DSK/FADE button or DSK Preview is selected. Both DSK and Fade settings can be performed.

Select the [DSK Source], [DSK Key], [Crop], [DSK On/Off], [DSK Effects] or [Fade] item using the rotary 1 control. When the title memory is 0, the Key [Memory], Source [Memory], [Memory], [Mode] and [Slide] settings are canceled.

| | | | | |
|---------------------|-------------|--------------------------|---------------|------------------------|
| Pos. X 128 Y 128 | | □ □ □ □ □ □ □ □ □ □ □ □ | | |
| Z 196 | | □ □ □ □ □ □ □ □ □ □ □ □ | | |
| Event 00E | | ME Time 10:00F | | Pattern 3015 |
| INT Wht | | | | |
| DSK Fade | | | Still | |
| DSK Source | Key EXT | Fill EXT | Page 1-1 | Mode Write |
| DSK Key | Slice 0 | Slope 8 | K Level 255 | |
| Crop | ▲ 6 | ▼ 2 | ◀ 12 ▶ | 12 |
| DSK On/Off | ME Trig Off | Slide In Off | Slide Out Off | Speed 8 |
| DSK Effects | Off | | | Light On |
| Fade | To Black | Audio On | Phone After | |
| R1 | R2 | R3 | R4 | R5 |

Still
Crawl
Roll
Movie

[DSK Source] settings

These are used to select the DSK [Key] and [Fill] signals.

Select the key signals using the rotary 2 control. Either [EXT] (external) or [Title] can be selected.

Select the key fill signals using the rotary 3 control. [EXT] (external) input, [Title] or [BodMat] (border matte) can be selected.

Select the page number of the title memory using the rotary 4 control. The total number of pages can be changed on the [Setup] setting screen.

Set the operation using the rotary 5 control. Either [Write] or [Preview] can be selected.

Set [Mode] to [Write], and use [Enter] to save the external input in the memory.

Set [Mode] to [Preview], and select [Enter] to initiate the preview display. It is now possible to check the slides or movie movements from On to Off. The default setting is [Preview].

When [Title] has been selected for [Key] and [Fill] and preview is initiated, the title, star and heart keys are canceled and changed to MIX (56).

The title page can be selected using the rotary 4 control. The first number is for the page and the second number for the sub-pages.

When part of a group has been selected, playback is initiated from the start of that part.

Writing initiated by [Write] applies to the entire screen. Sub-frames are ignored. If the page concerned is used as a group, the pages of the entire group will be cleared as well. Since the saving that is initiated by [Write] supports only the [EXT] external inputs, set [Key] and [Fill] to [EXT].

The playback type of the title concerned is displayed in the top section. Playback or pause for [Movie], [Crawl] and [Roll] is initiated by [Shift] + [0].

| | | | | |
|------------|--------------|------------------------|--------------------------------|------------------|
| R1 | R2 | R3 | R4 | R5 |
| DSK Source | Key EXT | Fill EXT | Page 1-1 | Mode Write |
| | EXT Title | EXT Title BodMat | 1-30/26 (NSTC/PAL) - 1-8 | Write Preview |

DSK/Fade settings

[DSK Key] settings

These are used to set the DSK key signals (for external applications). Memory keys are used in their original form.

The [Slice] level can be set to any value from 0 to 255 using the rotary 2 control. The default setting is 0.

[Slope] can be set to any value from 0 to 15 using the rotary 3 control. The default setting is 0.

The [K Level] (key level) can be set to any value from 0 to 255 using the rotary 5 control. The default setting is 255.

| R1 | R2 | R3 | R4 | R5 |
|---------|------------|------------|----|----------------|
| DSK Key | Slice 0 | Slope 0 | | K Level 255 |
| | 0 - 255 | 0 - 15 | | 0 - 255 |

[Crop] setting

This is used to set crop for DSK.

The top can be set to any value from 2 to 200 using the rotary 2 control. The default setting is 6.

The bottom can be set to any value from 2 to 200 using the rotary 3 control. The default setting is 2.

The left can be set to any value from 0 to 680 using the rotary 4 control.

The right can be set to any value from 0 to 680 using the rotary 5 control.

The default setting in each of these cases is 12.

If the top setting is changed, the bottom setting will change, and vice versa, in such a way that the total setting will not exceed 200. Similarly, if the left setting is changed, the right setting will change, and vice versa, in such a way that the total setting will not exceed 680. The left and right settings can be changed in 2-step increments.

| R1 | R2 | R3 | R4 | R5 |
|------|---------|---------|---------|---------|
| Crop | ▲ 6 | ▼ 2 | ◀ 12 | ▶ 12 |
| | 0 - 200 | 0 - 200 | 0 - 680 | 0 - 680 |

[DSK On/Off] setting

This is used to set the DSK on/off operations. [Slide IN/OUT] takes effect when [Title] has been selected for [Key] and [Fill].

Whether the in or out operation is to be initiated during an ME transition is set using the rotary 2 control.

Whether the sliding in operation is to be initiated in the horizontal or vertical direction during DSK ON is set using the rotary 3 control.

Whether the sliding out operation is to be initiated in the horizontal or vertical direction during DSK OFF is set using the rotary 4 control.

- ▶: Slide toward the right
- ◀: Slide toward the left
- ▲: Slide toward the top
- ▼: Slide toward the bottom

The default setting in each of these cases is [Off].

The sliding speed is set using the rotary 5 control. Any even number from 2 to 64 can be selected. The default setting is 8.

When sliding has been selected, the DSKTime is changed to 0. During sliding, the DSK buttons have no effect but become operational again upon completion of the sliding operation. This setting can also be changed at the PC.

| R1 | R2 | R3 | R4 | R5 |
|------------|----------------|-------------------------|-------------------------|------------|
| DSK On/Off | ME Trig Off | Slide In Off | Slide Out Off | Speed 8 |
| | On Off | Off ▶ ◀ ▲ ▼ | Off ▶ ◀ ▲ ▼ | 2 - 64 |

DSK/Fade settings

[Fade] settings

These are used to perform the fade settings.

The image to be faded is selected from [Black], [White] or [Blue] using the rotary 2 control. The default setting is [Black].

[On] or [Off] is selected for [Audio] fading using the rotary 3 control. The default setting is [On].

[After] or [Pre] is selected for [Phone] fading using the rotary 4 control. At [After], the sound is heard with the fading effect applied to the images; at [Pre], it is heard with no fading effect applied to the images. The default setting is [After].

| R1 | R2 | R3 | R4 | R5 |
|-------------|---------------------------|---------------------------|------------------------------|----|
| Fade | To Black | Audio On | Phone After | |
| | Black White Blue | On Off | After Pre | |

<Note>

Only one of three settings—namely, DSK memory, title key or star/heart key—can be selected. The key selected last takes precedence, and the previously selected key is canceled.

When the pattern is changed to MIX (56), the title key or heart/star key is to be canceled. During title DSK, the heart/star key cannot be used.

[Audio Effects] settings

1 - 8
Aux1
Aux2

| | | | | | | | | | |
|----------------------|-----------------|--|--------------|------------------------|-----------------|-------------------|--------------|----|--|
| Pos. X 128 Y 128 | | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | | | | | | | |
| Z 196 | | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | | | | | | | |
| Event 00E | | ME Time 10:00F | | Pattern 3015 | | INT Wht | | | |
| Audio Effects | | | | | | | | | |
| 1 | Pan | | Off | | IN Ch L | | Balance 0 | | |
| | EQ | | On | | Low 0 | | High 0 | | |
| | EQ Mid | | M Level 0 | | Freq 1.01KHz | | Q 0.5 | | |
| | Voice Change | | Off | | Pitch Up | | Level 5 | | |
| Mute | | | Off | | Ch AB | | | | |
| R1 | | R2 | | R3 | | R4 | | R5 | |

[Audio Effects] is opened using Audio Effects or the ON button. Audio effects can be set for each input. Select the input from [1] (crosspoint 1), [2] (crosspoint 2), [3] (crosspoint 3), [4] (crosspoint 4), [5] (crosspoint 5), [6] (crosspoint 6), [7] (crosspoint 7), [8] (crosspoint 8), [AUX1] or [AUX2] using the rotary 1 control. Select the item from [PAN], [EQ] (equalizer), [EQ Mid] equalizer midrange, [Voice] (voice changer) or [Mute] using the rotary 2 control.

[PAN] setting

Set [On] or [Off] using the rotary 3 control. The default setting is [Off].
 Select the input channel to be used using the rotary 4 control. Select [L], [R] or [L+R]. The default setting is [L].
 Set the output balance using the rotary 5 control. Make the selection from L7 to 0 to R7. The default setting is 0.

| | | | | |
|----|-----------------|------------|-------------------|---------------------|
| R1 | R2 | R3 | R4 | R5 |
| | PAN 1 | Off | IN Ch L | Balance 0 |
| | | On Off | L R L+R | L7 - 0 - R7 |

[Audio Effects] settings

[EQ] equalizer setting

This is used to set the equalizers.

Set [On] or [Off] for all equalizers using the rotary 3 control. The default setting is [On].

The [L Level] bass level can be set in 2 dB intervals to any value from -14 dB to 0 to +14 dB using the rotary 5 control. The default setting is [0].

The [H Level] treble level can be set in 2 dB intervals to any value from -14 dB to 0 to +14 dB using the rotary 4 control. The default setting is [0].

| R1 | R2 | R3 | R4 | R5 |
|----|----|-----------|-----------|-----------|
| 1 | EQ | On | L Level 0 | H Level 0 |
| | | On Off | -14 - +14 | -14 - +14 |

[EQ Mid] equalizer midrange setting

The [M Level] midrange level can be set in 2 dB intervals to any value from -14 dB to 0 to +14 dB using the rotary 3 control. The default setting is [0].

The midrange frequency can be set to any value from 100 Hz to 10.2 kHz using the rotary 4 control. The default setting is 1.01 kHz.

Select [0.5], [1], [2] or [5] for Q using the rotary 5 control. The default setting is [0.5].

| R1 | R2 | R3 | R4 | R5 |
|----|--------|-----------|----------------------|--------------------|
| 1 | EQ Mid | M Level 0 | Freq 1.01KHz | Q 0.5 |
| | | -14 - +14 | 100 Hz - 10.2 KHz | 0.5 1 2 5 |

[Voice Change] (voice changer) setting

This is used to set the voice changer.

Set [On] or [Off] using the rotary 3 control. The default setting is [Off].

Set [Up] or [Down] for the [Pitch] using the rotary 4 control. The default setting is [Up].

[Level] can be set to any value from [0] to [10] using the rotary 5 control. The default setting is [5].

| R1 | R2 | R3 | R4 | R5 |
|----|--------------|-----------|------------|---------|
| 1 | Voice Change | Off | Pitch Up | Level 5 |
| | | On Off | Up Down | 0 - 10 |

[Mute] setting

Set the mute level using the rotary 3 control. [Off], [-12 dB], [-20 dB] or [-60 dB] can be selected. The default setting is [Off].

Select the channel to be muted using the rotary 4 control. [AB] (AB bus only), [ABAUX1] (AB bus and Aux1) or [All] can be selected. The default setting is [All].

| R1 | R2 | R3 | R4 | R5 |
|----|------|--------------------------------|---------------------|----|
| | Mute | -12dB | AB | |
| | | Off -12dB -20dB -60dB | AB ABAUX1 All | |

[Setup] initial setting screen

| | | | | |
|--|------------------|--------------------------|---------------|------------------------|
| Wash Ph 128 Pr 128 Z 196 | | | | |
| <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | | | | |
| Event 00E | | ME Time 10:00F | | Pattern 3015 |
| INT Wh | | | | |
| Setup | | | | |
| Power | Reset | | | |
| Direct Pattern | Setup | | | |
| Audio Video | Input Setup | | | |
| Memory | INT V 30 | Title 0 | | |
| Gen Lock | Ref in | H Phase 0 | SC Phase 0 | |
| Video Format | NTSC | Aspect 4:3 | Setup 0 | Pb Pr Beta |
| System1 | Dly 1Frame | Time Sec | GPI ME | RS422 GVG |
| System2 | Lcd 0 | Stby Off | VBClean On | DR |
| Bus | Type AB | Still On | Audio CP | Tally 8 |
| Audio Level | Alignment 4dB | | | Head 18dB |
| File | Empty 1 | Save | | |
| R1 | R2 | R3 | R4 | R5 |

Scrolled display

Select the item to be set using the rotary 1 control. Items consist of [Power], [Direct Pattern], [Audio Video], [Memory], [Gen Lock], [Video Format], [System1], [System2], [Bus], [Audio Level] and [File].
The setup settings are not returned to the factory settings even if the system is started by Reset. They can be restored to the factory settings by pressing [Shift] and [Enter] together when the power is turned on.

[Setup] initial setting screen

[Power] (power ON) setting

Whether the system is to be started from the [Reset] status, from the [Preset] status or in the [Demo] mode can be selected using the rotary 2 control.

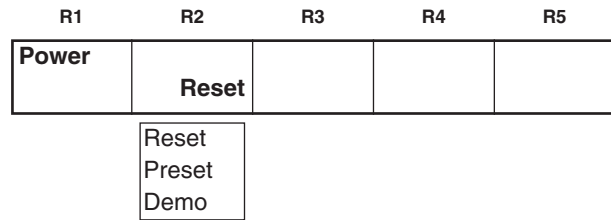
With [Reset], the settings except for the event memories, setup settings, file memory and key learn settings are initialized.

With [Preset], the mode in which the system is started from the status prior to power OFF is established when the power is next turned on.

If no status prior to power OFF existed (when, for instance, the system is used for the very first time after assembly or its memories have been destroyed), the system is started from the factory setting status.

With [Demo], the system starts up in the demonstration mode when the power is next turned on. This menu is displayed in the demonstration mode so that when the system is restarted by selecting [Preset] or [Reset], the regular operation screen will appear. Alternatively, when [Enter] is pressed, the demonstration mode is suspended and operation is enabled. To execute the demonstration mode again, turn the power off and then back on again. The audio faders can be used even in the demonstration mode.

The default setting is [Preset].

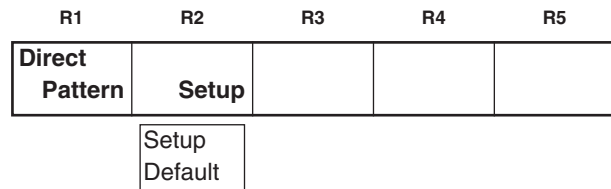


[Direct Pattern] setting

This is used to set the pattern which is to be called as the direct pattern.

When [Setup] is selected using the rotary 2 control and [Enter] is pressed, [OK?] appears so press [Enter] to change to the setting mode. Use [Shift] + [Enter] to cancel.

When [Default] is selected using the rotary 2 control and [Enter] is pressed, [OK?] appears so press [Enter] to change to the default setting. Use [Shift] + [Enter] to cancel.



Setting method in the setting mode

[ME] is selected for Preview so it can be used to check.

1. Press the direct pattern button.
2. The lamp of the selected button flashes. The [Mix], [Chrm] (chroma) key and [Lum] (luminance) key cannot be set.
3. Use the number keys to input the pattern to be assigned. (The pattern is displayed in the pattern area.) The program output can be checked using the wipe lever.

[Setup] initial setting screen

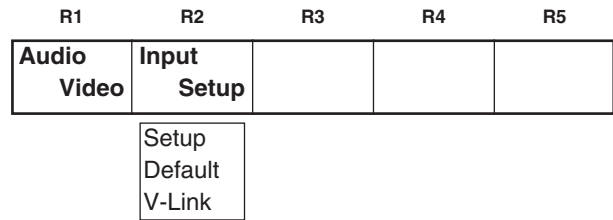
[Audio Video Input] settings

These are used to set the audio and video inputs.

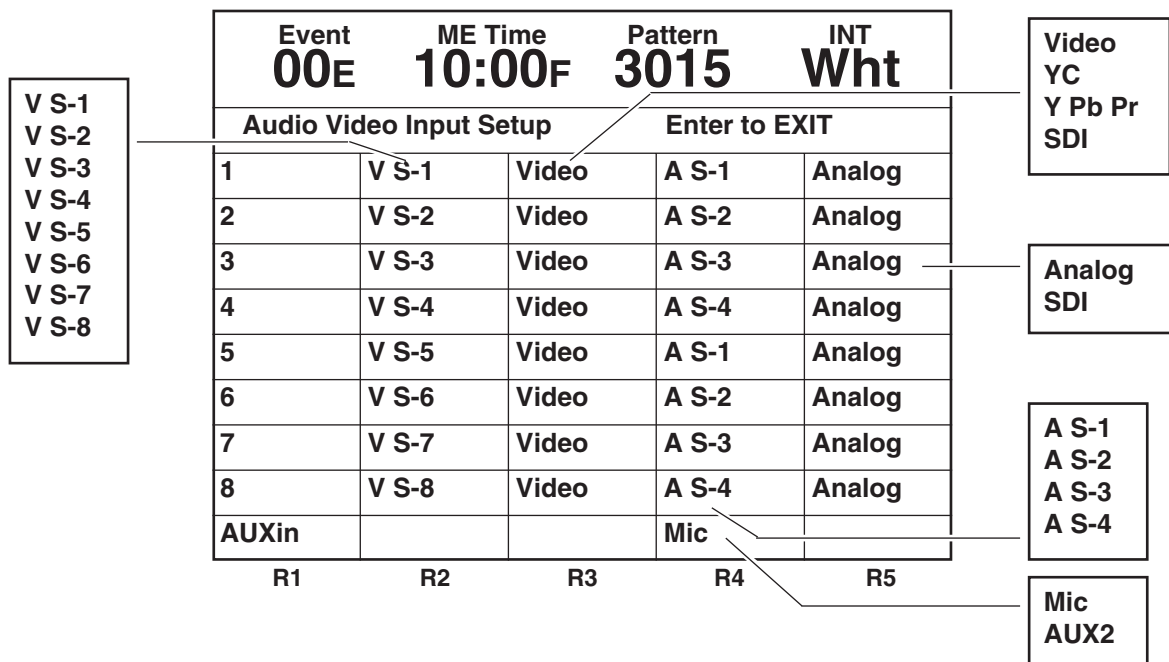
When [Setup] is selected using the rotary 2 control and [Enter] is pressed, [OK?] appears so press [Enter] to change to the setting mode. Use [Shift] + [Enter] to cancel.

When [Default] is selected using the rotary 2 control and [Enter] is pressed, [OK?] appears so press [Enter] to change to the default setting.

When [V-Link] is selected using the rotary 2 control and [Enter] is pressed, [OK?] appears so press [Enter] to change operation so that the audio input is matched with the video input.



Factory settings



Setting method

Press the button of the cross point to be set. Alternatively, select the button of the cross point which is to be set using the rotary 1 control. The lamp of the selected button flashes, and the bus is automatically output to Preview. When the cross point has been selected using the rotary 1 control, the A bus is output to Preview.

Select V S-1, V S-2, V S-3, V S-4, V S-5, V S-6, V S-7 or V S-8 as the video input using the rotary 2 control.

Select [Video] composite, [YC], [Y Pb Pr] component or [SDI] using the rotary 3 control.

Except for [Video], the sources extend from S-1 to S-4 so [5] is changed to [1], [6] to [2], [7] to [3] and [8] to [4]. If the setting operation is exited part of the way through, the settings performed so far will not be stored in the memory. They are entered using [Enter], and operation returns to the [Audio Video Input] settings.

Select A S-1, A S-2, A S-3 or A S-4 as the audio input using the rotary 4 control.

Select [ANALOG] or [SDI] using the rotary 5 control.

Video input combinations that cannot be set: S-5 to S-8 + YC/Y Pb Pr/SDI

Audio input combinations that cannot be set: Combination of SDIs with different source numbers

Example: SDI of S-1 for video and SDI of S-2 for audio

[Mic] or [AUX2] can be set for [AUXin] using the rotary 4 control. The default setting is [Mic].

[Setup] initial setting screen

[Memory] setting

This is used to set the memories used for INTVideo and DSK. When the setting is changed, all the memories are cleared. How much memory is to be used for [INT V] and how much for [Title] for DSK and TitleKey is set using the rotary 2 and 3 controls.

If the allocation to one memory is changed, the allocation to the other memory will change so that the total remains 30. When a change is to be made, [OK?] appears. Execute the change using [Enter], and use [Shift] + [Enter] to cancel. The default setting is 15 each for [INT V] and [Title] with NTSC and 13 each for [INT V] and [Title] with PAL.

| R1 | R2 | R3 | R4 | R5 |
|---------------|--------------------|-------------------|----|----|
| Memory | INT V 30 | Title 0 | | |
| | 0 - 30/26 | 0 - 30/26 | | |

[Gen Lock] external synchronization setting

Select [G/L] or [ExtKey] as the [Ref] (reference) source using the rotary 2 control. The default setting is [G/L]. Adjust the [H Phase] (horizontal phase) using the rotary 3 control. The default setting is 128. Adjust the [SC Phase] (subcarrier phase) using the rotary 4 control. The default setting is 512. [H Phase] and [SC Phase] are stored in the memory separately in accordance with [G/L] or [Ext Key] for the input.

| R1 | R2 | R3 | R4 | R5 |
|-----------------|-------------------|-----------------------|------------------------|----|
| Gen Lock | Ref G/L | H Phase 128 | SC Phase 512 | |
| | G/L Ext Key | 28 - 228 | 0 - 1023 | |

[Video Format] setting

Either [NTSC] or [PAL] is selected as the format by the rotary 2 control. The default setting is the format used in the area where the system was purchased. When a change is to be made, [OK?] appears. Execute the change using [Enter], and use [Shift] + [Enter] to cancel. Set [4:3] or [16:9] as the [Aspect] ratio of the patterns using the rotary 3 control. The default setting is [4:3]. Select [0] or [7.5] for [Setup] using the rotary 4 control. The default setting is [0]. Select [Beta] or [M2] for the [Pb Pr] component level using the rotary 5 control. The default setting is [Beta]. When the NTSC or PAL format is changed, the system is initialized, and the [INT V] and title memories are cleared.

| R1 | R2 | R3 | R4 | R5 |
|---------------------|-------------|----------------------|-------------------|----------------------|
| Video Format | NTSC | Aspect 4:3 | Setup 0 | Pb Pr Beta |
| | NSTC PAL | 4:3 16:9 | 0 7.5 | Beta M2 |

[Setup] initial setting screen

[System1] setting

This is used to perform a variety of settings.

The rotary 2 control is used to set the amount of delay for the source input when the [AdvRef] advanced reference signal is connected with the 3D optional board (AG-VE70) installed. If 0Frame is selected, the video delay amount is different between when the 3D effects are applied and when they are not. The default setting is 1Frame. The setting is fixed at 0Frame when the 3D optional board is not installed. The audio source delay amount is also set according to this setting.

[Sec] (seconds + frames) or [Frame] (frames) only is selected for the time display using the rotary 3 control. The default setting is [Sec].

Whether [ME], [DSK] or [Fade] is to be executed by GPI can be set using the rotary 4 control. The default setting is [ME]. [GVG] or [SONY] can be selected as the RS-422A protocol using the rotary 5 control. The default setting is [GVG].

| R1 | R2 | R3 | R4 | R5 |
|----------------|----------------------|--------------------|-------------------|---------------------|
| System1 | Dly 1Frame | Time Sec | GPI ME | RS422 GVG |
| | 1Frame 0Frame | Sec Frame | ME DSK Fade | GVG SONY |

[System2] setting

The time taken until the LCD is set to the power saving mode can be selected using the rotary 2 control.

With the 0 setting, the display is always on. The time can be set in 10-minute increments from 0 to 60. The default setting is 0.

[On] or [Off] is selected using the rotary 3 control to set whether or not cleaning is to be performed inside the vertical blanking period (VBlk). The default setting is [Off].

[On] or [Off] is selected using the rotary 4 control to set whether or not the [DR] (dynamic rounding) is to be performed. The default setting is [On].

| R1 | R2 | R3 | R4 | R5 |
|----------------|---------------------|-----------------------|-----------------|----|
| System2 | LCDStby 0 | VBClean Off | DR On | |
| | 0 - 60 | On Off | On Off | |

<Note>

Selecting [Off] for [VBClean] may result in a deviation in the amount of delay between the video signals and vertical blanking signals depending on the setting for the [Dly] item among the [System1] settings and on whether the 3D optional board (AG-VE70) has been installed.

[Bus] setting

AB (AB bus) or PrgPre (program/preset system) can be selected as the bus system using the rotary 2 control. The default setting is AB.

[On] (initiate Still) or [Off] (do not initiate Still) when cross points are to be changed is selected using the rotary 3 control. The default setting is [On].

The Audio MIX system can be selected using the rotary 4 control.

At the [CP] setting, two audio sources allocated to the selected cross point are output. At the [1,2] setting, the audio sources 1, 2 allocated to the cross point are mixed at all times. The default setting is [CP].

[8] or [EXT] can be selected using the rotary 5 control as the setting for the eight tally outputs. At the [8] setting, the tally signal is output when cross point 8 has been selected; at the [EXT] setting, it is output when EXT has been selected.

| R1 | R2 | R3 | R4 | R5 |
|------------|-------------------|--------------------|--------------------|-------------------|
| Bus | Type AB | Still On | Audio CP | Tally 8 |
| | AB Prg Pre | On Off | CP 1, 2 | 8 EXT |

<Note>

When [Still] is to be set to [Off], do not mix the analog and SDI signals for the input. Be absolutely sure to use the analog-only system or SDI-only system.

[Setup] initial setting screen

[Audio Level] setting

The [Alignment] (alignment) level is set using the rotary 2 control. [-3 dB], [0 dB] or [4 dB] can be selected. The default setting is [4 dB] for NTSC and [0 dB] for PAL.

The [Head] (headroom) is set using the rotary 5 control. Either [18 dB] or [20 dB] can be selected. The default setting is [20 dB] for NTSC and [18 dB] for PAL.

| R1 | R2 | R3 | R4 | R5 |
|--------------------|--------------------------|----|----|---------------------|
| Audio Level | Alignment -3dB | | | Head 18dB |
| | -3dB 0dB 4dB | | | 18dB 20dB |

[File] setting

The statuses set by [Setup] can be stored in the memory. Select 1 to 8 using the rotary 2 control. An empty file is indicated by [Empty]. A file with settings is indicated by [Saved].

Select [Save], [Recall] or [AllCLR] using the rotary 3 control, and execute using [Enter]. [Save] saves the settings and overwrites any existing settings, [Recall] loads the settings, and [All CLR] clears the settings.

When [Save] or [AllCLR] is selected, [OK?] appears. Enter the selection again using [Enter] or cancel using [Shift] + [Enter].

It is also possible to clear all the settings by holding down [Shift] + [Enter] when the power is turned on so that the factory settings are restored.

| R1 | R2 | R3 | R4 | R5 |
|-------------|-------------------|--------------------------|----|----|
| | Empty Saved | | | |
| File | Empty 1 | Save | | |
| | 1 - 8 | Save Recall AllCLR | | |

Other settings

Event memory

Setting method

Event
00E

One hundred panel statuses can be stored in event memories 0 to 99. Press the Set button, set the event number using the number keys, and enter the setting using [Enter].

Set button: Its lamp lights during the setting process. When [Enter] is pressed, it flashes for two seconds and then goes off.

When the setting is in progress, Event is displayed in reverse video, and the event is then entered using [Enter]. Event numbers can be incremented and decremented using the “+” and “-” keys. Empty events are indicated by [E] appearing next to the event number.

Recall method

Press the [Recall] button, select the event number to be loaded using the number keys, and recall it using the [Enter] or [AutoTake] button.

Recall button: Its lamp flashes while recall is underway. It lights when the button is set to ON, and goes off when it is set to OFF or when the recall is completed.

Since the input settings are not reflected during loading, events are executed in respect of the input set beforehand. Events 50 to 59, 60 to 69, 70 to 79, 80 to 89 and 90 to 99 can be set consecutively in units of 10 events and also recalled consecutively so they can also serve as key frame settings. Events are executed using the [Auto] button. With the recall of events 50 to 99, the Setup status of the head event is valid.

Clearing events

Set the number of the event to be cleared using [Recall], and execute clearing using [Shift] + [Enter]. Clearing all the events is possible by inputting a period twice at the recall stage and then pressing [Shift] + [.] . Alternatively, this can be achieved by starting the system by pressing [Shift] + [Enter] when the power is turned on, and restoring the factory settings.

Pattern settings

Press the [Pattern] button, input the pattern number using the number keys, and execute using [Enter]. If the pattern does not exist, operation will jump to the nearest pattern number.

Pattern
3015

Each time [Pattern] is pressed, the function is set to ON or OFF. The default setting is MIX (56).

Pattern numbers are incremented and decremented using the “+” and “-” keys. Patterns that do not exist are skipped and displayed in turn.

Other settings

Transition time setting

Select the item to be set, and press the [ME], [DSK] or [FADE] button.

Input the numerical value using the number keys, and press [Enter].

The numerical value can be incremented and decremented using rotary TIME or the “+” and “-” keys.

Set the ME (back, key transition), DSK or fade time.

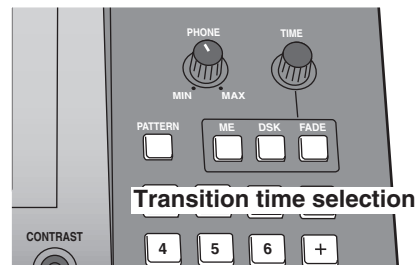
Set the time of the item selected for ME, DSK or Fade above the number keys.

The time is indicated on the LCD display. It can also be input or output using the number keys.

With x:xx displays, it is possible to input [2][.][5] to display 2:05 where [.] is used as a delimiter.

The default setting is 60F.

ME Time
10:00F



Correlation between number key settings and [Pattern] button

[Pattern] takes precedence over [ME], [DSK] and [Fade].

Items selected by ME, DSK or Fade can be set by the rotary controls. The number keys can also be used when Pattern is OFF. The items selected appear on the LCD display.

There are three options—ME, DSK and Fade—and they can be set to OFF by pressing the ON button. In this case, neither the rotary controls nor the number keys can be used.

Number key priorities

The number key priorities are: event memories → pattern settings → transition time settings → LCD screen settings.

In the event memories, the number keys cannot be used for pattern settings, transition time settings or LCD screen settings.

Transition patterns

| | | | | | | | | | | | | |
|---------------------|------------|------------|-----|------------|------------|------------|------------|-----|-----|-----|------------|--|
| Basic | | | | | | | | | | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | |
| Pair | | | | | | | | | | | | |
| | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | | | | |
| Blinds | | | | | | | | | | | | |
| | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | |
| Multi H3 | | | | | | | | | | | | |
| | 301 | | 302 | | 303 | 304 | 305 | 306 | 307 | | 308 | |
| Multi V3 | | | | | | | | | | | | |
| | | 321 | | 322 | 323 | 324 | 325 | 326 | | 327 | 328 | |
| Multi H6 | | | | | | | | | | | | |
| Overlap | 103 341 | | 342 | | 343 | 344 | 345 | 346 | 347 | | 348 | |
| Multi V6 | | | | | | | | | | | | |
| | | 104 361 | | 362 | 363 | 364 | 365 | 366 | | 367 | 368 | |
| Multi HV3 | | | | | | | | | | | | |
| | | | | 381 | 382 | 383 | 384 | | | | 385 | |
| Multi HV6 | | | | | | | | | | | | |
| | | | | 105 398 | 106 399 | 107 400 | 108 401 | | | | 109 402 | |
| Multi PairH3 | | | | | | | | | | | | |
| Overlap | 122 415 | | | 416 | 417 | 418 | 419 | | | | | |
| Multi PairV3 | | | | | | | | | | | | |
| Overlap | | 123 428 | | 429 | 430 | 431 | 432 | | | | | |

Transition patterns

| | | | | | | | | | | | | | |
|--------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|--|
| Basic | | | | | | | | | | | | | |
| | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | |
| Pair | | | | | | | | | | | | | |
| | | | | | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | |
| Blinds | | | | | | | | | | | | | |
| | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 100 | 101 | 102 | |
| Multi H3 | | | | | | | | | | | | | |
| | 309 | 310 | 311 | 312 | 313 | 314 | 315 | 316 | 317 | 318 | 319 | 320 | |
| Multi V3 | | | | | | | | | | | | | |
| | 329 | 330 | 331 | 332 | 333 | 334 | 335 | 336 | 337 | 338 | 339 | 340 | |
| Multi H6 | | | | | | | | | | | | | |
| | 349 | 350 | 351 | 352 | 353 | 354 | 355 | 356 | 357 | 358 | 359 | 360 | |
| Multi V6 | | | | | | | | | | | | | |
| | 369 | 370 | 371 | 372 | 373 | 374 | 375 | 376 | 377 | 378 | 379 | 380 | |
| Multi HV3 | | | | | | | | | | | | | |
| | 386 | 387 | 388 | 389 | 390 | 391 | 392 | 393 | 394 | 395 | 396 | 397 | |
| Multi HV6 | | | | | | | | | | | | | |
| Overlap | 110 403 | 111 404 | 112 405 | 113 406 | 114 407 | 115 408 | 116 409 | 117 410 | 118 411 | 119 412 | 120 413 | 121 414 | |
| Multi PairH3 | | | | | | | | | | | | | |
| | | | | | 420 | 421 | 422 | 423 | 424 | 425 | 426 | 427 | |
| Multi PairV3 | | | | | | | | | | | | | |
| Overlap | | | | | 124 433 | 125 434 | 435 | 436 | 126 437 | 127 438 | 439 | 440 | |

Transition patterns

| | | | | | | | | | | | | |
|-----------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------------|--------------|
| Multi PairH6 | | | | | | | | | | | | |
| | 441 | | | | 442 | 443 | 444 | 445 | | | | |
| Multi PairV6 | | | | | | | | | | | | |
| | | 454 | | | 455 | 456 | 457 | 458 | | | | |
| Multi PairHV3 | | | | | | | | | | | | |
| | | | | | 467 | 468 | 469 | 470 | | | | |
| Multi PairHV6 | | | | | | | | | | | | |
| | | | | | 479 | 480 | 481 | 482 | | | | |
| Mtrix | | | | | | | | | | | | |
| Overlap | 24 701 | 25 702 | 26 703 | 27 704 | 705 | 706 | 707 | | | | | |
| Basic2 | | | | | | | | | | | | |
| Overlap | 183 801 | 184 802 | 185 803 | 186 804 | 187 805 | 188 806 | 189 807 | 190 808 | 191 809 | 192 810 | | |
| DVE BPreSet | Mosaic XY | Mosaic X | Mosaic Y | Defocus | H Mirror | V Mirror | HV Mirror | Nega YC | Nega Y | Nega C | Mono | Paint |
| Overlap | 200 1001 | 201 1002 | 202 1003 | 203 1004 | 204 1005 | 205 1006 | 206 1007 | 207 1008 | 208 1009 | 209 1010 | 210 1011 | 211 1012 |
| Shutter | | | | | | | | | | | | |
| Overlap | 223 1091 | 224 1092 | 225 1093 | 226 1094 | | | | | | | | |
| Direct Pattern | DT 1 | DT 2 | DT 3 | DT 4 | DT 5 | DT 6 | DT 7 | | | | | |
| | 241 | 242 | 243 | 244 | 245 | 246 | 247 | | | | | |
| Comp1 | | | | | | | | | | | | |
| Overlap +Diss | 28 1501 1521 | 29 1502 1522 | 30 1503 1523 | 31 1504 1524 | 36 1505 1525 | 37 1506 1526 | 38 1507 1527 | 39 1508 1528 | 40 1509 1529 | 41 1510 1530 | | |
| Comp2 | | | | | | | | | | | | |
| Overlap | 32 1541 | 33 1542 | 34 1543 | 35 1544 | 130 1545 | 131 1546 | 132 1547 | 133 1548 | | | | |

<Notes>

- The DVE and Shutter patterns cannot be used for DSK effect. The Comp1 and Comp2 patterns can be used for DSK effect only when the 3D optional board (AG-VE70) has been installed.
- Pattern MIX (56) is used for DVE BPreSet.

Transition patterns

| | | | | | | | | | | | | |
|----------------|--------------------|---------------------|-------------|---------------------|--------------|--------------|---------------|-------------|-------------|-------------|-------------|-----|
| Multi PairH6 | | | | | | | | | | | | |
| | | | | | 446 | 447 | 448 | 449 | 450 | 451 | 452 | 453 |
| Multi PairV6 | | | | | | | | | | | | |
| | | | | | 459 | 460 | 461 | 462 | 463 | 464 | 465 | 466 |
| Multi HV3 | | | | | | | | | | | | |
| | | | | | 471 | 472 | 473 | 474 | 475 | 476 | 477 | 478 |
| Multi PairHV6 | | | | | | | | | | | | |
| | | | | | 483 | 484 | 485 | 486 | 487 | 488 | 489 | 490 |
| Panel | Panel Setting | Panel Setting | | | | | | | | | | |
| | 0 | 99 | | | | | | | | | | |
| Basic2 | | | | | | LUM | CUT MIX | SAT MIX | | | | |
| | 193 811 | 194 812 | 195 813 | 196 814 | | 197 1082 | 198 1083 | 199 1084 | | | | |
| DVE BPreset | CUT | Still Field | Still Fram | Strobe | 4Multi Strob | 9Multi Strob | 16Multi Strob | Decay | Video FxB | Color FxB | V+C FxB | |
| | 212 1059 | 213 1060 | 214 1061 | 215 1062 | 216 1063 | 217 1064 | 218 1065 | 219 1066 | 220 1067 | 221 1068 | 222 1069 | |
| | | | MIX | MIX | | | NAM | | | | | |
| | | | 55 1010 | 56 1080 | 57 | 58 | 60 1081 | | | | | |
| Direct Pattern | DK 1 | DK 2 | DK 3 | DK 4 | DK 5 | DK 6 | | | | | | |
| | 248 | 249 | 250 | 251 | 252 | 253 | | | | | | |
| Comp1 | | | | | | | | | | | | |
| Overlap +Diss | 42 1511 1531 | 128 1512 1532 | | 129 1513 1533 | | | | | | | | |
| Tumble | | | | | | | | | | | | |
| Overlap | 141 1549 | 142 1550 | | | | | | | | | | |

+DISS: This denotes a pattern to which the dissolve effect can be applied.





















































Transition patterns

| | | | | | | | | | | | | |
|----------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|--------------|--------------|--------------|--------------|
| Slide1 | | | | | | | | | | | | |
| Overlap +Diss | 43 1301 1311 | 44 1302 1312 | 45 1303 1313 | 46 1304 1314 | 51 1305 1315 | 52 1306 1316 | 53 1307 1317 | 54 1308 1318 | | | | |
| Slide2 | | | | | | | | | | | | |
| Overlap | 47 1341 | 48 1342 | 49 1343 | 50 1344 | 134 1345 | 135 1346 | 136 1347 | 137 1348 | | | | |
| 2D Move1 | | | | | | | | | | | | |
| Overlap +Diss | 143 1401 1411 | 144 1402 1412 | 145 1403 1413 | 146 1404 1414 | 147 1405 1415 | 148 1406 1416 | 149 1407 1417 | 150 1408 1418 | | | | |
| 2D Move2 /Exp | | | | | | | | | | | | |
| Overlap +Diss | 151 1421 1431 | 152 1422 1432 | 153 1423 1433 | 154 1424 1434 | 155 1425 1435 | 156 1426 1436 | 157 1427 1437 | 158 1428 1438 | | | | |
| 2D Move2 /Exp Curve2 | | | | | | | | | | | | |
| Overlap +Diss | 167 1461 1471 | 168 1462 1472 | 169 1463 1473 | 170 1464 1474 | 171 1465 1475 | 172 1466 1476 | 173 1467 1477 | 174 1468 1478 | | | | |
| Rotate | | | | | | | | | | | | |
| +Diss | 1601 1611 | 1602 1612 | 1603 1613 | 1604 1614 | | | | | | | | |
| Split Slide | | | | | | | | | | | | |
| +Diss | 1620 1660 | 1621 1661 | 1622 1662 | 1623 1663 | 1624 1664 | 1625 1665 | 1626 1666 | 1627 1667 | 1628 1668 | 1629 1669 | 1630 1670 | |
| Split | | | | | | | | | | | | |
| +Diss | 1639 1679 | 1640 1680 | 1641 1681 | 1642 1682 | 1643 1683 | 1644 1684 | 1645 1685 | 1646 1686 | 1647 1687 | 1648 1688 | 1649 1689 | 1650 1690 |
| Pers1 | | | | | | | | | | | | |
| +Diss | 1701 1741 | 1702 1742 | 1703 1743 | 1704 1744 | 1705 1745 | 1706 1746 | 1707 1747 | 1708 1748 | 1730 1750 | 1731 1751 | 1732 1752 | 1733 1753 |
| PersMove1 | | | | | | | | | | | | |
| +Diss | 1761 1781 | 1762 1782 | 1763 1783 | 1764 1784 | 1765 1785 | 1766 1786 | 1767 1787 | 1768 1788 | | | | |
| PersMove2 | | | | | | | | | | | | |
| +Diss | 1801 1821 | 1802 1822 | 1803 1823 | 1804 1824 | 1805 1825 | 1806 1826 | 1807 1827 | 1808 1828 | | | | |

<Notes>

- The 2D Move2/EXP patterns cannot be used for DSK effect. The Slide1, Slide2, 2D Move1 and 2D Move2 patterns can be used for DSK effect only when the 3D optional board (AG-VE70) has been installed.
- Transition patterns 1601 to 2617 can be used only when the 3D optional board (AG-VE70) has been installed.

Transition patterns

| | | | | | | | | | | | | |
|-------------------------------------|---|---|---|---|---|---|---|--|---|--|--|--|
| Bounce |  |  |  | | | | | | | | | |
| Overlap +Diss | 138 1321 1331 | 139 322 1332 | 140 1323 1333 | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| 2D Move2 /Exp |  |  |  |  |  |  |  |  | | | | |
| Overlap +Diss | 159 1441 1451 | 160 1442 1452 | 161 1443 1453 | 162 1444 1454 | 163 1445 1455 | 164 1446 1456 | 165 1447 1457 | 166 1448 1458 | | | | |
| 2D Move2 /Exp Curve2 |  |  |  |  |  |  |  |  | | | | |
| Overlap +Diss | 175 1481 1491 | 176 1482 1492 | 177 1483 1493 | 178 1484 1494 | 179 1485 1495 | 180 1486 1496 | 181 1487 1497 | 182 1488 1498 | | | | |
| | | | | | | | | | | | | |
| Split Slide |  |  |  |  |  |  |  |  | | | | |
| 2DComp +Diss | 1631 1671 | 1632 1672 | 1633 1673 | 1634 1674 | 1635 1675 | 1636 1676 | 1637 1677 | 1638 1678 | | | | |
| Split |  |  |  |  |  |  |  |  |  | | | |
| +Diss | 1651 1691 | 1652 1692 | 1653 1693 | 1654 1694 | 1655 1695 | 1656 1696 | 1657 1697 | 1658 1698 | 1659 1699 | | | |
| Pers1 |  |  |  |  |  |  | | | | | | |
| +Diss | 1734 1754 | 1735 1755 | 1736 1756 | 1737 1757 | 1738 1758 | 1739 1759 | | | | | | |
| PersMove1 |  |  |  |  |  | | | | | | | |
| +Diss | 1769 1789 | 1770 1790 | 1771 1791 | 1772 1792 | 1773 1793 | | | | | | | |
| PersMove1 |  |  |  |  |  | | | | | | | |
| +Diss | 1769 1789 | 1770 1790 | 1771 1791 | 1772 1792 | 1773 1793 | | | | | | | |

+DISS: This denotes a pattern to which the dissolve effect can be applied.

Transition patterns

| | | | | | | | | | | | | |
|--------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Spin | | | | | | | | | | | | |
| +Diss | 1841 1851 | 1842 1852 | 1843 1853 | 1844 1854 | 1845 1855 | 1846 1856 | | | | | | |
| Flip Tumble | | | | | | | | | | | | |
| Overlap | 1902 | 1903 | 1904 | 1905 | 1906 | | 1960 | 1961 | 1962 | 1963 | | |
| Twist | | | | | | | | | | | | |
| +Diss | 2001 2011 | 2002 2012 | 2003 2013 | 2004 2014 | 2005 2015 | 2006 2016 | 2007 2017 | 2008 2018 | 2009 2019 | | | |
| Roll | | | | | | | | | | | | |
| +Diss | 2051 2071 | 2052 2072 | 2053 2073 | 2054 2074 | 2055 2075 | 2056 2076 | 2057 2077 | 2058 2078 | | | | |
| Page1 | | | | | | | | | | | | |
| +Diss | 2101 2151 | 2102 2152 | 2103 2153 | 2104 2154 | 2105 2155 | 2106 2156 | 2107 2157 | 2108 2158 | | | | |
| Page2 | | | | | | | | | | | | |
| +Diss | 2118 2168 | 2119 2169 | 2120 2170 | 2121 2171 | 2122 2172 | 2123 2173 | 2124 2174 | 2125 2175 | | | | |
| Page3 | | | | | | | | | | | | |
| +Diss | 2131 2183 | 2132 2184 | 2133 2185 | 2134 2186 | 2135 2187 | 2136 2188 | 2137 2189 | 2138 2190 | | | | |
| Sphere | | | | | | | | | | | | |
| 2DComp +Diss | 2201 2231 | 2202 2232 | 2203 2233 | 2204 2234 | 2205 2235 | 2206 2236 | 2207 2237 | 2208 2238 | 2209 2239 | | | |
| Accordion Flag1 | | | | | | | | | | | | |
| 2DComp +Diss | 2401 2461 | 2402 2462 | 2403 2463 | 2404 2464 | 2405 2465 | 2406 2466 | 2407 2467 | 2408 2468 | 2409 2469 | 2410 2470 | 2411 2471 | 2412 2472 |
| Flag2 | | | | | | | | | | | | |
| 2DComp +Diss | 2431 2491 | 2432 2492 | 2433 2493 | 2434 2494 | 2435 2495 | 2436 2496 | 2437 2497 | 2438 2498 | 2439 2499 | 2440 2500 | | |
| Ripple | | | | | | | | | | | | |
| 2DComp +Diss | 2601 2611 | 2602 2612 | 2613 | 2604 2614 | 2605 2615 | 2606 2616 | 2617 | | | | | |

<Notes>

- The Flip Tumble, Twist and Roll and Page1, 2, 3 patterns cannot be used for DSK Effect.
- Transition patterns 1601 to 2617 can be used only when the 3D optional board (AG-VE70) has been installed.

Transition patterns

| | | | | | | | | | | | | |
|--------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|--------------|--------------|--|
| Spin | | | | | | | | | | | | |
| 2DComp +Diss | 1861 1871 | 1862 1872 | 1863 1873 | 1864 1874 | 1865 1875 | 1866 1876 | 1881 1891 | 1882 1892 | 1883 1893 | 1884 1894 | | |
| Flip Tumble | | | | | | | | | | | | |
| Overlap | 1964 | 1965 | 1966 | 1967 | | | | | | | | |
| Shutter | | | | | | 3D DVE | Ripple | Spark | Multi Move | | | |
| Overlap | 1971 | 1972 | 1973 | 1974 | | | 1981 | 1982 | 1983 | | | |
| Roll | | | | | | | | | | | | |
| +Diss | 2059 2079 | 2060 2080 | 2061 2081 | 2062 2082 | 2063 2083 | 2064 2084 | 2065 2085 | 2066 2086 | 2067 2087 | 2068 2088 | | |
| Page1 | | | | | | | | | | | | |
| +Diss | 2109 2159 | 2110 2160 | 2111 2161 | 2112 2162 | 2113 2163 | 2114 2164 | 2115 2165 | 2116 2166 | 2117 2167 | | | |
| Page2 | | | | | | | | | | | | |
| +Diss | 2126 2176 | 2127 2177 | 2128 2178 | 2129 2179 | | | | | | | | |
| Page3 | | | | | | | | | | | | |
| +Diss | 2139 2191 | 2140 2192 | 2141 2193 | 2142 2194 | 2143 2195 | | | | | | | |
| Sphere | | | | | | | | | | | | |
| +Diss | 2210 2240 | 2211 2241 | 2212 2242 | 2213 2243 | 2214 2244 | 2215 2245 | 2216 2246 | 2217 2247 | 2218 2248 | 2219 2249 | 2220 2250 | |
| Accordion Flag1 | | | | | | | | | | | | |
| +Diss | 2413 2473 | 2414 2474 | 2415 2475 | 2416 2476 | 2417 2477 | 2418 2478 | 2419 2479 | 2420 2480 | 2421 2481 | 2422 2482 | 2423 2483 | |
| Flag2 | | | | | | | | | | | | |
| +Diss | 2441 2501 | 2442 2502 | 2443 2503 | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

+DISS: This denotes a pattern to which the dissolve effect can be applied.

Key patterns

| | | | | | | | | | | | | | |
|------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--|
| BasicPattern Key | | | | | | | | | | | | | |
| Diss | 3001 | 3002 | 3003 | 3004 | 3005 | 3006 | | | | | | | |
| Exp | 3021 | 3022 | 3023 | 3024 | 3025 | 3026 | | | | | | | |
| Exp+Diss | 3041 | 3042 | 3043 | 3044 | 3045 | 3046 | | | | | | | |
| Basic Key | CHR | LUM | EXT | | | | | | | | | | |
| Overlap | 62 3101 | 61 3102 | 59 3103 | | | | | | | | | | |
| PinP | | | | | | | | | | | | | |
| Diss | 3301 | 3302 | 3303 | 3304 | | | | | | | | | |
| Exp | 3311 | 3312 | 3313 | 3314 | | | | | | | | | |
| Exp+Diss | 3321 | 3322 | 3323 | 3324 | | | | | | | | | |
| 2D Move | | | | | | | | | | | | | |
| Exp +Diss | 3401 3411 | 3402 3412 | 3403 3413 | 3404 3414 | 3405 3415 | 3406 3416 | 3407 3417 | 3408 3418 | | | | | |
| 2D Move2 | | | | | | | | | | | | | |
| ExpCurve2 +Diss | 3441 3451 | 3442 3452 | 3443 3453 | 3444 3454 | 3445 3455 | 3446 3456 | 3447 3457 | 3448 3458 | | | | | |
| DualPinP | | | | | | | | | | | | | |
| Move +Diss | 3501 3511 | 3502 3512 | 3503 3513 | 3504 3514 | 3505 3515 | 3506 3516 | 3507 3517 | 3508 3518 | | | | | |
| DualPinP | | | | | | | | | | | | | |
| Move +Diss | 3541 3551 | 3542 3552 | 3543 3553 | 3544 3554 | 3545 3555 | 3546 3556 | 3547 3557 | 3548 3558 | | | | | |
| Slide1 +Comp | | | | | | | | | | | | | |
| Move +Diss | 3601 3621 | 3602 3622 | 3603 3623 | | | | | | | | | | |
| Rotate | | | | | | | | | | | | | |
| 2DComp +Diss | 4601 4611 | 4602 4612 | 4603 4613 | 4604 4614 | | | | | | | | | |
| 3D Slide | | | | | | | | | | | | | |
| 2DComp +Diss | 4620 4660 | 4621 4661 | 4622 4662 | 4623 4663 | 4624 4664 | 4625 4665 | 4626 4666 | 4627 4667 | 4628 4668 | 4629 4669 | 4630 4670 | | |
| Split | | | | | | | | | | | | | |
| 2DComp +Diss | 4639 4679 | 4640 4680 | 4641 4681 | 4642 4682 | 4643 4683 | 4644 4684 | 4645 4685 | 4646 4686 | 4647 4687 | 4648 4688 | 4649 4689 | 4650 4690 | |

<Notes>

- The key patterns that can be used for DSK Effect are 6001, 6002, 6003, 6006, 6007 and 6101 to 6634.
- BasicPattern Key, Basic Key and Title are the key patterns for which Rev can be used.
- Key patterns 4601 to 6716 can be used only when the 3D optional board (AG-VE70) has been installed.

Key patterns

| | | | | | | | | | | | | |
|-------------------|------|------|------|------|------|------|------|------|------|--|--|--|
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| Spot Light | | | | | | | | | | | | |
| Diss | 3305 | 3315 | | | | | | | | | | |
| Exp | | 3325 | | | | | | | | | | |
| Exp+Diss | | 3325 | | | | | | | | | | |
| 2D Move | | | | | | | | | | | | |
| Exp | 3421 | 3422 | 3423 | 3424 | 3425 | 3426 | 3427 | 3428 | | | | |
| +Diss | 3431 | 3432 | 3433 | 3434 | 3435 | 3436 | 3437 | 3438 | | | | |
| 2D Move2 | | | | | | | | | | | | |
| ExpCurve2 | 3461 | 3462 | 3463 | 3464 | 3465 | 3466 | 3467 | 3468 | | | | |
| +Diss | 3471 | 3472 | 3473 | 3474 | 3475 | 3476 | 3477 | 3478 | | | | |
| DualPinP | | | | | | | | | | | | |
| Move | 3521 | 3522 | 3523 | 3524 | 3525 | 3526 | 3527 | 3528 | | | | |
| +Diss | 3531 | 3532 | 3533 | 3534 | 3535 | 3536 | 3537 | 3538 | | | | |
| DualPinP | | | | | | | | | | | | |
| Move | 3561 | 3562 | 3563 | 3564 | 3565 | 3566 | 3567 | 3568 | | | | |
| +Diss | 3571 | 3572 | 3573 | 3574 | 3575 | 3576 | 3577 | 3578 | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| 3D Slide | | | | | | | | | | | | |
| 2DComp | 4631 | 4632 | 4633 | 4634 | 4635 | 4636 | 4637 | 4638 | | | | |
| +Diss | 4671 | 4672 | 4673 | 4674 | 4675 | 4676 | 4677 | 4678 | | | | |
| Split | | | | | | | | | | | | |
| 2DComp | 4651 | 4652 | 4653 | 4654 | 4655 | 4656 | 4657 | 4658 | 4659 | | | |
| +Diss | 4691 | 4692 | 4693 | 4694 | 4695 | 4696 | 4697 | 4698 | 4699 | | | |

+DISS: This denotes a pattern to which the dissolve effect can be applied.

EXP: This denotes a pattern that appears bigger and bigger.

Key patterns

| | | | | | | | | | | | | |
|-----------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Pers1 | | | | | | | | | | | | |
| 2DComp +Diss | 4701 4741 | 4702 4742 | 4703 4743 | 4704 4744 | 4705 4745 | 4706 4746 | 4707 4747 | 4708 4748 | 4730 4750 | 4731 4751 | 4732 4752 | 4733 4753 |
| PersMove1 | | | | | | | | | | | | |
| 2DComp +Diss | 4761 4781 | 4762 4782 | 4763 4783 | 4764 4784 | 4765 4785 | 4766 4786 | 4767 4787 | 4768 4788 | | | | |
| PersMove2 | | | | | | | | | | | | |
| 2DComp +Diss | 4801 4821 | 4802 4822 | 4803 4823 | 4804 4824 | 4805 4825 | 4806 4826 | 4807 4827 | 4808 4828 | | | | |
| Spin | | | | | | | | | | | | |
| 2DComp +Diss | 4841 4851 | 4842 4852 | 4843 4853 | 4844 4854 | 4845 4855 | 4846 4856 | | | | | | |
| Sphere | | | | | | | | | | | | |
| 2DComp +Diss | 5201 5231 | 5202 5232 | 5203 5233 | 5204 5234 | 5205 5235 | 5206 5236 | 5207 5237 | 5208 5238 | 5209 5239 | | | |
| Flag1 | | | | | | | | | | | | |
| 2DComp +Diss | 5401 5461 | 5402 5462 | 5403 5463 | 5404 5464 | 5405 5465 | 5406 5466 | 5407 5467 | 5408 5468 | 5409 5469 | 5410 5470 | 5411 5471 | 5412 5472 |
| Flag2 | | | | | | | | | | | | |
| 2DComp +Diss | 5431 5491 | 5432 5492 | 5433 5493 | 5434 5494 | 5435 5495 | 5436 5496 | 5437 5497 | 5438 5498 | 5439 5499 | 5440 5500 | | |
| Ripple | | | | | | | | | | | | |
| 2DComp +Diss | 5601 5611 | 5602 5612 | 5613 | 5614 | | | | | | | | |
| 3DBasic | | | | | | | | | | | | |
| +Diss | 6001 | 6002 | 6003 | 6004 | 6005 | 6006 | 6007 | 6008 | 6009 | 6010 | | |
| Ripple | | | | | | | | | | | | |
| 2DComp +Diss | 6031 | 6032 | | | | | | | | | | |
| Flag Move | | | | | | | | | | | | |
| Move +Diss | 6101 6111 | 6102 6112 | 6103 6113 | 6104 6114 | 6105 6115 | 6106 6116 | 6107 6117 | 6108 6118 | 6109 6119 | | | |

<Notes>

- The key patterns that can be used for DSK Effect are 6001, 6002, 6003, 6006, 6007 and 6101 to 6634.
- Key patterns 4601 to 6716 can be used only when the 3D optional board (AG-VE70) has been installed.

Key patterns

| | | | | | | | | | | | | |
|-----------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--|
| Pers1 | | | | | | | | | | | | |
| 2DComp +Diss | 4734 4754 | 4735 4755 | 4736 4756 | 4737 4757 | 4738 4758 | 4739 4759 | | | | | | |
| PersMove1 | | | | | | | | | | | | |
| 2DComp +Diss | 4769 4789 | 4770 4790 | 4771 4791 | 4772 4792 | 4773 4793 | | | | | | | |
| Spin | | | | | | | | | | | | |
| 2DComp +Diss | 4861 4871 | 4862 4872 | 4863 4873 | 4864 4874 | 4865 4875 | 4866 4876 | 4881 4891 | 4882 4892 | 4883 4893 | 4884 4894 | | |
| Sphere | | | | | | | | | | | | |
| 2DComp +Diss | 5210 5240 | 5211 5241 | 5212 5242 | 5213 5243 | 5214 5244 | 5215 5245 | 5216 5246 | 5217 5247 | 5218 5248 | 5219 5249 | 5220 5250 | |
| Flag1 | | | | | | | | | | | | |
| 2DComp +Diss | 5413 5473 | 5414 5474 | 5415 5475 | 5416 5476 | 5417 5477 | 5418 5478 | 5419 5479 | 5420 5480 | 5421 5481 | 5422 5482 | 5423 5483 | |
| Flag2 | | | | | | | | | | | | |
| 2DComp +Diss | 5441 5501 | 5442 5502 | 5443 5503 | | | | | | | | | |
| Melt | | | | | | | | | | | | |
| 2DComp +Diss | 6033 | 6034 | | | | | | | | | | |
| Flag Move | | | | | | | | | | | | |
| Move +Diss | 6121 6131 | 6122 6132 | 6123 6133 | 6124 6134 | 6125 6135 | 6126 6136 | 6127 6137 | 6128 6138 | 6129 6139 | | | |

+DISS: This denotes a pattern to which the dissolve effect can be applied.

EXP: This denotes a pattern that appears bigger and bigger.

Key patterns

| | | | | | | | | | | | | |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Accordion | | | | | | | | | | | | |
| Move +Diss | 6201 6211 | 6202 6212 | 6203 6213 | 6204 6214 | 6205 6215 | 6206 6216 | 6207 6217 | 6208 6218 | 6209 6219 | | | |
| Sphere | | | | | | | | | | | | |
| Move +Diss | 6301 6311 | 6302 6312 | 6303 6313 | 6304 6314 | 6305 6315 | 6306 6316 | 6307 6317 | 6308 6318 | | | | |
| Sphere Curve | | | | | | | | | | | | |
| Move +Diss | 6401 6411 | 6402 6412 | 6403 6413 | 6404 6414 | 6405 6415 | 6406 6416 | 6407 6417 | 6408 6418 | | | | |
| Spin to Pers | | | | | | | | | | | | |
| Move +Diss | 6501 6521 | 6502 6522 | 6503 6523 | 6504 6524 | 6505 6525 | 6506 6526 | 6507 6527 | 6508 6528 | 6509 6529 | 6510 6530 | 6511 6531 | 6512 6532 |
| Pers In | | | | | | | | | | | | |
| Move +Diss | 6601 6611 | 6602 6612 | 6603 6613 | 6604 6614 | 6605 6615 | 6606 6616 | 6607 6617 | 6608 6618 | | | | |
| Pers In 2 | | | | | | | | | | | | |
| Move +Diss | 6701 6711 | 6702 6712 | 6703 6713 | 6704 6714 | 6705 6715 | 6706 6716 | | | | | | |
| Key Learn | Key Learn1 | Key Learn2 | Key Learn3 | Key Learn4 | Key Learn5 | Key Learn6 | Key Learn7 | Key Learn8 | Key Learn9 | Key Learn10 | | |
| | 9000 | 9001 | 9002 | 9003 | 9004 | 9005 | 9006 | 9007 | 9008 | 9009 | | |
| Title | T-1 | T-2 | T-3 | T-4 | T-5 | T-6 | T-7 | T-8 | T-9 | T-10 | T-11 | T-12 |
| Diss | 9501 | 9511 | 9521 | 9531 | 9541 | 9551 | 9561 | 9571 | 9581 | 9591 | 9601 | 9611 |
| Title | T-25 | T-26 | T-27 | T-28 | T-29 | T-30 | | | | | | |
| Diss | 9741 | 9751 | 9761 | 9771 | 9781 | 9791 | | | | | | |

<Notes>

- The key patterns that can be used for DSK Effect are 6001, 6002, 6003, 6006, 6007 and 6101 to 6634.
- Key patterns 4601 to 6716 can be used only when the 3D optional board (AG-VE70) has been installed.

Key patterns

| | | | | | | | | | | | | |
|-----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|------|------|
| Accordion | | | | | | | | | | | | |
| Move +Diss | 6221 6231 | 6222 6232 | 6223 6233 | 6224 6234 | 6225 6235 | 6226 6236 | 6227 6237 | 6228 6238 | 6229 6239 | | | |
| Sphere | | | | | | | | | | | | |
| Move +Diss | 6321 6331 | 6322 6332 | 6323 6333 | 6324 6334 | 6325 6335 | 6326 6336 | 6327 6337 | 6328 6338 | 6329 6339 | | | |
| Sphere Curve | | | | | | | | | | | | |
| Move +Diss | 6421 6431 | 6422 6432 | 6423 6433 | 6424 6434 | 6425 6435 | 6426 6436 | 6427 6437 | 6428 6438 | | | | |
| | | | | | | | | | | | | |
| Pers In | | | | | | | | | | | | |
| Move +Diss | 6621 6631 | 6622 6632 | 6623 6633 | 6624 6634 | | | | | | | | |
| | | | | | | | | | | | | |
| Title | Key Learn11 | Key Learn12 | Key Learn13 | Key Learn14 | Key Learn15 | Key Learn16 | Key Learn17 | Key Learn18 | Key Learn19 | Key Learn20 | | |
| Diss | 9010 | 9011 | 9012 | 9013 | 9014 | 9015 | 9016 | 9017 | 9018 | 9019 | | |
| Title | T-13 | T-14 | T-15 | T-16 | T-17 | T-18 | T-19 | T-20 | T-21 | T-22 | T-23 | T-24 |
| Diss | 9621 | 9631 | 9641 | 9651 | 9661 | 9671 | 9681 | 9691 | 9701 | 9711 | 9721 | 9731 |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

+DISS: This denotes a pattern to which the dissolve effect can be applied.

EXP: This denotes a pattern that appears bigger and bigger.

About this software

Description of the software

The software contained in the CD is described below.

■ USB driver

This driver software is for communications when the AG-MX70 is connected to a PC via the USB port.

■ MX-Navi

This software is for use when transmitting images from a PC to the AG-MX70 and playing them back and when reading still images from the AG-MX70 into a PC. Installing this software makes the following possible.

Transmitting of images from a PC to the AG-MX70

- PC images can be transmitted to the AG-MX70 as Title data or IntVideo data.
- Playback and pause operations can be performed with the transmitted data.

Reading of still images from the AG-MX70 into a PC

- Images displayed on the AG-MX70 can be read into a PC as still images.

Management of the AG-MX70 memory

- It is possible to check the status and change the settings of the AG-MX70's image memory.

Refer to "Before use" on pages 77 to 79 when installing this software.

System requirements

The PC to be used should meet the following requirements.

- | | |
|-------------|--|
| • Computer | DOS/V with USB port |
| • OS | Windows 98 Windows ME Windows 2000 Professional Windows XP HomeEdition Windows XP Professional |
| • CPU | Pentium II 300 MHz or better |
| • RAM | 64 MB or more |
| • Display | True Color (24 bits, 32 bits) 800×600 dots or more |
| • Hard disk | 5 MB or more free space |
| • Other | CD-ROM drive |

Overview of MX-Navi

MX-Navi is software used when transmitting images from a PC to the AG-MX70 and displaying them and when reading still images from the AG-MX70 into a PC.

The following are possible when a PC has been connected to the AG-MX70.

- DSK display of the PC screen as telop or animation.
- Display of the PC screen with internal matte.
- Images provided as input to the AG-MX70 can be read into the PC as still images and be converted to image files.

Processing of image data

■ By data type

Image data is processed by the AG-MX70 either as Title data or IntVideo data, depending on the application. When image data is transmitted to the AG-MX70, it is necessary to first select one of these 2 data types.

● Title data

Data to be used for DSK playback should be transmitted as Title data. RGB data and α channel data are used by Title data. When an image having an α channel is used, the image is subjected to transparency processing corresponding to the value of the α channel. When an image not having an α channel is used, transparency processing is not performed.

● IntVideo data

When the image is to be played back as internal matte, it is transmitted as IntVideo data. The image uses only RGB data. As the α channel is not used, transparency processing is not performed.

■ Display methods

It is possible to select from the following display methods according to how the image data is to be played back.

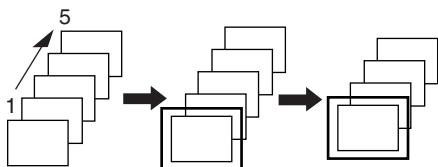
● STILL

With this method, a single image is played back as a still image. Both Title data and IntVideo data can be used. When Title data is used, it is possible to set the horizontal position and vertical position of the image.



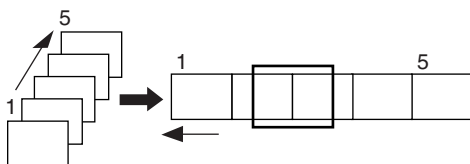
● MOVIE

With this method, two or more images are played back consecutively. A single image is processed as one frame. It is possible to select from ONCE or REPEAT playback. Both Title data and IntVideo data can be used. When Title data is used, it is possible to set the horizontal position and vertical position of the image.



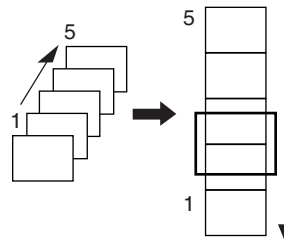
● CRAWL

Two or more images are lined up one after the other and played back (scrolled) horizontally on the screen. It is possible to set the direction and the speed for scrolling. Only Title data can be used with this method. It is possible to set the vertical position of the image.



● ROLL

Two or more images are lined up one after the other and played back (scrolled) vertically on the screen. It is possible to set the direction and the speed for scrolling. Only Title data can be used with this method. It is possible to set the horizontal position of the image.



■ DSK effects

When an image is displayed on (DSK ON) or cleared from (DSK OFF) the monitor, it is possible to apply dissolve or 2 or 3D transition effects.

■ Image size

The appropriate size of images for the Monitor 1 screen differs, depending on the video format setting of the AG-MX70 and the MX-Navi settings.

NTSC: Monitor 1 screen = 640 × 480

PAL: Monitor 1 screen = 768 × 576

It is possible to select any image size for playback, however, if the image size selected is larger than the Monitor 1 screen, only the part of the image that fits onto the screen will be transmitted and played back.

■ Image formats supported

It is possible to use the following image formats for playback with the AG-MX70.

● TARGA (.tga)

24 bit/pixel (no α channel) data and 32 bit/pixel (with α channel) data can be used.

● JPEG (.jpg)

● BMP (.bmp)

24 bit/pixel (no α channel) data can be used.

A 32 bit/pixel image of the TARGA format must be used when the image is to be displayed with transparency processing. When displaying images using either MOVIE, ROLL or CRAWL methods, it is necessary to use consecutively numbered file names.

(e.g. Image001.tga to Image015.tga)

Processing of image data

■ Management of the image memory

● Memory capacity

Images transmitted from the PC are stored in the AG-MX70's image memory. The memory capacity differs, depending on the AG-MX70's video format setting.

NTSC: 30 pages

(1 page = amount of memory required for 1 image on Monitor 1 screen)

PAL: 26 pages

The image memory is divided into separate areas for Title data and IntVideo data and capacity can be allocated freely as required.

● DIVIDE

The number of memory pages used differs, depending on the number of vertical pixels, however this only applies when images are transmitted as Title data. The memory pages being used can be reduced by adjusting the size of the image for DSK playback, so that a larger number of images can be played back.

| | Number of vertical pixels | Number of memory pages used |
|------|---------------------------|-----------------------------|
| NTSC | 1 to 60 | 1/8 page |
| | 61 to 120 | 1/4 page |
| | 121 to 240 | 1/2 page |
| | 241 to 480 | 1 page |
| PAL | 1 to 72 | 1/8 page |
| | 73 to 144 | 1/4 page |
| | 145 to 288 | 1/2 page |
| | 289 to 576 | 1 page |

<Notes>

- When the vertical position is set, images with a small number of vertical pixels can be played back on the lower part of the screen. This is effective for DSK playback of telop or logos at the lower part of the screen.
- IntVideo data always use one memory page, regardless of the image size.

Before use

AG-MX70 connections

It is necessary to connect the PC to the AG-MX70 using the USB cable before installing the software. Follow the steps below.

- 1) Turn off the power to the AG-MX70.
- 2) Connect the PC to the AG-MX70 using the USB cable.
Insert the USB cable connectors into the corresponding USB ports on the PC and on the rear panel of the AG-MX70.

This completes the connection. When the 2 units are being connected for the first time, install the USB driver by following the steps in "Installation of USB driver" below.

<Note>

The USB cable is not supplied with this unit. Use a commercially available 3 m or shorter USB cable. Note that if the cable to be used is more than 3 m in length, communications may not be performed correctly.

Installation of the USB driver

It is necessary to install this driver in the PC to enable USB communications between the PC and AG-MX70 after they are connected for the first time. (It is only necessary to install the USB driver software once.) Follow the steps below.

■ For Windows 98 and Windows 2000

<Notes>

- The steps outlined below are for Windows 98. With Windows 2000, the screens will differ slightly, but the driver software can still be installed following the same steps.
- Be sure to log on as a user with Administrator rights when installing this software in a PC with Windows 2000.

- 1) Connect the PC to the AG-MX70 correctly.
- 2) Turn on the power to the PC.
Check that Windows has started up.
- 3) Place the setup CD-ROM in the PC's CD-ROM drive.
- 4) Turn on the power to the AG-MX70.
After a short while, the "Add New Hardware Wizard" dialog will be displayed.
- 5) Click on the "Next" button.



- 6) Select "Search for the best driver for your device," then click on the "Next" button.



- 7) Place a check next to "Specify a location," enter the USB_DRV folder in the setup CD-ROM as the search location and click on the "Next" button.



- 8) If the driver is searched correctly, a screen similar to the one shown below will be displayed.



- 9) When the screen indicating that the installation is complete is displayed, click on the "Finish" button.



Before use

■ For Windows ME

- 1) Connect the PC to the AG-MX70 correctly.
- 2) Turn on the power to the PC.
Check that Windows has started up.
- 3) Place the setup CD-ROM in the PC's CD-ROM drive.
- 4) Turn on the power to the AG-MX70.
After a short while, the "Add New Hardware Wizard" dialog will be displayed.
- 5) Select "Automatic search for a better driver," then click on the "Next" button.



- 6) When the screen indicating that the installation is complete is displayed, click on the "Finish" button.



■ For Windows XP

<Note>

Be sure to log on as a user with Administrator rights when installing this software.

- 1) Connect the PC to the AG-MX70 correctly.
- 2) Turn on the power to the PC.
Check that Windows has started up.
- 3) Place the setup CD-ROM in the PC's CD-ROM drive.
- 4) Turn on the power to the AG-MX70.
After a short while, the "Found new hardware wizard" dialog will be displayed.
- 5) Select "Install the software automatically," then click on the "Next" button.



- 6) If the installation warning screen is displayed, click on the "Continue Anyway" button.



- 7) When the screen indicating that the installation is complete is displayed, click on the "Finish" button.



Before use

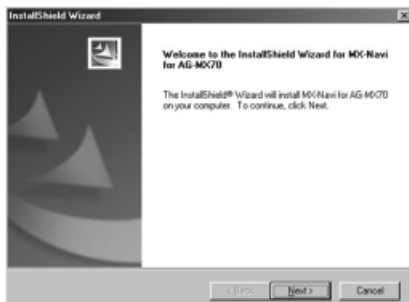
Installation of MX-Navi

After installing the USB driver, install MX-Navi, the software for handling image exchange with the AG-MX70. Follow the steps below.

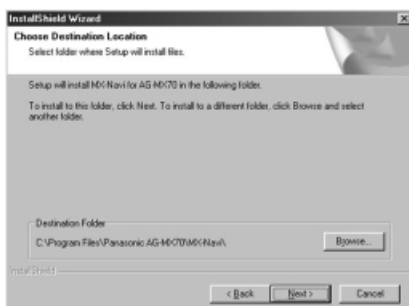
- 1) Select "Run..." from the "Start" menu. Click the "Browse" button, select Setup.exe in the MX-Navi folder of the setup CD-ROM, and click "OK."



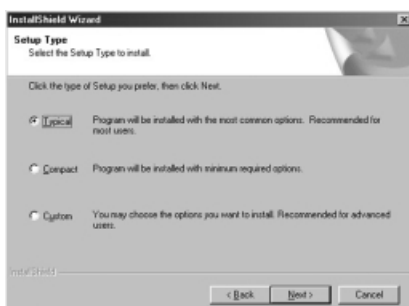
- 2) The setup start screen will be displayed. Click the "Next" button.



- 3) The screen for setting the MX-Navi installation destination will be displayed. If the destination shown is the one desired, just click the "Next" button. To change the installation destination, click the "Browse" button, change the installation destination, and click the "Next" button.

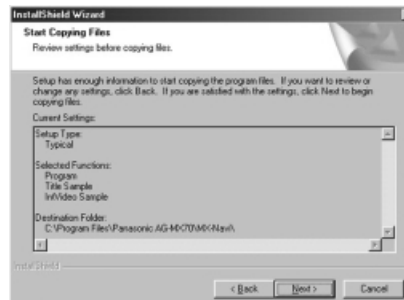


- 4) The screen for selecting the installation type is displayed. When "Typical" has been selected, the program files of MX-Navi and sample images are installed. When "compact" has been selected, only the MX-Navi program is installed. Select the type and click the "Next" button.



- 5) The installation contents confirmation screen appears.

To proceed with the installation of the contents shown, click the "Next" button. To change the contents, use the "Back" button to return to the previous screen, and change the settings.



- 6) After the files have been copied, the installation end screen appears. Installation is completed by clicking the "Finish" button now.

Operation confirmation

This completes installation of all of the software. Use the following procedure to confirm that the software has been installed correctly.

- 1) Confirm that the PC and the AG-MX70 have been connected correctly and that the power of the AG-MX70 is switched on.
- 2) Select "Programs" → "Panasonic AG-MX70" → "MX-Navi" from the Windows Start menu. MX-Navi will start.
- 3) When the display column of the status bar on the left bottom of the main window of MX-Navi shows "Connecting," it means that the software has been installed correctly.

Check that this column shows "Connecting."



<Notes>

If "Not connecting" is shown, check the following.

- PC and AG-MX70 must be connected correctly.
 - The power of the AG-MX70 must be switched on.
 - The length of the USB cable must be within 3 m.
- When a USB hub is being used, correct operation may be obtained when the hub is removed and the cable is connected directly to the USB port of the PC.


Startup and shutdown

How to start up MX-Navi

Select “Program” → “Panasonic AG-MX70” → “MX-Navi” from the Windows Start menu.

How to shut down MX-Navi

Shutdown is possible in the following two ways.

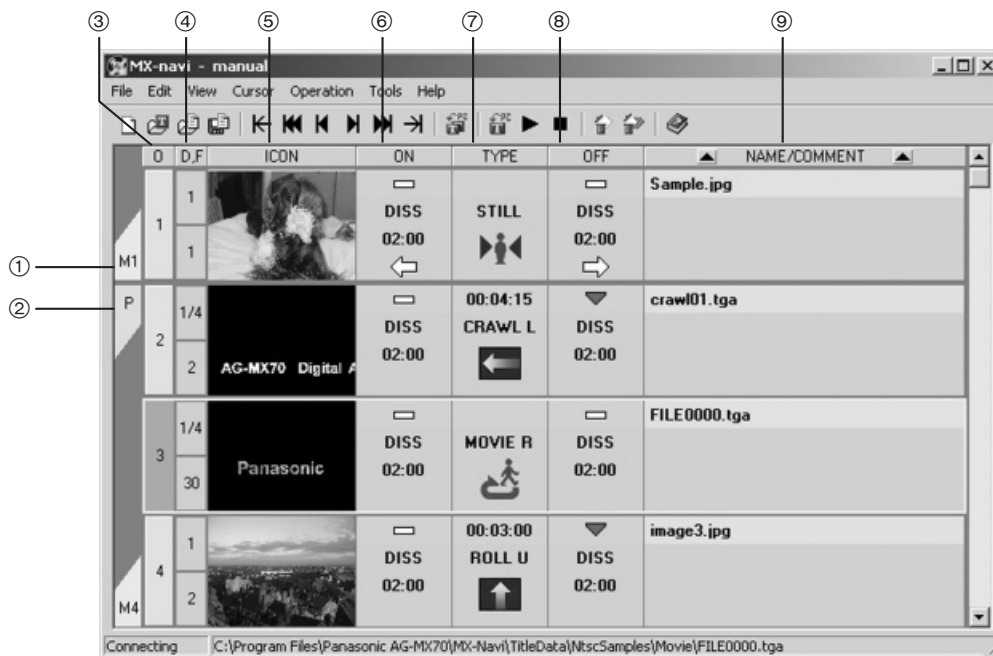
- Click the button  at the right top of the main window.
- Select “Exit” from the “File” menu of the main window.

Screen descriptions

Main window

A list of Title data, called the transmission list, is displayed on the main window. The main window of MX-Navi has two display modes, the icon mode and the list mode. The modes can be switched using the “view” menu.

Icon mode



- ① For data with a Mark setting, the Mark number is displayed. For details on Mark settings, refer to page 87.
- ② This is displayed for data with the Protect setting. For details on the Protect setting, refer to page 87.

③ O (Order)

The order of the data in the transmission list is displayed. The color changes according to the title transmission status.

- Not transmitted Dark gray
- Transmitted Light gray
- Transmission not possible Dark red (insufficient MX70 memory)

Screen descriptions

④ D, F

The upper line shows the Divide value for the data and the lower line shows the number of images of the data.

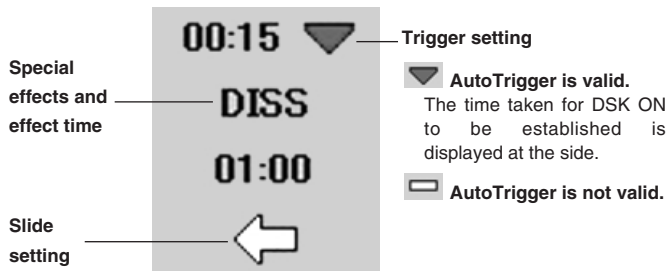
⑤ ICON

The image is reduced and displayed. When several files are used with one title, one of them will be used for the display. The aspect ratio of the reduced image changes according to the memory setting (16:9/4:3) of the main unit.

When double-clicked, the image display screen (page 89) opens and the original image can be checked.

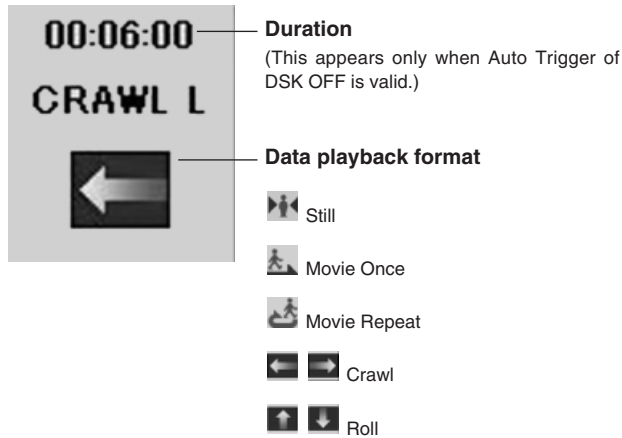
⑥ ON

The operation at the time of DSK ON will be displayed. When double-clicked, the Properties window (page 86) will open.



⑦ TYPE

The data playback format will be displayed. When double-clicked, the Properties window (page 86) will open.



⑧ OFF

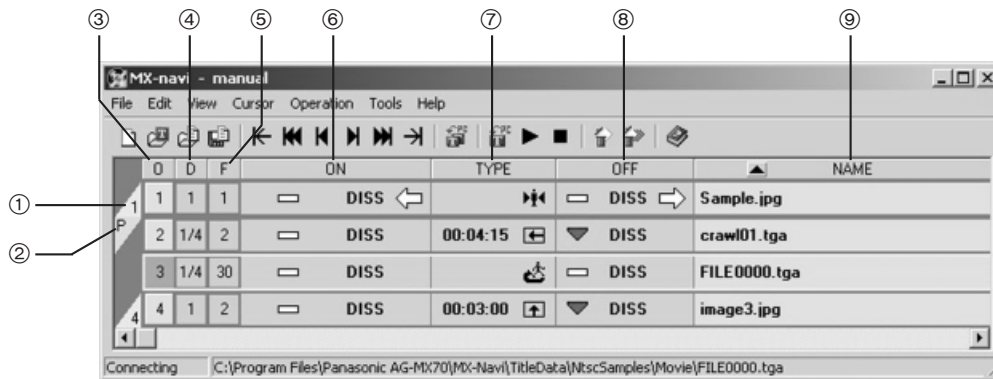
The operation at the time of DSK OFF will be displayed. The display contents are the same as for DSK ON. When double-clicked, the Properties window (page 86) will open.

⑨ NAME/COMMENT

The name given to the data and the comment string will be displayed. When double-clicked, the Properties window (page 86) will open.

Screen descriptions

List mode



① For data with a Mark setting, the Mark number is displayed.

② This is displayed for data with the Protect setting.

③ O (Order)

The order of the data in the transmission list is displayed. This is the same as with icon mode.

④ D

The Divide value of the data is shown.

⑤ F

The number of images of the data is shown.

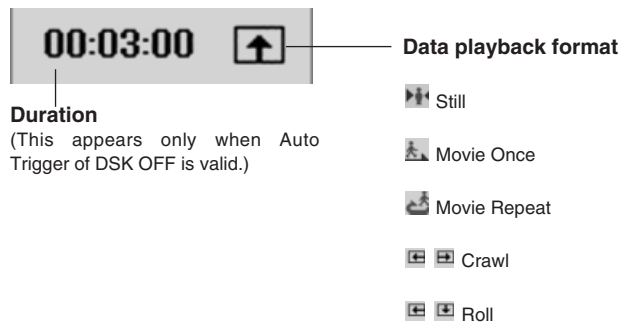
⑥ ON

The operation at the time of DSK ON will be displayed. When double-clicked, the Properties window (page 86) will open.



⑦ TYPE

The data playback format will be displayed. When double-clicked, the Properties window (page 86) will open.



⑧ OFF

The operation at the time of DSK OFF will be displayed. The display contents are the same as for DSK ON. When double-clicked, the Properties window (page 86) will open.

⑨ NAME/COMMENT

The name given to the data will be displayed. When double-clicked, the Properties window (page 86) will open.

The yellow frame is the cursor. The data marked by the cursor will be the object for transmission, deletion, memory clearing, property setting, etc.

When the mouse is left-clicked on data, the cursor will move to that data. When "Ctrl" is held down, several titles can be selected by left-clicking, and when "Shift" is held down, the titles between the first click and the last click will be selected.

When several titles are selected, the data selected first will be the object for Properties settings and screen display. For other operations, all selected titles will be the object.


<Note>

For the setting contents for DSK ON and DSK OFF, refer to "Setting the title data playback properties" (page 86).


Menu descriptions

File menu


Creation of a new list

This clears the current transmission list and creates a new one (refer to page 86). The same operation can be performed with the operation button .


Open image

This opens an image and adds the title data at the end of the transmission list. The same operation can be performed with the operation button .

Open List

This clears the current transmission list and opens a previously saved transmission list. The same operation can be performed with the operation button .

Save List

This overwrites and saves the current transmission list. If the current transmission list does not have a name, the operation becomes the same as with "Save List as...". The same operation can be performed with the operation button .

Save List as...

This saves the current transmission list with a new name.

Preview

This opens the image display screen and displays the image of the title selected by the cursor. The same operation can be performed by double-clicking the ICON column of the data display and selecting "Preview" from the pop-up menu.

Property

This opens the Properties setting screen for the title selected by the cursor.

The same operation can be performed by double-clicking the column IN, TYPE, OUT, NAME of the title data display or by right-clicking the title data and selecting "Property" from the displayed menu.

Read flash memory

This reads the data (SETUP menu settings, operation panel settings, etc.) in the flash memory of the AG-MX70, and saves it in files.

Select this menu item after turning on the power while holding down the "0" key and "5" key on the operation panel of the AG-MX70 and setting the AG-MX70 to the flash memory backup mode. A dialog box now appears so input the file name and click the "OK" button to save the flash memory data.

Write Flash memory

This writes the data of the saved file into the flash memory of the AG-MX70.

Select this menu item after turning on the power while holding down the "0" key and "5" key on the operation panel of the AG-MX70 and setting the AG-MX70 to the flash memory backup mode. A dialog box now appears so select the file and click the "OK" button to write the file data. When this operation is performed, all the data in the flash memory of the AG-MX70 is replaced.

Exit

This shuts down the program.

Edit menu

Undo

This undoes data additions, deletions and other operations. Up to 16 steps can be undone.

The same operation can be performed by pressing "Ctrl" + "Z."

Redo

This cancels the contents of the Undo.

The same operation can be performed by pressing "Ctrl" + "Y."

Cut

This deletes the selected title from the transmission list and saves it to the clipboard. The saved title can be added to the transmission list via the "Paste" menu. Only the title cut last will be saved.

The same operation also can be performed by "Ctrl" + "X" or by right-clicking the title data display column and selecting "Cut" from the pop-up menu.

Copy

This copies the selected title to the clipboard.

The saved title can be added to the transmission list via the "Paste" menu. Only the title cut last will be saved.

The same operation can be performed with "Ctrl" + "C" or by right-clicking the title data display column and selecting "Copy" from the pop-up menu.

Paste

This adds the title saved on the clipboard to the transmission list.

The same operation can be performed with "Ctrl" + "V" or by right-clicking the title data display column and selecting "Paste" from the pop-up menu.

Menu descriptions

Delete

This deletes the selected title from the transmission list.

The same operation can be performed with the “DEL” key or by right-clicking on the title data display column and selecting “Delete” from the pop-up menu.

Select all

This selects all titles in the transmission list.

The same operation can be performed by pressing “Ctrl” + “A.”

View menu

ICON view

This switches the display mode for the main screen to icon mode.

The same operation can be performed by right-clicking the data display and selecting “View” → “ICON view” from the displayed pop-up menu.

LIST view

This switches the display mode for the main screen to icon mode.

The same operation can be performed by right-clicking the data display and selecting “View” → “LIST view” from the displayed pop-up menu.

Sort by name

This rearranges the data of the transmission list by the Name character order.

The same operation can be performed with the ▲, ▼ buttons in the Name heading part of the data display.

Sort by comments


This rearranges the transmission list by the Comment character order.

The same operation can be performed with the ▲, ▼ buttons in the Comment heading part of the data display.

Cursor menu


Top

This moves the cursor to the start of the transmission list.

The same operation can be performed with the operation button  or with the HOME key.


Jump to 10th Previous

This moves the cursor up 10 from the present position.

The same operation can be performed with the operation button  or with the Left arrow key.


Previous

This moves the cursor up one from the present position.

The same operation can be performed with the operation button  or with the Up arrow key.


Next

This moves the cursor down one from the present position.

The same operation can be performed with the operation button  or with the Down arrow key.


Jump to 10th Next

This moves the cursor down 10 from the present position.

The same operation can be performed with the operation button  or with the Right arrow key.

Bottom

This moves the cursor to the end of the transmission list.

The same operation can be performed with the operation button  or with the END key.

Jump to the Current DSK Title

This moves the cursor to the title being played.

The same operation can be performed with the number key 0.

Jump to the marked Title

This moves the cursor to a title with a Mark setting.

Select Mark1 to Mark9 from the submenu.

The same operation can be performed with the number keys 1 to 9.


Menu descriptions

Operation menu

(effective only when the AG-MX70 is connected)


AutoLoad

This automatically transmits the data from the selected data to the end of the list and performs DSK playback. For details, refer to “Automatic transmission and playback of Title data” (page 88).

The same operation can be performed with the operation button  or with “Shift” + “Space.”


Load Title

This transmits the selected data. For details, refer to “Manual transmission and playback of Title data” (page 88).

The same operation can be performed with the operation button  or with the L key.


Play

This performs DSK playback for the selected data. When the data has not yet been transmitted, DSK playback will be performed after transmission. For details, refer to “Manual transmission and playback of Title data” (page 88).

The same operation can be performed with the operation button  or with “Space.”


Stop

This stops DSK playback.

The same operation can be performed with the operation button .


Clear the selected title

This clears the selected data from the image memory of the AG-MX70. For details, refer to “Clearing Title data” (page 90).

The same operation can be performed with the operation button  or with “Ctrl” + “R.”

Clear all titles

This clears all data in the transmission list from the image memory of the AG-MX70. For details, refer to “Clearing Title data” (page 88).

The same operation can be performed with the operation button  or with “Ctrl” + “T.”

Auto Take

This executes Auto Take using the AG-MX70.

Tool menu

Memory status

This displays the memory status screen. For details, refer to “Checking the memory status of the AG-MX70” (page 90).

AG-MX70 setup

This displays the memory setting screen. For details, refer to “Changing the AG-MX-70 memory settings” (page 90) and “Recalling events” (page 91.)

Properties initial value setting

This displays the Properties initial value setting screen. For details, refer to “Initial set of Property data” (page 92).


Operating environment

This displays the Operating environment screen. For details, refer to “Setting the operating environment” (page 93).

Help menu

Help

This displays the Help contents.

The same operation can be performed with the operation button .

Version

This displays the version of this application.

Title data operations

Flow until Title data playback

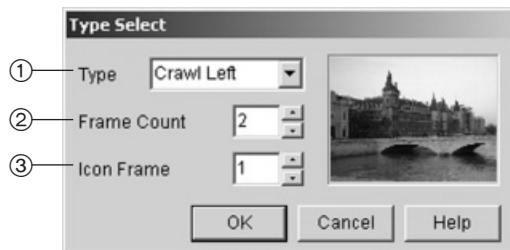
The procedure for transmission of PC images as Title data and DSK playback is as follows.

- 1) Register the image in the list of Title data for transmission to the AG-MX70 (transmission list).
- 2) Perform data playback settings.
- 3) Play back and transmit data manually or automatically.

Registering Title data in the transmission list

The transmission list is a list of Title data to be transmitted to the AG-MX70. Up to 99 Title data items can be registered in the transmission list. Images can be registered as Title data in the transmission list using the following procedure.

- 1) Select "Open image" from the "File" menu of the main window. The "Open file" dialog will open.
- 2) Select the image to be transmitted. When playback as MOVIE, ROLL, or CRAWL is desired, select the image to be displayed first from a series of images.
- 3) Set the data playback format etc.



- ① Set the data playback format.
- ② Set the data frame number (number of images).
- ③ Set the frame number for the image to be displayed in the Icon row.

<Note>

When the selected image is not a series format, it will be registered automatically as STILL data, so this screen will not be displayed.

- 4) The data is added to the transmission list and displayed in the main window.

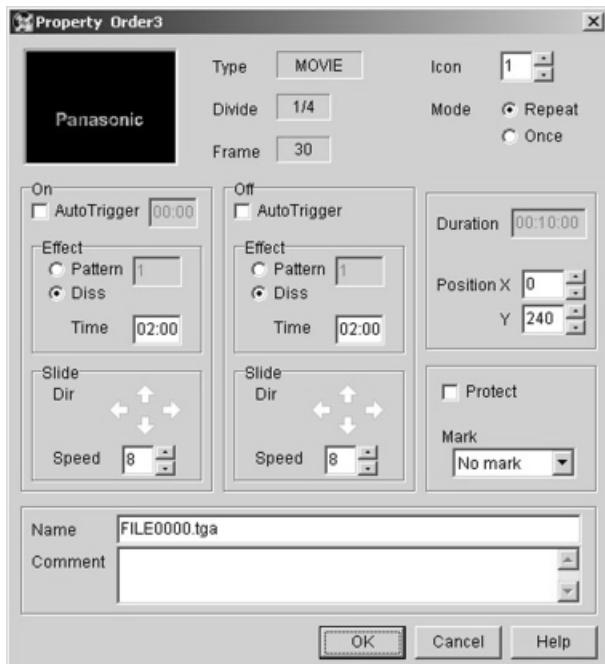
Setting the Title data playback properties

Setting of special effects with DSK ON, DSK OFF, the data display position, etc. will be done automatically according to the initial value settings at the time the data was registered in the transmission list.

These settings can be changed on the Properties screen of the data. The properties screen of the data is opened using the following procedure.

- 1) Move the mouse cursor to the data for which the settings are to be changed and left click on the data. The yellow band cursor will move and the data will be selected.
- 2) Select "Property" from the "File" menu of the main window. The Properties window will open.

Title data operations



Description of the setting items (depending on the data playback format, some items may not be displayed or setting may not be possible)

Icon: This is used for setting the frame number of the image to be used for display in the ICON row of the main window.

Mode: This is used for selecting ONCE or REPEAT when MOVIE display is being used. During ROLL and CRAWL, it is used for selecting the scroll direction and entering the speed (number of pixels to be moved per field).

On: This is used for setting the operation when the data is displayed on the screen (DSK ON).

- **AutoTrigger:** This sets the start operation.
 - No check: DSK ON will be performed when the playback button on the main window is pressed or when the DSK button on the main unit is pressed.
 - Check: DSK ON will be executed when the specified time has expired after the data playback operation.
- **Effect:** This sets the special effects.
 - Pattern: The specified pattern will be used at DSK ON.
 - Diss: Dissolve will be used.
 - Time: Set the time for execution of special effects from 00:00 to 00:30.
- **Slide:** This is used for the slide display settings.
 - Dir: Click the arrow to select the slide direction.
 - Speed: Enter the slide speed (number of pixels to be moved per field).

Off: This is used for setting the operation to be performed when the data is deleted from the screen (DSK OFF).

- **AutoTrigger:** This sets the start operation.
 - No check: DSK OFF will be performed when the playback button on the main window is pressed or when the DSK button on the main unit is pressed.
 - Check: DSK OFF will be performed according to the time set for Duration.
- **Effect:** Same as for DSK ON.
- **Slide :** Same as for DSK ON.

Duration: This is used for setting the data playback time. The playback time also includes the time for DSK ON and DSK OFF. This is effective only when AutoTrigger of DSK OUT is checked.

Position: This is used for setting the data display position as the offset (pixels) from the left top of the screen.

X and Y can be set for STILL and MOVIE, Y can be set for CRAWL, and X can be set for Roll.

- **X:** A value from 0 to 719 can be set for NTSC as well as PAL.
- **Y:** A value of 0 to 480 can be set for NTSC, and a value of 0 to 576 can be set for PAL (only even numbers).

Protect: When this is checked, the data will not be cleared from the memory by normal clearing operation.

Mark: Any number from 1 to 9 can be set. When the number to be set is selected via "Cursor" → "Jump to Mark." it is possible to jump straight to the desired data.

Name: This is used for setting the name of the data. Up to 128 single-byte characters can be entered.

Comment: This is used for setting a comment for the data. Up to 128 single-byte characters can be entered.

<Notes>

- The initial value for the playback setting can be changed at the "Initial set of Property data" screen. (Refer to page 92.)
- When the pattern entered for DSK ON and DSK OFF is a pattern that can not be used with DSK, automatic correction will be made to a similar pattern.
- When there are 3000 or more patterns, the same pattern must be used for DSK ON and DSK OFF. For 0 to 2999 patterns, the combination of DSK ON and DSK OFF can be selected freely.
- Set Time as 00:00 when no special effects are to be used with DSK ON and DSK OFF.
- The position Y value cannot be set when DIVIDE is 1.

Title data operations

Manual transmission and playback of Title data

Data registered in the transmission list can be transmitted to the AG-MX70 using the following procedure.

- 1) Move the cursor to the data to be transmitted and left click on the data.
The yellow frame cursor moves to the selected data.
- 2) Select "Operation" → "Load title" from the menu of the main window.
The data is transmitted to the AG-MX70.

<Notes>

- The time required for the transmission differs according to the image size and the number of images.
- Transmission is not possible when the image memory of the AG-MX70 does not have the required free space. Clear any data that is not required from the image memory (refer to "Clearing Title data") and repeat the transmission operation.
- Images cannot be transmitted while the "Loading..." display appears on the LCD screen immediately after the AG-MX70's power has been turned on or immediately after changes have been made to the image memory settings.
- While transmission is in progress, the LCD display of the AG-MX70 shuts down.

DSK playback of the transmitted data is possible using the following procedure.

- 1) Move the cursor to the data for DSK playback and left click on the data.
The yellow frame cursor moves to the selected data.
- 2) Select "Operation" → "Play" from the menu of the main window.
DSK playback is performed for the data.

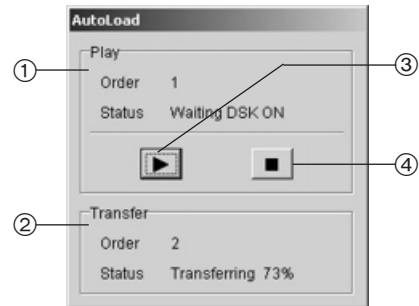
<Note>

In order to perform DSK playback for the data, it is necessary to set Key and Fill to Title using the DSK/Fade item on the DSK Fade menu of the AG-MX70. For details, refer to page 46.

Automatic transmission and playback of Title data

The data from the cursor position to the end of the transmission list can be transmitted automatically and DSK playback can be performed automatically.

Select "Operation" → "Automatic title load" from the menu of the main window.



- ① The DSK status is displayed here.
- ② The transmission status is displayed here.
- ③ This executes DSK ON/OFF.
- ④ This stops automatic loading.

<Notes>

- Any data that has not been transmitted will be transmitted automatically. Transmission also will be executed during playback of other data.
- If the data transmission has not been completed by the time the DSK playback stage is reached, standby status will be maintained until it is completed.
- After DSK playback, data without the Protect setting will be cleared from the memory.

Clearing Title data

The data written to the image memory of the AG-MX70 will be cleared only by a clearing operation or when the power supply of the AG-MX70 is switched off. When space is required for transmission of new data, delete any data that is not required. The clearing operation is performed using the following procedure.

- 1) Move the cursor to the data to be cleared and left click on the data.
The yellow frame cursor moves to the selected data.
- 2) Select "Operation" → "Clear the selected title" from the menu of the main window.
The data is cleared.

<Notes>

- When "Operation" → "Clear all title" is selected from the menu of the main window, all transmitted Title data will be cleared.
- Data for which Protect has been set will not be cleared by this operation. Clearing of data for which Protect has been set must be done from the memory status screen. (Refer to page 90.)

Title data operations

Checking the Title data image

The image of the data selected on the image display screen can be displayed in the original size so it can be checked. The image display screen can be displayed using one of the following methods.

- Select “Preview” from the file menu of the main window.
- Select “Preview” from the menu displayed when the mouse is right-clicked on the data.
- Double-click the ICON part in the data display column.



When the selected data has been changed on the main window, the image changes to reflect the changes.

① Order

This is the order of the data to which the displayed image belongs. The order displayed data can be changed either by direct input of numbers or by clicking the arrows.

② Frame

This shows the data frame to which the displayed image corresponds. The displayed frame can be changed either by direct input of numbers or by clicking the arrows.

Reordering the transmission list

The transmission list can be reordered by any one of the following methods.

- Select the reordering method as “Sort by name” or “Sort by comments” from the “Display” menu.
- Double-click the ▲, ▼ buttons in the heading column of NAME/COMMENT of the transmission list. When the display mode is Icon mode, reordering by name will be done with the left button and reordering by comment with the right button. When the display mode is List mode, it is only possible to reorder by name.
- Data can be dragged to a different position by left-clicking on the data and releasing the button after dragging the cursor to a new position. The data will be moved to the position where the button was released.

Saving the transmission list

The created transmission list can be saved to a file.

- 1) Select “Save list as...” from the “File” menu of the main window.
The “Save List as...” dialog will be displayed.
- 2) Enter the list name and click on the “OK” button.

Opening a transmission list

A saved transmission list can be opened as follows.

- 1) Select “Open list” from the “File” menu of the main window.
The “Open file” dialog will be displayed.
- 2) Select the list to be opened and click on the “OK” button.

Deleting Title data from the transmission list

Data registered in the transmission list can be deleted from the list using the following procedure.

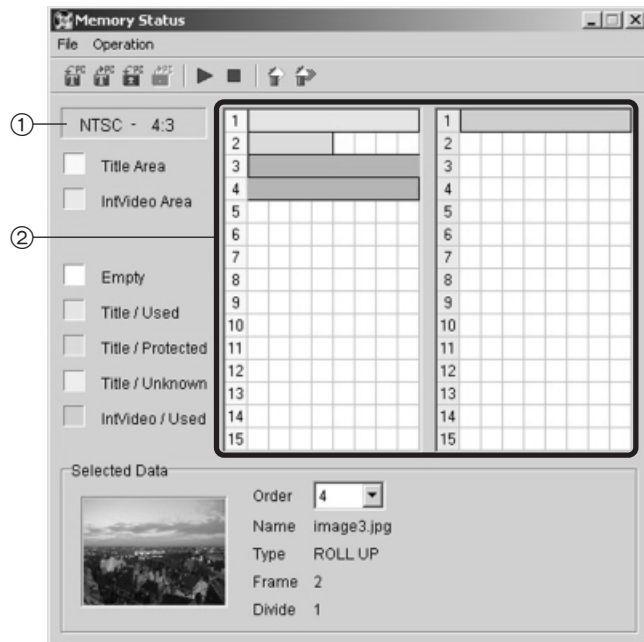
- 1) Move the cursor to the data to be deleted and left-click on the data.
The yellow frame cursor moves to the selected data.
- 2) Select “Edit” → “Delete” from the menu of the main window.
The data is deleted from the transmission list.

Other operations

Checking the memory status of the AG-MX70

The status of the image memory of the AG-MX70 can be checked on the memory status screen.

Select “Tools” → “Memory status” from the menu of the main window to open the memory status screen.



① The system setting status of the AG-MX70 is displayed here.

② This is the memory status display column.

- One line corresponds to one page.
- The column with the line numbers displayed in yellow is the Title data area, and the blue column shows the range of the IntVideo data.
- With Title data, the color differs according to the data type.

Orange: Normal data

Pink: Data with Protect setting

Green: Data that cannot be recognized by MX-Navi
(data written on the AG-MX70 side, data transmitted the previous time when MX-Navi had been started, etc.)

- The data can be selected by left-clicking on the data in the status display column. The selected data becomes the object for clearing and for reading to the PC.

<Notes>

- On this screen, select the data to be cleared and then select “Operation” → “Clear specified area ” from the menu. Title data with Protect setting also will be cleared by this operation.
- All Title IntVideo data can be cleared by selecting “Operation” → “All Clear” from the menu of this screen.

Changing the AG-MX-70 memory settings

The settings of the AG-MX70 (switching between NTSC and PAL, switching between 4:3 and 16:9, changing the page distribution between Title data and IntVideo data) can be changed from the PC.

1) From the menu of the main window, select “Tools” → “AG-MX70 setup” to open the mixer setting screen.

2) Change the memory settings in the Memory column on the mixer setting screen.

Signal This setting can be switched between NTSC and PAL.

Aspect This setting can be switched between 4:3 and 16:9.

Allocation The page distribution between Title data and IntVideo data can be changed here.

3) The settings are reflected by clicking the “Set” button.

<Notes>

- When the memory setting has been switched to 4:3 or when the page distribution for Title data and IntVideo data has been changed, all data will be cleared from the image memory.
- When the memory setting has been switched from NTSC to PAL or vice versa, the current transmission list will be closed and a new list will be opened.

Other operations

Transmission and playback of IntVideo data

The operations for transmission and playback of PC images as IntVideo data is described below.

- 1) Select "Tools" → "Memory status" from the menu of the main window and open the memory status screen.
- 2) Select "File" → "Load Intvideo" from the menu of the memory status screen.
The "Open file" dialog will be opened.
- 3) For transmission of a STILL image to the AG-MX70, select the image and click "OK."
To play back MOVIE images, select the image to be played back first from a series of images and click "OK" to display the playback format setting screen. When the playback format and the number of frames to be transmitted have been set and "OK" is clicked, the images will be transmitted to the AG-MX70.
- 4) Left-click the data to be played back in the status display column on the memory management screen.
The data is set to the selected status (status in which the color darkens).
- 5) Select "Operation" → "Preview" from the memory status screen menu.
The data is now played back.

<Notes>

- Crawl and Roll playback formats cannot be used for IntVideo data.
- Images cannot be transmitted immediately after the AG-MX70's power has been turned on or immediately after changes have been made to the image memory settings.
- While transmission is in progress, the LCD display of the AG-MX70 shuts down.
- Before playback, INT/EXT must be selected by the AG-MX70.

Clearing IntVideo data

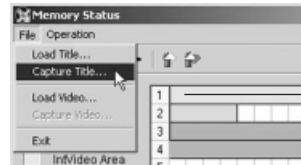
The operation for deletion of transmitted IntVideo data from the image memory of the AG-MX70 is described below.

- 1) Select "Tools" → "Memory status" from the menu of the main window to open the memory status screen.
- 2) Left-click the data to be deleted in the status display column of the memory status screen.
The data changes to selected status (the color becomes darker).
- 3) Select "Operation" → "Clear specified area" from the menu of the memory status screen.
The data is cleared.

Saving data

Title data or IntVideo data can be read to the PC from the image memory of the AG-MX70 and can be stored as still images. Use the following procedure.

- 1) Select "Tools" → "Memory status" from the menu of the main window to open the memory status screen.
- 2) Left-click on the data to be read into the PC in the status display column of the memory status screen.
The data changes to selected status (the color will become darker).



Select the data by left-clicking in the status display column.

- 3) Select "File" → "Capture Title" from the menu of the memory status screen to read in Title data.
Select "File" → "Save IntVideo" from the menu of the memory status screen to read in IntVideo data.
- 4) Enter the image format and the file name and click "OK."
When the data to be read in is composed of multiple images, a number will be automatically appended at the end of the file name.

<Notes>

- For saving in of Title data, the image format is fixed to TARGA (32 bit/pixel, with α channel).
- For saving in of IntVideo data, the image format can be selected as TARGA, JPEG, or BMP (all 24 bits/pixel, no α channel).
- Capture the IntVideo data after the IntVideo playback has been stopped at the AG-MX70 main unit.
- Images cannot be transmitted while the "Loading..." display appears on the LCD screen immediately after the AG-MX70's power has been turned on or immediately after changes have been made to the image memory settings.
- While transmission is in progress, the LCD display of the AG-MX70 shuts down.

Recalling events

AG-MX70 events can be recalled from the PC.

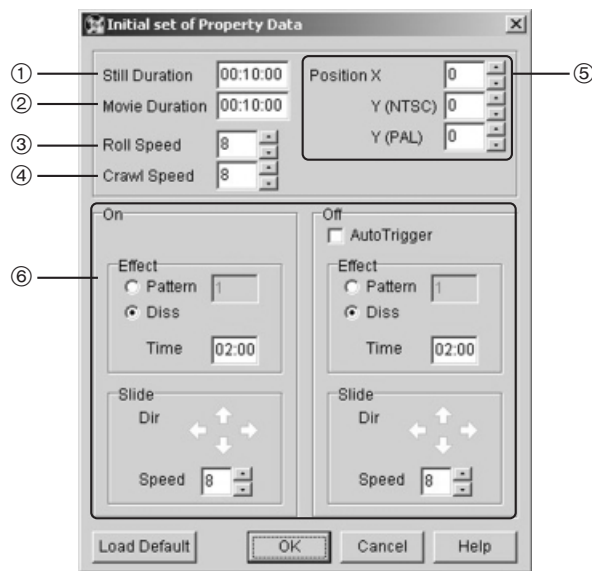
- 1) Select "AG-MX70 setup" from the "Tools" menu of the main window.
- 2) Input the number of the event to be recalled into the "Event Recall" column on the mixer setting window, and click the "Recall" button. The event is now recalled.

Other operations

Setting the initial properties

The initial values for the properties to be used with new data can be set on the “Initial set of Property Data” setting screen.

- 1) Select “Initial set of Property Data” from the Tools menu of the main window.
The “Initial set of Property Data” setting screen is displayed.
- 2) Set the individual items and click the “OK” button to change the settings.
All settings can be returned to the initial value by pressing the “Cancel” button.



① Still Duration

The duration is set for when Still is used as the data playback format.

② Movie Duration

The duration is set for when Movie Repeat is used as the data playback format.

③ Roll Speed

The speed is set for when Roll is used as the data playback format.

④ Crawl Speed

The speed is set for when Crawl is used as the data playback format

⑤ Position

The display position is set here. The vertical position is different for NTSC and PAL.

X: The horizontal position can be set from 0 to 719.

Y (NTSC): For NTSC, the vertical position can be set from 0 to 480. (Only even numbers.)

Y (PAL): For PAL, the vertical position can be set from 0 to 576. (Only even numbers.)

⑥ ON, OFF settings

The operation at the time of DSK ON and DSK OFF is set. For further details on each item, refer to “Setting the data playback properties” (page 86).

● AutoTrigger (OFF only)

When this is checked, the OFF Trigger is set to Auto.

● Effect

The pattern to be used for special effects and the special effects time are set here.

● Slide

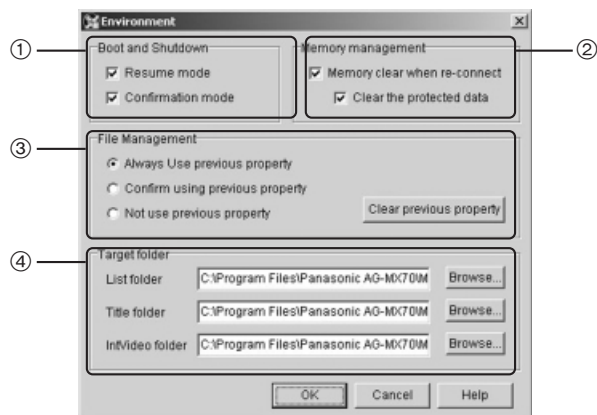
The slide direction and the speed are set here.

Other operations

Setting the operating environment

The operation settings for this application can be set on the operation environment screen.

- 1) Select "Operating environment" from the Tools menu of the main window.
The Environment screen will be displayed.
- 2) Set the individual items and click the "OK" button to change the settings.



① Boot and shutdown

The operation at the time of boot and shutdown of this application is set.

- **Resume mode**

When this is checked, the transmission list which was open when the application was shut down the last time will be opened at startup and the status effective at the time the application was shut down the last time will be re-established.

When this is not checked, a new transmission list will be opened at startup.

- **Confirmation mode**

When this is checked, the confirmation screen will be displayed when the application is shut down.

② Memory management

The operation when the AG-MX70 is connected to the PC is set.

When "Memory clear when re-connect" is checked, all Title and IntVideo data will be cleared when the AG-MX70 is connected.

Check "Clear the protected data" when data with the Protect setting is also to be cleared.

③ File Management

When adding an image that has once been used as title data to the transmission list, select whether the previous property settings are to be used.

The previous properties can be cleared using the "Clear previous property" button.

- **Always Use previous property**

When the previous properties are still available, the previous property settings are used again and again.

- **Confirm using previous property**

When the previous properties are still available, a confirmation screen for using or canceling the previous properties appears.

If the previous properties are not going to be used, alternative properties are handled as new data.

- **Not use the previous property**

The data will always be handled as new data.

④ Target folder

The folder to be opened first when opening or saving data is set. Enter the folder directly or click the "Browse" button and select from the displayed folder selection screen.

- **List folder**

The folder to be opened first for opening or saving a transmission list is set.

The default folder is the ListData folder created under the folder in which this application has been installed.

- **Title folder**

The folder to be opened first when opening or saving Title data is set.

The default folder is the TitleData folder created under the folder in which this application has been installed.

- **IntVideo folder**

The folder to be opened first when opening or saving IntVideo data is set.

The default folder is the IntVideoData folder created under the folder in which this application has been installed.

List of short-cut keys

| | | | |
|--|---------------|---------------------------|----------|
| Move the cursor to the top | Home | Select all the data | Ctrl + A |
| Move the cursor back by 10 | Left arrow | Delete the selected data | Delete |
| Move the cursor back | Up arrow | Cut out the selected data | Ctrl + X |
| Move the cursor ahead | Down arrow | Copy the selected data | Ctrl + C |
| Move the cursor ahead by 10 | Right arrow | Paste the data | Ctrl + V |
| Move the cursor to the bottom | End | Clear the selected data | Ctrl + R |
| Jump to the data in DSK | 0 | Clear all data | Ctrl + T |
| Jump to the data of the corresponding Mark setting | 1 to 9 | Undo | Ctrl + Z |
| Open the properties of the selected data | Enter | Redo | Ctrl + Y |
| Transfer the selected data | L | | |
| Play back the selected data | Space | | |
| Stop the data being played back | S | | |
| Automatically play back the data | Shift + Space | | |

Before calling for service

Troubleshooting

Contact your dealer if the problem persists even when you have checked the following items.

AG-MX70-related problems

| Problem | What to check |
|---|--|
| ● The power can not be switched on. | ● Is the plug of the power cable inserted properly in the outlet? ● Has the fan stopped operating? |
| ● There is no picture. | ● Is the power of the VTR or other connected equipment switched on? ● Are the cables connected correctly? ● Has fade been applied? ● Has the source been input correctly? |
| ● There is no color. | ● Is the monochrome selection switch set to ON? ● Is only "Y" provided as input instead of the composite signal? ● Has the source been input correctly? |
| ● There is no sound. | ● Has audio fade-out been applied? ● Has the source been input correctly? |
| ● The image does not change even when the transition lever is moved during mix/wipe mode. | ● Has the same signal been selected for A-side and B-side? |

MX-Navi-related problems

| Problem | What to check |
|---|---|
| ● A menu for title load or playback etc. is grayed out and operation is not possible. | The AG-MX70 has not been recognized by the PC. Check the following items. ● Is the power of the AG-MX70 switched on? ● Are the AG-MX70 and the PC connected correctly via a USB cable? ● Is the length of the USB cable less than 3 m? When operation is still not possible even though the above items are fulfilled, it is possible that the USB driver has not been installed successfully. Execute DrvUninstaller.exe in the DrvUninstaller folder of the setup CD-ROM to delete the USB driver (at this time the message "Cannot delete some files" may be displayed, but this does not present a problem), and then install the USB driver again. |
| ● Image transmission or reading has been performed, but the processing stopped and the message "AG-MX70 is not ready to transfer, Please check Power and connection, and try again.." is displayed. | Images cannot be transmitted or captured while the "Loading..." display appears on the LCD screen immediately after the AG-MX70's power has been turned on or immediately after changes have been made to the image memory settings. Wait until the "Loading..." display is cleared, and then try again. |
| ● The image does not change to DSK even when DSK playback operation is performed. | Check that the DSK/Fade items Key and Fill in the DSK/Fade menu of the AG-MX70 are set to Title. |

Before calling for service


MX-Navi-related problems

| Problem | What to check |
|---|---|
| <ul style="list-style-type: none">• Patterns set for DSK ON and DSK OFF for Title data are changed. | When the set pattern can not be used for DSK, the pattern is changed automatically to a different pattern. |
| <ul style="list-style-type: none">• The Title data has been cleared, but the data has not been deleted from the image memory. | When Protect has been set for the data, it will not be cleared even when clearing is performed from the menu of the main window. To clear data with the Protect setting, perform the clearing operation from the memory status window. |
| <ul style="list-style-type: none">• The button display of main window is abnormal. | <p>In a Windows 98 environment with certain video cards, the button display may become abnormal. Even if this problem should occur, operation of this software will not be influenced. It may be possible to eliminate the problem using one of the following methods.</p> <ul style="list-style-type: none">• Update the video card driver to the newest version.• Click "Advanced" on the "Settings" page of "My Computer" → "Control Panel" → "Display," open the "Performance" page on the displayed Properties screen, and set the hardware accelerator setting to "Basic" or "None." |

Specifications

[GENERAL]

| | |
|--------------------------|--|
| Power Source | : 120 V AC, 50/60 Hz |
| Power Consumption | : 52 W (with no optional accessories installed), 70 W (with all optional accessories installed) |

 indicates safety information.

| | |
|--------------------------------|---|
| Operating temperature: | 41 °F to 104 °F (+ 5 °C to + 40 °C) |
| Operating humidity: | Less than 80% (relative humidity) |
| Dimensions (W × H × D): | 16-3/4 × 7-3/4 × 15-3/4 inch (424 × 197 × 400 mm) |
| Weight: | 8.2 kg (with no optional accessories installed) 8.7 kg (with all optional accessories installed) |

[VIDEO]

| | |
|-----------------------------|---|
| Video format: | 525 (NTSC)/625 (PAL) switchable |
| Quantization: | Main input: 9 bit External input (EXT): 8 bit |
| Internal processing: | 4: 2: 2: 4 8 bits (ON/OFF switching for Dynamic Rounding processing enabled) Key: 13.5 MHz Y: 13.5 MHz Pb/Pr: 6.75 MHz |
| S/N ratio: | Component signal, Y: Less than -54 dB Pb/Pr: Less than -52 dB Composite signal, Y/C: Less than -50 dB |
| Band width: | Main input Y: 0.5 MHz to 4.5 MHz (±1.0 dB) Pb/Pr: 0.2 MHz to 2.0 MHz (+0.5 dB to -3.0 dB) External input (EXT) Y: 0.5 MHz to 4.5 MHz (±1.0 dB) Pb/Pr: 0.2 MHz to 2.0 MHz (±1.0 dB) |
| K factor: | Less than 1% |
| DG/DP: | Less than 4%/2° |

[AUDIO]

| | |
|----------------------------|--|
| Sampling frequency: | 48 kHz |
| Quantization: | Analog Input: 20bit, Digital Input (option): 24bit |
| Frequency response: | 20 Hz to 20 kHz (-1.0 dB to +1.0 dB) |
| Dynamic range: | More than 85dB (analog In/out) |
| THD: | Less than 0.05% (1 kHz) |
| Cross talk: | Less than -70 dB (1 kHz, between any two channels) |
| Headroom: | 20 dB/18 dB switchable |

Specifications

[VIDEO INPUT/OUTPUT]

| | |
|--|---|
| Analog component input/output connectors: | BNC × 4 (sources 1/2/3/4) Y: 1.0 Vp-p, 75 Ω Pb/Pr (525): 0.525/0.757 Vp-p switchable, 75 Ω Pb/Pr (625): 0.7 Vp-p, 75 Ω |
| Analog composite input/output connectors: | BNC × 8 (sources 1 to 8), 1.0 Vp-p, 75 Ω |
| YC input/output connectors: | Mini-DIN4 × 4 (sources 1/2/3/4) Y: 1.0 VP-P, 75 Ω C: 0.286 VP-P, 75 Ω (525)/0.3 VP-P, 75 Ω (625) |
| EXT (external input) connector: | BNC × 1 (Y/Pb/Pr), Analog component signals Y: 1.0 Vp-p, 75 Ω Pb/Pr (525): 0.757 Vp-p, 75 Ω Pb/Pr (625): 0.7 Vp-p, 75 Ω Key: BNC × 1, 1.0 Vp-p, 75 Ω Analog composite signals (genlock possible) |
| G/L input connector: | BNC × 1 (with loop-through configuration), 1.0 Vp-p, 75 Ω Composite signal (genlock selection enabled from G/L, EXT-Key) |
| Preview output connector: | BNC × 1, 1.0 Vp-p, 75 Ω |
| Advanced reference input connector: | BNC × 1 (with loop-through configuration), 75 Ω, composite signals Sync: 0.286 Vp-p (525)/0.3 VP-P (625) Burst: 0.286 Vp-p (525)/0.3 Vp-p (625) |

[AUDIO INPUT/OUTPUT]

| | |
|---------------------------------------|--|
| Analog audio (L/R) connectors: | XLR × 4 sets, +4/0/-3 dBu switchable, 10 kΩ, balanced |
| AUX input (L/R) connectors: | RCA × 2 sets, -10 dBV, 10 kΩ, unbalanced (AUX2 switchable with MIC) |
| Audio output (L/R) connectors: | Program 1: XLR × 1 set, +4/0/-3 dBu switchable, 47 Ω, balanced Program 2: RCA × 1 set, 10 dBv, 47 Ω, unbalanced |
| Mic input jack: | M6 × 1, -60 dBv, 2 kΩ, unbalanced (switchable with AUX2) |
| Headphone output jack: | M6 × 1, 8 kΩ, unbalanced |

[OTHER]

| | |
|----------------------------|---|
| Editor: | D-sub 9-pin, RS-422A/232C switchable RS-422A protocol; GVG/Sony switchable |
| Connectable Editor: | Panasonic: AG-A850, AJ-A900, SONY: BVE-2000, BVE-910, PVE-500 |
| Tally Out: | D-sub 9-pin, open-collector × 8 ch Collector current: Less than 50 mA, Maximum voltage: 35 V DC |
| GPI: | BNC × 1, Make-contact |
| USB: | Type-B connector × 1, USB Ver.1.1 (cable length: max. 3 m) |

Specifications

[SDI] (Option)

| | |
|---------------------------------|--|
| Video input connectors: | BNC × 4 (inputs 1/2/3/4), SMPTE 259M-C/EBU Tech.3267-E |
| Video output connectors: | BNC × 1, SMPTE 259M-C/EBU Tech.3267-E |
| Audio input connectors: | Embedded audio (channels 1/2, 3/4, 5/6, 7/8 switchable) |
| Audio output connectors: | Embedded audio (channels 1/2) |

[ACCESSORIES]

| | |
|-------------------------------------|----------|
| Power cable | 1 |
| Operating Instructions..... | 1 |
| MX-Navi installation CD..... | 1 |
| Warranty card | 1 |

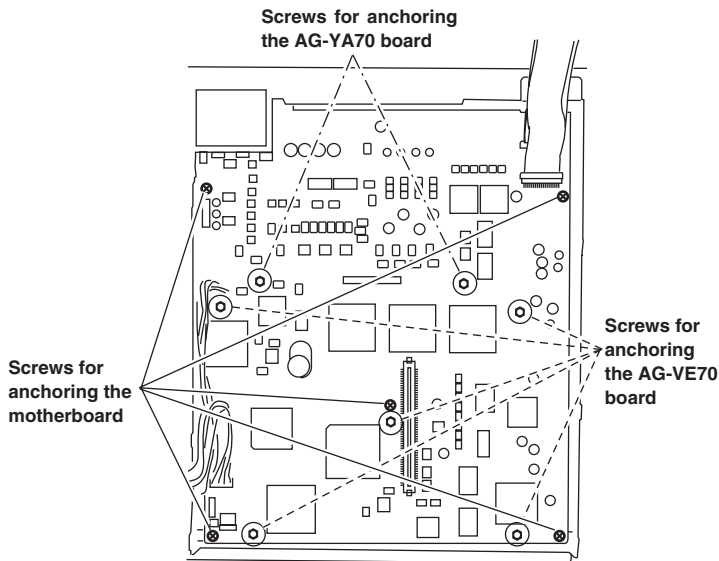
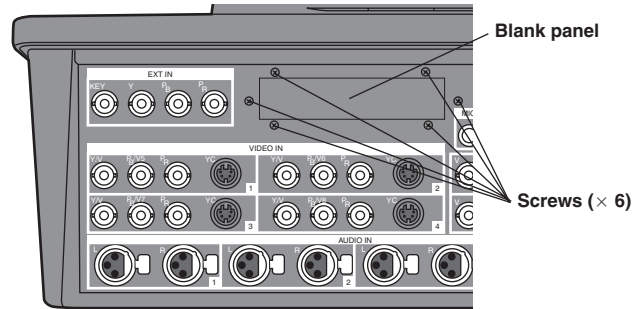
Installation of the AG-YA70

The AG-YA70 is an interface board that enables the AG-MX70 to be connected to a serial digital interface (SDI). Follow the procedure below to install it.

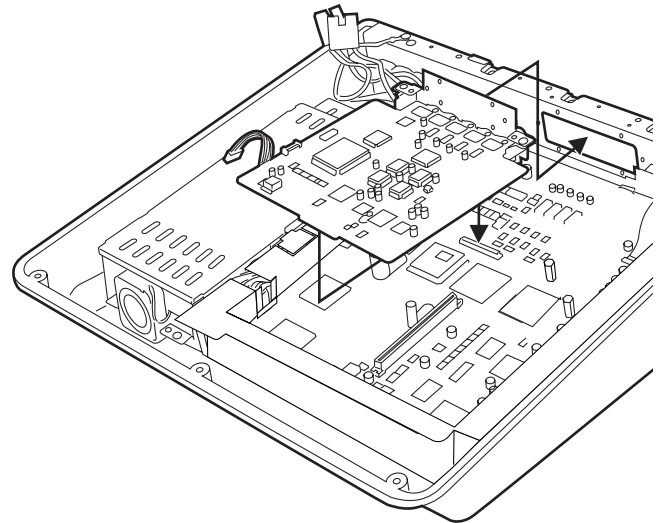
<Note>

Always consult your dealer or authorized service center regarding installation of the AG-YA70 in the AG-MX70.

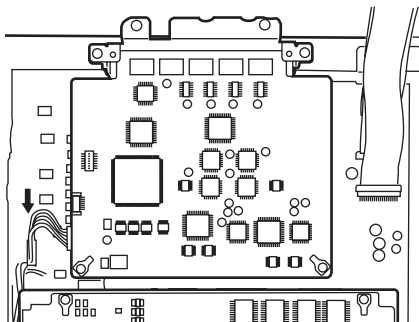
- 1) Turn off the power of the AG-MX70, remove the ten screws from the bottom panel, and detach the top part including the LCD. Refrain from using any force to pull the top part away from the bottom part since the two parts are still connected by cables. (Refer to the figure on page 101.)
- 2) Remove the 20 screws, and remove the shield plate.
- 3) Remove the six screws from the rear panel of the AG-MX70, and remove the blank panel.



- 4) Remove the two screws anchoring the AG-YA70 on the motherboard.
- 5) Slightly loosen the five screws anchoring the motherboard.



- 6) Refer to the figure on the right, and insert the AG-YA70 board.
- 7) Secure the two screws which were removed in step 4).
- 8) Secure the six screws which were removed in step 3).
- 9) Tighten up the five screws which were loosened in step 5).



- 10) Refer to the figure on the left, and plug the cable attached to the AG-YA70 into the AG-MX70.
- 11) Secure the screws which were removed in steps 2) and 1).

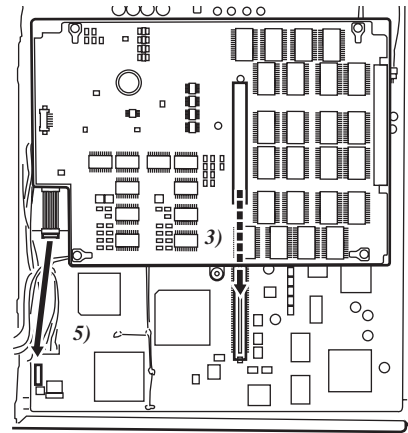
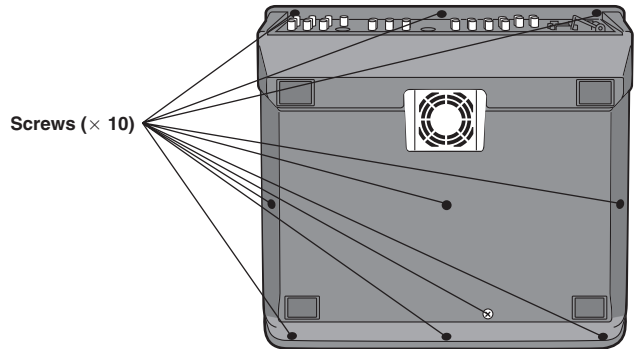
Installation of the AG-VE70

The AG-VE70 is a 3D effect board that enables the 3D patterns, etc. of the AG-MX70 to be used. Follow the procedure below to install it.

<Note>

Always consult your dealer or authorized service center regarding installation of the AG-VE70 in the AG-MX70.

- 1) Turn off the power of the AG-MX70, remove the ten screws from the bottom panel, and detach the top part including the LCD. Refrain from using any force to pull the top part away from the bottom part since the two parts are still connected by cables.
- 2) Remove the 20 screws, and remove the shield plate.
- 3) Refer to the figure on the left, and insert the AG-VE70.
- 4) Remove the five screws provided on the five hexagonal posts in the center of the motherboard. (Refer to the figure on page 100.)
- 5) In the same way, plug the cable attached to the AG-VE70 into the AG-MX70. Route the wires carefully ensuring that they do not make contact with the transition lever unit.
- 6) Secure the five screws which were removed in step 4).
- 7) Secure the screws which were removed in steps 2) and 1).



Specifications

[AG-YA70]

(SDI interface board: optional accessory)

Power Source: DC 5 V, 3.3 V
Power Consumption: 6.3 W

 indicates safety information.

Operating temperature: 41 °F to 104 °F
(+ 5 °C to + 40 °C)

Operating humidity: Less than 80%
Standard: SMPTE-259M-C standard
complied with

[AG-VE70]

(3D effect board: optional accessory)

Power Source: DC 5 V, 3.3 V
Power Consumption: 6.1 W

 indicates safety information.

Operating temperature: 41 °F to 104 °F
(+ 5 °C to + 40 °C)

Operating humidity: Less than 80%

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