

Production Control Software

User's Guide

Software Version 2.0

PWA-PRC1

NOTICE TO USERS

© 2013, 2014, 2015, 2016 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.

Contents

- Overview 5
- Name and Function of Parts 6
 - Control panel 6
 - Operation screen 9
 - Server status display 11
 - Viewers 11
 - Soft button menu 15
 - Clip/playlist list 16
 - Mode/settings screen select buttons 18
 - Information display area 18
 - Submonitors 19
- Preparation 20
 - Record train management 20
 - Starting and exiting the application 22
- Basic Operation 24
 - Operation modes 24
 - PGM modes 24
 - Preview control mode 25
 - Soft button menu items 26
- Clip Management 27
 - Selecting a clip 27
 - Basic clip operations 28
 - Soft button menu items 32
- Playlist Management 33
 - Playlist mode 33
 - Selecting a playlist 37
 - Basic playlist operations 38
 - Basic playlist edit and playback operations 39
 - Soft button menu items 42
- Cutout Edit Function 44
 - Cutout mode 44
 - Basic cutout operations 45
- Share Play Function 48
 - Preparation 48
 - Selecting a network server 48

Loading a record train on a network server	49
Creating a clip on a network server	49
Loading a clip on a network server	49
Cutout data operations on a network server	49
Configuration	51
Settings screen	51
Configuration items	52
Appendix	58
Trademarks	58
Obtaining LGPL-licensed software	58

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 the PWS-4500 Multi Port AV Storage 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.

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

In this document, the PWS-4500 is referred to as the "server."

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

Note

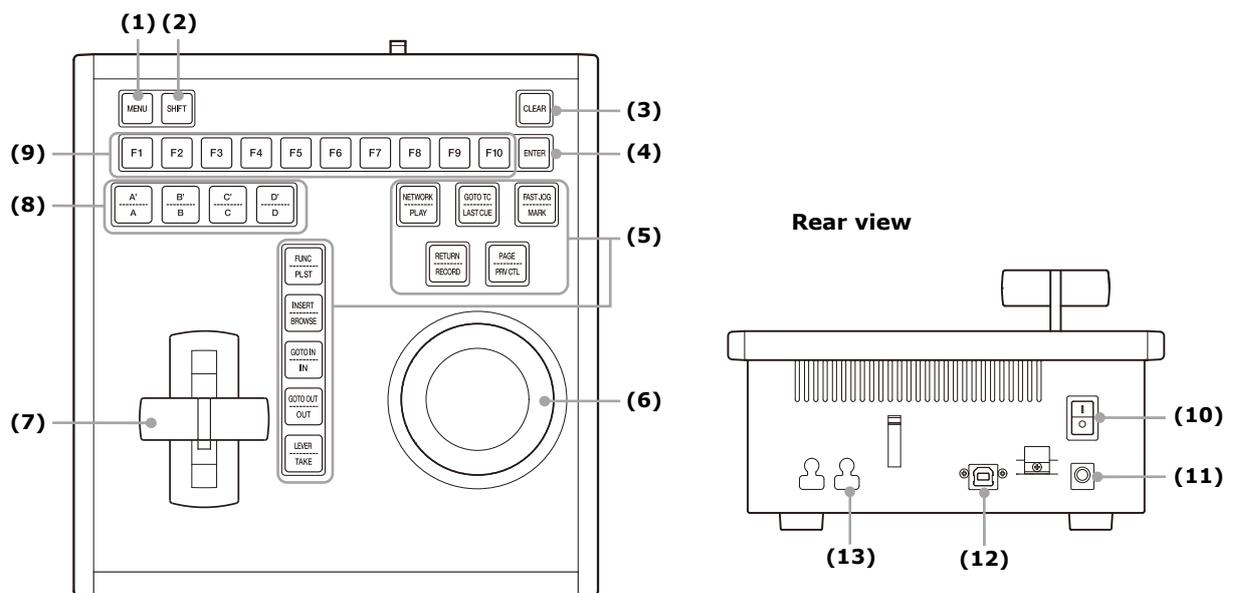
The PWA-PRC1 is software designed for controlling video and audio on the server. Real-time playback on the computer is not guaranteed.

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



- (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.
GOTO TC	Cues the position specified by the entered timecode.
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.)
BROWSE	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 the IN point.
OUT	Sets an OUT point for a clip.
GOTO OUT	Cues the OUT point.

Button	Function
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.
- (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 control panels are connected.
For details about the switch setting, refer to the installation guide.

Operation screen

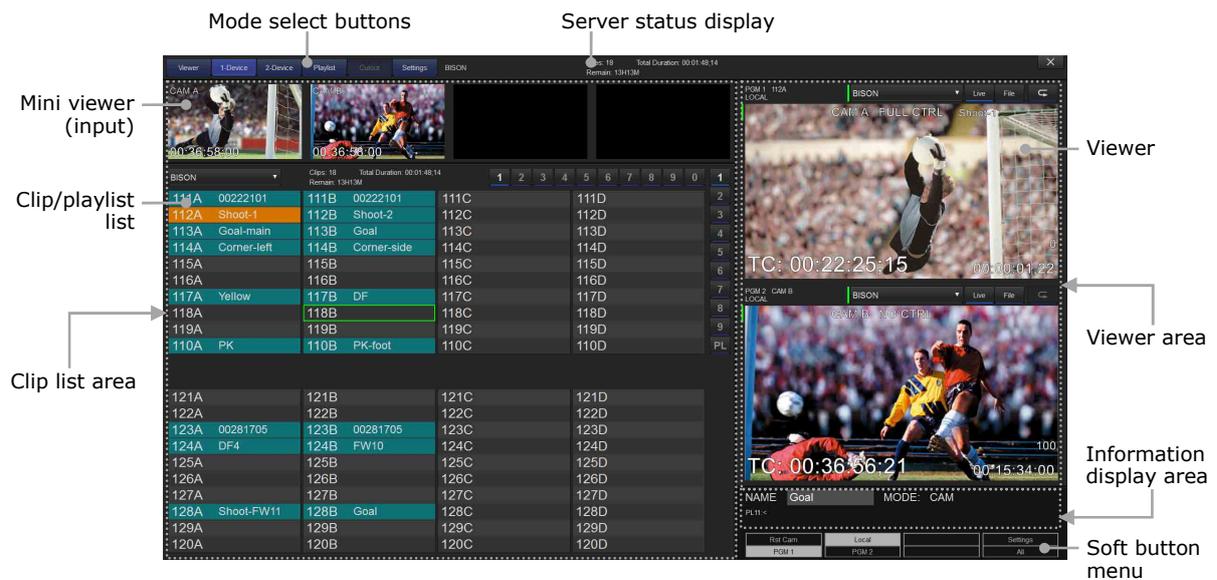
The PWA-PRC1 basic operation screen can be viewed in "1-device mode," "2-device mode," or "viewer mode."

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

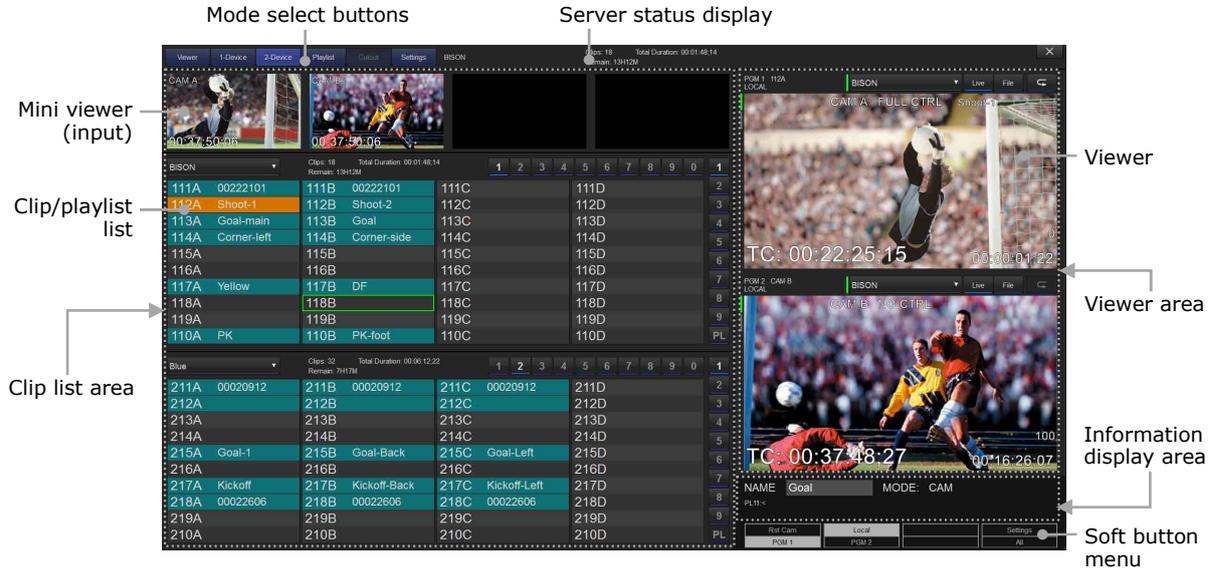
In 1-device/2-device mode, the screen contains the information display area, clip list area displaying a list of clips and other properties, and a viewer area that displays several viewers. The display can be set to either 4-angle mode or 6-angle mode on the settings screen, regardless of the I/O configuration. 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

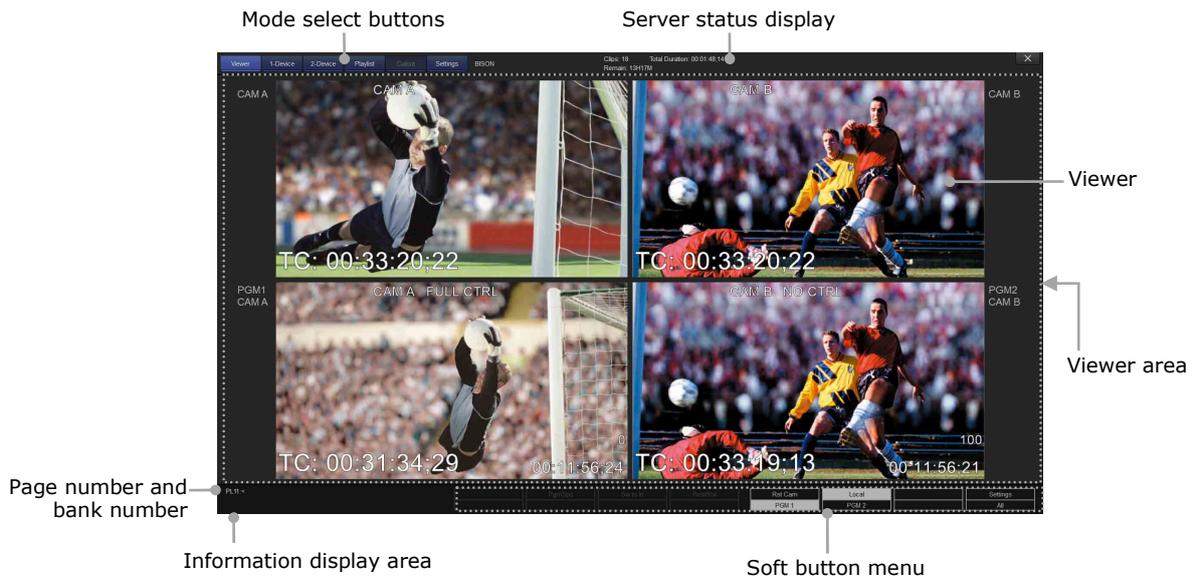
The screen in 2-device mode is identical to the screen in 1-device mode, except for the clip list display section. In 1-device mode, two banks are displayed for the target server. In 2-device mode, one bank is displayed for each of two servers.



Viewer mode screen

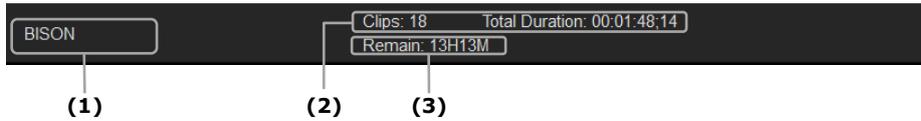
In viewer mode, the screen contains the information display area and the viewer area with separate viewers.

The layout and the number of viewers vary depending on the I/O configuration.



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

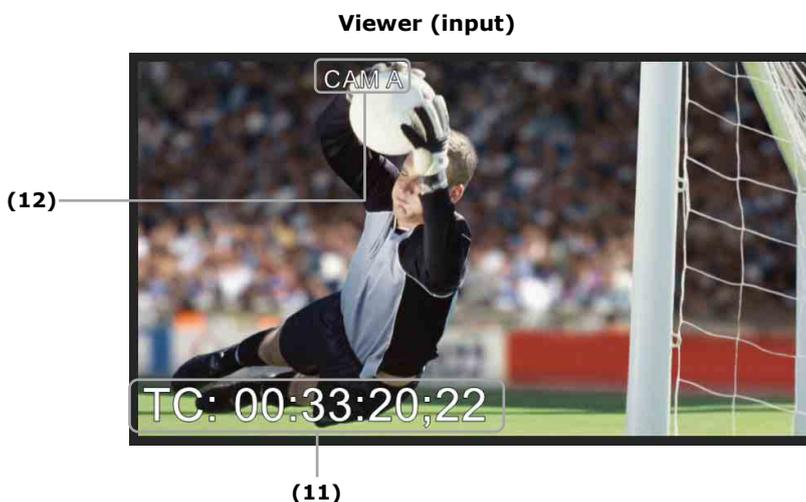
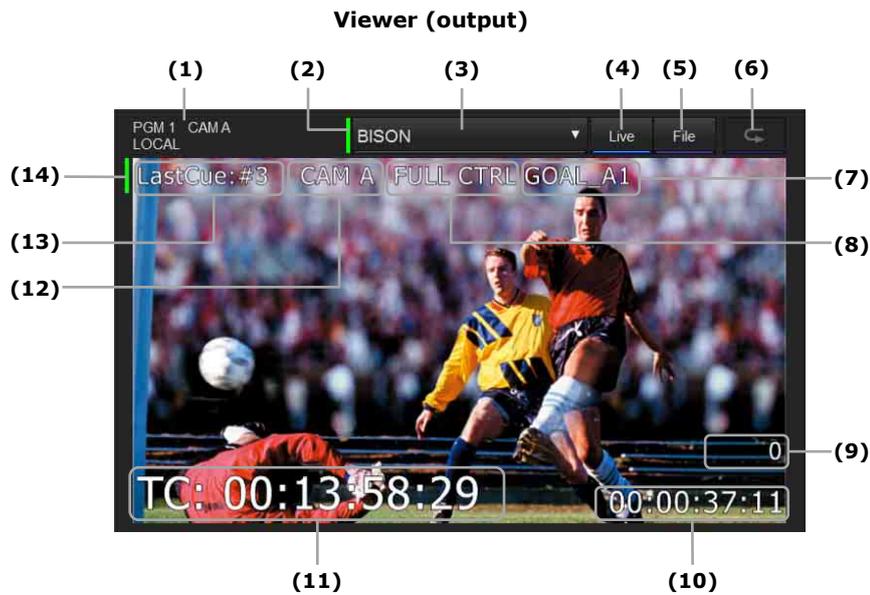
A color alert is displayed as the remaining time gets smaller.

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
- (2)** Record train Share Play indicator
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)** 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.
- (9)** Speed status
- (10)** Duration or countdown
The following information is displayed, depending on the settings and operation.
When IN/OUT points are not set during record train operation: Record train duration.
When searching between IN/OUT points set in a record train: Duration.
All other times: Countdown until the IN point or OUT point.
- (11)** Timecode
- (12)** Input name
In an output viewer, this is the name of the input assigned to the PGM output.
- (13)** Mark number of cue-up point (displayed during cue-up operation)
- (14)** Clip Share Play indicator
Indicates whether clips on the selected server are Share Play enabled.
Green: Share Play enabled
Gray: Share Play disabled

Timecode display format

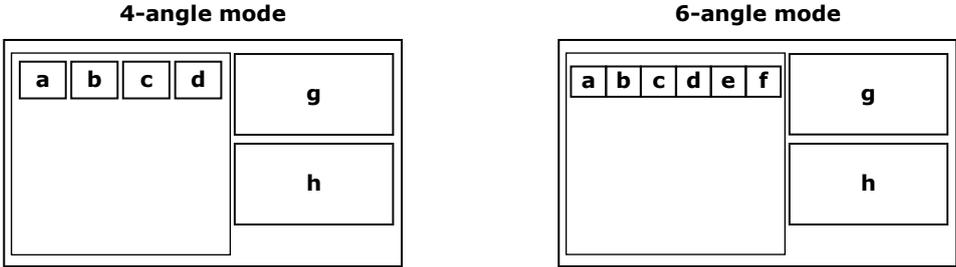
The timecode is displayed in either "hh:mm:ss;ff" (hours:minutes:seconds;frames) or "hh:mm:ss:ff" (hours:minutes:seconds:frames) format.

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



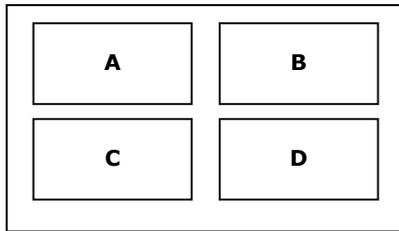
Viewer	2PGM mode	Preview control mode	1PGM mode	Cutout mode
a	Input 1	Input 1	Input 1	Input 1
b	Input 2	Input 2	Input 2	Input 2
c	Input 3	Input 3	Input 3	Input 3
d	Input 4	Input 4	Input 4	(Not used)
e	Input 5	Input 5	Input 5	(Not used)
f	Input 6	Input 6	Input 6	(Not used)
g	Output 1	PRV output	Selected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

Note

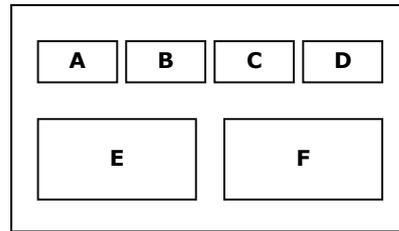
In playlist mode, viewers "g" and "h" are used as the display area for playlist editing (page 34).

Viewer mode

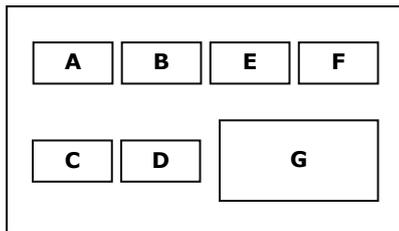
2 in+2 out / 3 in+1 out / 2 in+1 out



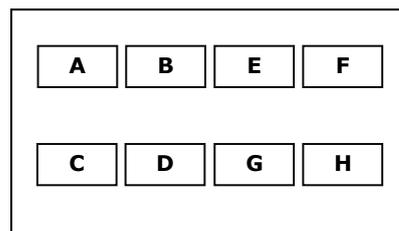
4 in+2 out



6 in+1 out



6 in+2 out



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 (Multi) 3 in + 2 out (Multi)	3 in + 1 out 2 in + 1 out	6 in + 1 out
a	Input 1	Input 1	Input 1	Input 1	Input 1
b	Input 2	Input 2	Input 2	Input 3	Input 2
c	Output 1	Input 3	Input 3	Input 2	Input 3
d	Output 2	Input 4	Input 4	Output 1	Input 4
e	—	Output 1	Input 5	—	Input 5
f	—	Output 2	Input 6	—	Input 6
g	—	—	Output 1	—	Output 1
h	—	—	Output 2	—	—

Viewer	HFR (2Boards)			2DIO configuration	
	3 in + 2 out	3 in + 1 out	2 in + 2 out 1 in + 2 out	2 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
b	Input 3	Input 4	Input 3	Input 2	Input 2
c	Input 4	Input 3	Output 1	Output 1	Output 1
d	—	Output 1	Output 2	Output 2	Cutout output
e	Output 1	—	—		
f	Output 2	—	—		
g	—	—	—		
h	—	—	—		

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.

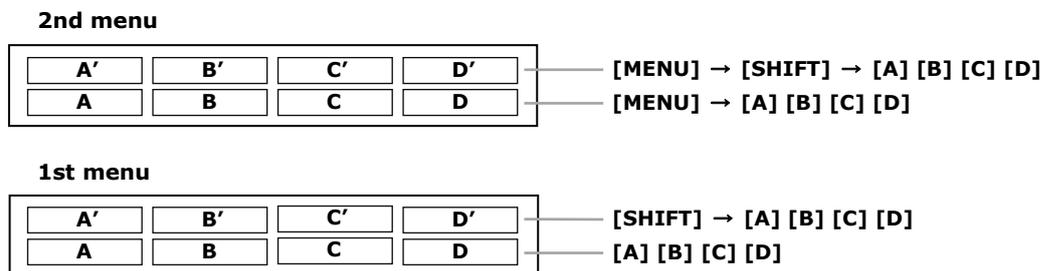
(1) 1st menu

Used primarily for selecting PGM outputs/cameras, and for displaying the settings screen.

(2) 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.

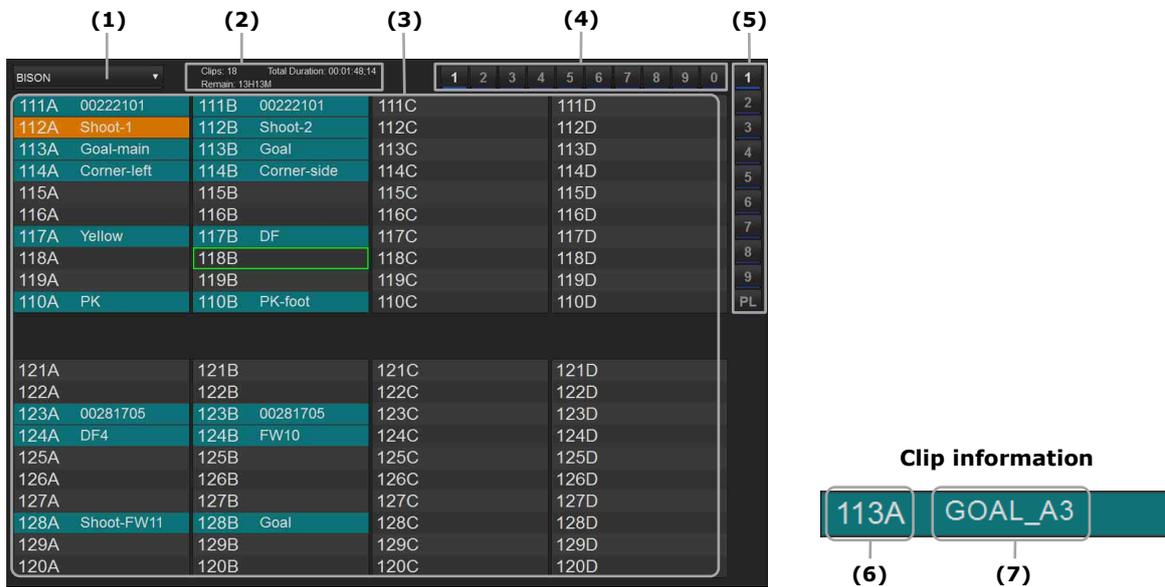
The items (A, B, C, D) in the bottom rows of the 1st menu and the 2nd menu are selected by pressing the corresponding soft buttons ([A], [B], [C], [D]).

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.



Playlist list (bank 10 (PL))



(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) 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.

(9) Playlist name

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

(10) Number of clips in playlist

(11) Total duration of clips in playlist

(12) 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.

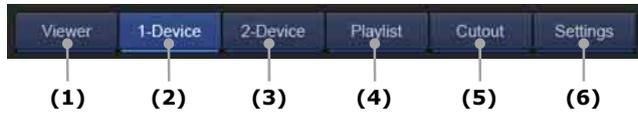
The clip ID/playlist ID background of clips/playlists when archiving fails is red.

Notes

- Clips with a dark green background cannot be loaded.
- The clip ID/playlist ID background of archived clips/playlists changes to blue when PWA-PRC1 is restarted.

Mode/settings screen select buttons

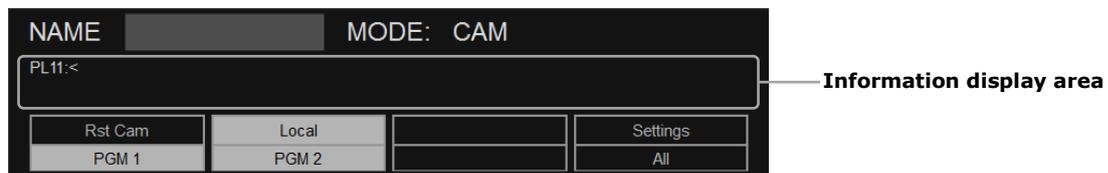
Switches the operation mode or displays the settings screen by clicking/tapping the corresponding button when operating the unit using a mouse/touch panel.



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

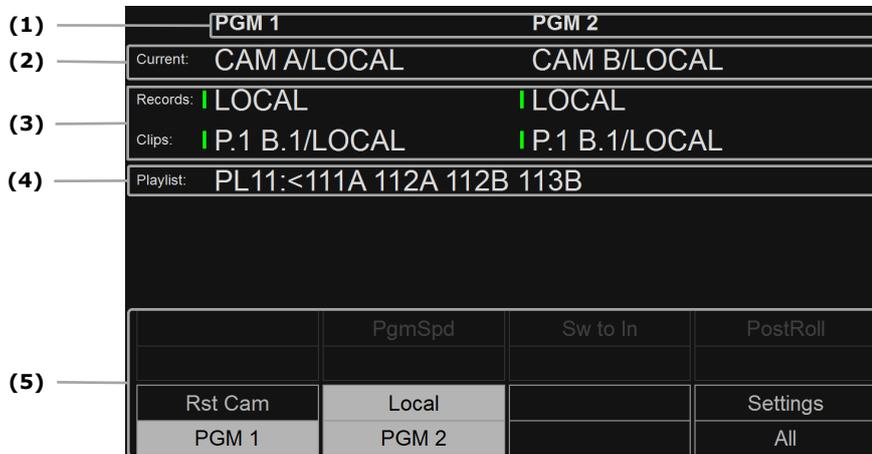
Information display area

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

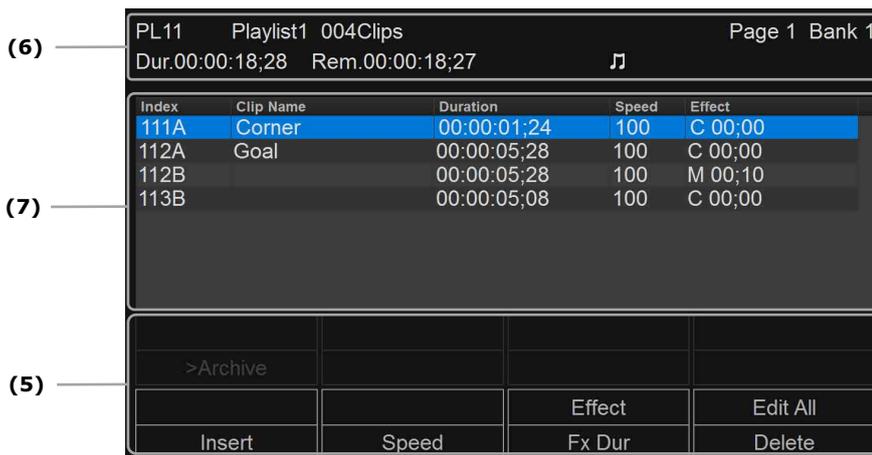


Submonitors

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.

(2) Input assignment status of PGM output

(3) Current server information, page number, and bank number

Displays information and messages, such as the server information, page number, and bank number, during operation.

(4) Currently selected playlist ID and list of registered clips

(5) Soft button menu

(6) Playlist information

Displays information about the current playlist.

(7) 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, an error message will be displayed when PWA-PRC1 starts, and record train recording will not commence.

Normal recording mode

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.

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 11).

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.

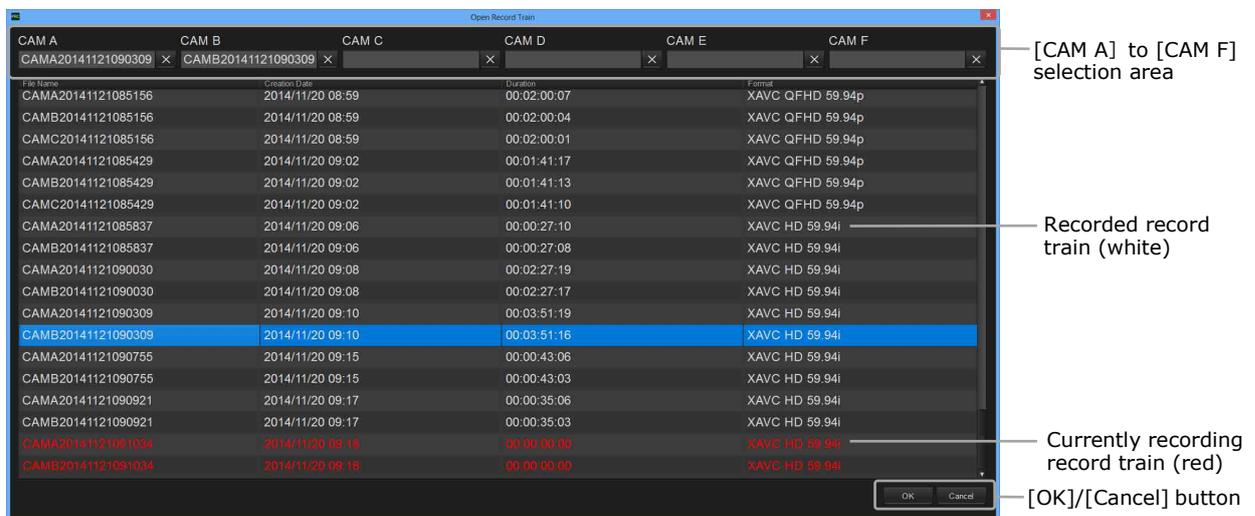
For details about operation and settings of the Web menu on the server, refer to the PWS-4500 Operation Manual.

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 reaches 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 → Select recorded record train → Drag & drop into [CAM A] to [CAM F] selection area → [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 system is cued-up at the end of the record train. 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 system is cued-up at the end of the selected record train.
- 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 PWS-4500.

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.

It automatically connects to the PWS-4500 using information registered on the settings screen.

When launching PWA-PRC1 for the first time or if it cannot connect to the PWS-4500

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

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

The PWS-4500 units connected to the network become available for selection in the [Servers] list box.

2. Select the PWS-4500 unit to become the local server in the [Servers] list box.

The PWS-4500 unit is automatically connected using the information registered on the settings screen.

When the connection with the PWS-4500 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 the [OK] button to stop record train recording and close all ports or click/tap [Cancel] to continue record train recording.

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

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.

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 51).

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 either the PRV side or PGM side when the indicator is off.
- Jog operation controls the PRV side when the [PRV CTL] button indicator is flashing red, and either the PRV side or PGM side when the indicator is off.

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.
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. <ul style="list-style-type: none"> 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. <ul style="list-style-type: none"> The set value is configured on the settings screen.
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) effect.

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).

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] button → [PRV CTL] button) → [F1] to [F10] function buttons (for page numbers 1 to 10)

To select a bank number

[SHIFT] button → [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

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

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

Select a clip 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.

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 select 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.

Basic clip operations

To create and save a clip

[IN] button (set IN point) → [OUT] button (set OUT point) → 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 guard bands 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 51).
- To clear configured IN/OUT points, press [CLEAR] → [IN]/[OUT].

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.
- To cue a clip at a specified timecode position, press the [GOTO TC] button ([SHIFT] button → [LAST CUE] button) to display the timecode entry field in the information display area. Enter a timecode "hh:mm:ss:ff" (hours:minutes:seconds:frames) using the [F1] to [F10] function buttons (for numerals 1 to 0) or the keyboard.

If all eight digits, starting from the leading digit, are entered, the clip is automatically cued to the specified timecode. To enter a timecode of only one to seven digits, press the [ENTER] button.

Examples:

8-digit timecode (hh:mm:ss:ff)

Enter "11223344" → Cues up 11:22:33:44

Leading four digits only (hh:mm)

Enter "1122" → [ENTER] button → Cues up 11:22:00:00

- 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 → Select bank number → [CLEAR] button → Select clip number → [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).

To copy a clip

Load clip to copy → Select available clip number → [A] (Copy) soft button in confirmation message dialog → [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] (CLIP or CAM) 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 → Select available clip number → [B] (Move) soft button in confirmation message dialog → [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] (CLIP or CAM) 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 → [MENU] button → [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.

Notes

- 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
- The clip ID background of archived clips changes to blue when PWA-PRC1 is restarted.

To change IN/OUT points of a clip

Load clip → Set IN/OUT point

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

[CLEAR] button → [IN] button or [OUT] button

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

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

Network copy

You can copy clips between the servers connected on the network. In network copy, the entire clip is copied, including guard bands. Also, IN point and OUT point settings are maintained. Information for servers on the network must be configured beforehand in [4K server(s)] on the settings screen. For details, see "Configuration" (page 51).

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

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

- You can switch page/bank when selecting clips.
 - [SHIFT] button → [PRV CTRL] button: Page display
 - [SHIFT] button → [F1] to [F10] function button: Bank display
- You can select CLIP mode or CAM mode by pressing the [D] (CLIP or CAM) soft button in the confirmation message dialog.
 - In CLIP mode, all camera angles are copied. In CAM mode, only the loaded 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] button → [PLAY] button) → [B] (Clips) soft button → Select server on network ([F1] to [F10] function buttons) → Load clip to copy → Local ([SHIFT] button → [B] soft button → Select available clip number → [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 → [MENU] button → [SHIFT] button → [A] (Push) soft button → [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.
- 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] (CLIP or CAM) soft button in the confirmation message dialog.

In CLIP mode, all camera angles are copied. In CAM mode, only the loaded camera angle is copied.

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.
Settings	Displays the settings screen.
Copy	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) effect.
Loop	Enables/disables loop playback.

Playlist Management

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

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

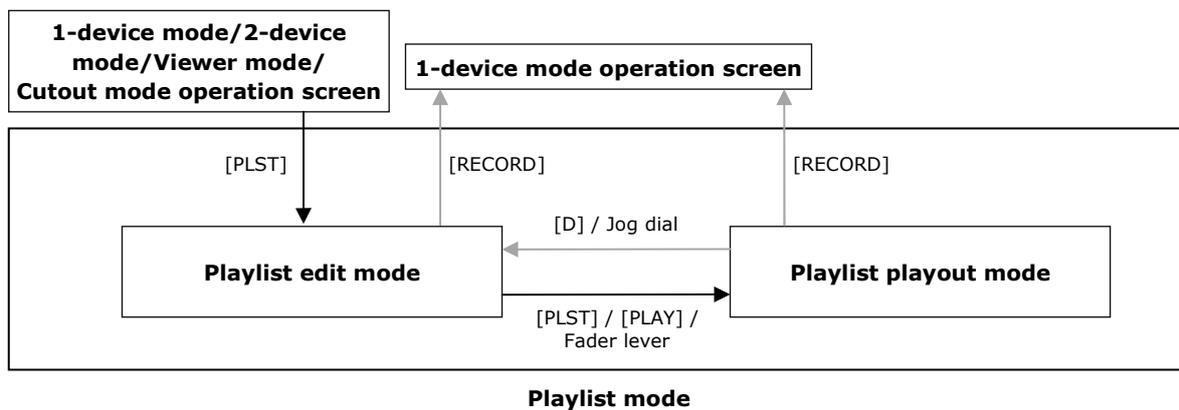
Old playlist settings information must be deleted after FS Format is executed on the server. Click/tap the [Clear] button under [Clear all playlist/cutout data] on the settings screen.

Playlist mode

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

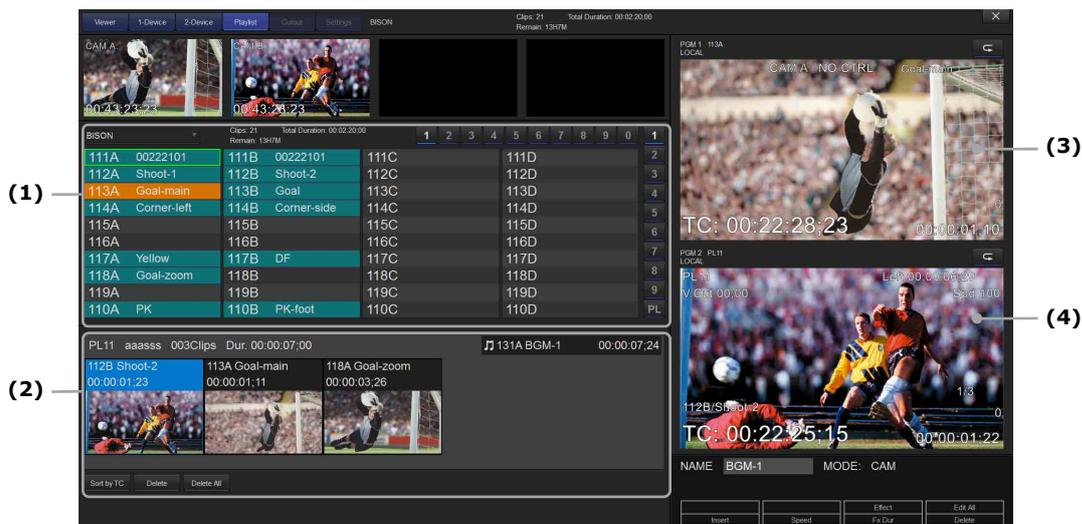
You press the [PLST] button to invoke playlist mode.

To exit playlist mode, press the [RECORD] button.

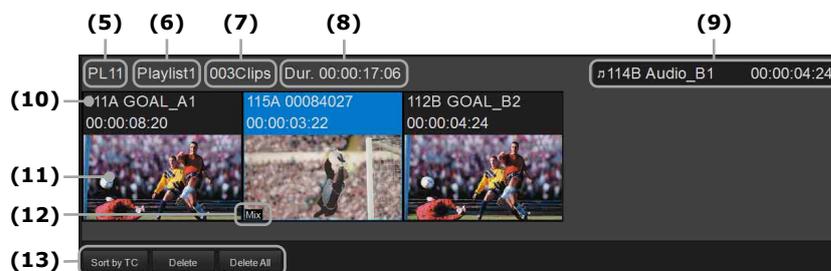


For mouse/touch panel operation, click/tap [Playlist] on the operation screen to invoke playlist mode. To exit playlist mode, click/tap [Viewer], [1-Device], [2-Device], or [Cutout] on the operation screen.

Playlist mode operation screen



Storyboard



- (1)** Clip/playlist list
- (2)** Storyboard
Displays the loaded playlist in storyboard format.
Displays the selected clip with a blue background.
- (3)** PGM1 viewer (2PGM mode)
Displays the clip image.
In Preview control mode, it displays the next cued clip when in playlist playout mode.
- (4)** PGM1 viewer (1PGM mode) or PGM2 viewer (2PGM mode)
Displays the playlist image.
- (5)** Playlist ID
- (6)** Playlist name
Displays the name of the playlist, if a name has been assigned.
- (7)** Number of clips in playlist
- (8)** Total duration of clips in playlist
- (9)** Audio clip information area
Displays the clip ID, clip name, and duration of audio clips that are configured in a playlist.
- (10)** Clip information
Displays the clip ID, clip name, and duration.
- (11)** Thumbnail image

(12) Effect mark

Appears when an effect is configured on the clip.

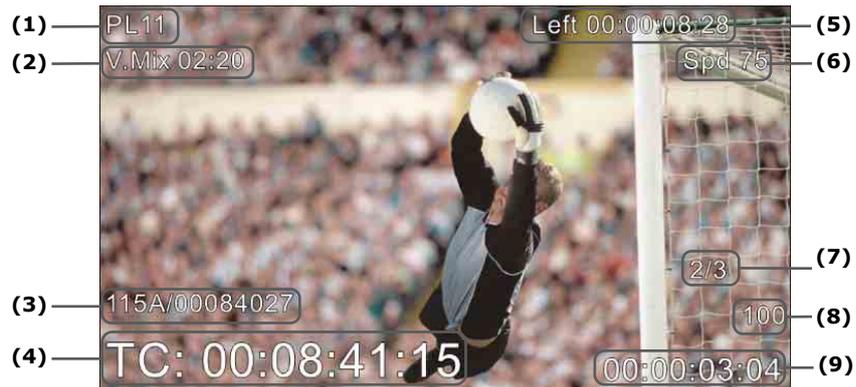
(13) Playlist edit buttons

Delete: Deletes the selected clip in the playlist.

Delete All: Deletes all the clips in the playlist.

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

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) Number of the current clip/Total number of clips in the playlist

(8) Speed status

(9) 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. In 2PGM mode, the IN point of the clip registered at the start of the playlist is displayed in PGM1, and the IN point of the clip selected in the playlist is displayed in PGM2. In 1PGM mode, the IN point of the clip selected in the playlist is displayed in PGM1.

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

To exit playlist edit mode, press the [RECORD] button or click/tap [Viewer], [1-Device], [2-Device], or [Cutout] on the operation screen.

Note

Empty playlists cannot be loaded.

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

Note

When there is only one PGM output that can be controlled, preview control is disabled.

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.

To exit playlist playout mode, press the [RECORD] button or click/tap [Viewer], [1-Device], [2-Device], or [Cutout] on the operation screen.

Note

The next cued clip is displayed on the PRV side in Preview control mode.

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] button → [PRV CTL] button) → [F1] to [F10] function buttons (for page numbers 1 to 10)

To select bank number 10 (PL)

[SHIFT] button → [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 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 → Load clip to register → [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 recorded is 100.

To delete a playlist

Select page number → Select bank number ([SHIFT] button → [F10] function button) → [CLEAR] button → Select playlist number → [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 → Select available playlist number → [A] (Copy) soft button in confirmation message dialog → [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 → [MENU] button → [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

- The playlist ID background of archived playlists changes to blue when PWA-PRC1 is restarted.
- 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 → [BROWSE] button → Browse using jog dial → 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.

To insert a clip into a playlist

Playlist edit mode → Select clip insertion position → Load clip into PGM1 → [A] (Insert) soft button or [INSERT] button ([SHIFT] button → [BROWSE] button)

- The clip is inserted before the selected insertion position.
- Using a mouse/touch panel, select a clip in the clip list, then drag & drop the clip to the insertion position in the storyboard.
- In 1PGM mode, insert clips using mouse/touch panel operations.

To delete a clip in a playlist

Playlist edit mode → Select clip → [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].

To move a clip within a playlist

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

- The clip is moved to before 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 → Select clip → Set IN/OUT point
To set IN/OUT point at the start/end of a clip that includes guard bands:
[CLEAR] button → [IN] button or [OUT] button
To set IN/OUT point at any position on a clip:
[IN] button or [OUT] button at desired position

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

To register an audio clip

You can register an audio clip in the active playlist.

Viewer mode, 1-Device mode, or 2-Device mode → Select 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.
- In 2PGM mode, to register an audio clip in the active playlist in playlist edit mode, press [PRV CTL] → Select 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.

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.

- 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.
- For details about playback operations in playlist playout mode, see "*Playlist playout mode*" (page 36).

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.

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.
Delete	Deletes a clip.
Speed	Sets the playback speed (0% to 100%) of the selected clip. <ul style="list-style-type: none">• Press the [B] (Speed) soft button, select the speed using the fader lever, and then press the [B] soft button again.
Fx Dur	Sets the transition effect duration (0:00 to 3:00 (seconds:frames)) of the selected clip. <ul style="list-style-type: none">• Press the [C] (Fx Dur) soft button, select the duration using the fader lever, and then press the [C] soft button again.
Effect	Sets the transition effect (Mix or Cut) for the selected clip. <ul style="list-style-type: none">• Press the [SHIFT] button → [C] (Effect) soft button, select the effect using the fader lever, and then press the [SHIFT] button → [C] soft button again.• Effects can only be set for HD formats.
Edit All	Sets all clips in a playlist as the target of edit operations.

2nd menu

Item	Description
>Archive	Archives a playlist.

Playlist playout mode items

1st menu

Item	Description
Edit	Switches to playlist edit mode.
Next	Starts playback of the next clip.

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 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.

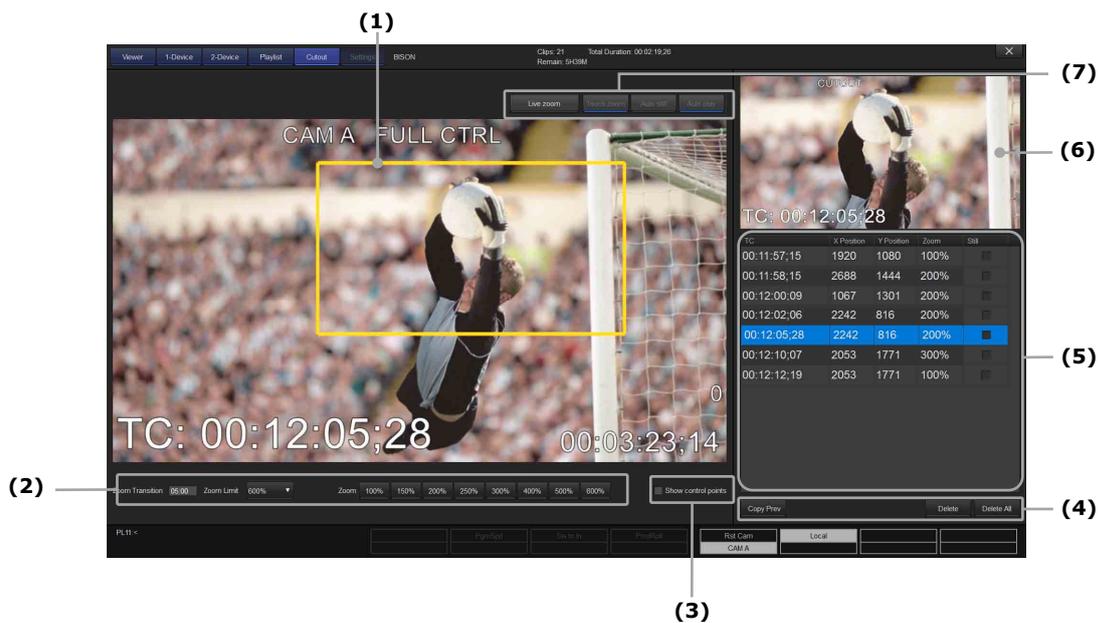
Cutout mode

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], 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) Zoom settings

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

Zoom: Click/tap a button to use a preset zoom factor. During live zoom operation, sets the zoom factor using a drop-down list.

Zoom transition setting: Sets the zoom time for Still Zoom and Live Zoom.

(3) Show control points checkbox

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

(4) 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.

(5) 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.

(6) Cutout image display area

Displays the resulting cutout image.

(7) 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.
2. 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], 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 30).

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 38).

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 operate the zoom during playback

Zoom 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, Zoom transition, 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. 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 51).

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): Set record train control for the local server.
 - [D] (Clips + Records): 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	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 or 2-device 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 or 2-device 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.

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 21)*.

Creating a clip on a network server

If both clip control and record train control are set for the same network server, you can create a clip from a record train on the network server and save the clip on the same network server. The procedure for creating a clip is the same as for the local server. For details, see *"To create and save a clip" (page 28)*.

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 28)*.

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 44)*.

Note

A network clip cannot be registered in a playlist directly. The clip can be registered in a playlist by first copying the clip to the local server.

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, or viewer 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.

For details about each item, see "Configuration items" (page 52).

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], or [2-Device] 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 "⌘" button in the top right corner of the window using a mouse/touch panel to exit the application.

Notes

- If the local server is changed or the IP address setting of the local server 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] tab

Category	Item	Description	Default value
Record trains	Loop REC	Enables/disables loop recording mode. Enable (check mark), Disable	Disable
	Recording port	Sets whether to record when using each port on the server as an input. 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.	Record 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 12 seconds), Disable (auto-creation disabled)	Disable
	Record trains OUTs	Sets operation when the OUT point is reached in a record train. Play through: Continue playback. Freeze: Stop playback.	Play through
	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
	Freeze on cue points	Operation when cue point is reached during playback. Yes: Stops playback. No: Continue playback.	No
	Guardbands	Sets the guard bands added before the IN point and after the OUT point when saving a clip. 0 to 60 seconds	5

Category	Item	Description	Default value
	HFR TC mode	Sets the timecode display for HFR material. HFR: Displays slow motion playback timecode. Real time: Displays the real time timecode.	HFR
Clips	Auto name clips	Sets the name automatically assigned to clips when they are created. Disable: Names are not assigned. TC IN: Assigns IN point timecode	Disable
	Clip post-roll	Sets the playback interval after reaching the OUT point when [PostRoll] is enabled. 0 to 30 seconds	2
Controller	Fast jog	Sets the speed increase of the jog dial in high-speed mode. 1 to 20 times	20
	PGM speed/var Max	Sets the fixed speed when [PgmSpd] is enabled, or the maximum speed when [VarMax] is enabled. 1 to 100%	50
	Lever engage mode	Sets the operating mode of the fader lever. Direct: Playback speed controlled by position of lever in the range 1 to 100%. Current speed: Engages the lever when the lever is moved to the position corresponding to the current playback speed.	Direct
	Second lever range	Sets the speed range of the fader lever in the 2nd mode. -100% to +100%, 0% to +200%, -200% to +200%, 0% to +400%, -400% to +400%	-100% to +100%
	Recall clip toggle	Sets whether the function buttons toggle between camera angles when pressed repeatedly. Enable (check mark), Disable	Enable
	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: Starts recording and switches to live mode.	Start REC+Live

Category	Item	Description	Default value
	Play key	Sets the operation of the [PLAY] button for 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.	Play
	First lever mode for HFR	Sets the operation of the fader lever in fast mode for HFR clips. Type-A: Slow ramp, fixed position Type-B: Slow speed, fixed position	Type-A
Operation	Clear all clips	Deletes all clips, playlists, playlist settings information, and cutout data on the server. Operation from panel: Execute using [A] (Clear) soft button.	—
	Clear all playlist/cutout data	Deletes only the playlist settings information and cutout data on the server.	—
	Record (Start/Stop)	Starts and stops record train recording. Operation from panel: Execute using [B] (Start or Stop) soft button.	—
	Split view	Set the operation screen to 4-angle mode (4 Angles) or 6-angle mode (6 Angles).	4 Angles
GUI and Panel links	Panel1/2	Enables a control panel row, if the 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. <ul style="list-style-type: none"> 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. <ul style="list-style-type: none"> 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. 	—

Category	Item	Description	Default value
	Sub1/2	Enables a submonitor column, if the corresponding submonitor is connected. Connection (check mark), No connection	—
	—	[Update] button: Displays indicators identifying the connected control panel and submonitor connection status. <ul style="list-style-type: none"> • [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 Panel2. • "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. 	—
	Preview control mode	Enables/disables Preview control mode. Enable, Disable	Disable
	Effect duration for TAKE	Sets the transition time when an effect is set and the [TAKE] button is pressed in Preview control mode. 0:00 to 3:00	0:05

[System] tab

Category	Item	Description	Default value
PRC manager	Primary PRC manager IP/Port	Specify the IP address of PRC Manager and the port used for communications. Note If this setting is changed, restart PWA-PRC1.	IP address: undefined Port No.: 51000
	PTP Domain	Specifies the domain value for Share Play (range: 0 to 127). [Set] button: Resets the Share Play connection in response to edited settings.	100
4K server(s)	—	Registers information about the servers on the network (up to 10 servers).	—
	ID	Displays the connected server ID.	—
	Name	Specifies the server name.	Server ID

Category	Item	Description	Default value
	Local	Specifies the local server	(Undefined)
	Push	Specifies the transfer destination server when using the push function.	(Undefined)
	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
	Share Play	<p>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.</p> <ul style="list-style-type: none"> • When linking is off, nothing is displayed. • When linking is on, "... " is displayed 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. 	—
	Push receive page	Selects the receive page for clips transferred using the push function.	—
	Edit by network	Enables/disables editing and deleting of clips from the PRC1 for which the corresponding server is a network server.	Yes
Media Gateway	IP address	<p>Registers the IP address of Media Gateway.</p> <p>[Refresh] button: Acquires information about the drives connected to Media Gateway.</p> <p>Note Click/tap the [Refresh] button in the following cases.</p> <ul style="list-style-type: none"> • Archive destination drive connection is changed • Media is exchanged • Server transfer IP is changed or deleted 	(Undefined)
	Drive	Selects the archive destination drive from the list.	(Undefined)
	Push machine	Selects the push function transfer destination from the servers connected to Media Gateway.	(Undefined)

Category	Item	Description	Default value
	Folder	Selects the archive destination folder from a list. [Folder] button: Sets the selected folder.	Root folder
Push target	—	Selects the transfer destination server for the push function. [4K server]: Selects the 4K server selected in [Push machine]. [Other server]: Selects a server connected to Media Gateway.	4K server

General

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 is a trademark or registered trademark of Avid Technology, Inc. or its subsidiaries in the United States and/or other countries.

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 ™ 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.

