

CLOUD-BASED WIRELESS SERVICE
XDCAM air

This guide describes the system for live streaming on the Internet using XDCAM air and how to send shooting plans to a camcorder.

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Features

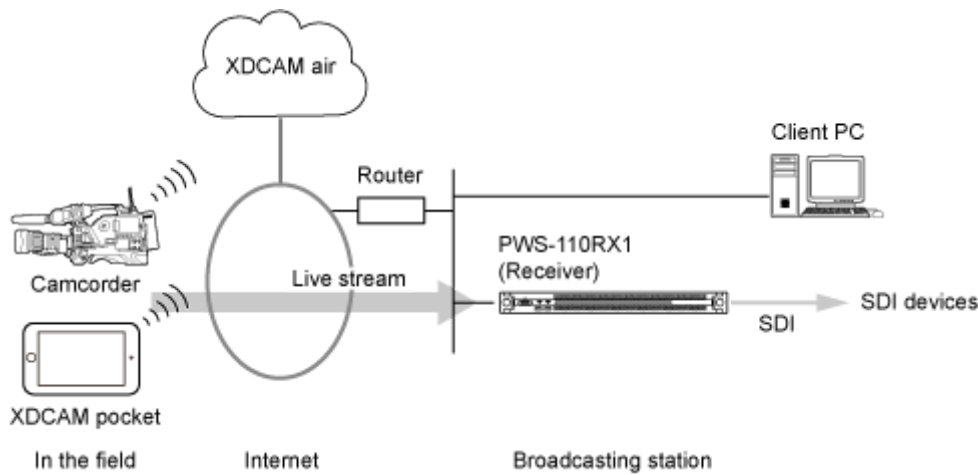
XDCAM air is a cloud-based service that manages the connection between a camcorder sending streaming video and a server, either in the cloud or in-house, on the receiver side. It also manages proxy files sent from the camcorder to the server. Shooting plans can also be sent to a camcorder from XDCAM air.

System Configuration Examples

This topic shows a system configuration example for live streaming using XDCAM air, and a system configuration example for sending shooting plans generated in a Newsroom Computer System (NRCS) to a camcorder.

Live streaming operation

This is a system configuration that receives streaming video using a PWS-110RX1/110RX1/110RX1A, where the connection is managed by the XDCAM air service.

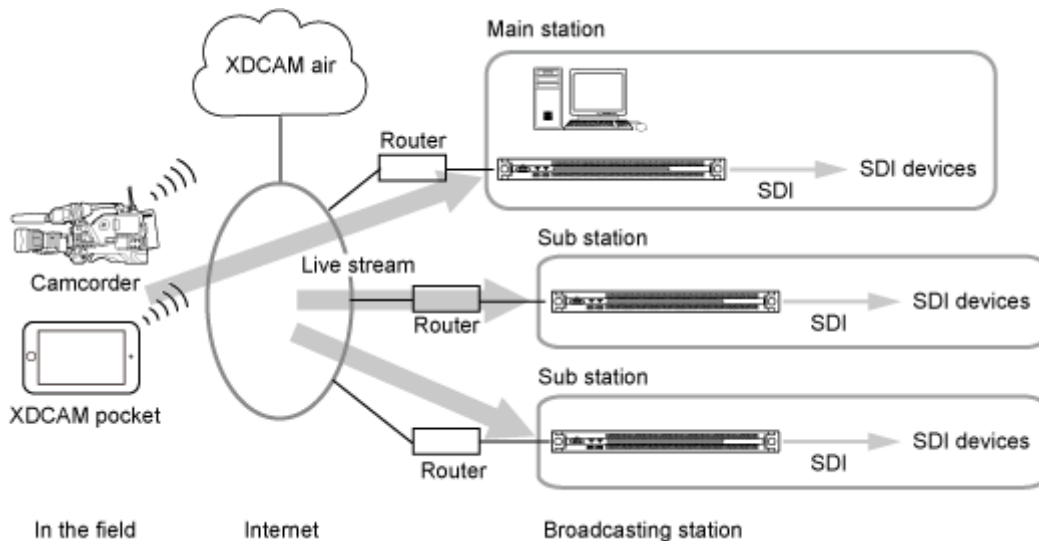


Note

- A Live license is required to use the streaming function.
- An XDCAM pocket license is required to use XDCAM pocket.

Streaming to multiple stations (multi point distribution)

This is a system configuration for streaming to multiple receiving stations. You can stream by specifying a station as the main station for streaming and other sub stations can then join the stream.

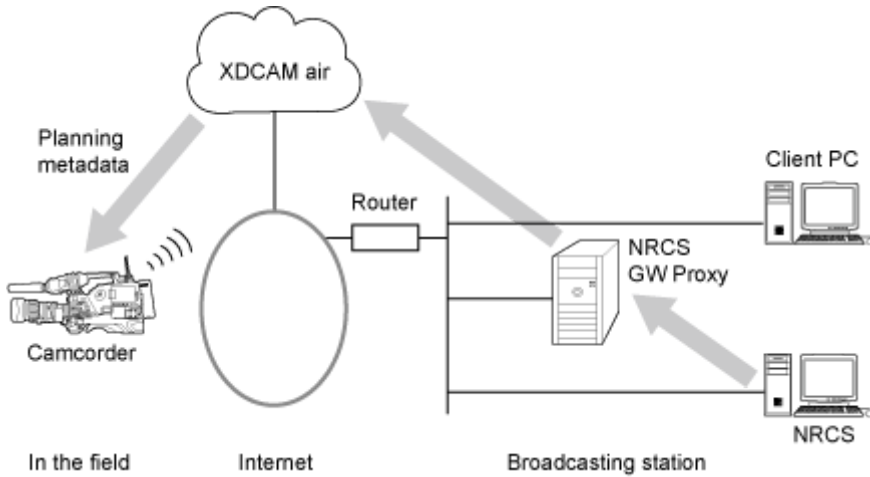


Note

- A Live license is required to use the streaming function.
- An XDCAM pocket license is required to use XDCAM pocket.

NRCS operation

This is a system configuration that sends shooting plans received from a Newsroom Computer System to a camcorder in the field.

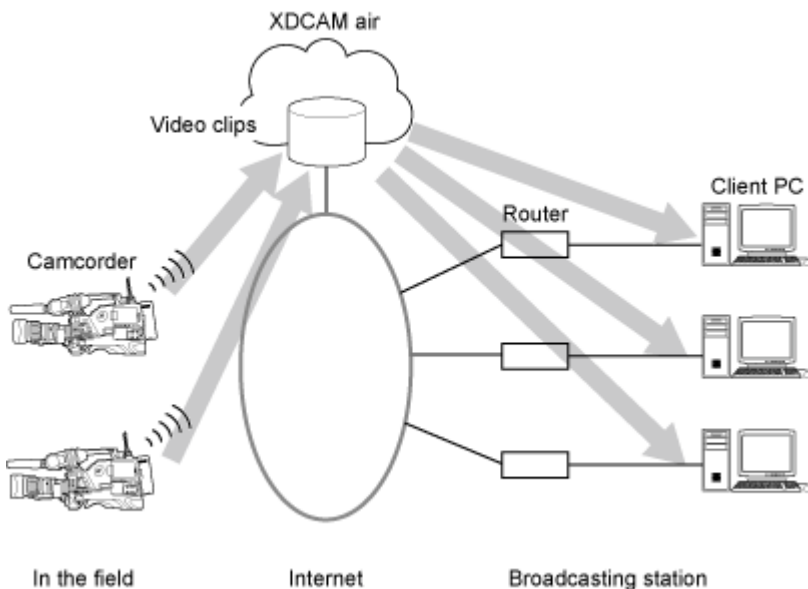


Note

- For streaming transmission, a camcorder with a CBK-WA100/101 Wireless Adapter attached or a camcorder with wireless function is required.
- A Metadata license is required to use the planning function.

Asset management

This is a system configuration for managing and sharing video clips uploaded automatically from a camcorder as assets.

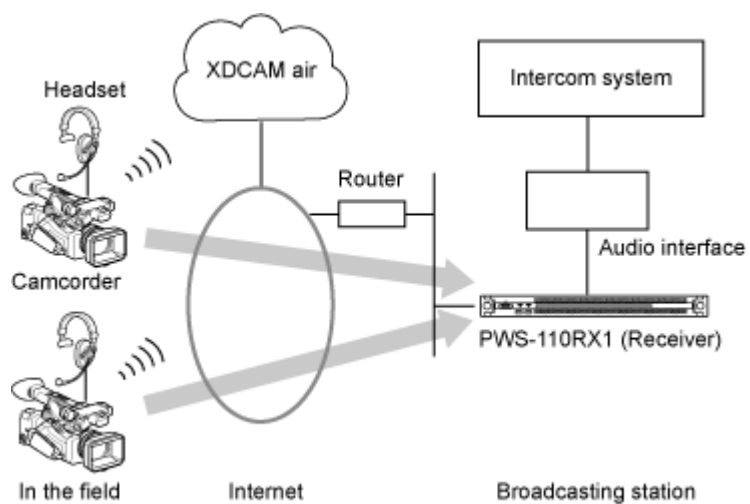


Note

- A CMS license is required to use the asset management function.

Intercom operation

This is a system configuration in which operation of the internal intercom of the broadcast station and XDCAM air are used in conjunction when using a camcorder that has an intercom function.



Setup and Operation Flow

Perform setup and operation in the following sequence to use this service.

1 Setup

The setup required for operation is performed by an administrator. For the setup procedure, refer to the XDCAM air Setup Guide.

Once setup is completed, perform the following operations in the field and at the broadcasting station.

2 Operation in the field

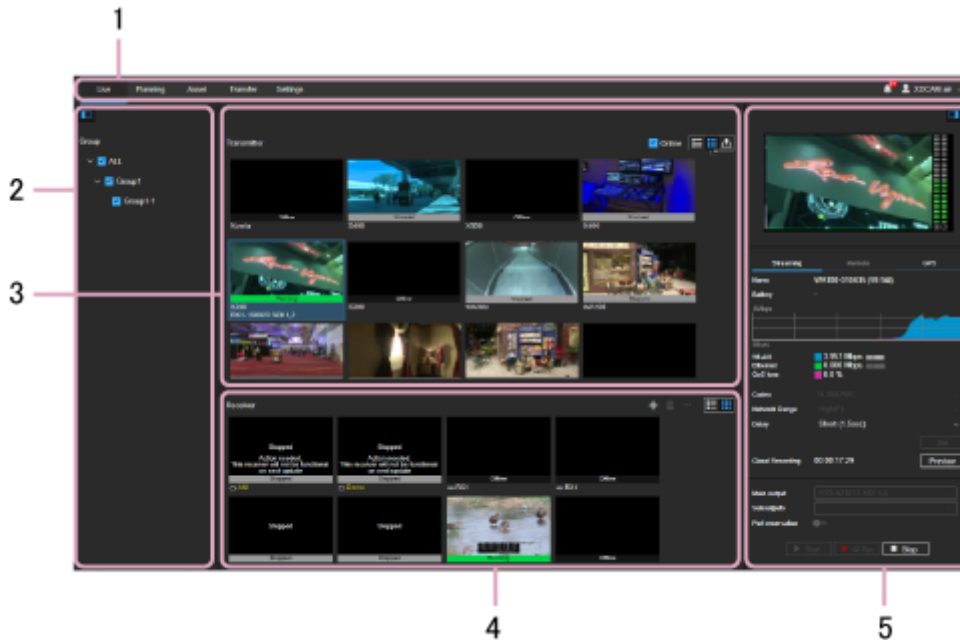
- Set the wireless adapter to network client mode.
When shooting using a camcorder with a wireless adapter attached, set the wireless adapter to network client mode.
- Set the camcorder to network client mode.
When shooting using a network-enabled camcorder, set the camcorder to network client mode.
- Start XDCAM pocket.
Start the XDCAM pocket application if using XDCAM pocket to stream video. For details, refer to the Help for XDCAM pocket.

3 Operation at the broadcasting station

1. Start streaming.
Start streaming of video received from the camcorder in the field using XDCAM air.
2. Send shooting plan to camcorder.
If operating with connection to a Newsroom Computer System, send shooting plan received from the Newsroom Computer System via XDCAM air to a camcorder in the field.
3. Share recorded assets.
Using the asset function, share assets uploaded from a camcorder to XDCAM air.

Structure of the Live Screen

The Live screen displays the devices that perform streaming and controls for starting/stopping streaming.



1. Global menu

Click the icons to move between screens.

- Live: Display the Live screen.
- Planning: Display the Planning screen.
- Asset: Display the Asset screen.
- Transfer: Display the Transfer screen.
- Settings: Display the Settings screen.
- (Notifications): Displays notifications to the user. Press [Mark all as read] to mark all notifications as read. Press [Delete all] to delete all notifications.
- (Personal setting): Sign out, display account settings, or display the Help Guide.

2. Group selection area

Displays the registered groups.

3. Transmitter area






Displays the transmitters registered in the group selected in the group selection area in thumbnail view or list view.

- [Online] checkbox: Place a check mark here to display only those transmitters that are online.
- button: Display the devices in list view.
- button: Display the devices in thumbnail view.
- button: Display the current position of the transmitter on a map.

4. Receiver area

Displays the receivers registered in the group selected in the group selection area in thumbnail view or list view. You can create a cloud receiver here.

- Cloud receivers created in earlier versions cannot be used after subsequent software updates. Re-register the registered cloud receivers. For details about re-registering, “Creating a Cloud Receiver.”

-  button: Use to display the preferences for the selected receiver and edit settings.
-  button: Create a cloud receiver.
-  button: Delete a cloud receiver.
-  button: Display the devices in list view.
-  button: Display the devices in thumbnail view.

5. Streaming information area

When the [Live] tab is selected in the Transmitter area, the following information is displayed.

Preview area

Displays a preview of the streaming content from the device selected in the Transmitter area.

Streaming tab

Displays detailed information about the streaming content.

- **Name:** Name of the transmitter
- **Battery:** Battery information
- **Intercom:** Turns the intercom function on/off. It also displays the status of the intercom function. For details about the status, see “Intercom Operations.”
- **(Network Information):** Name of the network carrier, type of network, and signal strength used for communication with the camcorder.
- **QoS Loss:** QoS loss rate
- **Codec:** Codec to be used for streaming
- **Network Range:** Select the streaming resolution and maximum bit rate. [Very High], [High], [Middle], [Low], or [Very Low] can be selected. The values available for selection vary depending on the connected camcorder. [Auto] can also be selected in the case of XDCAM pocket. [High(R)] and [High(F)] may be displayed, depending on the transmitter model. [High(R)] and [High(F)] are adjusted for clear, smooth streaming.
- **Delay:** Select the streaming delay time. [Short], [Middle], [Long], or [Very Long] can be selected (the displayed delay time is an estimate, and may vary from the actual delay time).
- **[Set] button:** Click to apply changed Codec, Network Range, and Delay settings.
- **Cloud Recording:** Displays the duration when recording a stream using a cloud receiver. Clicking the [Preview] button displays a preview of the asset being recorded on the Asset screen.


Note

- The Media Manager, Media Editor, or Media Viewer role is required in order to use the cloud recording function.

- **Main Output:** Select the receiver to be the main output destination for streaming.
- **Sub Outputs:** Select the receivers to be sub output destinations for streaming.
- **Port Reservation:** Reserve the selected port for streaming by selecting a source and port in [Main Output], and setting the switch to the on position. To cancel the reservation, set the switch to the off position.

Note

- When [Reserve (Auto Streaming)] on the [Settings] screen is set to ON, the port is reserved as a destination and “Auto Streaming” is displayed for the port. For details, refer to the XDCAM air Setup Guide.
- XDCAM pocket does not support the auto streaming function. “Reserved” is displayed regardless of the setting.

- **[Start] button:** Start streaming.
- **[Rec] button:** Record stream to a file. During recording,  is displayed on the transmitter thumbnail.
- **[Stop] button:** Stop streaming.

Remote tab

Controls a camcorder remotely. Set [Camera Control] on to use remote control.

You can switch proxy recording on/off using [NCM with Proxy].

To record using a remote camcorder, set [REC Control] on.

Note

- The [Remote] tab is enabled only when a camcorder that supports remote control is selected.
- Remote recording is supported on PXW-Z280/Z190/FX9 camcorders.

GPS tab

Displays the location information values acquired from a camcorder.

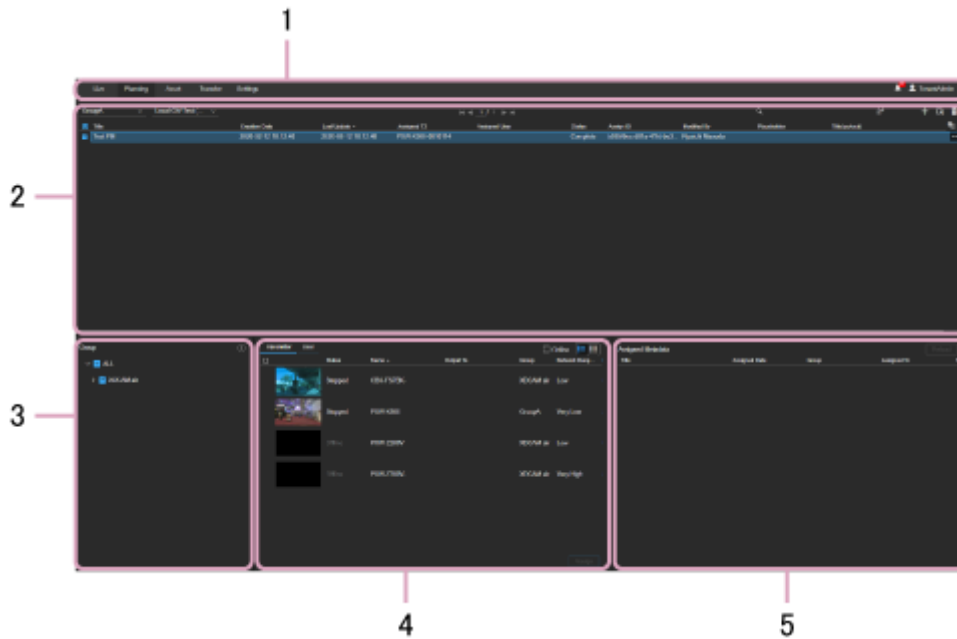
Related Topic

- [Intercom Operations](#)

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Structure of the Planning Screen

The Planning screen displays the shooting plans (planning metadata) received from the Newsroom Computer System (NRCS) in list view. This is used to send the shooting plan selected in the list to a camcorder.



1. Global menu

Click the icons to move between screens.

- Live: Display the Live screen.
- Planning: Display the Planning screen.
- Asset: Display the Asset screen.
- Transfer: Display the Transfer screen.
- Settings: Display the Settings screen.
- (Notifications): Displays notifications to the user. Press [Mark all as read] to mark all notifications as read. Press [Delete all] to delete all notifications.
- (Personal setting): Sign out, display account settings, or display the Help.

2. Shooting plan operation area

Use to search and select a displayed shooting plan and send it to a camcorder. If many shooting plans are displayed, the display is split into separate pages.

- Group drop-down list: Displays the list of NRCS systems related to the selected group.
- NRCS drop-down list: Displays the shooting plans received from the selected system if more than one network NRCS or local NRCS is registered.
- (Search): Search for shooting plans and displays the search results.
- (Add): Create a shooting plan.
- (Edit): Edit the selected shooting plan.
- (Delete): Delete the selected shooting plan.
- Select an item in the list, click [...], and select the Details menu to display the details.

Note

- The columns displayed in the shooting plan operation area are configured on the Settings screen.

3. Group selection area

Select a group in the tree view to display the camcorders and users registered in the group in the transmitter/user selection area.

4. Transmitter/user selection area

Selects the camcorder or user to which to assign a shooting plan.



Click the [Assign] button to assign the shooting plan to the selected camcorder or user.

Transmitter tab

Displays the camcorders to which a shooting plan can be assigned.

Click a thumbnail and select [Planning Metadata in TX] to display a list of the shooting plans sent to the camcorder. You can select a shooting plan on this screen to load it into a camcorder displayed in the list.

Note

- On the CBK-FS7BK, click a thumbnail and select [Assigned Planning Metadata]. A list of the assigned shooting plans is displayed. Select a shooting plan from the list to load it into the camcorder.
- [Online] checkbox: Place a check mark here to display only those camcorders that are online.
-  button: Display the devices in list view.
-  button: Display the devices in thumbnail view.

User tab

Displays the users to which a shooting plan can be assigned.

5. Assigned Metadata area

Displays the planning metadata assigned to the camcorder or user selected in the transmitter/user selection area.

Structure of the Asset Screen

The Asset screen displays information about assets.



1. Global menu

Click the icons to move between screens.

- Live: Display the Live screen.
- Planning: Display the Planning screen.
- Asset: Display the Asset screen.
- Transfer: Display the Transfer screen.
- Settings: Display the Settings screen.
- (Notifications): Displays notifications to the user. Press [Mark all as read] to mark all notifications as read. Press [Delete all] to delete all notifications.
- (Personal setting): Sign out, display account settings, or display the Help.

2. Tree panel

Displays the bins in which assets are stored in tree view.

The status of FTP file transfer is indicated by the color of the bin icons.

Selecting a bin displays the context menu.

- Create Bin: Create a new bin.
- Rename Bin: Rename the bin.
- Upload File: Upload file to the bin.
- Delete Bin: Delete the bin.
- Create Storyboard: Create a new storyboard.
- Transfer Settings: Select the FTP server, S3 storage, or Sony Ci service for transferring assets in the bin.





3. Asset list



Displays a list of the assets stored in the bin. If many assets are displayed, the display is split into separate pages.

You can move/copy assets between bins using drag & drop.

Hovering the mouse over a thumbnail displays a simple preview. A line indicating the playback position is displayed on the thumbnail.

You can use the following buttons for operations on the selected asset.

-  (Preview) button: Display the asset details screen to preview the asset.
-  (Create Storyboard) button: Create a new storyboard.
-  (Download) button: Download the asset.
-  (Delete) button: Delete the asset.


You can click the  (Search) button and enter a character string to search for assets. You can click the  (Advanced Search) button to filter the assets displayed.

Note

- When entering a character string to search for that contains " \ () characters, the characters must be escaped.
- When an interlaced proxy file is displayed in a browser and the zoom factor is changed, the displayed image may become distorted.

4. Preview screen

Displays a preview of the asset.

The preview screen is displayed by double-clicking an asset, or by clicking the  (Preview) button.

You can set an In point and Out point, and add the asset to a storyboard.

Essence mark operations

The following shortcut keys are supported for essence mark operations.

Shortcut keys	Operation
M	Add essence mark
Ctrl+M	Move to next essence mark
Ctrl+Shift+M	Move to previous essence mark
Ctrl+Alt+M	Delete selected essence mark
Ctrl+Alt+Shift+M	Delete all essence marks

5. Asset information panel

Displays the metadata for the asset selected in the asset list. You can edit the metadata.

Note

- If the metadata for the same asset is edited simultaneously by more than one client, the last saved contents become valid.

6. Timeline

Use to edit a storyboard.

The timeline is displayed by executing [Create Storyboard] in the asset list or by selecting a created storyboard.

Storyboard operations

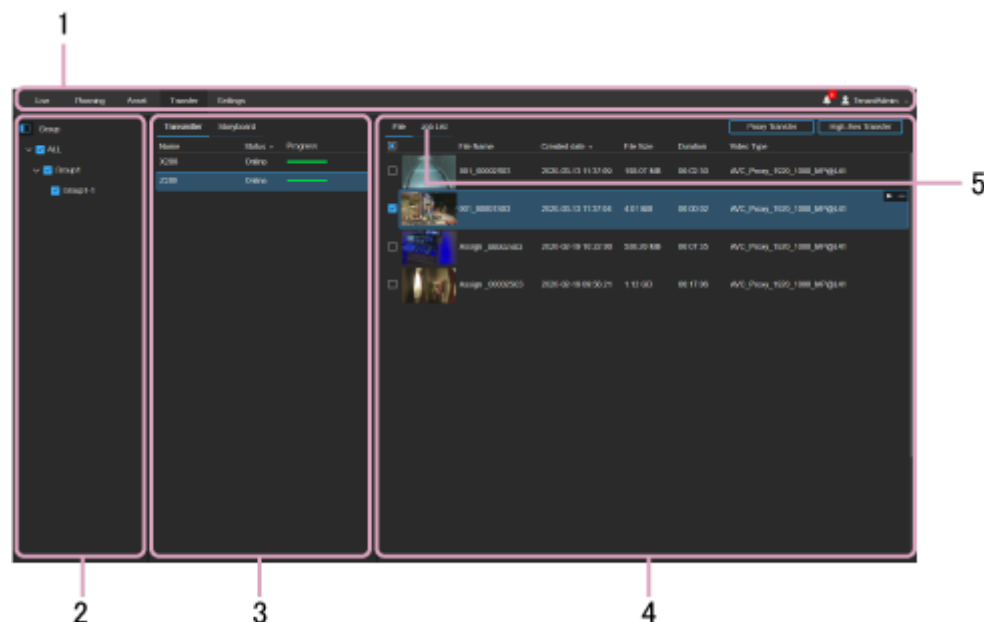
The following shortcut keys are supported on the storyboard.

Shortcut keys	Operation
Space key	Toggle play/pause
S	Toggle full-screen video
. (period), → (right arrow) key	Step 1 frame forward

Shortcut keys	Operation
, (comma), ← (left arrow) key	Step 1 frame backward
L, F	Shuttle forward
K	Pause playback
J, D	Shuttle reverse
M	Add essence mark
Ctrl+M	Move to next essence mark
Shift+M	Move to previous essence mark
Ctrl+Alt+M	Delete essence mark
Shift+Ctrl+Alt+M	Delete all essence marks
I	Mark In-point
O	Mark Out-point
Page Up key	Move up in essence mark table
Page Down key	Move down in essence mark table
R, Ctrl+K	Razor edit cut at the playhead location

Structure of the Transfer Screen

The Transfer screen is used to transfer camcorder proxy files to XDCAM air, and to upload high-resolution (High-Res) files to an FTP server. It is used to specify the clips to transfer and to control transfer jobs.



1. Global menu

Click the icons to move between screens.

- Live: Display the Live screen.
- Planning: Display the Planning screen.
- Asset: Display the Asset screen.
- Transfer: Display the Transfer screen.
- Settings: Display the Settings screen.
- (Notifications): Displays notifications to the user. Press [Mark all as read] to mark all notifications as read. Press [Delete all] to delete all notifications.
- (Personal setting): Sign out, display account settings, or display the Help.

2. Group selection area

Displays groups in tree view. Select a group that contains the devices to display in the Source area.

3. Source area

Transmitter tab

Displays the devices on which files to transfer are stored in list view.

Storyboard tab

Displays transfer jobs when sending high-resolution files to an FTP server according to the edit results on a storyboard.

4. File tab

Displays a list of files stored on the device selected in the Source area. Select files to transfer by placing a check mark in the checkbox beside each file.

- Proxy Transfer button: Adds the proxy file for the selected file to the transfer job list. Files are transferred to the server specified in [Upload Server] in XDCAM air. The transferred files are also saved in the [Auto Upload] bin on the

Asset screen in the same way as when using the camcorder Auto Upload function. Selection of the transfer destination in the GUI is not required.

- **High-Res Transfer button:** Adds the high-resolution file for the selected file to the transfer job list. Select the transfer destination server from among the external servers registered as Upload destinations on the camcorder.
- **Preview button:** Displays the selected file in the preview screen. You can specify an In point and Out point on the preview screen to transfer that portion only. Essence marks and metadata configured on the camcorder are displayed on the preview screen.

Note

- The Preview button is displayed above the list when a file is selected.
- Proxy Transfer and High-Res Transfer are also displayed in the context menu above the list.
- For PXW-Z280/Z190/FX9 camcorders, the transfer destination registered in XDCAM air is also displayed as the transfer destination for High-Res Transfer.

5. Job List tab

Displays a list of file transfer jobs executed on the [File] tab and the current transfer status.

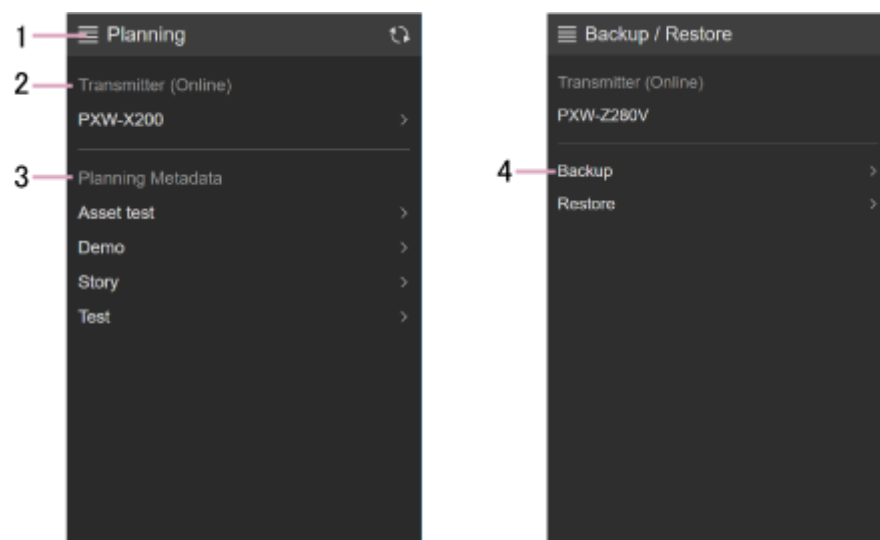
- **Delete:** Delete the selected job from the list.
- **Clear Completed Jobs:** Delete jobs after completion of transfer to an FTP server from the list.

Structure of the Settings Screen

The Settings screen is used by the administrator. For a description of the screen and configuration operations, refer to the XDCAM air Setup Guide.

Structure of the Screen for Mobile Devices

The Planning screen displays the shooting plans (planning metadata) assigned to the user logged in on the mobile device. This is used to send and load the shooting plan into a camcorder.



1. Menu

The following menu is displayed.

- Planning: Display the Planning screen.
- Backup/Restore: Display the Backup/Restore screen.
- Select Transmitter: Select a camcorder.
- Sign out: Sign out from the service.

2. Transmitter

Displays the selected camcorder.

Tap the displayed camcorder to display a list of the planning metadata stored in the camcorder.

To select another camcorder, select [Select Transmitter] from the menu.

3. Planning Metadata

Displays the planning metadata that is assigned to the signed-in user.

Tap the displayed planning metadata to display more details.

You can transfer and load planning metadata into a camcorder from the planning metadata details screen.

4. Backup/Restore

Use to back up and restore the settings for the camcorder selected in [Transmitter].

Setting the Wireless Adapter to Network Client Mode

When shooting using a camcorder with a wireless adapter attached, set the wireless adapter to network client mode as described below.

- 1 Attach the wireless adapter to the camcorder.**
- 2 Attach an LTE modem and/or wireless LAN module to the wireless adapter.**
- 3 Turn on the camcorder and wireless adapter.**
- 4 Access the wireless adapter from a smartphone, tablet, or other device to display the settings screen.**
- 5 Configure network client mode.**
- 6 Turn on network client mode.**

Note

- For details about attaching and configuration, refer to the manuals for the camcorder and wireless adapter, and the Wireless Network Connection setup guide.
- Synchronize the time and time zone on the wireless adapter with the time of the PWS-100RX1/110RX1/110RX1A server.

Setting the Camcorder to Network Client Mode

When shooting using a network-enabled camcorder, use the following procedure to set the camcorder to network client mode.

- 1 Attach an LTE modem to the camcorder.
- 2 Turn on the camcorder.
- 3 Open the settings menu on the camcorder.
- 4 Configure network client mode.
- 5 Turn on network client mode.

Note

- For details about attaching and configuration, refer to the manual for the camcorder, and the Wireless Network Connection setup guide.
- Set the camcorder clock to the correct time and time zone, and synchronize with the PWS-100RX1/110RX1/110RX1A server.

CLOUD-BASED WIRELESS SERVICE
XDCAM air

Starting XDCAM pocket

Start XDCAM pocket if using a smartphone with XDCAM pocket installed as the streaming device. For details, refer to the Help for XDCAM pocket.

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Starting Streaming

Use the following procedure to start and stop streaming from the Live screen of XDCAM air.
Specify the camcorder used for shooting, and enable streaming transmission.

1 Select the group in which the device for streaming is registered in the group selection area.

2 Select a camcorder or XDCAM pocket displaying a thumbnail in the Transmitter area.

3 Select the maximum bit rate for streaming in [Network Range] on the [Streaming] tab.

Note

- If [Network Range] is set to [Auto] when streaming from XDCAM pocket on a 3G network, the session may be disconnected. In this case, specify a different value and execute again.

4 Select the codec to use for streaming in [Codec] on the [Streaming] tab.

Note

- If the devices used for streaming do not support H.265/HEVC, the codec is set to H.264/AVC (fixed).
- The codec cannot be changed while streaming is in progress.
- H.265/HEVC streaming is supported only on SDI outputs.
- Stream recording is not supported in H.265/HEVC streaming.

5 Select the delay time for streaming video in [Delay] on the [Streaming] tab.

6 Select the SDI port group for output in [Main Output] / [Sub Outputs] on the [Streaming] tab.

Note

- A cloud receiver cannot be selected in [Sub Outputs].

7 Click [Start] on the [Streaming] tab.

Distribution of streaming video starts.

Note

- If the selected parameters for streaming do not require change, you can drag & drop the camcorder from the Source area or the XDCAM pocket icon onto the SDI port to start streaming.

To stop streaming

Click [Stop] on the [Streaming] tab.

To reserve an SDI port for output streaming

You can reserve an SDI output port used when streaming starts in [Port reservation] on the [Streaming] tab. When a port is reserved, that port is no longer available for selection in [Main Output] for other streams.

Note

- The [Delay] parameter on the [Streaming] tab can be changed while streaming, although the streaming output may be interrupted momentarily when the value is changed.

Saving a Stream to a File

You can save streaming video from a camcorder to a file automatically and register the file as an asset.

Note

- This function cannot be used if the codec of the transmitter is set to HEVC.

1 Start streaming.

Note

- Recording starts automatically if [Streaming with recording] on the [Settings] screen is set to ON. For details, refer to the XDCAM air Setup Guide.

2 Click the [Rec] button in the stream information area.

Recording to the file starts, and the duration of the file is displayed in the stream information area. You can click the [Preview] button to preview the file during recording. For details about preview operations, see “Previewing and Trimming a File During Recording.”

3 Stop recording.

Streaming stops.

You can check the saved file on the Asset screen. A bin (with name configured on the [Settings] screen) is created in the [Live Recording] bin in the group to which the transmitter belongs, and the asset is saved in the bin.

Note

- The file name of the asset is the name of the transmitter, with a suffix determined by the date and time of recording.
- The time is determined according to the time zone specified on the Settings screen.
- An asset is created when streaming stops.
- The maximum time that a stream can be continuously recorded is 3 hours. When recording while casting to an SNS, the maximum continuous recording time is 1 hour.
- When you want to stop recording, allow recording to continue for approximately 30 seconds longer and then stop recording. If you don't, the recorded video may be shortened due to the display delay.

Recording a stream using a cloud receiver

To record a stream in a system that does not have a PWS-100RX1/110RX1/110RX1A or while casting to an SNS, use a cloud receiver.

Create a cloud receiver as described in “Creating a Cloud Receiver.”

To record, select the created cloud receiver in [Main output] in the Streaming information area, start streaming, and click the [REC] button.

Related Topic

- [Creating a Cloud Receiver](#)

- [Previewing and Trimming a File During Recording](#)

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Streaming to an SNS or External System

You can distribute streaming video from a camcorder to an SNS (social networking service) or external system automatically. To do this requires creating a cloud receiver in the Receiver area.

Note

- This function cannot be used if the codec of the transmitter is set to HEVC.

1 Click the **[+]** button in the Receiver area of the Live screen.

The dialog for creating a cloud receiver appears.

2 Place a check mark in **[Stream Cast]** in **[Stream]**.

Create Cloud Receiver

Name *Enter a name*

Group **ATG_Design**

Preset **1920x1080 59.94p**

Stream ☒ **Stream Cast**

Stream Cast Setting

☐ Watermark **192x108**

☒ **Output 1**

Preset **(RTMP) 12Mbps, high, 1920x1080p**

Endpoint *Enter the endpoint for the stream*

Stream key *Enter the key for the stream*

☒ **Output 2**

Preset **(RTMP) 12Mbps, high, 1920x1080p**

Endpoint *Enter the endpoint for the stream*

Stream key *Enter the key for the stream*

Create **Cancel**

3 Specify **[Name]**, **[Group]**, and **[Preset]**.

[Preset] determines the type of cloud receiver. Depending on this setting, the values of [Preset] for [Output] in [Stream Cast Setting] that can be selected will vary.

4 Configure the settings for streaming to an SNS or external system.

- Watermark: To display a watermark on the streamed video, select a preconfigured watermark. Watermarks are configured using [Resource] > [Watermark Preset] on the Settings screen.

- Output 1/Output 2: Place a check mark beside each output to use for streaming, and configure the output format, endpoint, and stream key.
- Preset: Select a streaming preset.
- Endpoint: Specify the SNS or external system endpoint.
- Stream Key: Specify the SNS or external system stream key.

Note


- The SNS or external system must first be set to streaming enabled state. When setting up streaming, set the endpoint and the stream key values that are acquired by the SNS or external system for the stream caster.

5 Click the [Create] button.

A cloud receiver is created in the Receiver area.

6 To start streaming, drag & drop the streaming transmitter onto the cloud receiver.

Note

- The maximum time that a stream can be continuously cast to an SNS is 1 hour.
- To check the status of each output after recording starts, select a cloud receiver, click the  button, select [View Detail] from the displayed menu, and check [Status] and [Statistics] in the [Cloud Receiver] dialog.

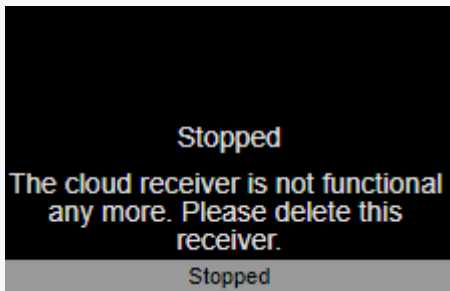
To stop streaming

Click [Stop] on the [Streaming] tab.

Creating a Cloud Receiver

Note

- Cloud receivers created in earlier versions cannot be used after subsequent software updates, as shown in the following diagram. Use the following procedure to re-register the registered cloud receivers.



- This function cannot be used if the codec of the transmitter is set to HEVC.

1 Click the [+] button in the Receiver area of the Live screen.

The dialog for creating a cloud receiver appears.

2 Specify [Name] and [Group].

Create Cloud Receiver

Name

Enter a name

Group

ATG_Design

Preset

1920x1080 59.94p

Stream

☒ Stream Cast

Stream Cast Setting

☐ Watermark

192x108

☒ Output 1

Preset

(RTMP) 12Mbps, high, 1920x1080p

Endpoint

Enter the endpoint for the stream

Stream key

Enter the key for the stream

☒ Output 2

Preset

(RTMP) 12Mbps, high, 1920x1080p

Endpoint

Enter the endpoint for the stream

Stream key

Enter the key for the stream

Create

Cancel

3 Specify [Preset].

[Preset] determines the type of cloud receiver. Depending on this setting, the values of [Preset] for [Output] in [Stream Cast Setting] that can be selected will vary. Also, the format of the asset that is created will vary depending on the cloud receiver.

4 To cast to an SNS or other output destination, place a check mark in [Stream Cast]. To record a stream without casting, clear the check mark.

A cloud receiver that is created without a check mark in [Stream Cast] can be used to save a stream in system configurations that do not have a PWS-100RX1/110RX1/110RX1A. For details, see “To save a stream to a file in a system configuration that does not use an PWS-100RX1/110RX1/110RX1A.”

5 If you placed a check mark in [Stream Cast], configure the settings for streaming to an SNS or other output destination.

- Watermark: To display a watermark on the streamed video, select a preconfigured watermark. Watermarks are configured using [Resource] > [Watermark Preset] on the Settings screen.
- Output 1/Output 2: Place a check mark beside each output to use for streaming, and configure the output format, endpoint, and stream key.
- Preset: Select a streaming preset.
- Endpoint: Specify the endpoint.
- Stream Key: Specify the stream key. This setting may be disabled, depending on the system.

6 Click the [Create] button.

A cloud receiver is created in the Receiver area.

To save a stream to a file in a system configuration that does not use an PWS-100RX1/110RX1/110RX1A

- When registering a cloud receiver, clear the the check mark from the [Stream Cast] checkbox in step 4.
- Specify the registered cloud receiver in [Main output] in the Streaming information area, and start streaming.

When creating an interlaced asset

- Select an interlaced format in [Preset] in step 3 when registering a cloud receiver.
- Set the recording format of the camcorder or the input setting of the wireless adapter to interlaced.
- Select [Follow source] for [Scanning method] on the [Live Recording] tab on the Settings screen.
- Select [Very High], [High], or [High (F)] for [Network range] in the Streaming information area, and start streaming.

When creating a 50p/60p asset

- Select a progressive format in [Preset] in step 3 when registering a cloud receiver.
- Set the recording format of the camcorder, the input setting of the wireless adapter, or the Camera setting in XDCAM pocket to 50p/60p.
- Select [Very High], [High], or [High (F)] for [Network range] in the Streaming information area, and start streaming.

Related Topic

- [Saving a Stream to a File](#)

Intercom Operations

You can make calls between the broadcast station and units in the field using camcorders with an intercom function. The streaming receiver (PWS-100RX1/110RX1/110RX1A) channel used for communication must be specified for each camcorder beforehand.

Note

- For details about configuration, refer to the Setup Guide.

1 Set the [Intercom] switch to the ON position on the [Streaming] tab.

The status of the intercom function is displayed on the [Intercom] switch.

- (blank): Audio Receiver Ch is not yet selected to a valid port
- Offline: Intercom module is offline on the transmitter side or receiver side
- Not available: Intercom is not available on the transmitter side or receiver side
- In use: Audio channel on the receiver side is being used by another transmitter
- Not connected: Ready to connect
- Connecting...: Starting or stopping intercom communications
- Connected: Intercom is running
- Unstable: Connection is unstable

Note

- Before you start the intercom, you first need to enable the intercom module and insert a supported audio device into both the transmitter and receiver sides. For details, refer to the manual for the transmitter and receiver.

2 Make an intercom call.

You can initiate a call between the configured intercom system and an online camcorder.

Note

- An intercom call can be made even when streaming.
- For information about other limitations that may occur when using the intercom function, refer to the manual for the transmitter.

Creating a Shooting Plan using XDCAM air

Note

- The use of shooting plans received from an NRCS and shooting plans created using XDCAM air is supported.
- To create a shooting plan using XDCAM air, an XDCAM air local type NRCS must be registered beforehand on the [NRCS] tab of the [Settings] screen.
- For details about adding an NRCS, refer to the XDCAM air Setup Guide.


Use the following procedure to create a new shooting plan using XDCAM air.

- 1 Select the group for the NRCS registered as a local type.
- 2 Click the [+] button at the top right of the [Planning] screen.
- 3 Enter a title for the shooting plan and other metadata values, as required, in the displayed dialog.
- 4 Click the [Create] button.

To delete a shooting plan

Select a shooting plan in the list (multiple selection supported), and click the  button.

To edit a shooting plan

Select a shooting plan in the list, and click the  button.

Sending Shooting Plans to a Camcorder

To send a shooting plan to a camcorder, use the following procedure on the Planning screen of XDCAM air.

- 1 Select the group for the NRCS to operate in the group selection area.
- 2 Display the shooting plan to send in the shooting plan operation area.
- 3 Place a check mark in the checkbox for the shooting plan to send.
- 4 Place a check mark in the checkbox for the target camcorder in the camcorder selection area.
- 5 Click the [Assign] button.

Note

- The assigned shooting plan is sent to the camcorder automatically.
- If a shooting plan with the same title as an existing plan is sent to a camcorder, the new shooting plan overwrites the previous plan.
- The status of the assigned shooting plan will not be updated unless communication is established between XDCAM air and NRCS.

To assign multiple shooting plans to a camcorder

Place a check mark in the checkboxes for the shooting plans in the shooting plan operation area.

To assign a shooting plan to multiple camcorders

Place a check mark in the checkbox for the target camcorders in the camcorder selection area.

Note

- You can check the status of shooting plans sent to multiple camcorders in the Details menu.

To view details of a shooting plan

Double-click a shooting plan in the shooting plan operation area.

A window appears displaying the details of the shooting plan. You can cancel the transfer to the target camcorders from the opened window.

Sending Shooting Plans to a User

To send a shooting plan to a user, use the following procedure on the Planning screen of XDCAM air.

- 1 Select the group for the NRCS to operate in the group selection area.
- 2 Display the shooting plan to send in the shooting plan operation area.
- 3 Place a check mark in the checkbox for the shooting plan to send.
- 4 Place a check mark in the checkbox for the target user in the user selection area.
- 5 Click the [Assign] button.

Note

- You can check the assigned shooting plan using the GUI of the mobile device.
- To load the shooting plan onto a camcorder, sending and loading are required.
- For details, see “Loading Planning Metadata on a Mobile Device.”

To assign multiple shooting plans to a user

Place a check mark in the checkboxes for the shooting plans in the shooting plan operation area.

To assign a shooting plan to multiple users

Place a check mark in the checkbox for the target users in the user selection area.

Note

- You can check the status of shooting plans sent to multiple users in the Details menu.

To view details of a shooting plan

Double-click a shooting plan in the shooting plan operation area.

A window appears displaying the details of the shooting plan. You can cancel the transfer to the target users from the opened window.

Related Topic

- [Loading Planning Metadata on a Mobile Device](#)

Loading a Shooting Plan into a Camcorder

To load a shooting plan into a camcorder, use the following procedure on the Planning screen of XDCAM air.

- 1 Select the group for the transmitter to operate in the group selection area.**
- 2 Select a camcorder in which to load a shooting plan in the camcorder selection area.**
- 3 Select [Planning Metadata in TX].**
On the CBK-FS7BK, select [Assigned Planning Metadata].
- 4 Select the shooting plan to load from the displayed list.**
- 5 Select [Load] from the menu.**

To view details of a shooting plan on a camcorder

Select a camcorder after executing [Planning Metadata in TX] in the camcorder selection area. Select a shooting plan in the [Planning Metadata in Transmitter] dialog.

A window appears displaying the details of the shooting plan. You can load the plan from the opened window.

Loading Planning Metadata on a Mobile Device

You can check planning metadata assigned to you and then load the planning metadata into a camcorder by logging in to XDCAM air from a mobile device.

- 1 Log in to XDCAM air on the mobile device.**
- 2 Select the type of camcorder.**
The selection is not required when subsequently logging in.
- 3 Select the planning metadata you want to load from the planning metadata that has been assigned to you.**
- 4 Check the details, then tap [Send & Load].**
The planning metadata is loaded into the camcorder.

Managing Assets

Video streamed from a camcorder is automatically uploaded as an asset.

- 1** Select **[Asset]** in the global menu.
- 2** In the tree panel, select a bin based on the project, title, date, or other criteria.
- 3** Select an asset from the asset list.
- 4** Click the **[Preview]** button to display the preview.
The asset details screen appears and displays a preview.
- 5** To download the asset, click the **[Download]** button.

To transfer all assets added to a bin

You can specify a bin and automatically transfer all assets stored in the bin and all assets subsequently added to the bin to an FTP server, external storage, or Sony Ci service.

When you select a bin in step 2, select **[Transfer Settings]** from the context menu and select the connection type for transfer.

Editing Video Using a Storyboard

You can edit multiple assets using a storyboard.

- 1 **Select an asset to add to a storyboard in the asset list of the Asset screen, and click the [Create Storyboard] button.**
- 2 **Enter a name and description for the storyboard in the dialog, select the timebase for the storyboard, and click [OK].**

Note

- The frame rate of the selected asset(s) becomes the frame rate of the storyboard.

- 3 **Double-click the created storyboard to display the storyboard preview and timeline.**
- 4 **Select another asset you want to add to the storyboard in the asset list.**
The preview of the asset appears.
- 5 **Drag & drop the asset into the timeline or select [Add to current storyboard] from the context menu in the preview area.**

The asset is added to the timeline.

Note

- Assets added to the storyboard must have the same frame rate.

- 6 **Select the asset on the timeline, and set an In point and Out point in the preview area.**

Note

- You can select the title of a storyboard on the timeline to preview and play the whole storyboard.
- You can check essence marks added on a camcorder in a storyboard.

- 7 **When finished editing, select [Export] from the timeline context menu.**
- 8 **To manage the edited video as an asset, select an export destination in the [Settings] tab of the dialog.**
You can also add a watermark. To use a watermark, it must be configured beforehand using [Resource] > [Watermark Preset] on the Settings screen.
- 9 **To upload the video to an SNS, place a check mark in the [Upload] checkbox for the SNS types to which you wish to upload on the [Publish] tab of the dialog, and configure the account settings and upload settings.**

10 To edit an EDL in a non linear editor, select [Export EDL] from the context menu.

Select the EDL format in the dialog, and select whether to download the EDL and proxy video or to transfer the EDL and high-resolution video to an FTP server. To transfer the high-resolution video, select the FTP server for transfer. You can also set the number of seconds for pre-roll/post-roll.

Note

- To transfer high-resolution video, the camcorder on which the target asset is stored must be online.
- Just as for the file transfer function, only an FTP server configured beforehand on the camcorder can be specified as the transfer destination for high-resolution video.
- For PXW-Z280/Z190/FX9 camcorders, the FTP transfer destination registered in XDCAM air is also displayed as the file transfer destination for high-resolution video transfer.

11 Click the [Next] button.

12 Click the [Finish] button.

Transferring Files

You can transfer camcorder files to an FTP server from XDCAM air.

1 Click [Transfer] in the global menu to display the Transfer screen.

2 Select a group in the Group area of the Transfer screen.

3 Select a camcorder on the [Transmitter] tab of the Source area.

Note

- Selecting the [Storyboard] tab in the Source area displays the storyboard file transfer job in the job list.

4 Click the [File] tab.

A list of files stored on the selected camcorder is displayed.

5 Click the clips to transfer, placing a check mark in the checkboxes.

You can select a file, press the preview button, and specify an In point and Out point on the preview screen to transfer that portion only.

6 To transfer proxy files, click the [Proxy Transfer] button. To upload high-resolution files, click the [High-Res Transfer] button.

The selected files are added to the job list, and the files are then transferred in sequence. You can check the transfer state by clicking the [Job List] tab to display the list of transfer jobs.

Note

- Transfer of high-resolution files is not supported when using FAT format recording media.

To preview a clip

Select a clip that you want to preview in the clip list, and click the playback icon. The preview screen appears, and playback starts.

To return to the clip list, click the  (Back) button on the preview screen.

To transfer a clip while previewing the clip

Click the [Proxy Transfer] or [High-Res Transfer] button on the preview screen. To transfer only a portion of a clip, set an IN point and/or OUT point, and then click the [Proxy Transfer] or [High-Res Transfer] button.

Integration with Non Linear Editors

You can register video files managed with XDCAM air in a Non Linear Editor (NLE) using the XDCAM air extension in the NLE.

- 1 In an NLE, select [Windows] – [Extensions] – [XDCAM air].**
The XDCAM air panel appears, and the XDCAM air login screen is displayed.
- 2 Log in to XDCAM air.**
A list of assets in XDCAM air is displayed.
- 3 Select the asset you want to register, then select [Download] from the context menu.**
The asset is downloaded and registered in the NLE.
You can also download an asset by double-clicking the asset.

Note

- The XDCAM air extension runs in the NLE. It does not run inside the browser in which this Help Guide is displayed.
- The XDCAM air extension must be installed on the NLE device.

Previewing and Trimming a File During Recording

When recording a stream to a file, you can preview and trim the file during recording.

1 On the Live screen, start recording a stream to a file.

2 Use one of the following methods to display the preview of the file during recording.

- Select the transmitter during recording on the Live screen, and click the [Preview] button in the Streaming information area.
- Select and double-click the asset that has “Recording” status on the Asset screen.

3 Set an In point and Out point while displaying the preview.

Note

- An error may occur at the In/Out points depending on the state of the recorded stream. To make sure that the edit points are retained, set the In/Out points with a margin of 2 to 3 seconds.

4 Select [Trim & Create Asset] from the context menu in the preview area.

The region between the In point and Out point is registered as an asset.

Note

- If you stop recording during trim editing, the configured In and Out points will be cleared and conversion will start.
- Conversion for asset registration takes some time after trimming or after cloud recording stops. The time taken for conversion will vary depending on the duration of the asset.
- An asset cannot be played back during conversion.

Backing Up and Restoring Settings

You can back up and restore all camcorder settings. This function backs up and restores the “All File” of the camcorder. To back up or restore settings, display the [Transmitter Setting] > [Backup/Restore] screen on the Settings screen. Backup/restore operation can be executed on online camcorders only.

Note

- [Backup/Restore] can be used by users with Camera Operator authority.

To back up settings

Select the camcorder whose settings you want to back up on the [Backup/Restore] screen, and click the [Backup] button. Enter a name and description for the backup.

To restore settings

Select the camcorder whose settings you want to restore on the [Backup/Restore] screen, and click the [Restore] button. Select the settings to restore from the list of backed up settings.

Deleting backup files

Display [Maintenance] > [Camera All File] on the Settings screen, select the files you want to delete, and click the Trash button.

Note

- [Camera All File] can be used by administrators.

Backing Up and Restoring Settings on a Mobile Device

You can back up and restore the settings on a mobile device.

Note

- When a backup is created on a mobile device, backup files are saved per user. Other users are not able to view the backup file.

To back up settings



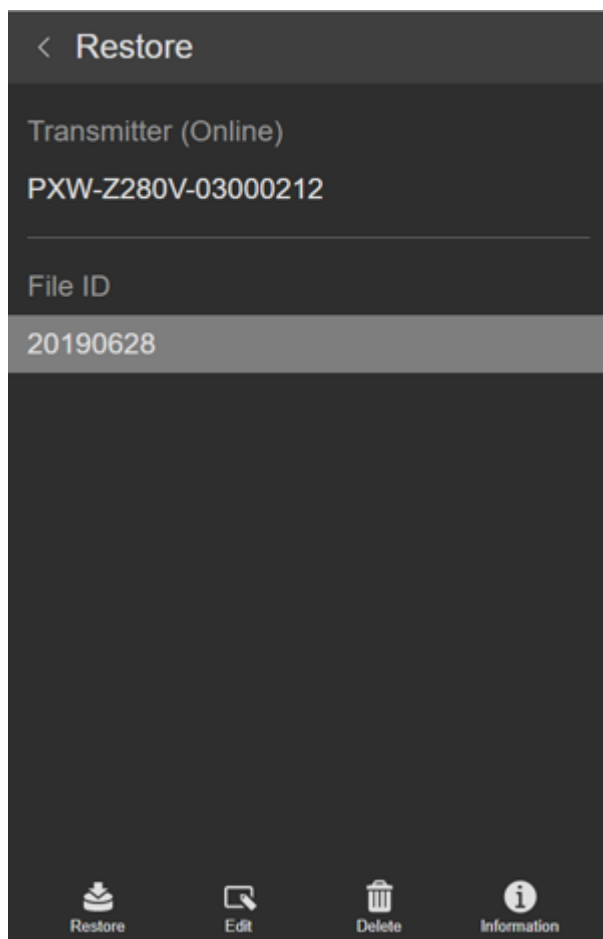
The screenshot shows a mobile app interface for backing up settings. At the top, there is a back arrow and the title 'Backup'. Below this, the text 'Transmitter (Online)' is followed by 'PXW-Z280V'. There are two input fields: 'File ID' with the placeholder text 'Input File ID', and 'Description' with the placeholder text 'Input Description'. At the bottom of the screen, there is a large 'Backup' button.

Specify [File ID] and [Description], then tap [Backup] to save the settings.

Note

- [File ID] input is required.

To restore settings



The file ID of backup files are displayed. Select the file ID of the file you want to restore, and tap [Restore] to restore the settings.

In addition to restoring a file, you can edit the file ID, delete the file, and display file details.

Note

- The camcorder will reboot after restoring settings.

Checking the Service Usage Status

Display [Maintenance] > [Dashboard] on the Settings screen. You can check the data statistics, license information, and other usage status information for the current month or day.

Note

- [Dashboard] can be used by administrators.

Supported Formats

The following video formats are supported by the system.

Streaming SDI output formats

- 1920×1080 59.94p, 59.94i, 50p, 50i
- 1280×720 59.94p, 50p

Asset video

- Supports video registered from a transmitter using Auto Upload.
- Video that is uploaded from a web browser must have a .mp4 file name extension. The video images may not be displayed correctly, depending on the video codec.
- When a stream is saved to a file, it is saved in the following format.
 - Resolution: 1920×1080
 - Format: H.264 MP4
 - Bit rate: Determined by [Network range]

Streaming formats to an SNS

- 1920×1080
- 1280×720
- 640×360

Restrictions

The following restrictions occur when using this system.

- Streaming may be interrupted, depending on the network environment.
- The video quality and audio quality of a file recorded from a stream will vary depending on the network environment. Differences in video quality and audio quality, compared to a file recorded on a camcorder, may occur.
- A short delay may occur after setting the camcorder (and wireless adapter) to network client mode until thumbnails are displayed in the source area of XDCAM air.
- The image displayed in the Preview area may lag the SDI output image of the PWS-100RX1/110RX1/110RX1A slightly.
- Operations are displayed using a web browser. If the display becomes corrupted for any reason, reload the web page to restore the display.
- The XDCAM air extension can be used only in an NLE that is supported by XDCAM air.

CLOUD-BASED WIRELESS SERVICE
XDCAM air

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