Panasonic

User Guide

ClipConvert Software

Contents

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<Overview>

The ClipConvert software application is used to convert Targa files (.tga) containing still image data into clip files (".clp" files) which can be handled as movie data.

In addition, by loading audio files (.wav) during conversion, clip files with audio data can be created.

The clip files created from the Targa files after they have been converted using this software can be registered in the Live Switcher's video memory by copying them onto an SD/SDHC memory card and then loading them using the Live Switcher.

<Operation environment>

A personal computer that satisfies the performance criteria listed below is required in order for the software to run properly.

Operating system supported:	Microsoft® Windows® 7, 10
CPU:	Intel® Core™ 2 DUO 2.4 GHz or faster recommended
Memory:	1 GB or more recommended

<How to obtain the ClipConvert Software>

The ClipConvert Software can be downloaded from "Service and Support" on the home page whose address is as follows:

   http://pro-av.panasonic.net/

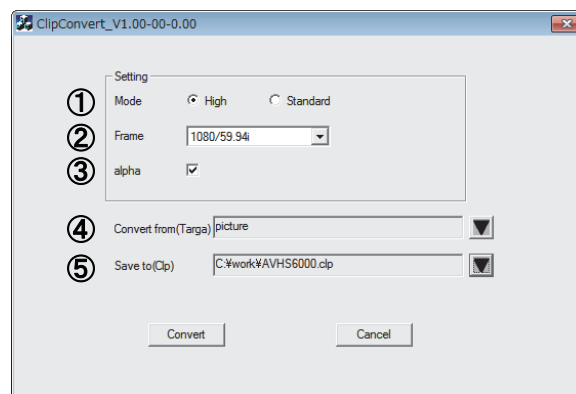1. Download the ClipConvert Software zip file and copy them onto the hard disk of the personal computer.
2. Unzip the downloaded zip file.

<How to use the software>

1. Start up the software.

Double-click "ClipConvert.exe" to start up ClipConvert.

2.   Converting Targa files into clip files

2.1. Settings
① **Mode**

The resolution (high or standard image quality) is selected here.
The bit rates are as follows:

When the frame rate is 2160/59.94p, or 2160/50p
High: Approx. 1600 Mbps
Standard: Approx. 800 Mbps
When the frame rate is 1080/59.94p or 1080/50p
High: Approx. 400 Mbps
Standard: Approx. 200 Mbps
When the frame rate is not the above
High: Approx. 200 Mbps
Standard: Approx. 100 Mbps

② **Frame**

The frame rate is selected here.
Given below is the correspondence between the frame rate setting and the image sizes of the Targa files which can be converted. An error results when an attempt has been made to specify a Targa file with a different image size for conversion.
Whether a Targa file is converted into two fields or one frame will depend on the frame rate.

Frame rate	Image size	Conversion method
2160/59.94p	3840×2160	1 frame
2160/50p		
1080/59.94p	1920×1080	
1080/50p		
720/59.94p	1280×720	
720/50p		
1080/59.94i	1920×1080	2 fields (breakdown into one even field and one odd field)
1080/50i		
1080/24PsF		
1080/23.98PsF		
576/50i	720×576	
480/59.94i	720×487 [1]	

1:     Files in the range from 720 × 480 to 720 × 487 can be imported.

Notes:

The maximum number of files differs depending on the playback device.

Pixels are not square in the 480/59.94i and 576/50i formats. Therefore, the aspect ratio will differ between the image displayed on the computer and the image loaded to the video memory.
(480/59.94i will be a portrait image, and 576/50i will be a landscape image.))

To reproduce images faithfully, create the images in 720×540, and use images compressed into 720×487 when using 480/59.94i. When using 576/50i, use images expanded to 720×576.

③ **alpha**
Check this when the Targa files include α channels and you want to use the α channel data as video key signals.

④ **Convert from(Targa)**
The Targa file to be converted is selected here.
- Compressed Targa files and Targa files that are not in a full-color format cannot be used.

When ▼ is clicked, the File List screen is displayed.

Click the Targa file to be converted to select it. When the [OK] button is clicked, the ClipConvert screen is restored.
The selected Targa file now appears in Convert from(Targa).

Name: The name of the Targa file is displayed here.
Page: The number of pages in the Targa file is displayed here.
Size: The image size of the Targa file is displayed here.

If the Targa files are numbered consecutively, they are grouped together and the names in front of the numbers are displayed as the filenames.
In order to ensure that these files are recognized as consecutively numbered Targa files, a 4-digit number (starting with 0001) is assigned consecutively ahead of time after the filename before the extension.
To create clip files with audio data, save audio files (.wav) in the same folder as the Targa files. In addition, make sure that the file names of the audio file and the Targa file are identical (except for the extensions). Audio files with a different name from the Targa files will not be loaded, and audio data will not be embedded in the clip file.

Example:
picture0001.tga
to
picture0011.tga
picture.wav
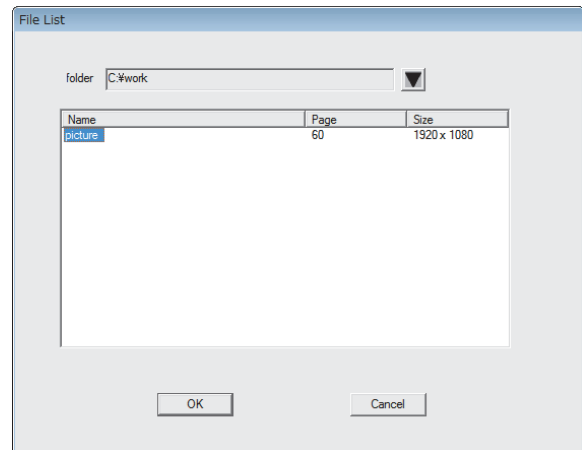
⑤ **Save to(Clp)**
The destination where the converted clip file is to be saved is selected here.
When ▼ is clicked, the file save screen is displayed.

Select the save destination and filename.
When a filename with more than 8 characters (excluding the extension) is specified, the filename of the clip file will appear without the ninth and following characters when that file has been loaded in the Live Switcher.
As such, it is recommended that filenames be specified using 8 or fewer characters.

2.2. Conversion

After entering or selecting the settings in steps ① to ⑤ listed above, conversion is started by clicking on the [Convert] button.

If the file is converted successfully, the message screen shown below is displayed.
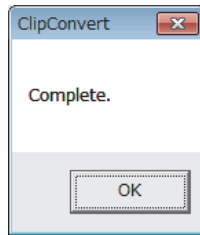
Notes:

· Targa files that are not in a full-color format cannot be used.

· Prepare an even number of Targa files when the frame rate is 1080/59.94p or 1080/50p. If an odd number of Targa files are loaded, a clip file with the last frame copied to produce an even number will be created.

■ Supported header formats for Targa files

➢ Number with the added "H" indicate hexadecimal numbers.

Offset (byte)	Length (byte)	Name	Description	Value
0	1	ID field length	—	0H
1	1	Color map ON/OFF	Disable color map	0H
2	1	Image format	Full color	2H or AH
3	2	Color map origin	Unlimited	—
5	2	Color map length	Unlimited	—
7	1	Color map entry size	Unlimited	—
8	2	X coordinate of image	Unlimited	—
10	2	Y coordinate of image	Unlimited	—
12	2	Image width	Varies depending on the image size.	—
14	2	Image height	Varies depending on the image size.	—
16	1	Color depth	24 bit	18H
			32 bit	20H
17	1	Image descriptor	Unlimited	—

■ Audio file specifications

● You can only use audio files that meet the following specifications.

- File format: WAV (.wav)

- Recording format: Linear PCM (uncompressed)

- Sampling frequency: 48 kHz

- Quantization: 16 bit

- Channel count: 2 channels (stereo)

● If the length of the audio data included in the audio file is shorter than that of the video data, audio data with muted data added to its end will be embedded in the clip file.

● If the length of the audio data included in the audio file is longer than that of the video data, audio data with its ending deleted will be embedded in the clip file.

<How to transfer files to the Live Switcher>

Transfer the converted clip files to the Live Switcher as follows:

■ Using SD/SDHC/SDXC memory cards

1. Have at hand an SD, SDHC, or SDHC memory card with a memory size large enough to accommodate the coping of the clip files to be transferred.
    ● For details on SDXC memory card support, check the operating guide of Live Switcher.
2. Copy the converted clip files into the "\HS\COMM\CLIP" folder which has been created on the memory card.
    ● Be sure to initialize the memory card using Live Switcher.
3. Insert the memory card onto which the clip files have been copied into Live Switcher.
4. Select the transmission destination channel and perform loading from the Recall screen.

Note:
  ● The clip files registered in Live Switcher will be deleted from the video memory when the power of the Live Switcher is turned off.