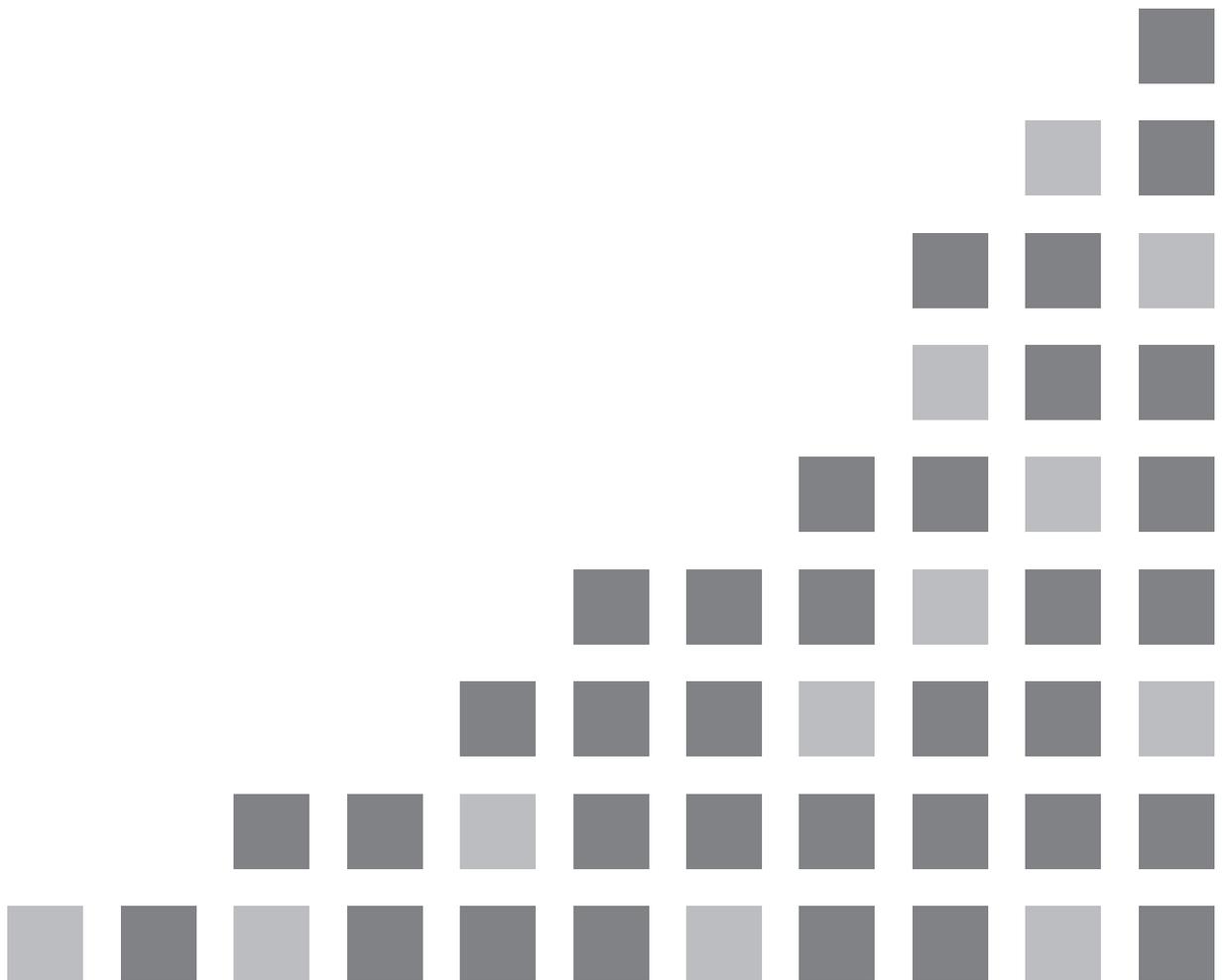


# Panasonic

## User Guide

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# Live Production Suite Series Plug-in Software



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## Introduction

The Live Production Suite series supports plug-in software that can be registered to include additional functionality.

The following types of plug-in software are available.

- AUX\_IP<sup>\*1</sup>: Allows you to select AUX output material from a remote control panel (Venetex VS-R45) connected on the network.
- GVG200<sup>\*1</sup>: Allows you to control GVG200-protocol compliant devices connected to the serial port (RS-422) on the switcher.
- TALLY<sup>\*1</sup>: Allows you to output tally information in serial communication format compatible with TSL UMD Protocol V3.1.
- P2\_Control: Allows you to connect P2 devices via a serial communication format (RS-422) and control operations such as recording and playback.
- External Control: Allows you to switch buses and transmit/receive material name information between external devices connected to the network. You can also switch the SourceLink settings (Master/Slave) from external devices.
- CAM\_Control: Allows you to perform pan, tilt, preset playback, and other controls for remote cameras connected to the network.

\*1) Preinstalled in system version 1.XX.

## Registration and Launch Setting

You can register, delete, and set launch settings for plug-in software by pressing the <PLUG IN> button in the top menu and selecting [PLUGIN Maint]→[Configuration]/[Load] tab. For details, refer to the Live Production Suite series User Guide.

Note:

- 1) The plug-in software registration and launch setting functions are enabled in V2.00.00 and later of the device software.  
The plug-in software cannot be registered in versions earlier than V2.00.00.
- 2) Launching of the plug-in software is enabled in V3.00.00 and later of the device software. The plug-in software will not launch, even if it is registered in device software versions earlier than V3.00.00. You can determine whether the plug-in has launched properly based on whether the plug-in menu appears.
- 3) Multiple instances of the same plug-in software cannot be registered and used. If an older version of the plug-in software is already registered, delete it before registering this plug-in software.
- 4) Use the plug-in after the Live Production Suite mainframe's power reboots with the launch setting set to [Enable on boot] is ON.
- 5) CAM\_Control and Macro Trigger IP can be used in V4.00.00 and later of the device software.

## AUX\_IP(V3.XX)

### <Overview>

AUX IP software is a plug-in for the Live Production Suite series. It allows you to select the following buses from a remote control panel (Venetex VS-R45) connected to the network.

- AUX output
- PGM and PVW of each ME
- Fill and Source of KEY1 to KEY4 of each ME
- UTIL1/2 output of each ME
- Fill and Source for DSK1 to DSK4
- Fill and Source for DISP and VMEM

[PGM / PVW] button

When any of the AUX1 to AUX16 buses of the Live Production Suite are configured for the VS-R45 AUX1 to AUX4 bus switch labels, you can switch configured AUX bus crosspoints to DSK PGM1 / DSK PVW1 by pressing the [PGM / PVW] button of the VS-R45.

[AUTO] button

- When any of the ME1KEY1 to KEY4, ME2KEY1 to KEY4, or Fill or Source of DSK1 to 4 buses of the Live Production Suite are configured for the VS-R45 KEY, PinP1, PinP2, DSK1, or DSK2 bus switch labels, you can transition between ON/OFF for the configured key bus key by pressing the [AUTO] button of the VS-R45.
- When any of the AUX1 to AUX4 buses of the Live Production Suite are configured for the VS-R45 AUX1 bus switch label, you can transition between ON/OFF for the configured AUX bus by pressing the [AUTO] button of the VS-R45.
- When any of the ME1PGM, ME1PVW, ME2PGM, or ME2PVW buses of the Live Production Suite are configured for the VS-R45 PGM/A and PST/B bus switch labels, you can perform BKGD AUTO transitions for the configured ME by pressing the [AUTO] button of the VS-R45.  
\* If different ME are configured for PGM/A and PST/B, BKGD AUTO will be performed for the ME configured for PST/B.

### <Setup>

Connect the VS-R45 to the LAN port on the rear panel of the AV-HS60U1/AV-HS60U2 using a LAN cable.

A single plug-in can support six VS-R45 units. If connecting to multiple VS-R45 units, connect the units using a distribution hub. Configure the VS-R45 units for use with an AV-HS450.

### <Configuration>

1. Display the AUX\_IP plug-in registered number menu.
  - Press the <PLUG IN> button in the top menu and select [Plugin 1-6]→[AUX\_IP] tab.
2. Configure the AUX\_IP plug-in network.
  - Configure the receive port number of the AV-HS60U1/AV-HS60U2 in the Port No column. The value is "60020" (fixed).
3. Configure the IP address of VS-R45.
 

In the [AUX\_IP IP Address1] to [AUX\_IP IP Address3] columns, configure the IP addresses for the six VS-R45 units to be connected.

Associate the columns that correspond to the Convert1 to 11 VS-R45 bus switch labels and AUXPT1 to 32 with Live Production Suite AUX buses and materials for each of the VS-R45 units (AUX\_IP1 to 6) corresponding to the IP addresses configured in this menu.

4. Configure the columns that correspond to the Convert1 to 11 VS-R45 bus switch labels for each of the six VS-R45 units (AUX\_IP1 to AUX\_IP6). Configure the target AUX\_IP1 to 6 in the [AUX\_IP] column, and configure the Live Production Suite buses in the columns corresponding to the Convert1 to 11 VS-R45 bus switch labels.

| Live Production Suite bus | Assignable buses                                                    |
|---------------------------|---------------------------------------------------------------------|
| AUX                       | No Assign, AUX1 to 16                                               |
| ME1                       | No Assign, PGM, PVW, KEY1 F, KEY1 S to KEY4 F, KEY4 S, UTIL1, UTIL2 |
| ME2                       | No Assign, PGM, PVW, KEY1 F, KEY1 S to KEY4 F, KEY4 S, UTIL1, UTIL2 |
| DSK                       | No Assign, KEY1 F, KEY1 S to KEY4 F, KEY4 S                         |
| Other                     | No Assign, DISP, VMEM F, VMEM S                                     |

Configure the [AUX XPT1] to [AUX XPT32] columns for each of the six VS-R45 units (AUX\_IP1 to AUX\_IP6). Configure the target AUX\_IP1 to 6 in the AUX\_IP column, and configure the material corresponding to the VS-R45 crosspoint buttons in the [AUX XPT1] to [AUX XPT32] column.

| Live Production Suite material | Assignable buses                                                                                                                                    |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| Input 1-20                     | No Assign, SDI IN1 to SDI IN20                                                                                                                      |
| Input 21-32                    | No Assign, SDI IN21 to SDI IN32, DVI IN1, DVI IN2                                                                                                   |
| Internal Source                | No Assign, Still 1V, Still 1K to Still 4V, Still 4K, Clip 1V, Clip 1K to Clip 4V, Clip 4K, CBGD 1, CBGD 2, CBAR, Black                              |
| MEOut                          | No Assign, ME1PGM, ME1PVW, ME1CLN, ME1KEYPVW, ME2PGM, ME2PVW, ME2CLN, ME2KEYPVW, DSKPGM1, DSKPGM2, DSKPVW1, DSKPVW2, DSK1CLN to DSK4CLN, SEL_KEYPVW |
| MV / Special                   | No Assign, MV1, MV2, MV3, MV4                                                                                                                       |

## External\_Control(V3.XX)

### <Overview>

This software is a plug-in for the Live Production Suite series. It allows you to switch materials for all buses on the Live Production Suite and transmit/receive material name information between system controllers, tally lamp interfaces, and other external devices connected to the network. You can also switch the SourceLink settings (Master/Slave) from external devices.

You transmit/receive tally information and Source ID information in a communication format compatible with TSL UMD Protocol V5.0.

By connecting a Panasonic AW-RP120 remote control controller via IP connection, material switching for the Live Production Suite buses, tally information transmission, focus assist, and material name acquisition via RP120 camera select.

\* For details on control bus settings and other information, refer to the AW-RP120 operating instructions.

### <Setup>

Connect the external device to the LAN port on the rear panel of the AV-HS60U1/AV-HS60U2 using a LAN cable.

A single plug-in can support up to 20 IP connection lines. If connecting to multiple external devices, connect the devices using a distribution hub. Configure the IP settings so that there is not overlap. Verify the network settings for the Live Production Suite in the <SYSTEM> button → [SYSTEM] → [NetWork] tab.

The default IP address and subnet mask are "192.168.0.5" and "255.255.255.0" respectively.

### <Configuration>

1. Display the External Control plug-in registered number menu.
  - Press the <PLUG IN> button in the top menu and select [Plugin #-#] → [External\_Control] tab.
2. Configure the External Control plug-in network.
  - Configure the receive port number of the AV-HS60U1/AV-HS60U2 in the [Switcher1] column. The default setting is 62000. The setting range is 62000 to 65535.
  - The command transmission interval is configured in [Transmission Interval] of the [Switcher2] column. The default setting is 16ms. The setting range is 0ms to 80ms.
3. Configure the IP address of the external device.
 

Specify the IP address of the external device to be connected in IP Address1-20 of the [AUX Panel1] to [AUX Panel10] columns.
4. Configure the receive port number of the external device in the [AUX Panel11] column.
 

The default setting is 65000. The setting range is 60000 to 65535.

When connecting an AW-RP120 remote camera controller, set this to 60031.
5. Note on the DMSG-CONTROL parameters for TSL UMD Protocol V5.0 commands.
 

During RH tally output, TallyGroup1 settings are output.

During TXT tally output, TallyGroup2 settings are output.

During LH tally output, TallyGroup3 settings are output.
6. To change material names for the control panel, you must set the [Type] for each input source column to [User] in the <CONF> button → [SOURCE NAME] → [Panel Name] tab.
 

Similarly, to change material names for the multi-view, you must set the [Type] for each input source column to [User] in the <CONF> button → [SOURCE NAME] → [MV Name] tab.

Material name changing for individual input sources is not possible via external control. Changes will be applied to all materials set to [User].

Material name changing can also be performed on the Live Production Suite menu, but the information changed later will be applied.

**<Command specifications>**

Refer to the Live Production Suite External Interface Communication Protocol Specifications (separate document).

## Macro Trigger IP

### <Overview>

This software is a plug-in for the Live Production Suite series. Specified macro can be executed by receiving a specific command sent via the TCP/IP protocol from the external device connected to the network. Use 63000 for the TCP/IP port number.

### <Setup>

Connect the external device that triggers macro execution on the network to the LAN port on the rear panel of the AV-HS60U1/AV-HS60U2 using a LAN cable.

A single plug-in can support up to 20 IP connection lines. If connecting to multiple external devices, connect the devices using a distribution hub. Configure the IP settings so that there is not overlap.

### <Configuration>

1. Display the setup menu of this plug-in software.
  - Press the <PLUG IN> button in the top menu and select [Plug-in 1-6] → [Macro Trigger IP] tab.
2. Set the IP address of the external device that triggers macro execution on the network and macro to be executed.
  - Up to 20 devices (Connect 1 to 20) can be registered.



3. Register macro to be executed on Live Production Suite. For details about macro registration, refer to the Live Production Suite series User Guide.

**<Command specifications>**

This document describes the TCP/IP protocol commands transmitted/received between the external device and Live Production Suite.

When the macro setup command (401) is sent from the external device to Live Production Suite, the macro setup response command (451) is returned.

- Macro setup command (401) (the external device → Live Production Suite)

| No. | Name                       |                    | Size (byte) | Details                                                                                                                |
|-----|----------------------------|--------------------|-------------|------------------------------------------------------------------------------------------------------------------------|
| 0   | Start code                 |                    | 2           | Fixed to "@S"                                                                                                          |
| 2   | Source information         | Device code        | 2           | Upper 1 byte: device specific 0x19 fixed<br>Lower 1 byte: device number (arbitrarily set from 1 to avoid duplication.) |
| 4   |                            | PROTOCOL ID        | 1           | Fixed to 0                                                                                                             |
| 5   |                            | Transaction ID     | 1           | Set to an arbitrary value                                                                                              |
| 6   |                            | IP address         | 4           | IP address of the device                                                                                               |
| 10  |                            | Port number        | 2           | Device port number                                                                                                     |
| 12  | Destination information    | Device code        | 2           | Upper 1 byte: device specific 0x02 fixed<br>Lower 1 byte: device number (arbitrarily set from 1 to avoid duplication.) |
| 14  |                            | PROTOCOL ID        | 1           | Fixed to 0                                                                                                             |
| 15  |                            | Transaction ID     | 1           | Set to an arbitrary value                                                                                              |
| 16  |                            | IP address         | 4           | IP address of the device                                                                                               |
| 20  |                            | Port number        | 2           | Device port number 63000=0xF618                                                                                        |
| 22  | Information section header | Control code       | 1           | Fixed to 0                                                                                                             |
| 23  |                            | Number of controls | 1           | Fixed to 0                                                                                                             |
| 24  |                            | Data length        | 2           | Fixed to 3                                                                                                             |
| 26  | Information section data   | Command            | 2           | Macro setup 401=0x191                                                                                                  |
| 28  |                            | Data               | 1           | Fixed to 0                                                                                                             |
| 29  |                            | Reserved           | 481         | Fixed to 0                                                                                                             |
| 510 | End code                   |                    | 2           | Fixed to "@E"                                                                                                          |

● Macro setup response command (451) (Live Production Suite → the external device)

| No. | Name                       |                    | Size (byte) | Details                                                                                                                |
|-----|----------------------------|--------------------|-------------|------------------------------------------------------------------------------------------------------------------------|
| 0   | Start code                 |                    | 2           | Fixed to "@S"                                                                                                          |
| 2   | Source information         | Device code        | 2           | Upper 1 byte: device specific 0x02 fixed<br>Lower 1 byte: device number (arbitrarily set from 1 to avoid duplication.) |
| 4   |                            | PROTOCOL ID        | 1           | Fixed to 0                                                                                                             |
| 5   |                            | Transaction ID     | 1           | Transaction ID of the destination when receiving the command                                                           |
| 6   |                            | IP address         | 4           | IP address of the device                                                                                               |
| 10  |                            | Port number        | 2           | Device port number 63000=0xF618                                                                                        |
| 12  | Destination information    | Device code        | 2           | Upper 1 byte: device specific 0x19 fixed<br>Lower 1 byte: device number (arbitrarily set from 1 to avoid duplication.) |
| 14  |                            | PROTOCOL ID        | 1           | Fixed to 0                                                                                                             |
| 15  |                            | Transaction ID     | 1           | Transaction ID of the source when receiving the command                                                                |
| 16  |                            | IP address         | 4           | IP address of the device                                                                                               |
| 20  |                            | Port number        | 2           | Device port number                                                                                                     |
| 22  | Information section header | Control code       | 1           | Fixed to 0                                                                                                             |
| 23  |                            | Number of controls | 1           | Fixed to 0                                                                                                             |
| 24  |                            | Data length        | 2           | Fixed to 3                                                                                                             |
| 26  | Information section data   | Command            | 2           | Macro setup response 451=0x1C3                                                                                         |
| 28  |                            | Data               | 1           | Fixed to 0                                                                                                             |
| 29  |                            | Reserved           | 481         | Fixed to 0                                                                                                             |
| 510 | End code                   |                    | 2           | Fixed to "@E"                                                                                                          |