

T2

INTELLIGENT DIGITAL DISK RECORDER

User Manual(SP2) — Front Panel mode —



14 June, 2010

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About this manual

- The screens used as examples in this manual are those of the development stage, so they may vary from those in the final product.
- If there are any variations between the explanation in this manual and the actual application method, priority is given to the actual application method.
- This manual is written for people who have a basic knowledge of how to use a computer. If there are no special instructions, perform the same operation as a normal computer operation.
- In this manual, the system of the T2 is called "Workstation".

Warning

- Health precautions

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Setup

Overview

The T2 is a multi-channel digital video recorder that allows simultaneous recording and playback of media stored on internal disk drives. The T2 features a single recording channel (R1) and two playback channels (P1/P2). The quantity of hours recorded depends on the video compression settings that are selected. The front panel touch screen and TFT display, along with front panel transport controls, allow easy operation and monitoring with minimal external connections.

With the Jog/Shuttle or the external controllers, variable speed playback is available.

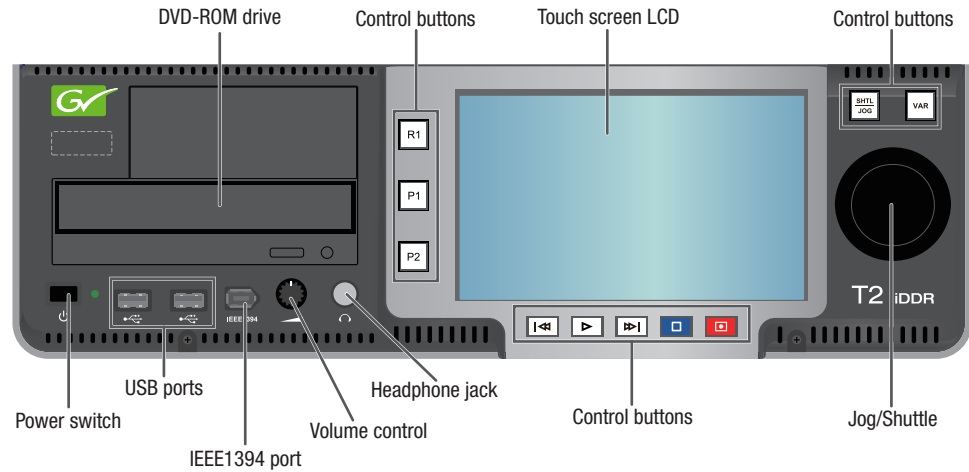
Features

- Supporting a high quality “Canopus HQ Codec”, the T2 can handle videos in full resolution (1920x1080), 4:2:2 color space, and up to 200Mbps.
- The T2 can load and play HQ videos edited on Grass Valley EDIUS, without any additional encoding.
- Equipped with 1 input line and 2 HD/SD-SDI output lines, recording and playback are available simultaneously, as well as playbacks with the 2 output channels perfectly synchronized.
- Supports RS-422A deck controls.
- Supports remote controls via GPI.
- Equipped with a 7-inched touch screen LCD and a jog/shuttle knob, the T2 can be operated as a stand-alone unit.
- Supports file import in various formats including QuickTime* and Windows Media.

* QuickTime is not supported in some codecs.

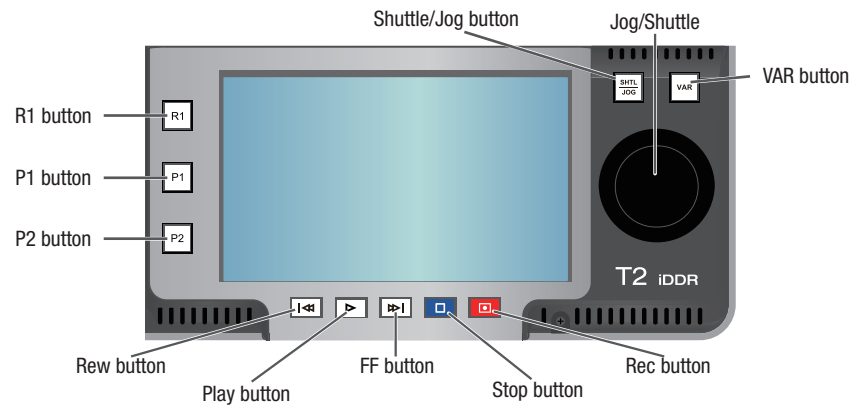
Part names and functions

Front panel



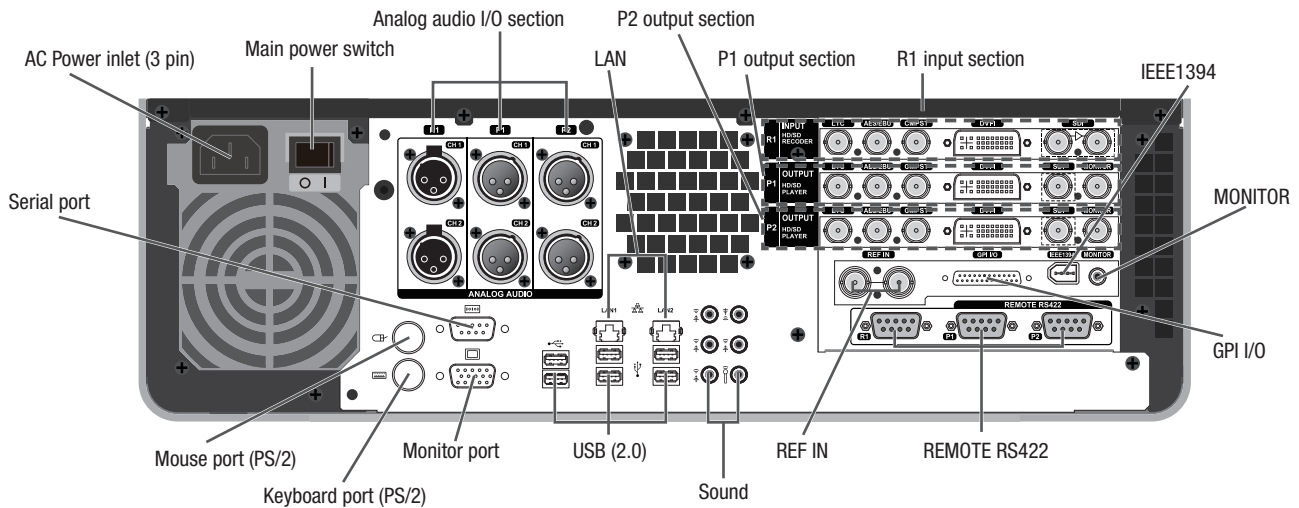
Touch screen LCD	Displays the T2 screens. By tapping on the items displayed on screen, T2 can be operated.
DVD-ROM drive	Used to import video/audio media files stored on DVD-ROM. * Does not support DVD-Video playback.
Power switch	Turns on/off the T2.
USB ports	Used to connect USB removable devices.
IEEE1394 port	Used to connect IEEE1394 removable devices. * Does not support the connection of DV/HDV devices.
Volume control	Used to adjust the headphone volume.
Headphone jack	Used to connect a headphone.
Jog/Shuttle	(See next page)
Control buttons	(See next page)

Control buttons



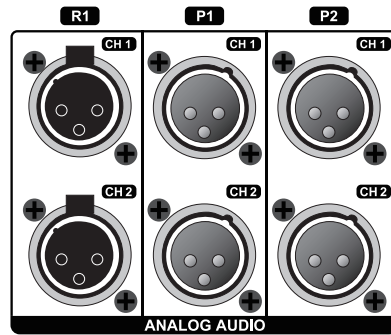
R1 button	Switches the Recorder channel to active.
P1 button	Switches the Player1 channel to active.
P2 button	Switches the Player2 channel to active.
Rew button	Moves back frame by frame. Keep pressing the button will fast-rewind.
Play button	Starts playback.
FF button	Moves forward frame by frame. Keep pressing the button will fast-forward.
Stop button	Stops playback/recording.
Rec button	Starts recording.
Shuttle/Jog button	Makes Jog/Shuttle active. (Switches modes from VAR button.)
VAR button	Executes variable speed playback. (Opens the control screen. Switches modes from Shuttle/Jog button.)
Jog/Shuttle	Executes jog playback, shuttle playback.
Rew + Stop buttons	While playing a clip Moves to the previous IN/OUT point, or the top of the clip. While playing a playlist Moves to the previous event.
FF + Stop buttons	While playing a clip Moves to the next IN/OUT point, or the end of the clip. While playing a playlist Moves to the next event.

Rear panel



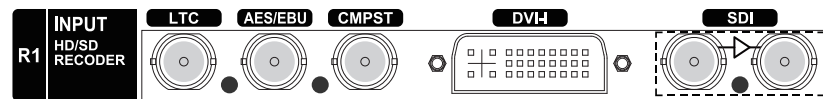
AC Power inlet (3 pin)	Use the supplied power cable and connect to the AC power.
Main power switch	Turns the main power ON/OFF.
Analog audio I/O section	Used for analog audio I/O.
Mouse port (PS/2)	Used to connect a mouse.
Keyboard port (PS/2)	Used to connect a keyboard.
Serial port	Not used.
Monitor port	Used to connect a PC monitor.
USB (2.0)	Used to connect a keyboard or mouse.
LAN	Used to connect a LAN cable.
Sound	Not used.
R1 input section	Used for inputting to the R1 channel.
P1 output section	Used for outputting from the P1 channel.
P2 output section	Used for outputting from the P2 channel.
REF IN	Used to input REF signal.
GPI I/O	Used for GPI I/O.
IEEE1394	Used to connect a device via IEEE1394. * Does not support the connection of DV/HDV devices.
MONITOR	Used for audio monitor.
REMOTE RS422	Used for remote control of R1, P1, P2 channels.

Analog audio I/O section



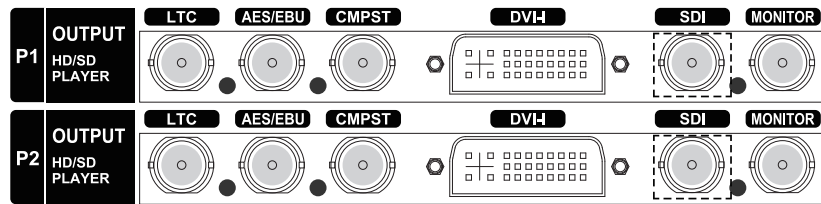
R1 – CH1 R1 – CH2	Used for audio input to the R1 channel. Balanced audio input. XLR-3-31x2 (CH1-2)
P1 – CH1 P1 – CH2	Used for audio output from the P1 channel. Balanced audio output. XLR-3-32x2 (CH1-2)
P2 – CH1 P2 – CH2	Used for audio output from the P2 channel. Balanced audio output. XLR-3-32x2 (CH1-2)

R1 input section



LTC	Used for LTC (timecode) input.
AES/EBU	Used for digital audio (AES/EBU) input.
CMPST	Used for Composite input.
DVI-I	Used for DVI-I input (for DVI, YPbPr).
SDI	Used for SDI input (left), and for active through (right).

P1/P2 output section



LTC	Used for LTC (timecode) output.
AES/EBU	Used for digital audio (AES/EBU) output.
CMPST	Used for Composite output.
DVI-I	Used for DVI-I output (for DVI, RGB, YPbPr).
SDI	Used for SDI output.
MONITOR	Used for monitor output (Composite).

Note The YPbPr signal is input/output via analog RGB pins on the DVI-I port. To output YPbPr, use a RGB conversion connector cable.

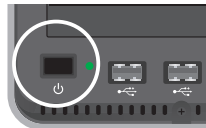
Start-up and shutdown

Start-up

The following procedure is to start-up the T2.

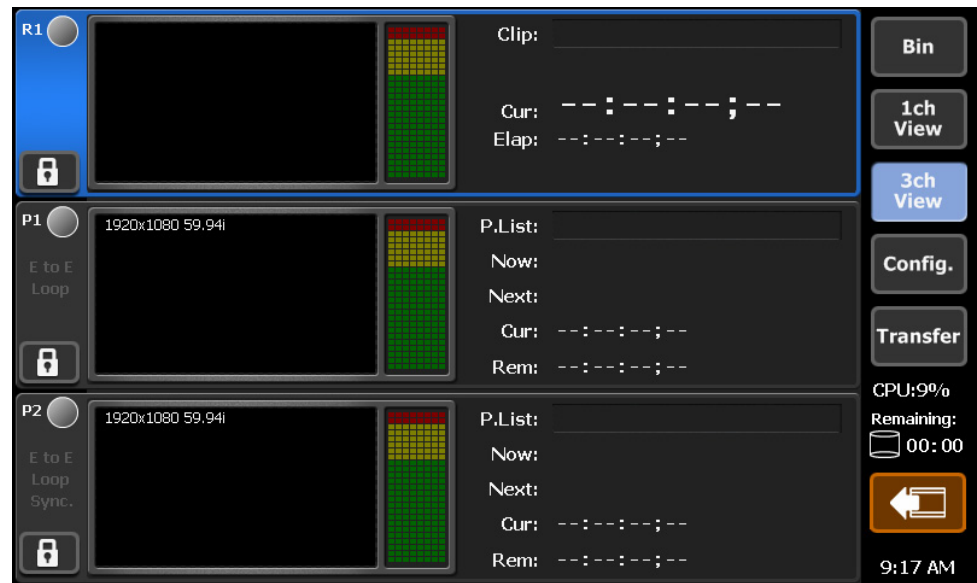
1. Switch the Main power switch on the rear panel to the on position, and turn the Power switch on the front panel ON.

Power switch



2. T2 starts up and the 3ch View screen appears on the touch screen LCD.

3ch View

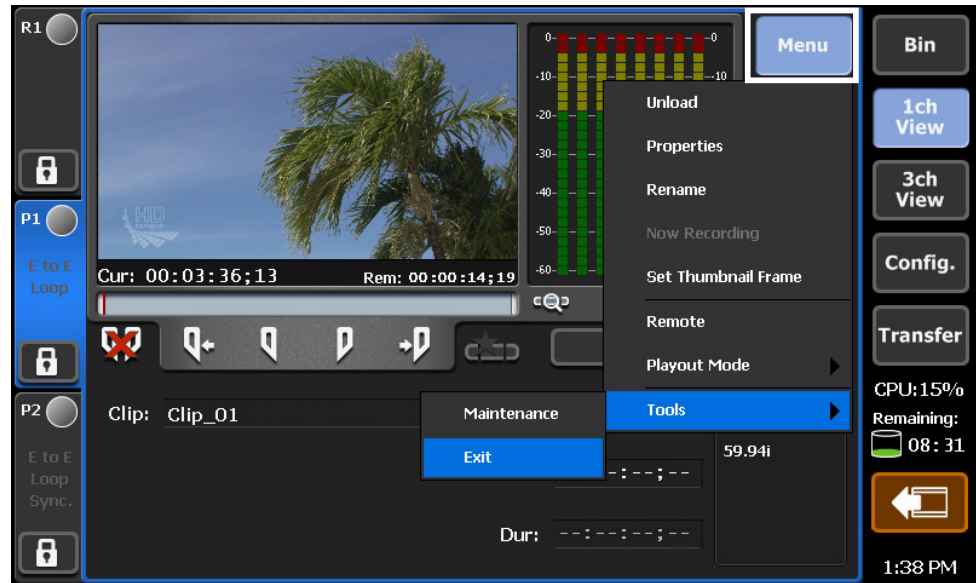


Shutdown

The following procedure is to shutdown the T2.

1. Switch the screen to the 1ch View, and tap the **Menu** button.

Menu button (P1 channel)



2. From the text menu, choose **Tools – Exit**.
3. On the dialog displayed, choose **Shut Down** and tap the **OK** button.

To turn the T2's main power off, wait until the screen goes blank, confirm that the shutdown is complete, and then turn off the main power switch on the rear panel.

Note Never shutdown your T2 by pressing and holding the Power switch, or by turning off the Main power switch. Doing so may cause serious malfunctions.

Hardware settings

Tapping the **Config** button shown on the screen, the General settings screen will open.

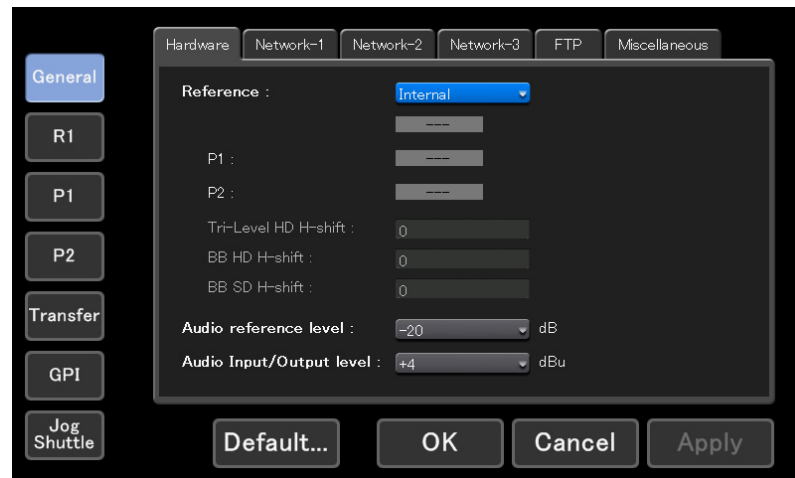
Modify the settings according to your environment.

Config button



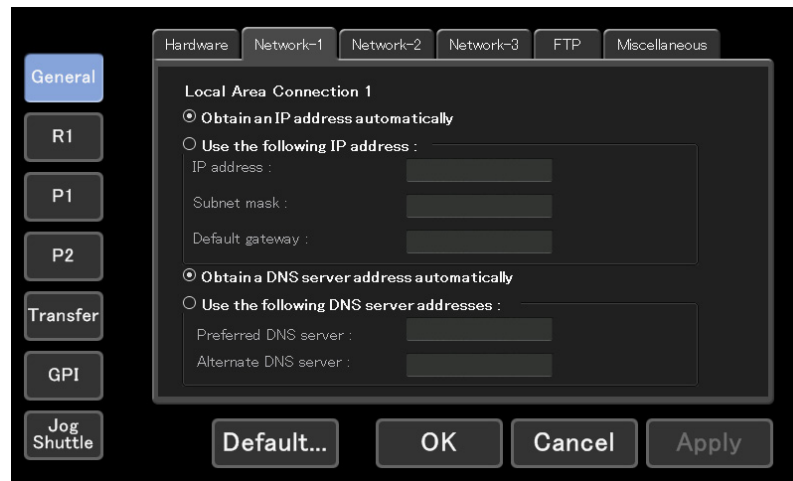
General settings

Hardware tab



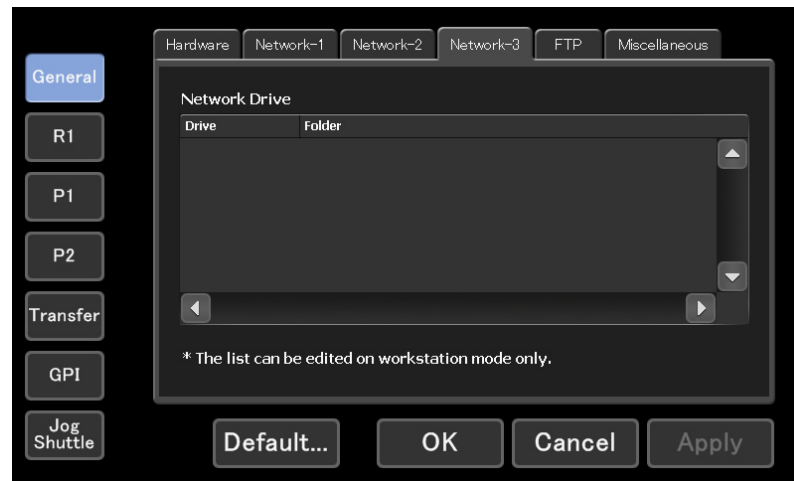
<p>Reference</p>	<p>The options you can choose from for the reference input method are External, Input and Internal. The sync status is displayed in the boxes below this button.</p> <ul style="list-style-type: none"> • P1 Displays if the P1 channel is synchronized. • P2 Displays if the P2 channel is synchronized. • Tri-Level HD H-shift To use the HD tri-level REF signal as the HD REF signal, check this box. Enter a value to adjust the REF phase. (Available only for External) • BB HD H-shft To use the HD Black Burst REF signal as the HD REF signal, check this box. Enter a value to adjust the REF phase. (Available only for External) • BB SD H-shft..... To use the SD Black Burst REF signal as the SD REF signal, check this box. Enter a value to adjust the REF phase. (Available only for External)
<p>Audio reference level</p>	<p>Adjusts the audio reference level (Headroom).</p>
<p>Audio Input/Output level</p>	<p>Adjusts the audio input/output level.</p>

Network-1/Network-2 tab



Obtain an IP address automatically	Check this option to obtain an IP address automatically via DHCP.
Use the following IP address	Establishes a local area connection by specifying an IP address, subnet mask and default gateway. IP address Specify an IP address. Subnet mask Specify a subnet mask. Default gateway Specify a default gateway.
Obtain a DNS server address automatically	Check this option to obtain a DNS server address automatically via DHCP.
Use the following DNS server addresses	Establishes a local area connection by specifying addresses for the default DNS server and an alternate DNS server. Preferred DNS server Specify a default DNS server address. Alternate DNS server Specify a default DNS server address.

Network-3 tab



Network Drive

Lists the network drives currently connected.

* Adding and/or disconnecting network drives is available in the Workstation mode.

FTP tab



User Name	Displays the user name to access the FTP server.
Password	Displays the password to access the FTP server.
Max Clients	Displays the maximum number of users who can access the FTP server simultaneously.
Bin (root directory)	Displays the name of the bin to store materials uploaded to the root directory.
Start	Starts the FTP server.
Stop	Stops the FTP server.
Settings	Opens the FTP Server settings screen.

FTP Server settings screen

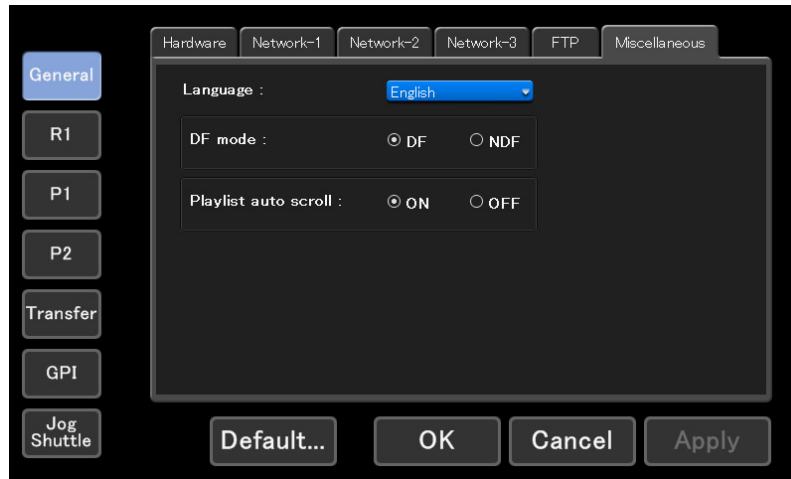
The screenshot shows a dialog box for FTP server configuration. The fields are as follows:

User Name :	ftpuser
Password :	ftppassword
Max Clients :	5
Bin(root directory) :	Default

Buttons: OK, Cancel

User Name	Specify the user name to access the FTP server.
Password	Specify the password to access the FTP server.
Max Clients	Specify the maximum number of users who can simultaneously access the FTP server.
Bin (root directory)	Specify the bin to store materials uploaded to the root directory.

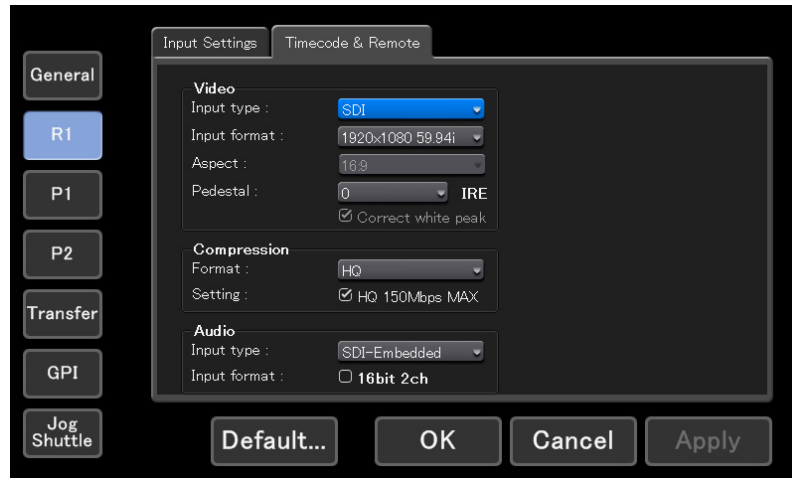
Miscellaneous tab



Language	Choose the on-screen language. * Restarting the system is required to apply the setting.
DF mode	Specify either drop-frame or non-drop frame to be used. DF Check this option to use Drop frame. NDF Check this option to use Non-drop frame.
Playlist auto scroll	Specify if you want the Event List of the playlist to automatically scroll.

R1 channel settings

Input Settings tab



<p>Video</p>	<p>Input type Choose a type of video input.</p> <p>Input format Choose a format for the video input.</p> <p>Aspect Choose the aspect ratio for the SD input.</p> <p>Pedestal Choose the setup (black) level in NTSC. Choose 7.5IRE for North America.</p> <p>Correct white peak Check this option to enable white peak correction.</p>
<p>Compression</p>	<p>Format Specify the compression format.</p> <p>Setting Check this option to limit the compression rate for the Canopus HQ codec, up to 150Mbps.</p>
<p>Audio</p>	<p>Input type Specify the audio input format from Analog, AES/EBU (digital) and SDI embedded.</p> <p>Input format Check this option to record in 16bit 2ch.</p>

Timecode & Remote tab



Select Timecode	Specify the format for the timecode from TC (LTC) and SDI (VITC) .
Record Timecode	Choose the timecode to use for recording. External Uses the timecode from the external device. Internal-System time Uses the system clock. Internal-Specified start TC Specify a value as the beginning timecode.
Record ancillary data	Setting this option to ON will record VANC.
Remote protocol	Choose a REMOTE protocol from BVW and AMP .
AMP Connection	Specify an IP address and a channel for AMP connection.

P1/P2 channel settings

Video tab



Format	Specify the resolution and the frame rate for the output video.
DVI option	Choose a video resolution to use with DVI/RGB format for output.
Output capability	Displays available format with highlight.
Aspect	Specify the aspect ratio. Choose 4:3 or 16:9 for SD video.
Component type	Choose the type of the analog signal output via DVI-I port.
Pedestal	Choose the setup (black) level in NTSC. Choose 7.5IRE for North America.
Still image	Specify the display mode during pause. Field Displays the still picture interpolating both fields. The image is displayed in complete still. Frame The top field and the bottom field will be displayed alternately. The image is displayed shakingly.
Aspect Ratio Conversion	Bars Adds black bars on the top and bottom or both sides of the image when the aspect ratio of the clip differs from the settings. Crop Crops the edges of the image when the aspect ratio of the clip differs from the settings.
Auto play mode	Enables/Disables auto playback when material is loaded to a channel.

Monitor & Remote tab



<p>Monitor out</p>	<p>Specify the channel to use for monitor out, and specify if OSD (on-screen display) is enabled.</p> <p>Channel Specify the channel to use for monitor out. Only P1 is available for P1 channel, while P1 and P2 for P2 channel.</p> <p>OSD Enables/Disables the on-screen display.</p> <p>Show Cur timecode Check this option to show the current timecode for the on-screen display.</p> <p>Show Remain timecode Check this option to show the remaining timecode for the on-screen display. (See "Playlist Remain TC" below.)</p> <p>Playlist Remain TC: Specify the display style of the remaining time for the playlist.</p> <ul style="list-style-type: none"> • Event.....Displays the remaining time of the event (clip/playlist). • Total.....Displays the remaining time of the entire playlist.
<p>Remote protocol</p>	<p>Choose a REMOTE protocol from BVW and AMP.</p>

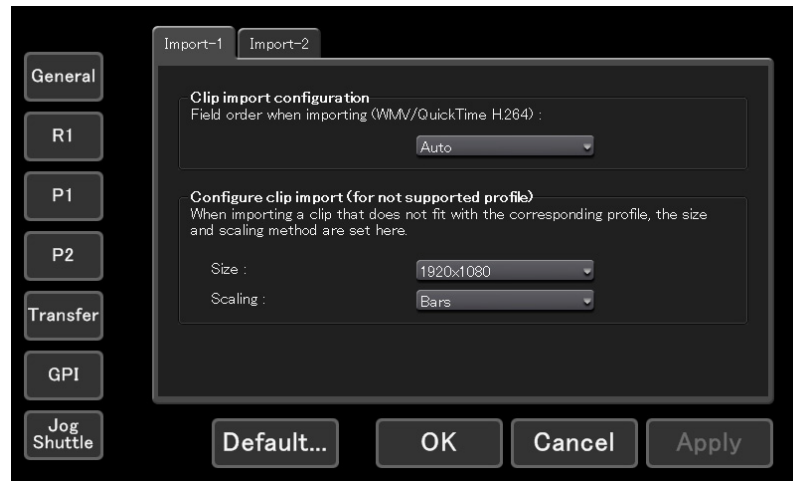
ProcAmp tab



Video gain	Adjusts the Video gain. (Available only for Composite and SD Component)
Chroma gain	Adjusts the Chroma gain. (Available only for Composite and SD Component)
Chroma phase	Adjusts the Chroma phase. (Available only for Composite)
Black level	Adjusts the Black level. (Available only for Composite and SD Component)
Video output level	Adjusts the Video output level. (Available only for Composite and Component)

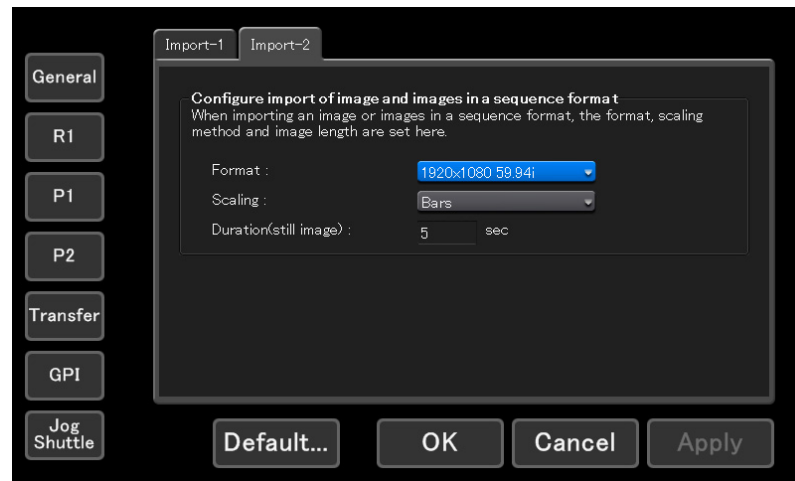
Transfer screen

Import-1 tab



Clip Import configuration	Choose the field order for the imported clip from Auto , Progressive , Top field first , and Bottom field first .
Configure clip import (for not supported profile)	<p>When importing a clip that does not match the supported profile of T2, the clip will be imported according to the parameters specified here.</p> <p>Size Imports clip scaled to the specified size.</p> <p>Scaling When the size specified by the "Size" option differs from the actual size of the material, the generated clip is scaled by the following method.</p> <ul style="list-style-type: none"> • BarsAdds black bars to the top and bottom or both sides so that the longer side fits the screen. • CropDisplays the image so that the shorter side fits the screen. • StretchStretches the clip to fit the screen.

Import-2 tab



Configure import of image and images in a sequence format

Specify the format, method and duration to import an image or a sequence of images.

Format

Specify the format and frame rate of the image to import.

Scaling

When the size and aspect ratio differ between the image and importing profile, the generated clip is scaled by the following method.

- BarsAdds black bars to the top and bottom or both sides so that the longer side fits the screen.
- CropDisplays the image so that the shorter side fits the screen.
- StretchStretches the clip to fit the screen.

Duration (still image)

Specify the duration when the imported image is being displayed.

GPI settings

Input tab



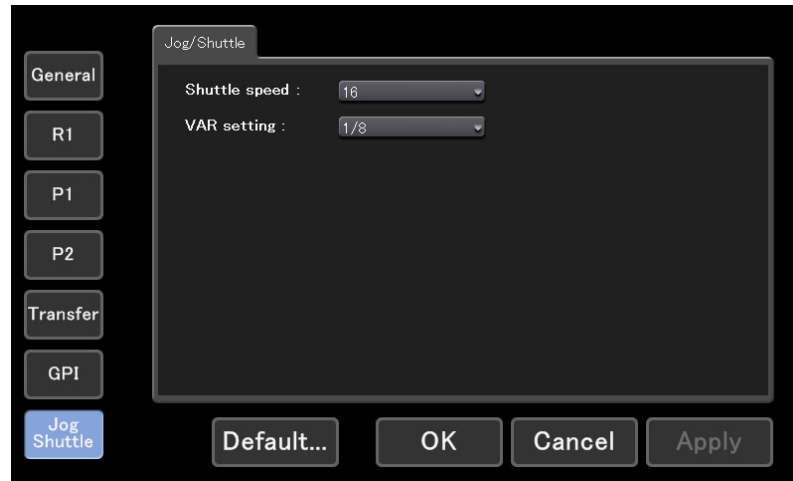
GPI-Input	Use the Previous and Next buttons to choose the GPI input trigger.
Trigger settings	<p>Permits specification of the GPI input trigger settings.</p> <p>Channel Choose a channel to respond to the GPI input trigger.</p> <p>Action Specify the action caused by the trigger.</p> <ul style="list-style-type: none"> • Stop Stops playback/recording. • Play Plays the clip or playlist loaded to a channel. • Record Starts recording. • Rewind Rewinds. Rewinding stops at the start of the content, or when other action is performed. • FastFwd Executes Fast Forward. Fast Forward stops at the end of the content, or when other action is performed. • CueStart Cues up to the IN point of the content loaded. • CueEnd Cues up to the OUT point of the content loaded. • Eject Unloads the content loaded. • Preview Loads the clip uploaded from the R1 channel onto the P1 channel. • CueNextEvent Cues up to the next event on the playlist loaded. • CuePrevEvent Cues up to the previous event on the playlist loaded. • VARPlayback Plays the content in the speed specified in Variable speed playback mode (see "Jog/Shuttle settings"). <p>Active Choose the GPI signal to activate from High and Low.</p>

Output tab



GPI-Output	Use the Previous and Next buttons to choose the GPI output trigger.
Trigger settings	Permits specification of the GPI output trigger settings. Name Specify the name of the trigger. Active Choose the GPI signal to activate from High and Low .

Jog/Shuttle settings



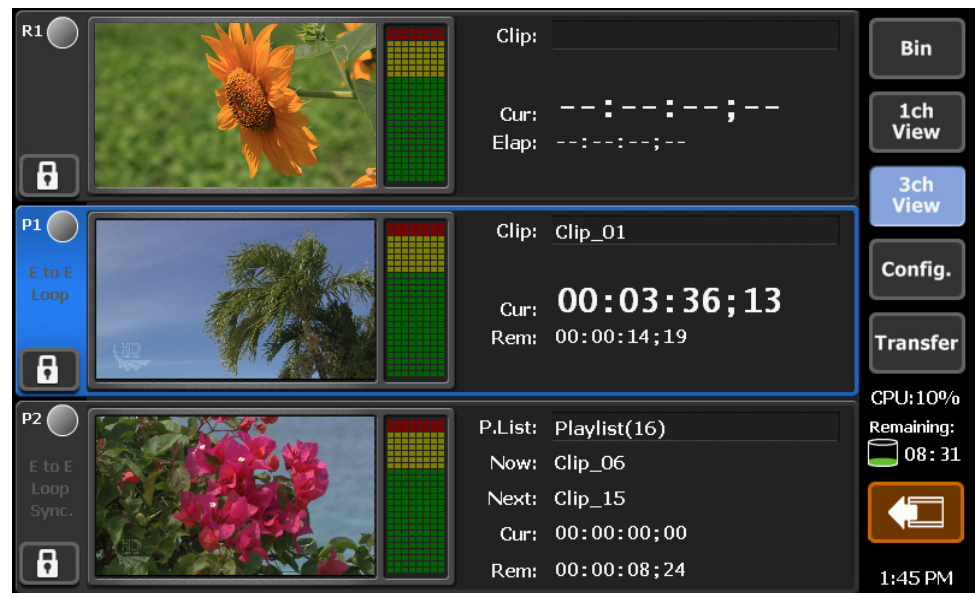
Shuttle speed	Choose the maximum shuttle speed, either 16x or 32x .
VAR setting	Choose the playback speed in the Variable speed playback mode, between 1/8 , 1/4 and 1/2 .

Front Panel mode

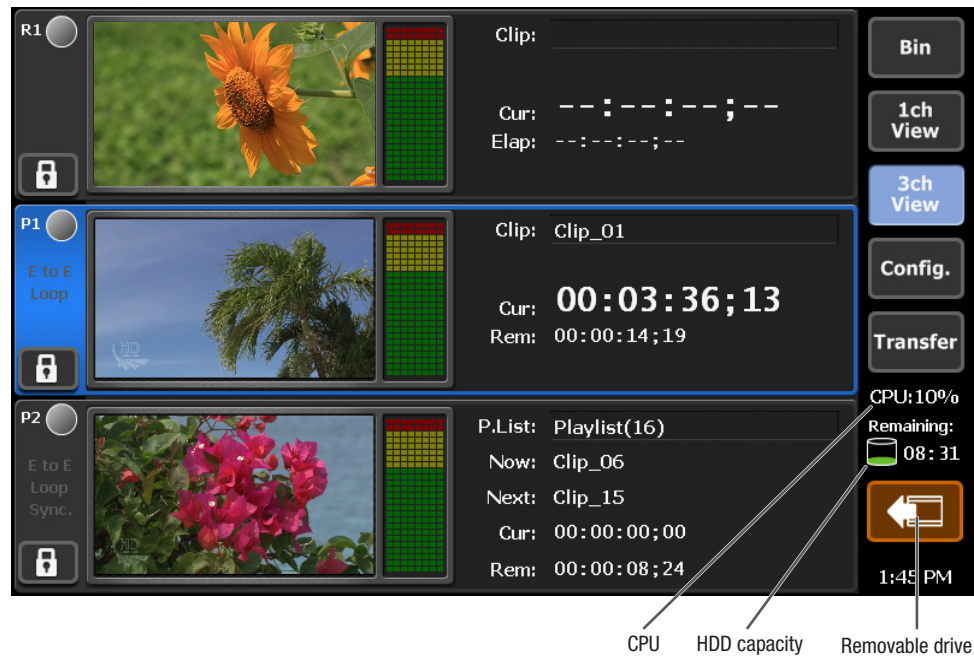
Overview

In the Front Panel mode, you can operate the T2 through the image displayed on the touch screen LCD on the front of the T2. When the T2 is turned on, the 3ch View is displayed as the main screen. The 3ch View consists of one Recorder and two Playback channels. The Playback channel has two modes: **Clip Player** mode and **Playlist Player** mode. Tapping the area where the input value is available opens the **S/W Keyboard** (for the alphabet) or the **S/W Keypad** (for inputting numbers) screen. You can input values by tapping the key on the touch screen LCD.

3ch View

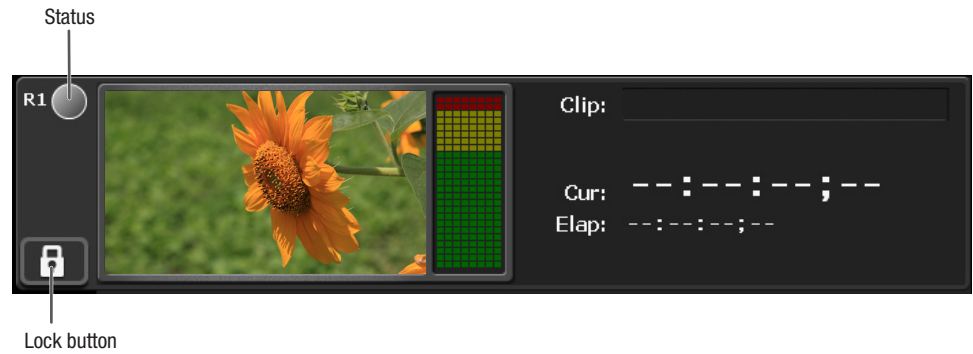


3ch View



R1 channel	To choose this channel, tap the header area shown on the touch screen LCD. The active channel is highlighted.
P1 channel	To choose this channel, tap the header area shown on the touch screen LCD. The active channel is highlighted.
P2 channel	To choose this channel, tap the header area shown on the touch screen LCD. The active channel is highlighted.
Bin button	Opens the Bin window.
1ch View button	Switches the screen to the 1ch View for the active channel.
3ch View button	Switches the screen to the 3ch View.
Config button	Opens the Config screen.
Transfer button	Opens the Transfer screen.
CPU	Displays the CPU burden of your T2.
HDD capacity	Displays the estimated amount of time for recording.
Removable drive	Displayed when removable drives are connected. Tapping this button allows you to move the data stored on connected removable drives.
Clock	Displays the current time.

Recorder (R1) channel



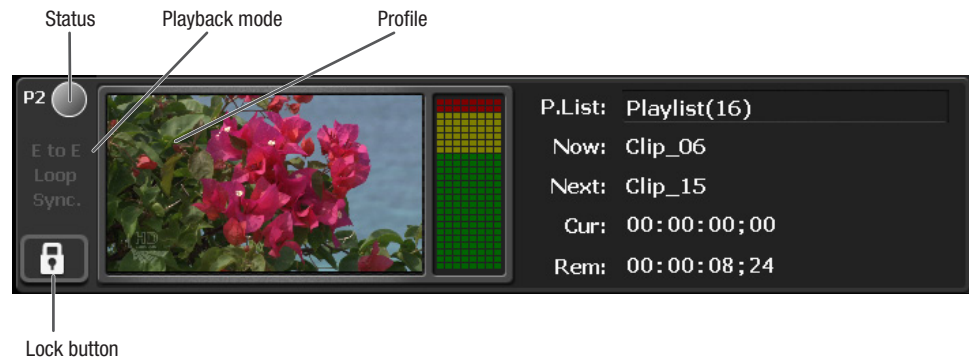
Clip	Displays the clip name.
Cur	Displays the current timecode.
Elap	Displays the elapsed time by timecode.
Status	Displays the status of the recording operation with a circular chart.
Lock button	Locks/Unlocks the channel.

Player (P1/P2) channel (Clip Player mode)



Clip	Displays the clip name.
Cur	Displays the current timecode.
Rem	Displays the remaining time by timecode.
Status	Displays the status of the playback operation with a circular chart.
Playback mode	Displays the status whether Sync mode (Available only on P2 channel), E to E mode, or Loop mode is enabled.
Lock button	Locks/Unlocks the channel.
Profile	Displays the profile of the channel. (Only when no content is loaded.)

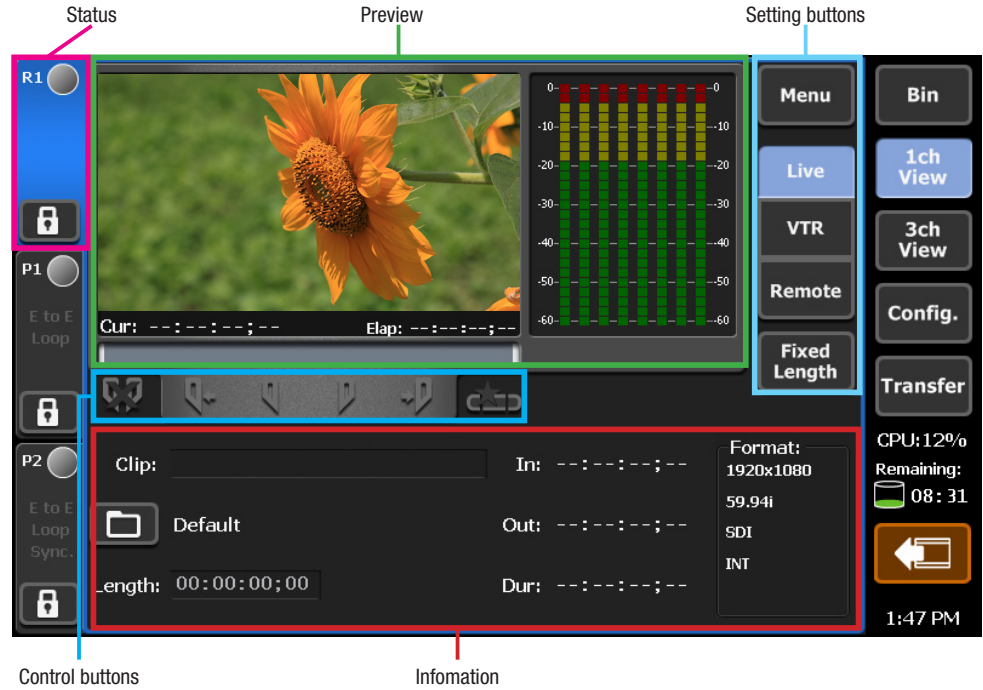
Player (P1/P2) channel (Playlist Player mode)



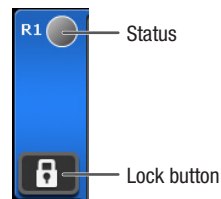
P.List	Displays the playlist name.
Now	Displays the current event.
Next	Displays the next event.
Cur	Displays the current timecode.
Rem	Displays the remaining time by timecode.
Status	Displays the status of the playback operation with a circular chart.
Playback mode	Displays the status whether Sync mode (Available only on P2 channel), E to E mode, or Loop mode is enabled.
Lock button	Locks/Unlocks the channel.
Profile	Displays the profile of the channel. (Only when no content is loaded.)

1ch View — Recorder screen

On this screen, you can modify the settings for recording and/or execute the recording. When recording is in progress, other operations, with the exception of stop, are not available on the channel. When the capacity of the HDD becomes low, the HDD icon is displayed in red. In that case, a warning message appears at the beginning of the recording.



Status



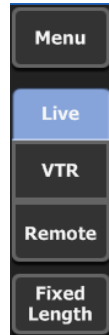
Status	Displays the status of the recording operation with a circular chart.
Lock button	Locks/Unlocks the channel.

Preview



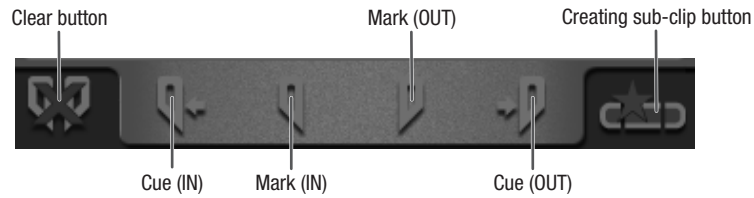
Preview	Displays the preview for the input video.
Audio level	Displays the input audio level.
Cur	Displays the current timecode.
Elap	Displays the elapsed recording time by timecode.
Status bar	Displays the recording status with a bar.

Setting buttons



<p>Menu button</p>	<p>Displays the menu.</p> <p>Unload Unloads the loaded clip.</p> <p>Properties Opens the clip properties dialog.</p> <p>Rename Opens the dialog to change the current clip name.</p> <p>Tools</p> <ul style="list-style-type: none"> • Maintenance..Choose this option to switch the T2 to Maintenance mode. Entering a password is required. • Exit.....Choose this option to restart or shutdown the T2.
<p>Control Mode button</p>	<p>Switches the recording mode between Live and VTR.</p> <p>Live Records the video input from an external device as live (stream). Perform operations manually for recording. When the Fixed Length Recording is activated, the recording automatically stops when the specified period of time has passed.</p> <p>VTR You can specify the IN/OUT points before starting recording, controlling the external VTR device from T2. To use this mode, connection to an external device via RS-422A is required.</p> <p>Remote You can specify the IN/OUT points before starting recording, controlling the T2 from an external VTR device. To use this mode, connection to an external device via RS-422A is required</p>
<p>Fixed Length button</p>	<p>Enables/Disables the Fixed Length recording mode. Setting this button to ON opens the dialog to specify the duration of the recording.</p>

Control buttons



Clear button	Clears the existing IN/OUT points.
Cue (IN)	Cues the VTR to the existing IN point. (Available only in VTR mode)
Mark (IN)	Marks the current position as the IN point of the content. Marking an IN point will set the timecode of the IN point in the timecode box.
Mark (OUT)	Marks the current position as the OUT point of the content. Marking an OUT point will set the timecode of the OUT point in the timecode box, as well as the duration of the clip in the Length box.
Cue (OUT)	Cues the VTR to the existing OUT point. (Available only in VTR mode)
Creating sub-clip button	Generates a sub-clip according to the existing IN/OUT points.

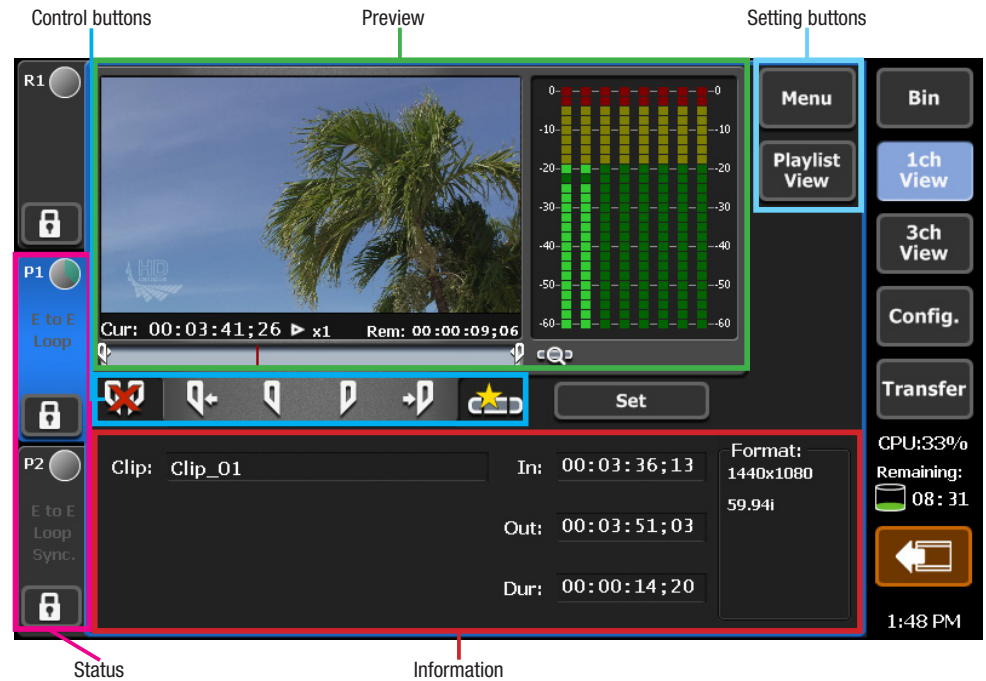
Information



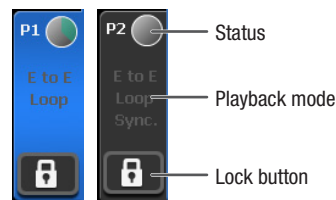
Clip	Input a clip name.
Target Bin	Displays the Bin folder where the recorded media file is stored. Tapping the icon will open the dialog to change target Bins.
Length	Displays the duration of the clip in the Fixed Length mode.
In	Displays the timecode at the IN point.
Out	Displays the timecode at the OUT point.
Dur	Displays the duration of the content between the IN-OUT points by timecode.
Format	Displays the information including video size, frame rate, input type, source timecode (TC (LTC) / SDI (VITC) / INT), etc.

1ch View — Clip Player screen

On this screen, you can modify the settings for clip playback and/or execute the playback

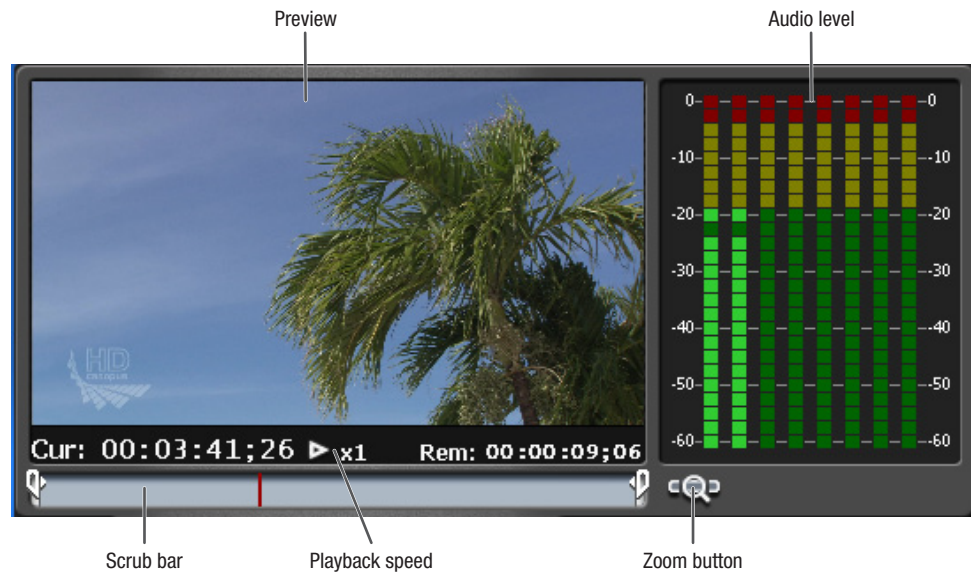


Status



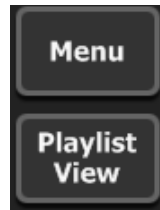
Status	Displays the status of the playback operation with a circular chart.
Playback mode	<p>E to E Displays whether the E to E mode is enabled. When the E to E mode is enabled, the recorder channel audio and video inputs are switched to the player channel audio and video outputs when the player channel is in stop mode or when there is no clip loaded. * The video format for the channel specified to E to E mode must be same as that of the R1 channel.</p> <p>Loop Displays whether the Loop mode is enabled.</p> <p>Sync. Displays whether the Sync mode is enabled (Available only on P2 channel).</p>
Lock button	Locks/Unlocks the channel.

Preview



Preview	Displays the video preview.
Audio level	Displays the input audio level.
Cur	Displays the current timecode.
Playback speed	Displays the current playback speed (ratio).
Rem	Displays the remaining time by timecode.
Scrub bar	Displays the current position and the IN/OUT points.
Zoom button	<p>Changes the display scale on the scrub bar (Zoom On / Off).</p> <p>Zoom On Displays the section between the IN-OUT points of the clip as a whole scale of the scrub bar. Moving the current point out of the IN-OUT range is not available.</p> <p>Zoom Off Displays the entire media clip in a complete scale of the scrub bar. In the normal playback operations, the current position can be moved between the IN-OUT points. To move out of the existing IN-OUT range, perform FF, Rew, Jog/Shuttle operations after CueUp.</p>

Setting buttons



<p>Menu button</p>	<p>Displays the menu.</p> <p>Unload Unloads the loaded clip.</p> <p>Properties Opens the clip properties dialog.</p> <p>Rename Opens the dialog to change the current clip name.</p> <p>Now Recording Loads the clip which is being recorded on the R1 channel onto one of the playback channels. (Follow-up playback)</p> <p>Set Thumbnail Frame Changes the thumbnail of the clip with the current frame displayed.</p> <p>Remote Enables/Disables the Remote controls. With the Remote controls set to ON, local operations will be ignored.</p> <p>Playout Mode Enables/Disables the Sync mode, E to E mode, and Loop mode.</p> <ul style="list-style-type: none"> • E to EEnables/Disables the E to E mode. When the E to E mode is enabled, the recorder channel audio and video inputs are switched to the player channel audio and video outputs when the player channel is in stop mode or when there is no clip loaded. * The video format for the channel specified to E to E mode must be same as that of the R1 channel. • Loop.....Enables/Disables the Loop mode. • Sync.....Enables/Disables the Sync mode.(Available only on P2 channel) <p>Tools</p> <ul style="list-style-type: none"> • Maintenance.....Choose this option to switch the T2 to the Maintenance mode. Entering a password is required. • Exit.....Choose this option to restart or shutdown the T2.
<p>Playlist View</p>	<p>Switches the screen to the Playlist Player mode.</p>

Sync mode

Tap the **Menu** button on the P2 channel, and choose **Playout Mode - Sync** to activate the Sync mode. In the Sync mode, the content (clip or playlist) loaded to the P2 channel will be played in sync with the P1 channel.

When the Sync mode is activated, if the output settings of the P1 and P2 channels differ, the settings on the P2 channel are automatically changed so as to match those of the P1.

The E to E mode cannot be simultaneously activated.

In the Sync mode, only playback operations are available. Marking IN/OUT points or creating sub-clips is not available.

* If the duration of the contents differs between P1 and P2 channels, the playback operations will be performed according to the P1 channel. (P1 channel is the master channel.) When the content loaded on the P2 channel is shorter, the final frame remains displayed.

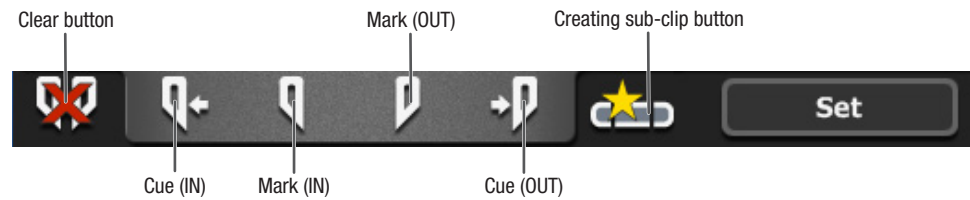
Requirements for sync mode

- Contents must be of the same type. (clip and clip or playlist and playlist). Combinations between clip and playlist are not available for pairing contents in the sync mode.
- Audio types do not matter.

Note	In the Front panel mode, setting the pairing option is not available in the Bin. When the loaded contents satisfy the conditions for pairing, the pairing option is set for the contents when the sync mode is activated.
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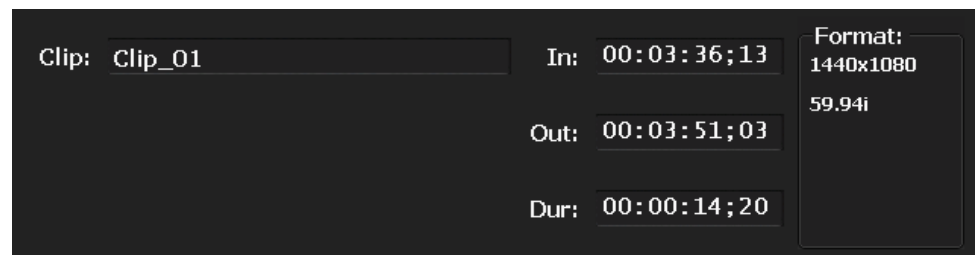
Note	The materials (clips) on removable drives are not available for pairing.
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Control buttons



Clear button	Clears the existing IN/OUT points.
Cue (IN)	Cues to the existing IN point.
Mark (IN)	Marks the current position as the IN point of the content. Marking an IN point will set the timecode of the IN point in the timecode box.
Mark (OUT)	Marks the current position as the OUT point of the content. Marking an OUT point will set the timecode of the OUT point in the timecode box, as well as the duration of the clip in the Length box.
Cue (OUT)	Cues to the existing OUT point.
Creating sub-clip button	Generates a sub-clip according to the existing IN/OUT points.
Set button	Use this button to set the IN/OUT points for the clip. After marking the IN/OUT points, tap the Set button to update the IN/OUT points of the clip.

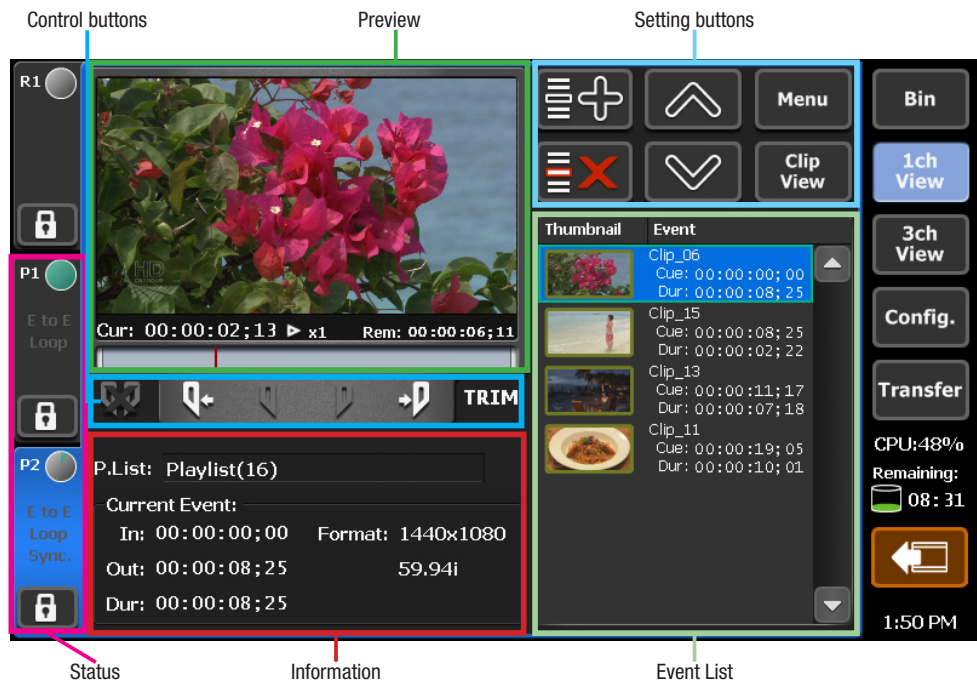
Information



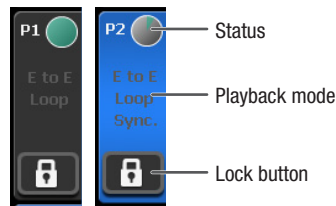
Clip	Displays the name of the loaded clip.
In	Displays the timecode at the IN point.
Out	Displays the timecode at the OUT point.
Dur	Displays the duration of the content between the IN-OUT points by timecode.
Format	Displays video size and frame rate of the clip.

1ch View — Playlist Player screen

In this screen, you can modify the playback settings for the playlist and/or execute the playback. The Event List will be automatically scrolled so that the clip being played is shown on screen. To enable/disable the auto-scroll for the Event List, tap the **Config** button, open the **Miscellaneous** tab and change the **Playlist AutoScroll** setting (Default: ON).



Status



Status	Displays the status of the playback operation with a circular chart.
Playback mode	<p>E to E Displays whether the E to E mode is enabled. When the E to E mode is enabled, the recorder channel audio and video inputs are switched to the player channel audio and video outputs when the player channel is in stop mode or when there is no playlist loaded. * The video format for the channel specified to E to E mode must be same as that of the R1 channel.</p> <p>Loop Displays whether the Loop mode is enabled.</p> <p>Sync Displays whether the Sync mode is enabled (Available only on P2 channel).</p>
Lock button	Locks/Unlocks the channel.

Preview



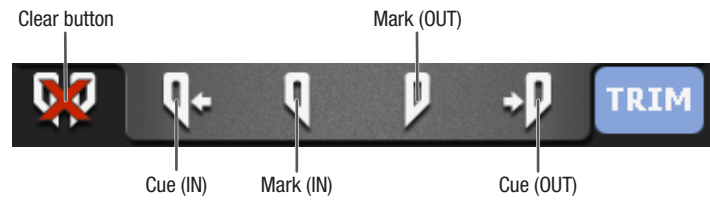
Preview	Displays the video preview.
Cur	Displays the current timecode.
Playback speed	Displays the current playback speed (ratio).
Rem	Displays the remaining time by timecode.
Scrub bar	Displays the current position and the IN/OUT points.

Setting buttons



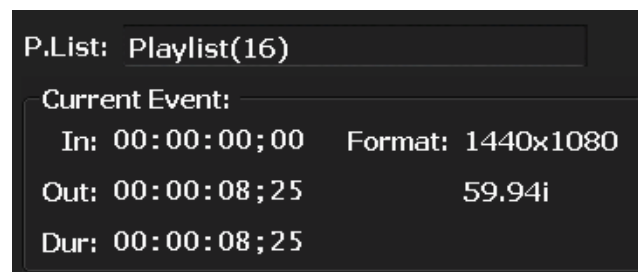
Edit Playlist button	Opens the Edit Playlist screen.
Delete button	Deletes the events selected in the Event List.
UP button	Moves the selected event to a position above the previous event in the list.
DOWN button	Moves the selected event to a position below the next event in the list.
Menu button	<p>Displays the menu.</p> <p>Unload Unloads the loaded playlist.</p> <p>Properties Opens the playlist properties dialog.</p> <p>Rename Opens the dialog to change the current playlist name.</p> <p>Event Effect Opens the Event Effect settings dialog for the event selected in the Event List.</p> <p>Event Properties Opens the properties dialog for the event selected in the Event List.</p> <p>Remote Enables/Disables Remote control. When Remote control is enabled, local operations are ignored.</p> <p>Playout Mode Enables/Disables Sync mode, E to E mode, and Loop mode.</p> <ul style="list-style-type: none"> • E to EEnables/Disables the E to E mode. When the E to E mode is enabled, the recorder channel audio and video inputs are switched to the player channel audio and video outputs when the player channel is in stop mode or when there is no playlist loaded. * The video format for the channel specified to E to E mode must be same as that of the R1 channel. • Loop.....Enables/Disables the Loop mode. • Sync.....Enables/Disables the Sync mode.(Available only on P2 channel) <p>Tools</p> <ul style="list-style-type: none"> • Maintenance.....Choose this option to switch the T2 to the Maintenance mode. Entering a password is required. • Exit.....Choose this option to restart or shutdown the T2.
Clip View	Switches the screen to the Clip Player mode.

Control buttons



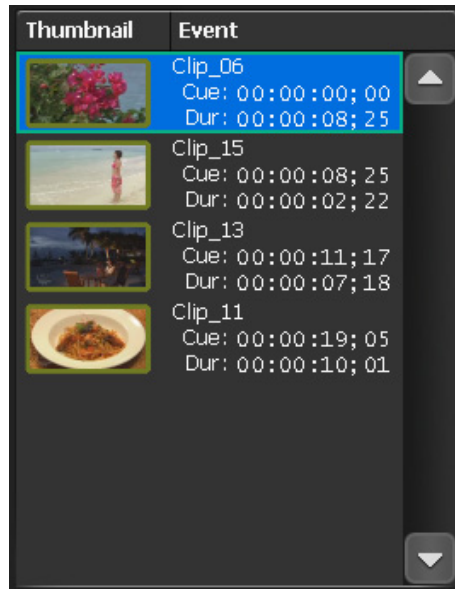
Clear button	Clears the existing IN/OUT points.
Cue (IN)	<p>Normally Cues to the existing IN point of the current event.</p> <p>While editing Cues to the existing IN point.</p>
Mark (IN)	Marks the current position as the IN point of the content. Marking an IN point will set the timecode of the IN point in the timecode box. (Available only while editing)
Mark (OUT)	Marks the current position as the OUT point of the content. Marking an OUT point will set the timecode of the OUT point in the timecode box. (Available only while editing)
Cue (OUT)	<p>Normally Cues to the existing OUT point of the current event.</p> <p>While editing Cues to the existing OUT point.</p>
TRIM button	Use this button to start editing IN-OUT points on the current event.

Information



P. List	Displays the name of the loaded playlist.
Current Event	<p>Displays the current event.</p> <p>In Displays the timecode at the IN point.</p> <p>Out Displays the timecode at the OUT point.</p> <p>Dur Displays the duration of the event by timecode.</p> <p>Format Displays the video size, frame rate, etc.</p>

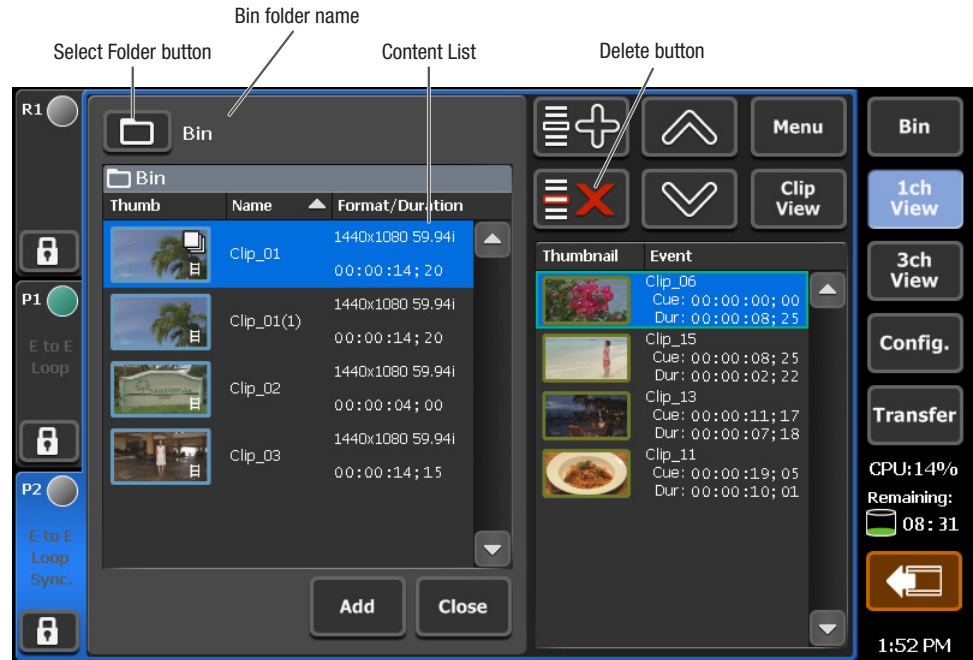
Event List



<p>Event List</p>	<p>Lists the events on the playlist. On the thumbnail of each event, icons for identifying its effect are displayed, if any. Double-tapping on an event will cue to the event.</p> <p>Blue background Current event being played</p> <p>Colored frame Selected event</p>
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Playlist Player — Edit Playlist screen

Tapping the **Edit Playlist** button on the Playlist Player screen opens the Edit Playlist screen.

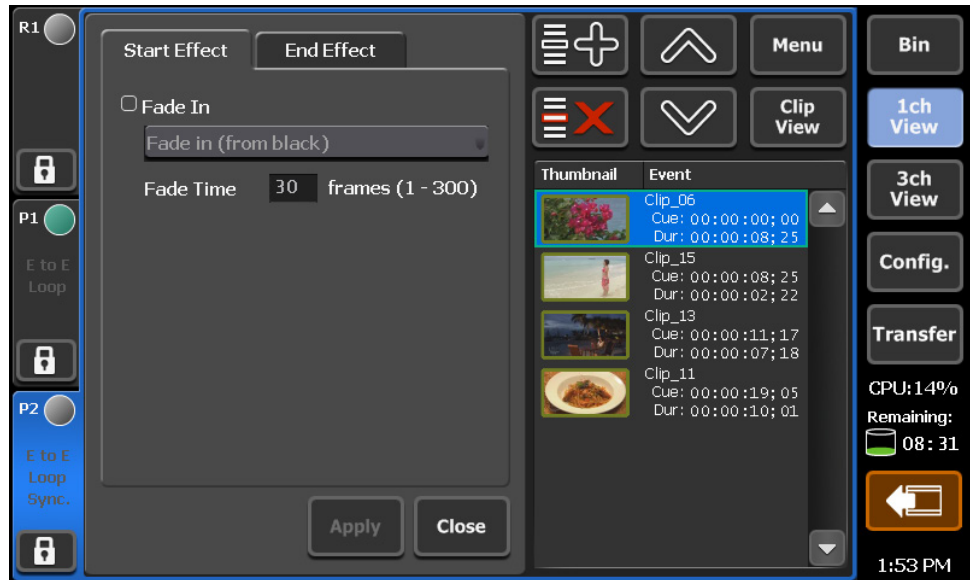


Select Folder button	Tapping the Select Folder button allows you to change the Bin, listing the contents of the Bin folder in the Content List area. After choosing a folder, tapping the OK button will change the Bin, displaying the contents of the selected folder.
Bin folder name	Displays the name of the Bin folder that is currently chosen.
Content List	Displays the contents (clip and playlist) of the Bin folder. While choosing a folder, a list of the Bin folders is displayed.
Edit Playlist button	Registers contents to the selected playlist. Tap the Edit Playlist button to display the contents stored in the Bin, and tap the Add button to register.
Delete button	Deletes the events selected on the Event List.
UP button	Moves the selected event above the previous event on the list.
DOWN button	Move the selected event below the next event on the list.
Menu button	Displays the menu.
Clip View button	Switches the screen to the Clip Player mode.
Add button	Adds the clips (and playlists) that were chosen from the Content List as events after the selected event on the Event List at the right.
Close button	Closes the Edit Playlist screen and goes back to the Playlist Player screen.

Playlist Player — Event Effect screen

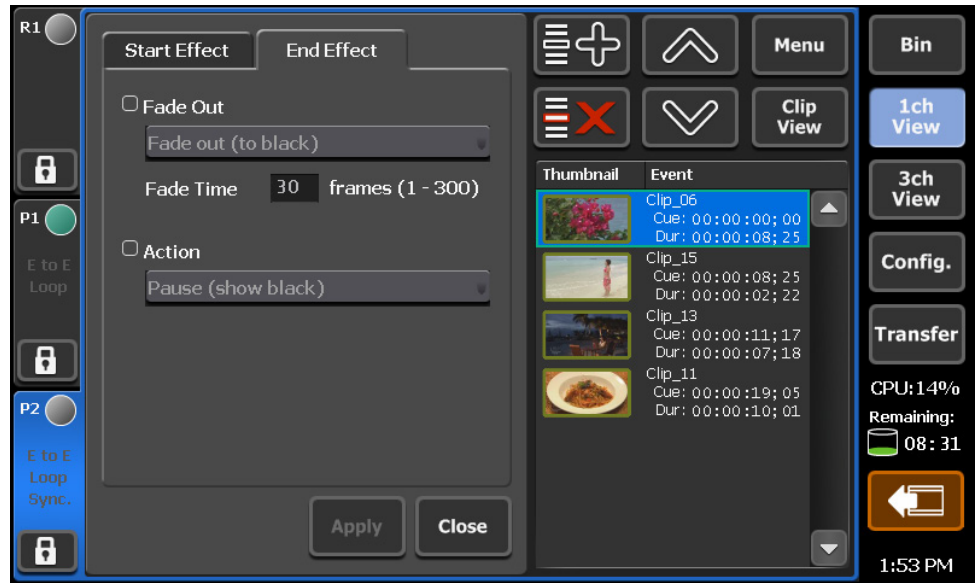
Tapping the **Menu** button on the Playlist Player screen and choosing **Event Effect** will open the Event Effect screen.

Start Effect tab



<p>Fade In</p>	<p>Check this option to add the fade in effect to the chosen event, and choose the effect.</p> <ul style="list-style-type: none"> • Fade in (from black)Adds the fade in starting from a black screen. • Fade in (from white)Adds the fade in starting from a white screen.
<p>Fade Time</p>	<p>Specify the duration between the beginning and the end of the fade in.</p>

End Effect tab

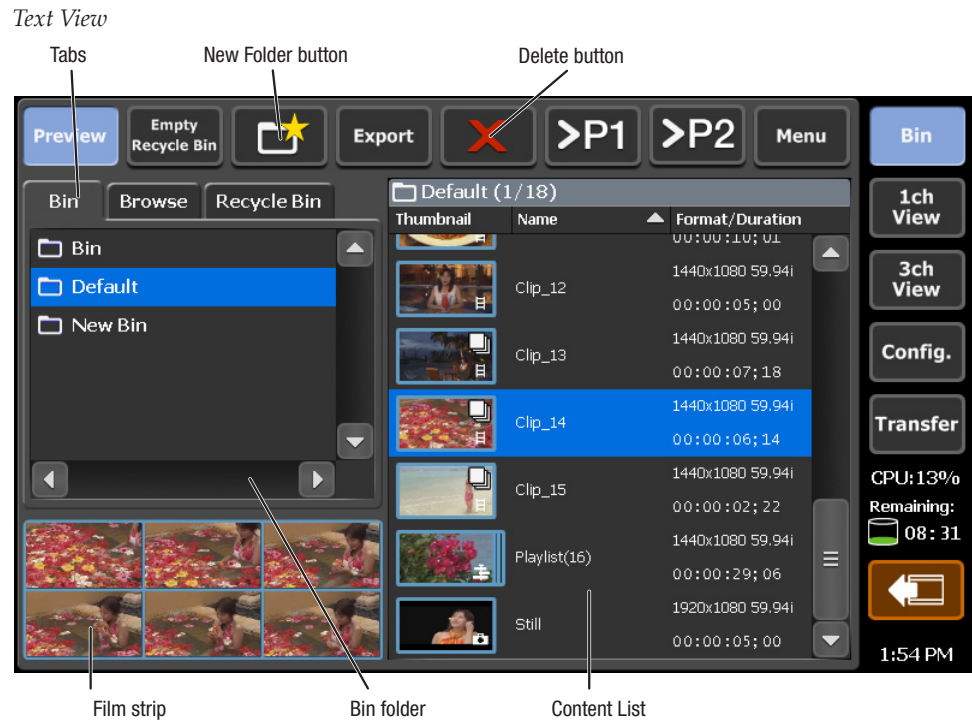


<p>Fade Out</p>	<p>Check this option to add the fade out effect to the chosen event, and choose the effect.</p> <ul style="list-style-type: none"> • Fade out (to black)..... Adds the fade out ending with a black screen. • Fade out (to white)..... Adds the fade out ending with a white screen.
<p>Fade Time</p>	<p>Specify the duration between the beginning and the end of the fade out.</p>
<p>Action</p>	<p>Choose the action after the fade out ends.</p> <ul style="list-style-type: none"> • Pause (show black)..... Pauses the playback and displays a black screen. • Pause (show white)..... Pauses the playback and displays a white screen. • Pause (last frame) Pauses the playback and displays the last frame. • Pause (next event) Pauses the playback and displays the first frame of the next event. • Pause (show EtoE) Displays the video input to the R1 channel with active through. • Loop..... Playbacks the selected event in a loop.

Bin

Tapping the **Bin** button on the Clip Player screen or the Playlist Player screen for the P1/P2 channel will open the Bin. The Bin has two view modes that can be chosen from the Menu: **Text View** and **Icon View**.

Bin tab



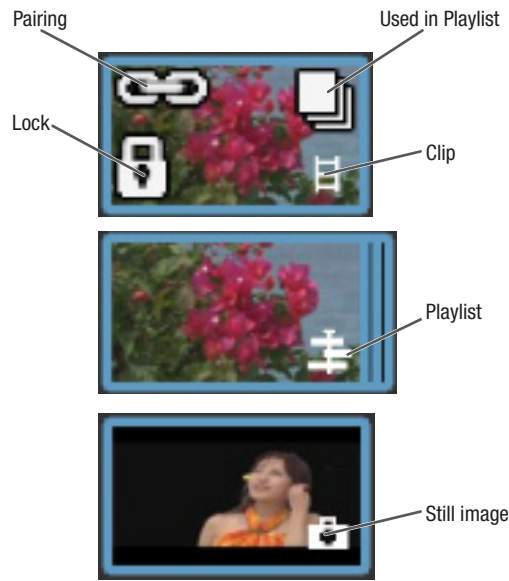
Preview button	Shows/Hides the preview (film strip).
Empty Recycle Bin button	Deletes all the contents in the Recycle Bin. Note that the deleted contents cannot be restored.
New Folder button	Creates a new Bin folder.
Export button	Opens the Export screen.
Delete button	Deletes the selected contents from the Bin and moves them to the Recycle Bin.
> P1 button	Loads the selected contents to the P1 channel.
> P2 button	Loads the selected contents to the P2 channel.

Menu	<p>Displays the menu.</p> <p>View Switches the Bin view between Text View and Icon View.</p> <p>Rename Folder Renames the selected Bin folder.</p> <p>Delete Folder Deletes the selected Bin folder and its contents and moves them to the Recycle Bin.</p> <p>Properties Opens the properties dialog for the item selected on the Content List.</p> <p>Move Moves the contents selected in the content list to another folder.</p> <p>Unpairing Cancels the pairing setting when the content selected in the content list is paired to another to be used in sync mode (see page 48).</p> <p>Tools</p> <ul style="list-style-type: none"> • Maintenance.....Choose this option to switch the T2 to the Maintenance mode. Entering a password is required. • Exit.....Choose this option to restart or shutdown the T2.
Film strip	Displays the preview of the contents with a six-parted film strip.
Bin folder	Displays the Bin folder.
Tabs	Switches the Bin view among Bin/Browse/Recycle bin.
Content List	Lists the contents in the folder chosen in the Bin folder.

Icon View



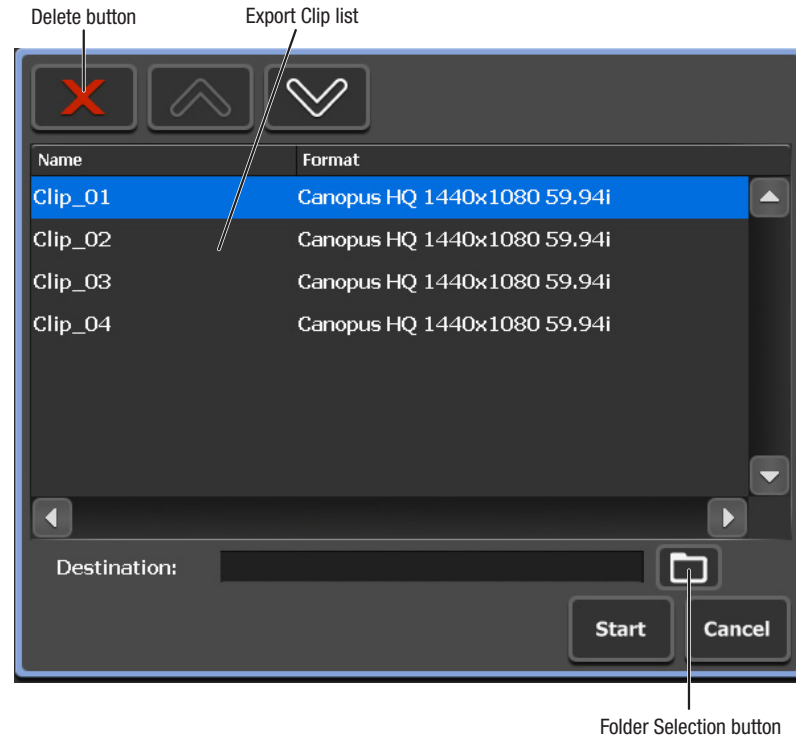
Thumbnail icons



Pairing icon	Displayed on the clips/playlists that have been paired for the Sync mode.
Lock icon	Displayed on the clip/playlist that have been locked.
Used in Playlist icon	Displayed on the clip/playlist that have been used in a playlist.
Material type icon	Displays the material type. (clip/playlist/still)

Export screen

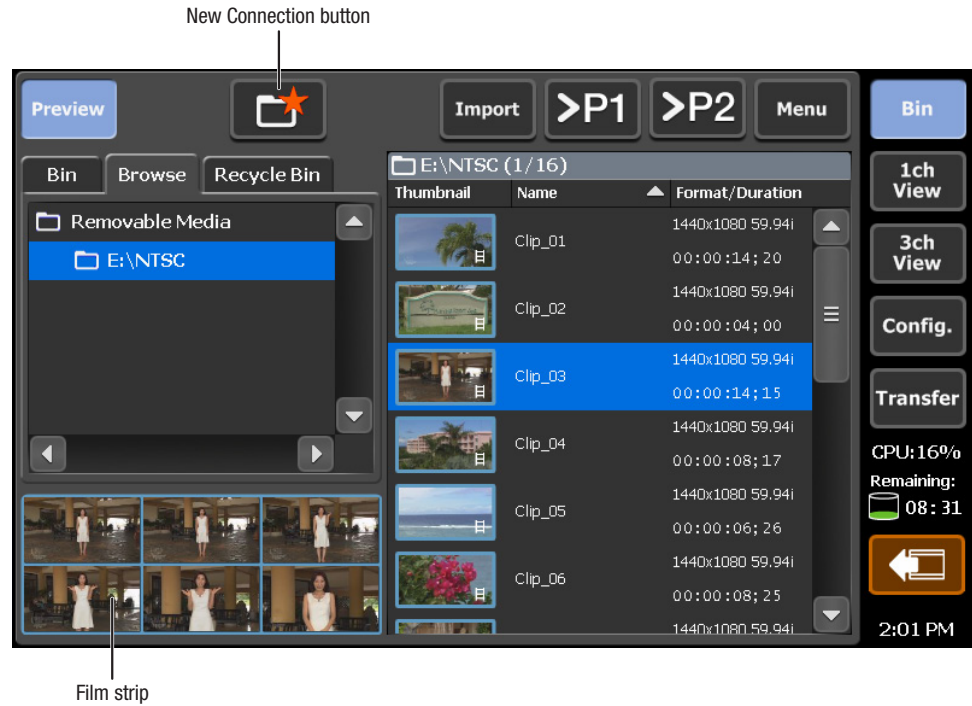
This screen appears when you choose contents to export on the Bin tab of the Bin, and then tap the **Export** button.



Delete button	Deletes the selected clips from the Export Clip list.
UP button	Moves the selected clip above the previous clip in the Export Clip list.
DOWN button	Moves the selected clip below the next clip in the Export Clip list.
Export Clip list	Lists the clips to be exported.
Destination	Displays the destination folder that the contents are exported to. Tapping on the folder name will open the folder selection screen where you can choose a location.
Folder Selection button	Allows choosing the destination to export.
Start button	Starts exporting the selected clips.
Cancel button	Closes the clip selection screen.

Browse tab

You can browse folders and choose materials to import, or view their information.



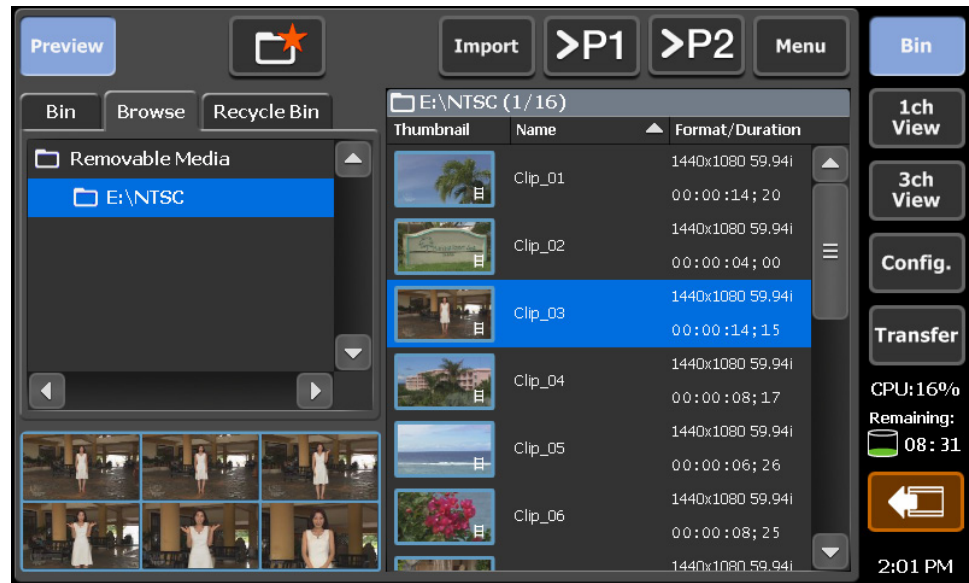
Preview button	Shows/Hides the preview (film strip).
New Connection button	Identifies the connected removable drive.
Import button	Imports the selected files. Import Imports the selected files as contents. Import (Sequence) Imports the selected images as a sequenced video clip.
>P1 button	Loads the selected file to the P1 channel. Without importing the files as clips, they can be loaded to the channel. While you playback the file, the playback performance depends on the performance of the media drive where the file is stored.
>P2 button	Loads the selected contents to the P2 channel. Without importing the files as clips, they can be loaded to the channel. While you playback the file, the playback performance depends on the performance of the media drive where the file is stored.

Menu button	<p>Displays the menu.</p> <p>View Switches the Bin view between Icon and Text View.</p> <p>New Connection Identifies the connected removable drive.</p> <p>Disconnect Disconnects the selected removable drive.</p> <p>Refresh Refreshes the selected removable drive.</p> <p>Properties Opens the properties dialog for the content selected on the Content List.</p> <p>Tools</p> <ul style="list-style-type: none"> • Maintenance.....Choose this option to switch the T2 to the Maintenance mode. Entering a password is required. • Exit.....Choose this option to restart or shutdown the T2.
Film strip	Displays a preview of the contents in a six part film strip.
Removable Media	Lists the removable drives that are connected.
Tabs	Switches between Bin/Browse/Recycle Bin windows.
Media file list	Lists the folder and the media files on the selected removable drive.

Direct playback from removable drives

Without importing files on your T2, you can load the supported media stored on a removable drive on the P1/P2 channels of your T2.

To do so, open the Browse tab for the Bin, choose a media file, and then tap the >P1 or >P2 button. The selected file will be loaded on the corresponding channel.



Operations on the P1/P2 channel

When a file is loaded on a channel, the following operations are available.

- Playback operations with the operation buttons (play, stop, etc.)
- Setting In/Out points, Cue up to In/Out points
- Adjusting audio gain
- Displaying properties
- Adjusting Mark In/Mark Out settings

* When the removable drive is disconnected, the settings will be cleared.

Note The following operations are not available.

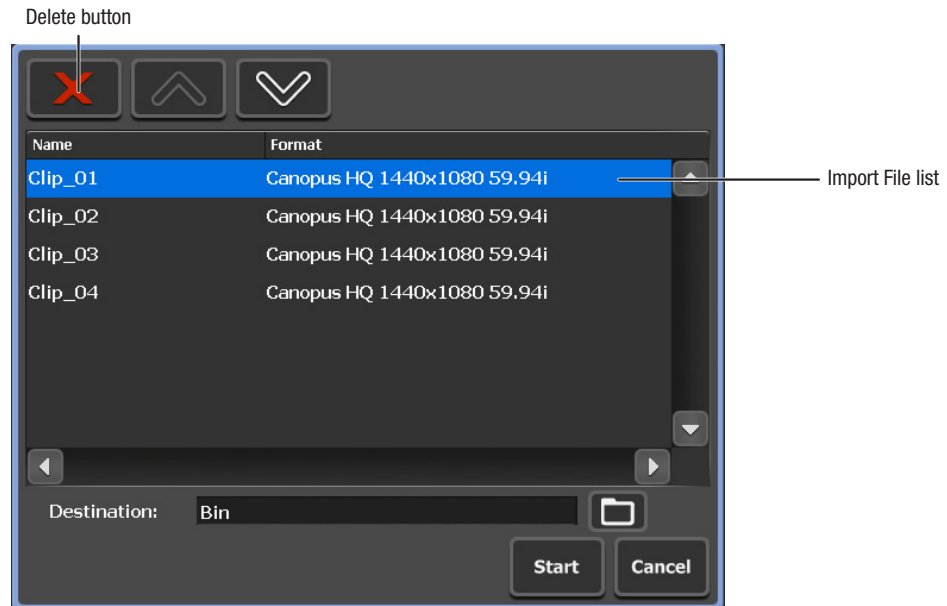
- Editing the tag
- Generating sub clips
- Sync playback (Pairing clips)
- Adding to a playlist

Note * Depending on the performance of the external drive, playback may not operate properly, or some delay may occur.

* Generating sub-clips from or creating a playlist with the media files on removable drives is not available. If you need to create sub-clips or playlists using data on removable drives, open the Browse Tab of the Bin window, and import and register them as clips.

Import Dialog

This screen appears when you choose media to import on the Browse tab of the Bin, and then tap the **Import** button.



Delete button	Deletes the selected files from the Import File list.
UP button	Moves the selected file above the previous item in the Import File list.
DOWN button	Moves the selected file below the next item in the Import File list.
Import File list	Lists the files to be imported.
Destination	Choose a bin folder as a destination to import clips.
Folder Selection button	Allows choosing the destination to import.
Start Button	Starts importing the selected clips.
Cancel button	Closes the clip selection screen.

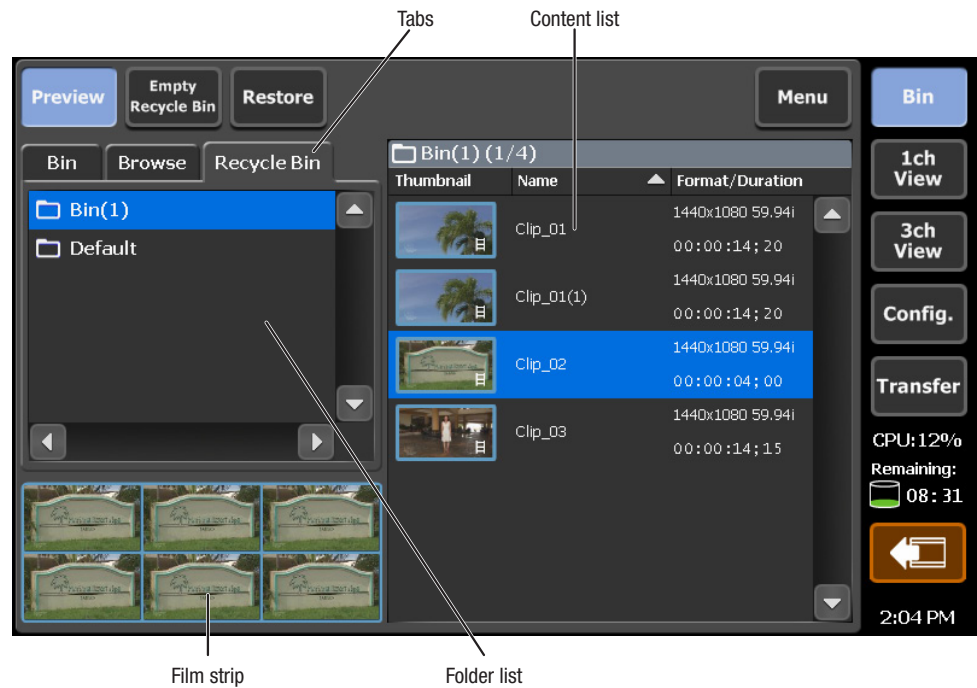
Importing still images

You can import still images on your T2.

If you import multiple still images as a sequenced clip, the clip can be used as video content on your T2 (see pages 32-33 for the import settings).

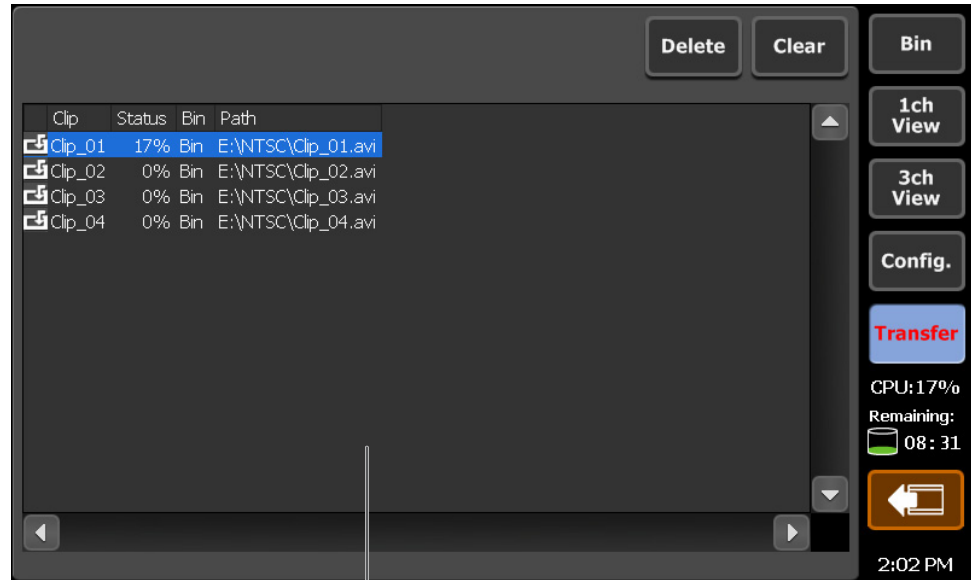
- * When importing still images as a sequenced clip, the importing process will be aborted if the file extension changes, or if you try to import mixed files where some files have an alpha channel and others do not.
- * The clip generated from still images, or sequenced still images does not have audio (mute).
- * When importing still images that have an alpha channel, the clip will be generated in Canopus HQ format with an alpha channel.
- * When a sequenced clip is loaded to a channel, the position of the thumbnail is similar to that of a movie clip.
- * The maximum size of a still image that may be imported is 4,096 x 2,304 pixels (4K).

Recycle Bin tab



Preview button	Shows/Hides the preview (film strip).
Empty Recycle Bin	Deletes all the folders and their contents in the Recycle Bin. Note that the deleted contents cannot be restored.
Restore	Restores the selected folder and its contents to the original Bin. When a playlist is restored, and the clips used in the playlist exist in the Recycle Bin, the clips will also be restored.
Menu button	<p>Displays the menu.</p> <p>View Switches the Bin view between Icon and Text View.</p> <p>Properties Opens the properties dialog for the content selected on the Content List.</p> <p>Tools</p> <ul style="list-style-type: none"> • Maintenance.....Choose this option to switch the T2 to the Maintenance mode. Entering a password is required. • Exit.....Choose this option to restart or shutdown the T2.
Film strip	Displays a preview of the contents in a six part film strip.
Folder list	Lists folders.
Tabs	Switches Bin/Browse/Recycle Bin windows.
Content list	Lists the contents in the selected folder.

Transfer screen

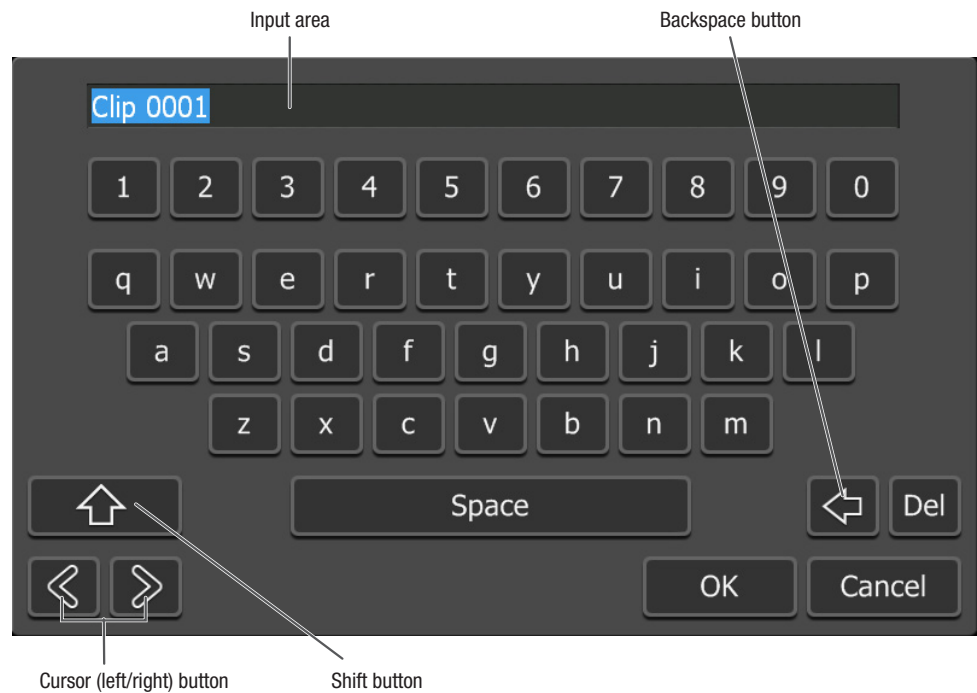


Job list

Delete button	Deletes the selected job. Tapping the button while transferring will stop the transfer.
Clear button	Deletes all jobs on the job list.
Job list	Lists the registered jobs. Clip Displays the name of the target clip. Status Displays the progress. Bin Displays the target Bin. Path Displays the name (full path) of the target media file.

S/W Keyboard screen

When you tap any area where data input is available, this screen appears.

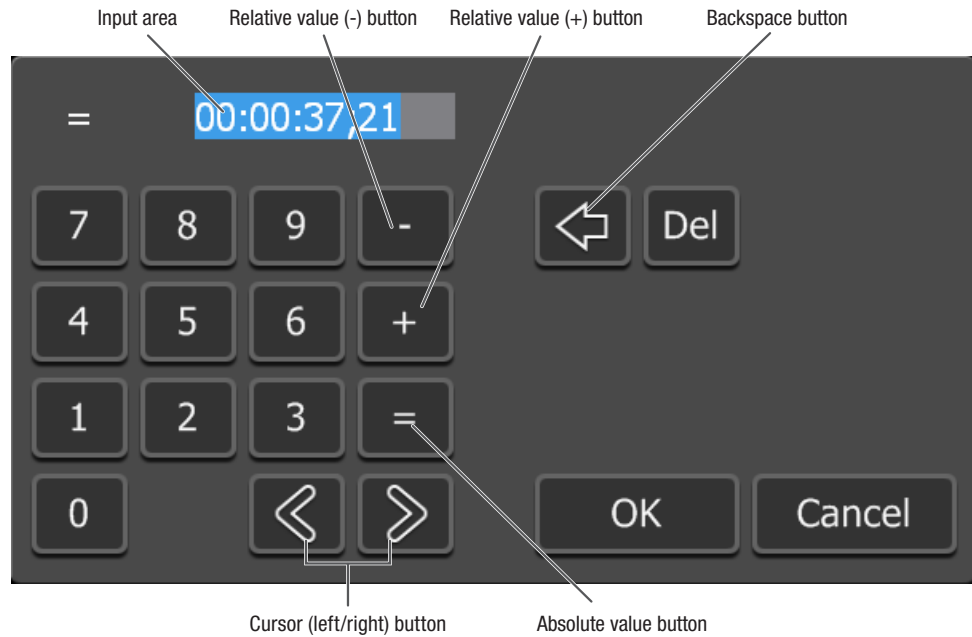


Input area	The string entered with the software keyboard is displayed here. Tapping the OK button inputs the string.
Shift button	Used as the Shift key. Toggles Uppercase/Lowercase. Default: Shift Off (lowercase)
Cursor (left/right) button	Moves the cursor in the input area.
Space button	Used as the Space key.
Backspace button	Used as the Backspace key.
Del button	Used as the Delete key.
OK button	Confirms the entered string, and closes the S/W Keyboard screen.
Cancel button	Cancel the entered string, and closes the S/W Keyboard screen.

S/W Keypad screen

Timecode input screen

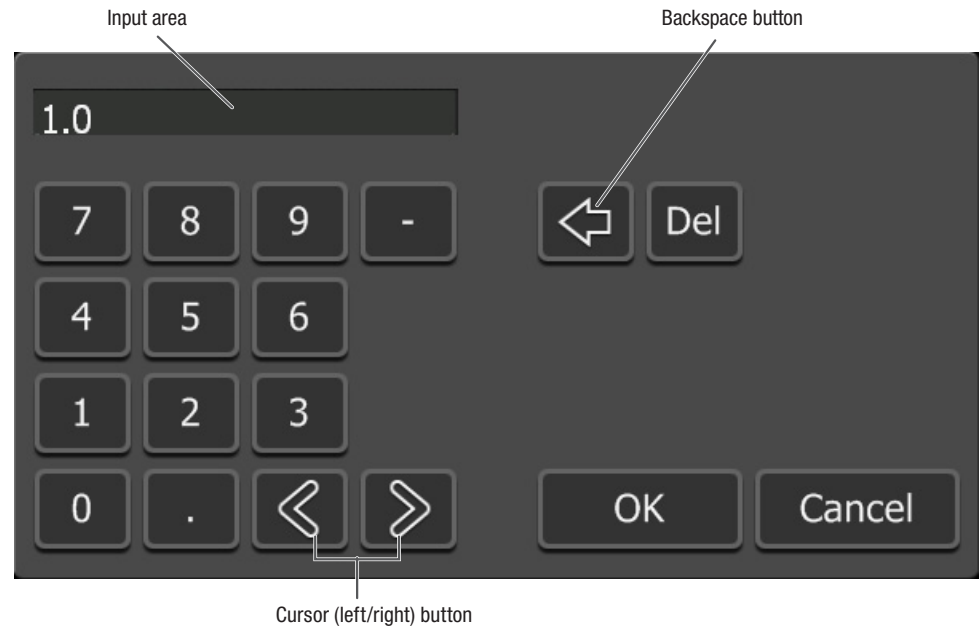
When you tap any area where inputting a timecode is available, this screen appears.



Input area	The value entered with the S/W Keypad is displayed here. According to the digits of the value entered, the value will be converted to Hours, Minutes, Seconds, frames. When the OK button is tapped, the value entered here will be set according to the relative value (- / +) or absolute value settings.
Cursor (left/right) button	Moves the cursor in the input area.
Relative value (-) button	Tap this button to use the value as a relative timecode (negative direction) from the current value.
Relative value (+) button	Tap this button to use the value as a relative timecode (positive direction) from the current value.
Absolute value button	Tap this button to use the value as an absolute timecode.
Backspace button	Used as the Backspace key.
Del button	Used as the Delete key.
OK button	Confirms the entered value, and closes the S/W Keypad screen.
Cancel button	Cancels the entered string, and closes the S/W Keypad screen.

Value input screen

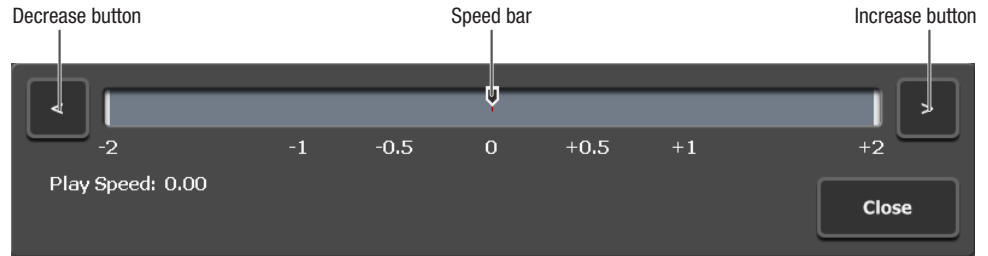
When you tap any area where inputting a value is available, this screen appears.



Input area	The value entered with the S/W Keypad is displayed here. Tapping the OK button inputs the value.
Cursor (left/right) button	Moves the cursor in the input area.
Backspace button	Used as the Backspace key.
Del button	Used as the Delete key.
OK button	Confirms the entered value, and closes the S/W Keypad screen.
Cancel button	Cancels the entered string, and closes the S/W Keypad screen.

VAR Control screen

Pressing the **VAR** button on the front panel opens the window to specify the speed for variable speed playback.



Speed bar	Specify the playback speed in the range between -2 and +2.
Decrease button	Decreases the playback speed by 0.1.
Increase button	Increases the playback speed by 0.1.
Close button	Closes the VAR Control screen.

Button functions on the front panel

In the Front Panel mode, the following operations can be executed with the control buttons on the front panel.

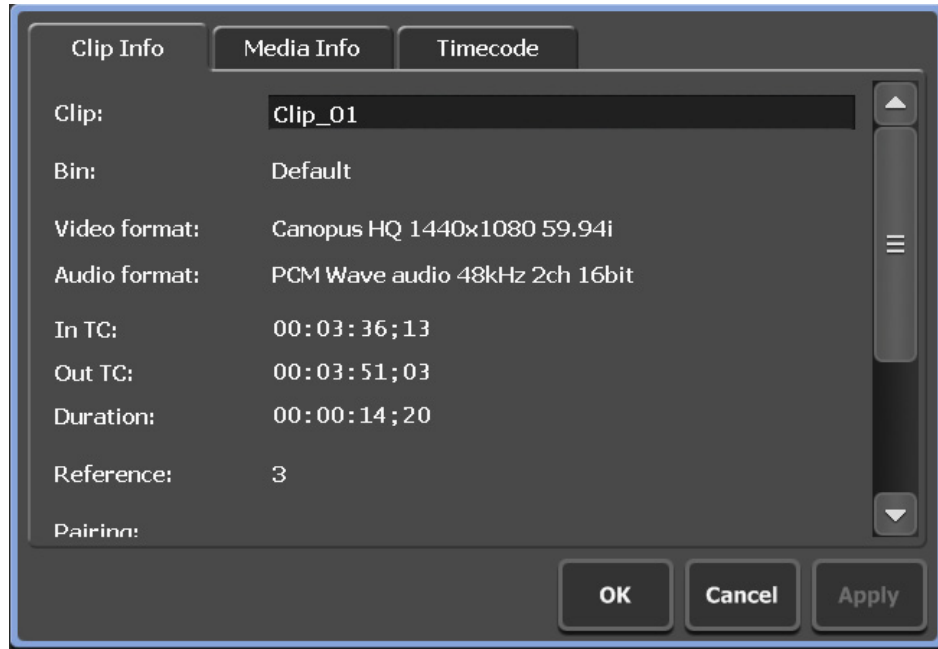
Button	R1 channel	P1/P2 channel (Clip Player)	P1/P2 channel (Playlist Player)
Play button		Starts playback.	Starts playback.
Stop button	Stops recording.	Stops playback.	Stops playback.
Rew button		Moves back frame by frame. Pressing the button will rewind (x32).	Moves back frame by frame. Pressing the button will rewind (x32).
FF button		Moves forward frame by frame. Pressing the button will fast-forward (x32).	Moves forward frame by frame. Pressing the button will fast-forward (x32).
Rec button	Starts recording.		
Stop+Rew		Cues up to the IN point. *	Moves to the previous event's (IN point).
Stop+FF		Cues up to the OUT point. *	Moves to the next event's (IN point).
Play+Rew		Cues up to the IN point and starts playing.	Starts playing the previous event.
Play+FF		Cues up to the OUT point.	Starts playing the next event.

* Jumps to the top of the clip, the IN point of the clip, the OUT point of the clip, or the end of the clip according to the current position.

Properties screen

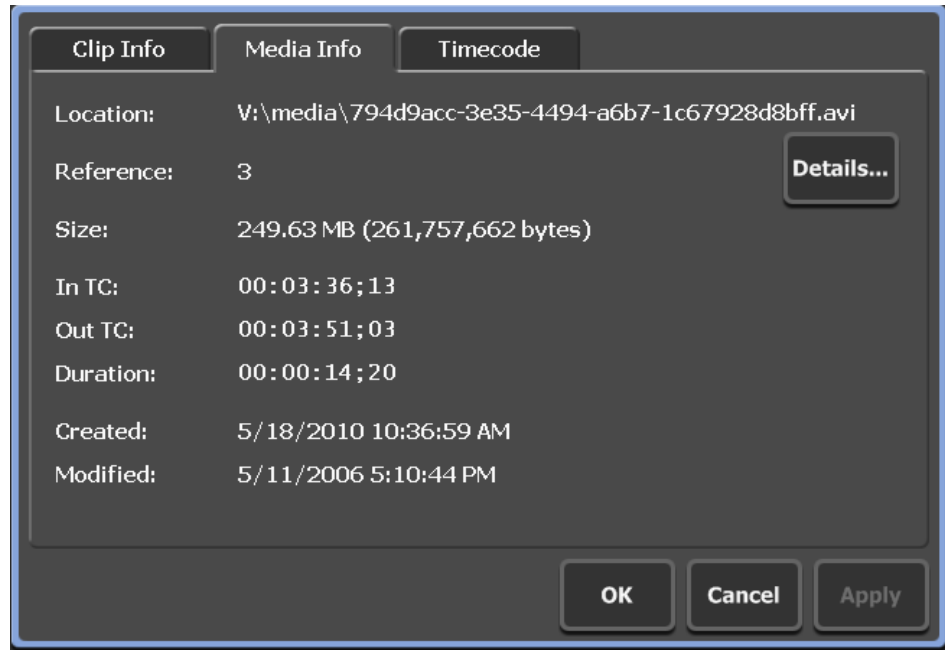
Clip properties

Clip Info tab



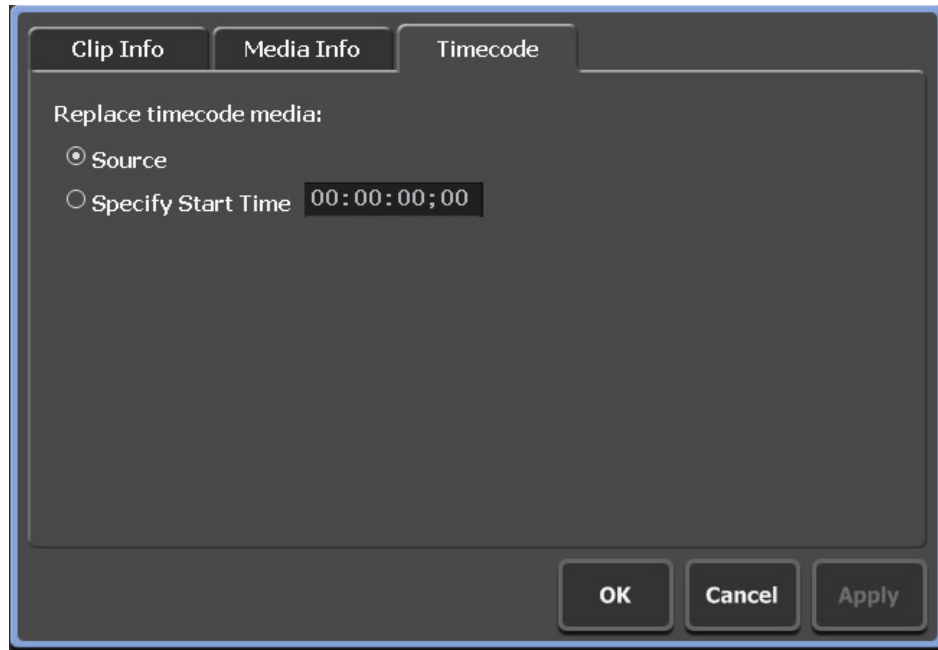
Clip	Displays the clip name. The clip name can be changed in this screen.
Bin	Displays the name of the Bin folder where the clip is registered.
Video format	Displays the video format.
Audio format	Displays the audio format.
In TC	Displays the timecode at the IN point.
Out TC	Displays the timecode at the OUT point.
Duration	Displays the duration of the clip. The duration can be specified for still images.
Reference	Displays the number of playlists that refer to the clip.
Pairing	Displays the clip name that is paired with this clip for the Sync mode.
Created	Displays the timestamp when the clip was created.
Modified	Displays the timestamp when the clip was updated.
Audio Gain	Display/Specify the audio gain. * This option is not displayed for still images.
Lock	Check this option to lock the clip.

Media Info tab



Location	Displays the file name and the file path for the media file.
Reference	Displays the number of clips and playlists that refer to the media file.
Size	Displays the size of the media file.
In TC	Displays the timecode at the IN point.
Out TC	Displays the timecode at the OUT point.
Duration	Displays the duration of the media file.
Created	Displays the timestamp when the clip media file was created.
Modified	Displays the timestamp when the clip media file was updated.
Details	Displays the clips that refer to the media file.

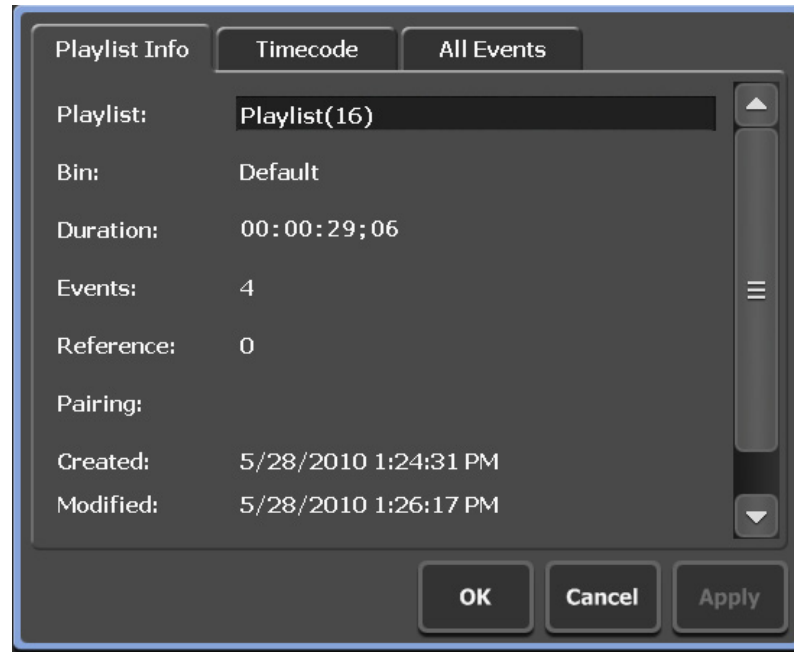
Timecode tab



<p>Replace timecode media</p>	<p>Specifies the method to change the timecode.</p> <p>Source Check this option to replace with the timecode for the source. * When the frame rate differs between the channel profile and the content, the timecode will start from 0, even if the “Source” option is selected.</p> <p>Specify Start Time Check this option to specify the starting timecode, and specify the value.</p>
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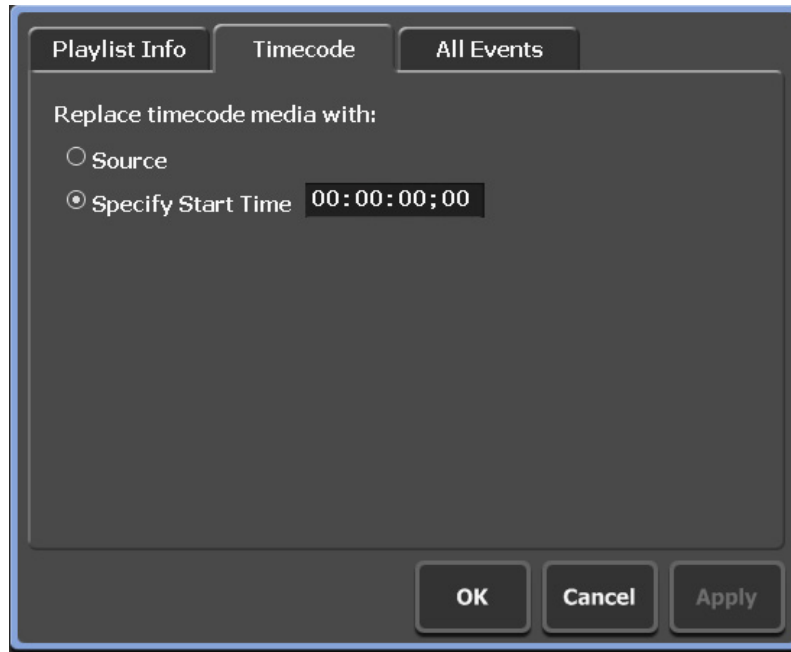
Playlist properties

Playlist Info tab



Playlist	Displays the playlist name. The playlist name can be changed on this screen.
Bin	Displays the name of the Bin folder where the playlist is registered.
Duration	Displays the duration of the playlist.
Events	Displays the number of events registered on the playlist.
Reference	Displays the number of playlists that refer to the playlist.
Pairing	Displays the name of the target that the playlist is paired to.
Created	Displays the timestamp when the playlist was created.
Modified	Displays the timestamp when the playlist was updated.
Lock	Check this option to lock the playlist.

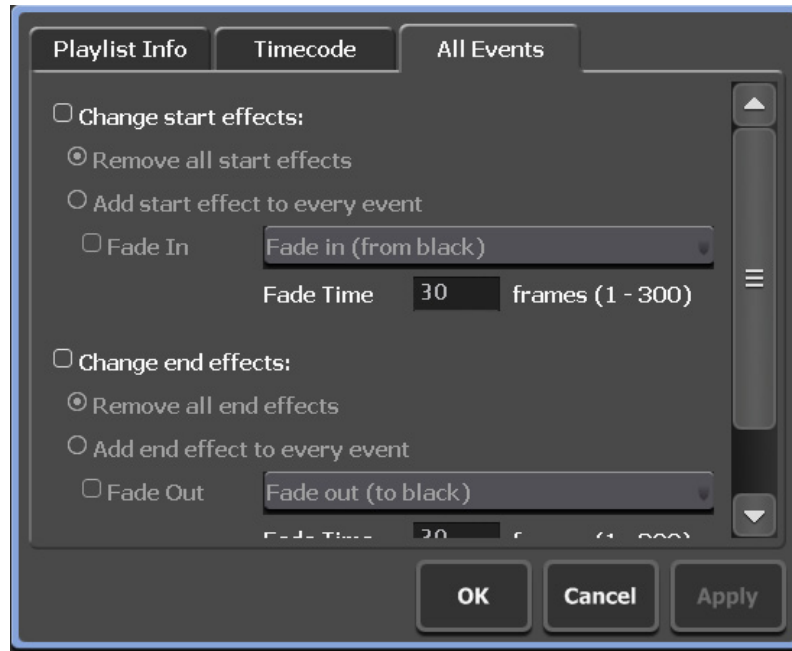
Timecode tab



Replace timecode media with	Specifies the method to change the timecode. Source Check this option to replace with the timecode for the source. * When the frame rate differs between the channel profile and the content, the timecode will start from 0, even if the “Source” option is selected. Specify Start Time Check this option to specify the starting timecode, and specify the value.
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All Events tab

In this tab, the settings for all the events registered on the playlist can be modified globally.



Change start effects

Check this option to change the start effect of the events.

Remove all start effects

Removes the start effects from all the events.

Add start effect to every event

Adds start effects to all the events.

Fade In

Adds fade in to all the events.

- Fade in (from black)Adds the fade in starting from a black screen.
- Fade in (from white)Adds the fade in starting from a white screen.

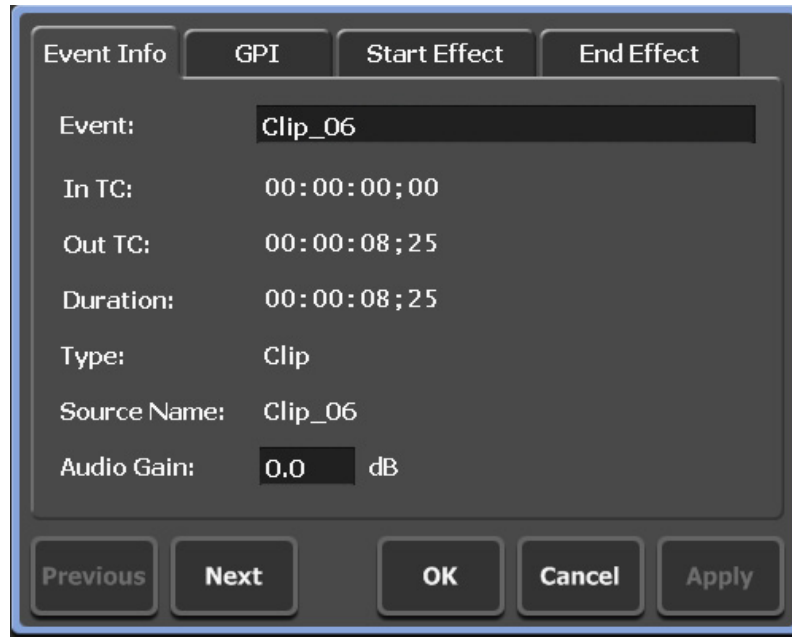
Fade Time

Specify the duration between the beginning and the end of the fade in.

<p>Change end effects</p>	<p>Check this option to change the end effect of the events.</p> <p>Remove all end effects Removes the end effects from all the events.</p> <p>Add end effect to every event Adds end effects to all the events.</p> <p>Fade Out Adds fade out to all the events.</p> <ul style="list-style-type: none"> • Fade out (to black)Adds the fade out ending with a black screen. • Fade out (to white)Adds the fade out ending with a white screen. <p>Fade Time Specify the duration between the beginning and the end of the fade out.</p> <p>Action Check this option to specify the action when the playback ends.</p> <ul style="list-style-type: none"> • Pause (show black)Pauses the playback with a black screen displayed. • Pause (show white)Pauses the playback with a white screen displayed. • Pause (last frame)Pauses the playback with the last frame displayed. • Pause (next event).....Pauses the playback with the first frame of the next event displayed. • Pause (show E to E).....Displays the video input to the R1 channel with active through. • Loop.....Plays the selected event in loop.
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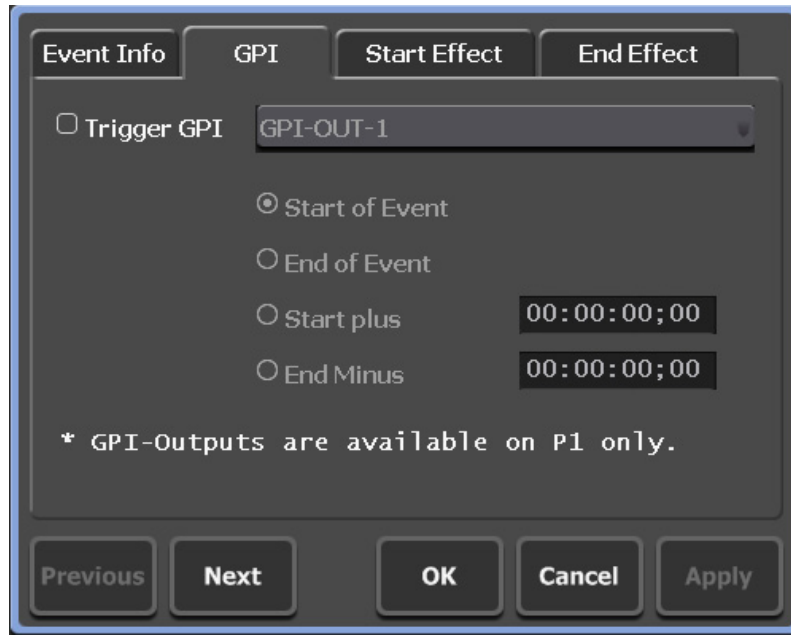
Event properties

Event Info tab



Event	Displays the event name. The event name can be changed on this screen.
In TC	Displays the timecode at the IN point.
Out TC	Displays the timecode at the OUT point.
Duration	Displays the duration of the event. The duration can be specified for still images.
Type	Displays the type of event (Clip or Playlist).
Source Name	Displays the clip name or the playlist name that the event refers to.
Audio Gain	Display/Specify the audio gain. * This option is not displayed for still images.

GPI tab



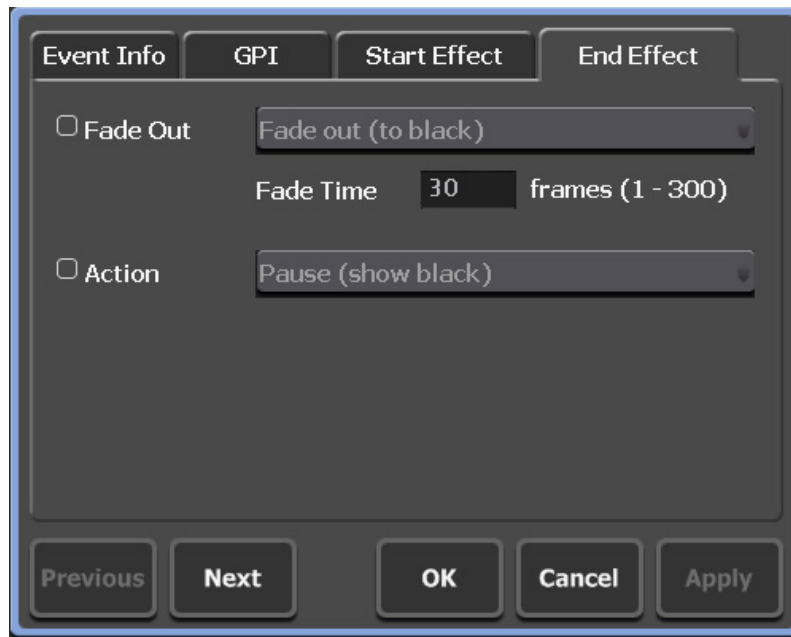
Trigger GPI	Choose the GPI trigger to specify setting.
Start of Event	Check this option to set the start of an event as a trigger.
End of Event	Check this option to set the end of an event as a trigger.
Start plus	Check this option to set a certain point from the top of an event as a trigger, and then specify the value.
End Minus	Check this option to set a certain point before the end of an event as a trigger, and then specify the value.

Start Effect tab



<p>Fade In</p>	<p>Check this option to add the fade in effect to the chosen event, and choose the effect.</p> <ul style="list-style-type: none"> • Fade in (from black)Adds the fade in starting from a black screen. • Fade in (from white)Adds the fade in starting from a white screen.
<p>Fade Time</p>	<p>Specify the duration between the beginning and the end of the fade in.</p>

End Effect tab



<p>Fade Out</p>	<p>Check this option to add the fade out effect to the chosen event, and choose the effect.</p> <ul style="list-style-type: none"> • Fade out (to black)..... Adds the fade out ending with a black screen. • Fade out (to white)..... Adds the fade out ending with a white screen.
<p>Fade Time</p>	<p>Specify the duration between the beginning and the end of the fade out.</p>
<p>Action</p>	<p>Specify the action when the event comes to an end.</p> <ul style="list-style-type: none"> • Pause (show black)..... Pauses the playback with a black screen displayed. • Pause (show white)..... Pauses the playback with a white screen displayed. • Pause (last frame) Pauses the playback with the last frame displayed. • Pause (next event)..... Pauses the playback with the first frame of the next event displayed. • Pause (show E to E)..... Displays the video input to the R1 channel with active through. • Loop..... Playbacks the selected event in loop.

APPENDIX

T2 Hardware specifications

PC interface USB	USB		USB2.0 x2 (front), x6 (rear)
	IEEE1394		IEEE1394a x1 (front), x1 (rear), Up to 12V , 1A of bus power (total for both ports)
	PS/2		Mini DIN 6pin x2
	Display		Analog RGB D-SUB 15pin x1
	Serial		RS232C D-SUB 9pin x1 (Not used)
	LAN		RJ-45 Network connector x2, 10BASE-T/100BASE-TX/1000BASE-T
	Sound		Stereo mini jack x6 (Not used)
Removable media			DVD-ROM x1
			2.5 inched removable drive bay x1 (RAID/SSD model)
Video signal	Input	SDI	1 line, BNC x2 (Active through x1)
		DVI-I	1 line, DVI-I x1. The analog sections are also for YPbPr. (DVI-D does not support HDCP.)
		Composite	1 line, BNC x1
	Output	SDI	2 lines, BNC x2
		DVI-I	2 lines. The analog sections are also for RGB/YPbPr.
		Composite	2 lines, BNC x2
		Monitor	Composite, 2 lines, BNC x2
Audio signal	Input	Balanced audio	1 line, XLR-3-31 x2, Up to 24dBu
		Digital audio	1 line, AES/EBU BNC x1
	Output	Balanced audio	2 lines, XLR-3-32 x4
		Digital audio	1 line, AES/EBU, 2 lines, BNC x2
		Headphones	Stereo jack x1
Monitor line	Stereo mini jack x1		
Timecode	Input	LTC	1 line, BNC x1
	Output	LTC	2 lines, BNC x2
REF in			HD tri-level, BB compatible, BNC x2 (throughout x1)
Remote	GPI I/O		D-SUB 15pin x1, 6 input, 6 output pins.
	RS422		3 lines, D-SUB 9pin x3 (each one of the lines correspond to the R1, P1 or P2 channel)
Power supply			AC 100V - 240V, 50/60Hz
Power consumption			2.5A - 1.1A
Dimensions			430(W) x 132(H) x 550.8(D) (Projecting parts not included)
Weight			15kgf approximately
Operating temperature			+5 to +35 degrees C
Operating humidity			10% to 80% (Without condensation)

Supported resolutions

Profile	Available format for loading	Available video port	Conversion mode for PC		Output to monitor	R1 input, REF input signal for Sync mode
			DVI-D	DVI-A (RGB)		
720×486 59.94i	720×486 59.94i 720×480 59.94i (DVD) 720×480 59.94i (DV)	SDI Component Composite	×	×	NTSC	720×480 59.94i
720×576 50i	720×576 50i (DV) 720×576 50i (DVD)	SDI Component Composite	×	×	PAL	720×576 50i
1920×1080 59.94i	1920×1080 59.94i 1440×1080 59.94i 1280×1080 59.94i	SDI Component DVI-D *1	PC	PC	NTSC	720×480 59.94i, 1920×1080 59.94i
1920×1080 50i	1920×1080 50i 1440×1080 50i	SDI Component DVI-D *2	PC	PC	PAL	720×576 50i, 1920×1080 50i
1920×1080 24psf	1920×1080 24p 1440×1080 24p	SDI Component DVI-D(24p)	PC	PC	×	1920×1080 24psf (REF in only)
1920×1080 23.98psf	1920×1080 23.98p 1440×1080 23.98p 1280×1080 23.98p	SDI Component DVI-D (23.98p)	PC	PC	×	1920×1080 23.98psf (REF in only)
1920×1080 24p	1920×1080 24p 1440×1080 24p	SDI Component DVI-D	PC	PC	×	1920×1080 24p (REF in only)
1920×1080 23.98p	1920×1080 23.98p 1440×1080 23.98p 1280×1080 23.98p	SDI Component DVI-D	PC	PC	×	1920×1080 23.98p (REF in only)
1280×720 59.94p	1280×720 59.94p 960×720 59.94p	SDI Component DVI-D	PC	PC	NTSC	720×480 59.94i *3
1280×720 50p	1280×720 50p 960×720 50p	SDI Component DVI-D	PC	PC	PAL	720×576 50i *3
1280×720 24p	960×720 24p	SDI Component	×	×	×	1280×720 24p (REF in only)
1280×720 23.98p	1280×720 23.98p 960×720 23.98p	SDI Component	×	×	×	1280×720 23.98p (REF in only)

*1 Can be specified to 1920 x 1080p 59.94.

*2 Can be specified to 1920 x 1080p 50.

*3 As the playback of channels is synchronized with paired frames, the sync mode is not available in 3Sync phase

PC Can be specified to VGA, SVGA, XGA, or SXGA.

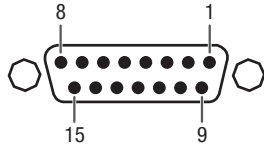
Note 1 Component and DVI-A (RGB) cannot be used simultaneously.

Note 2 DVI-I and DVI-A outputs in PC conversion mode cannot be used for Sync mode.

Note 3 When the aspect ratios of the source and the profile differ, a black bar is added to the top/bottom or left/right sides.

Note 4 The DVI/RGB signal is output with a certain delay from the SDI/YPbPr output.

GPI I/O connector pinouts



Pin	Signal
1	Output 1
2	Output 2
3	Output 3
4	Output 4
5	Output 5
6	Output 6
7	NC
8	Common Ground

Pin	Signal
9	Input 1
10	Input 2
11	Input 3
12	Input 4
13	Input 5
14	Input 6
15	NC
SHELL	Common Ground

Note T2 iDDR software supports outputs 1-6 and inputs 1-6 only. Pin 7 and Pin 15 are not used.

Supported File Import Format

format	field	size	frame	R1	P1/P2	Canopus HQ AVI	Quick Time DV	Quick Time DVCPRO HD	Quick Time ProRes	Quick Time H.264	WMV	MPEG2 PS	MPEG2 HDV	
SD	Interlace	720x486	59.94i	○	○	○	-	-	○	○	○	-	-	
		720x480 (DVD**)	59.94i	-	-	○	-	-	○	○	○	○	-	
		720x480 (DV**)	59.94i	-	-	○	○	-	○	○	○	○	-	
		720x576 (DVD**)	50i	-	-	○	-	-	○	○	○	○	-	
		720x576 (DV**)	50i	○	○	○	○	-	○	○	○	-	-	
		1920x1080	59.94i	○	○	○	-	-	○	○	○	○	○	-
		1440x1080	59.94i	○	-	○	-	-	○	○	○	○	-	○
		1280x1080	59.94i	-	-	○	-	○	○	○	○	○	-	-
		1920x1080	50i	○	○	○	-	-	○	○	○	○	○	-
		1440x1080	50i	○	-	○	-	○	○	○	○	○	-	○
HD	Progressive	1280x720	59.94p	○	○	○	-	-	○	○	○	○	○	
		960x720	59.94p	-	-	○	-	○	○	○	○	-	-	
		1280x720	50p	○	○	○	-	-	○	○	○	○	○	
		960x720	50p	-	-	○	-	-	○	○	○	-	-	
		1920x1080	24p	○ (p/PsF)	○ (p/PsF)	○	-	-	○	○	○	○	-	-
		1440x1080	24p	○ (p/PsF)	-	○	-	-	○	○	○	○	-	-
		960x720	24p	-	-	○	-	-	○	○	○	○	-	-
		1920x1080	23.98p	○ (p/PsF)	○ (p/PsF)	○	-	-	○	○	○	○	○	-
		1440x1080	23.98p	○ (p/PsF)	-	○	-	-	○	○	○	○	-	○
		1280x1080	23.98p	-	-	○	-	-	○	○	○	○	-	-
		1280x720	23.98p	-	○	○	-	-	○	○	○	○	○	○
		960x720	23.98p	-	-	○	-	○	○	○	○	○	-	-
1280x720	24p			○	-	-	○	○	○	○	-	-		

** In this list, "(DVD)" means "top field first", while "(DV)" means "bottom field first."

