

Production Control Software

User's Guide

Software Version 2.8

PWA-PRC1

NOTICE TO USERS

© 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020 Sony Corporation All rights reserved. This manual or the software described herein, in whole or in part, may not be reproduced, translated or reduced to any machine readable form without prior written approval from Sony Corporation.

SONY CORPORATION PROVIDES NO WARRANTY WITH REGARD TO THIS MANUAL, THE SOFTWARE OR OTHER INFORMATION CONTAINED HEREIN AND HEREBY EXPRESSLY DISCLAIMS ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE WITH REGARD TO THIS MANUAL, THE SOFTWARE OR SUCH OTHER INFORMATION.

IN NO EVENT SHALL SONY CORPORATION BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES, WHETHER BASED ON TORT, CONTRACT, OR OTHERWISE, ARISING OUT OF OR IN CONNECTION WITH THIS MANUAL, THE SOFTWARE OR OTHER INFORMATION CONTAINED HEREIN OR THE USE THEREOF.

Sony Corporation reserves the right to make any modification to this manual or the information contained herein at any time without notice.

The software described herein may also be governed by the terms of a separate user license agreement.

Tables of Contents

Overview	5
Name and Function of Parts	6
Control panel	6
Locking the control panel	9
Operation screen	10
Server status display	12
Viewers	13
Soft button menu	17
Clip/playlist list	18
Mode/settings screen select buttons	20
Information display area	20
Submonitors	21
Preparation	23
Record train management	23
Starting and exiting the application	25
Exporting/importing PWA-PRC1 settings	26
Basic Operation	28
Operation modes	28
PGM modes	28
Preview control mode	30
Soft button menu items	31
Clip Management	33
Basic clip operations	33
Soft button menu items	38
Selecting a clip	39
Context menu items	40
Registering metadata	41
Registering metadata on the operation screen	41
Registering metadata on the control panel	45
Searching for clips	48
Searching metadata	48
Timecode search	49
Searching by clip name	50
Checking search results	50
Playlist Management	52
Playlist mode	52
Selecting a playlist	56
Basic playlist operations	57

	Basic playlist edit and playback operations	59
	Audio split edits	63
	Swapping audio channels	64
	Unifying clips in a playlist	65
	Soft button menu items	66
Cu	tout Edit Function	69
	Cutout mode	69
	Basic cutout operations	71
Sh	are Play Function	74
	Preparation	74
	Selecting a network server	74
	Loading a record train on a network server	75
	Creating a clip on a network server	75
	Loading a clip on a network server	75
	Camera mapping on a network server	76
	Cutout data operations on a network server	76
Со	nfiguration	77
	Settings screen	77
	Configuration items	78
Ар	pendix	91
Т	rademarks	91
(Ohtaining LGPL-licensed software	91

Overview

This User's Guide describes the function and operation of the PWA-PRC1 Production Control Software and PWSK-4403 USB Control Device.

The PWA-PRC1 is software that controls a PWS-4500 Multi Port AV Storage Unit or BPU4800 Baseband Processor Unit to provide slow-motion playback of live video and basic clip/playlist management functions.

The PWSK-4403 connects to the computer on which PWA-PRC1 is installed using a USB connection, and controls the PWS-4500 using software-controlled "soft" buttons, a fader lever, and a jog dial.

This configuration allows operators to control slow-motion playback speed, search for video images, cue marked positions, perform cutout edits, and control other functions while monitoring the video on a computer display. It also enables created clips to be selected from a list for playback or copying and for registering in a playlist for highlight editing.

In this document, PWS-4500 and BPU4800 are referred to as the "server."

The server on which recording and playback are controlled from the PWA-PRC1 is called the "local server."

For details about the PWA-PRC1 operating environment, connection with the PWS-4500 or BPU4800, and installation, contact your Sony sales or service representative.

Note

The PWA-PRC1 is software designed for controlling video and audio on the server. Real-time playback on the computer is not guaranteed.

Name and Function of Parts

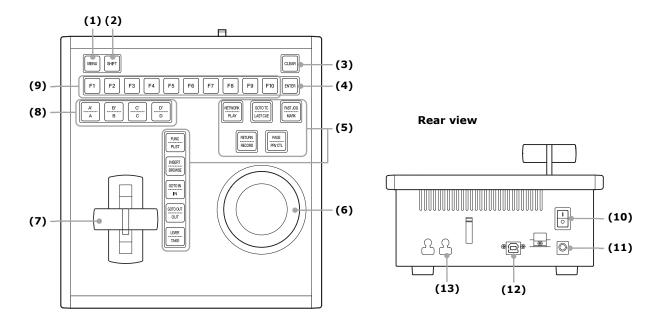
This section describes the parts of the control panel of the PWSK-4403 USB Control Device and the PWA-PRC1 Production Control Software operation screen.

Up to two control panels can be connected to the computer on which PWA-PRC1 is installed.

Control panel

Note

After turning on the PWSK-4403, always move the fader lever to the uppermost end and then move it to the lowermost end to set the operating range of the fader lever.



- (1) **MENU button** Used when selecting a soft button menu. It is also used as the cancel button in confirmation message dialogs.
- (2) **SHIFT button** Used when selecting the top (shifted row) function on an operation button or soft button.
- (3) **CLEAR button** Used to remove clips/playlists, marks, and IN/OUT points.
- (4) **ENTER button** Used to apply settings and as the confirm button in confirmation message dialogs. It is also used to register clips at the end of the selected playlist.

(5) Operation buttons

Different functions are assigned to the top and bottom of each button.

To select the bottom function, press the button. To select the top function, press the [SHIFT] button first and then press the button.

Button	Function		
PLAY	Starts playback of the selected clip or playback from a		
	selected image when in search mode.		
NETWORK	Specifies the server for file sharing or network copy.		
LAST CUE	Cues the previously marked position.		
	If [Pre-roll for cue point] is configured on the settings		
	screen, a location (set by the [Pre-roll for cue point]		
	setting) before the actual mark position is cued-up.		
GОТО ТС	Cues the position specified by the entered timecode.		
	Goto Start: Cue up at the start.		
	Goto End: Cue up at the end.		
MARK	Sets a mark (cue-up point) in the record train at the		
	timecode position during recording.		
FAST JOG	Switches the jog dial to high-speed mode. The speed is		
	set on the settings screen.		
RECORD	Switches to live mode during search mode or clip		
	playback. After switching to live mode, configured		
	IN/OUT points are deleted.		
RETURN	Switches to live mode during record train operation.		
	Configured IN/OUT points are maintained even after		
	returning to live mode.		
	During clip operation, this cues up the record train that		
	corresponds to the current position. If IN/OUT points		
	exist in the immediately preceding record train, those		
	values will be set.		
PRV CTL	Enables clip operation in playlist edit mode.		
	In Preview control mode, switches between PGM and		
	PRV control.		
PAGE	Selects the clip/playlist page.		
PLST	Switches operation to playlist edit mode or playlist		
	playout mode.		
FUNC	(Not used in this version.)		

Button	Function	
BROWSE	Displays the search results of executing a search with	
	the last specified search conditions. Executes the search	
	at the current timecode and displays the search results.	
	Enables browsing of clip search results.	
	Enables clip browsing in playlist edit mode. Enables	
	selection of cutout data on the keyframe table using jog	
	in cutout mode.	
INSERT	Inserts a clip in the selected playlist.	
IN	Sets an IN point for a clip.	
GOTO IN	Cues up the IN point.	
OUT	Sets an OUT point for a clip.	
GOTO OUT	Cues up the OUT point.	
TAKE	Toggles between PGM output selection and camera	
	selection.	
	In Preview control mode, switches between the PGM	
	output picture and PRV output picture.	
LEVER	Switches the fader lever to 2nd mode. In 2nd mode, the	
	speed range of the lever is set on the settings screen.	

(6) Jog dial Invokes search mode, and advances frames in forward/reverse direction in response to the dial rotation.

(7) **Fader lever** Controls the speed of slow-motion playback.

After turning on the PWSK-4403, always move the fader lever to the uppermost end and then move it to the lowermost end to set the operating range of the fader lever.

(8) Soft buttons Selects the soft button menu items displayed on the operation screen.

(9) Function buttons

Used to select a page/bank/clip/playlist and other functions.

(10) Power switch Turns power on/off.

(11) DC IN connector

Connects the PWSK-4403 to the supplied AC adaptor.

(12) **USB connector** Connects to the computer with PWA-PRC1 installed via USB cable.

(13) **DIP switch** Used to designate control panels when two PWSK-4403 units are connected.

For details about the switch setting, refer to the installation guide.

Locking the control panel

You can lock the control panel to prevent accidental operation using the following procedure.

Note

The control panel cannot be locked on unlocked while a dialog is being displayed.

- **1.** Press the CLEAR button on the PWSK-4403 you want to lock. The CLEAR button lights up red.
- 2. Press the MENU button within the next five seconds.
 When the panel finishes locking, the CLEAR button flashes green. The other button lights up red. Excluding the CLEAR button, all the buttons, fader lever, and dials do not function when operated until the panel is unlocked.

To unlock the control panel

Repeat the procedure for locking the control panel to unlock the panel. Press the CLEAR button, then press the MENU button within the next five seconds.

Operation screen

The PWA-PRC1 basic operation screen can be viewed in "1-device mode," "2-device mode," or "viewer mode."

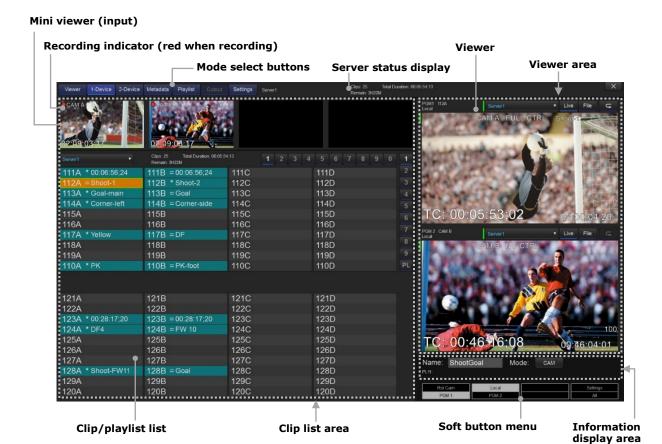
You can click/tap [1-Device], [2-Device], or [Viewer] on the operation screen to switch the display mode.

1-device mode/2-device mode screen

In 1-device/2-device mode, the screen contains the information display area, clip list area displaying a list of clips and other properties, and a viewer area that displays several viewers.

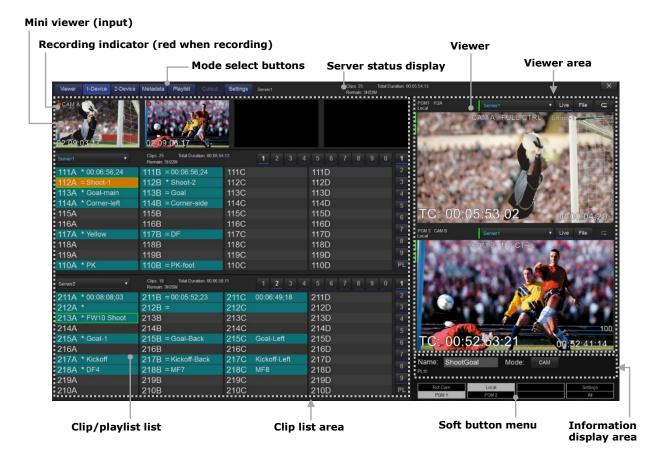
The display can be set to either 4-angle mode or 6-angle mode on the settings screen, regardless of the I/O configuration (you can switch between angle modes using the F5 key). The number of camera angles and mini viewers displayed in the clip list area varies depending on the angle mode setting.

1-device mode



2-device mode

The screen is identical to 1-device mode, except for the clip list display section. In 1-device mode, two banks are displayed for the target server. In 2-device mode, one bank is displayed for each of two servers.

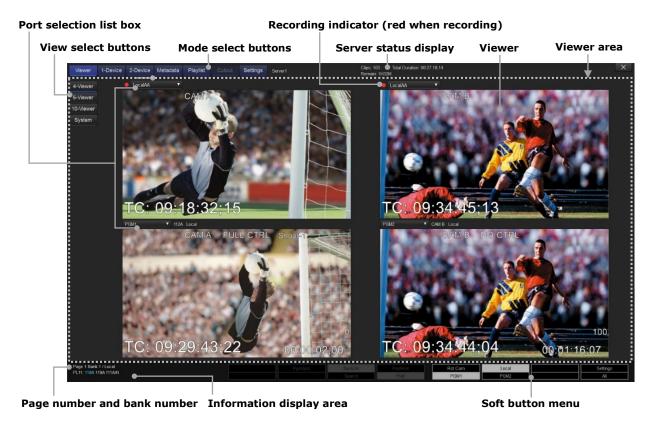


Viewer mode screen

The screen in viewer mode contains the information display area and the viewer area with separate viewers.

In viewer mode, the screen can display a 4-viewer, 6-viewer, or 10-viewer layout, selected using the [4-Viewer], [6-Viewer], and [10-Viewer] view select buttons. When [System] is selected, the layout to use is automatically selected according to the I/O configuration. The input/output video displayed in each viewer is selected using the port selection list box.

4-viewer mode



Server status display

Displays information about the server specified as the local server.



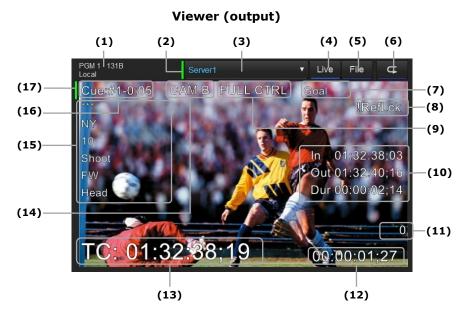
- (1) Name of the server specified as the local server
- (2) Number of clips registered in the clip list, and the total duration
- (3) Remaining recording time on the server

A color alert is displayed as the remaining time gets smaller.

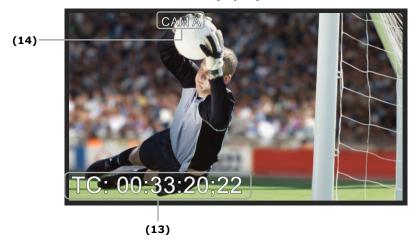
Green: Less than 30 minutes remaining Red: Less than 10 minutes remaining

Viewers

Displays input video to the server and output video from the server.







- (1) Indicator label for currently displayed material
 Displays the delay time (seconds) in parentheses if delayed playback is configured using [Chase delay] on the settings screen.
- (2) Share Play indicator for record trains

Indicates whether record trains on the selected server are Share Play enabled.

Green: Share Play enabled

Gray: Share Play disabled

- (3) Currently selected record train server display and selection menu
- (4) [Live] button

 Loads a record train during recording, and switches to live mode.
- (5) [File] button

 Displays a dialog for selecting a record train recorded on a server.
- (6) Loop button

- (7) Clip name (displayed when a clip is loaded)
- (8) Reference signal input error indicator

"!RefLck" is displayed when the specified reference signal input is not correct.

(9) PGM output control status

"FULL CTRL" is displayed when control is enabled, and "NO CTRL" when disabled. In Preview control mode, on the PGM side, "LEVER CTRL" is displayed when PRV CTL is on, and "FULL CTRL" when PRV CTL is off.

(10) IN point, OUT point, and duration

Displays the IN/OUT timecodes and duration when [In/Out/Dur on OSD] is set to [Yes] on the settings screen.

- **(11)** Speed status
- (12) Duration or countdown

The following information is displayed, depending on the settings and operation.

When IN/OUT points are not set in a record train:

In search mode/playback mode: Time from recording point to current position

In live mode: Duration of record train

When searching between IN/OUT points set in a record train: Duration.

All other times: Countdown until the IN point or OUT point.

- (13) Timecode
- (14) Input name

In an output viewer, this is the name of the input assigned to the PGM output. It displays the name if the input name is configured in [CAM name] on the settings screen.

(15) Metadata

Displays rating and keywords registered in the clip when [Metadata on OSD] is set to [Yes] on the settings screen.

- (16) Mark number of cue-up point (displayed during cue-up operation)
- (17) Share Play indicator for clips

Indicates whether clips on the selected server are Share Play enabled.

Green: Share Play enabled Gray: Share Play disabled

Timecode display format

The timecode is displayed in either "hh:mm:ss;ff" (hours:minutes:seconds;frames) or "hh:mm:ss:ff" (hours:minutes:seconds:frames) format.

When the server is set to Drop Frame (DF) mode, the number of frames in the timecode is preceded by a semi-colon (;). When the server is set to Non-Drop Frame (NDF) mode, the number of frames in the timecode is preceded by a colon (:).

For recording material using HFR, setting [HFR TC mode] to [Real time] on the settings screen will display timecode in "hh:mm:ss:ff.x" (hour:minute:second:frame.subframe) format.

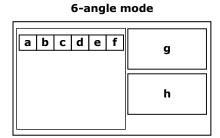
The images displayed in each viewer are arranged as follows.

1-device mode / 2-device mode

4-angle mode

a b c d g

h



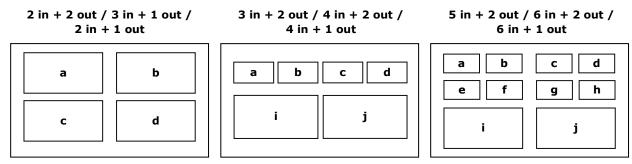
Viewer	2PGM mode	Preview control mode	1PGM mode	Cutout mode
а	Input 1	Input 1	Input 1	Input 1
b	Input 2	Input 2	Input 2	Input 2
С	Input 3	Input 3	Input 3	Input 3
d	Input 4	Input 4	Input 4	(Not used)
е	Input 5	Input 5	Input 5	(Not used)
f	Input 6	Input 6	Input 6	(Not used)
g	Output 1	PRV output	Selected input (1 to 6)	Cutout output
h	Output 2	PGM output	Output 1	Output 1

Note

In playlist mode, viewers "g" and "h" are used as the display area for playlist editing (page 53).

Viewer mode

The following layouts are set automatically when the [System] view selection button is selected.



Viewer 2PGM mode				1PGM mode	
	2 in + 2 out	4 in + 2 out	6 in + 2 out (Multi) 5 in + 2 out (Multi) 4 in + 2 out 3 in + 2 out (Multi)	3 in + 1 out 2 in + 1 out	6 in + 1 out 4 in + 1 out
а	Input 1	Input 1	Input 1	Input 1	Input 1
b	Input 2	Input 2	Input 2	Input 3	Input 2
С	Output 1	Input 3	Input 3	Input 2	Input 3
d	Output 2	Input 4	Input 4	Output 1	Input 4
е	_	_	Input 5	_	Input 5
f	_	_	Input 6	_	Input 6
g	_	_	_	_	_
h	_	_	_	_	_
i	_	Output 1	Output 1	_	_
j	_	Output 2	Output 2	_	Output 1

Viewer	HFR (2Boards)			2DIO configuration		
	3 in + 2 out	3 in + 1 out	2 in + 2 out 1 in + 2 out	2 in + 1 out	2 in + 2 out 1 in + 2 out	2 in + 1 out 1 in + 1 out 1 in + 1 out (Cutout)
a	Input 1	Input 1	Input 1	Input 1	Input 1	Input 1
b	Input 2	Input 3	Input 2	Input 2	Input 2	Input 2
С	Input 3	Input 2	Output 1	_	Output 1	Output 1
d	_	Output 1	Output 2	Output 1	Output 2	Cutout output
е	_	_	_	_	_	_
f	_	_	_	_	_	_
g	_	_	_	_	_	_
h	_	_	_	_	_	_
i	Output 1	_	_	_	_	_
j	Output 2	_	_	_	_	_

Note

In Preview control mode, output 1 in 2PGM mode becomes the PGM output, and output 2 becomes the PRV output.

Soft button menu

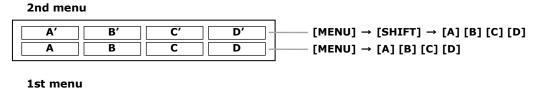
Displays functions assigned to the PWSK-4403 soft buttons. The items displayed vary depending on the operating mode and settings.

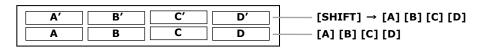


The soft button menu is divided into two: 1st menu and 2nd menu. Use the [MENU] button to switch between the menus.

- 1st menu
 Used primarily for selecting PGM outputs/cameras, and for displaying the settings screen.
- 2nd menu
 Used primarily for selecting functions and changing settings.

Soft button menu operation





To select the 2nd menu, press the [MENU] button. The 2nd menu items are displayed, and [MENU] button starts flashing red.

To return to the 1st menu, press the [MENU] button again. The button lamp goes out. The selected menu is highlighted.

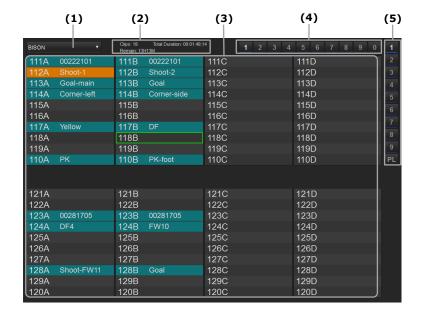
The items (A, B, C, D) in the bottom rows of the 1st menu and the 2nd menu are selected by pressing the corresponding soft buttons ([A], [B], [C], [D]).

The items (A', B', C', D') in the top rows are selected by first pressing the [SHIFT] button and then pressing the corresponding soft buttons ([A], [B], [C], [D]).

Clip/playlist list

Displays a list of the clips in each bank. Bank 10 (PL) is used for managing playlists.

The number of camera angles displayed in a clip list varies depending on the angle mode setting.







- (1) Server selection list box
 - Selects the server on which clips are registered.
- (2) Server status display

Displays the number of clips registered in playlists on the selected server, total duration of the clips, and the remaining recording time on the server.

- (3) Clip information list
 - Displays a list of the clips registered in each bank. The selected bank is displayed in the top half of the screen, and the content displayed in the bottom half varies depending on the mode.
- (4) Page select buttons

(5) Bank select buttons

Displays the currently selected bank number highlighted. Click/tap a button using a mouse/touch panel to change bank.

The bank number is also displayed at the bottom of the viewer mode operation screen.

(6) Clip ID

Unique name used to identify clips in the format "Page number + Bank number + Clip number + Camera angle."

For example, "123A" represents page 1, bank 2, clip 3, and camera angle A. The clip ID background turns green and a progress bar is displayed below the clip ID when cued for archiving and when archiving is in progress.

(7) Clip name

Displays the name of the clip, if a name has been assigned.

A progress bar is displayed below the clip name when network copy is cued and when network copy is in progress.

(8) Share Play indicator

Indicates whether clips on the network server are Share Play enabled.

Green: Share Play enabled

Gray: Share Play disabled

(9) Playlist ID

Unique name used to identify playlists in the format "PL + Page number + Playlist number."

For example, "PL12" represents page 1, playlist 2.

The playlist ID background turns green and a progress bar is displayed below the playlist ID when cued for archiving and when archiving is in progress.

(10) Playlist name

Displays the name of the playlist, if a name has been assigned.

- (11) Number of clips in playlist
- (12) Total duration of clips in playlist
- (13) Audio clip information

Displays the clip ID of the audio clip when an audio clip is specified for the playlist.

Clip information display color

If the clip has been saved, the clip information background is blue.

The clip information background turns orange when a clip is selected and loaded.

The clip information background of a clip with a different video format than the currently recording clip is dark green.

The clip ID/playlist ID background of archived clips/playlists is green.

The clip ID/playlist ID background of clips/playlists when archiving fails is red.

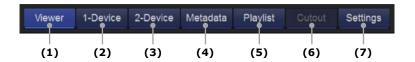
Notes

- Clips with a dark green background cannot be loaded.
- The background of archived playlist IDs changes to blue when PWA-PRC1 is restarted.

Mode/settings screen select buttons

Switches the operation mode or displays the settings screen by clicking/tapping the corresponding button when operating the unit using a mouse/touch panel.

The operation mode can also be switched using a keyboard.



- (1) Viewer mode select button
- (2) 1-device mode select button
- (3) 2-device mode select button
- (4) Metadata setup mode select button
- (5) Playlist mode select button
- (6) Cutout mode select button
- (7) Settings screen select button

Operation mode switching using a keyboard

F6 key: Viewer mode select key

F7 key: 1-device mode/2-device mode select toggle key

F8 key: Metadata setup mode select key

F9 key: Cutout mode select key **F10 key:** Playlist mode select key

Shift+F2 key: Setting screen select key

Information display area

Displays information and messages, such as the current playlist ID and IDs of clips registered in the playlist.



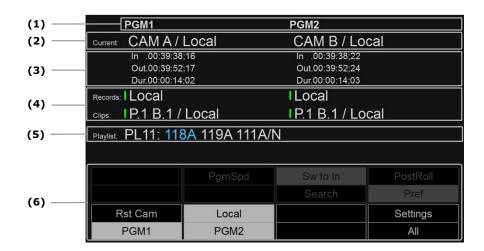
(1) Name field

You can search for clips by clip name by entering a character string. For details, see "Searching by clip name" (page 50).

- (2) CAM mode / Clip mode select button
- (3) Information display area

Submonitors

You can use submonitors to display the configuration and control status for each control panel.



In playlist mode



(1) PGM name

When loop playback is enabled, appears beside the PGM name.

Displays the delay time (seconds) in parentheses after the PGM name if delayed playback is configured using [Chase delay] on the settings screen.

Displays the name if the input name is configured in [CAM name] on the settings screen.

- (2) Input assignment status of PGM output
- (3) IN point, OUT point, and duration
 Displays the IN/OUT timecodes and duration when [In/Out/Dur on OSD] is set to [Yes]
 on the settings screen.
- (4) Current server information, page number, and bank number
 Displays information and messages, such as the server information, page number, and bank number, during operation.
- (5) Currently selected playlist ID and list of registered clips
 The selected clip is displayed in blue.
- **(6)** Soft button menu
- (7) Playlist information
 Displays information about the current playlist.
- (8) Playlist registered clip information
 Displays information about clips registered in the current playlist.
 The background of the selected clip is displayed blue.

Preparation

Record train management

When you start the PWA-PRC1, files are created for recording on the server. Each file is called a "record train."

A record train is created for each input channel (camera angle), and is named automatically. When you exit the PWA-PRC1, a confirmation message appears asking you whether to stop record train recording and close all ports, or to continue record train recording.

Two recording modes, normal recording mode and loop recording mode, configured using the Web menu on the server, are available for recording to record trains. Set the same recording mode for all input ports on the server. Also, set [Loop REC] on the PWA-PRC1 settings screen to the same recording mode.

If the server recording mode and the [Loop REC] setting are different, a warning message will be displayed when PWA-PRC1 starts, and record train recording will not commence.

Normal recording mode

The free space is used up and record train recording automatically stops when the length exceeds 23 hours and 55 minutes. All recording stops whenever any record train recording stops. The [RECORD] button lamp goes out when recording stops.

When recording in HFR (High Frame Rate), the actual recording time remains unchanged.

Loop recording mode

When the capacity of the record train configured by the server is reached, recording continues from the start of the record train. Registering a clip prevents that region of the record train from being overwritten, reducing the available free space.

Recording continues until 24 hours have elapsed or until the record train free space has been consumed.

An alert is displayed as the remaining recording time on the server gets smaller.

For details about the alert, see "Server status display" (page 12).

To ensure there is sufficient free space, execute the FS Format command in the Web menu to erase the content on the server.

Executing the FS Format command also deletes clips created by the record trains. Any required record trains and clips should be copied to separate media beforehand.

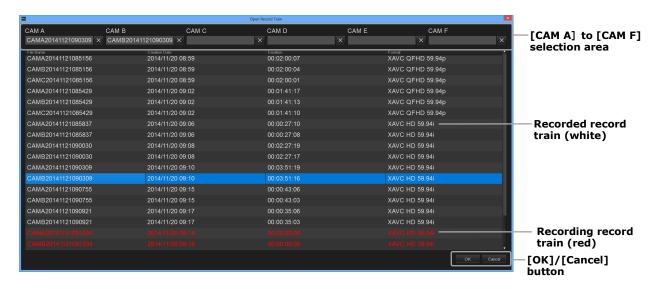
For details about operation and settings of the Web menu on the server, refer to the Operation Manual for the server.

Notes

- Record trains can be deleted from Media Gateway. Before deleting, exit PWA-PRC1, and stop record
 train recording and close all ports. To close the ports, click/tap [OK] in the confirmation message
 dialog that appears when exiting.
- Playlist settings information and cutout data are not deleted after executing the FS Format command. After executing FS Format, click/tap the [Clear] button under [Clear all playlist/cutout data] on the settings screen to delete playlist settings information and cutout data.
- When performing retrieve operations in loop recording mode, maintain adequate "Remain Area" on the server while setting the loop recording area.
- When the available space reduces to less than five minutes in loop recording mode, clips cannot be saved.
- File repair on the server will be required if the record trains are not stopped correctly, due to power interruption on the server or other cause, during recording.

To access a recorded record train on a server

Click/tap the [File] button on the 1-device mode or 2-device mode operation screen to open a dialog that displays record trains recorded on the server and currently recording record trains.



[File] button on operation screen \rightarrow Select recorded record train \rightarrow Drag & drop into [CAM A] to [CAM F] selection area \rightarrow [OK] button

- To clear the record trains specified in the selection area, click/tap the [×] buttons in the selection area.
- When the [OK] button is clicked/tapped after selecting a recorded record train, the selected record
 train is loaded into the corresponding PGM, and the position set by [Default cue up] on the settings
 screen is cued up. If a currently recording train is selected, the operation mode switches to live
 mode.

- If the [RECORD] button is pressed while a recorded record train is active, the position set by [Default cue up] on the settings screen is cued up.
- To return to live mode, click/tap [Live] on the operation screen.

Note

Record trains with video formats that are different from the recording video format cannot be set as the active record train.

Starting and exiting the application

Starting

- **1.** Turn on the computer on which PWA-PRC1 is installed, the PWSK-4403, and the server. The [F1] to [F10] function buttons and the [ENTER] button on the PWSK-4403 are lit blue.
- 2. Click/tap "PWA-PRC1" on the Start screen or double-click/double-tap the "PWA-PRC1" icon on the desktop.

PWA-PRC1 launches.

The server is automatically connected using the information registered on the settings screen.

When launching PWA-PRC1 for the first time or if it cannot connect to the server

The IP address input screen appears. Perform the following procedure.

 Enter the IP address of the computer on which PRC Manager is installed, and then click/tap [Set].

The servers connected to the network become available for selection in the [Servers] list box.

2. Select the server to become the local server in the [Servers] list box.

PWA-PRC1 launches.

The server is automatically connected using the information registered on the settings screen.

When the connection with the server is successful, the information on the PWA-PRC1 operation screen is updated and record train recording starts.

The clip registration status is reflected in the [F1] to [F10] function buttons on the PWSK-4403 (button is green if a clip is registered or off if no clip is registered).

Notes

• PRC Manager must be started before starting PWA-PRC1. For details about starting PRC Manager, refer to the Installation Guide.

- Under the default settings of the PWA-PRC1, loop recording mode is disabled. If the server is set to loop recording mode, be sure to enable [Loop REC] in the settings screen after the PWA-PRC1 starts.
- Do not change the size of text on the screen.

Exiting

1. Press the [SHIFT] button on the PWSK-4403 and then press the [D] (Settings) soft button.

The settings screen appears.

You can also press the Shift+F2 key combination on the keyboard to display the settings screen.

2. Press the [SHIFT] button and then press the [A] (Exit App) soft button.

A confirmation message appears.

Click/tap [OK] to stop record train recording and close all ports or click/tap [Cancel] to continue record train recording.

You can also click/tap the "\omega" button in the top right corner of the window using a mouse/touch panel to exit PWA-PRC1.

Exporting/importing PWA-PRC1 settings

You can save the PWA-PRC1 settings and then later restore settings to that previous state as required.

The following settings are saved.

- Content of the settings screen
- BPU4800 SharePlay
- [Add Space] setting on metadata setup mode screen
- Viewer settings
- PRC version

Note

The content of the metadata setup mode screen (excluding [Add Space]) and the cutout mode screen are not saved.

Exporting settings

- **1.** Display the settings screen.
- Click/tap the [Export Settings] button on the [System 1] screen.The [Export] dialog appears.
- **3**. Specify the save destination and file name, then click/tap the [Save] button.

Importing settings

- **1.** Display the settings screen.
- Click/tap the [Import Settings] button on the [System 1] screen.The [Import] dialog appears.
- Select the .dat file, and click/tap the [Open] button.The settings are imported, and the PWA-PRC1 automatically restarts.

If the IP address of the PRC Manager has changed due to importing the settings, the IP address setting screen of the PRC Manager appears after the PWA-PRC1 restarts. For details, see "When launching PWA-PRC1 for the first time or if it cannot connect to the server" (page 25).

If the settings screen is canceled, the IP address of the PRC Manager becomes the imported value.

Basic Operation

Operation modes

The PWA-PRC1 has three basic operation modes.

Live mode

To switch to live mode, press the [RECORD] button.

Video can be played back simultaneously while recording to a record train.

You can also drag & drop a CAM mini viewer to a viewer or double-click/tap the mini viewer during recording to switch to live mode.

When drag & drop to a viewer is used, the record train is played in that viewer. When double-click/tap is used, the record train is loaded into the control target PGM and then played.

You can delay the playback of video in live mode by configuring [Chase delay] on the settings screen.

Search mode

To switch to search mode, operate the jog dial.

Turn the jog dial to search in the forward/reverse direction to move to the desired timecode position or image.

Playback mode

To switch to playback mode, operate the fader lever or press the [PLAY] button. Playback starts from the specified timecode position, if one is specified, or from the beginning of the loaded clip. The fader lever controls the playback speed.

PGM modes

The PGM mode is automatically selected based on the I/O configuration of the server.

2PGM mode

2PGM mode is selected if the I/O configuration on the output side is "2 out."

In 2PGM mode, you select the PGM output to control using [PGM 1] and [PGM 2] in the soft button menu.

Select [All] to control both PGM outputs simultaneously.

[CAM A] and [CAM B] are assigned to [PGM 1] and [PGM 2], respectively, by default.

You can change the camera assigned to an output by first pressing the [TAKE] button to switch the soft button menu to the camera selection display.

In this mode, two PWSK-4403 units can be connected.

The control panel designated as Panel1 controls the PGM1 output, and the control panel designated as Panel2 controls the PGM2 output.

For details about designation of control panels, see "Configuration" (page 77).

In 2PGM mode, when [Multi playlist] is set to [Enable] on the settings screen, you can play a playlist in one PGM while editing or playing a different playlist in the other PGM. You can also play record trains and clips, instead of playlists.

To enable [Multi playlist], the following settings are required.

- I/O configuration: "2 out" on the output side
- Number of control panels in use: One
- [Preview control mode] setting on the settings screen: Disable
- [Effect by two ports] setting on the settings screen: Disable
- [Multi playlist] setting on the settings screen: Enable

To play a playlist in PGM1 and edit/play a different playlist in PGM2 (example)

- **1.** Press the [A] (PGM1) soft button to set PGM1 as the control target.
- **2.** Press the [PLST] button two times to invoke playlist playout mode.
- **3.** Play the playlist using the [PLAY] button or fader lever.
- **4.** Press the [TAKE] button to switch from playlist mode to the operation screen.
- **5.** Press the [B] (PGM2) soft button to set PGM2 as the control target.
- **6.** Press [SHIFT] + [F10], and select another playlist using the [F1] to [F10] buttons lit green.
- **7.** Press the [PLST] button to switch to playlist edit mode to edit the playlist.
- **8.** Press the [PLST] button two times to invoke playlist playout mode to play the playlist.

Note

The same playlist cannot be loaded in both PGM1 and PGM2 at the same time.

1PGM mode

1PGM mode is selected if the I/O configuration on the output side is "1 out."

In 1PGM mode, select a camera to assign to the PGM output using the soft button menu.

Camera selection

If [CAM A] to [CAM D] are assigned, select the desired camera using [CAM A], [CAM B], [CAM C], or [CAM D] in the soft button menu.

To select [CAM D] to [CAM F] when [CAM E] and [CAM F] are assigned, press the [D] (--->) soft button. The soft button menu changes to display [CAM D], [CAM E], and [CAM F], and then you can select the desired camera.

To return to the [CAM A], [CAM B], and [CAM C] display, press the [D] (<---) soft button.

Preview control mode

Using Preview control mode allows you to preview and prepare the next picture while on-air and to switch the picture at any location.

The following setup is required in order to use Preview control mode.

- I/O configuration: "2 out" on the output side
- [Preview control mode] setting on the settings screen: Enable
- Number of control panels in use: One

Switching from the PGM picture to the PRV picture during playback

- 1. Load a record train or a clip to play.
- 2. Search for the playback start point.
- **3.** Play the clip using the [PLAY] button or fader lever.
- **4.** Press the [PRV CTL] button to switch control to the PRV side.
- **5.** Load a record train or a clip to play in the PRV side.
- **6.** Search and cue a picture using jog control.
- **7.** Press the [TAKE] button.

The output picture on the PGM side changes to the PRV picture.

If effect settings are available, the picture switches with the effects.

Notes

- There are no effects applied to audio data.
- [PLAY] button and fader lever operation control the PGM side when the [PRV CTL] button indicator is flashing red, and the PRV side and PGM side when the indicator is off.
- Jog operation controls the PRV side when the [PRV CTL] button indicator is flashing red, and the PRV side and PGM side when the indicator is off.
- When switching to a clip with a different frame rate (for example, when switching from a clip recorded at HFR to a normal clip), the clip after switching is played back at the real-time playback speed of the clip before switching.

Soft button menu items

The items displayed vary depending on the operating mode and settings.

1st menu

Item	Description	
PGM x	(2PGM mode only)	
	Selects the [PGM x] output to control.	
CAM x	Assigns [CAM x] to a PGM output.	
> / <	>: Switches to [CAM D], [CAM E], and [CAM F] selection display.	
	<: Switches to [CAM A], [CAM B], and [CAM C] selection display.	
All	(2PGM mode only)	
	Enables control of both PGM outputs.	
Rst Cam	Resets the camera assignment to the PGM outputs to the default	
	settings.	
Local	Sets a server for clips and record trains as the local server.	
	This function can also be executed by pressing the Alt+L keys on the	
	keyboard.	
Settings	Displays the settings screen.	
Sync Prv	Syncs PRV to the same timecode and speed as the PGM.	

Note

The [Sync Prv] soft button menu is enabled only when the PGM side is stopped.

2nd menu

Item	Description	
PgmSpd / VarMax	PgmSpd: When the fader lever is not in the 0% position, playback speed	
	is constant at the set value speed, regardless of the position of the fader	
	lever.	
	VarMax: Playback speed varies over the range 0% to the set value,	
	according to the position of the fader lever.	
	OFF: Playback speed varies over the range 0% to 100% according to the	
	position of the fader lever.	
	The set value is configured on the settings screen.	
	When playback is initiated using the [PLAY] button, selecting either	
	[PgmSpd] or [VarMax] sets the playback speed to the set value.	
PostRoll	OFF: Stops playback after the OUT point is reached.	
	ON: Continues playback for the specified interval after the OUT point is	
	reached, and then stops.	
	The interval is configured on the settings screen.	

Item	Description	
Sw to In	OFF: Switches to the current timecode position when switching the	
	camera angle.	
	ON: Switches to the IN point, if an IN point has been set, when switching	
	the camera angle.	
	If an IN point has not been set, it switches to the current timecode	
	position.	
Effect	Sets a transition (Cut, Mix, or White Flash) effect.	
Pref	Enables/disables Preference mode.	
	OFF: Disables Preference mode (loads clips using the currently selected	
	camera angle).	
	ON: Enables Preference mode (loads clips in the preferred camera angle	
	sequence).	
Search	Switches to search mode.	

Clip Management

Clips are managed by page number, bank number, and clip number.

On the server, there are ten pages (pages 1 to 10), with nine banks (banks 1 to 9) for clips on each page. Each bank can store ten clips (clips 1 to 10), and each clip has up to six camera angles (A to F).

Basic clip operations

To create and save a clip

[IN] button (set IN point) \rightarrow [OUT] button (set OUT point) \rightarrow Select available clip number

- A clip must have a duration of ten frames or longer in order to save the clip.
- Clips are saved with 5-second guardbands added before the IN point and after the OUT point.
- To change the length of the guardbands, set [Guardbands] on the settings screen. For details about settings, see "Configuration" (page 77).
- To clear configured IN/OUT points, press [CLEAR] → [IN]/[OUT].
- When a clip is saved, preferred angles used when the clip is subsequently loaded are set. A primary
 preferred angle and secondary preferred angle are set in sequence based on the angles loaded in
 the control target PGM.

You can check which preferred angle is which by looking the suffix of the clip ID in the cliplist. The primary preferred angle has a "*" suffix, and the secondary preferred angle has an "=" suffix.

To change the preferred angles after a clip is saved, select the clip in the cliplist, and press the F4 key on the keyboard to change the primary preferred angle or the Ctrl+F4 keys to change the secondary preferred angle.

• Clip names can be assigned automatically when clips are created by configuring the naming rule using [Auto name clips] on the settings screen. For clips that have already been saved, you can register and rename clips in metadata setup mode (page 41).

To load a clip

Select page number → Select bank number → Select clip number

- When the clip loads, the selected [F1] to [F10] function button lamp turns red, and the IN point is cued up. To start playback, press the [PLAY] button.
- To switch between camera angles, press the selected [F1] to [F10] function button repeatedly.
- When Preference mode is set to On, a clip is loaded in the control target PGM with the preferred angles.
- On a keyboard, select a clip and press the Enter key. To start playback, press the Alt+P keys.

 You can also recall a clip by entering a clip ID in the Name field and pressing the F3 key. Specify the

full clip ID, including the camera angle. You can recall clips with the same camera angle when control of both PGM outputs is enabled in 2PGM mode.

• Using a mouse/touch panel, double-click/double-tap a clip or drag & drop the clip into a viewer.

To delete a clip

Select page number \rightarrow Select bank number \rightarrow [CLEAR] button \rightarrow Select clip number \rightarrow [ENTER] button in confirmation message dialog

- To cancel deletion, press the [MENU] button in the confirmation message dialog.
- All camera angles for the selected clip are deleted.
- Clips cannot be deleted while they are loaded or during playlist mode.
- The recorded data for a record train is not deleted when a clip is deleted.
- On a keyboard, select a clip and press the Ctrl+Delete keys. Press the Enter key in the confirmation message dialog (press the Esc key to cancel).
- Clips registered on pages specified using [Protect pages] on the settings screen cannot be deleted.
 Clips on protected pages are not deleted even when [Clear all clips] on the settings screen is executed.

Clips on protected pages are deleted when FS Format is executed on the server.

To copy a clip

Load clip to copy \to Select available clip number \to [A] (Copy) soft button in confirmation message dialog \to [ENTER] button

- To cancel copying, press the [MENU] button in the confirmation message dialog.
- You can select Clip mode or CAM mode by pressing the [D] (CAM or Clip) soft button in the confirmation message dialog.

In Clip mode, all camera angles are copied. In CAM mode, only the selected camera angle is copied.

- On a keyboard, select a clip to copy and press the Ctrl+C keys, then select an available clip number and press the Ctrl+V keys.
- Using a mouse/touch panel, select a clip to copy, then drag & drop the clip onto an available clip number.

To move a clip

Load clip to move \rightarrow Select available clip number \rightarrow

[B] (Move) soft button in confirmation message dialog \rightarrow [ENTER] button

- To cancel moving, press the [MENU] button in the confirmation message dialog.
- You can select Clip mode or CAM mode by pressing the [D] (CAM or Clip) soft button in the confirmation message dialog.

In Clip mode, all camera angles are moved. In CAM mode, only the selected camera angle is moved.

• On a keyboard, select a clip to move and press the Ctrl+X keys, then select an available clip number and press the Ctrl+V keys.

• Using a mouse/touch panel, select a clip to move, press and hold the Shift key on the keyboard, and then drag & drop the clip onto an available clip number.

To archive a clip

You can store the clip in conjunction with Media Gateway.

```
Load clip \rightarrow [MENU] button \rightarrow [A] (>Archive) soft button
```

- If [Clip] is selected in the soft button menu, all camera angles are archived. If [CAM] is selected in the soft button menu, only the loaded camera angle is archived.
- The clip ID background turns green and a progress bar is displayed below the clip ID when cued for archiving and when archiving is in progress.
- On a keyboard, select a clip and press the Alt+Z keys.
- If an archive operation is performed on a linked clip (page 75), the actual clip on the network server is archived, but the metadata of the linked clip is the metadata that will be archived.

Note

Click/tap the [Refresh] button under [Media Gateway] in the settings screen in the following cases.

- Archive destination drive connection is changed
- · Media is exchanged
- Server transfer IP is changed or deleted

To change IN/OUT points of a clip

```
Load clip \rightarrow Set IN/OUT point
```

To set IN/OUT point at the start/end of a clip that includes guardbands:

[CLEAR] button → [IN] or [OUT] button

To set IN/OUT point at any position on a clip:

[IN] or [OUT] button at desired position

To change the clip timecode

```
Load clip \rightarrow [MENU] button \rightarrow [C] (Metadata) soft button \rightarrow [SHIFT] button \rightarrow [C] (Set TC) soft button \rightarrow
```

Enter timecode (hour:minute:second:frame) on timecode setting screen →

[ENTER] button

- To cancel the operation, press the [MENU] button.
- Enter a timecode using the [F1] to [F10] function buttons (for numerals 1 to 0) or the keyboard.
- You can specify the destination for a set value by pressing the [A] soft button.

Current TC: Sets the configured timecode to the current position in the viewer.

Start TC: Sets the configured timecode as the start timecode (timecode of start of guard band).

In TC: Sets the configured timecode as the IN point timecode.

- Press the [D] (CAM or Clip) soft button to change the target clip of the timecode.
 In CAM mode, this sets the timecode of the loaded clip only. In Clip mode, this sets the timecode for all angle clips.
- When [HFR TC mode] is set to [HFR] on the settings screen, destination for the set value is fixed to Start TC.
- On a keyboard, select a clip, press the Alt+T keys, enter a timecode on the timecode setting screen, and press the Enter key.

Note

The timecode of a linked clip (page 75) cannot be changed. To change the timecode, first use the [Copy to local] function.

Network copy

You can copy clips between the servers connected on the network. In network copy, the entire clip is copied, including guardbands. Also, IN point and OUT point settings are maintained.

To copy a clip from the local server to a network server

Load clip to copy \rightarrow [NETWORK] button ([SHIFT] \rightarrow [PLAY]) \rightarrow [B] (Clips) soft button \rightarrow Select server on network ([F1] to [F10] function buttons) \rightarrow Select available clip number \rightarrow [ENTER] button in confirmation message dialog

• You can switch page/bank when selecting clips.

```
[SHIFT] button \rightarrow [PRV CTRL] button: Page display [SHIFT] button \rightarrow [F1] to [F10] function button: Bank display
```

- You can select Clip mode or CAM mode by pressing the [D] (CAM or Clip) soft button in the confirmation message dialog.
 - In Clip mode, all camera angles are copied. In CAM mode, only the selected camera angle is copied.
- A progress bar is displayed below the copy source clip name in the clip list while the clip is being copied.
- While copying, the [F] button for the copy destination clip flashes green. To cancel copying, press the [CLEAR] button and then the flashing [F] button.

To copy a clip from a network server to the local server

```
[NETWORK] button ([SHIFT] \rightarrow [PLAY]) \rightarrow [B] (Clips) soft button \rightarrow Select server on network ([F1] to [F10] function buttons) \rightarrow Load clip to copy \rightarrow Local ([SHIFT] button \rightarrow [B] soft button \rightarrow Select available clip number \rightarrow [ENTER] button in confirmation message dialog
```

- If the clip to copy cannot be loaded, the network copy dialog appears. Follow the instructions in the dialog.
- A progress bar is displayed below the copy source clip name in the clip list while the clip is being copied.

• While copying, the [F] button for the copy destination clip flashes green. To cancel copying, press the [CLEAR] button and then the flashing [F] button.

Network copy operations using a mouse/touch panel

To switch the operation screen:

Click/tap [2-Device] on the operation screen.

The bottom of the clip list area changes to show other servers that can be selected.

To select a server: Click/tap a network server from the [Server Name] selection box on the screen.

To start network copy:

Select a clip to copy, then drag & drop the clip onto an available clip number in the copy destination.

Push function (transfer clip to a server on the network)

You can transfer (copy) a clip to a specified network server.

To use the push function, [Push], [Push receive page], [Push machine], and [Push target] must be configured in advance on the settings screen.

Load clip to copy \rightarrow [MENU] button \rightarrow [SHIFT] button \rightarrow [A] (Push) soft button \rightarrow [ENTER] button in confirmation message dialog

- The clip to be transferred is copied to an available clip number on the receive page. A warning message is displayed if there are no available clip numbers.
- You can specify the page number and bank number of a clip to transfer in the dialog displayed by pressing the [A] (Push) soft button when [Push page/bank dialog] is set to [Yes] on the settings screen.

To specify the page: Press the [A] (Page) soft button and specify the page number using the [F1] to [F10] function buttons.

To specify the bank: Press the [B] (Bank) soft button and specify the bank number using the [F1] to [F9] function buttons.

- A progress bar is displayed below the copy source clip name in the clip list while the clip is being copied.
- While copying, the [F] button for the copy destination clip flashes green. To cancel copying, press the [CLEAR] button and then the flashing [F] button.
- You can select Clip mode or CAM mode by pressing the [D] (CAM or Clip) soft button in the confirmation message dialog.
 - In Clip mode, all camera angles are copied. In CAM mode, only the selected camera angle is copied.
- If the push function is executed while a linked clip is loaded, the actual clip on the network server is transferred.

Soft button menu items

The items displayed vary depending on the operating mode and settings.

1st menu

Item	Description
CAM x	Selects a camera angle.
Rst Cam	Resets the camera assignment to the PGM outputs to the default
	settings.
Local	Sets a server for clips and record trains as the local server.
	This function can also be executed by pressing the Alt+L keys on the
	keyboard.
Settings	Displays the settings screen.
Сору	Copies a clip.
Move	Moves a clip.
CAM / Clip	CAM: Applies to the selected camera angle only when copying/moving a
	clip.
	Clip: Applies to all camera angles when copying/moving a clip.
Sync Prv	Syncs PRV to the same timecode and speed as the PGM.

2nd menu

Item	Description
Push	Executes the push function.
>Archive	Archives a clip.
Aux Clip	Registers an audio clip.
PostRoll	OFF: Stops playback after the OUT point is reached.
	ON: Continues playback for the specified interval after the OUT point is
	reached, and then stops.
	The interval is configured on the settings screen.
CAM / Clip	CAM: Applies settings to the selected camera angle only.
	Clip: Applies settings to all camera angles.
Sw to In	OFF: Switches to the current timecode position when switching the
	camera angle.
	ON: Switches to the IN point, if an IN point has been set, when
	switching the camera angle.
	If an IN point has not been set, it switches to the current timecode
	position.
Effect	Sets a transition (Cut, Mix, or White Flash) effect.
Loop	Enables/disables loop playback.
Metadata	Switches to metadata setup mode.

Selecting a clip

Select a clip by specifying a page number, bank number, and clip number, in that order.

To select a page number

[PAGE] button ([SHIFT] \rightarrow [PRV CTL]) \rightarrow [F1] to [F10] function buttons (for page numbers 1 to 10)

To select a bank number

[SHIFT] button \rightarrow [F1] to [F9] function buttons (for bank numbers 1 to 9)

To select a clip number

[F1] to [F10] function buttons (for clip numbers 1 to 10)

Press the same [F1] to [F10] function button repeatedly to switch between camera angles.

Clip operations using the keyboard

You can also select a clip using the keyboard.

To select a page: Alt + left/right arrow keys

You can select the next page using the PageUp key, or the previous

page using the PageDown key.

To select a bank: Alt + up/down arrow keys

You can select Bank 1 using the Home key, or Bank PL using the

End key.

To select a clip: In Clip mode, move the cursor to a clip using up/down arrow keys.

In CAM mode, move the cursor to the clip/camera angle using the

up/down/left/right arrow keys.

You can also make the following settings from the keyboard.

Mode select: Switch between Clip mode and CAM mode using the F2 key.

In Clip mode, operations and settings apply to all camera angles for

a clip. In CAM mode, operations and settings apply to only the

selected camera angle.

Clip operations using a mouse/touch panel

You can also select a clip using a mouse/touch panel.

To select a page: Click/tap the page number using the page buttons at the top of the

clip list area.

To select a bank: Click/tap the bank number using the bank select buttons on the

right of the clip list area.

To select a clip: In Clip mode, click/tap the target clip in the clip list.

In CAM mode, click/tap a camera angle for the target clip in the clip

list.

Mode select: Click/tap the Clip mode / CAM mode select button in the information

display area.

Context menu items

A list of option functions is available in the context menu displayed by right-clicking a clip. You can also press the Shift+F10 keys to display the menu.

Item	Description
Copy to local	Copies material on the network server to the local server.
	This function is enabled only for clips registered in a cliplist on the local
	server.
	This function can also be executed by selecting a clip and pressing the
	Alt+C keys on the keyboard.
Transcode	Transcodes files in the native file format to XAVC format.
	This function is enabled only for clips on the BPU4800.
Load XAVC	Load a BPU4800 XAVC file for playback.

Registering metadata

You can register the clip name, keywords, rating, colors, and a memo for a clip as metadata.

Some metadata (keywords, rating, colors) can be used as clip search conditions.

The metadata that can be registered in a clip varies depending on the registration method.

- Registering on the operation screen: Clip name, keywords (registration/editing), rating, colors, memo
- Registering on the control panel: Keywords (registration only), rating, colors

Registering metadata on the operation screen

Metadata is registered using metadata setup mode.

- Using a mouse/touch panel, click/tap [Metadata] on the operation screen.
- On a keyboard, press the F8 key.

| New | 10 to | 20 to | Maradal | Payint | Cool | Setting | Sever | Secret | Secret

Metadata setup mode

You can search for a clip name using the Name field in the metadata area. For details, see "Searching by clip name" (page 50).

Registering a clip name

You can register a clip name by entering a character string in the [Name] field. You can also register a clip name in metadata setup mode by clicking/tapping a keyword button that has a registered character string.

For details about entering a character string using the keyword buttons, see "Setting the keyword buttons" (page 45).

To register a character string using a keyboard

You can assign a name (up to 32 characters) to a clip.

Select a clip and enter a name in the [Name] field, then press the F1 key to register it.

- Characters entered using the keyboard are added to the end of the [Name] field.
- The Backspace key deletes a single character, and the Esc key clears the [Name] field.
- The Shift+F1 keys move the cursor to the [Name] field, and the Ctrl+left/right keys change the cursor position.

To register using keyword buttons on metadata setup mode screen

Register a name using a mouse/touch panel.

- 1. Click/tap a clip to select it.
- 2. Click/tap the checkbox on the left of the [Name] field to select it.
 - The keyword buttons can now be used for the [Name] field.
- 3. Click/tap the keyword button with the character string you want to enter.
 - The character string is added to the [Name] field.
- **4**. Click/tap [Enter].

The clip name is registered.

- Click/tap [X] on the right of the [Name] field to clear the [Name] field.
- There are 25 category 2 and 20 category 3 keyword buttons displayed for each category 1 button.

 Selecting a category 1 button displays the category 2 and category 3 buttons for that category 1 button
- Click/tap a selected category 1 button to enter the character string for that button.
- When the [Add space] checkbox is checked for a category number, a space is automatically added to the character string after the corresponding button is clicked/tapped.
- Click/tap [In TC] to register the IN point timecode in the [Name] field.
- Click/tap [Original name] to recall the name of the selected clip in the [Name] field.

To register using a keyboard

- **1**. Select a clip using the up/down/left/right keys.
- **2**. Press the Alt+N keys.

The checkbox on the left of the [Name] field is selected.

- **3**. Press and hold the Shift key, and select a keyword button using the up/down/left/right arrow keys.
- Press the Shift+Enter keys.

The character string is added to the [Name] field.

5. Press the F1 key.

The clip name is registered.

Registering keywords

You can register up to five character strings of keyword buttons as keywords. Character strings cannot be entered using a keyboard.

For details about entering a character string using the keyword buttons, see "Setting the keyword buttons" (page 45).

To register using a mouse/touch panel

- 1. Click/tap the checkbox on the left of the [KW] fields to select it.
- 2. Click/tap the keyword buttons.

The character strings assigned to the buttons are added to the fields [1] to [5], and registered at the same time in the clip.

To register using a keyboard

- **1**. Press the Alt+K keys.
 - The checkbox on the left of the [KW] fields is selected.
- 2. Press and hold the Shift key, and select a keyword button using the up/down/left/right arrow keys.
- 3. Press the Shift+Enter keys.
 - The character strings assigned to the buttons are added to the fields [1] to [5], and registered at the same time in the clip.
- Click/tap [X] on the right of a [KW] field to clear the [KW] field.
- There are 25 category 2 and 20 category 3 keyword buttons displayed for each category 1 button.
 Selecting a category 1 button displays the category 2 and category 3 buttons for that category 1 button.
- Click/tap a selected category 1 button to enter the character string for that button.

To delete all keywords

You can clear the keywords in the text box using the following operation.

Using a mouse/touch panel, clip/tap [All].

On a keyboard, select the text box and press the Alt+Delete keys.

Registering a memo

You can register a character string using the keyword buttons in a memo. You can also enter a character string from a keyboard.

For details about entering a character string using the keyword buttons, see "Setting the keyword buttons" (page 45).

To register using a mouse/touch panel

- 1. Click/tap the checkbox on the left of the [Memo] field to select it.
- 2. Click/tap the keyword buttons.

The character string assigned to the button is added to the [Memo] field.

3. Click/tap [Enter].

The memo is registered.

To register using a keyboard

1. Press the Alt+M keys.

The checkbox on the left of the [Memo] field is selected.

- 2. Press and hold the Shift key, and select a keyword button using the up/down/left/right arrow keys.
- 3. Press the Shift+Enter keys.

The character string assigned to the button is added to the [Memo] field.

4. Press the Enter key.

The memo is registered.

- Click/tap [X] on the right of a [Memo] field to clear the [Memo] field.
- There are 25 category 2 and 20 category 3 keyword buttons displayed for each category 1 button. Selecting a category 1 button displays the category 2 and category 3 buttons for that category 1 button.
- Click/tap a selected category 1 button to enter the character string for that button.
- When the [Add space] checkbox is checked for a category number, a space is automatically added to the character string after the corresponding button is clicked/tapped.

To register an arbitrary character string

Using a mouse/touch panel, click/tap the [Memo] field to select it, and enter a character string using a keyboard.

On a keyboard, press the Tab key to select the [Memo] field, and then enter a character string.

A character string of up to 256 characters can be entered.

If a character is already registered in the [Memo] field, characters entered using the keyboard are added to the end of the character string.

The Backspace key deletes a single character, and the Esc key clears the [Memo] field.

Registering a rating

Using a mouse/touch panel, click/tap the button for the rating you want to register.

On a keyboard, press the Tab key to select the button for the rating you want to register, and press the Space key.

Registering colors

Using a mouse/touch panel, click/tap the button for a color you want to register. To remove a registered color, click/tap the color again.

On a keyboard, press the Tab key to select the button for a color you want to register, and press the Space key. To remove a registered color, select the color and press the Space key. Multiple colors can be registered.

Setting the keyword buttons

- Click/tap [Edit] in the metadata area.
 The character strings for each button become editable.
- **2**. Click/tap a button to select it for editing.
- Modify or enter the character string using a keyboard.A character string of up to 32 characters can be entered.
- Click/tap [Edit].The changes are applied.
- The keyword button settings can be imported/exported using [Import]/[Export].

Registering metadata on the control panel

You can register metadata from the control panel.

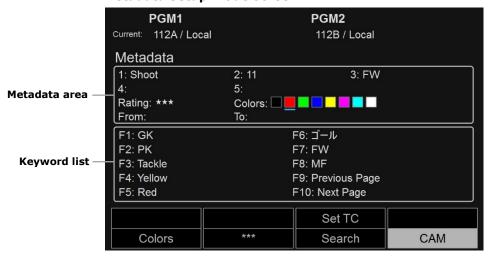
Notes

- To register a keyword, the keyword buttons must be configured beforehand on the operation screen. For details about setting keyword buttons, see "Setting the keyword buttons" (page 45).
- A memo cannot be registered, when registering metadata on the control panel.

Load clip \rightarrow [MENU] button \rightarrow [C] (Metadata) soft button

• When the control panel link with the main display is turned on, a metadata setup screen similar to the submonitor of the operation screen is displayed in a subdialog.

Metadata setup mode screen



Registering keywords

[F1] to [F8] function buttons (corresponds to F1 to F8 in keyword list)

- Pressing a function button registers a keyword in an empty field [1] to [5].
- Up to five keywords can be registered for each clip.
- The character strings registered on the keyword buttons on the metadata setup screen are displayed in the keyword list.
- If there are more than eight keywords in the keyword list, you can switch pages using the [F9] (previous page) and [F10] (next page) function buttons.

To clear a keyword

[CLEAR] button \rightarrow

[F1] to [F5] function buttons (corresponds to [1] to [5] metadata area items)

To clear all keywords

[CLEAR] button → [F10] function button

Registering a rating

[B] (***) soft button

• Press the [B] (***) soft button repeatedly to toggle between " \star ", " \star ", " \star *", and " \star *.

Registering colors

[A] (Colors) soft button \rightarrow Soft button for the desired color

- Multiple colors can be registered.
- To cancel a registered color, press the soft button corresponding to the color.
- To cancel the operation, press the [MENU] button.

Soft button menu items

Item	Description
Colors	Switches the soft buttons to color registration mode.
***	Switches the rating between " \star ", " \star ", " \star *", and " \star * \star ".
Search	Displays the search condition setup screen.
Set TC	Displays the timecode setting screen.
CAM / Clip	CAM: Applies settings to the selected camera angle only.
	Clip: Applies settings to all camera angles.

Searching for clips

You can search for clips or record trains on the local server or network server by specifying metadata values, such as timecodes and clip names.

Searching metadata

Search using keywords, ratings, color, archive status, and dates. When multiple conditions are specified, this searches for clips that meet all the specified conditions.

```
Load clip \rightarrow [MENU] button \rightarrow [C] (Metadata) soft button \rightarrow [C] (Search) soft button \rightarrow Set search condition using soft buttons \rightarrow [ENTER] button or [C] (Exec Search) soft button
```

- When a record train is loaded, press [MENU] button → [C] (Search) soft button, and press the corresponding soft button.
- When the control panel link with the main display is turned on, a search condition setup screen similar to the submonitor of the operation screen is displayed in a subdialog.

PGM1 PGM2 Current: CAM A / Local CAM B / Local Search 1: H 2: Shoot 3: 5: Metadata area Rating: *** Colors: From: F1: 23 F6: Pass F2: 25 F7: FK Keyword list F3: 28 F8: CK F4: Shoot F9: Previous Page F5: Head F10: Next Page Reset Archive Date Network Colors **Exec Search** Search TC

Search condition setup screen

Specifying search conditions

Setting keywords, ratings, and colors

For details about configuration, see "Registering metadata on the control panel" (page 45).

• When searching ratings, clips that have an equal or higher specified rating are matched.

Specifying an archive status

 $[SHIFT] \rightarrow [B]$ (Archive) soft button

• Press [SHIFT] + [B] (Archive) repeatedly to toggle between "Not Archived", "Archiving", and "Archived".

Specifying dates

Search by specifying the creation date of clips.

```
[SHIFT] \rightarrow [C] (Date) soft button \rightarrow [C] (From Date) or [D] (To Date) soft button \rightarrow Enter "YY/MM/DD" (year, month, day) values
```

- Press the [F1] to [F10] function buttons (for numerals 1 to 0) to enter a date.
- To cancel the operation, press the [MENU] button.
- To clear the date at the cursor, press the [SHIFT] button + [A] (Clear) soft button.

Specifying a search range

```
[SHIFT] \rightarrow [D] (Network) soft button
```

• Searches the local server and network server when on (highlighted) or the local server only when off.

Timecode search

You can search by specifying a timecode in the Search dialog or by pressing the [Browse] button in a viewer to search at the current timecode position.

Search by specifying a timecode

You can search for a clip or record train containing the specified timecode.

```
Load clip \rightarrow [MENU] button \rightarrow [C] (Metadata) soft button \rightarrow [C] (Search) soft button \rightarrow [D] (Search TC) soft button \rightarrow Select search target using [B] soft button \rightarrow Enter a timecode (hh:mm:ss:ff) \rightarrow [ENTER] button
```

- When a record train is loaded, [MENU] button \rightarrow [C] (Search) button and [D] soft button.
- Switch between search targets by repeatedly pressing the [B] soft button. Select [Clips] to search clips only, [Records] to search record trains only, or [Clips + Records] to search clips and record trains.
- Press the [SHIFT] + [C] (Date) soft button to display the date setup screen and specify a date search range. For details about specifying a range, see "Specifying dates" (page 49).
- Enter a timecode using the [F1] to [F10] function buttons (for numerals 1 to 0).
- To cancel the operation, press the [MENU] button.

Search using the [BROWSE] button

You can conduct a search at the current timecode in the PGM being controlled by pressing the [BROWSE] button during clip or record train operation.

```
[BROWSE] button
```

• To execute a search at the current timecode, set [Browse key] on the settings screen to [Search TC]. Select [Search result] to display the last search executed by pressing the [Browse] button.

Searching by clip name

Search clips by clip name. This search can be executed using a keyboard.

- 1. Enter a character string in the information display area of the operation screen or the Name field of the metadata setup mode operation screen.
- Press the Ctrl+F1 keys.
 Clips with names containing the character string entered in the Name field are displayed in the search results.
- To conduct another search, enter a character string in the Name field on the search results screen and press the Ctrl+F1 keys.
- During panel operation, press the [SHIFT] + [D] (Network) soft button to switch between search targets. Searches the local server and network server when on (highlighted) or the local server only when off.

Checking search results

Clips and record trains that match the search conditions are displayed in a list on the search results screen.

The [BROWSE] button is lit, and the search results screen enters browse mode.

PGM1 PGM2 Current: 112A / Local 112F / Local Search 1: H 2: Shoot **Search conditions** 5: Rating: *** Colors: From: 03:19:52:15 00:00:02:24 H Shoo CAM F03:19:52.. 03:19:52;15 00:00:02;24 H Shoot 112F Server1 Search results 117B Server1 Goal 17:53:23;11 00:00:02;02 H Shoot 17:53:03;03 00:00:04;14 H Shoot 212B Server1 Shoot-1 18:30:59:13 00:00:06:18 H Shoot Reset Date Network Archive Colors Search TC Keyword

Example metadata search results

- Select a clip or record train in the search results list using the jog dial to load it in a viewer.
- Press the [INSERT] button ([SHIFT] → [BROWSE]) to insert all search result clips before/after (set using [Insert in playlist] on the settings screen) the active playlist clip.
- Press the [MENU] button to close the search results screen and to control the selected clip or record train in the viewer.

Soft button menu items

Item	Description
Colors	Switch the soft buttons to color registration mode.
***	Switch the rating between " \star ", " \star ", " \star *", and " \star * \star ".
Exec Search	Execute a metadata search.
Keyword	Switch the search results screen to keyword setting mode.
Search TC	Switch the search condition setup screen to timecode search mode.
Reset	Clear the search conditions and search results.
Archive	Switch archive status condition between "Not Archived", "Archiving",
	and "Archived".
Date	Switch the search condition setup screen to date setting (From Date, To
	Date).
Network	Switch the search range between the local server only and local and
	network servers.

Playlist Management

You can register created clips in a playlist and perform highlight editing.

Clips on a network server can also be registered in a playlist.

Playlists are managed by page number, bank number 10 (PL), and playlist number.

On the server, there are ten pages (pages 1 to 10), and bank 10 (PL) on each page is used for playlist management. Each bank can store ten playlists.

Note

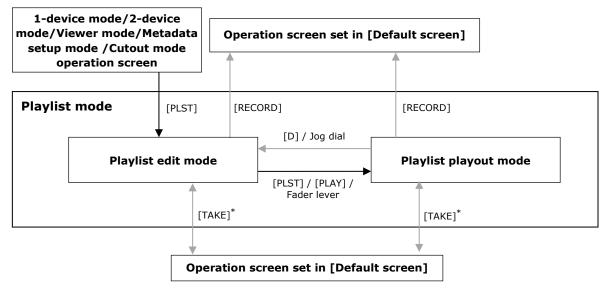
Old playlist settings information must be deleted after FS Format is executed on the server. Click/tap the [Clear] button under [Clear all playlist/cutout data] on the settings screen.

Playlist mode

Playlist mode comprises "Playlist edit mode" for editing and "Playlist playout mode" for playback.

You press the [PLST] button to invoke playlist mode. You can also switch to playlist mode using the F10 key.

To exit playlist mode, press the [RECORD] button. The operation screen displayed after exiting playlist mode can be set in [Default screen] on the settings screen.



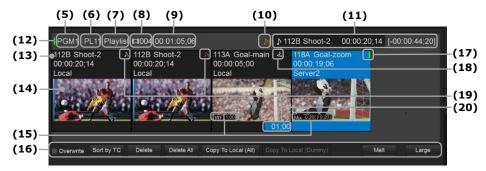
*: When [Multi playlist] is set to [Enable], control target is set to either [PGM1] or [PGM2], and playlist image is displayed in a viewer

For mouse/touch panel operation, click/tap [Playlist] on the operation screen to invoke playlist mode. To exit playlist mode, click/tap [Viewer], [1-Device], [2-Device], [Metadata], or [Cutout] on the operation screen.

Playlist mode operation screen



Storyboard



(1) Server selection list box

Selects a server in which clips and playlists are registered.

- (2) Clip/playlist list
- (3) Storyboard

Displays the loaded playlist in storyboard format.

Displays the selected clip with a blue background.

- (4) Viewer
 - 2PGM mode

When [Multi playlist] is set to [Disable] on the settings screen:

Playlist image is displayed in the PGM1 viewer.

Clip image is displayed in the PGM2 viewer. In Preview control mode, it displays the next cued clip when in playlist playout mode.

When [Multi playlist] is set to [Enable] on the settings screen:

Playlist image is displayed in the control target PGM.

• 1PGM mode

Playlist image is displayed in the PGM1 viewer.

- (5) PGM name
- (6) Playlist ID

(7) Playlist name

Displays the name of the playlist, if a name has been assigned.

- (8) Number of clips in playlist
- (9) Total duration of clips in playlist
- (10) Asynchronous clip indicator

Indicates, when displayed, that there is a clip or clips in the playlist that are not synchronized with the audio clip.

(11) Audio clip information area

Displays the clip ID, clip name, and duration of an audio clip, if one is configured in a playlist, and the difference between the total duration of all clips in the playlist and the duration of the audio clip.

(12) Share Play indicator for playlists

Indicates whether playlists for which there is at least one network clip are Share Play enabled.

Green: Share Play enabled

Gray: Share Play disabled

(13) Clip information

Displays the clip ID, clip name, and duration.

(14) Thumbnail image

(15) Effect mark and duration

Left side: Displays the effect type configured for the current clip.

Right side: Displayed when [Display effect duration] is set to [Yes] on the settings screen. Displays the effect duration in the following format.

[video_effect_duration (audio_effect_duration)]

(16) Playlist edit buttons

Overwrite checkbox: Sets whether to edit the playlist in insert mode or overwrite mode. Place a check mark here to select overwrite mode.

Sort by TC: Sorts the clips in the playlist by IN-point order.

Delete: Deletes the selected clip in the playlist.

Delete All: Deletes all the clips in the playlist.

Copy to local (All): Copies all network server clips in a playlist to the local server.

Copy to local (Dummy): Copies Share Play disabled network clips in a playlist to the local server.

Melt: Merges the clips in a playlist into a single unified clip.

Small/Large: Changes the display size of thumbnail images.

(17) Share Play indicator for clips

Indicates whether clips on the network server are Share Play enabled.

Green: Share Play enabled Gray: Share Play disabled

(18) Swap mark

Indicates that there is swap data configured for the clip.

(19) Audio clip sync indicator

If the clip and the audio clip are the same clip, this indicates whether the clips are synchronized.

: Synchronized

1: Not synchronized

(20) Audio split value

Displays the audio split value configured for the clip. If the split value is set beyond the clip, [<<] or [>>] will be displayed for the clip.

Playlist viewer



- (1) Loaded playlist ID
- (2) Effect type and duration configured for the current clip
- (3) Current clip ID/clip name
- (4) Current timecode
- (5) Remaining playback time of playlist
- **(6)** Current speed setting
- (7) Audio split value configured for the clip
- (8) Swap data configured for the clip (displayed when current position is a swap point)
- (9) Number of the current clip/Total number of clips in the playlist
- (10) Speed status
- (11) Countdown to OUT point of the current clip

Playlist edit mode

Press the [PLST] button to invoke playlist edit mode.

If using a mouse/touch panel, click/tap [Playlist] on the operation screen to invoke playlist edit mode.

The playlist edit mode operation screen is displayed and the selected playlist is loaded. The IN point of the clip selected in the playlist is displayed in PGM1. In 2PGM mode, the IN point of the clip registered at the start of the playlist is displayed in PGM2.

In playlist edit mode, you can perform edit operations on registered clips, such as moving and deleting clips.

Preview control

In 2PGM mode, you can perform operations on a clip (preview) or the playlist by switching the PGM output to control.

Press the [PRV CTL] button to enable preview control and set PGM2 (clip operations) as the control target. Press [PRV CTL] again to return to PGM1 (playlist operations) target control.

Notes

- When there is only one PGM output that can be controlled, preview control is disabled.
- If a PWS-4500 is being used in XAVC 4K/QFHD, Avid DNxHD, or Apple ProRes 422 format and [Effect by two ports] on the settings screen is set to [Enable], the effect picture is displayed on PGM2 when the current position in the playlist is within the effect period. In this case, the target clip to control is not displayed even when the [PRV CTL] button is pressed.

Playlist playout mode

Press the [PLST] button in playlist edit mode to invoke playlist playout mode. Press the [PLAY] button to start playback from the current position.

In playlist playout mode, press the [PLST] button again to cue up the IN point of the first clip, then press the [PLAY] button to start playback.

To return to playlist edit mode, move the jog dial or press the [D] (Edit) soft button.

Notes

- The next cued clip is displayed on the PRV side in Preview control mode.
- If there are any unplayable parts of clips on the network server, those parts are played back using an internal signal on the server.

Selecting a playlist

Select a playlist to make the active playlist by specifying a page number, bank number 10 (PL), and playlist number, in that order.

"PL11" (page 1, playlist 1) is the default active playlist.

When using two control panels, "PL11" is the default on the first control panel (Panel1) and "PL21" is the default on the second panel (Panel2).

To select a page number

[PAGE] button ([SHIFT] \rightarrow [PRV CTL]) \rightarrow [F1] to [F10] function buttons (for page numbers 1 to 10)

To select bank number 10 (PL)

[SHIFT] button \rightarrow [F10] function button (for bank number 10 (PL))

To select a playlist number

[F1] to [F10] function buttons (for playlist numbers 1 to 10)

If a clip is registered in the playlist, the playlist becomes active and the selected [F1] to [F10] function button lamp turns on red.

If the playlist is empty, press the [ENTER] button in the confirmation message dialog to make the playlist active and turn the selected [F1] to [F10] function button lamp on red.

Playlist operations using the keyboard

You can also select a playlist using the keyboard.

To select a page: Alt + left/right arrow keys **To select bank 10 (PL):** Alt + down arrow keys

To select a playlist: Up/down arrow keys + Enter key

You can also make the following settings from the keyboard.

Playlist name setting: You can specify an arbitrary name (up to 32 characters) for a

playlist. Select a playlist and enter a name in the Name field,

then press the F1 key to register the name.

Pressing the Shift+F1 keys moves the cursor to the Name field.

Playlist operations using a mouse/touch panel

You can also select a playlist using a mouse/touch panel.

To select a page: Click/tap the page number using the page buttons at the top of

the clip list area.

To select bank 10 (PL): Click/tap "PL" using the bank buttons displayed on the right of

the clip list area.

To select a playlist: Double-click/double-tap the playlist in the playlist list.

Basic playlist operations

To create a playlist

Select playlist \rightarrow Load clip to register \rightarrow [ENTER] button

- If a playlist is available, registering a clip creates a playlist. If a playlist contains registered clips, the clip is added to the end of the playlist.
- Using a mouse/touch panel, select a playlist and select a clip to register, then drag & drop the clip into the storyboard.

Note

The maximum number of clips that can be registered is 300 if the local server is a PWS-4500, or 100 if the local server is a BPU4800.

To delete a playlist

```
Select page number \rightarrow Select bank number ([SHIFT] button \rightarrow [F10] function button) \rightarrow [CLEAR] button \rightarrow Select playlist number \rightarrow [ENTER] button in confirmation message dialog
```

- To cancel deletion, press the [MENU] button in the confirmation message dialog.
- The playlist and the clips in the playlist are deleted.
- Active playlists cannot be deleted.
- On a keyboard, select a playlist and press the Ctrl+Delete keys. Press the Enter key in the confirmation message dialog (press the Esc key to cancel).

To copy a playlist

```
Select playlist to copy \rightarrow Select available playlist number \rightarrow [A] (Copy) soft button in confirmation message dialog \rightarrow [ENTER] button
```

- To cancel copying, press the [MENU] button in the confirmation message dialog.
- On a keyboard, select a playlist to copy and press the Ctrl+C keys, then select an available playlist number and press the Ctrl+V keys.
- Using a mouse/touch panel, select a playlist to copy, then drag & drop the playlist onto an available playlist number.

To archive a playlist

You can store the playlist in conjunction with Media Gateway.

```
Playlist edit mode \rightarrow [MENU] button \rightarrow [A] (>Archive) soft button
```

- The playlist and all clips in the cliplist are archived.
- The playlist ID background turns green and a progress bar is displayed below the playlist ID when cued for archiving and when archiving is in progress.
- On a keyboard, select a playlist and press the Alt+Z keys.

Notes

- Before archiving a playlist, a shared folder must be configured on the PC which has Media Gateway
 installed and qualification information must be configured on the PC which has PWA-PRC1 installed.
 For details about configuration, refer to the installation guide.
- Playlists cannot be archived to Professional Discs, SxS memory cards, or Avid servers.

Basic playlist edit and playback operations

To select a clip in a playlist (browse operation)

Playlist edit mode \rightarrow [BROWSE] button \rightarrow Browse using jog dial \rightarrow Select target clip

- To exit browse mode, press the [BROWSE] button again.
- Using a mouse/touch panel, click/tap the target clip in the storyboard to select the clip.
- You can configure the unit so that the image of the first frame of the clip is displayed, not the frame at the start of the effect, in the viewer during browse operations, even when an effect is configured between clips using [Browse mode Fx] on the settings screen.

To add a clip to a playlist

Clips are added in insert mode if the Overwrite checkbox is cleared or in overwrite mode if the Overwrite checkbox is checked. Adding in overwrite mode is supported only when using a mouse/touch panel.

• In insert mode, the clip is inserted before/after (set using [Insert in playlist] on the settings screen) the selected position.

In overwrite mode, the clip (with fixed IN/OUT points and duration) overwrites the existing clips in the playlist starting from the IN point.

- In overwrite mode, clips within the playlist cannot be moved.
- In overwrite mode, the IN/OUT points cannot be changed.
- In overwrite mode, audio split editing is not supported.
- In overwrite mode, [Sort by TC] operation is not available.
- If audio split is set for clip in the loaded playlist, a check mark cannot be placed in the Overwrite checkbox.

```
Playlist edit mode \rightarrow Select clip insertion position \rightarrow [PRV CTL] button \rightarrow Load clip into PGM2 \rightarrow [A] (Insert) soft button or [INSERT] button ([SHIFT] \rightarrow [BROWSE])
```

- Using a mouse/touch panel, select a clip in the clip list, then drag & drop the clip to the desired position in the storyboard.
- In 1PGM mode, add clips using mouse/touch panel operations.
- Clips on a network server can also be added.
 For details about specifying clips on a network server, see "Share Play Function" (page 74).

Notes

- When clips on a network server are added to a playlist, audio split edits cannot be performed. When network clips are first registered, any configured split edit data is deleted.
- When the playback ports on a PWS-4500 are set to HD Multi-Output and the Avid DNxHD or Apple ProRes 422 format is being used, setting [Effect by two ports] to [Enable] on the settings screen of this application will disable the [PRV CTL] button operation.

To delete a clip in a playlist

Clips are deleted in insert mode if the Overwrite checkbox is cleared or in overwrite mode if the Overwrite checkbox is checked. Deleting in overwrite mode is supported only when using a mouse/touch panel.

```
Playlist edit mode \rightarrow Select clip \rightarrow [D] (Delete) soft button
```

- Using a mouse/touch panel, select a clip in the storyboard and click/tap [Delete] or drag & drop the selected clip out of the storyboard. To delete all clips, click/tap [Delete All].
- When a clip is deleted in insert mode, the subsequent clips move forward by a distance equal to the duration of the deleted clip.
- When a clip is deleted in overwrite mode, the IN point of the next clip moves forward by a distance equal to the duration of the deleted clip.

Note

Normally when deleting a clip, the deleted clip is loaded in the viewer. If the clip cannot be loaded due to usage conditions, the clip image is not displayed and the clip ID/server name is displayed at the top of the viewer.

To move a clip within a playlist

```
Playlist edit mode \rightarrow Select clip to move \rightarrow [D] (Delete) soft button \rightarrow Select clip insertion position \rightarrow [A] (Insert) soft button or [INSERT] button ([SHIFT] \rightarrow [BROWSE])
```

- The clip is moved to before/after (set using [Insert in playlist] on the settings screen) the selected insertion position.
- Using a mouse/touch panel, select a clip in the storyboard and then drag & drop the clip to the insertion position.
- In 1PGM mode, move clips using mouse/touch panel operations.

To change IN/OUT points of a clip in a playlist

```
Playlist edit mode \rightarrow Select clip \rightarrow Set IN/OUT point

To set IN/OUT point at the start/end of a clip that includes guardbands:

[CLEAR] button \rightarrow [IN] or [OUT] button

To set IN/OUT point at any position on a clip:

[IN] or [OUT] button at desired position
```

• The IN/OUT point change is reflected only on the clip in the selected playlist.

To cut a clip within a playlist

```
Playlist edit mode \rightarrow Select clip to cut \rightarrow Move to cut position using jog dial \rightarrow [MENU] button \rightarrow [SHIFT] button \rightarrow [D] (Add Cut) soft button
```

• A clip cannot be cut if the maximum number of registered clips has already been reached.

- A clip cannot be cut if the portions of the clip on either side of the cut position would have a duration
 of less than 10 frames.
- If an effect is configured for a clip that is cut, the effect is retained on the portion of the clip before the cut position.
- A clip cannot be cut during an effect.
- A clip cannot be cut within the range of a configured split edit.

To switch to another angle for a clip in a playlist

You can switch a clip in a playlist to another angle at the same timecode or with the same clip number.

```
Playlist edit mode \rightarrow Select clip \rightarrow [MENU] button \rightarrow [SHIFT] button \rightarrow [C] (Other Angle) soft button
```

- Press the [A] soft button and set the search target.
 - TC: Clip or record train containing the same timecode
 - Clip number: Clip with the same clip number
- Switch between search targets by repeatedly pressing the [B] soft button. Select [Clips] to search clips only, [Records] to search record trains only, or [Clips + Records] to search clips and record trains.
- Press the [SHIFT] + [D] (Network) soft button to switch between search targets. Searches the local server and network server when on (highlighted) or the local server only when off.
- When a record train containing the same timecode is selected, you can create and replace a clip with the same IN point and OUT point values as a clip in the playlist. The clip to be replaced is created on the page specified using [Network/PL clip save page] on the settings screen.

To register an audio clip

You can register an audio clip in the active playlist.

```
Viewer mode, 1-Device mode, 2-Device mode, Metadata setup mode, or Cut Out mode \rightarrow Load audio clip \rightarrow [MENU] button \rightarrow [SHIFT] button \rightarrow [B] (Aux Clip) soft button
```

- To unregister a clip, press the [MENU] button → [CLEAR] button → [SHIFT] button → [B] (Aux Clip) soft button, and select the clip to unregister.
- In 2PGM mode, to register an audio clip in the active playlist in playlist edit mode, press [PRV CTL]
 → Load audio clip → [MENU] button → [SHIFT] button → [B] (Aux Clip) soft button.
 To unregister a clip, press the [MENU] button → [CLEAR] button → [SHIFT] button → [B] (Aux Clip) soft button, and select the clip to unregister.
- Using a mouse/touch panel, select an audio clip in playlist edit mode and drag & drop the audio clip into the audio clip area.
 - To unregister a clip, drag & drop the audio clip out of the audio clip area.
- In 1PGM mode, register and unregister audio clips using mouse/touch panel operations.

Note

This function is not supported if the local server is a BPU4800.

To play a playlist

To play a playlist from the current position in playlist edit mode, press the [PLAY] button. Clips in a playlist are played back at the speed specified for each clip. You can also control the playback speed using the fader lever.

The playback speed of clips recorded with HFR can be set to any speed up to realtime speed.

- On a keyboard, press the Alt+P keys to start playback.
- Pressing the [B] (Next) soft button during playback will stop playback of the currently playing clip, and start playback of the next clip.
- Pressing the [C] (Skip) button during playback will continue playback of the current clip until the end, then skip the next clip and start playback of the subsequent clip.
- If an effect is configured for the next playback clip when Next/Skip is executed, the clip is played with the effect.
- For details about playback operations in playlist playout mode, see "Playlist playout mode" (page 56).
- If a clip on a network server registered in a playlist does not support Share Play, it is automatically replaced with an internal signal (RAMP) and jog operation is enabled (dummy clip). In this case, playout mode is not invoked. To playback the dummy clip as-is, set [Playback with dummy clip] to [Enable] on the settings screen.

To add a clip to the currently playing playlist

When a playlist is currently playing on the playlist mode operation screen, you can add a clip to the end of the playing playlist by adding a clip to the storyboard using drag & drop.

In 2PGM mode, you can add a clip from the PGM not being used for the playlist to the end of the currently playing playlist on the 1-device or 2-device mode screen by setting [Multi playlist] to [Enable] on the settings screen.

Playlist edit mode \rightarrow Select the PGM not used for currently playing playlist \rightarrow [ENTER] button

To insert a playlist

You can insert a playlist into another playlist.

- On a keyboard, select the playlist to insert and press the Ctrl+C keys to copy the playlist, select the playlist number where you want to insert the playlist and press the Ctrl+V keys to paste the playlist. The playlist is added to the end of the insertion destination playlist.
- Using a mouse/touch panel, load the insertion destination playlist, select the playlist to insert, and drag & drop the playlist to the insertion location in the storyboard.

• Playlists on a network server can also be specified.

To insert search results in a playlist

You can insert clips displayed in the search results in a playlist using the [INSERT] button ([SHIFT] \rightarrow [BROWSE]).

Audio split edits

You can delay the timing of clip video and audio switching by editing the video and audio independently (split edit). Editing is enabled when [Advanced audio editing] is set to [Yes] on the settings screen.

Note

This function is not supported if the local server is a BPU4800.

Video-base split edit

In a transition between two clips, you can adjust the switch timing of the audio of the clips. You can specify a split value in the range from the start to the end of the clip, including the guardbands. You can specify a value beyond the clip between the IN point of the first clip and the OUT point of the last clip in a playlist.

Specifying a time value

```
Playlist edit mode \rightarrow Select clip to edit \rightarrow [SHIFT] button \rightarrow [A] (V Base) soft button \rightarrow [A] (A Advance) or [B] (A Delay) soft button \rightarrow Enter split value \rightarrow [ENTER] button
```

- To advance the audio start location of a clip, press the [A] soft button. To delay the audio, press the [B] soft button.
- Enter a split value using the [F1] to [F10] function buttons (for numerals 1 to 0) or the keyboard.
- To apply the same split value to all clips in a playlist, press [SHIFT]+[D] (Edit All).
- While the split value input dialog is displayed, you can press the [A] (Previous) soft button to set the IN point of the clip (boundary with previous clip) or the [B] (Next) soft button to set the OUT point of the clip (boundary with following clip) to the split position.

Specifying and marking a location

You can also mark the location of a split, instead of entering a value, using the following.

```
Playlist edit mode \rightarrow Select clip to edit \rightarrow [SHIFT] button \rightarrow [A] (V Base) soft button \rightarrow [D] (A Split) soft button \rightarrow Jog to split location \rightarrow [IN] or [OUT] button
```

- Pressing the [IN] button moves the start position of the audio of the selected clip to the jogged split location.
- Pressing the [OUT] button moves the start position of the audio of the clip after the selected clip to the jogged split location.

Audio-base split edit

In a transition between two clips, you can adjust the switch timing of the video of the clips. You can specify a split value in the range from the start to the end of the clip, including the guardbands. However, the position that can be set is between the IN point plus 10 frames of the previous clip and the OUT point minus 10 frames of the following clip.

Specifying a time value

```
Playlist edit mode \rightarrow Select clip to edit \rightarrow [SHIFT] button \rightarrow [B] (A Base) soft button \rightarrow [A] (V Advance) or [B] (V Delay) soft button \rightarrow Enter split value \rightarrow [ENTER] button
```

- To advance the video start location of a clip, press the [A] soft button. To delay the video, press the [B] soft button.
- Enter a split value using the [F1] to [F10] function buttons (for numerals 1 to 0) or the keyboard.
- To apply the same split value to all clips in a playlist, press [SHIFT]+[D] (Edit All).

Specifying and marking a location

You can also mark the location of a split, instead of entering a value, using the following.

```
Playlist edit mode \rightarrow Select clip to edit \rightarrow [SHIFT] button \rightarrow [A] (A Base) soft button \rightarrow [D] (V Split) soft button \rightarrow Jog to split location \rightarrow [IN] or [OUT] button
```

- Pressing the [IN] button moves the start position of the video of the selected clip to the jogged split location.
- Pressing the [OUT] button moves the start position of the video of the clip after the selected clip to the jogged split location.

Swapping audio channels

You can swap the audio channels of clips.

The audio channel swapping operation varies depending on the [Swap audio track] setting (Auto or Manual) on the settings screen.

Note

This function is not supported if the local server is a BPU4800.

To swap audio channels automatically

```
Playlist edit mode \rightarrow Select clip to edit \rightarrow [SHIFT] button \rightarrow [A] (V Base) soft button \rightarrow [SHIFT] button \rightarrow [C] (Swap) soft button \rightarrow Jog to audio channel swap start location \rightarrow [IN] button \rightarrow Jog to audio channel swap stop location \rightarrow [OUT] button
```

• The audio channel swap locations specified with the [IN] and [OUT] buttons are called swap points.

Multiple swap points can be configured for the selected clip.

• In automatic audio channel swapping, the audio channels swap as follows.

```
Track 1: channel 1 \rightarrow channel 3, Track 2: channel 2 \rightarrow channel 4 Tracks 5 to 8 are not swapped.
```

• You can apply an effect when the audio channels swap. This operation is the same as the effect setting for audio-base split edits.

To swap audio channels manually

```
Playlist edit mode \rightarrow Select clip to edit \rightarrow [SHIFT] button \rightarrow [A] (V Base) soft button \rightarrow [SHIFT] button \rightarrow [C] (Swap) soft button \rightarrow Jog to audio channel swap start location \rightarrow [IN] button \rightarrow Select track using function buttons \rightarrow Specify track number using function buttons \rightarrow Specify all tracks in same way \rightarrow [ENTER] button \rightarrow Jog to audio channel swap stop location \rightarrow [OUT] button \rightarrow Select track using function buttons \rightarrow Specify track number using function buttons \rightarrow Specify all tracks in same way \rightarrow [ENTER] button
```

- You can specify any audio channel for all tracks (1 to 8).
- When selecting a track, pressing the [F10] function button sets audio muting.
- To cancel the operation, press the [MENU] button.

Swap point operations

```
Playlist edit mode \rightarrow Select clip to edit \rightarrow [SHIFT] button \rightarrow [A] (V Base) soft button \rightarrow [SHIFT] button \rightarrow [C] (Swap) soft button \rightarrow Jump to swap point using [GOTO IN] or [GOTO OUT] \rightarrow Delete swap point using [CLEAR] + [IN] or [OUT]
```

- You can jump to a swap point using the following buttons.
 [GOTO IN] button: Jump to the swap point before the current position in the clip.
 [GOTO OUT] button: Jump to the swap point after the current position in the clip.
- You can delete a swap point using [CLEAR] + [IN] or [OUT] buttons. The operation varies depending on the current position in the clip.

Current position is at a swap point: The swap point at the current position is deleted.

Current position is not at a swap point: A message appears, prompting you whether to delete all swap points in the clip. Press the [ENTER] button to delete all swap points.

Unifying clips in a playlist

You can merge the clips in a playlist into a single unified clip. The created clip can be saved by specifying a page. If a page is not specified, it is saved on the page specified in [Network/PL clip save page] on the settings screen.

```
Playlist edit mode \rightarrow [MENU] button \rightarrow [SHIFT] button \rightarrow [A] (Melt) soft button \rightarrow [ENTER] button
```

- To cancel the operation, press the [MENU] button.
- You can modify the following items using the keyboard. When clips are unified using the operation panel, the settings displayed in the [Melt] dialog cannot be modified.

REC port: Selects the port to record when unifying clips.

Clip name: Sets the clip name.

Clip ID: Displays a unique name used to identify the clip (Page number + Bank number + Clip number + Camera angle).

In TC: Sets the IN point timecode of the clip. The value set using [Melt default In TC] on the settings screen is displayed.

Clip save location specification

While the [Melt] dialog is displayed, specify the page number and bank number on a submonitor.

- To specify the page: Press the [A] (Page) soft button and specify the page number using the [F1] to [F10] function buttons.
- To specify the bank: Press the [B] (Bank) soft button and specify the bank number using the [F1] to [F9] function buttons.

Note

While a playlist is being unified, recording on the selected port temporarily stops. When unification is finished, recording restarts.

Soft button menu items

Items when a playlist is selected

1st menu

Item	Description
Copy Playlist	Copies a playlist.
New Playlist	Activates a new playlist.

Playlist edit mode items

1st menu

Item	Description
Insert	Inserts a clip.

Item	Description
Speed	Sets the playback speed of the selected clip.
	Press the [B] (Speed) soft button and select the speed using the fader
	lever. Press the [B] soft button again, or press the [PLST] or [ENTER]
	button to check the setting.
	The playback speed range can be set to 0% to 100% or 0% to 400%
	using [Max speed] on the settings screen if the local server is a PWS-
	4500. Only a range of 0% to 100% can be set if the local server is a
	BPU4800, regardless of the [Max speed] setting.
Fx Dur	Sets the transition effect duration (0:00 to 3:00 (seconds:frames)) of
	the selected clip.
	Press the [C] (Fx Dur) soft button and select the duration using the
	fader lever. Press the [C] soft button again, or press the [PLST] or
	[ENTER] button to check the setting.
Delete	Deletes a clip.
V Base	Invokes video-base split edit mode.
A Base	Invokes audio-base split edit mode.
Effect	Sets the transition effect (Cut, Mix, or White Flash) for the selected clip.
	ullet Press the [SHIFT] button $ullet$ [C] (Effect) soft button, and select the
	effect using the fader lever. Press the [SHIFT] button \rightarrow [C] soft
	button again, or press the [PLST] or [ENTER] button to check the
	setting.
	Note
	This function is not supported if the local server is a BPU4800.
Edit All	Sets all clips in a playlist as the target of edit operations.
A Advance	Sets the split value when advancing the audio start position of the clip
	in a video-base split edit.
A Delay	Sets the split value when delaying the audio start position of the clip in
	a video-base split edit.
A Fx Dur	Sets the audio effects duration in a video-base split edit.
	Press the [C] (A Fx Dur) soft button and specify a duration using the
	fader lever. Press the [C] soft button again, or press the [PLST] or
	[ENTER] button to check the setting.
A Split	Sets a mark at the split position in a video-base split edit.
Swap	Invokes audio channel swap mode.
V Advance	Sets the split value when advancing the audio start position of the clip
	in an audio-base split edit.
V Delay	Sets the split value when delaying the audio start position of the clip in
	an audio-base split edit.

Item	Description
V Fx Dur	Sets the video effects duration in an audio-base split edit.
	• Press the [C] (V Fx Dur) soft button, and specify a duration using the
	fader lever. Press the [C] soft button again, or press the [PLST] or
	[ENTER] button to check the setting.
V Split	Sets a mark at the split position in an audio-base split edit.
V Effect	Sets the type of effect (Cut, Mix, or White Flash) applied in a video-base
	split edit.

2nd menu

Item	Description
>Archive	Archives a playlist.
Melt	Saves the clips in a playlist as a single clip.
Other Angle	Replaces a clip in a playlist with another angle with the same timecode
	or the same clip number.
Add Cut	Cuts a clip.
Slow	Sets the optimized slow speed for HFR clips in a playlist.

Playlist playout mode items

1st menu

Item	Description
Next	Starts playback of the next clip.
Skip	Skips the next clip and starts playback of the subsequent clip.
Edit	Switches to playlist edit mode.

2nd menu

Item	Description
Loop	Enables/disables loop playback.

Cutout Edit Function

You can extract an HD resolution image from 4K resolution material for use.

Registering cutout data for a clip, by specifying the cutout position and range, enables playback of the cutout region as HD video.

Clips with cutout data can be archived and registered in a playlist.

Notes

- This operation is supported only when the server output port is set to HD Cut Out mode.

 For details about configuration, refer to the PWS-4500 or BPU4800 Operation Manual.

 For details about connecting to the server, contact your Sony sales or service representative.
- A mouse/touch panel is required for cutout edit operation.
- Old cutout data must be deleted after FS Format is executed on the server. To delete, execute [Clear all playlist/cutout data] from the settings screen.

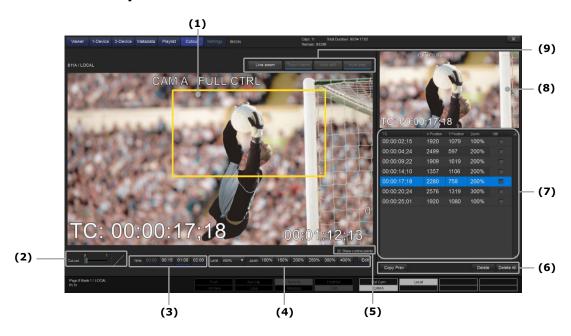
Cutout mode

In cutout mode, you use a mouse/touch panel to perform operations.

Click/tap [Cutout] on the operation screen to invoke cutout mode and to display the cutout mode operation screen.

To exit cutout mode, click/tap [Viewer], [1-Device], [2-Device], [Metadata], or [Playlist] on the operation screen.

Cutout mode operation screen



(1) Cutout frame setting area

Displays an image with a frame specifying the cutout region.

(2) Smoothness setting slider

Sets the zoom movement for Still Zoom and Live Zoom.

Slide to the left end to move linearly from zoom start to zoom end.

Slide to the right end to slow down start and end movement to zoom smoothly. The curve image is displayed on the right.

(3) Transition time setting

Time: In Live zoom, click/tap the buttons for the Zoom time and Move time you want to set.

The transition time of each button can be set by pressing the [Edit] button and clicking the corresponding button.

(4) Zoom settings

Zoom Limit: Sets the maximum zoom factor (100% to 600%).

Zoom: Click/tap a button to use a preset zoom factor. The zoom value of each button can be set by pressing the [Edit] button and clicking the corresponding button.

(5) Show control points checkbox

When checked, displays the cutout data boundary outline in the cutout frame setting area.

(6) Cutout edit operation buttons

Copy Prev: Sets the previous cutout data in the current position.

Delete: Deletes the selected cutout data.

Delete All: Deletes all cutout data.

(7) Keyframe table

Displays cutout data registered in clips as keyframes in list view.

You can check the timecode, center point XY coordinates, and zoom factor in the list. You can also specify a zoom-out setting (Still Zoom) for a specified keyframe position. You can select and cue up cutout data by clicking/tapping the cutout data or by pressing the [BROWSE] button and using jog control.

(8) Cutout image display area

Displays the resulting cutout image.

(9) Live zoom setting buttons

Live zoom: Switches to live zoom operation.

Touch zoom: Starts zooming in using touch panel operation.

Auto still: Automatically stops playback when zooming in starts.

Auto play: Automatically starts playback after zooming out.

Basic cutout operations

To create cutout data

- 1. Load a clip/record train.
- Click/tap [Cutout] on the operation screen.Cutout mode is invoked and the cutout mode operation screen appears.
- **3.** Play the clip.
- **4.** Click/tap the center point of the cutout range in the cutout frame setting area.
- **5.** Adjust the size of the frame using a mouse wheel or pinch operation on a touch panel to specify the cutout range of the image.
 - You can specify the cutout range by monitoring the resulting image in the cutout image display area.
- **6.** Repeat steps 4 and 5 to specify additional cutout data as required.
 - All specified cutout data, including interpolation data created based on the cutout data, is registered with the clip.
 - To exit cutout mode, click/tap [Viewer], [1-Device], [2-Device], [Metadata], or [Playlist] on the operation screen.

To edit cutout data

Click/tap the cutout data to edit in the keyframe table to select it, then edit the center position and/or frame size of the cutout region in the cutout frame setting area.

To delete cutout data

Click/tap the cutout data to delete in the keyframe table to select it, then click/tap [Delete]. To delete all cutout data, click/tap [Delete All].

To play cutout data

Press the [PLAY] button or Alt+P keys on the keyboard.

A clip based on the specified cutout data is played, with interpolation between data segments.

To create a clip from cutout data

If a cutout data setting exists when creating a clip, the clip is registered as a clip with cutout data.

When cutout data is set, the clip is registered with IN/OUT points at the first and last keyframes, respectively, even if IN/OUT points have not been set.

To archive a clip with cutout data

When a clip with cutout data is archived, the cutout data is archived together with the clip. For details about archiving, see "To archive a clip" (page 35).

To register a clip with cutout data in a playlist

You can add clips with cutout data to a playlist.

For details about clip operations in playlists, see "Basic playlist operations" (page 57).

Note

Archiving clips with cutout data and registering clips in a playlist are supported only when the server is set to HD Cut Out mode or High Frame Rate with 2 Boards + HD Cut Out mode.

To set the zoom at a specific point

- **1.** Set [Freeze on cue points] to [Yes] on the settings screen.
- **2.** Display the frame you want to zoom.
- **3.** Set the zoom size of the source zoom.
- **4.** Place a check mark in the [Still] checkbox in the keyframe list.
- **5.** Set the zoom size of the target zoom.
- 6. To return to the source zoom, click the button in the [Still] field of the target zoom to change it to .
- **7.** Set the zoom transition value.
- 8. Cue up the playback start position.
- **9.** Play the clip.

Stop the playback at the desired point.

10. Press the [TAKE] button.

The zoom changes from the source zoom to the target zoom over the time interval specified by the zoom transition setting.

11. If the direction of the Still setting is set to , press the [TAKE] button.

The zoom changes from the target zoom to the source zoom over the time interval specified by the zoom transition setting.

12. Start playback using the [PLAY] button or the fader lever control.

Note

Still Zoom can be set for clips only.

To zoom and move during playback

Zoom and move operation is supported during playback without the need to set keyframes.

- **1.** Place a check mark in the [Live zoom] checkbox.
- **2.** Select Auto still, Auto play, Touch zoom, Time, or Zoom.
- **3.** Click/tap the position you want to zoom.

The position you click/tap is stored as a zoom point.

If Touch zoom is set to On, zooming in occurs simultaneously.

4. Start playback, then press the [TAKE] button at the position you want to zoom.

The picture zooms in toward the zoom point.

- **5.** Click/tap the position to which you want to move. The picture moves to the specified position.
- . Press the [TAKE] button again. The picture zooms out to full size (100%).

Share Play Function

You can browse record trains and clips on a server on a network, and control the playback in the same way as for clips and record trains on the local server (Share Play function).

Preparation

Network server information must be configured beforehand in [4K server(s)] on the settings screen. For details, see "Configuration" (page 77).

Selecting a network server

Select the network server to share for the Share Play function. You can select separate servers for clips and for record trains.

[NETWORK] button → [B] to [D] soft buttons →
Select network server using [F1] to [F10] function buttons

- Press the [NETWORK] button and then one of the [B] to [D] soft buttons for network server use.
 - [B] (Clips) soft button: Set clip control for the local server.
 - [C] (Records) soft button: Set record train control for the local server.
 - [D] (Clips + Records) soft button: Set both clip control and record train control for the local server.
- To select the local server, press the [A] (Local) soft button.

Network server selection operations using the keyboard

You can select and control a network server using the keyboard.

Operations	Keys
Display the server list	Shift+F9
Return to sharing on the local server	Alt+L
Set clip control for the network server	Alt+C
Set record train control for the network server	Alt+R
Set clip control and record train control for the network server	Alt+P
Select network server in the server list	Up/Down/Left/Right
Apply the network server selection	Enter
Cancel operation	Esc

Network server selection operations using a mouse/touch panel

You can select and control a network server using a mouse/touch panel.

- To set clip control for a network server, select the server in the drop-down list on the 1-device mode, 2-device mode, or metadata setup mode operation screen.
- To set record train control for a network server, select the server in the drop-down list in the viewer area of the 1-device mode, 2-device mode, or metadata setup mode operation screen.

Loading a record train on a network server

When a network server is selected as a record train, a record train on the server can be loaded using the following operations.

To load a record train while recording

After switching to the selected server, the currently recording record train becomes the target of operations. You can play a record train on a network server using the following operation.

• Press the [RECORD] button to switch to live mode, and then the currently active record train switches to live mode.

You can also use a mouse/touch panel as follows.

- Click/tap the [Live] button to make the currently recording record train the target of operations and switch to live mode.
- You can delay playback of live mode video by setting [Chase delay] on the settings screen.

To load a recorded record train

You can load a record train in the same way as a record train on the local server by clicking/tapping the [File] button. For details, see "To access a recorded record train on a server" (page 24).

Creating a clip on a network server

If both clip control and record train control are set for the same network server, or clip control is set for the local server, you can create a clip from a record train on the network server and save the clip on the same network server. If clip control is set for the local server, the clip itself is created on the same network server as the record train, and a linked clip that links to the clip is displayed in the local cliplist.

The procedure for creating a clip is the same as for the local server. For details, see "To create and save a clip" (page 33).

Loading a clip on a network server

If clip control is set for a network server, the clips on the server are assigned to the [F1] to [F10] function buttons. The procedure for loading a clip in a viewer is the same as for the local server. For details, see "To load a clip" (page 33).

Camera mapping on a network server

A record train on a network server can be controlled in the same way as a local record train by mapping the record train on the network server to an unused camera angle on the local server. If a clip is created from the mapped record train, the clip itself is saved on the network server and a linked clip that links to the clip is created in the local cliplist. For details about the mapping setting, see "Mapping network cam" (page 89) in "Configuration".

Cutout data operations on a network server

Creating and editing cutout data from a clip/record train on a network server are not supported. However, when cutout data is registered on a network server, you can play the cutout data in the same way as for cutout data on the local server. Live zoom operation is also supported for clips and record trains on a network server. For details, see "Cutout Edit Function" (page 69).

Configuration

Settings screen

The settings screen is used to configure PWA-PRC1 and PWSK-4403 settings, server settings, and to manage and control record trains.

To display the settings screen

On the 1-device mode, 2-device mode, viewer mode, or metadata setup mode operation screen, press the [SHIFT] button on the control panel and then press the [D] (Settings) soft button.

On a keyboard, press the Shift+F2 keys.

Using a mouse/touch panel, click/tap the [Settings] button on the operation screen.

When a playlist is loaded in a PGM, the settings screen cannot be displayed.

For details about each item, see "Configuration items" (page 78).

To return to the operation screen

Press the [SHIFT] button and then press the [D] (Exit Settings) soft button.

On a keyboard, press the Shift+F2 keys.

Using a mouse/touch panel, click/tap [Viewer], [1-Device], [2-Device], or [Metadata] on the operation screen.

To exit PWA-PRC1

Press the [SHIFT] button and then press the [A] (Exit App) soft button. A confirmation message appears.

Click/tap [OK] to stop record train recording and close all ports or click/tap [Cancel] to continue record train recording.

You can also click/tap the "\omega" button in the top right corner of the window using a mouse/touch panel to exit PWA-PRC1.

Notes

- If the local server is changed or the IP address setting of the PRC Manager is changed, start PWA-PRC1 again.
- When using two PWSK-4403 units, the configuration on the settings screen can be changed only
 from the control panel with the main display link setting turned on. While the settings screen is
 displayed, key operation is disabled on the control panel with the main display link setting turned
 off.

Configuration items

[Local 1]

Category	Item	Description	Default value
Operation	Clear all clips	Deletes all clips, playlists, playlist settings	_
		information, and cutout data on the server.	
		Operation from panel: Execute using [A] (Clear all clips) soft button.	
		Note	
		Clips on protected pages or banks are not deleted.	
	Clear all	Deletes only the playlist settings	_
	playlist/cutout	information and cutout data on the server.	
	data		
	Record	Starts and stops record train recording.	_
	(Start/Stop)	Operation from panel: Execute using [B] (Start or Stop) soft button.	
	Split view	Sets the operation screen to 4-angle mode	4 Angles
		(4 Angles) or 6-angle mode (6 Angles).	
	Character super	Specifies whether to also output the	PRC
		character information for display on the	
		PWA-PRC1 operation screen on Monitor Out	
		of the server. This enables control while	
		viewing an external monitor, even if a	
		display for the PWA-PRC1 operation screen	
		is not installed.	
		PRC: Display character information on PWA- PRC1 operation screen only.	
		PWS: Output character information on Monitor Out of the server and PWA-PRC1 operation screen.	
	Metadata on OSD	Specifies whether to display metadata in	No
		viewer if metadata (rating, keywords) is	
		registered in the clip.	
	In/Out/Dur on	Specifies whether to display the IN point,	No
	OSD	OUT point, and duration in a viewer and	
		submonitor.	
		Note	
		Cannot be displayed when [Character Super] is set to [PWS].	

Category	Item	Description	Default value
	Default screen	Sets the screen displayed at startup and	1-Device
		when the [RECORD] or [TAKE] button	
		([Multi playlist] set to [Enable]) is pressed	
		in playlist mode.	
	Preview control	Enables/disables Preview control mode	Disable
	mode	(Enable/Disable).	
	Effect duration	Sets the transition time (0:00 to 3:00)	0:05
	for TAKE	when an effect is set and the [TAKE] button	
		is pressed in Preview control mode.	
	Audio slow	Specifies whether to cut the audio during	No
	motion	slow-motion playback.	
		Yes: Output audio	
		No: Do not output audio	
	Name field	Specifies the display format of the Name	Recall
		field when a clip is selected on the	
		metadata setup mode screen.	
		Clear: Clears the Name field when another clip is selected.	
		Remain: Retains the content of the Name field when another clip is selected.	
		Recall: Displays the name of the clip when another clip is selected.	
	Mark for each	Specifies whether to set a different IN	No
	angle	point/OUT point for each camera angle.	
		Yes: Specify a separate IN point/OUT point for each camera angle.	
		No: Specify an IN point/OUT point for one angle to apply the same IN point/OUT point to all angles.	
	Out point display	Specifies the display mode of the OUT point	Include
	mode	shown in a viewer or submonitor when	
		[In/Out/Dur on OSD] is set to [Yes].	
		Include: Value of the frame at the OUT point is displayed as the OUT point.	
		Exclude: Value of the frame after the OUT point is displayed as the OUT point.	

Category	Item	Description	Default value
	Confirm dialog	Sets whether to display a deletion	Off (all)
	for [Delete All]	confirmation dialog when [Delete All] is	
		clicked/tapped on the playlist mode	
		operation screen and cutout mode operation	
		screen.	
		Playlist: Display/hide confirmation dialog when [Delete All] is executed on the playlist mode operation screen.	
		Cutout: Display/hide confirmation dialog when [Delete All] is executed on the cutout mode operation screen.	
GUI and Panel	Panel 1/2	Enables a control panel row, if the	_
links		corresponding panel is connected.	
	Main	Sets the link setting between the control	_
		panel and the main display.	
		Link on (check mark): The following functions are linked.	
		 Specifying page/bank, loading clip/playlist in PGM, switching to playlist mode, switching mode from playlist mode, switching to settings screen 	
		 Switching to network copy on the control panel 	
		Link off: Specifying page/bank and switching mode operate independently.	
		 Loading clips/playlists from the operation screen on the main display is disabled. 	
		 Switching to settings screen supported from the operation screen on the main display only. 	
	Sub 1/2	Enables a submonitor column, if the	_
		corresponding submonitor is connected.	
		Connection (check mark), No connection	
	Update	Checks the connection status between the	_
		control panels and the submonitors, and	
		displays the result.	
		 [F1] is lit green for three seconds on the panel designated as Panel1. [F2] is lit green for three seconds on the panel designated as Panel1. "Sub1" is displayed for three seconds on the submonitor designated as submonitor 1. "Sub2" is displayed for three seconds on the submonitor designated as submonitor 2. 	

Category	Item	Description	Default value
Controller	HFR jog mode	Sets the response speed during jog control	Frame base
		for HFR clips.	
		Frame base: Frames advance by frame.	
		Real time base: Frames advance by real time.	
	Fast jog	Sets the speed increase of the jog dial in	20
		high-speed mode.	
		1 to 50 times	
	PGM speed/var	Sets the fixed speed when [PgmSpd] is	50
	Max	enabled, or the maximum speed when	
		[VarMax] is enabled.	
		1 to 100%	
	Lever engage	Sets the operating mode of the fader lever.	Direct
	mode	Direct: Playback speed controlled by position of lever (1 to 100%).	
		Current speed: Engages the lever when the lever is moved to the position corresponding to the current playback speed.	
	Second lever	Sets the speed range of the fader lever in	-100% -
	range	the 2nd mode. -100% - +100%, 0% - +200%, -200% - +200%, 0% - +400%, -400% - +400%	+100%
	Recall clip toggle	Sets whether to enable (check mark) or	Enable
		disable toggling between camera angles	
		when function buttons are pressed	
		repeatedly.	
	Record key	Sets the operation of the [RECORD] button. Live: If recording is stopped, switches to the last recorded image in live mode without starting to record.	Start REC+Live
		Start REC+Live: Starts recording and switches to live mode.	
	Play key	Sets the operation of the [PLAY] button for	Play
		HFR clips.	
		Play: Starts playback at normal [PLAY] button speed.	
		Feed Play: Starts playback at a speed in accordance with the frame rate when the clip was recorded.	

Category	Item	Description	Default value
	Browse key	Sets the operation when the [BROWSE]	Search result
		button is pressed during clip or record train	
		operation.	
		Search TC: Search current timecode on the currently controlled PGM, and display results.	
		Search result: Start search using last search conditions, and display results.	
	First lever mode	Sets the operation of the fader lever in fast	Type-A
	for HFR	mode for HFR clips.	
		Type-A: Slow ramp, fixed position	
		Type-B: Slow speed, fixed position	
	Multi playlist	Enables/disables Multi playlist in 2PGM	Disable
		mode (Enable/Disable).	

[Local 2]

Category	Item	Description	Default value
Record trains	Loop REC	Enables (check mark)/disables loop recording mode.	Disable
	Recording port	Sets whether to record on the server input port. Enable (check mark), Disable CAM A is always set to record (check mark). [Apply] button: Applies changes to the Recording port setting. When the [Apply] button is clicked/tapped, all recording to the server temporarily stops, then recording starts only on CAMs set to record. At startup, recording starts only on CAMs set to record.	On (all)
	Default clip duration	Duration of automatically created clips when only an IN point or an OUT point is specified. Enable (check mark, 1 to 60 seconds), Disable (auto-creation disabled)	Disable
	Guardbands	Sets the guardbands (0 to 60 seconds) added before the IN point and after the OUT point when saving a clip.	5
	Record train OUTs	Sets operation when the OUT point is reached in a record train. Play through: Continue playback. Freeze: Stop playback.	Play through

Category	Item	Description	Default
			value
	Mark cue points	Timecode to use when configuring cue points. Live: Use currently recording record train timecode. Playback: Use channel timecode of clip during playback.	Playback
	Pre-roll for cue	Sets the time shift (0:00 to 60:00) of the cue	0:05
	point	point, set by LAST CUE, in advance of the actual mark position.	
	Freeze on cue points	Operation when cue point is reached during playback. Yes: Stops playback. No: Continue playback.	No
	HFR TC mode	Sets the timecode display for HFR material. HFR: Displays slow motion playback timecode. Real time: Displays the real time timecode.	Real time
	Default cue up	Specifies the cue-up position when a recorded record train is loaded. Start: Cue up at the start. End: Cue up at the end.	End
	Chase delay	Specifies the output delay (0 to 120 seconds) for playback of live mode video.	0
Clips	Clip post-roll	Sets the playback interval (0 to 30 seconds) after reaching the OUT point when [PostRoll] is enabled.	2
	Auto make clip for CAM	Specifies whether to save the selected unused target angles to a clip. Specify each angle using the checkboxes. On: Save angle when saving clip. Off: Do not save angle when saving clip.	On (all)

Category	Item	Description	Default
			value
	Auto name clips	Sets the name automatically assigned to clips	Rule1
		when they are created.	(blank)
		Select the rule to set in the list box and enter	
		a character string in the text box to name	
		clips automatically when created with the	
		entered string. No clip name is set if the text	
		box is empty.	
		To use a reserved word, double-click the	
		reserved word below the text box to add the	
		word to the text box.	
		%CAMLBL%: Input camera (CAM A to F) label when clip is registered. Use alias if alias is defined.	
		%PORTLBL%: Port label when clip is registered.	
		%CDATE%: Creation date.	
		%TCIN1%: IN point timecode (HH:MM:SS: FF display format).	
		%TCIN2%: IN point timecode (HHMMSSFF display format).	
		Note	
		Up to 32 characters can be entered, including reserved words. If more than 32 characters are entered after reserved words are converted to characters, the 33rd and subsequent characters in the clip name are deleted.	
Playlists	Default effect	Specifies the default effect transition (Cut,	Cut
		Mix, or White Flash) when registering clips in	
		a playlist.	
	Video effect	Specifies the default duration (0 to 3:00) to	0:05
	duration	apply to a video effect when registering clips	
		in a playlist.	
	Audio effect	Specifies the default duration (0 to 3:00) to	Enabled
	duration	apply to an audio effect when registering	0:05
		clips in a playlist. Select [Lock to video] to	
		use the same duration as video effects.	
	Display effect	Specifies whether the effect duration is	No
	duration	displayed, if an effect is configured for a clip,	
		on the storyboard on the playlist mode	
		operation screen.	

Category	Item	Description	Default
			value
	Max speed	Sets the maximum value of the Speed setting	100%
		in playlist edit mode.	
		100%: 0% to 100% Speed	
		400%: 0% to 400% Speed	
		Note	
		If the local server is a BPU4800, the range of the Speed setting is 0% to 100%, even when set to 400%.	
	Default speed for	Sets the playback speed for HFR clips when	Real time
	HFR clip	HFR clips are registered in a playlist.	
		Real time: Playback at 100% speed.	
		Slow: Slow playback according to the HFR increase in frame rate.	
	Insert in playlist	Specifies whether a clip is inserted before or	Before
		after a clip when editing a playlist.	
		Before: Insert before clip.	
		After: Insert after clip.	
	Advanced audio	Specifies whether to enable split editing and	No
	editing	swap editing.	
	Swap audio track	Specifies the mode used for configuring the	Auto
		swapping of audio channels. Select [Manual]	
		to specify the channels to swap manually.	
	Playback with	Sets whether to enable playback by replacing	Disable
	dummy clip	a dummy clip, if present, by an internal	
		signal (RAMP).	
		Enable / Disable	
	Playlist pre-roll /	Sets the margin (0 to 30 seconds) added to	0
	post-roll	the start or end of a playlist.	
	Melt default In TC	Sets the IN point timecode to display in the	01:00:00:00
		[Melt] dialog.	
	Effect by two	Sets whether to enable the effect setting in	Disable
	ports	playlist edit mode for 1-board "2 Out" (Multi)	
		configuration in XAVC 4K/QFHD, Avid DNxHD,	
		and Apple ProRes 422 formats.	
		Enable: Enable the effect setting and disable the [PRV CTL] button.	
		Disable: Disable the effect settings and enable the [PRV CTL] button	

Category	Item	Description	Default
			value
	100% speed by	Specifies the action to be taken when a	Var
	first lever	playlist is played at 100% speed using the	
		fader lever.	
		Var: Same action for playback speed of less than 100% (audio crossfade disabled).	
		Play: Same action taken for playback by	
		pressing the Play button (audio crossfade	
		enabled).	
	Browse mode Fx	Specifies which position in a clip is displayed	On
		in the viewer when browse operation is	
		initiated in playlist mode.	
		On: Displays the frame image of the effect start position if an effect is configured between clips.	
		Off: Displays the frame image for the start of the clip, regardless of whether an effect is configured or not.	

[System 1]

Category	Item	Description	Default
			value
PRC manager	Primary PRC	Specifies the IP address of PRC Manager and	IP address:
	manager IP/Port	the port used for communications.	undefined
		Note	Port No.:
		If this setting is changed, restart PWA-PRC1.	51000
	PTP Domain	Specifies the domain value (Primary,	Primary: 100
		Secondary) for Share Play (range: 0 to 127).	Secondary:
		[Set] button: Resets the Share Play connection in response to edited settings.	101
	ISC Auto	Specifies whether to enable (On) or disable	Off
	maintenance	(Off) automatic PWA-ISC1 maintenance.	
		Configurable only when a PWA-ISC1 is	
		connected.	
4K server(s)	_	Registers information about the servers on the	_
		network (up to 10 servers).	
	ID	Displays the connected server ID.	_
	Model Name	Displays the model name.	_
	Name	Specifies the server name.	Server ID
	Local	Specifies the local server.	Follows the
			initial startup
			setting

Category	Item	Description	Default
			value
	Push	Specifies the transfer destination server when	(Undefined)
		using the push function.	
	Control IP	Specifies the IP address set for Network 1 on	_
		the server.	
	Transfer IP	Specifies the IP address for transfers.	Same as
			Control IP
			address value
	Ready Status	Displays the Share Play status of the server.	_
	Genlock Status	Displays the status of the server's four Share	_
		Play ports ("T" for transmitter, "R" for	
		receiver), and indicates whether the ports are	
		in use.	
		· When linking is off, nothing is displayed.	
		 When linking is on, "Stopped," "Free Running," "Locking," and "Locked" are displayed in sequence until genlock is achieved. 	
		 Each Share Play port is displayed in green when available. 	
		 Each Share Play port is displayed in yellow when in use. 	
		 The server with "*" indicates the GenLock Master. 	
	Rec control	Starts/stops recording on the network server.	_
		[Start] button: Start recording	
		[Stop] button: Stop recording	
		The status is displayed on the right side of the [Stop] button when the network server is recording or is stopped. "" is displayed from when the [Start] button/[Stop] button is clicked/tapped until the recording starts/stops	
	Edit by network	Enables/disables editing and deleting of clips	Yes
		from the PRC1 for which the corresponding	
		server is a network server.	
	Push receive	Selects the receive page for clips transferred	(Undefined)
	page	using the push function (0-9, multiple selection	
		supported).	

Category	Item	Description	Default value
	Network/PL clip	Selects the page to register (0 to 9, multiple	(Undefined)
	save page	selection supported), when PRC1 is connected	(01140111104)
		to a network server and a clip is created in the	
		cliplist managed by PRC1 from material on the	
		network server.	
		Note	
		If the specified page is on a local server, this setting is configurable only from the local PWA-PRC1. If the server is not local, this setting can be configured from any PWA-PRC1 instance.	
	Protect pages	Specifies the pages (0 to 9, multiple selection	(Undefined)
		supported) on which clips are protected.	
		Note	
		If the specified page is on a local server, this setting is configurable only from the local PWA-PRC1. If the server is not local, this setting can be configured from any PWA-PRC1 instance.	
Media	IP address	Selects the IP address of the Media Gateway to	First IP
Gateway		use.	address in
		[Refresh] button: Acquires information about the	list (blank if
		drives connected to Media Gateway.	Media
		Note Click/tap the [Refresh] button in the following	Gateway is
		cases.	not
		Archive destination drive connection is changed Media is exchanged	connected)
		Server transfer IP is changed or deleted	
	Drive	Selects the archive destination drive from the	First drive of
		list.	Media
			Gateway
			selected in
			[IP address]
			(blank if
			Media
			Gateway is
			not
			connected)
	Push machine	Selects the push function transfer destination	(Undefined)
		from the servers connected to Media Gateway.	

Category	Item	Description	Default value
	Folder	Selects the archive destination folder.	Root folder
		[Folder] button: Display a list of folders. Select a folder from the list and click/tap the [OK] button to display the path of the selected folder beside the [Folder] button.	of the drive
			specified in
			[Drive]
		Note	
		The [Folder] path is restored to the default in the following cases.	
		When the [Refresh] button is clicked/tapped.When Media Gateway is changed.When [Drive] setting is changed.	
Push target	_	Selects the transfer destination server for the	4K server
		push function.	
		4K server: Selects the 4K server selected in [Push].	
		Other server: Selects a server connected to Media Gateway.	
	Push page/bank	Sets whether to display a dialog for specifying	No
	dialog	the page or bank when executing the push	
		function.	
		Yes: Display dialog	
		No: Do not display dialog	

[System 2]

Category	Item	Description	Default
			value
CAM name	_	Assigns an arbitrary name to the input name	_
		(CAM A to F).	
		Select the server to set the input name in the	
		list box, and enter a name in the text box (up	
		to 8 characters).	
Mapping	_	Assigns a network camera to any camera angle	Local
network cam		(A to F).	
		Note	
		Assignable only on ports set not to record in [Recording port].	
		To display video from an assigned network	
		camera in a viewer, enter the input name	
		(CAM A to F) of the viewer to display in the list	
		box on the right, and specify the entered MSQ-	
		S321 port.	

[BPU4800]

Category	Item	Description	Default
			value
Transcode	_	Displays the processing status in list view for	_
		clip transcode processing using the BPU4800.	
	ClipID	Displays the ID of the clip to transcode.	_
	Duration	Displays the total duration of the clips.	_
	Server Name	Displays the server name of the BPU4800 for	_
		transcoding.	
	Trigger	Displays the name of the application that	_
		initiated the transcode request, and the IP	
		address of the PC on which the application is	
		running.	
	State	Displays the transcode state.	_
	Progress	Displays the transcode progress state.	_
	Cancel	[Cancel] button: Stop the process.	_
Controller	SharePlay from	Specifies whether to enable Share Play for	No
	BPU4800	material on the BPU4800.	
		Yes: Use Share Play.	
		No: Do not use Share Play.	

[About]

Item	Description
About	Displays PWA-PRC1 version information.

Note

Operation is not guaranteed if an invalid value for a setting is entered. Enter only valid values.

Appendix

Trademarks

Avid and Avid DNxHD are trademarks or registered trademarks of Avid Technology, Inc. or its subsidiaries in the United States and/or other countries.

Apple is a trademark of Apple, Inc.

All system names and product names appearing in this document are registered trademarks or trademarks of their respective owners. Trademarked items are not indicated by @ or $^{\text{TM}}$ symbols in this document.

Obtaining LGPL-licensed software

This product uses Qt software licensed under LGPL. You have the right to obtain, change, and distribute the source code of this software. To obtain the source code, contact your Sony sales or service representative for details. Note that we cannot respond to inquiries regarding the content of the source code.

The material contained in this manual consists of information that is the property of Sony Corporation and is intended solely for use by the purchasers of the equipment described in this manual.

Sony Corporation expressly prohibits the duplication of any portion of this manual or the use thereof for any purpose other than the operation or maintenance of the equipment described in this manual without the express written permission of Sony Corporation.