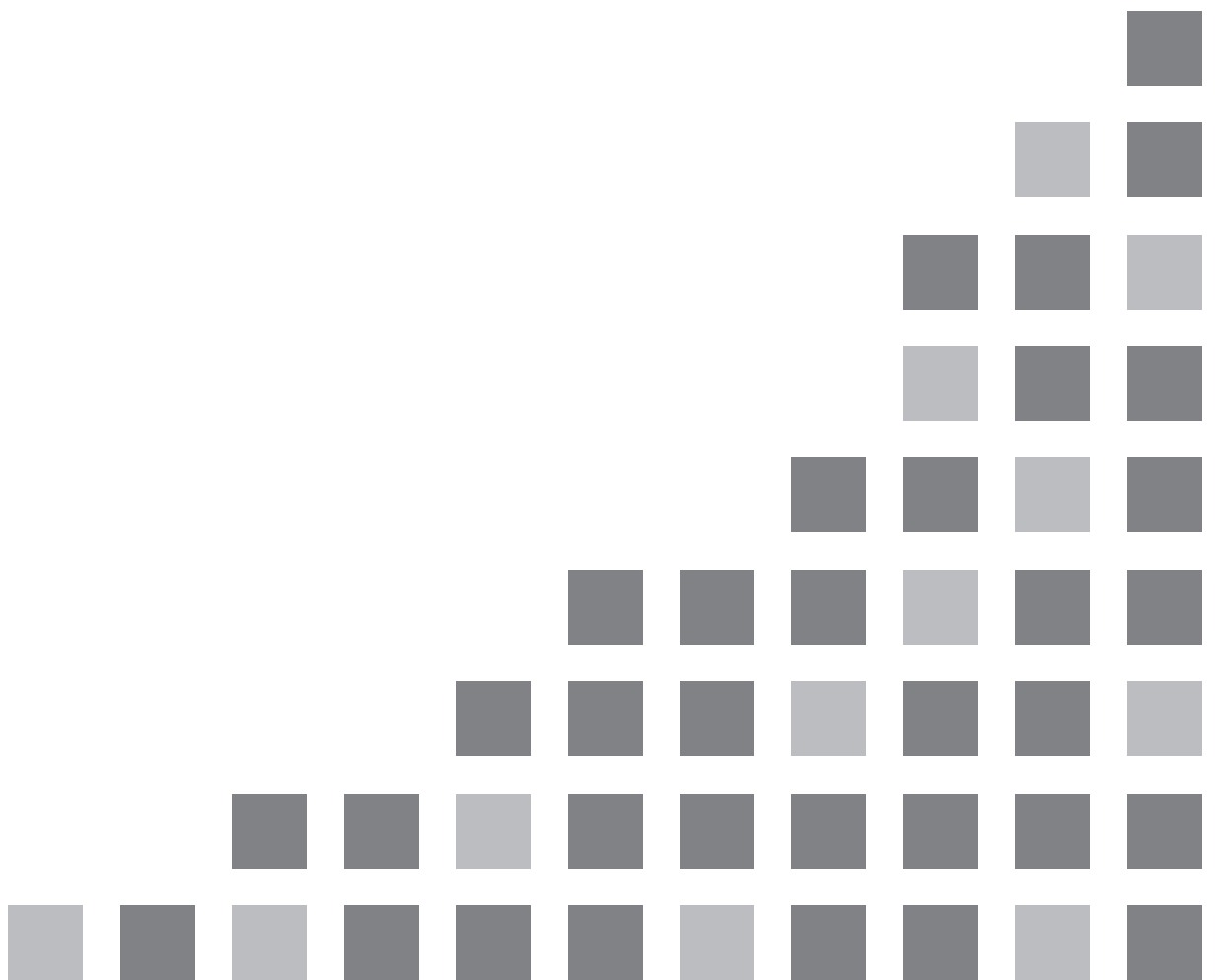


# Panasonic

## Operating Instructions

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### Software Control Panel AV-SF10



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# 1. About Software Control Panel

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## 1.1. Introduction

Software Control Panel is application software for AV-HSW10 that runs in Windows and Mac. This software is used to control the AV-HSW10 to perform operations such as switching material, turning keys on and off, controlling assignment of still images, and displaying lists of all material for the PGM, PVW, and other video buses while viewing a list of all material.

The main features of this software are as follows.

### **[Background transition and wipe operation]**

#### **1. Bus and material selection**

Select the PGM, and PVW and KEY1, and KEY2 buses and display and select the material of each of the buses. Either a video or still image is displayed for material display depending on the material.

#### **2. Transition operation**

Select from BKGD, and KEY1 as the transition target and then perform the transition operation.

- **Transition type setting**

Set a transition type from MIX, and WIPE.

- **Wipe direction selection**

Select the direction for the wipe when a transition is executed.

When BKGD is selected, N (Normal), N/R, and R (Reverse) can be selected.

When KEY1 is selected, N (Normal) and R (Reverse) can be selected.

- **Transition execution**

A transition is executed using any of the fader operation, AUTO (auto transition), and CUT (instant transition). AUTO and CUT are valid only with BKGD.

- **Transition pattern selection**

As the transition pattern, select one of the 16 patterns displayed in the multiple pages that can be switched by the <1, 2> buttons.

### **[KEY operation]**

#### **1. Transitions can be executed or canceled for each key.**

#### **2. Display the setting information of the material set for each key.**

- Material thumbnails
- Transition type and transition time

#### **3. Transition time can be changed for each key.**

#### **4. Transition type can be changed for KEY1.**

**[Memory operation]**

1. **Display and select the information of SHOT MEM, and Still (still image) memory.**
  - SHOT MEM (shot memory): Display of thumbnails or names and numbers, rename, and playback by clicking a thumbnail.
  - Still (still memory): Display of thumbnails and names.
2. **Still can be recalled from both the PC and AV-HSW10 internal storage.**

**[Menu panel operation]**

1. **The menu screen on the menu panel is displayed and can be operated.**

**[Material video status display]**

1. **Input materials (SDI/HDMI/IP input), output materials (SDI/HDMI/IP/UVC output), all bus materials, and MV materials can be displayed as thumbnails and names.**

**[Maintenance function]**

1. **This can search, connect to and synchronize with the AV-HSW10 to be connected to the software.**

## 1.2. Operating Environment

For details on the operating environment for this software, see the Panasonic website ("Software download" at <https://www.pass.panasonic.co.jp/p2ui/guest/TopLogin.do?lang=en>).

## 1.3. About the Information in This File

This file is for both Windows and Mac. Unless otherwise stated, the information included in this file is common to both Windows and Mac.

The screenshots used in this file are captured from Windows. Although the screen layouts are for the most part common to Windows and Mac, there are differences with the following parts.

- **[Minimize], [Maximize], and [Close] buttons at the top of windows**

The display states and display positions differ between Windows and Mac.

- The illustrations and screen displays in this file may differ from what actually appears.
- A personal computer is referred to as a "PC" in this file.

## 1.4. **About Trademarks and Registered Trademarks**

- Microsoft and Windows are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.
- Mac and macOS are trademarks of Apple Inc., registered in the U.S. and other countries.
- Other company names and product names appearing in this document are trademarks or registered trademarks of their respective owners. Furthermore, the TM and ® marks are not indicated in this document.

## 1.5. **Information About the Software for This Product**

This product includes software licensed under the MIT, LGPL, BSD, Ms-PL, and MPL/GPL/LGPL licenses as well as software licensed under the following individual licenses.

Libpng: <http://www.libpng.org/pub/png/libpng.html>

jQuery: <https://jquery.org/license/>

jQuery UI: <https://github.com/jquery/jquery-ui/blob/master/LICENSE.txt>

## 1.6. **Caution Regarding Network Usage**

Proper operation may not be possible depending on your network environment. In that case, please review the network environment.

## 2. Setup

---

### 2.1. Operation Device Configuration

This software operates in the following device configuration.

- 1) PC: For running this software. Operation is performed with a keyboard and a mouse.
- 2) PC monitor: Capable of full HD (1920x1080) resolution display. If the monitor has a touch panel function, operation can be performed with touch operations on the touch panel instead of click operations.
- 3) AV-HSW10: The switcher itself. Connection between the PC and switcher is made through the <LAN> terminal.

**<Note>**

- Only one PC can be connected to the AV-HSW10.
- In the case of a PC with a built-in monitor such as a notebook PC, check that the monitor supports a display resolution of 1920x1080 or higher and use it set to 1920x1080 (or 1920x1200).
- Frames may be dropped or black or white images may appear when displaying material due to the conditions of the PC.

### 2.2. Installation

Obtain the compressed package for your operating system environment from the website and then extract it. Then start the extracted installer and perform the installation work as described on the screen. For details, please see the AV-SF10 Installation Guide.

## 3. User Interface Layout

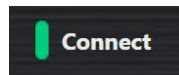
### 3.1. Basic Screen Layout

The basic screen layout consists of the following three areas.

① **Information display area:**

1. Connect icon:

This indicates the status of the connection with the AV-HSW10. It is lit in red when the connection is disconnected, and in green when the connection is connected.

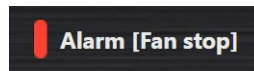


**<Note>**

- Once the Connect icon lights red to indicate the connection disconnected state, the connected state can not be restored automatically even if, for example, the connection state recovers. Check the IP address indication from the Maintenance screen and then reconnect by clicking the Connect button again.

2. Alarm icon:

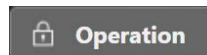
This indicates the alarm status of the AV-HSW10. It is not lit when an alarm is not occurring and lit in red when an alarm is occurring. When an alarm occurs, the type of alarm is displayed.



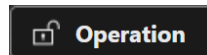
3. Operation button:

This button enables and disables user operations in each mode.

Enabled: When user operation is disabled

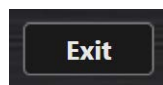


Disabled: When user operation is enabled

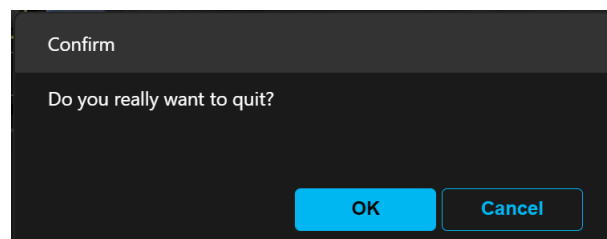


4. Exit button:

This closes the software.



Clicking the Exit button displays the confirm dialog as shown below. Click the OK button to close the software.



② **Mode selection area:**

- 1. Mode selection buttons:

These are used to select any of the Control Mode, Menu Panel, Video Status, Maintenance, and Source Setting for the mode.

- 2. Mode Lock button:

This button enables and disables the mode selection buttons.

Enabled: When mode change is disabled



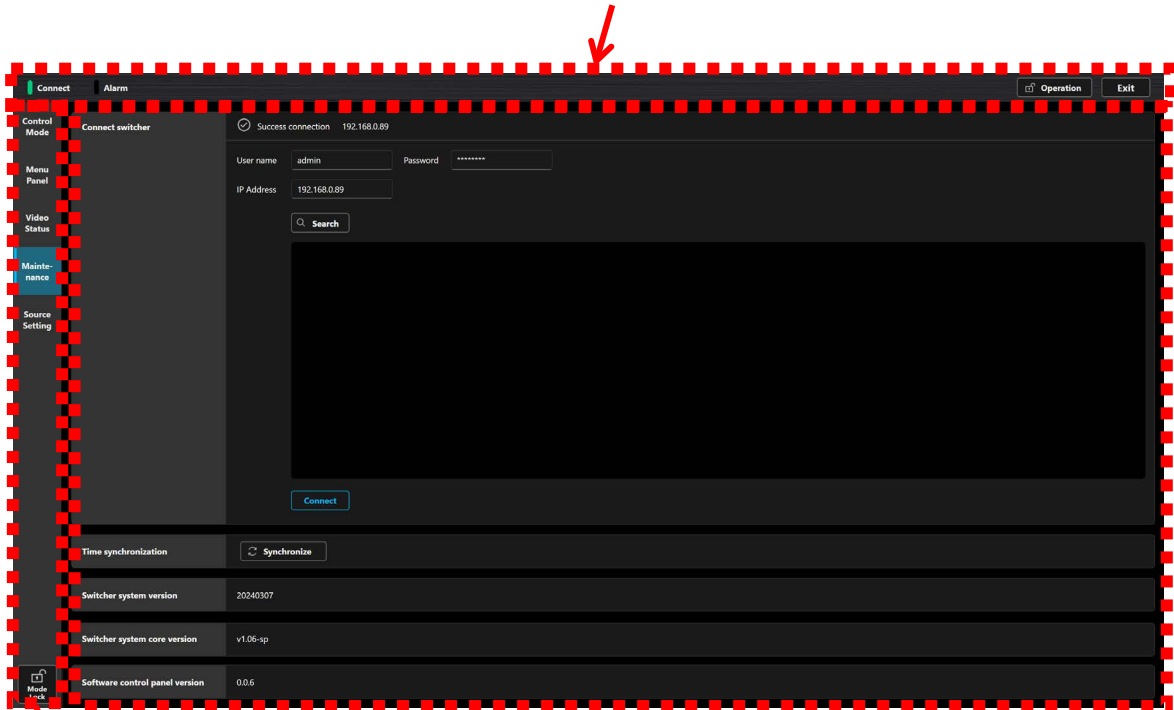
Disabled: When mode change is enabled



③ **Sheet area:**

This area displays the screen for the mode selection button clicked in the mode selection area of ②.

① Information display area



② Mode selection area

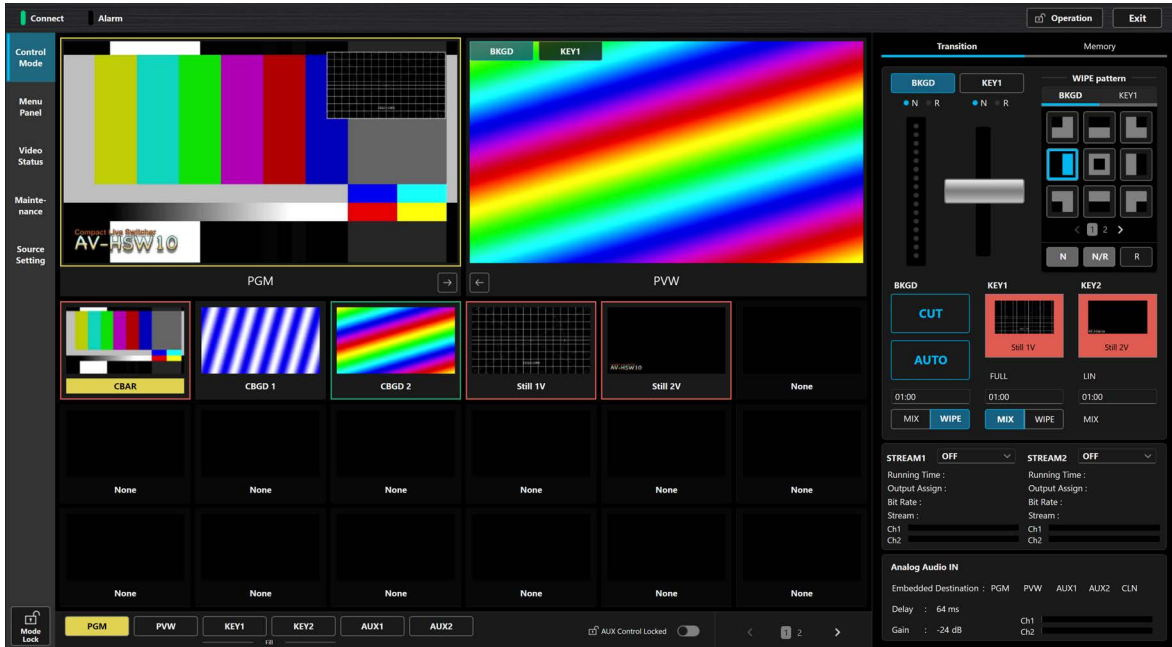
③ Sheet area



### 3.2. Sheet Area Layout

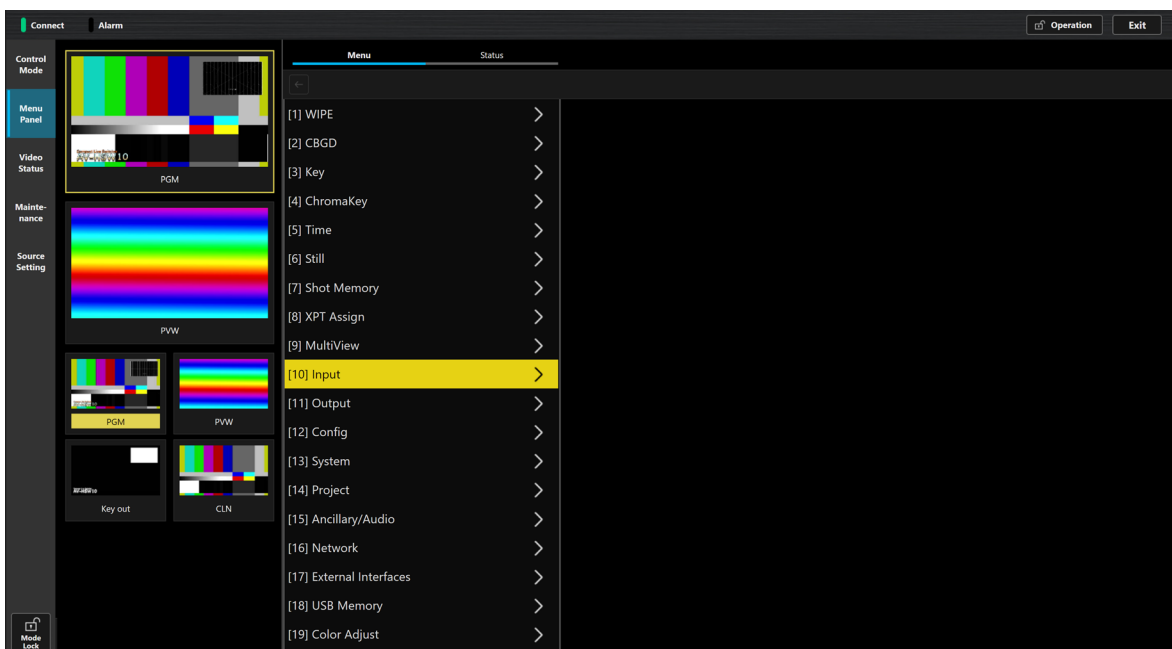
This area displays the screen corresponding to the clicked mode selection button.

1. **Control Mode screen:** This screen is for operating the switching and other functions while checking the video material of the AV-HSW10.



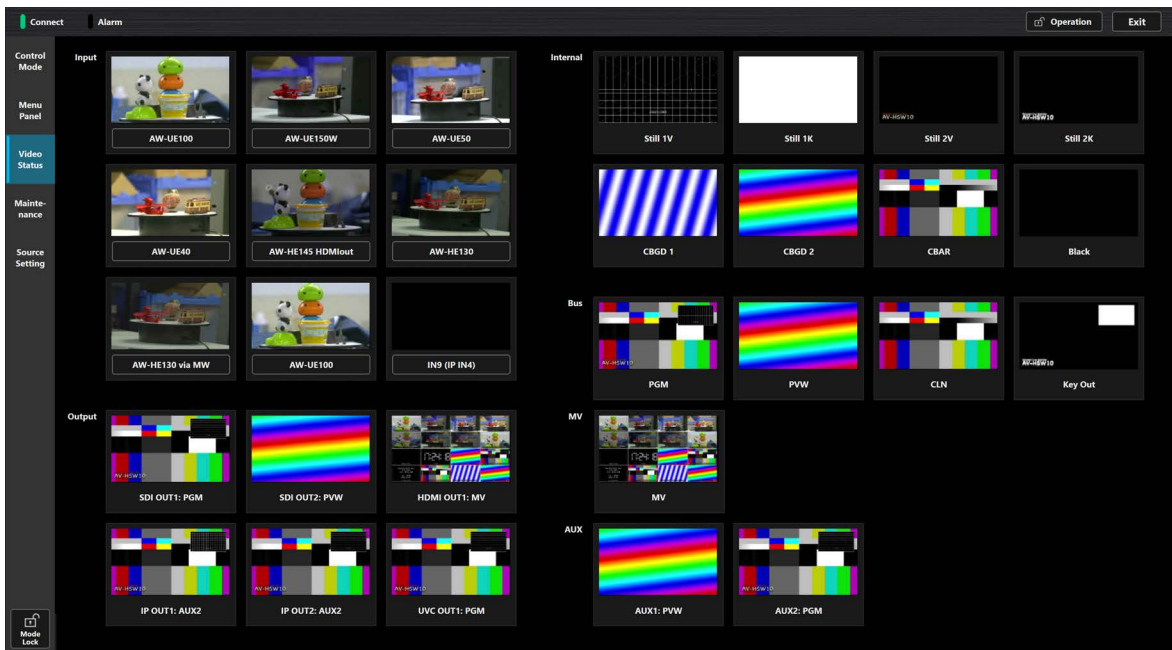
Control Mode Screen

2. **Menu Panel Screen:** Displays the menu screen which appears on the output destination of the AV-HSW10. Additionally, thumbnails of each internal bus video are displayed on the left side, above which are two windows that display enlarged thumbnails of selected bus videos.



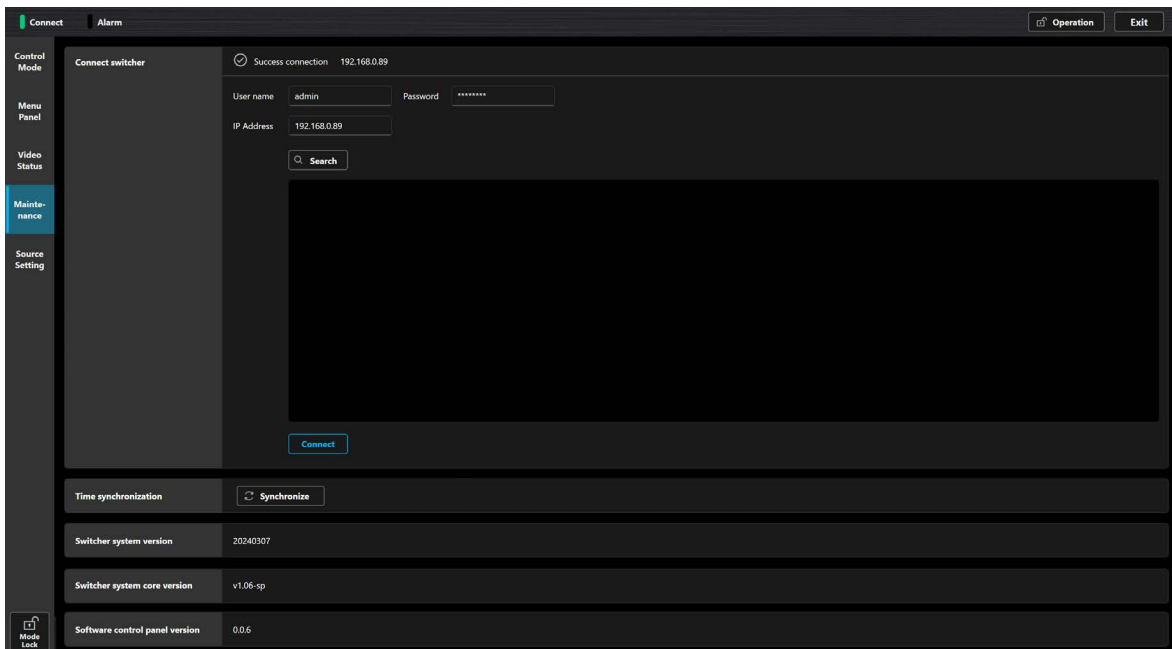
Menu Panel Screen

- 3. **Video Status Screen:** This screen displays all input materials, all output videos, internal materials (still images, etc.), buses, AUX, and multi-view video materials of the AV-HSW10.



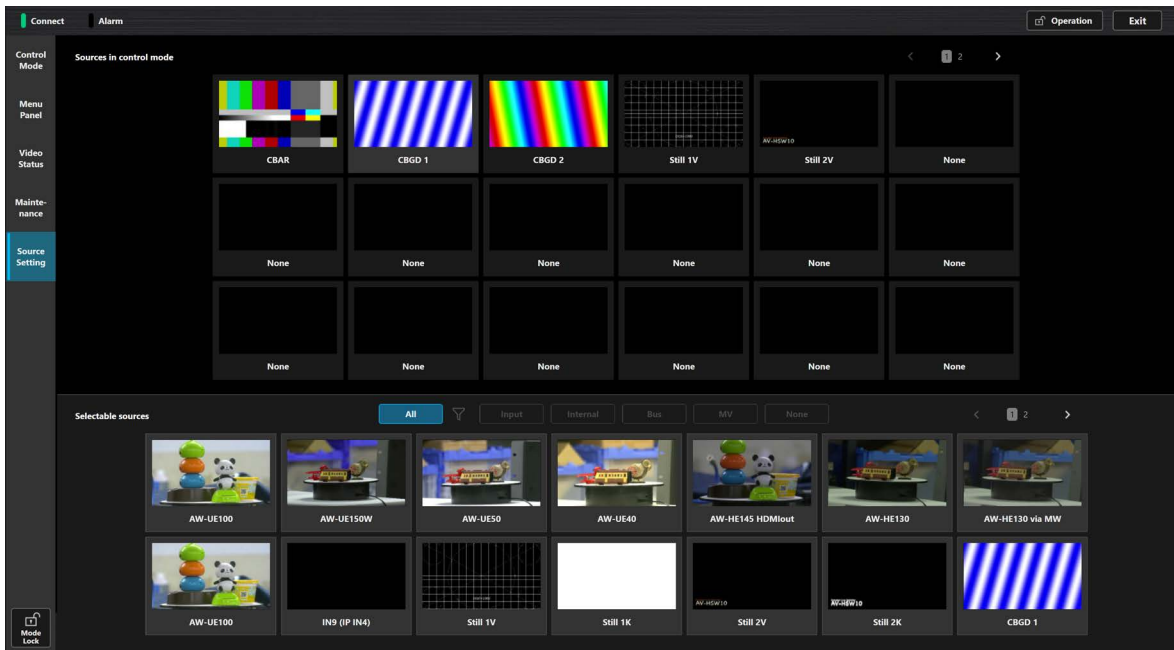
Video Status Screen

- 4. **Maintenance screen:** Searches for the AV-HSW10 unit to be connected, sets its IP address, displays its software version, and synchronizes its time with the PC.



Maintenance Screen

- 5. **Source Setting screen:** This screen allows you to assign any input materials to the material assignment area displayed in the lower part of the Control Mode screen.



Source Setting Screen

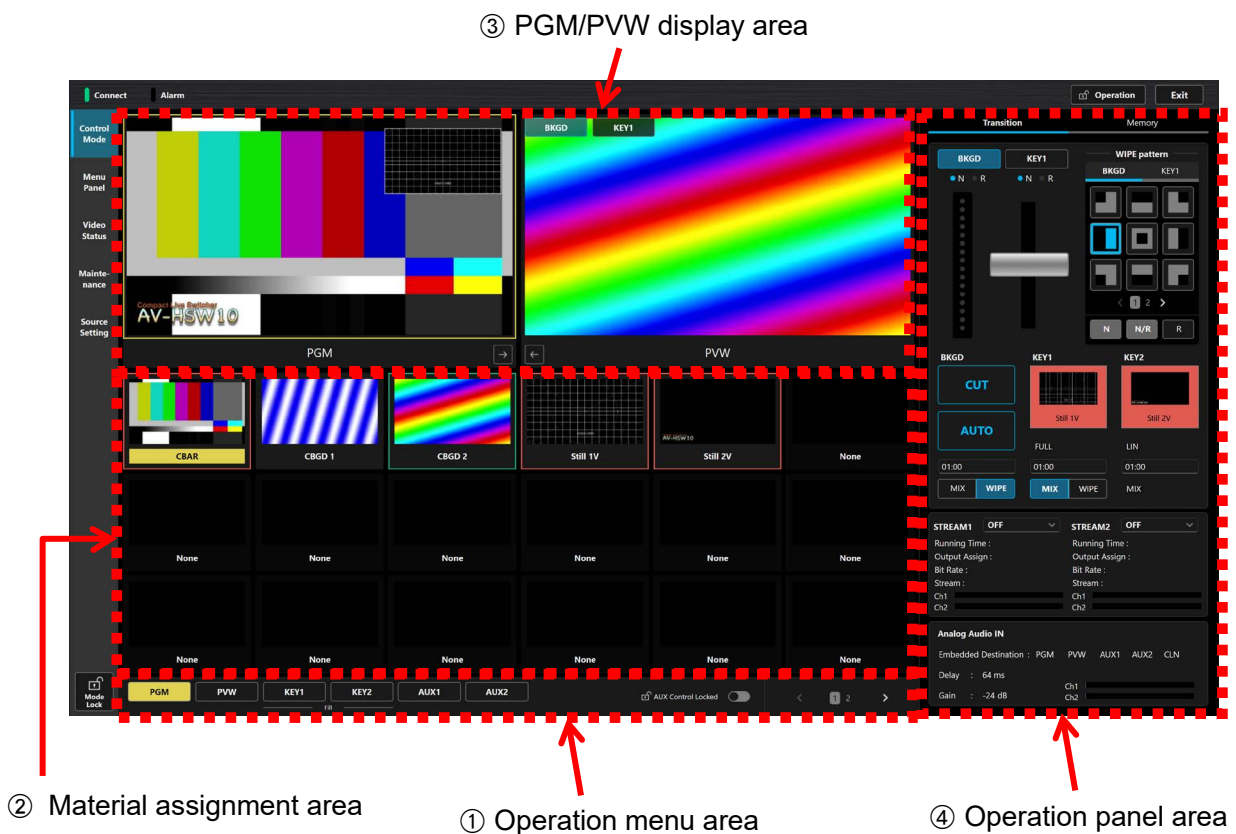
## 4. Control Mode Functions

### 4.1. Function Overview

In the Control Mode screen, operations such as the following are possible.

- ① Displays PGM, PVW, AUX1, and AUX2 images, and allows switching between PGM/PVW and AUX displays by selecting buttons in the operation menu area.
- ② Switch the specified bus video by directly clicking to select the input material displayed as a video, and tally display in input material frame
- ③ Specifiable buses: PGM, PVW, KEY1, KEY2, AUX1, and AUX2.
- ④ Transition operations (fader, AUTO, and CUT) can also be performed by click operations
- ⑤ Transition time can be set as KEY control
- ⑥ Thumbnail display of material assigned to KEY is possible
- ⑦ Displaying and changing the name of SHOT MEM is possible
- ⑧ Still selection and thumbnail display are possible.

### Screen Layout Display



#### ① Operation menu area

- Bus selection buttons:  
These are the bus selection buttons for choosing any of PGM, PVW, KEY1, KEY2, AUX1, and AUX2.
- The text below the KEY1 and KEY2 buttons shows that Fill is the target of KEY bus operation. Fill/Source settings of Key Source Signal Coupling are reflected.
- The AUX Control Locked button locks the AUX1 and AUX2 buses so that they cannot be selected.

② **Material assignment area**

This area displays a total of 18 material videos (up to 24 materials divided into up to two pages). To change the page, ① you can either select the < (previous) or > (next) button on the right side of the operation menu area, ② choose one of the page numbers displayed on the right side of the operation menu area, or ③ swipe left (previous) or right (next) in the page display on the left side of the operation menu area. Also, the names are displayed below the materials. The bus target to assign material can be specified by clicking any of the PGM, PVW, KEY1, KEY2, AUX1, and AUX2 buttons on the left side of the operation menu area of ①. The material name of the material selected for the specified bus target is indicated by yellow highlighting. Furthermore, the frame of that material is red if Red Tally or green if Green Tally is assigned as the tally.

Set the materials of the material assignment area in the Source Setting screen.

PGM, PVW, CLN, Key Out, and MV can only be assigned to AUX.

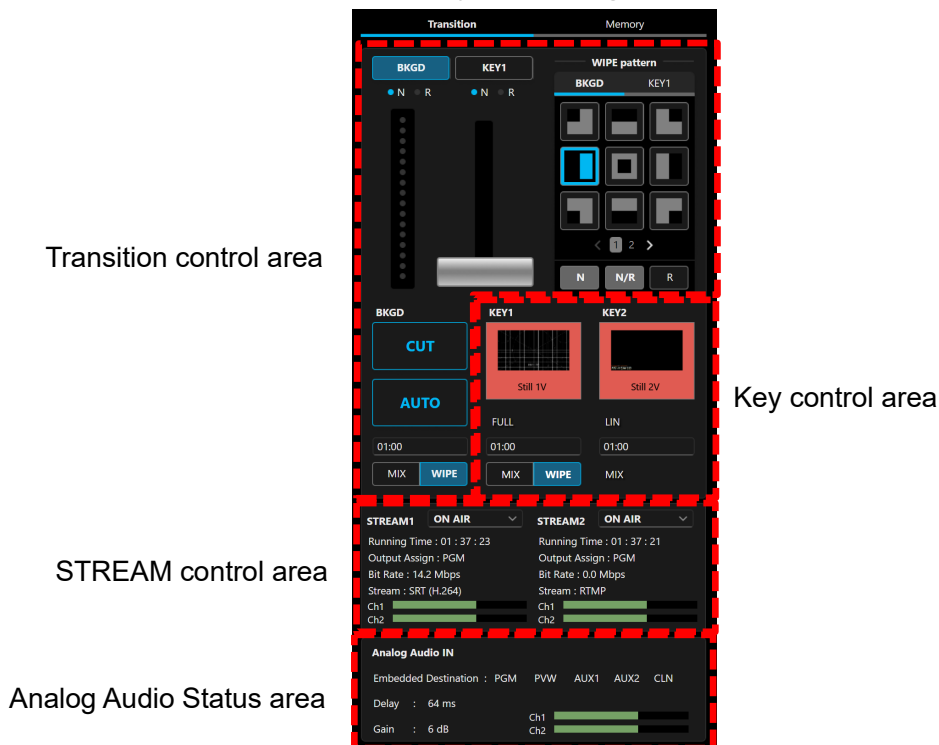
③ **PGM/PVW display area**

Displays the PGM, PVW video. Under default settings, the PVW video appears on the left and the PGM video appears on the right. If you want to switch the positions of the two displays, click the → or ← button. The display positions from previous sessions will be remembered each time you start the software. The next transition setting state (BKGD/KEY1) is displayed superimposed on the PVW video. The corresponding material display area in the material assignment area of ② is highlighted yellow.

④ **Operation panel area (screen has two pages)**

- Page buttons: These page buttons change the display of the operation panel area.

④ - 1: Screen Layout of Page 1 (Transition)



- The screen includes the following four areas.

1) Transition control area

(1) BKGD/KEY1 buttons:

Set the next transition selection target (linked with the superimposed display of the next transition setting status of the PGM/PVW display area).

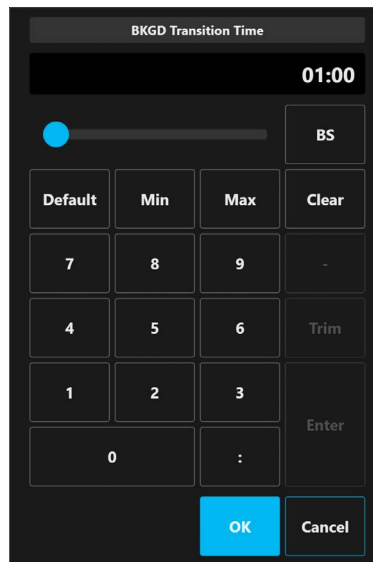
## (2) Control area:

This area contains the following buttons, etc.

- Fader:  
Execute a transition using the fader operation.
- WIPE pattern selection area (3x3):  
Select the WIPE pattern. Pages can be changed with the <1, 2> buttons.
- WIPE direction setting buttons (N, N/R, R):  
Set the WIPE direction by selecting from N, N/R (BKGD only), or R.
- Transition time of background:  
Set the transition time. The following two setting methods are provided.

## i) Text editing

A mouse click or touch displays the numeric keypad entry dialog shown in the figure below. If you click the OK button after setting the time, the setting is applied and the numeric entry dialog box will close. If you click the Cancel button, the settings up to that point are canceled and the dialog box will close.



## ii) Drag operation

Touching or clicking the transition time area and dragging up increases the time, while dragging down decreases the time. The transition time will be displayed in red during drag operations.

Double-clicking the transition time area restores the initial value (1 second).

- Transition type (MIX/WIPE) of background:  
Select one of the transition types.
- AUTO button:  
Execute the AUTO transition of background.
- CUT button:  
Execute the CUT transition of background.

## 2) Key control area

The following information is displayed for the bus material of each selected bus.

- Key type: LUM(CHR OFF)/LUM(CHR ON)/LIN/CHR/FULL
- Transition type (MIX/WIPE) (KEY1 only)
- Transition time

Set the transition time using the same method as the background transition time.

- Thumbnail and name of assigned material

The thumbnail sections serve as image buttons to execute transition of KEY individually and also have the role of LEDs for indicating the transition state of KEY. It flashes red during key-in and lights red when the transition is completed. It lights red during key-out and goes off when the transition is completed.

## 3) STREAM Control area

You can select between three states for each of the IP outputs (SRT/RTMP): ON AIR (output), STDBY (standby), and OFF.

Select for each output from the pull-down menu.

The following information is also displayed for each IP output (SRT/RTMP).

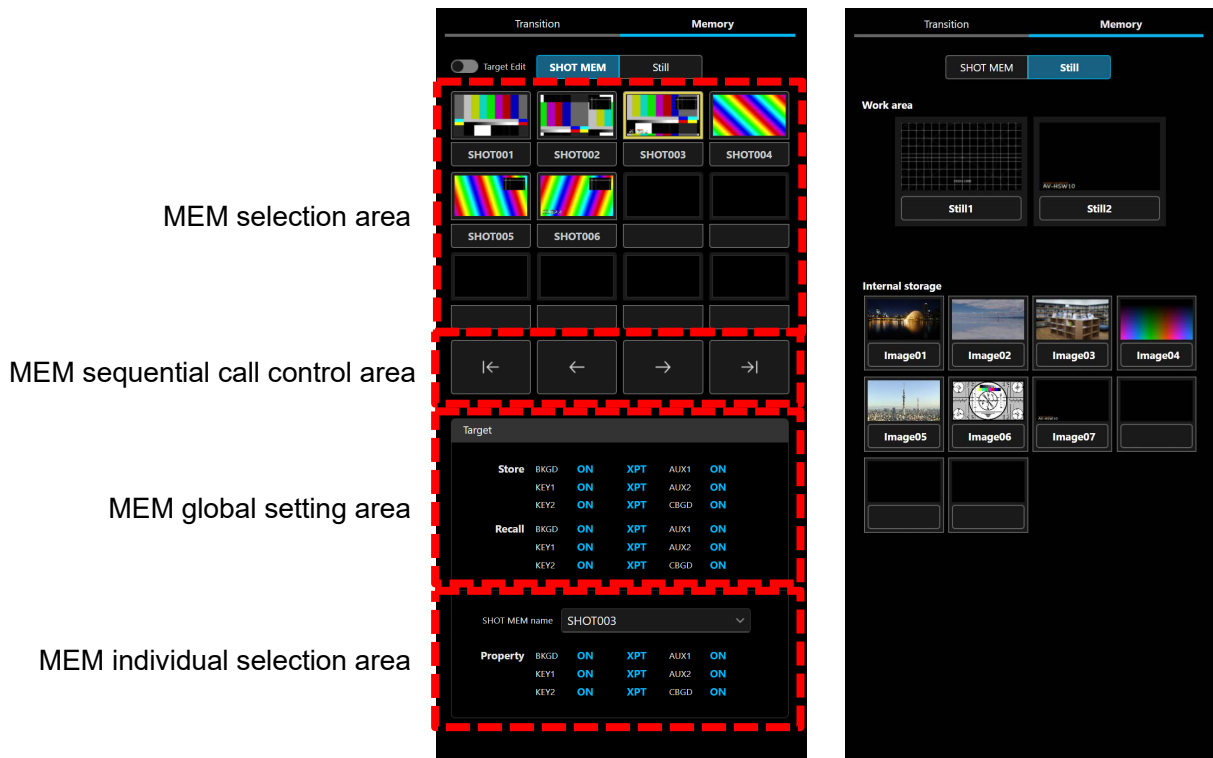
- Running Time
- Output Assign
  - During STDBY, the display switches to the material assigned as the standby output material.
- Bit Rate
- Stream
- Ch1/2 Audio level display for embedded audio

## 4) Analog Audio Status area

The following information is displayed for analog audio input.

- Embedded Destination
- Delay
- Gain
- Ch1/2 Audio level display for analog audio

④-2: Page 2 (Memory) Screen Layout



- Select an operation target by button-click in the following areas.

1) SHOT MEM

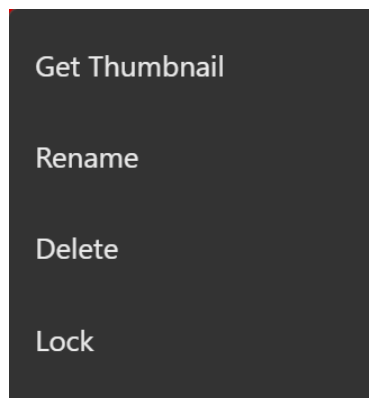
(1) MEM selection area

Composed of thumbnails numbered 1–12.

Clicking on a thumbnail recalls the applicable SHOT MEM.

The portion of the thumbnail that has been played is marked with a yellow frame.

Clicking on the number of a registered SHOT MEM displays the following context menu.



- Get Thumbnail: Registers the current screen layout as a thumbnail.
- Rename: Renames a registered SHOT MEM. The default is SHOT0\*\*.
- Delete: Deletes a registered SHOT MEM.
- Lock: Protects a registered SHOT MEM by prohibiting its renaming or deletion. When locked, a lock icon appears in the upper left corner of the thumbnail to indicate that the thumbnail is locked. To cancel the protection, Unlock is displayed in the context menu.

Clicking on a number where no SHOT MEM has been registered displays the Store, allowing the current state to be registered as a SHOT MEM.



(2) MEM sequential call control area

Allows registered SHOT MEMs to be recalled in sequence.



recalls the first or last SHOT MEM.



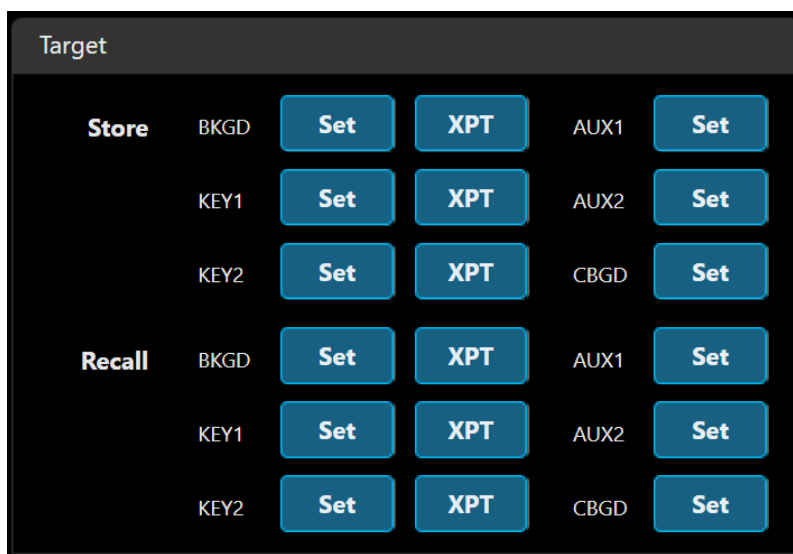
recalls the SHOT MEM preceding or following the current SHOT MEM.

(3) MEM global setting area

Displays settings for storing and recalling targets for the entire SHOT MEM.

Turning on Target Edit at the top allows you to change the target of all SHOT MEMs to Store/Recall.

- Setting and XPT can be selected for BKGD, KEY1, and KEY2.
- Setting can be selected for AUX1, AUX2, and CBGD.



(4) MEM individual selection area

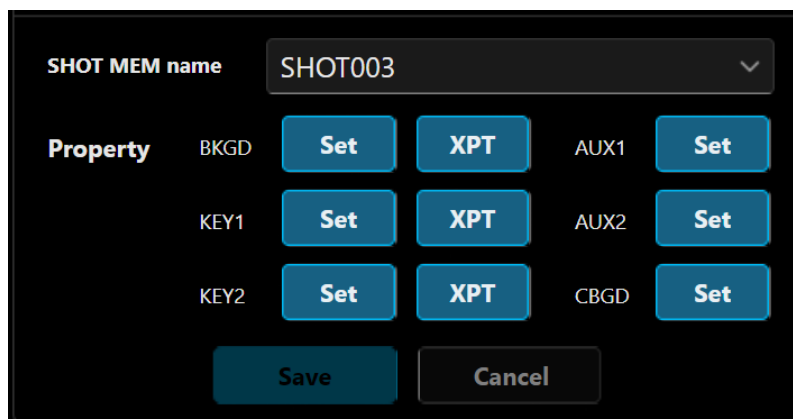
SHOT MEM name shows the name of the currently selected SHOT MEM. The selection can be changed using the pull-down menu.

The setting of the selected SHOT MEM target is displayed in Property.

By turning on Target Edit at the top, you can set the target for the applicable SHOT MEM.

To change the setting, click Save.

If you do not want to change the setting, click Cancel.

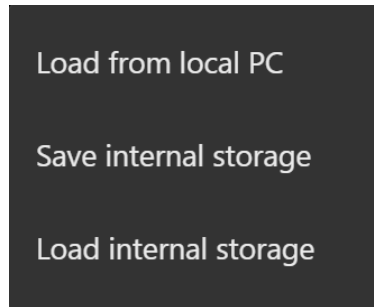


2) Still

(1) Work area

Holds still data that can be selected as internal material (Still1/2) on the AV-HSW10. This area displays thumbnails and names of each of the Still1/2 materials.

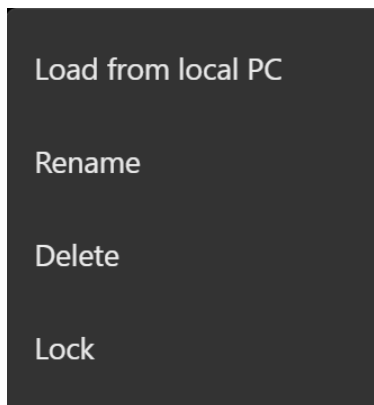
Clicking on a name displays the following screen as a context menu.



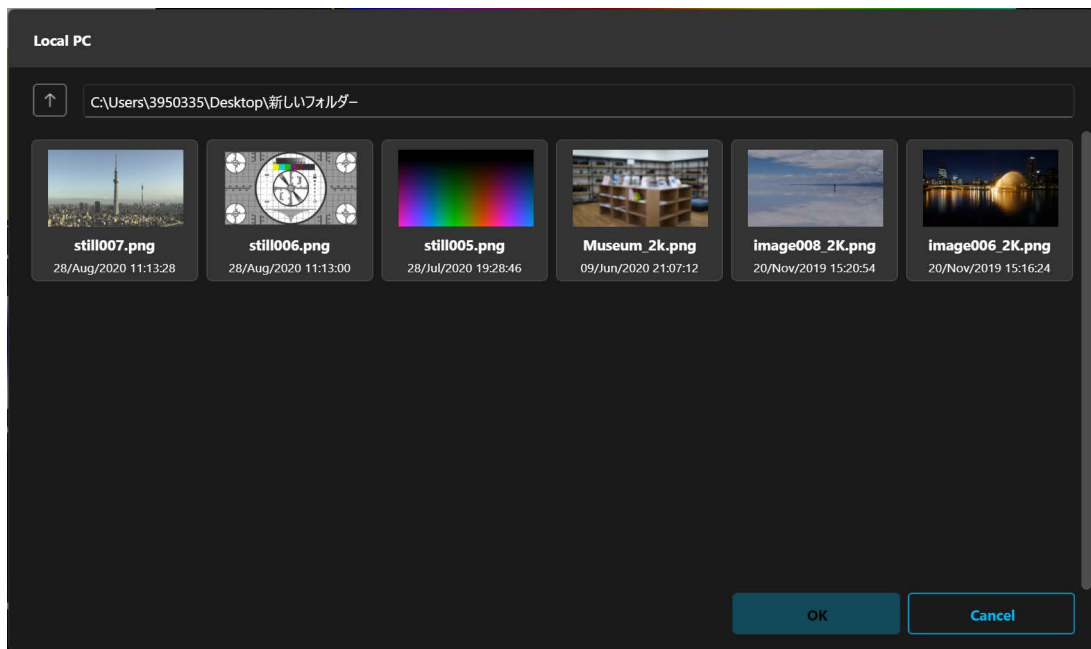
Load from local PC supports PNG, JPEG, and GIF formats. When loading a still that is larger than HD size, it is automatically scaled down to HD size before importing. An error message is displayed if the size is greater than 4K. With the JPEG and GIF formats, K channel of the still is white (opaque). With the PNG format, it is also white for files without an alpha channel. Load from local PC loads data from the PC running this software. Up to 100 folders and files (jpg, png, gif) are displayed. No more than 100 items can be displayed. Divide the folders and files and reopen them. Save internal storage saves data to AV-HSW10 internal storage. (Available only through the Software Control Panel) Load internal storage loads data from AV-HSW10 internal storage. (Available only through the Software Control Panel)



(2) Internal Storage

AV-HSW10 internal storage can accommodate up to 10 still data items. This area displays thumbnails and names of still data items stored in internal storage. Clicking on a name displays the following screen as a context menu.



Use Load from local PC to load data from the PC running this software. The following selection dialog appears When this software is run for the first time, the initial folders are as follows.  
With Windows: C:\  
With Mac: /Users



You can move to another folder by clicking the Move to Higher Folder icon  in the folder list. Alternatively, you can move to any desired folder by double-clicking the folder icon . The folder with the loaded file will be selected the next time the selection dialog is opened.

Use Rename to change the name of loaded data.

Use Delete to erase data stored in internal storage.

Use Lock to protect data by prohibiting its renaming or deletion.

When locked, a lock icon appears in the upper left corner of the thumbnail to indicate that the thumbnail is locked. To cancel the protection, Unlock is displayed in the context menu.

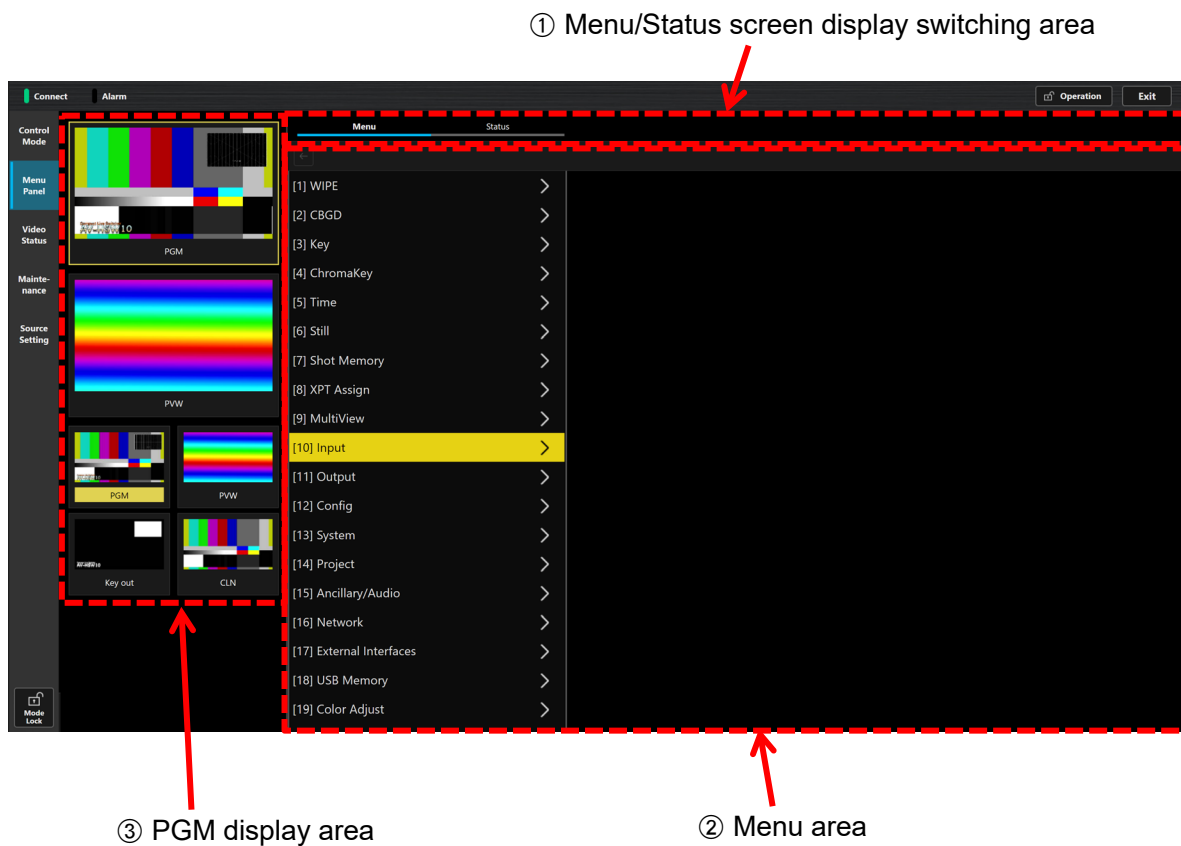
## 5. Menu Panel Functions

### 5.1. Function Overview

In the Menu Panel screen, operations such as the following are possible.

- ① You can switch between the Menu screen and Status screen.  
For information on the Status screen display, refer to the AV-HSW10 instruction manual .
- ② The menu screen displayed on the output destination of the AV-HSW10 appears and menu operations are possible.  
The operational relationship with the AV-HSW10 is such that priority is given to later operations.
- ③ Thumbnails of each internal bus and enlarged thumbnails (up to 2) of selected internal buses are displayed.

### Screen Layout Display



- ① **Menu/Status screen display switching area**  
The Menu tab displays a menu screen for configuring the device.  
The Status screen lists the following configuration information.
  - Wipe pattern settings for BKGD and KEY
  - Transition time settings for BKGD, KEY1, KEY2, and FTB
  - USER button assignment settings
  - Assignment settings for XPT1–12

**② Menu area**

The menu screen displayed on the AV-HSW10 main unit appears at the output destination and can be operated.

A button located on the upper left side of the menu area can be used to move up one level in the menu hierarchy.

In addition to mouse operation, the arrow keys, BS key, ESC key, and Enter key on the keyboard can also be used.

The left and right arrow keys can be used to move through the menu hierarchy.

The up and down arrow keys can be used to move menu items up and down.

The BS and ESC keys can be used to move up one level in the menu hierarchy.

The Enter key can be used to select menu items.

**③ PGM display area**

There is an area to display thumbnails of the following internal bus materials and an area to display two enlarged thumbnails. After selecting the enlarged thumbnail area, select thumbnails of internal bus materials to enlarge and display them in that area. The frame of a selected thumbnail is displayed in yellow.

- Internal bus materials:  
PGM, PVW, CLN, Key out

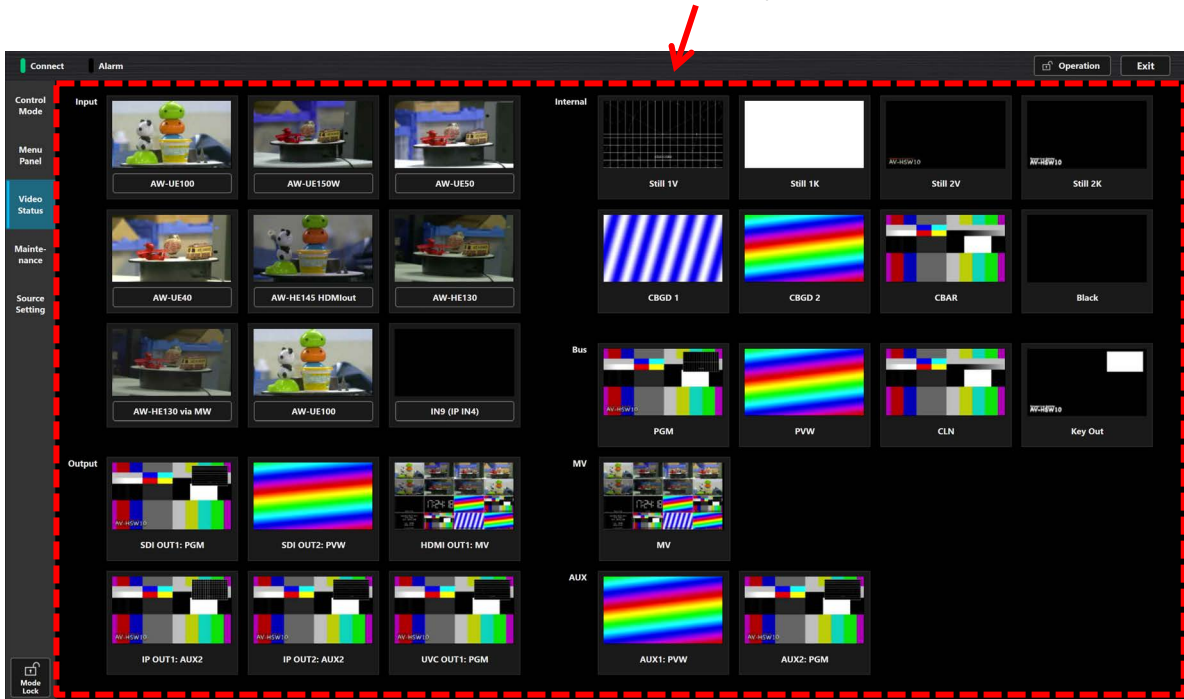
## 6. Video Status Functions

### 6.1. Function Overview

This screen displays all input materials, all output videos, internal materials (still images, etc.), buses (PGM, PVW, CLN, Key Out, and AUX buses), and multi-view video materials of the AV-HSW10.

#### Screen Layout Display

① Video display area



① Video display area

Displays the videos of the materials assigned to Input, Internal, Bus, MV, AUX, and Output. Input material can be renamed by clicking on the name of the input material.

# 7. Maintenance Functions

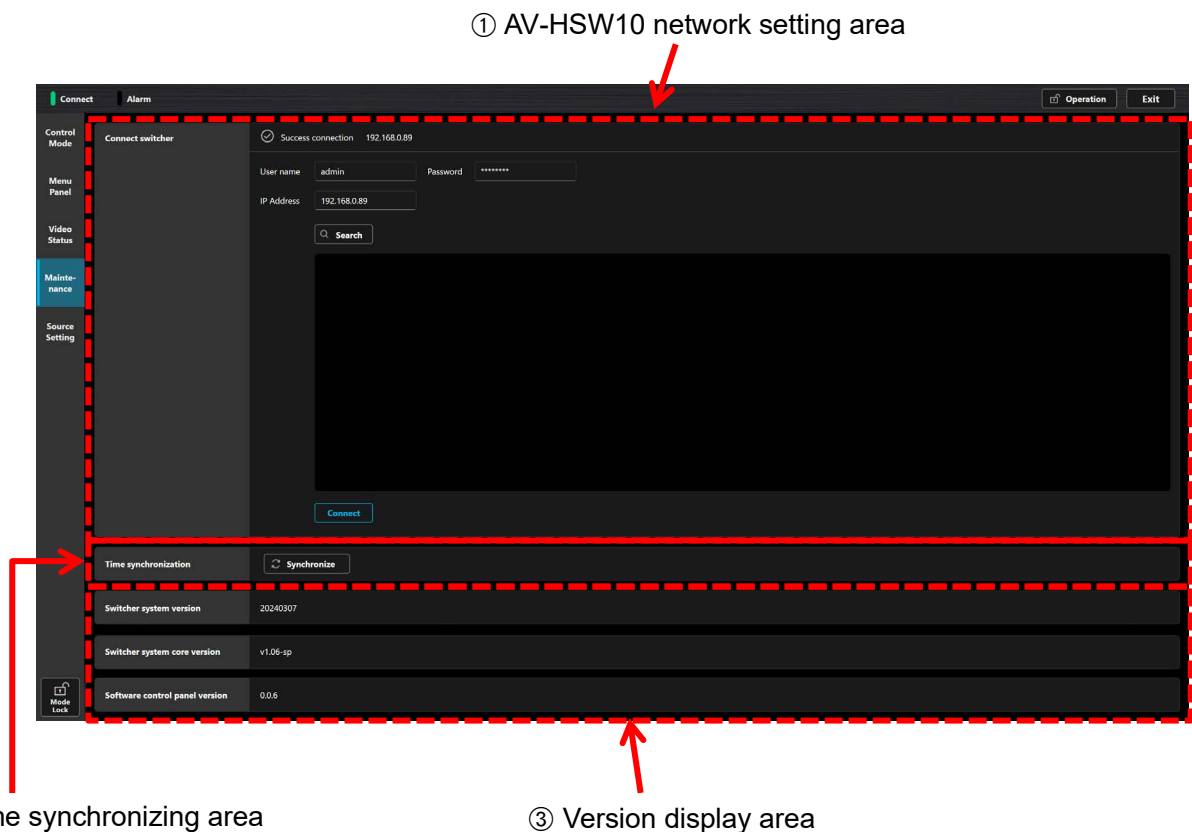
## 7.1. Function Overview

Select AV-HSW10 to connect it.

It displays Software Control Panel version information and AV-HSW10 firmware information.

It synchronizes the times of a PC and AV-HSW10.

### Screen Layout Display



#### ① AV-HSW10 network setting area

Enter the IP address setting, User name, and Password of the AV-HSW10 to be connected to the Software Control Panel and make the connection.

The connection status is indicated in the uppermost part of the screen. "Disconnection" appears if AV-HSW10 is not connected.

The IP address of the AV-HSW10 to be connected can be set by the following two types of methods.

- 1) Manual setup: Click IP Address and enter the address of the AV-HSW10 to be connected.

Next, set the user name. Click in the User name area and enter the user name that was set up for software panel authentication on the AV-HSW10.

Next, set the password. Click in the Password area and enter the password that was set up for software panel authentication on the AV-HSW10.

Afterwards, click the Connect button located below ①.

- 2) Automatic setup: Clicking the Search button automatically searches and displays the IP address of the AV-HSW10 on the same network as the PC running the Software Control Panel. Click the IP address of the desired AV-HSW10 from the search results, and click the Connect button. All of the AV-HSW10 on the local network that does not pass via the network router are searched. The AV-HSW10 of the different subnet is also displayed, however, connection is not possible even by pressing the Connect button. If the subnet is different, change it so that the IP address and subnet mask of the PC matches the subnet of the AV-HSW10.

When the two devices are successfully connected, the “Success connection IP address” appears at the top of the AV-HSW10 network settings area.

### ② Time synchronizing area

Time information for the PC installed with this software is transmitted to the main unit of the AV-HSW10 enabling times to be synchronized. Press the Synchronize button to synchronize the times.

### ③ Version display area

It displays the firmware version of the connected AV-HSW10 and the software version of the Software Control Panel.

Switcher system version: Firmware version of the AV-HSW10's main unit.

Switcher system core version: Indicates the firmware version of the switcher system.

Software control panel version: Software version of the Software Control Panel

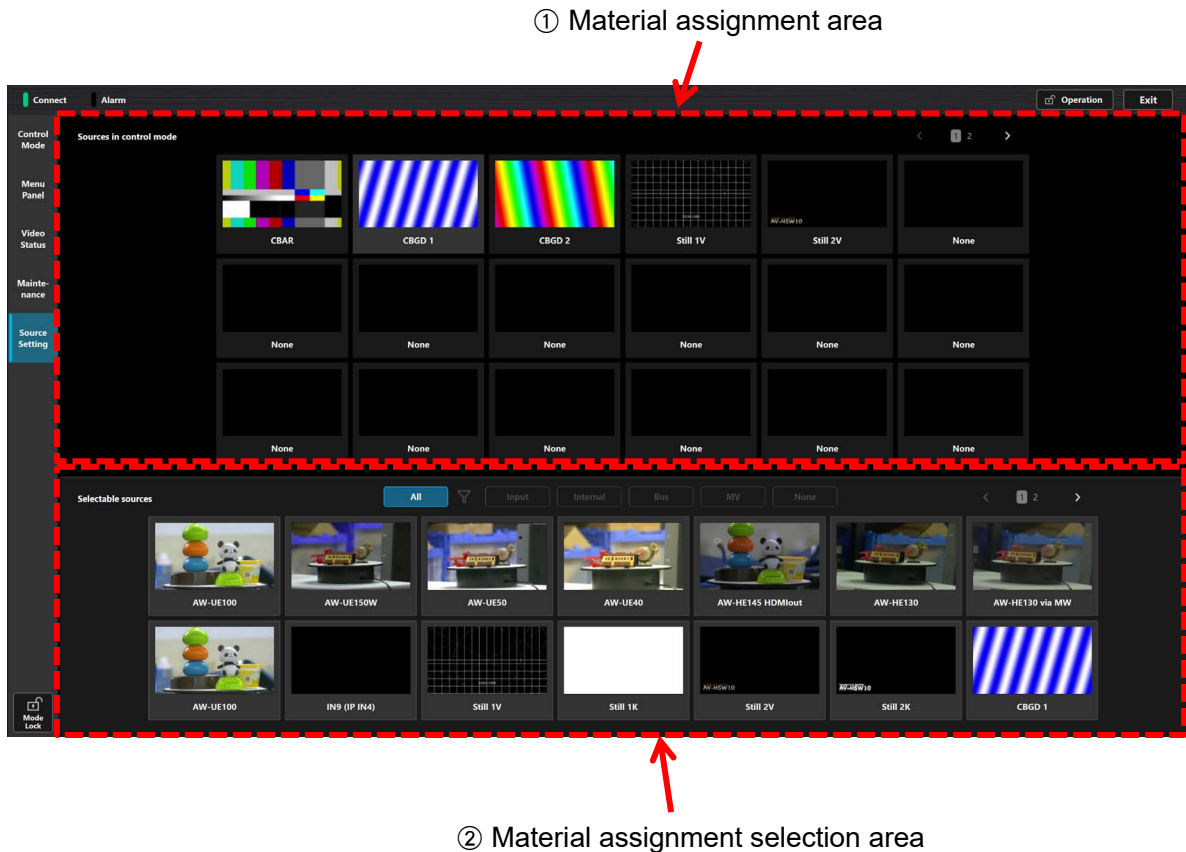


## 8. Source Setting Functions

### 8.1. Function Overview

Assign any input material to the material assignment section displayed at the bottom of the Control Mode screen.

#### Screen Layout Display



**① Material assignment area**

Click on the material area that you want to assign, and that area will be selected in yellow. Then, click the material you wish to assign from the material assignment selection area of ② to assign that material to that area. After making the assignment, the yellow selection automatically moves to the neighboring area on the right. The yellow frame will not move when reaching the final material on that page (No. 18 on page 1 and No.6 on page 2). The material assignment list is divided into a maximum of 24 items (18 on page 1 and 6 on page 2) and the pages can be changed with the < button (previous) and > button (next) or by swiping left (next) or swiping right (previous).

**② Material assignment selection area**

This displays a list of the source material that can be set in the material assignment area of ① for you to select. The material list can be up to two pages long, and the filter button can be used to switch to displaying only the materials for the buses.