

Introduction (IO Config)

This guide explains how to use the IO Config to (1) set the model ID and IP address of the Kikusui PFX2512 Charge/Discharge System Controller, (2) configure temperature chambers, and (3) update the firmware.

■Product version covered

This guide covers IO Config version 1.x. You can check the version by clicking About I/O Config on the Help menu.

■Notations used in this manual

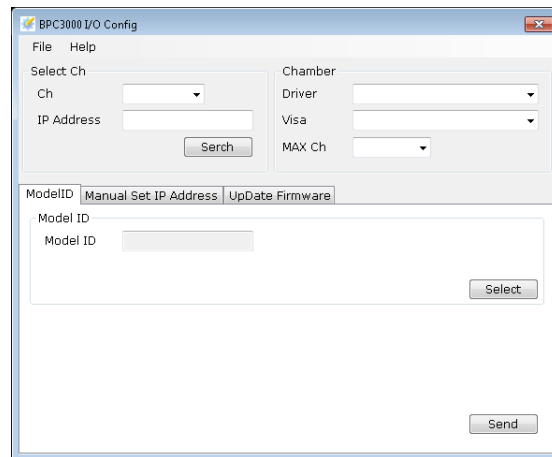
- In the interest of brevity, the PFX2512 Charge/Discharge System Controller shall be hereafter referred to as the “PFX2512 Series”.
- The term “PC” is used to refer generally to both personal computers and workstations.

Starting the IO Config

To start the IO Config, on the taskbar, click Start, All Programs, Kikusui BPChecker3000, and IO Config.
If a security warning window appears at startup, specify the following settings.

Private network: Allow

Public network: Not allow

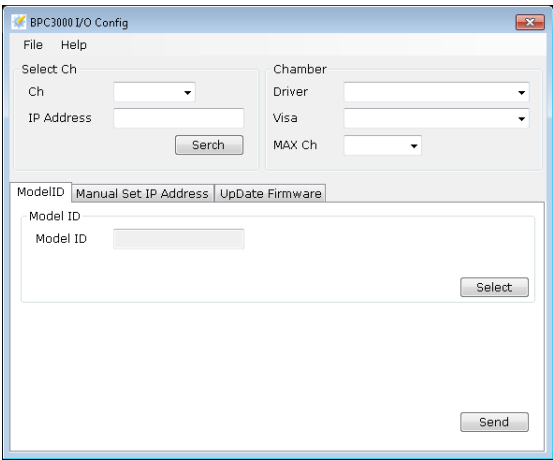


Before Configuring Settings

Before configuring various settings with the IO Config, you first need to select the channel (the PFX2512) that you want to configure (in the Select Ch area of the IO Config window). Then, you can set the model ID and IP address as well as update the firmware. Channels are set on the PFX2512s.

Parts of the Screen

IO Config consists of the Select Ch and Chamber areas and three tabs.

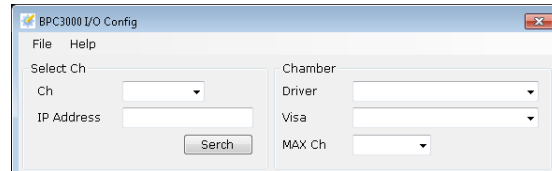


	Description
Select Ch	Select the channel that you want to configure.
Chamber	Set the temperature chamber driver, VISA resource, and the number of temperature chambers.
Model ID tab	Set the PFX2512 model ID.
Manual Set IP Address tab	Set the PFX2512 IP address.
UpDate Firmware tab	Update the PFX2512 firmware.

Selecting the Channel

Before configuring various settings, select the channel (the PFX2512) that you want to configure under Select Ch.

First, search for the PFX2512s that are connected, and then select the channel. Be sure to search even when there is only a single PFX2512 that is connected.

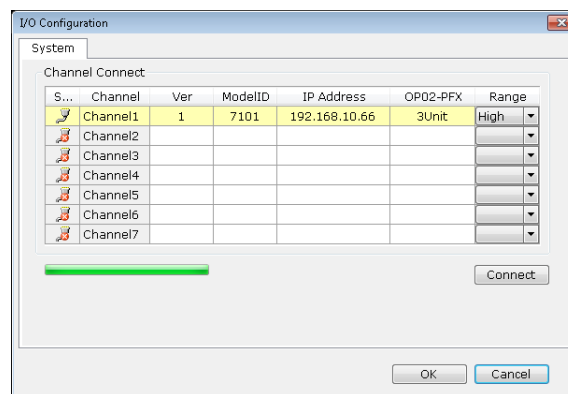


1 Under Select Ch, click Serch.

The I/O Configuration window appears. You can view the channel information in this window.

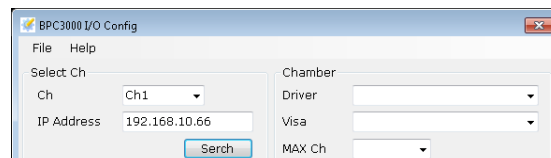
When the progress bar reaches the right end, the search is complete. If no PFX2512s appear after the search, the PFX2512s may not be connected properly, or there may be overlapping channel assignments. Check the connections. Then click Connect to search again.

You can also enter the IP address. After entering the IP address, click Connect.



2 Check that all connections are displayed, and click OK.

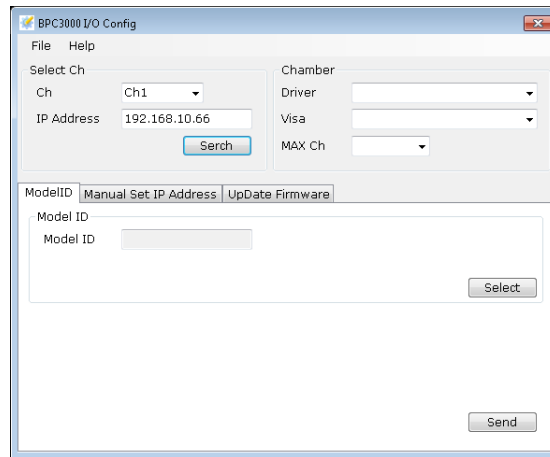
The target channel and IP address are displayed.



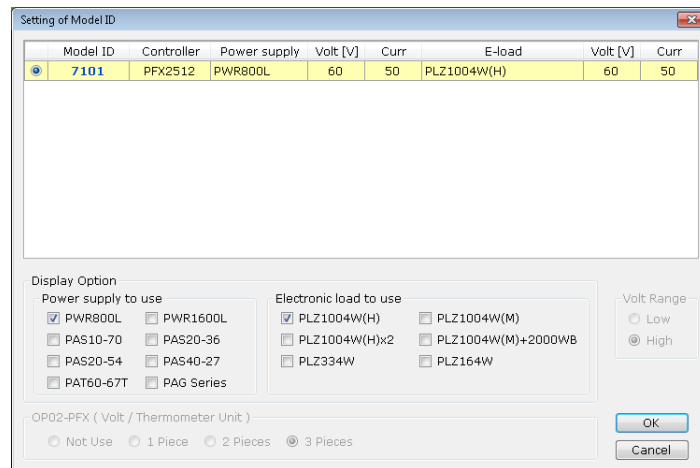
3 Select the channel you want to configure.

Setting the Model ID

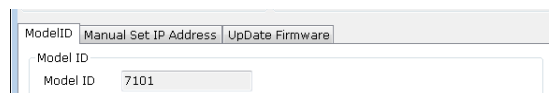
On the ModelID tab, set the model ID of the PFX2512.



- 1 Check that the PFX2512 that you want to configure is displayed under Select Ch.**
If a different channel is displayed, select the appropriate channel. If the channel is not displayed, click Serch under Select Ch to search channels.
- 2 On the ModelID tab, click Select.**
The Setting of Model ID dialog box appears.



- 3 Select the check boxes for the power supply and electronic load to use.**
The selectable model ID is displayed.
- 4 Click OK.**
The Setting of Model ID dialog box closes, and the model ID appears on the ModelID tab.



- 5 On the ModelID tab, click Send.**
The model ID is sent to the PFX2512 that is selected under Select Ch. Setting of the PFX2512 model ID is complete. You can check whether the ID has been assigned correctly to the PFX2512 by clicking Serch under Select Ch.

Setting the IP Address

To use a fixed IP address (when connecting through a switching hub or when connecting directly), use the Manual Set IP Address tab to set the PFX2512 IP address.

If you are using DHCP, you do not have to set the IP address.

In the factory default settings, the PFX2512 IP address is set to a value in the range of 192.168.1.101 to 192.168.1.115 (the value varies depending on the node address setting).

Duplicate IP addresses cannot be used. You can use the IO Config to change the PFX2512 IP address to a value in the range of 192.168.0.0 to 192.168.255.254.

On the Manual Set IP Address tab, set the PFX2512 IP address.

The screenshot shows the 'BPC3000 I/O Config' window. At the top, there are 'File' and 'Help' menus. Below them, the 'Select Ch' section has a 'Ch' dropdown menu set to 'Ch1' and an 'IP Address' text box containing '192.168.10.66'. To the right of this is a 'Chamber' section with 'Driver', 'Visa', and 'MAX Ch' dropdown menus. A 'Serch' button is located below the 'IP Address' box. Below these sections are three tabs: 'ModelID', 'Manual Set IP Address' (which is selected), and 'UpDate Firmware'. The 'Manual Set IP Address' tab contains three text boxes: 'IP Address' (192.168.1.101), 'Subnet Mask' (255.255.255.0), and 'Default Gate Way' (192.168.1.250). A 'Send' button is at the bottom right of the window.

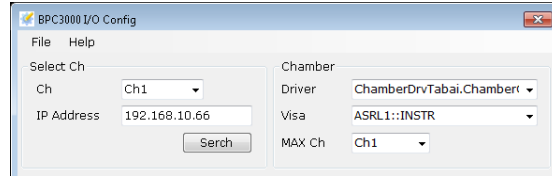
- 1 Check that the PFX2512 that you want to configure is displayed under Select Ch.**
If a different channel is displayed, select the appropriate channel. If the channel is not displayed, click Serch under Select Ch to search channels.
- 2 Enter the IP address, subnet mask, and default gateway.**
- 3 Click Send.**
The IP address is sent to the PFX2512 that is selected under Select Ch. Setting of the PFX2512 IP address is complete.

To verify whether the IP address has been set correctly, check using the PFX2512 panel. For details, see the PFX2512 operation manual.

Configuring Temperature Chambers

If you want to use temperature chambers, set the temperature chamber driver, VISA resource, and the number of temperature chambers.

To use temperature chambers, a VISA library must be installed in your PC.



If you are not using temperature chambers

Set MAX Ch to None.

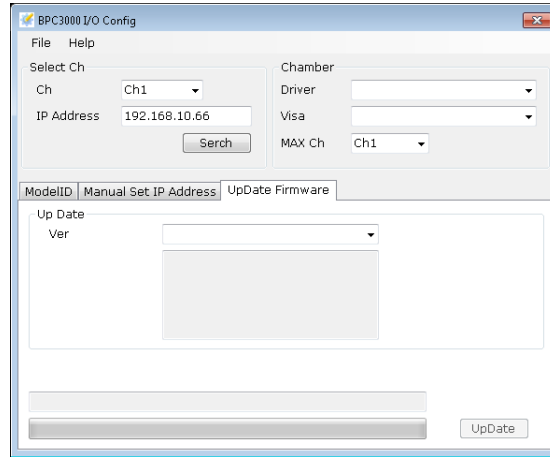
If you are using temperature chambers

- 1 From the Driver list, select the temperature chamber driver.**
- 2 From the VISA list, select the VISA resource.**
If you are using RS232C to communicate, specify the serial port COM number.
(Example) For serial port COM1, select ASRL1::INSTR.
- 3 From the MAX Ch list, select the number of temperature chambers.**
You can connect up to seven temperature chambers.
The temperature chamber configuration is complete.

When using temperature chambers in tests executed from Test Executive, the Test Executive checks the temperature chamber settings in the IO Config. The temperature chamber settings remain even after you close the IO Config.

Updating the Firmware

When you update or upgrade BPChecker3000, you may also need to update the PFX2512 firmware. If the firmware version is old, an alert is displayed when you run the Test Executive. If this happens, update the firmware using the UpDate Firmware tab.



- 1 Check that the PFX2512 that you want to update is displayed under Select Ch.**
If a different channel is displayed, select the appropriate channel. If the channel is not displayed, click Serch under Select Ch to search channels.
- 2 If there are multiple firmware versions available, select the version that you want to update to.**
- 3 On the UpDate Firmware tab, click UpDate.**
The UpDate button is available only when there is a firmware version that you can update to.
The PFX2512 that is selected under Select Ch will be updated. When updating is complete, a dialog box will appear.
- 4 Turn off the PFX2512, and turn it back on.**
The PFX2512 will start with the updated firmware.

Menu Reference

Menu		Description
File	Exit	Closes the IO Config.
Help	About I/O Config	Displays IO Config information.
	Help	Displays a help file.