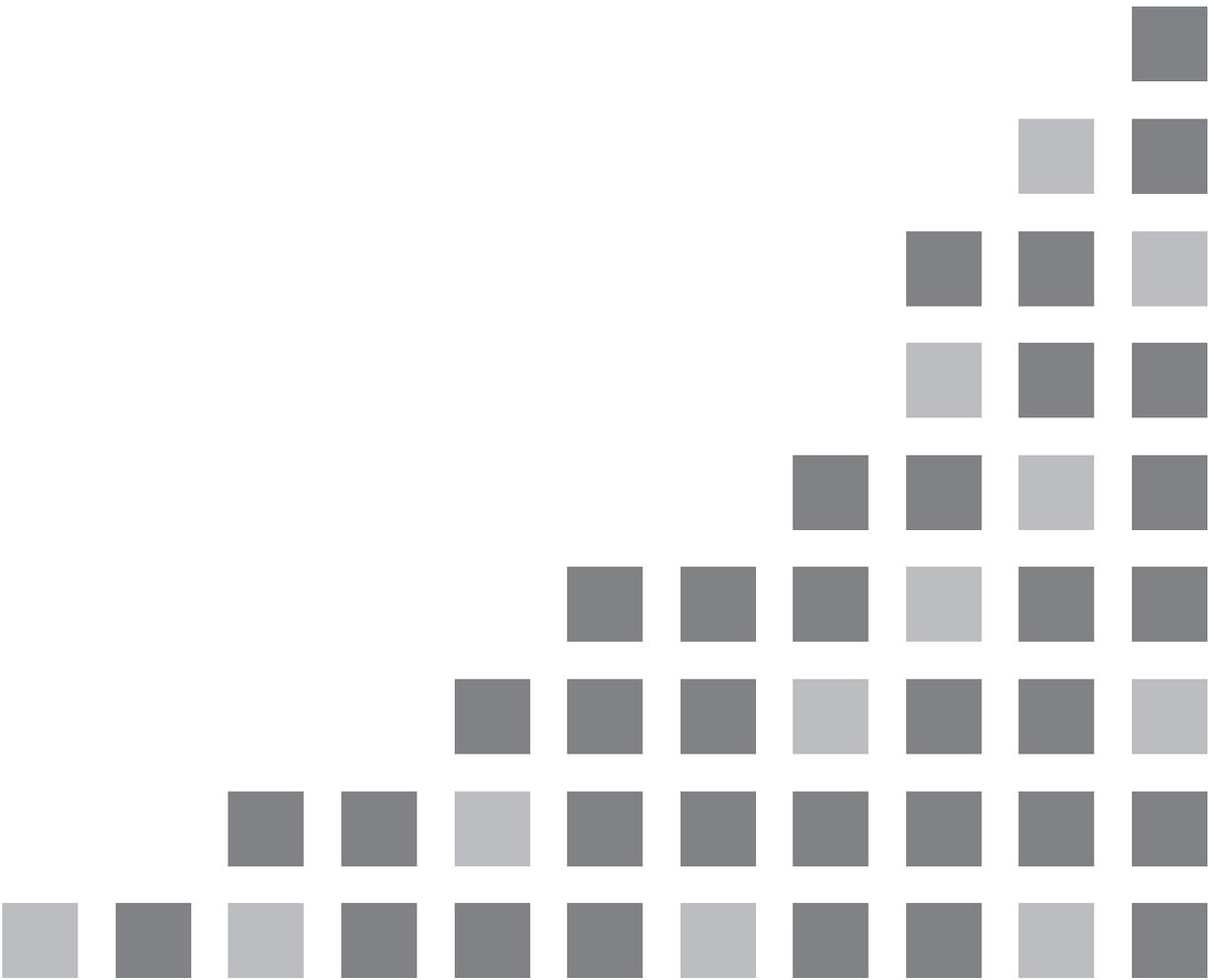


## User Guide

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### Image Transmission Software for AV-HS410



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# Overview

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This Image Transmission Software enables movies and still images to be transferred between the AV-HS410 and host computer.

Two-way transmission is possible both from the AV-HS410 to host computer and from the host computer to the AV-HS410.

## Specifications

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### <File formats>

#### Still image files:

Bitmap format (bmp), JPEG format (jpg), TARGA format (tga), TIFF format (tif), GIF format (gif), PNG format (png)

#### Still image files with running numbers:

TARGA format (tga)

The files are converted into movie files (AV-HS410 original format), and transferred.

#### Movie files:

AV-HS410 original format (clp)

- In order to run this software correctly, use a host computer which satisfies the conditions set forth in “Required computer environment” in <Basics>.

## Connections

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Connect the AV-HS410 and host computer using a LAN cable.

Connect the host computer to the LAN connector on the rear panel of the AV-HS410.

Either a straight LAN cable or crossover LAN cable can be used for the connection.

For network settings such as IP addresses, refer to “3-5. Network settings” in <Operations and Settings>.

Set the IP addresses of the host computer so that its network address is the same as that of the AV-HS410 and its host address is different from that of the AV-HS410.

Set the subnet mask to the same address as that of the AV-HS410.

## Software installation methods

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### • When installing the software from the CD-ROM provided

1. Load the CD-ROM provided with the AV-HS410 into the CD-ROM drive of the host computer in which the software is to be installed.
2. Copy the “Image Transmission Software” folder on the CD-ROM onto the hard disk of the host computer.

### • When downloading the software from the web site

This software can be obtained from “Service and Support” on the home page whose address is provided below: <b><a href="http://pro-av.panasonic.net/">http://pro-av.panasonic.net/</a></b>
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1. Download the files onto the hard disk of the host computer.
2. Unzip the downloaded files.

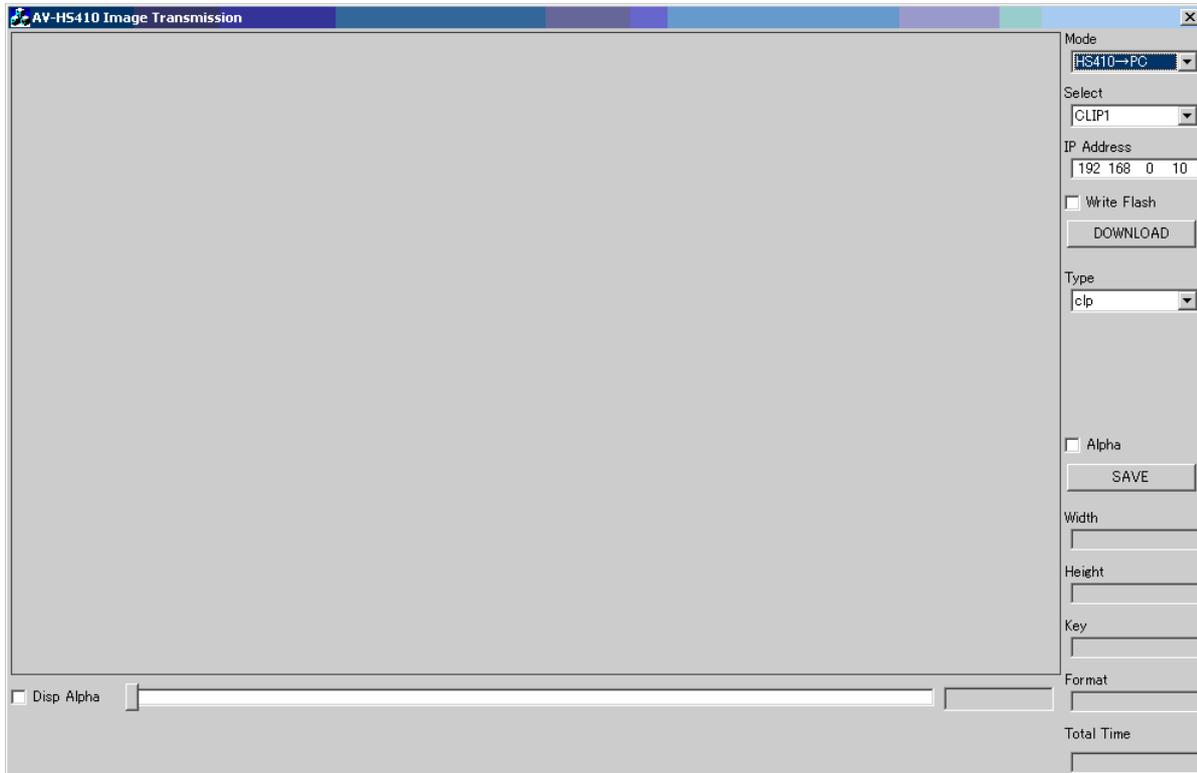
# Basic software operations

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## ■ Starting up

Double-click on “ImageTrans.exe” in the “Image Transmission Software” folder which was copied into the host computer.

- If the software was downloaded from the web site, double-click “ImageTrans.exe” which was unzipped.



## ■ Exiting

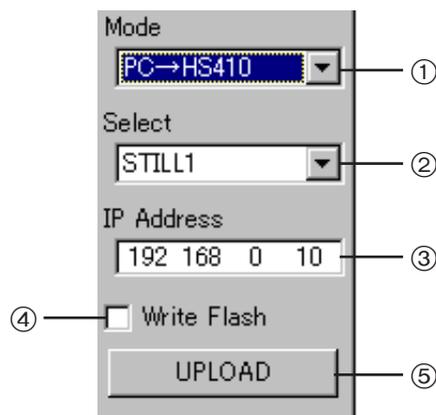
Click  on the title bar.

## ■ Entering the IP Address

Input the IP address of the AV-HS410 in the IP Address setting box.

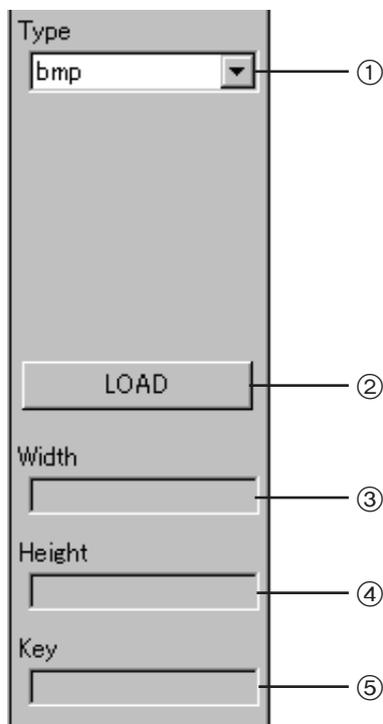
# Transferring the image data

## ■ Transferring the image data from the host computer to the AV-HS410



- ① Select the data transfer direction.  
Select "PC→HS410" from the pull-down menu.
- ② Select the data to be transferred.  
"STILL1," "STILL2," "CLIP1" or "CLIP2" can be selected using the Select pull-down menu.
- ③ Input the IP address of the AV-HS410.
- ④ Specify saving to the flash memory of the AV-HS410 in order to retain the image data.  
If this item is checked, the image data is saved in the flash memory and retained even when the power of the AV-HS410 has been turned off.  
The setting for the Mode item on the Video Memory menu is ignored.
- ⑤ Click this button to transfer the loaded images to the AV-HS410.  
The AV-HS410 is recording images while its [VMEM] button is blinking so no images can be transferred.

## ● When transferring still images



- ① Select the format of the images to be loaded.
- ② Click this button to load the image data file into the host computer.  
When this button is clicked, the file selection screen appears.  
Select the file. When [OK] is clicked, the images are loaded.
- ③ The width of the loaded images is displayed.
- ④ The height of the loaded images is displayed.
- ⑤ This display indicates whether key signals are present in the loaded images.

## Transferring the image data (continued)

### • When transferring movies

<When “clip” is selected as the “Type” setting>

The screenshot shows a dialog box for transferring image data. At the top, the 'Type' dropdown menu is set to 'clip'. Below it is a 'LOAD' button. Further down are several input fields: 'Width', 'Height', 'Key', 'Format', and 'Total Time'. Each of these elements is connected to a numbered callout (1-7) on the right side of the page.

- ① Select the format of the images to be loaded.  
In the example given here, “clip” is selected.
- ② Click this button to load the image data file into the host computer.  
When this button is clicked, the file loading screen appears.  
Select the file. Click [OK] to load the images.
- ③ The width of the loaded images is displayed.
- ④ The height of the loaded images is displayed.
- ⑤ This display indicates whether key signals are present in the loaded images.
- ⑥ The format of the loaded images is displayed.
- ⑦ The playback time (in frames) of the loaded images is displayed.

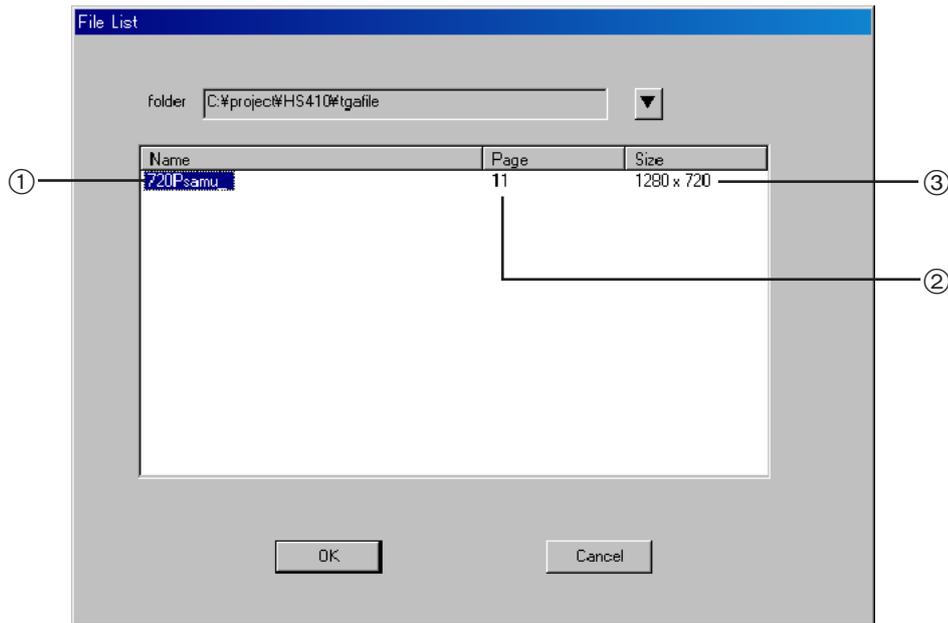
<When “tga” is selected as the “Type” setting>

The screenshot shows a dialog box for transferring image data. At the top, the 'Type' dropdown menu is set to 'tga'. Below it is a 'Quality' dropdown menu set to 'High', followed by a 'Format' dropdown menu set to '1080/59.94i'. There is an 'Alpha' checkbox which is currently unchecked. Below these is a 'LOAD' button. Further down are several input fields: 'Width', 'Height', 'Key', 'Format', and 'Total Time'. Each of these elements is connected to a numbered callout (1-10) on the right side of the page.

- ① Select the format of the images to be loaded.  
In the example given here, “tga” is selected.
- ② Select the bit rate for loading the files.  
High: 200 Mbps; Standard: 100 Mbps
- ③ Select the frame rate of the loaded files.  
The files cannot be sent if the frame rate selected is different from the system format of the AV-HS410.  
In the interlace mode or PsF mode, one file is expanded into two fields; in the progressive mode, one file is equivalent to one frame.
- ④ Check this box when transferring images with key signals to the AV-HS410.
- ⑤ Click this button to load the image data files into the host computer.  
When this button is clicked, the file loading screen appears.  
Select the files. When [OK] is clicked, the images are loaded.  
Maximum number of files:  
Standard: 600; High: 300  
When a file is loaded, it is converted into a clip so this may take a few moments.
- ⑥ The width of the loaded images is displayed.
- ⑦ The height of the loaded images is displayed.
- ⑧ This display indicates whether key signals are present in the loaded images.
- ⑨ The format of the loaded images is displayed.
- ⑩ The playback time (in frames) of the loaded images is displayed.

# Transferring the image data (continued)

<File loading screen when “tga” is selected as the “Type” setting>



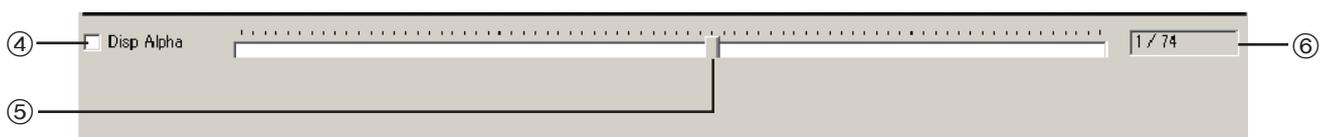
- ① The TARGA file group name is displayed.  
If the TARGA files have running numbers, they are formed as a group, and the name in front of the 4-digit number is displayed as the group name.  
In order to recognize the files as TARGA files with running numbers, provide 4-digit running numbers in advance, starting with 0001 after the filenames excluding their extensions.

Example:

720Psamu\_0001.tga  
to  
720Psamu\_0011.tga

- ② The number of TARGA files is displayed.
- ③ The TARGA file image size is displayed.

In the case of movies, an operation bar used for playback is displayed at the bottom of the screen.



- ④ When this is checked, the key signal image is displayed on the screen.
- ⑤ By dragging this using the mouse, the image of the target frame can be checked on the screen.
- ⑥ The current frame of the image being displayed and the total number of frames are displayed.

## Transferring the image data (continued)

### ■ Transferring image data from the AV-HS410 to the host computer

Mode  
HS410→PC

Select  
STILL

IP Address  
192 168 0 10

Write Flash

DOWNLOAD

- ① Select the data transfer direction.  
Select "HS410→PC" from the pull-down menu.
- ② Select the data to be transferred.  
"STILL1," "STILL2," "CLIP1" or "CLIP2" can be selected using the Select pull-down menu.
- ③ Input the IP address of the AV-HS410.
- ④ Load the images from the AV-HS410.

### ● When transferring still images

Type  
tga

Alpha

SAVE

Width

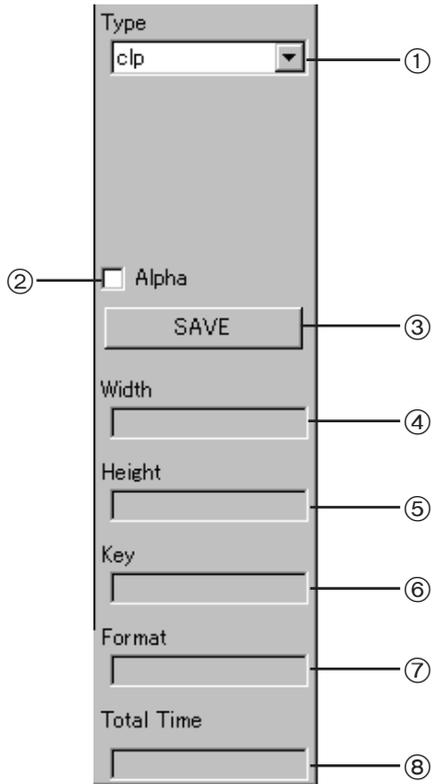
Height

Key

- ① Select the format of the images to be loaded.
- ② Check this to load the images with the key signals from the AV-HS410.  
This is displayed when TARGA format (tga) files or PNG format (png) files have been selected.
- ③ Click this button to save the image data in the host computer.  
When this button is clicked, the file saving screen appears.
- ④ The width of the loaded images is displayed.
- ⑤ The height of the loaded images is displayed.
- ⑥ This display indicates whether key signals are present in the loaded images.

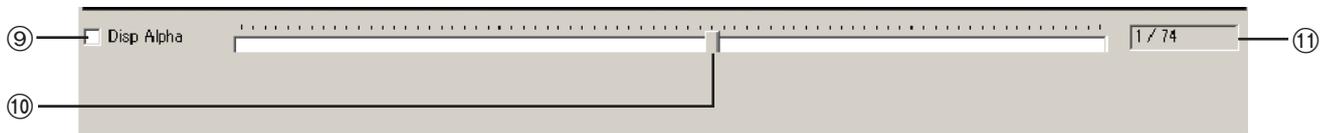
## Transferring the image data (continued)

### • When transferring movies



- ① Select the format of the images to be loaded.
- ② Check this when loading images with key signals from the AV-HS410.
- ③ Click this button to save the image data in the host computer. When this button is clicked, the file saving screen appears. If saving TARGA format (tga) files, specify the folder.
- ④ The width of the loaded images is displayed.
- ⑤ The height of the loaded images is displayed.
- ⑥ This display indicates whether key signals are present in the loaded images.
- ⑦ The format of the loaded images is displayed.
- ⑧ The playback time (in frames) of the loaded images is displayed.

In the case of movies, an operation bar used for playback is displayed at the bottom of the screen.



- ⑨ When this is checked, the key signal image is displayed on the screen.
- ⑩ By dragging this using the mouse, the image of the target frame can be checked on the screen.
- ⑪ The current frame of the image displayed and the total number of frames are displayed.

# Transferring the image data (continued)

## ■ Restrictions

When loading still image files, check what the suitable size is for the kind of file concerned as listed below.

If an image does not match the suitable size, it is centered without changing its size, and output from the AV-HS410.

If it is too big, the parts extending beyond the suitable size are cut off, and the resulting image is displayed.

If it is too small, the blank areas are displayed as a black image.

Files with images whose pixel size exceeds 1920 × 1080 cannot be loaded.

File type	Suitable size
HD/1080i	1920 × 1080
HD/1080PsF	1920 × 1080
HD/720p	1280 × 720
SD/NTSC	720 × 487
SD/PAL	720 × 576

When loading a running number file (tga) of still images as a movie file, set the images to the applicable size below.

Frame rate	Image size
1080/59.94i	1920 × 1080
1080/50i	1920 × 1080
576/50i	720 × 576
480/59.94i	720 × 487
1080/24PsF	1920 × 1080
1080/23.98PsF	1920 × 1080
720/59.94p	1280 × 720
720/50p	1280 × 720

- TARGA files compressed in the RLE format cannot be used.

### <Header formats of supported TARGA files>

Offset (bytes)	Length (bytes)	Header	What is set	Setting
0	1	Number of Characters in Identification Field.		0H
1	1	Color Map Type	No color map	0H
2	1	Image Type Code	Full color	2H
3	2	Color Map Origin	No restrictions	–
5	2	Color Map Length	No restrictions	–
7	1	Color Map Entry Size	No restrictions	–
8	2	X Origin of Image	No restrictions	–
10	2	Y Origin of Image	No restrictions	–
12	2	Width of Image	Depends on image size	–
14	2	Height of Image	Depends on image size	–
16	1	Image Pixel Size	24 bits	18H
			32 bits	20H
17	1	Image Descriptor Byte	No restrictions	–

- Numbers with “H” are in hexadecimal notation.
- SD format images displayed on the host computer will have a different aspect ratio than images loaded in the video memory. (They are longer vertically with the NTSC system.)  
In order to reproduce these images faithfully, create the original image in the 720 × 540 size and, with the NTSC system, use images which have been reduced to the 720 × 487 size.  
With the PAL system, use images which have been enlarged to the 720 × 576 size.

**Panasonic Corporation**

Web Site: <http://panasonic.net>

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