CITIZEN

POS Printer Utility Manual

CITIZEN SYSTEMS JAPAN CO., LTD.

Introduction

The POS Printer Utility can perform the internal setup of a printer easily.

Also, it can edit BMP, GIF and JPG types of images, to register logo data into NV memory (flash memory) of the printer and to perform test printing.

Supported Models

CT-D101,

CT-D150, CT-D151,

CT-E301, CT-E351,

CT-E601, CT-E651,

CT-S251,

CT-S280, CT-S280II, CT-S281, CT-S281BD, CT-S281II,

CT-S300, CT-S310, CT-S310II,

CT-S601, CT-S601II, CT-S601IIR,

CT-S651, CT-S651II,

CT-S751,

CT-S801, CT-S801II,

CT-S851, CT-S851II,

CT-S2000,

CT-S4000, CT-S4500,

CT-P291, CT-P293,

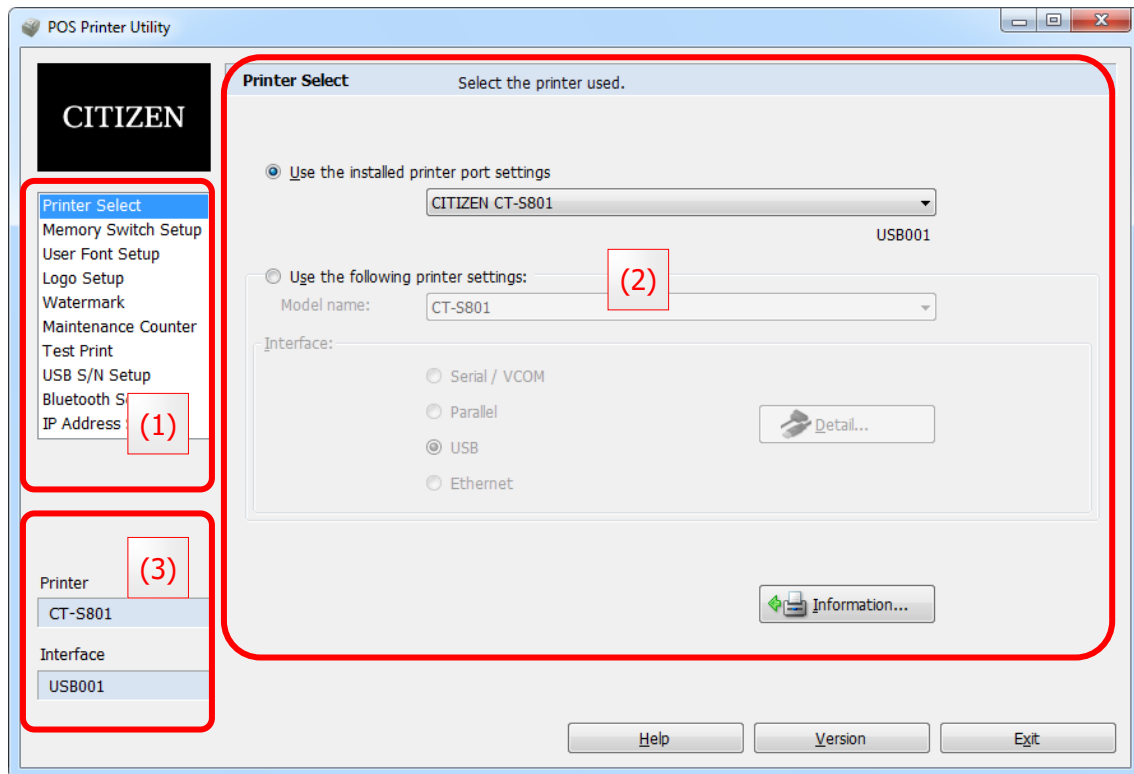PMU2300III,

PMU3300,

PPU-700II

Supported OS

Windows 7 or later

Requires: .NET Framework 4.8

Basic usage

When you click on setting items of (1) on the left-hand side of screen, the right-hand side screen (2) is changed and setting on each item can be performed.

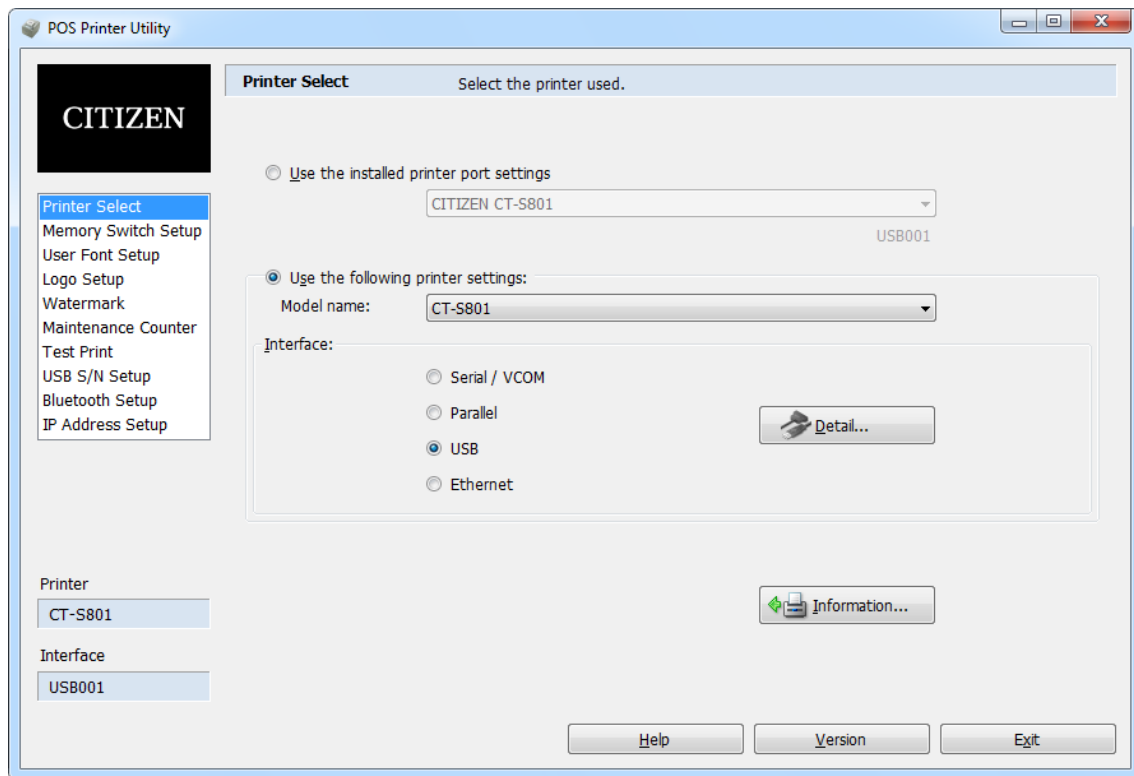The current printer and interface are displayed on the left-lower part (3) of screen.

Common Buttons

[Help]	Displays the manual for POS Printer Utility.
[Version]	Displays the version information for POS Printer Utility.
[Exit]	Exits the POS Printer Utility.

Printer Select

Select the printer and the interface.

[Use the installed printer port settings] radio button

You can choose from the installed printer.

Click the ⬛ to select the printer used.

[Use the following printer settings] radio button

You can manually select a model and an interface.

Click [Model name] list and [Interface] radio button, select the printer used.

Click [Detail...] button, and set the details of Interface.

[Information...] button

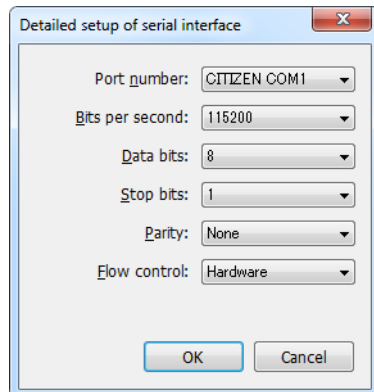Acquisition of printer information is tried and the result is displayed.

The contents of a display change by a model.

Detailed Setup of Interface

Perform the detail setting of the interface.

*Some items may not be displayed if the selected interface is Parallel or USB.

Serial interface

Port number:

Select the port number.

Bits per second:

Select the baud rate from [1200] to [115200].

The selectable value changes by a model.

Data bits:

Select the data bit from [7] or [8].

Stop bits:

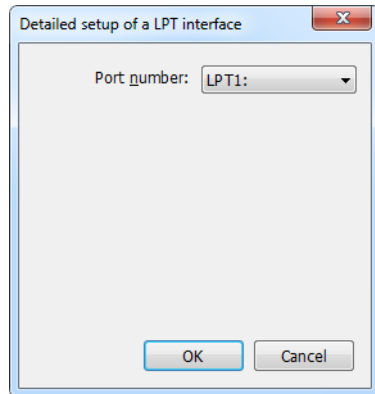Select the stop bit from [1] or [2]

Parity:

Select the serial parity from [None], [Odd] or [Even].

Flow control

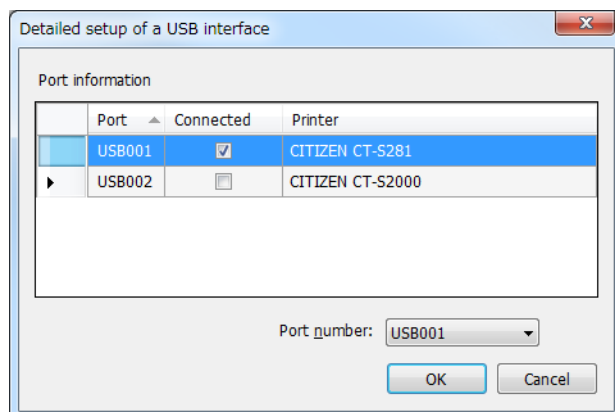Select [DTR/DSR], [Xon / Xoff] for Serial flow control.

Parallel interface

Port number:

Select the port number.

USB interface

Port information:
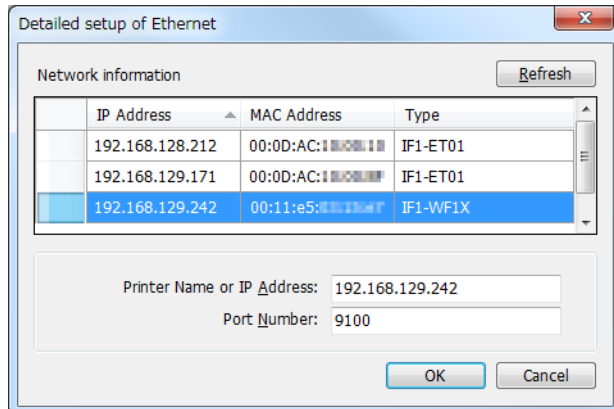
Display the port information.

You can choose the port number by clicking on the port information.

Port number:

Select the port number.

*If you are using Virtual COM on the USB interface, please refer to the detailed setup of "Serial interface".

Ethernet

Network information:

      Display the network information.

      You can choose the IP address by clicking on the network information.

[Refresh] button

      Search the network printers and display it.

      Searchable network interface boards are as follows.

      IF1-ETxx, IF2-ETxx, IF1-WFxx, IF2-WFxx, IF1-ESxx

Port Name or IP Address:

      Type the port name or IP address.
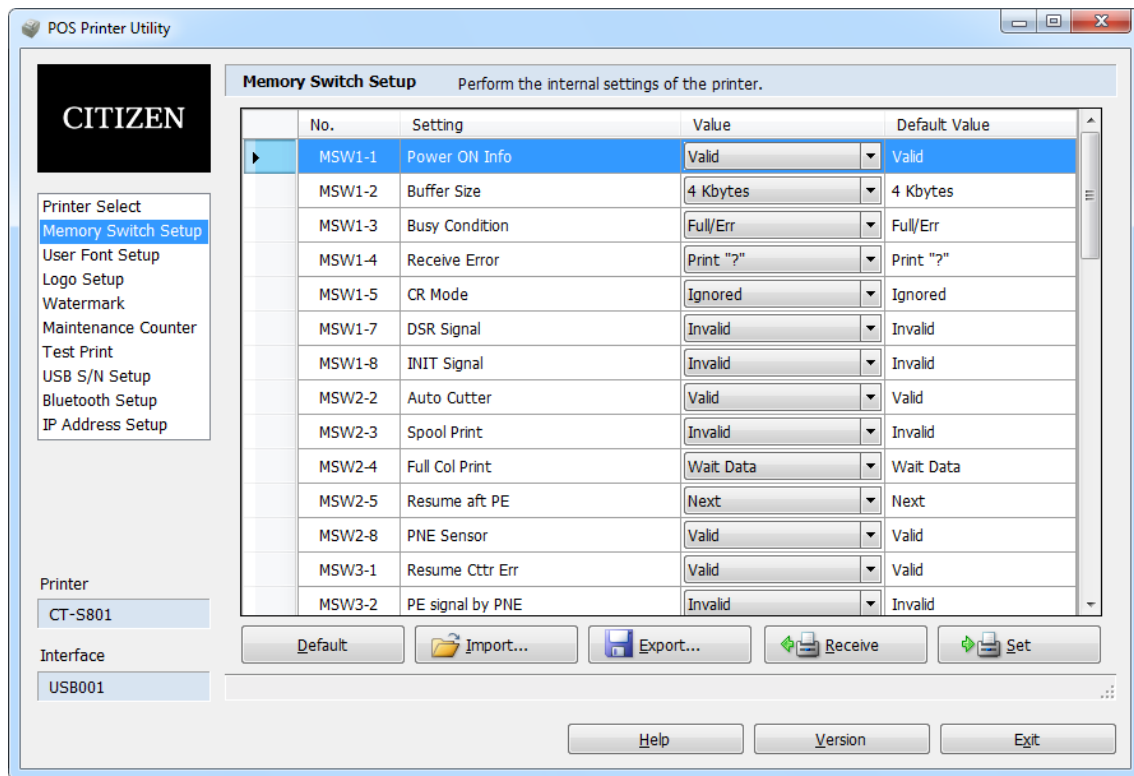
Port number:

      Type the port number.

*If driver uses **"SEH Print Monitor"** or **"Standard TCP/IP Port"**, you must uncheck **[Enable bidirectional support]** of the port.

If driver uses **"CITIZEN TCP/IP Port"**, the above setting is not necessary.

Memory Switch Setup

Perform the printer's Memory Switch Setup. The setting can also save and open.

* Display setting item varies depending on the selected printer.

For setting items, please refer to the **user's manual** for each printer.

* This function may differ from the actual product.

Memory Switch Setup

Click the ⏷ to select a Value of each line.

Example

Button function

[Default] button

Return the Values to the Default Value.

* Depending on the destination, the default value may differ from the actual product.

[Import...] button

Reads the settings from the exported file for utility, and display the contents in the screen.

[Export...] button

Save the screen settings to the file.

You can choose the save format from [for Printer Registration] or [for Utility].
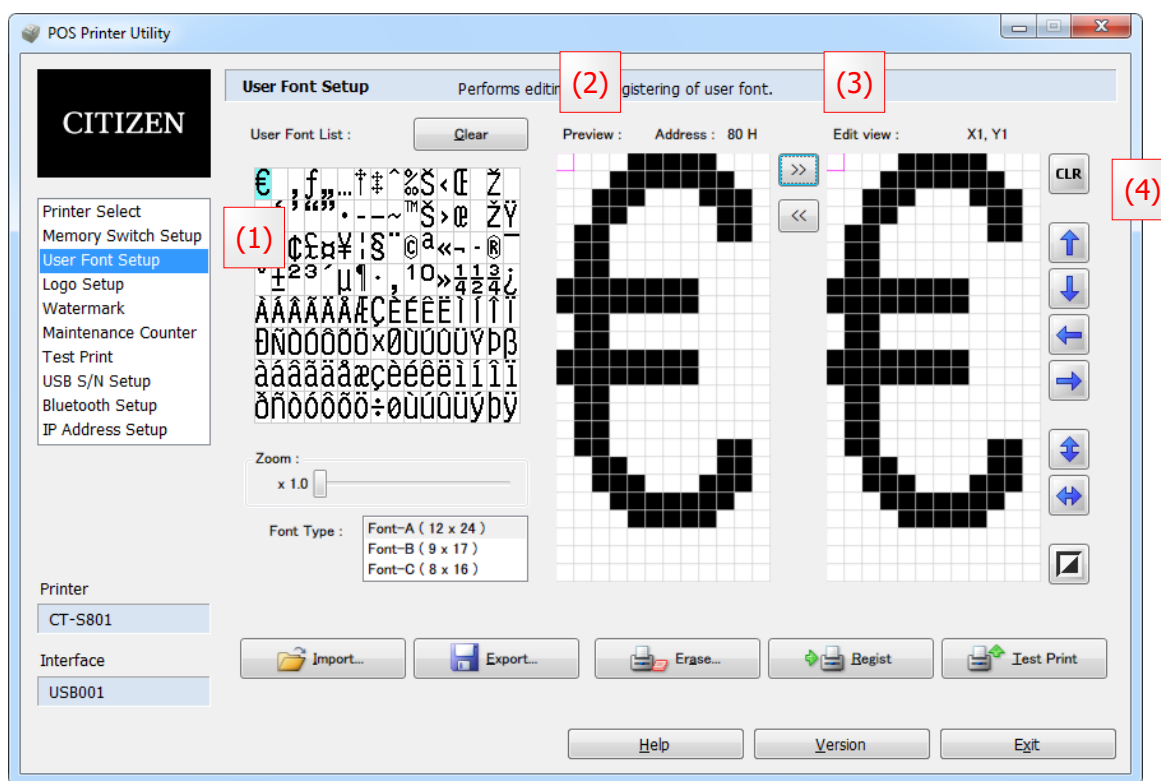
[Receive] button

Reads the current printer setting, and display the contents in the screen.

[Send] button

Send the screen settings to the printer.

User Font Setup

Performs the user font setup.

Editing and registration procedures

1. Selects the font type

Click the [Font Type] list to select the font type to edit. Size of Font-B is different by a model.

2. Selects the existing user font

Select the font file to edit on [Import] dialog box, which will open by clicking [Import ...] button. Then, the fonts are listed on [User Font List] (1).

[Clear] button: Clears the list of [User Font List] (1).

[Zoom] slider: Zooms in on the list of [User Font List] (1).

3. Copy the font to [Edit View] (3)

To copy the font to [Edit View] (3), double-click the font of [User Font List] (1). At this time, [Preview] (2) is also updated.

If you single-click the font of [User Font List] (1), [Preview] (2) only to copy. Further if you want to copy to [Edit View] (3), click the `>>` button.

4. Edits the Font

Left-click (drag) is set to black and right-click (drag) is set to white on [Edit View] (3).

[Edit View] tool button group (4)

CLR	All dots clear to white.
⬆	1 dot up rotation.
⬇	1 dot down rotation.
⬅	1 dot left rotation.
➡	1 dot right rotation.
⬍	Vertical flip.
⬌	Horizontal flip.
◪	Black & white reversal.

5. Copy the font to [User Font List] (1)

To copy the font to [User Font List] (1) from [Edit View] (3), click the `<<` button. At this time, [Preview] (2) is also updated.

If necessary, save the [User Font List] (1) by [Save file...] button.

6. [User Font List] (1) registration

[User Font List] (1) to register the printer by click the [Regist] button.

[Print] button: Prints the list of registered fonts.

Erasing procedures

1. Open [Erase user font] dialog

Click [Erase...] button on [User Font Setup] screen and opens [Erase user font] dialog box.
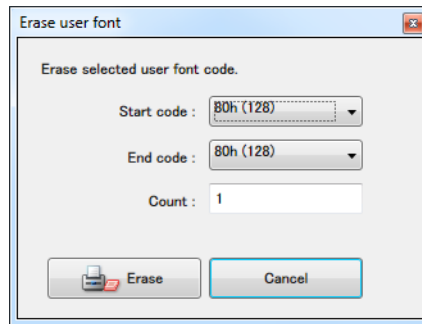
2. Select the font address

Select each of [Start code] and [End code].

The number of the selected fonts appears at [Count].

3. Erasing

Click [OK] button and start erase.

Logo Setup

Performs editing and registering of logo data.
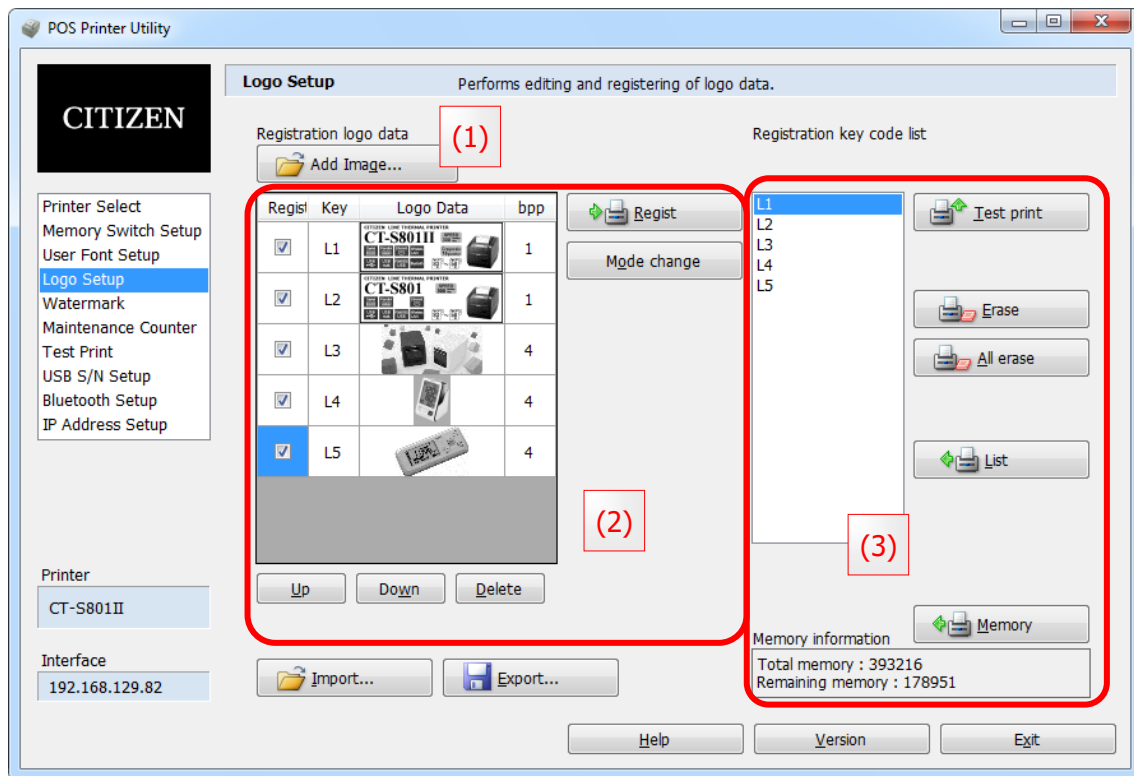
The above figure is one example that supports to Key code mode.

* Supported image file formats: BMP, GIF, JPG, PNG.

[Import...] button

> Reads the settings from the exported file for utility, and add to the list of Registration logo data.

[Export...] button

> Save the screen settings to the file.
>
> You can choose the save format from [for Printer Registration], [for Utility] or [BMP picture].

Add image procedure [Logo Setup screen (1)]

Processing the selected image and add to the list.

1. Select an image on [Open] dialog that appears by **[Add Image...] button**.

2. Specifies the size of Image by **[Width]** and **[Height]**.

   * If checked in [Aspect ratio is fixed], change without changing the aspect ratio.
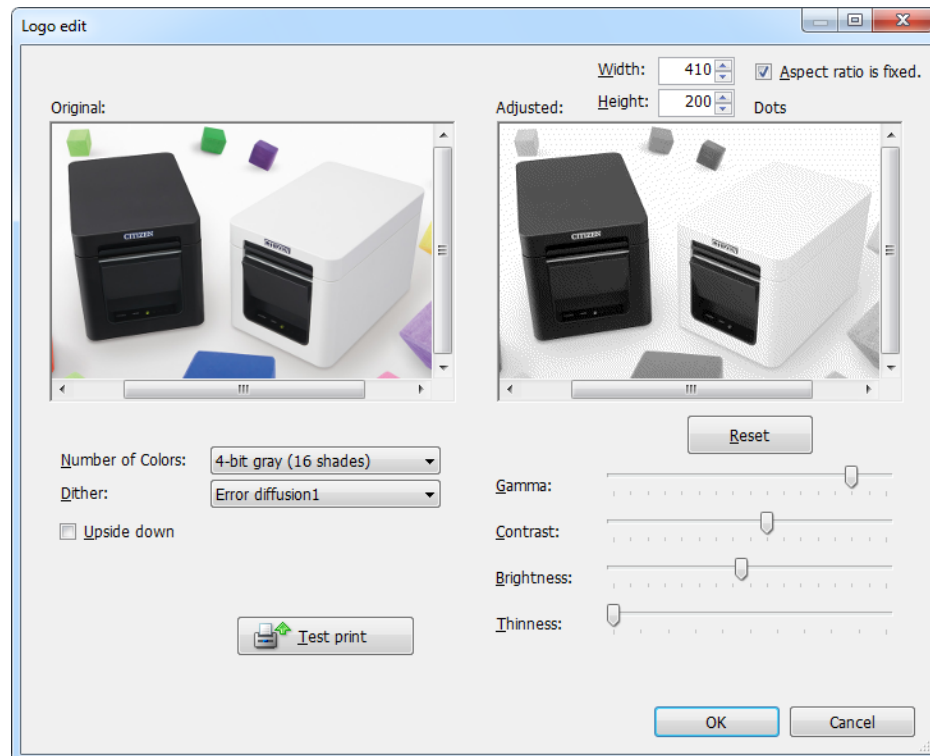
   * If checked in [Upside down], change upside down.

3. Specifies the reduced number of colors by **[Number of Colors]**.

[gray] Supported model:	CT-D151, CT-E601, CT-E651, CT-S251, CT-S601II, CT-S601IIR, CT-S651II, CT-S751, CT-S801II, CT-S851II

4. Specifies the color reduction method of the selected image by **[Dither]**.

5. Adjust the selected image by **[Gamma]**, **[Contrast]**, **[Brightness]** and **[Thinness** (thin out the black dot)**] slider**.

   * Return the adjust value to default by **[Reset] button**.

6. Print the adjusted image by **[Test print] button** and check the amount of adjustments.

   * The image is not registered to the printer.

7. Add the adjusted image by **[OK] button** to the list of Registration logo data.

Image registration procedure [Logo Setup screen (2)]

Set logo registration mode, registration order, key code, check the logo and register.

1. Select logo registration mode by **[Mode change] button**.

   Logo registration mode can be selected for the following two types.

          Unused key code mode: FS q command

          Key code mode: GS (L command

   *Conditions:

[Key code mode] Unsupported model:	CT-S280, CT-S281, CT-S281BD, CT-S300, CT-S310, CT-P291, CT-P293, PMU2300III, PMU3300

2. Change the position by **[Up]** / **[Down] button**.

   If you wish to change registration order, please make registration by changing position since the checked logo data is registered in printer by top-to-bottom order.

   Delete logo data under selection with **[Delete] button**.

3. Specifies the key code to **[Register] column**.

   Unused key code mode: The key code becomes invalid (registration order).

   Key code mode: Enter the any two alphanumeric characters.

   Recommended key code:

 | Usage environment | Recommended key code |
   |---|---|
   | Windows Driver v2.8 or earlier | **"L1"**-**"L5"** |
   | Windows Driver v3.0 or later | **"L1"**-**"L9"** |
   | Each POS Print SDK, OPOS, etc. | **"01"**-**"20"** |

4. Check the checkbox for registration in **[Regist] column**.

5. Register the checked logo data by **[Regist] button** and then print it.

      Please make sure that the prints are correctly.

      If you use on Windows, please see "**Windows Driver Specifications**".

Logo print [Logo Setup screen (3) Key code mode]
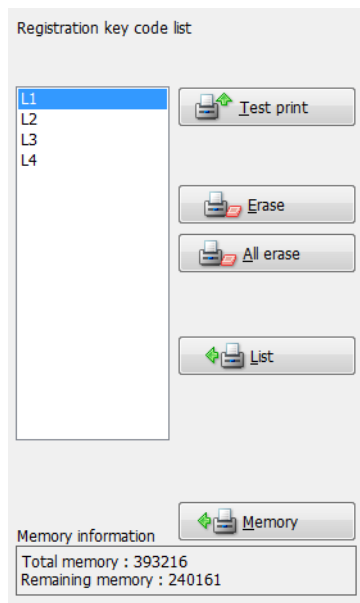
- Print NV registered logo data selected by **[Test print] button**.
- Erase NV registered logo data selected by **[Erase] button**.
- Erase all NV logo data selected by **[All erase] button**.
- Obtain the list of NV registered logo data from printer by **[List] button**.
- Display the memory information of the printer by **[Memory] button**.

Logo print [Logo Setup screen (3) Unused key code mode]

Registration number list

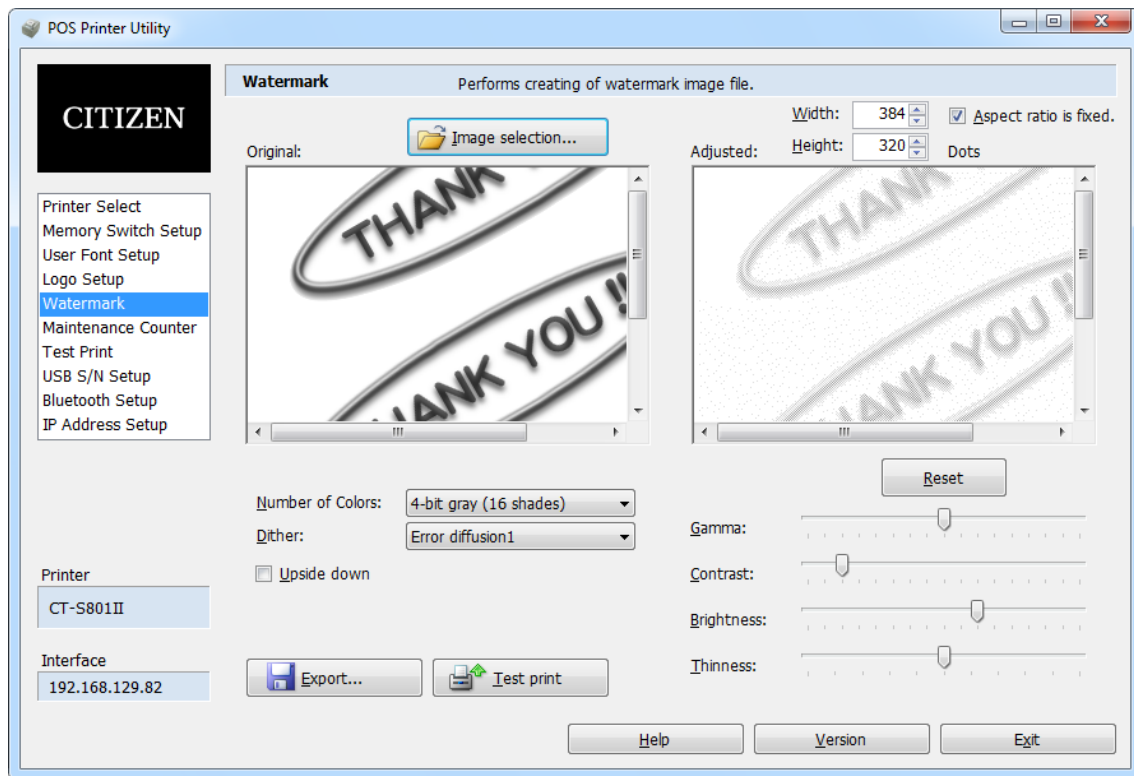| |
|---|
| 1 |
| 2 |
| 3 |
| 4 |
| 5 |
| 6 |
| 7 |
| 8 |
| 9 |
| 10 |
| 11 |
| 12 |
| 13 |
| 14 |
| 15 |
| 16 |
| 17 |
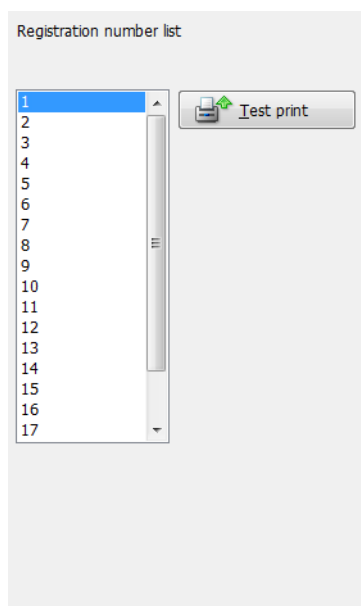
[Test print]

- Print logo data under selection by **[Test print] button**.

Watermark

Performs creation of watermark image file for the Windows Driver v2.0 or later.

Creation procedure

1. Select an image in [Open] dialog that appears by **[Image selection...] button**.
2. Specifies the size of Image by **[Width]** and **[Height]**.
   * If checked in [Aspect ratio is fixed], change without changing the aspect ratio.
   * If checked in [Upside down], change upside down.
3. Specifies the reduced number of colors by **[Number of Colors]**.

[gray] Supported model:	CT-D151, CT-E601, CT-E651, CT-S251, CT-S601II, CT-S601IIR, CT-S651II, CT-S751, CT-S801II, CT-S851II

4. Specifies the color reduction method of the selected image by **[Dither]**.
5. Adjust the selected image by **[Gamma]**, **[Contrast]**, **[Brightness]** and **[Thinness (thin out the black dot)] slider**.
   * Return the adjust value to default by **[Reset] button**.
6. Print the adjusted image by **[Test print] button** and check the adjustments.
   * The image is not registered to the printer.
7. Save the adjusted image by **[Export...] button**.

   If you use on Windows, please see "**Windows Driver Specifications**".

Maintenance Counter

Performs display and clear of the maintenance counter.
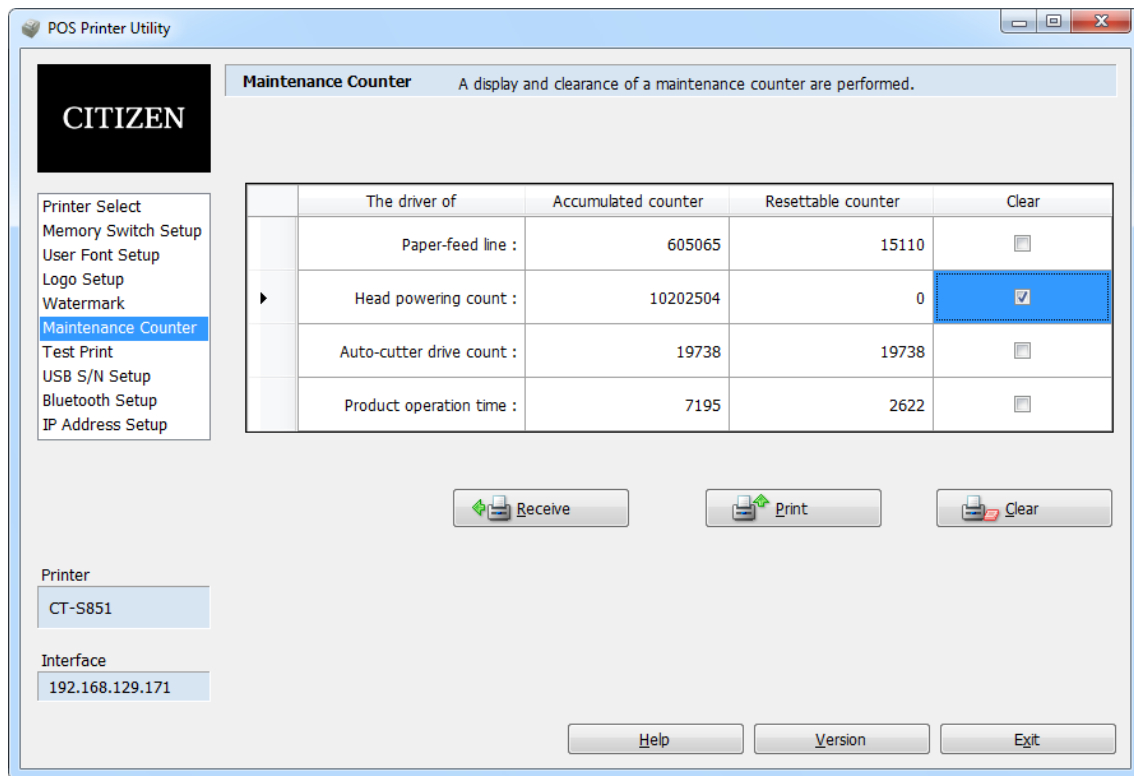
The above figure is one example that supports this function.

*Conditions:

Unsupported model:	CT-S280, CT-S281, CT-S281BD, CT-S300, CT-S310, CT-P291, CT-P293, PMU2300III, PMU3300, PPU-700II

[Accumulated counter] [Resettable counter]

There are [Accumulated counter] and [Resettable counter] respectively for [Paper-feed line], [Head powering count], [Auto-cutter drive count] and [Product operation time].

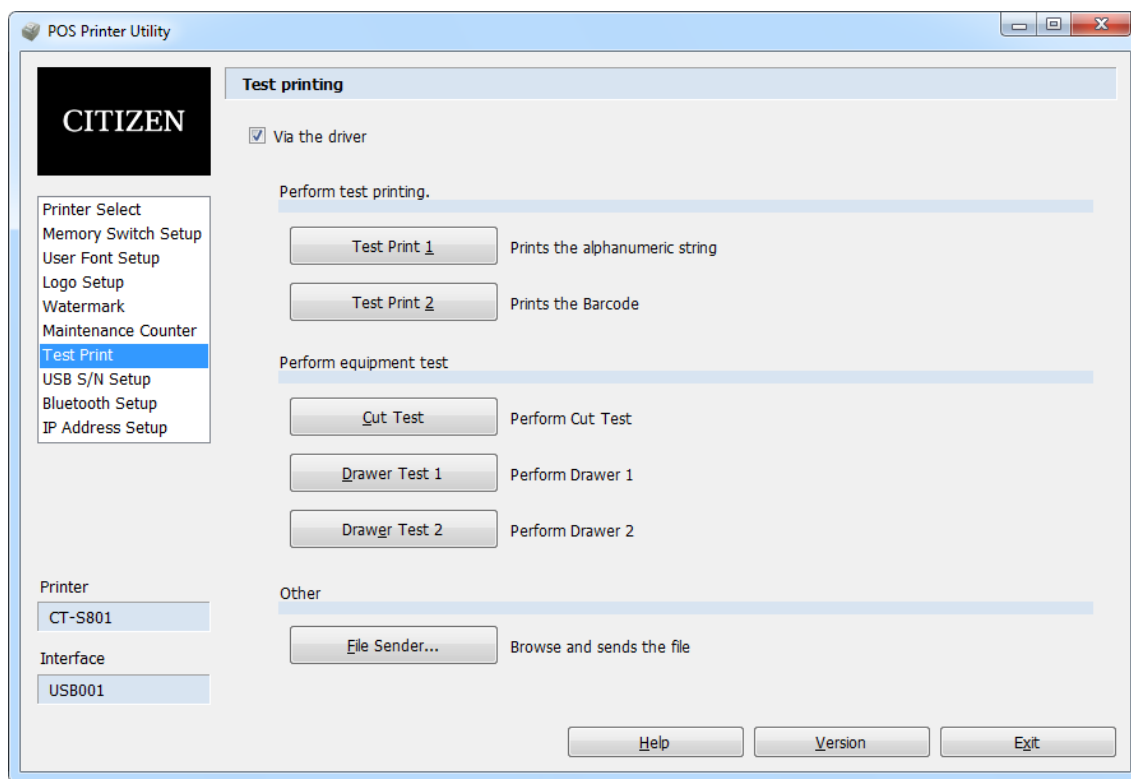Communicate with printer by **[Receive] button**.

Print the values by **[Print] button**.

Initialization of checked [Resettable counter] is possible by **[Clear] button**.

* Initialization of [Accumulated counter] is not possible.

Test Print

Performs test printing.

The above figure is one example that support all function.

* Testing item vary depending on the selected printer.

[Via the driver] check box

> Checked: The test print outputs data via the print spooler service.
>
> Unchecked: The test print outputs directly data to the selected interface.

[Test Print 1] button	Prints the alphanumeric string.
[Test Print 2] button	Prints the Barcode.

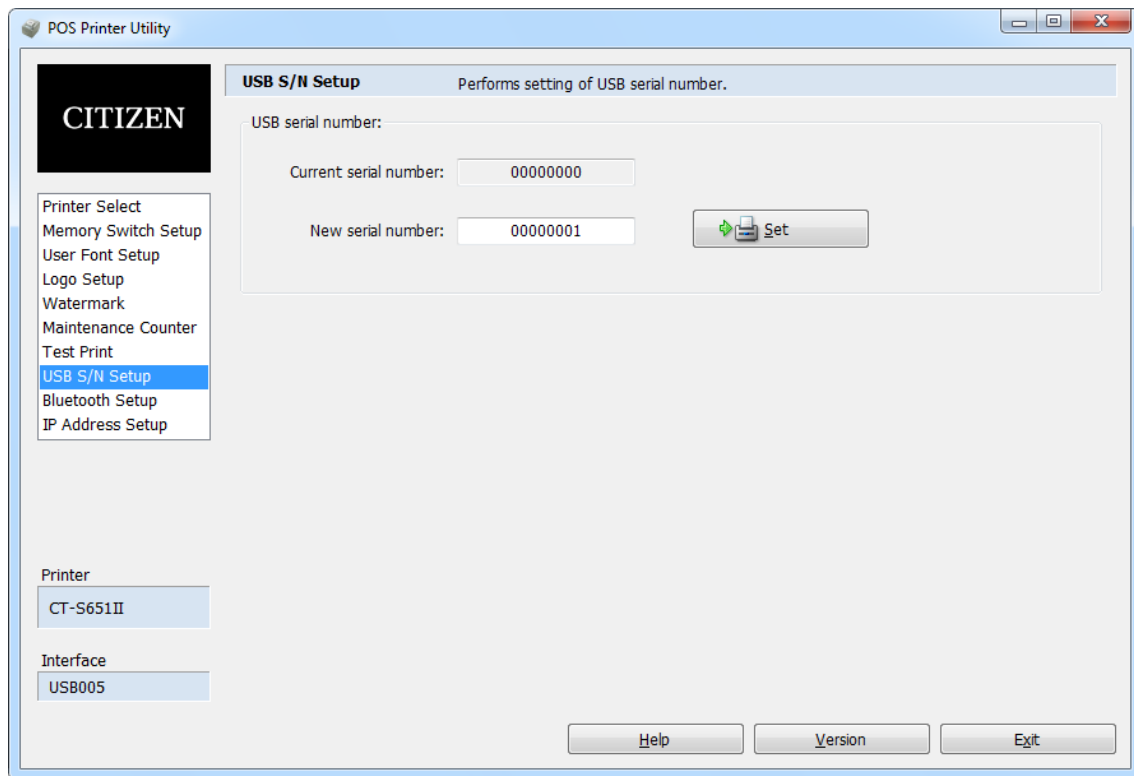|	
[Cut Test] button	Perform the Cut Test.
[Drawer Test 1] button	Perform the Drawer 1 open.
[Drawer Test 2] button	Perform the Drawer 2 open.

[File Sender...] button	Browse and sends PRN file.

USB S/N Setup

Performs setting of USB serial number.

The above figure is one example that supports this function.

*Conditions:

Unsupported model:	CT-S280, CT-S280II, CT-S300

[Current serial number]

If printer is connected via the USB interface, display the current USB serial number.

[New serial number]

Type the new USB serial number with up to 20 alphanumeric.
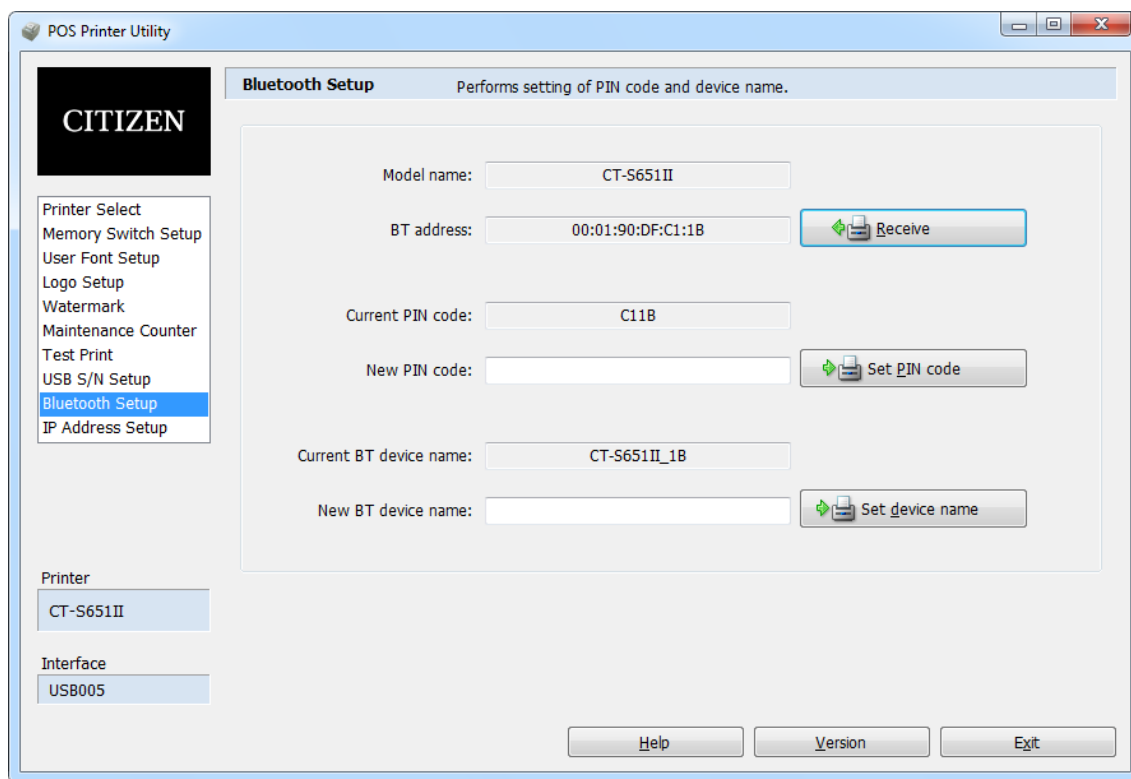
[Set] button

Set new USB serial number to the printer.

* If you set via the USB interface, please re-select the printer (port number) in [Select Printer] screen.

If the new printer is added at this time, you may need restart the Print Spooler service or restart the computer.

Bluetooth Setup

Performs setting of PIN code and device name.

The above figure is one example that supports this function.

*Conditions:

Supported model:	CT-D151, CT-E601, CT-E651, CT-S251, CT-S281BD, CT-S601II, CT-S601IIR, CT-S651II, CT-S751, CT-S801II, CT-S851II, CT-S4500

[Receive] button

Receives and displays [Model name], [BT address], [Current PIN code], [Current BT device name] from the printer.

* This function is only available when equipped with Bluetooth interface to the printer.

[Set PIN code] button

Set New PIN code to the printer.

PIN code must meet the following conditions.

- The number of characters to be 4-16 characters.

- First character is other than space (20H), double quotes (22H).

- Characters code to be ASCII character (20H-2BH, 2DH-7EH), except comma (2CH).

[Set device name] button

Set New BT device name to the printer.

BT device name must meet the following conditions.

- The number of characters to be 1-31 characters.

- First character is other than space (20H), double quotes (22H).

- Characters code to be ASCII character (20H-2BH, 2DH-7EH), except comma (2CH).

IP Address Setup

Performs setting of DHCP, IP address, Subnet mask and Default gateway.
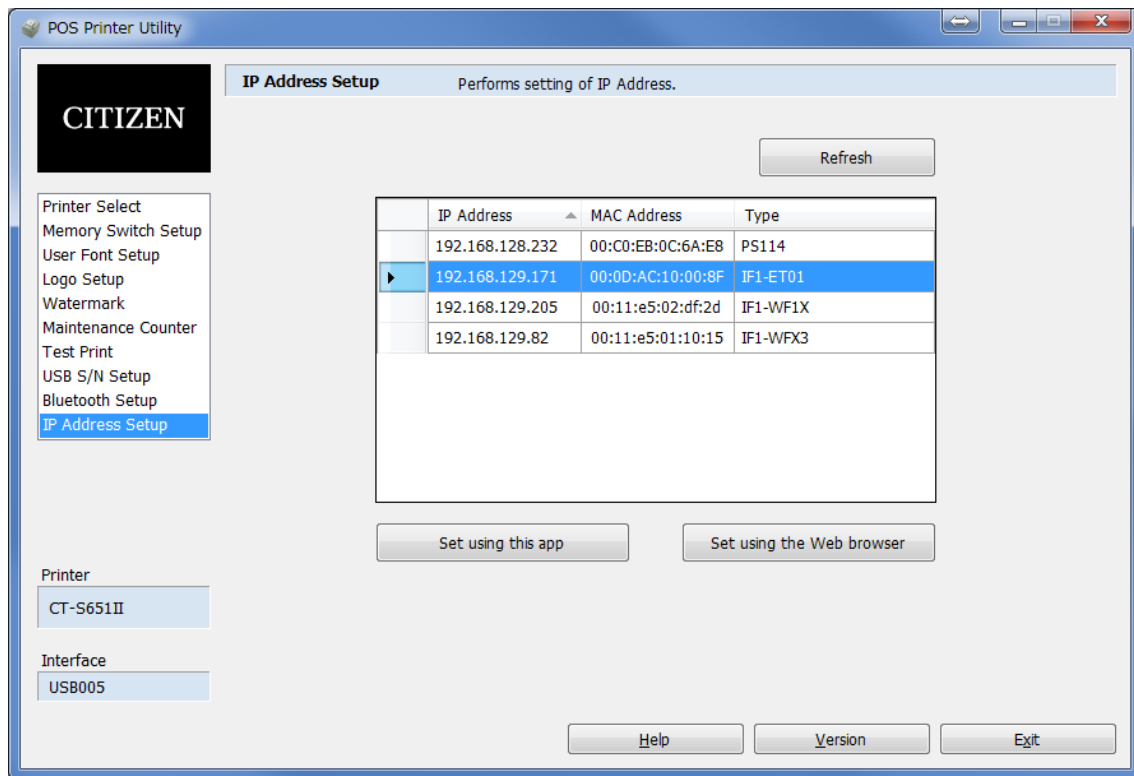
The above figure is one example that supports this function.

* This function is only available in a state in which the printer is connected via a network interface.

[Refresh] button

      Search the printer on the network and refresh the display.

[Set using this app] button

      Make the IP settings by this application.

      Please use here if you cannot connect in the Web browser.

      ※ This function cannot be changed DHCP / BOOTP of IF1-ESxx interface. Please set using the Web browser if you want to change.

[Set using the Web browser] button

      Make the network interface settings by the default Web browser.

      Please use here if detailed settings required.