

# Projector Network Setup Software Operation Guide

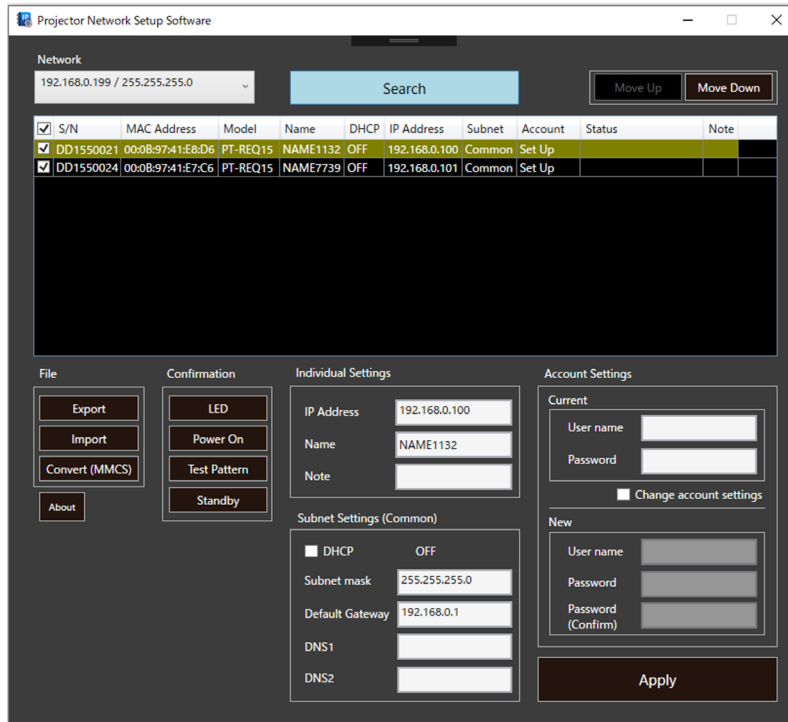
Thank you for purchasing this Panasonic product.

This document explains how to operate the projector network configuration software.

## ■ Introduction

This software allows you to simultaneously configure administrator accounts, network information such as IP addresses, and projector names for multiple projectors that are connected to the same network.

It also allows you to change already configured administrator accounts.



## ■ Things to Prepare

- A computer with a LAN port on which Windows 10, or Windows 11 is installed
- A LAN cable (straight or cross)  
Check with your network administrator regarding usability of straight or cross cables, or both, as this will differ according to your system configuration. For projectors, the cable type (straight or cross) is detected automatically.
- Projector network setup software (this software "ProjectorNetworkSetupSoftware.exe")

## ■ Preparation

1. **Place the ProjectorNetworkSetupSoftware.exe file in any convenient location on your computer.**
  - This software does not require installation. Directly launch and operate the executable file.
2. **Connect the computer to the network or projector using a LAN cable.**
3. **Put each projector to be configured into standby mode, or turn it on and put it into projection mode.**
  - For projectors for that have a [PROJECTOR SETUP] menu which includes the [STANDBY MODE] option, if the [STANDBY MODE] is set to [ECO], the administrator account, network information such as IP address, and the projector name cannot be set using this software while the projector is on standby. To set the administrator account, network information such as the IP address, and projector name in standby mode, first set the [STANDBY MODE] to [NORMAL] by using the menu.

## ■ Operating Procedure

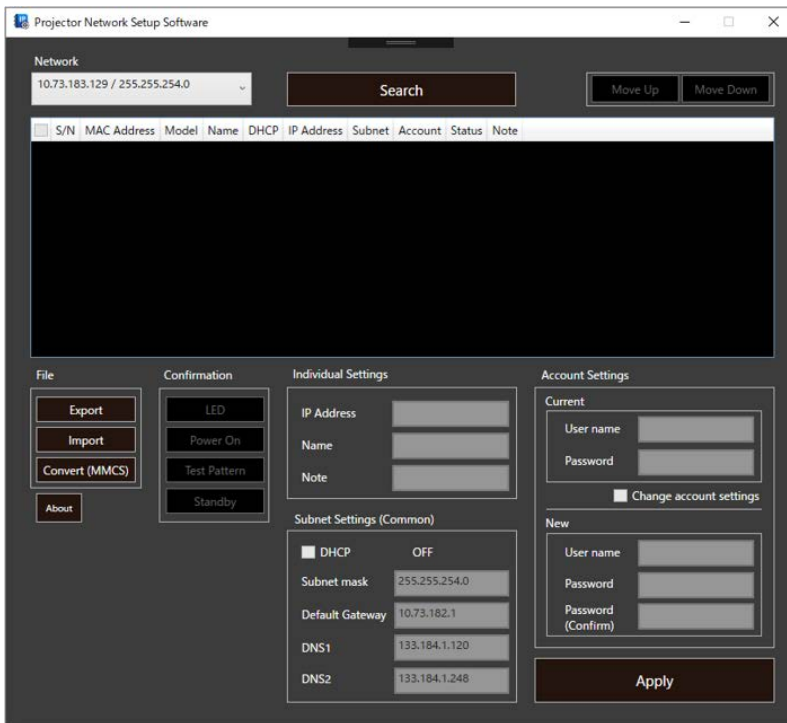
This software sets the administrator account, network information, and projector name for one or more projectors that are connected via LAN and displayed in the list. The maximum number of projectors that can be simultaneously configured is 256. Settings can be made using either of two methods.

- A) Entering configuration information into this software ➔ page 2
- B) Reading previously created configuration information and applying it to projector(s) ➔ page 6

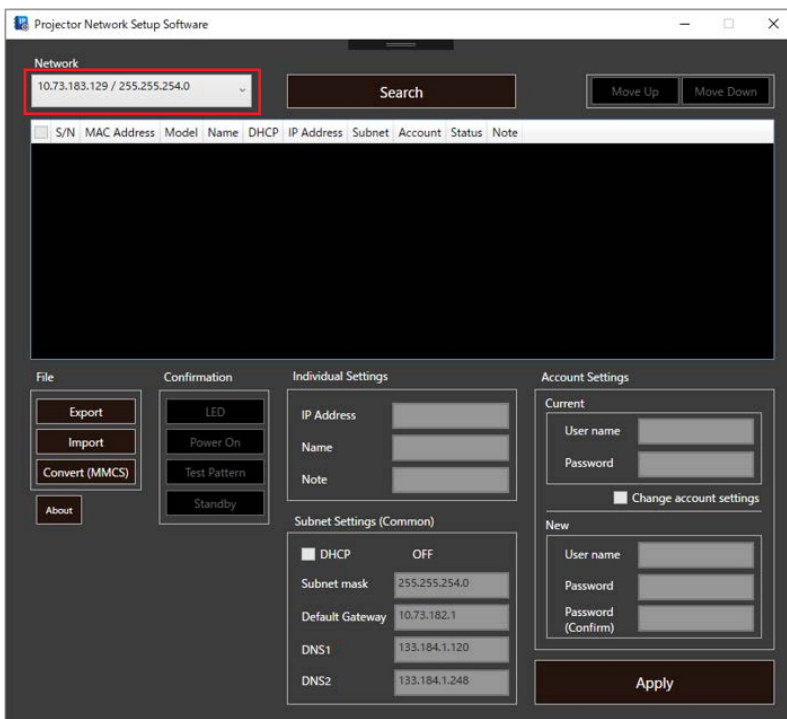
## A) Entering configuration information into this software

### 1. Launch this software (ProjectorNetworkSetupSoftware.exe).

- The following screen appears.

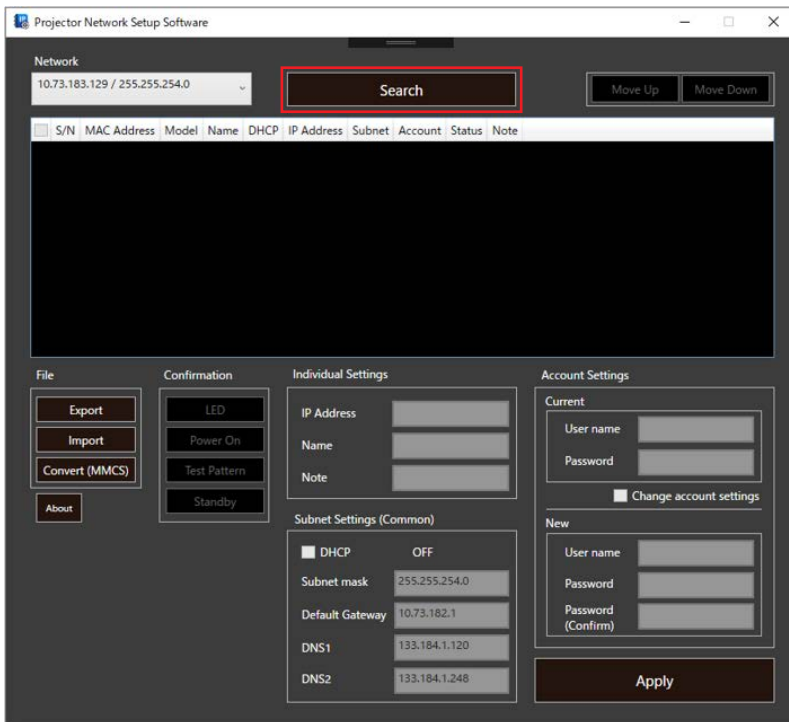


### 2. From the [Network] pull-down menu, select the network to which the computer is connected.



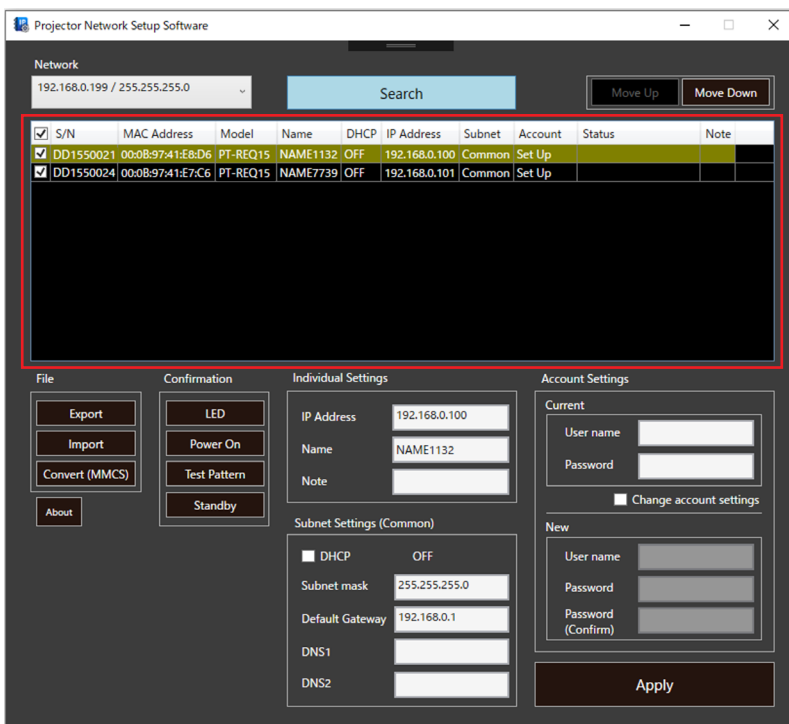
**3. Click the [Search] button.**

- Projectors on the network are located and detected projectors are displayed in the list.
- The maximum number of projectors that can be displayed as search results is 2048.
- This search only finds projectors that use IPv4 addresses. Projectors that use only IPv6 addresses cannot be found or configured.



**4. Place check marks in the check boxes of the projectors to be configured.**

- Place check marks in the check boxes on the rows containing the projectors to which settings are to be applied from the search results displayed in the list.
- Placing a check mark in the check box on the title row at the very top places check marks on all rows, and removing it clears the check marks from all rows.



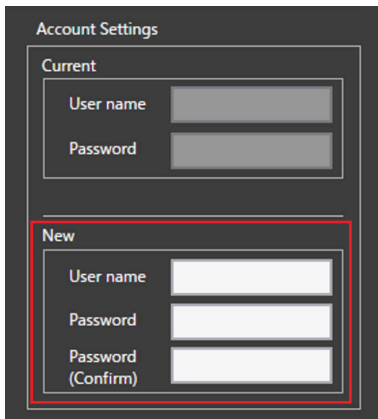
**5. Click to select the row of a projector for which to configure the administrator account and network information from the projectors in which you placed check marks in the check boxes in the previous step.**

**6. Enter the administrator account information for the selected projector.**

- The subsequent operation differs depending on whether an administrator account is set for the projector.
  - [Not Set Up] is displayed under [Account] for projectors that do not have an administrator account. In this case, go to "(a) When an administrator account has not been set up".
  - [Set Up] is displayed under [Account] for projectors that do have an administrator account. In this case, go to "(b) When an administrator account has been set up".
- To configure the network information and projector name, you first must set up an administrator account. To prevent malicious third parties from modifying network information, please restrict access by user name and password.
- For information on the characters and maximum number of characters that can be used for administrator account settings, see "Characters and maximum number of characters allowed in administrator account settings" (➔ page 8).

**(a) When an administrator account has not been set up**

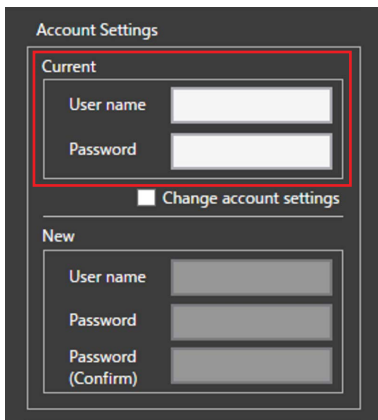
Enter the user name and password to be used for the administrator account in the [User name], [Password], and [Password (Confirm)] fields in [New] of [Account Settings].



The screenshot shows the 'Account Settings' form. It has two main sections: 'Current' and 'New'. The 'Current' section has 'User name' and 'Password' fields. The 'New' section has 'User name', 'Password', and 'Password (Confirm)' fields. A red box highlights the 'New' section.

**(b) When an administrator account has been set up**

Enter the user name and password of the administrator account set for the selected projector in the [User name] and [Password] fields in [Current] of [Account Settings].



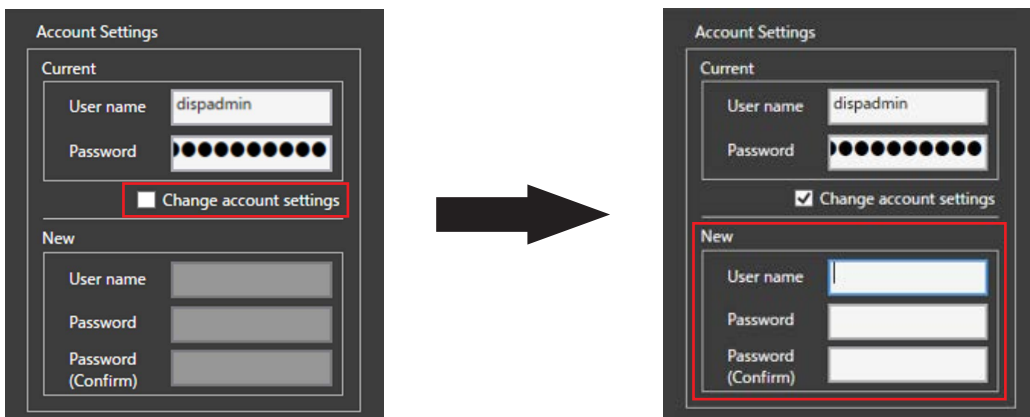
The screenshot shows the 'Account Settings' form. It has two main sections: 'Current' and 'New'. The 'Current' section has 'User name' and 'Password' fields. The 'New' section has 'User name', 'Password', and 'Password (Confirm)' fields. A red box highlights the 'Current' section. Below the 'Current' section is a checkbox labeled 'Change account settings' which is currently unchecked.

**When changing the administrator account information**

Place a check mark in the [Change account settings] check box.

The setting items in [New] of [Account Settings] for the new administrator account information become able to be entered.

Enter the new user name and password in the [User name], [Password], and [Password (Confirm)] fields.



The first screenshot shows the 'Account Settings' form with the 'Current' section filled with 'dispadmin' for the user name and a masked password. The 'Change account settings' checkbox is unchecked. A red box highlights the checkbox. A large black arrow points to the second screenshot. The second screenshot shows the 'Change account settings' checkbox checked. The 'New' section is now highlighted with a red box, indicating it is active for input.

## 7. Enter the network information for the selected projector.

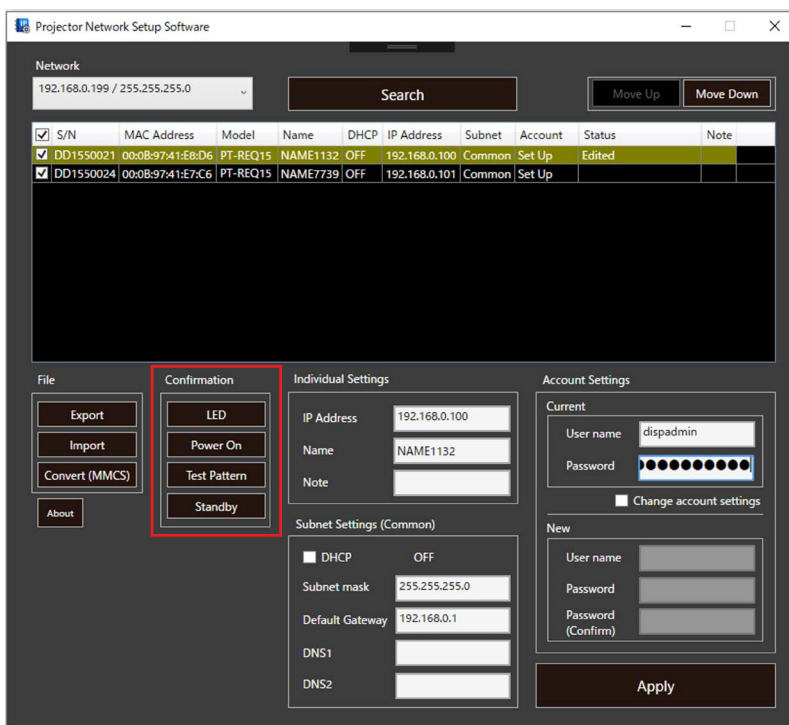
- See “Parameters You Can Set” (➔ page 8) for details on settings that can be made using this software.
- IP addresses can also be assigned automatically. If the [IP Address] field is left blank or filled with “\*”, an available IP address is assigned automatically. For details, see “Automatic IP address assignment” (➔ page 8).
- If [DHCP] of [Subnet Settings (Common)] is ON, [Subnet mask], [Default Gateway], [DNS1], and [DNS2] in [Subnet Settings (Common)] and [IP Address] in [Individual Settings] are displayed grayed out and cannot be set. To specify an IP address manually, remove the check mark from the check box to set [DHCP] to OFF, and then enter each setting item.
- If you want to change the IP address setting, edit the [IP Address] field in [Individual Settings]. When you update the information in [IP Address], [Edited] appears under the [Status] column of the projector list. Edit [Subnet mask], [Default Gateway], [DNS1], and [DNS2] in [Subnet Settings (Common)] as required.

## 8. Click the [Apply] button.

- The set information is reflected in the projectors with check marks placed in check boxes in the list. The display under the [Status] column of the list changes to [OK] for projectors in which the settings were reflected. The display under [Account] changes to [Set Up] for projectors that do not have an administrator account.
- This operation overwrites the network configuration information of all projectors with check marks placed in check boxes in the list. For projectors that you do not want to overwrite, first make sure that check marks are not placed in check boxes in the list.

## Notice

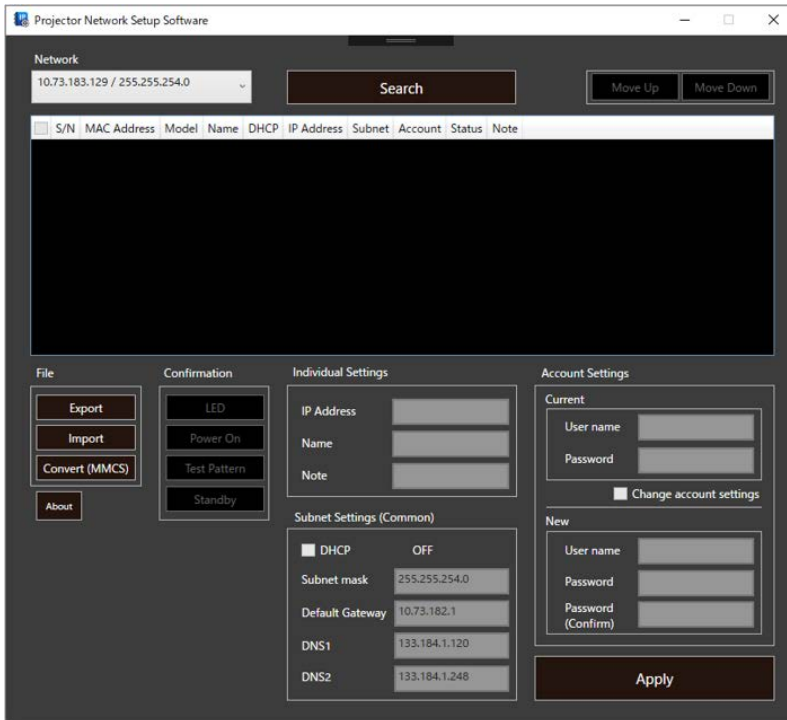
- The function to change already set up administrator account information can be executed only for projectors that support this function. If executed for projectors that do not support it, [Unknown error] appears under [Status] and the settings are not reflected.
- When configuring account information that is not configured or changing already configured administrator account and network information for multiple projectors, repeat steps 5 through 7 for each projector.
- The software does not have a redo function. If you accidentally overwrite the network settings, please set them again.
- If you need to verify the location of the currently selected projector, click the [LED] button. This causes the power indicator <ON(G)/STANDBY(R)> on the corresponding projector to flash for 5 seconds. If you cannot locate a projector by its flashing power indicator (such as when the projector is installed in a high location), operate the [Power On] button, [Test Pattern] button, and [Standby] button to check initiation of projection and test pattern display. Furthermore, to operate the [Confirmation] button, you need to have entered the administrator account information in [Current] of [Account Settings].



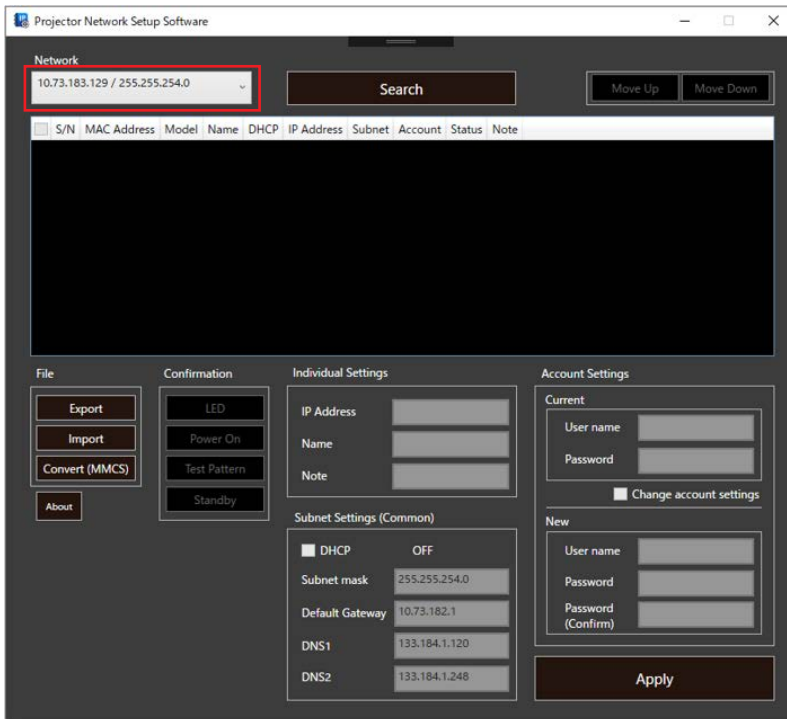
## B) Reading previously created configuration information and applying it to projector(s)

### 1. Launch this software (ProjectorNetworkSetupSoftware.exe).

- The following screen appears.



### 2. From the [Network] pull-down menu, select the network to which the computer is connected.



### 3. Click [Search].

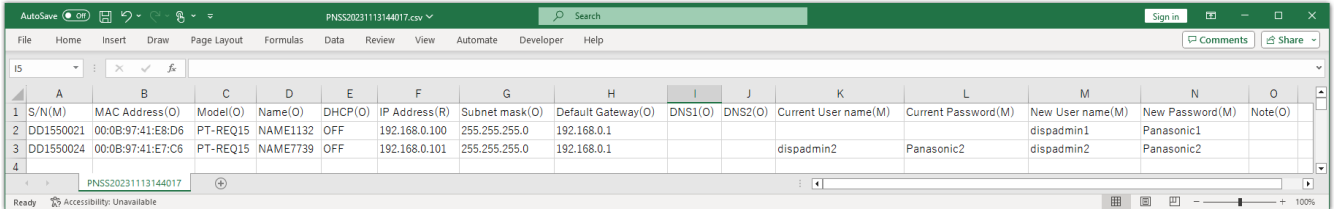
- Projectors on the network are located and detected projectors are displayed in the list.
- The maximum number of projectors that can be displayed as search results is 2048.
- This search only finds projectors that use IPv4 addresses. Projectors that use only IPv6 addresses cannot be found or configured.
- You can also export an editable CSV file containing only parameter names. In that case, do not perform the operation in step 3, but go to step 4.

### 4. Click [Export].

- A file in CSV format is generated on the computer desktop listing projectors that are included in the list. The file name consists of "PNSS" and the date and time the file was created. (Example: PNSS20180412170704.csv)
- If you click [Export] while no projector is displayed in the list, an editable CSV file containing only the parameter names is exported for editing.

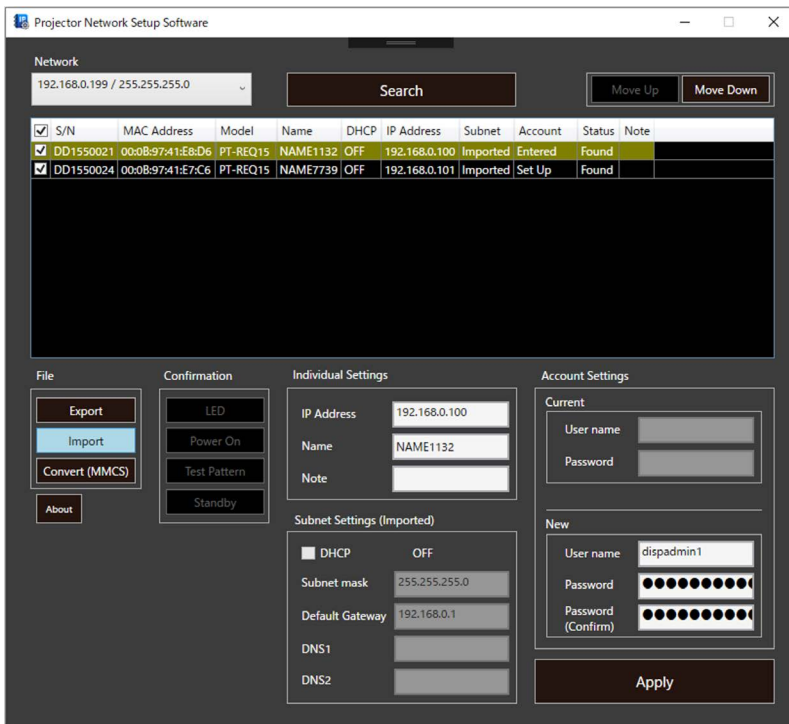
**5. Edit the CSV file using Excel or a similar spreadsheet software or editor.**

- Enter the network information (IP address, etc.) to be set for the projector, the user name and password set for the projector’s administrator account, and other device information such as the serial number. For details on items that can be entered, see “About CSV Files” (➔ page 9).
- For projectors that have not been configured with an administrator account, also be sure to enter the user name and password for the administrator account. In the list, [Not Set Up] is displayed under [Account] for projectors which an administrator account has not been set.
- If the user name specified for the administrator account contains characters that cannot be used or exceeds the maximum number of characters, it is regarded as a format error upon import into the projector and [Format error] is displayed under [Status]. For details on items that can be entered, see “About CSV Files” (➔ page 9).
- You can choose to leave the IP address blank. If no IP address is entered, a free IP address in the currently connected network is assigned automatically. For details, see “Automatic IP address assignment” (➔ page 8).



**6. Click the [Import] button and select the edited CSV file.**

- The CSV file can also be imported without clicking the [Import] button by dragging and dropping the file into the list.
- If a projector listed in the CSV file is detected in the currently selected network, [Found] is displayed under [Status]. [Not Found] is displayed for any projectors that are not detected.
- If you set up a new administrator account by importing a CSV file, the contents are reflected in the [User name] and [Password] fields in [New] of [Account Settings], and the display under [Account] changes to [Entered], enabling entry of information such as IP addresses.



**7. Select the projector to which settings are to be applied in the list.**

**8. Click the [Apply] button.**

- The contents of the CSV file are reflected in the selected projector, the [Status] display changes to [OK] and the [Account] display will change to [Set Up].

**Notice**

- The software does not have a redo function. If you accidentally overwrite the network settings, please set them again.



## ■ Parameters You Can Set

Using this software, you can set the following parameters.

| Parameter       | Entry type | Contents  |
|-----------------|------------|---|
| IP Address      | Individual | Sets the IP address (IPv4).   |
| Name            | Individual | Sets the projector name.  |
| DHCP            | Common     | Enables or disables DHCP. When set to ON, the IP address, subnet mask, default gateway, and DNS1/DNS2 addresses are obtained automatically. |
| Subnet mask     | Common     | Sets the subnet mask.   |
| Default Gateway | Common     | Sets the IP address of the default gateway. Network connection is possible even if this parameter is not set.                               |
| DNS1            | Common     | Sets the IP address of the primary DNS server. Network connection is possible even if this parameter is not set.                            |
| DNS2            | Common     | Sets the IP address of the alternate DNS server. Network connection is possible even if this parameter is not set.                          |
| User name       | Individual | Sets the user name of the administrator account.  |
| Password        | Individual | Sets the password of the administrator account.   |

Individual: Values entered into each row of the list are applied individually to each projector.

Common: The same common value is applied to all projectors appearing in the list.

### Characters and maximum number of characters allowed in administrator account settings

The characters and maximum number of characters allowed in the user name and password for the administrator account are as follows.

**User name:** Up to 16 alphanumeric symbols excluding “.”.

**Password:** Up to 16 alphanumeric characters and symbols

### Characters and maximum number of characters allowed in the projector name

The characters that can be used are as follows.

**Alphabet:** A to Z, a to z (Lower-case letters can be used to set the projector name only if the projector name previously included lower-case letters.)

**Numerals:** 0 to 9

**Symbols:** “-”, “.”

The maximum number of characters is 8 single-byte characters. However, if the projector already had a name of 9 or more characters before setting, the maximum number of characters is the number of characters in the prior projector name.

### Automatic IP address assignment

When making or importing network settings, if an IP address field is left blank or contains an asterisk, an IP address is assigned automatically from available addresses within the subnet range excluding the specified default gateway and DNS addresses (DNS1 and DNS2).

The table below shows a typical network configuration for a computer on which this software is used.

|                 |               |
|-----------------|---------------|
| IP address      | 192.168.10.20 |
| Subnet mask     | 255.255.255.0 |
| Default gateway | 192.168.10.1  |
| DNS1            | 192.168.10.2  |
| DNS2            | 192.168.10.3  |

When you apply a value from the “IP address entry example” column of the following table from the computer on which this software is being used by entering it into the network settings or importing it from a CSV file, an address will be assigned automatically as indicated in the “Automatically assigned IP address” column. Note that the asterisk must always be the last character in the entered string. If it is included in the middle of a string, characters following the asterisk are ignored.

| IP address input example | Automatically assigned IP address  |
|--------------------------|--|
| Blank                    | Any available IP address from 192.168.10.4   |
| *                        | Any available IP address from 192.168.10.4   |
| 192.*                    | Any available IP address from 192.168.10.4   |
| 192.168.10.1*            | Any available IP address from 192.168.10.10  |
| 192.168.10.2*            | Any available IP address from 192.168.10.21 (excluding the IP address “192.168.10.20” of the computer on which you are using the software) |
| 192.168.10.10*           | Any available IP address from 192.168.10.100   |

### Notice

- If there are no available IP addresses, a warning is displayed and automatic assignment is not performed.



## ■ About CSV Files

The exported CSV file contains information such as serial numbers and IP addresses that are required for network configuration.

Example of CSV file:

| S/N(M),MAC Address(O),Model(O),Name(O),DHCP(O),IP Address(R),Subnet mask(O),Default Gateway(O),DNS1(O),DNS2(O), Current User name(M),Current Password(M),New User name(M),New Password(M),Note(O) |
|---|
| SD0000001,00:00:00:00:00:01,PT-VMZ51,Name0001,OFF,192.168.10.101,255.255.255.0,192.168.10.1,192.168.10.1,,admin1,panasonic,,  |
| SD0000002,00:00:00:00:00:02,PT-VMZ51,Name0002,OFF,192.168.10.101,255.255.255.0,192.168.10.1,192.168.10.1,,admin1,panasonic,,  |
| SD0000003,00:00:00:00:00:03,PT-VMZ51,Name0003,OFF,192.168.10.101,255.255.255.0,192.168.10.1,192.168.10.1,,admin1,panasonic,,  |
| SD0000004,00:00:00:00:00:04,PT-VMZ51,Name0004,OFF,192.168.10.101,255.255.255.0,192.168.10.1,192.168.10.1,,admin1,panasonic,,  |

The first line indicates the name of each parameter. If no projectors appear in the list, a CSV file containing only the parameter names will be output. Do not delete the parameter names.

The letters M, R, and O to the right of each item name indicate the necessity for entry of each item. The meanings of these letters are indicated in the table below.

| Letter          | Necessity   |
|-----------------|---|
| M (Mandatory)   | Entry is required. (Entry of Current User name, Password, New User name, and Password may not be required depending on the configuration state of the administrator account.) |
| R (Recommended) | It may be filled in automatically, but manual entry may be required.  |
| O (Optional)    | Enter as required. Network connection is possible even if this parameter is not entered.  |

The second and following lines are each composed of the following parameters.

| Parameter         | Letter | Contents  |
|-------------------|--------|---|
| S/N               | M      | Serial number of the target projector.  |
| MAC Address       | O      | MAC address of the target projector. Network configuration is possible even without entering a serial number when a MAC address is entered.   |
| Model             | O      | Model name of the target projector. This item is not used for network configuration. If not entered, the model name of the projector that matches the serial number or MAC address on the selected LAN is assigned.   |
| Name              | O      | Projector name to be set to the target projector. If not entered, the projector name of the projector whose serial number or MAC address matches the selected LAN is assigned.  |
| DHCP              | O      | Specify whether DHCP for the target projector is to be set ON or OFF. If not entered, it is set to OFF. When set to ON, the IP address, subnet mask, default gateway, and DNS1/DNS2 addresses cannot be set.  |
| IP Address        | R      | Enter the IP address (IPv4) to be set to the target projector. When DHCP is set OFF and no IP address is entered, or when an IP address is specified using an asterisk, a valid, unique IP address within the selected LAN is assigned automatically.   |
| Subnet mask       | O      | Enter the subnet mask to be set to the target projector. If DHCP is OFF and the subnet mask is not entered, the [Subnet mask] value in [Subnet Settings (Common)] will be used for applying network settings.   |
| Default Gateway   | O      | Enter the IP address of the default gateway to be set to the target projector. Network connection is possible even if this parameter is not set. If DHCP is set ON, entry is not required.  |
| DNS1              | O      | Enter the IP address of the primary DNS server. Network connection is possible even if this parameter is not set. If DHCP is set ON, entry is not required.   |
| DNS2              | O      | Enter the IP address of the alternate DNS server. Network connection is possible even if this parameter is not set. If DHCP is set ON, entry is not required.   |
| Current User name | M *1   | Enter the user name of the administrator account that was set to the target projector. Entry is not required when an administrator account has not been set up.   |
| Current Password  | M *1   | Enter the password for the administrator account that was set to the target projector. Entry is not required when an administrator account has not been set up.   |
| New User name     | M *2   | If the administrator account has not been set up or if you want to change the set up administrator account for the target projector, enter the user name of the administrator account to be configured. You can use up to 16 alphanumeric characters and symbols.   |
| New Password      | M *2   | If the administrator account has not been set up or if you want to change the set up administrator account for the target projector, enter the password of the administrator account to be configured. You can use up to 16 alphanumeric characters and symbols.  |
| Note              | O      | You can enter supplemental information about the target projector or the like using single-byte alphanumeric characters and symbols. This information is not used for network configuration, but is displayed in the list of this software. While information exceeding 32 characters can be entered, the maximum number of characters displayed in the list is 32. |

\*1 Entry is not required when an administrator account has not been set up.

\*2 Enter this when setting up an administrator account or when changing the already configured information.

## Points to note about CSV files

- If the user name and password start with a symbol (e.g., @Panasonic), Excel may interpret the name as a function when you try to change the user name and password in Excel. In such case, edit the relevant cells using a text editor such as Notepad. All other cells of the CSV file can be changed using Excel.

## ■ Status

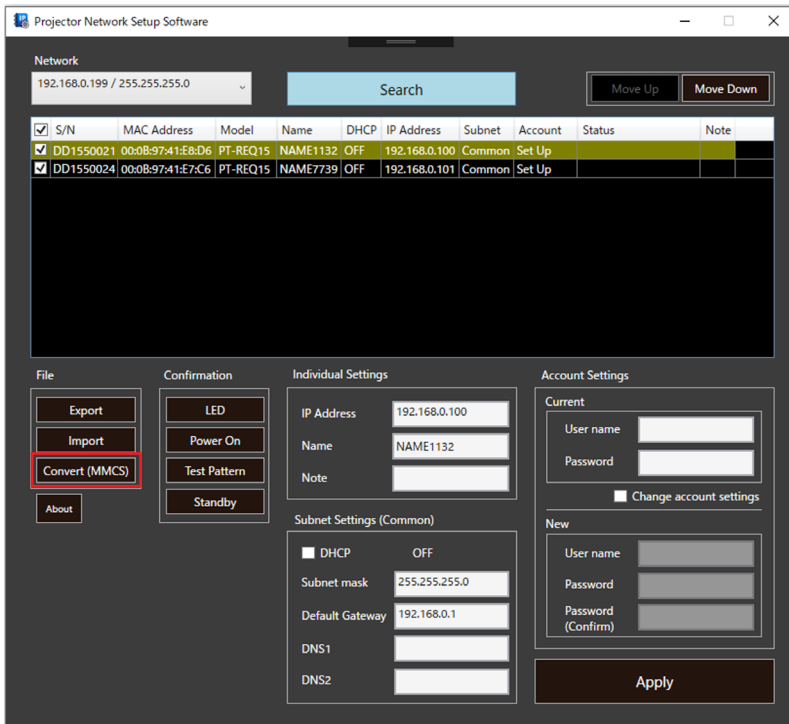
The following statuses are displayed under [Status] in the list. Projector statuses other than [OK], [Edited], and [Found] are displayed in red letters.

| Status                           | Description   |
|----------------------------------|---|
| OK                               | The projector was located and its network settings have been successfully configured.   |
| Edited                           | Editing of projector settings has been completed.   |
| Found                            | The projector was found on the LAN.   |
| Not found                        | The projector was not found on the LAN.   |
| Format error                     | Formatting error in the imported file.  |
| IP Address overlapped            | The LAN contains a duplicate IP address   |
| Invalid IP Address               | The IP address is invalid.  |
| No unused IP Address             | No IP addresses within the specified range are available for automatic assignment.  |
| Invalid Current Account Settings | The administrator account information entered in [Current] of [Account Settings] does not match the administrator account information configured in the projector.              |
| Invalid New Account Settings     | The administrator account information entered in [New] of [Account Settings] is invalid. (No user name was specified. The password and password for confirmation do not match.) |
| Operation not allowed            | Network configuration failed due to concurrent operation of the network menu.   |
| Unknown error                    | The projector did not accept the network settings for some unknown reason.  |
| Designated IP Address not set    | Network configuration was performed, but the designated IP address was not set.   |
| DHCP not serve IP Address        | DHCP was enabled, but no IP address was assigned.   |
| Response timeout                 | Network settings were made, but communication from the projector timed out.   |

## ■ Transferring Settings to Multi-Projector Monitoring and Control Software

Settings made using this software can be imported into multi-projector monitoring and control software. The import procedure is as follows.

1. Select the network, search for the projector, and click the [Convert (MMCS)] button.



- A UGK file is created with the name “MMCS” followed by numbers indicating the year, month, day, hour, minute, and second (e.g., MMCS20180412170704.ugk).
2. Start the multi-projector monitoring and control software, and then import the projector registration information file (extension: .ugk) from the [Device Management] > [Importing an external setup file] > [Geometry Manager Pro] menu.
- Projector information is imported into the multi-projector monitoring and control software.

## ■ Trademarks

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