

PJ1158 / PJ1173

Projector Image Tool

Ver.2.00

Instruction Guide

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- **This software, or any product used with this software may not be used for any act which obstructs the Maintenance of the International Peace and Safety.**

1 Introduction

1.1 Outline

The Projector Image Tool is an application that provides following functions:

- Conversion of an image file from your PC into one which can be transmitted to a PJ1158 / PJ1173 via Network.
- Transmit the converted image file to a PJ1158 / PJ1173 via Network.

[Note]

You will need to configure the network settings of the projector in order to transmit the image files with this application. Please consult to 'User's Manual-Network Functions' which is included with the projector.

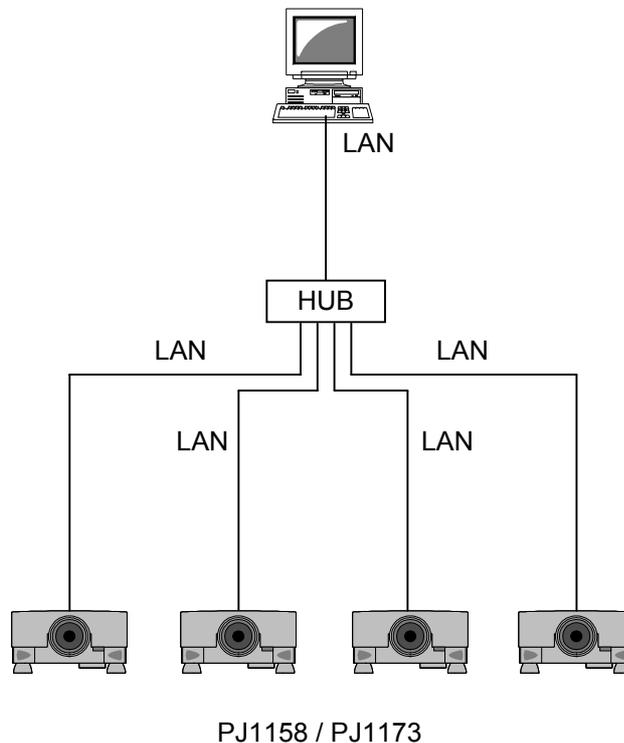
The image that is transmitted by this application can be displayed by using the 'e-SHOT' function of PJ1158 / PJ1173.

[Note]

Please consult to 'User's Manual-Operating Guide' and 'User's Manual-Network Functions' which is included with the projector, in order to use the e-SHOT function.

1.2 System

The following diagram shows a typical network diagram for the Projector Image Tool



- Use a UTP cable category 5 or higher for a Local Area Network cable.

2 Installation

2.1 System Requirements

The following is the minimum system requirements of hardware and software to use the Projector Image Tool.

- (1) Operating System
Windows 2000 Professional
Windows XP Home Edition
Windows XP Professional
Windows Vista
- (2) CPU
Pentium3 500MHz or higher
- (3) Memory
128MB or higher
- (4) Hard Disc
Minimum 20MB free space for installation.
- (5) LAN Port (RJ-45)
It's needed for transferring the image file.

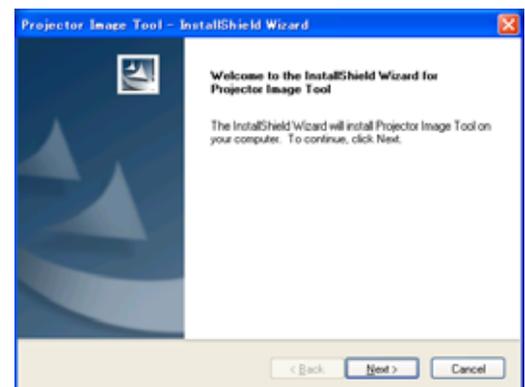
2.2 Projector Image Tool Installation

The installation process of Projector Image Tool is as follows:

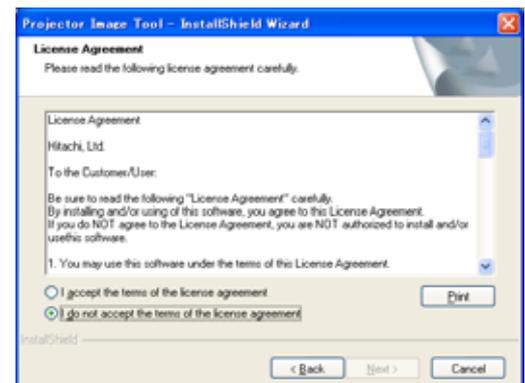
- (1) Double click the file "Setup.exe".
- (2) Select the language (English, Japanese or Chinese [Simplified]) during the installation process. And then click [OK].



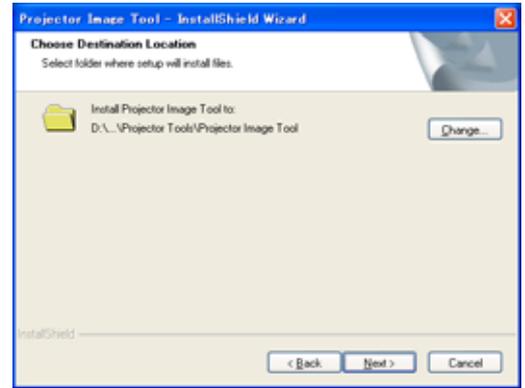
- (3) Click [Next]



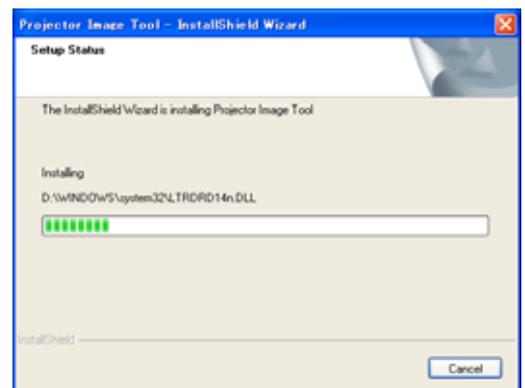
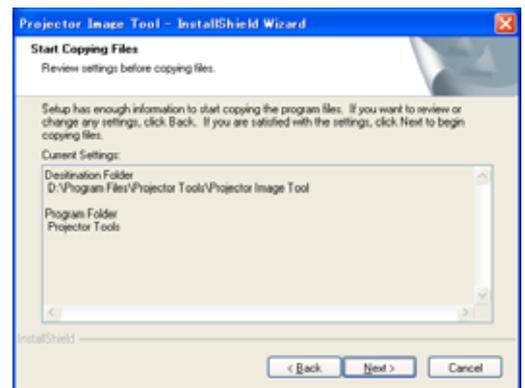
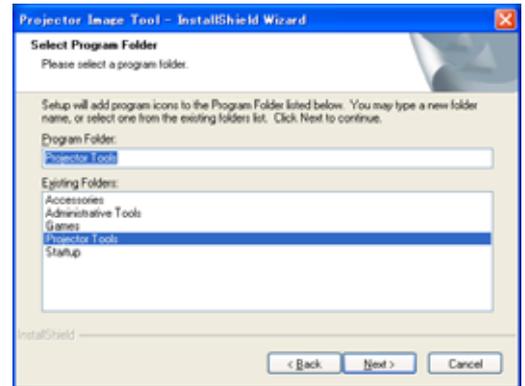
- (4) Read "License Agreement" and select I accept the Functions of the license agreement and click [Next] if you agree the license agreement. Otherwise, click [Cancel] and stop the installation.



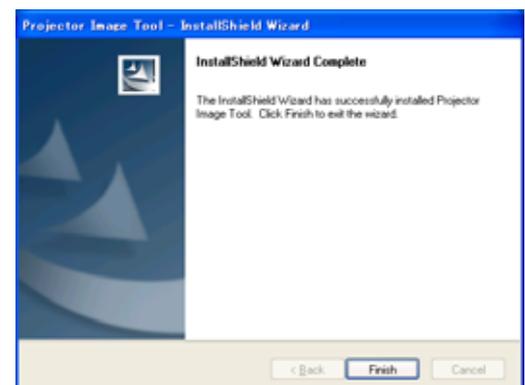
(5) Confirm the program folder, and then click [Next].



(6) Confirm the install folder and program folder again, and then click [Next].



(7) Click [Finish] to complete the Projector Image Tool setup wizard.



3 Operating Instructions

3.1 Create login accounts

The Projector Image Tool requires a login name and password to launch the software. The Projector User Administration Tool helps you to create new user accounts.

3.1.1 How to launch

Double Click "PJUsrEdit.exe" that is located on same folder that you installed Projector Image Tool.

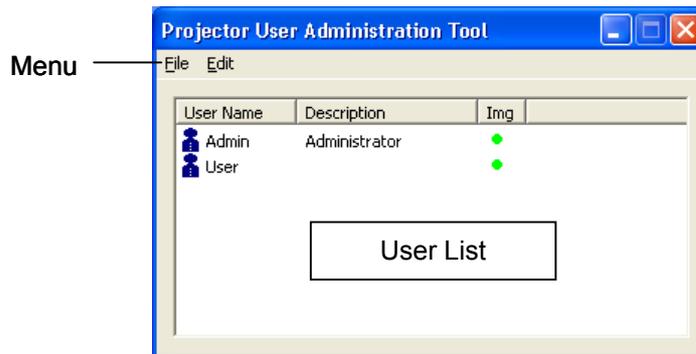
It automatically launches the Projector User Administration Tool, if no user accounts are created yet. Also Projector Image Tool has a short cut [File] → [User Configuration] to launch Projector User Administration Tool.



3.1.2 How to exit

Select [File] → [Exit] from the menu or click [x] bottom of the top right corner. If the changes are made, you will be required to confirm the changes.

3.1.3 Main Window



(1) Menu

Menu	Sub Menu	Description
File	Save	Save user data
	Exit	Exit
Edit	Add New User	Create new user
	Change User	Edit user account
	Delete User	Delete user account

(2) User List

The status in the User List is described below.

Row name	Description
User Name	Username (ID)
Description	Comment
Img	"●" shows that the user can access to the PJImg (Projector Image Tool).

3.1.4 Creating new user account

Select [Edit] → [Add New User] or right click on the user list and select [Add New User]. The following dialog window appears.

- User --- Define user name, up to 20 characters
- Description --- Add comments, up to 50 characters
- User Rights --- Define accessibility. It defines the accessibility for the application software by each user account. The user can use allocation only marked application software.
- Select All --- Select all application software.
- UnSel All --- Unselect all application software.



Press [OK] button after entering user name. The [Change Password] dialog appears. Enter new password and confirm entered password. The password is up to 20 characters and case sensitive.



3.1.5 Edit user account

Double click a username on the user list or select [Edit] → [Change User] after choosing user to open edit dialog. You can edit username, description and accessibility (user rights).

Click the button to change password. Enter old and new password, and re-enter new password to confirm.



3.1.6 Delete user account

Select [Edit] → [Delete User] or right click on the user list and select [Delete User]. The confirmation window will popup.

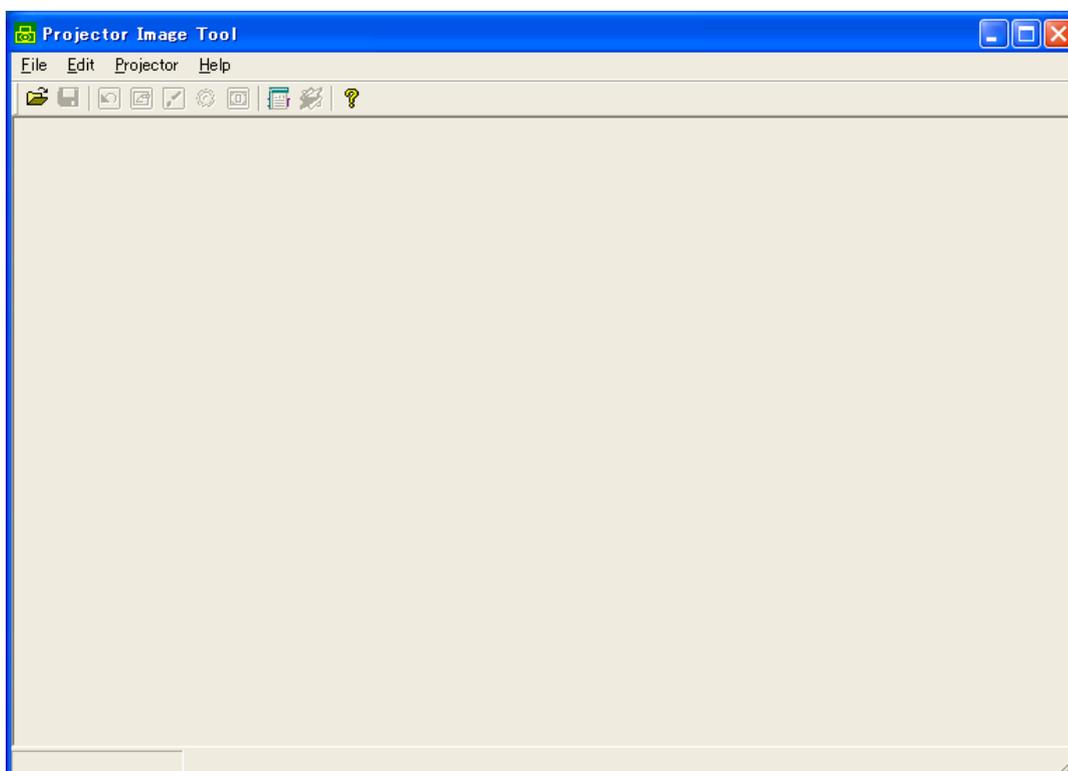
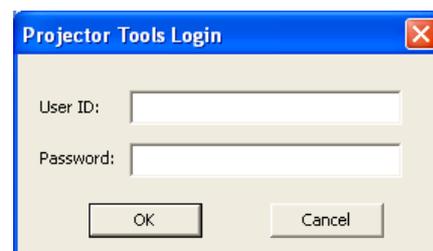
3.1.7 Save user account

Select [File] → [Save]. The date is stored in the file, "C:\Program Files\Common Files\HITACHI\Projector Tools\config\UserList".

3.2 Start Application

Select Windows [Start] → [Program] → [Projector Tools] → [Projector Image Tool]. The login window is appeared.

Enter the username and password that is created by “Projector User Administration Tool”. After logged in, a following window is appeared.



3.3 Quit Application

Select [File] - [Exit] to quit.

It is also possible to quit this software by clicking [x] on the top right corner of the window.

When the confirmation dialog appears, select [OK] to finish.



3.4 Main Screen

(1) Menu

The functions of the main window are as follows.

Menu	Sub-Menu	Function
File	Open	Load the image file from the PC and display it on Main Screen.
	Save As	Save the image file on Main Screen as a Projector GIF type.
	User Configuration	Launch Projector User Administration Tool.
	Exit	Quit Application.
Edit	Undo	Undo any previous change (only for last change)
	Resize	Resize the image on Main Screen.
	Color Saturation	Adjust the Color Saturation of the image on Main Screen.
	Color Resolution	Adjust the Color Resolution of the image on Main Screen.
	Trimming	Trim away the image on Main Screen.
Projector	Projector List	Register the destination projector of the image file in the Projector List.
	Send	Send the image file on Main Screen to the projector.
Help	About Projector Image Tool	Display the version of this application.

(2) Toolbar

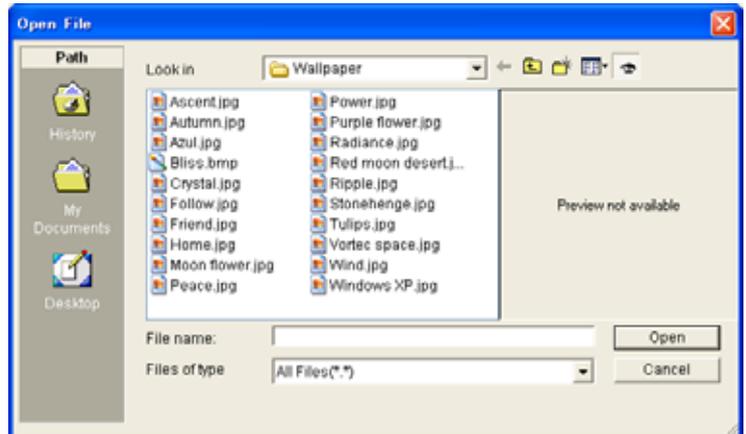
The functions of these icons correspond with the menus as follows:

Icon	Menu
	[File] - [Open]
	[File] - [Save As]
	[Edit] - [Undo]
	[Edit] - [Resize]
	[Edit] - [Color Saturation]
	[Edit] - [Color Resolution]
	[Edit] - [Trimming]
	[Projector] - [Projector List]
	[Projector] - [Send]
	[Help] - [About Projector Image Tool]

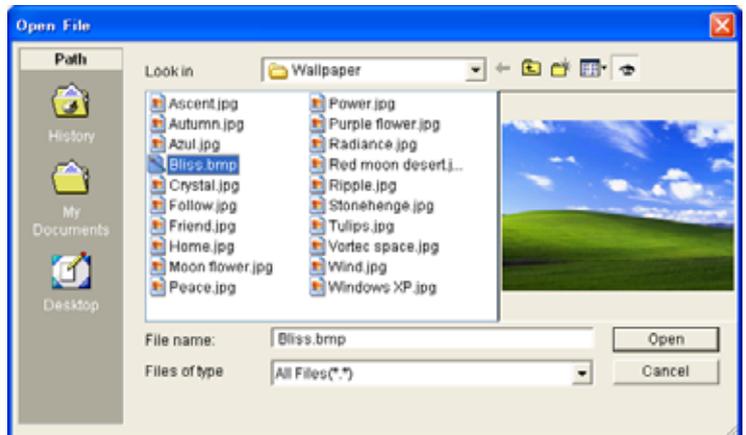
3.5 Open up the Image File

In order to transmit an image file to the projector, the file must be converted into a format that can be displayed by the 'e-shot' function of the projector. First, please open up the image file at Main Screen.

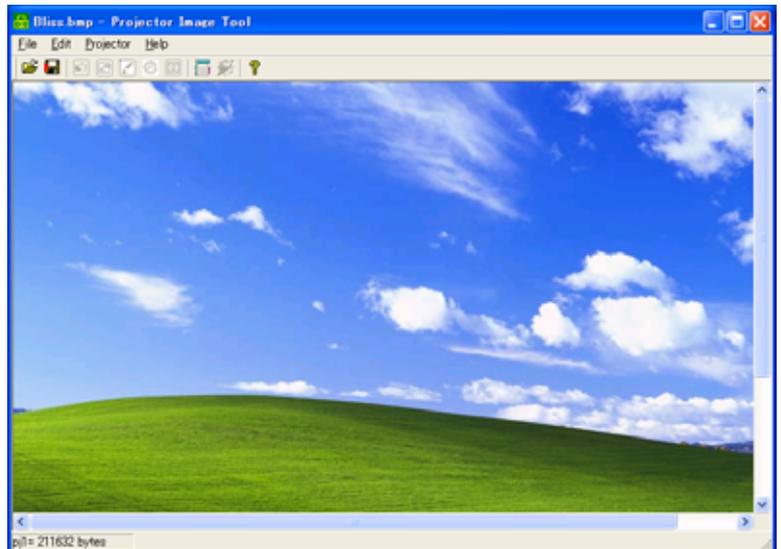
- (1) Select [File] → [Open] or click  :
→ "Open File" screen appears:



- (2) Select the image file which you want to transmit to the projector in "Open File" screen.
→ Selected image will appear in the screen as follows:



- Click [Open] to open up the selected image file at Main Screen, and close the "Open File" screen.



- The data size of the opened file appears on the left below of the Main Screen. This value corresponds to the data size of the file that has already been converted to the transferable form.

pjl= 211632 bytes

You can also drag-and-drop a file to open the file.

3.6 File Conversion/Save

In order to transmit an image file to projector, the file must be converted to a Projector GIF (.PJ1) file.

If the file size (which displays on the lower left corner of the Main Screen) is smaller than maximum file size, you can transmit the file after it has been converted and saved. (For information on how to transmit the image file, see 3.8 Image Transmission)

If the file size exceeds the maximum size, please edit the image file and make the file size smaller (For information on how to edit the image file, see 3.7 Image Editing).

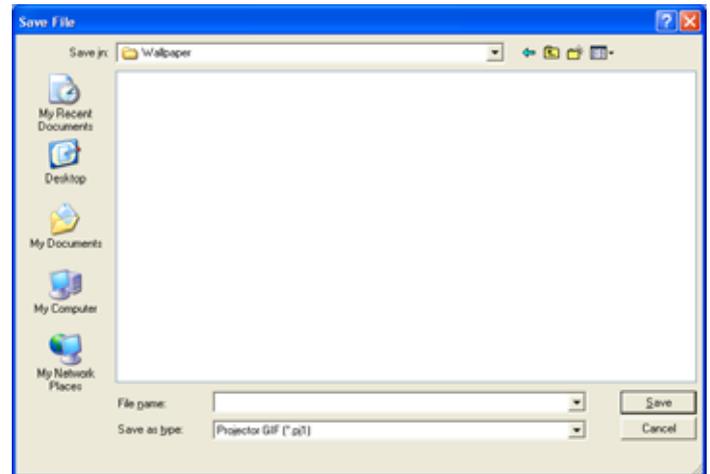
Refer to “4 Limitations” for the maximum size.

[Note]

After converting and saving the file, the color depth of the image data becomes 8bit. If you edit the image after converting it, the image quality can deteriorates dramatically. If the color depth of the image opened is larger than 16bit, please edit the image first, before converting and saving the file. (For information on how to edit the image file, see 3.7 Image Editing)

(1) Select [File] → [Save As] or click  :
→ “Save File” screen appears.

(2) Select the saving folder and input a file name on “Save File” screen, and then Click [Save].
→ The file is converted to a transmittable form and saved in the folder, and the screen is closed.



3.7 Image Editing

You can edit the image size to reduce the file size. Once the file size is smaller than the maximum size, you can then transmit the file (after converting and saving). (For information on how to transmit the image file, see 3.8 Image Transmission)

Refer to "4 Limitations" for the maximum size.

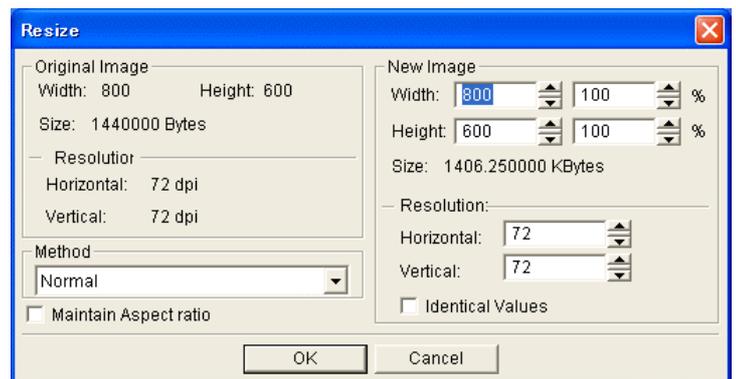
[Note]

After converting and saving the file, the color depth of the image data becomes 8bit. If you edit the image after converting it, the image quality can deteriorate dramatically. If the color depth of the image opened is larger than 16bit, please edit the image first, before converting and saving the file.

3.7.1 Resize the Image

How to Resize the image file is shown here.

- (1) Select [Edit] → [Resize], or click  :
→ "Resize" screen appears.



Original Image --- Show Width/ Height/ Size/ Horizontal Resolution/ Vertical Resolution information of the opened file.

(The "Size" shown here is the data size which is uncompressed, so it doesn't correspond to the size which is shown in the lower left corner of the Main Screen)

Method --- Select the Resizing method.

Normal : Normal Resizing

Resample : Generate a fine quality image by using linear interpolation and averaging .

Bicubic : Generate a fine quality image by using BI Cubic interpolation and averaging.

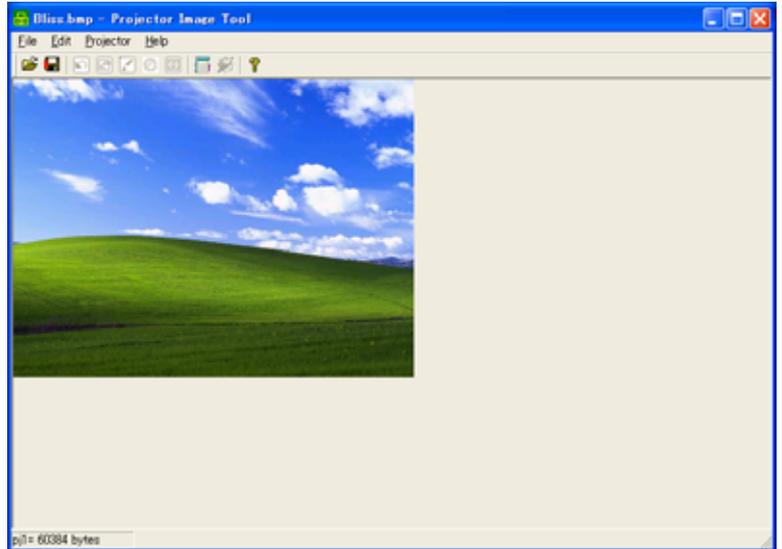
(Processing speed is slower than Re Sample.)

New Image --- Setting the value of Width/Height/Horizontal Resolution/Vertical Resolution for Resized image. (The "Size" shown here is the data size which is uncompressed, so it doesn't correspond to the size which is shown in the lower left corner of the Main Screen)

Maintain Aspect Ratio --- The Width/Height ratio is fixed.

Identical Values --- The Horizontal Resolution value is conformed to Vertical Resolution value.

- (2) Click [OK] → The image is resized by the configured method and value, and opened at the Main Screen. “Resize” screen is closed and the resized image is shown on the Main Screen:



[Note]

You can't restore the file after you finished the resizing by clicking [OK]. If you want to undo the image file, please start again from 3.5 Opening up the Image File.

3.7.2 Color Saturation Adjustment

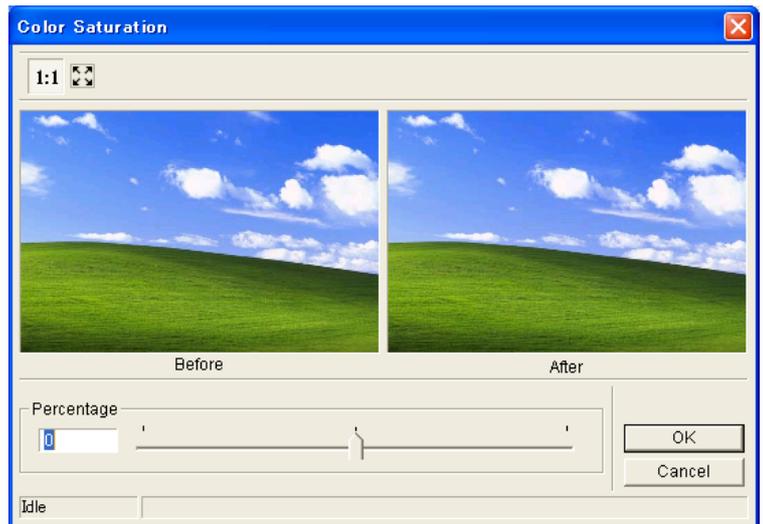
How to adjust the Color Saturation of the image is shown here.

- (1) Select [Edit] → [Color Saturation], or click  :
→ "Color Saturation" screen appears.

 → Image is displayed the same size with Main Screen.

 → Image is shaped to fit in the current window size.

- (2) Please compare Before and after images, and adjust the color saturation by putting the value (-1000~1000) into the box or by sliding the indicator. The positive value will increase the color saturation, and negative value will decrease it.



- (3) Click [OK] → The color saturation is adjusted at the configured value. “Color Saturation” screen is closed and the adjusted image is shown on the Main Screen.

[Note]

You can't restore the file after you finished the adjustment by clicking [OK]. If you want to undo the image file, please start again from 3.5 Opening up the Image File.

3.7.3 Color Resolution Adjustment

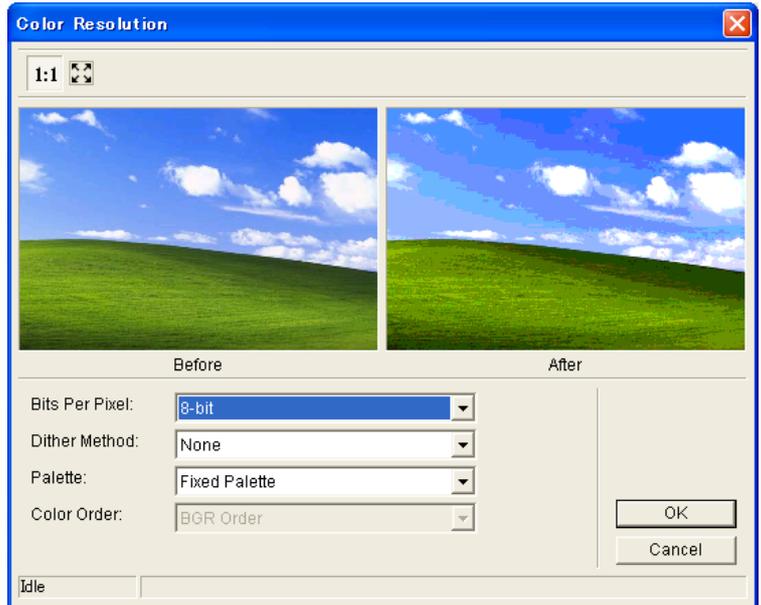
How to adjust the Color Adjustment of the image is shown here.

- (1) Select [Edit]-[Color Resolution], or click  :
→ "Color Resolution" screen appears.

 → Image is displayed at the same size with Main Screen.

 → Image is shaped to fit the window size.

- (2) Please adjust the color resolution by setting the dithering and palette options.



Bits Per Pixel : Setting pixel depth. This setting is fixed at 8bit and cannot be changed.

Dither Method :

None : Conform to the nearest color without Dithering.

Floyd Stein : Uses Floyd-Steingberg method

Stucki : Uses Stucki method

Burkes : Uses Burkes method

Sierra : Uses Sierra method

Stevenson Arce : Uses Stevenson Arce method

Jarvis : Uses Jarvis method

Ordered : Uses Pattern method. It's faster than the other Dithering method, but it loses the precision.

Clustered : Uses Cluster method

Palette :

Fixed Palette : Uses fixed Palette

Optimized Palette : Drawing up an Optimized Palette.

Netscape Fixed Palette : Uses the Palette which is used by Netscape Navigator and Microsoft Internet Explorer.

Windows Identify Palette : Insert the System Palette.

Order : Unable to use in this application.

- (3) Click [OK] → The color resolution is adjusted, and opened at the Main Screen. "Color Resolution" screen is closed and the adjusted image is shown on the Main Screen.

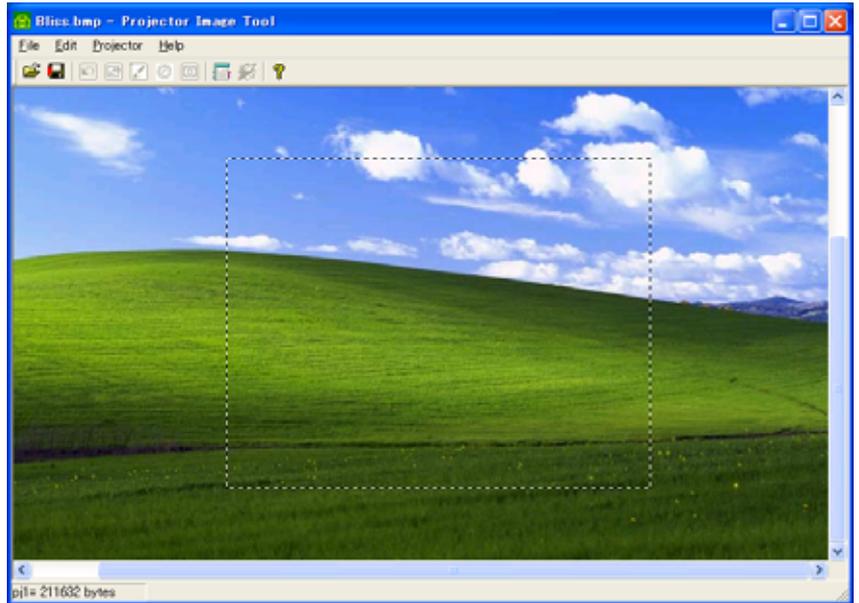
[Note]

You can't restore the file after you finished the adjustment by clicking [OK]. If you want to undo the image file, please start again from 3.5 Opening up the Image File.

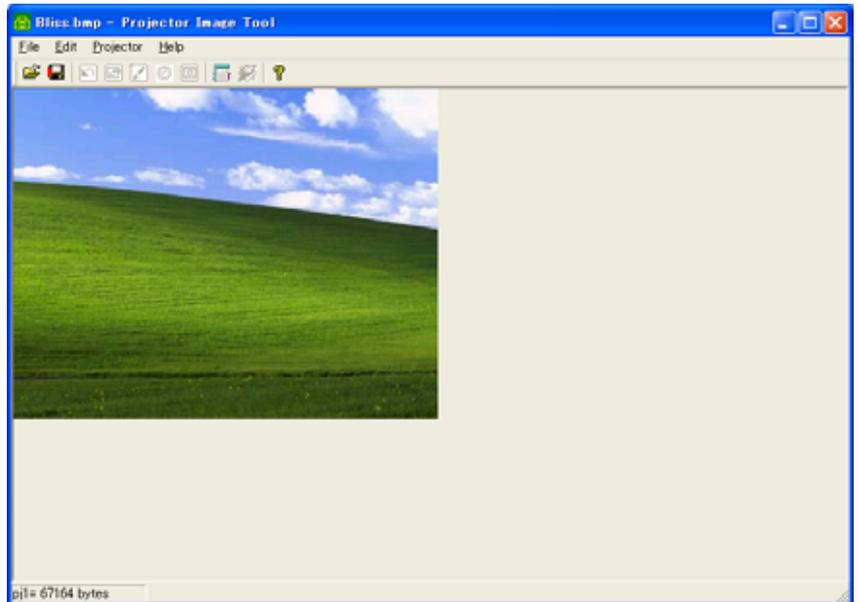
3.7.4 Image Trimming

How to Trim the Image is shown here.

- (1) Please specify the Trimming area by moving the cursor with pushing the left click button.



- (2) Select [Edit]-[Trimming], or click  :
→ The image is trimmed away with the area specified at (1)



[Note]

You can't restore the file after you finished the trimming by clicking [OK]. If you want to undo the image file, please start again from 3.5 Opening up the Image File.

3.7.5 Undo

This function will undo any previous change that you ware made. Click the  button or select [Edit] → [Undo] to undo the previous change.

[NOTE]

It works only the last change. It would not go back further.

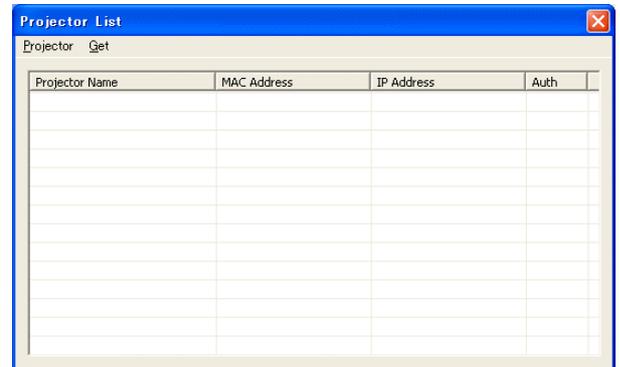
3.8 Image Transmission

How to transmit and save the image to the projector is shown here.

3.8.1 Register the Destination Projector

How to register the Destination Projector is shown here.

- (1) Select [Projector]-[Projector List] or, click  :
→ "Projector List" screen appears.



Add

Select [Projector] -> [Add] from menu, or select [Add] on a pop-up menu that will be shown when you make a right click on the projector list. It will be shown "Add Projector" window.

Please enter the IP address that you want to add. Other entries (Projector name, MAC address and Authentication) are optional. The authentication is enabled on the adding projector, marked Authentication and enter the password. Click [OK] to complete.



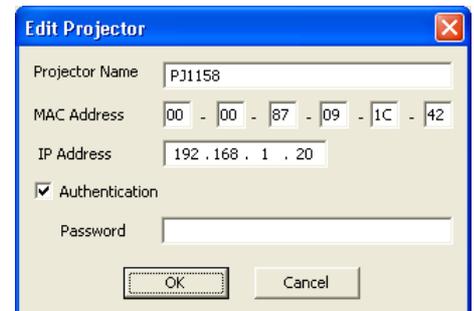
Delete

Choose a projector that you want to delete from the list, and then select [Projector] → [Delete] from the menu, or select [Delete] on the pop-up menu.

Edit

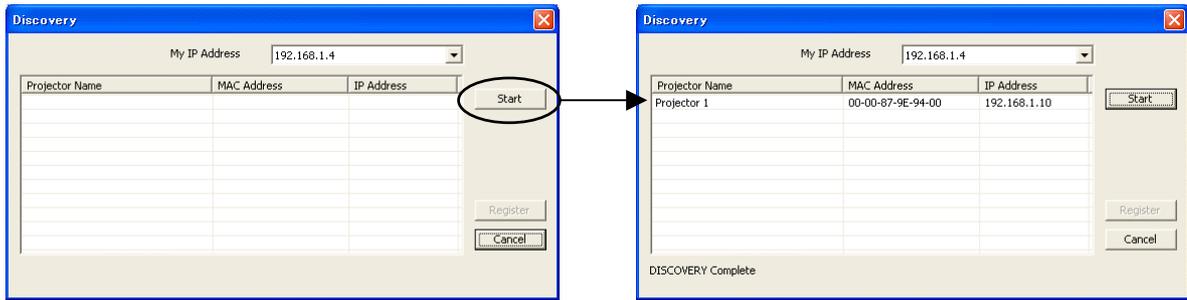
Choose a projector that you want to edit from the list, and then select [Projector] → [Edit] from the menu or select [Edit] on the pop-up menu. It will be shown "Edit Projector" window.

Click [OK] after editing entries.



Discovery

Choose a projector that you want to edit from the list, and then select [Projector] → [Discovery] from the menu or select [Discovery] on the pop-up menu. It will be shown “Discovery” window. Choose one of your computer IP address (network adapter) from the My IP Address pull-down list, then click [Start] button. It will display projectors that are founded by discovery function on the network.



Select a projector from the list, click [Register] button to add a projector.

[NOTE]

Windows Security Alert will be shown on your display when the discovery function activates, if Windows Firewall is “On” on Windows XP SP2 or later. Please choose “Unblock” to add the software onto the exception list. Also other firewall security software may block the discovery function. In that case, please add the software to the safe list or disable firewall software when you use discovery function.

(2) Click [Close] → “Projector List” screen is closed.

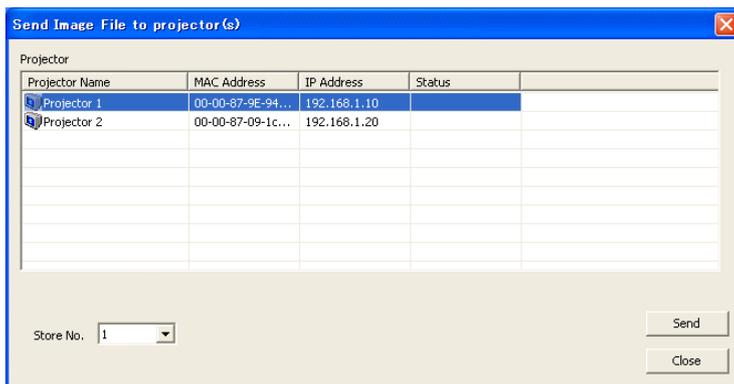
3.8.2 Transmit the Image File

How to transmit the image file which opened on application to the projector is shown here.

- (1) Select [Projector]-[Send], or click  :
 → “Send” screen appears. Please select the Destination Projector from the list, and select the Store No. (1~4) from the left below box.

[Note]

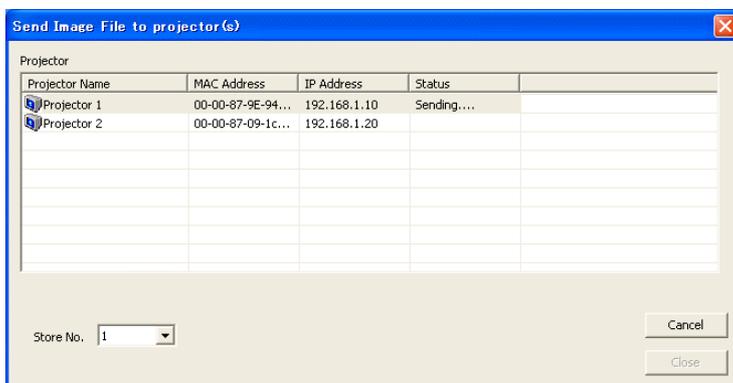
If the type of the image file is not converted to Projector GIF (.pj1), or if the data size is larger than maximum size, you cannot select [Send]. If the file type isn't converted, please refer to the section 3.6 File Convert/Save. If the data size is larger than maximum size, please refer to the section 3.7 Image Editing and make the data size less than maximum size. Refer to “4 Limitations” for the maximum size.



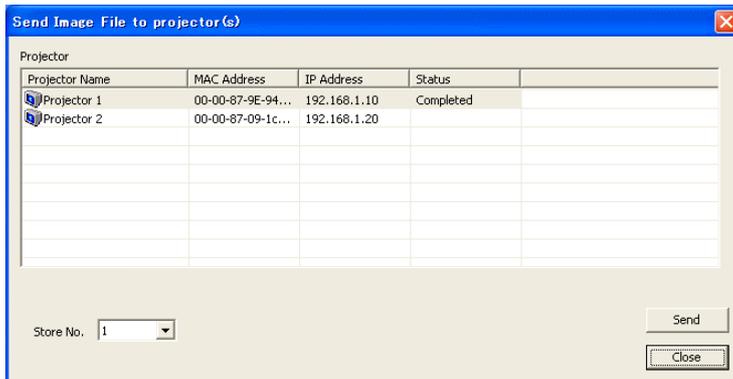
- (2) Click [Send] → Transmission starts.

Following messages can appear in the Status column:

- Sending : Transmitting the file
- Completed : Transmission succeeded
- Send error : Transmission failed
- Illegal Request : Request is unauthorized
- Processing : Former transmission isn't completed
- File Size Over : File size is over
- Other error : Other Error Occurred
- Cancel : Transmission is canceled
- Illegal data : Projector's is set authentication but application isn't



- (3) If “Completed” appeared in Status term, the transmission is completed.



- (4) Click [Close] and finish the “Send” screen.

[Note]

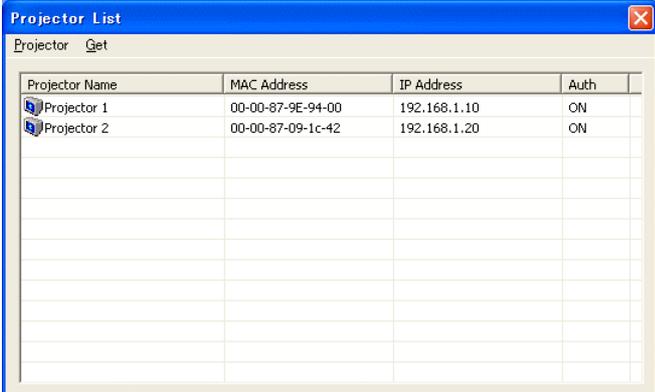
Please put a different name on image file for every Store No. If the names are the same, the transmission will fail in some cases.

If file transmission failed, please confirm the projector and application's authentication setting and password.

3.8.3 Get the Image Information

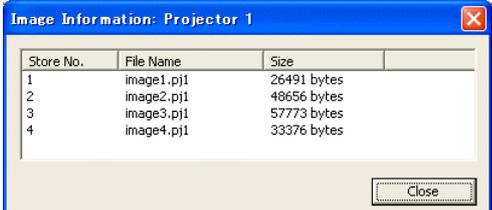
How to get the image information that stored in the projector is shown here.

- (1) Select [Projector] - [Projector List], or click  :
→ “Projector List” screen appears.



Projector Name	MAC Address	IP Address	Auth
Projector 1	00-00-87-9E-94-00	192.168.1.10	ON
Projector 2	00-00-87-09-1c-42	192.168.1.20	ON

- (2) Select a projector that you want to get the image information from the list, then select [Get] → [Image Information]. The information (image file name and size) will be displayed.



Store No.	File Name	Size
1	image1.pj1	26491 bytes
2	image2.pj1	48656 bytes
3	image3.pj1	57773 bytes
4	image4.pj1	33376 bytes

In some case the following message appears instead of File-Name and File-Size.

- Request Injustice received : Unauthorized request
- Communication processing : Image file is now transmitting
- Projector Busy : Projector is busy
- Receive time out : Time out
- Nothing is registered : No Image File
- Transmit error : Failed to connect with the Projector
- Illegal data receive : Projector's is set authentication but application isn't

[Note]

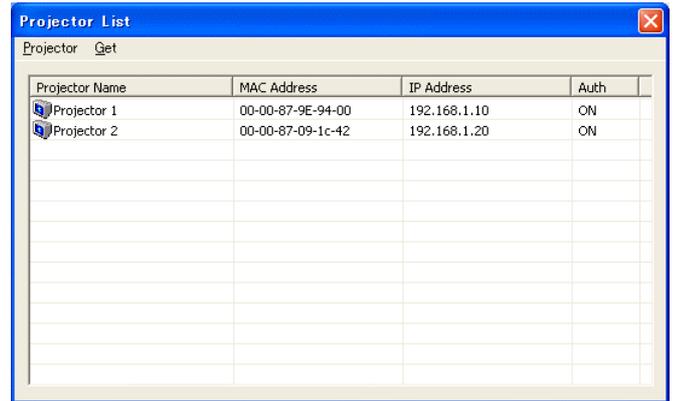
If file transmission failed, please confirm the projector and application's authentication setting and password.

- (3) Click [Close] and finish the "Image Information" screen.
(4) Select [Projector] - [Close] → “Projector List” screen is closed.

3.8.4 Get the Transmission State

How to get the Transmission State is shown here.

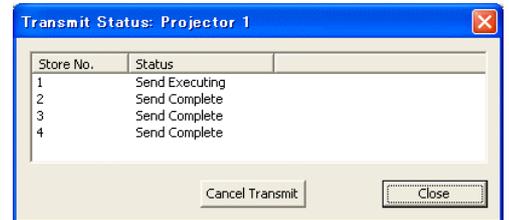
- (1) Select [Projector] - [Projector List], or click  :
→ “Projector List” screen appears.



Projector Name	MAC Address	IP Address	Auth
Projector 1	00-00-87-9E-94-00	192.168.1.10	ON
Projector 2	00-00-87-09-1c-42	192.168.1.20	ON

- (2) Select a projector that you want to get transfer status from the list, then select [Get] → [Transmit Status]. The status window will be appeared.

The following state is shown in the “Transmit Status” screen.



Store No.	Status
1	Send Executing
2	Send Complete
3	Send Complete
4	Send Complete

Cancel Transmit Close

- Send Complete : Transmission complete
- Send Executing : Transmitting
- Send Retry : Retrying the transmitting
- Projector Busy : Projector is Busy
- Send Error : Transmission failed
- Send Wait : Waiting for Transmission to other Store No.
- Transmit Error : Failed to connect the with the projector
- Illegal data receive : Projector's is set authentication but application isn't

[Note]

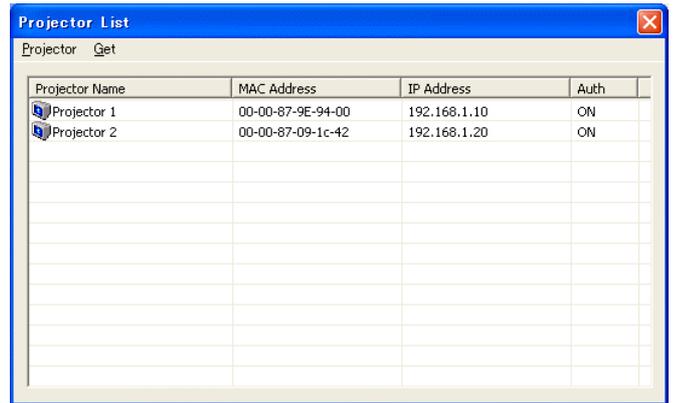
If file transmission failed, please confirm the projector and application's authentication setting and password.

- (3) Click [Close] and finish the "Transmit Status" screen.
(4) Select [Projector] - [Close] → “Projector List” screen is closed.

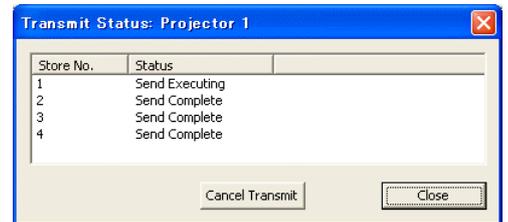
3.8.5 Cancel the Transmission

You need to display the Transmit Status window to cancel “on-going” sending images process.

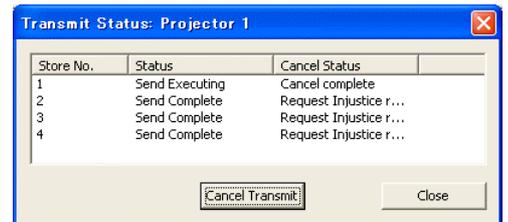
- (1) Select [Projector] - [Projector List], or click  :
 → “Projector List” screen appears.



- (2) Select a projector that you want to get transfer status from the list, then select [Get] → [Transmit Status]. The status window will be appeared.



- (3) Click [Cancel Transmit] on the “Transmit Status” window the following message will be displayed.



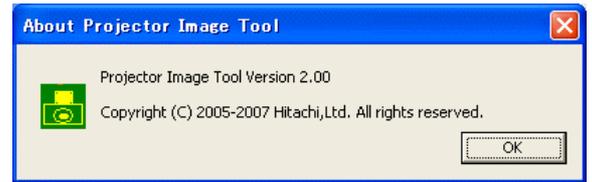
- Cancel Complete : Transmission cancel complete
- Request Injustice received : Unauthorized request
- Cancel failure : Transmission Cancel failed
- Projector Busy : Projector is Busy
- Receive time out : Timeout
- Illegal data receive : Projector's is set authentication but application isn't

Request Injustice received appears if you try to Cancel the Transmission while the Transmission is not proceeding.

- (4) Click [Close] and finish the ”Transmit Status” screen.
 (5) Select [Projector] - [Close] → “Projector List” screen is closed.

3.9 About this Application

You can check the version of this application. Select [Help] → [About Projector Image Tool], or click  .



4 Limitations

- The maximum file size is shown as follows.

Less than equal 130,816byte

This tool can transfer the file up to 130,816 bytes

- In some case the Projector Menu moves slowly during the Image Transmission.
- The time for the Transmission complete differs according the Projector's processing situation.