# IP Address Setting Procedure on GigE Vision Camera

(KOWA GEV Viewer)

Ver. 1.0

Kowa Optronics Co.,Ltd.

# IP Address Setting Procedure on GigE Vision Camera

## Purpose

This document is a procedure manual for setting the IP address for the camera to connect our GigE camera to a Windows PC (host PC).

## Settings Overview

Our cameras are set to DHCP mode at the time of shipment, and the camera is connected to the network by the DHCP server (router or host PC) in the network giving the camera an IP address. However, if the camera is connected with a fixed IP address (Static IP) instead of using automatic IP address setting by DHCP, it is necessary to set the IP address for the camera to match the network.

Here, this manual describes the procedure for setting the IP address to the camera, with a fixed IP address, using the viewer application "KOWA GEV Viewer" of KOWA SDK.

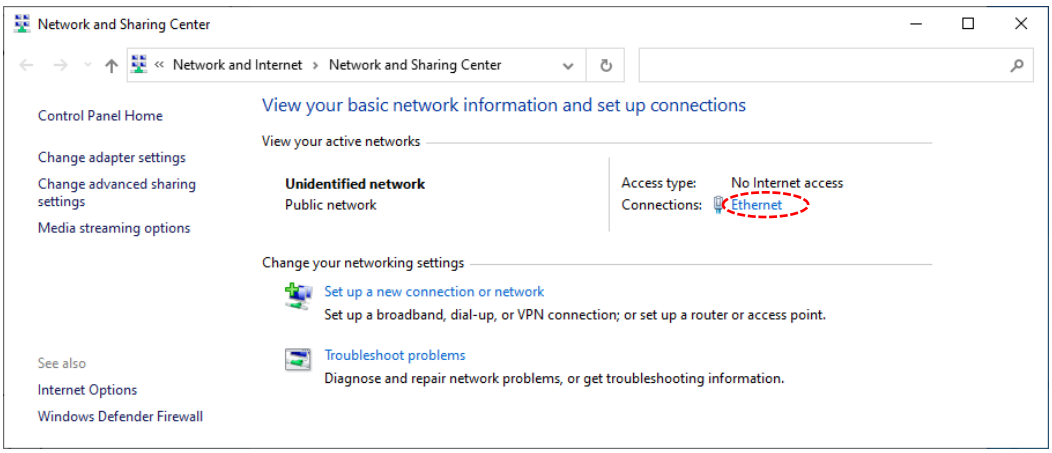
After installing/connecting the host PC and camera, perform the settings through the following four steps.

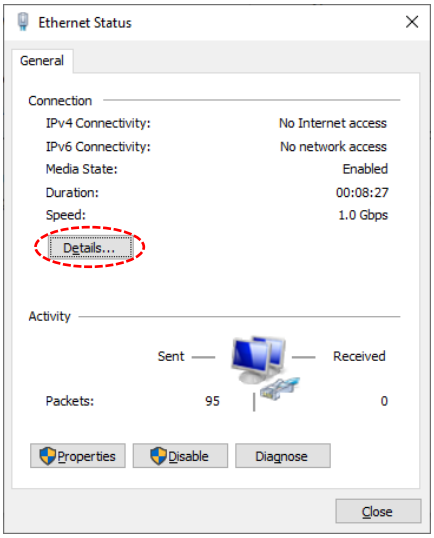
1. Examine the host PC's network settings
2. Set a temporary IP address using the temporary IP address setting function (Force IP)
3. Connect to the camera with a temporary IP address and set a new IP address
4. Restart the camera and check the connection

## 1. Examine the host PC's network setting

### 1.1 Open "Change settings on adapter"

Open "**Settings**" from the "**Start**" menu, and then open "**Network and Internet**". Open "**Network and Sharing Center**", **select the adapter** that the camera is connected to, and open "**Details**".

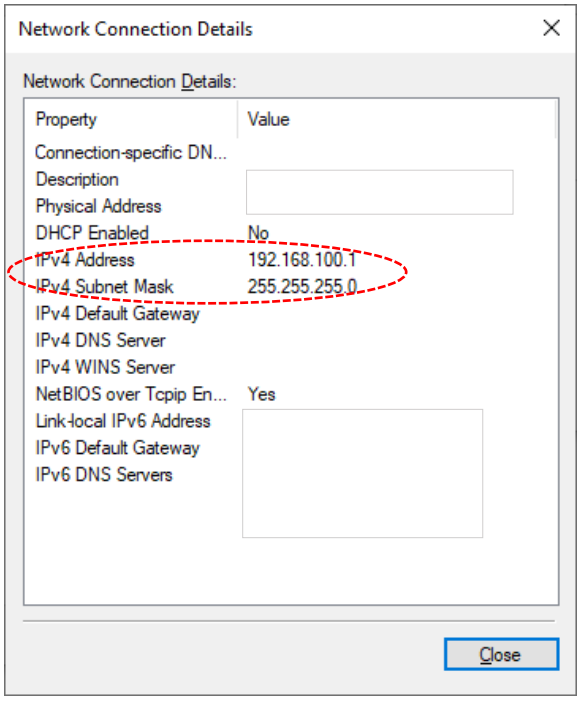





## 1.2 Confirmation on IP Address and Subnet Mask

"**IPv4 Address**" is the IP address and "**IPv4 Subnet Mask**" is the subnet mask.

Please write these down.

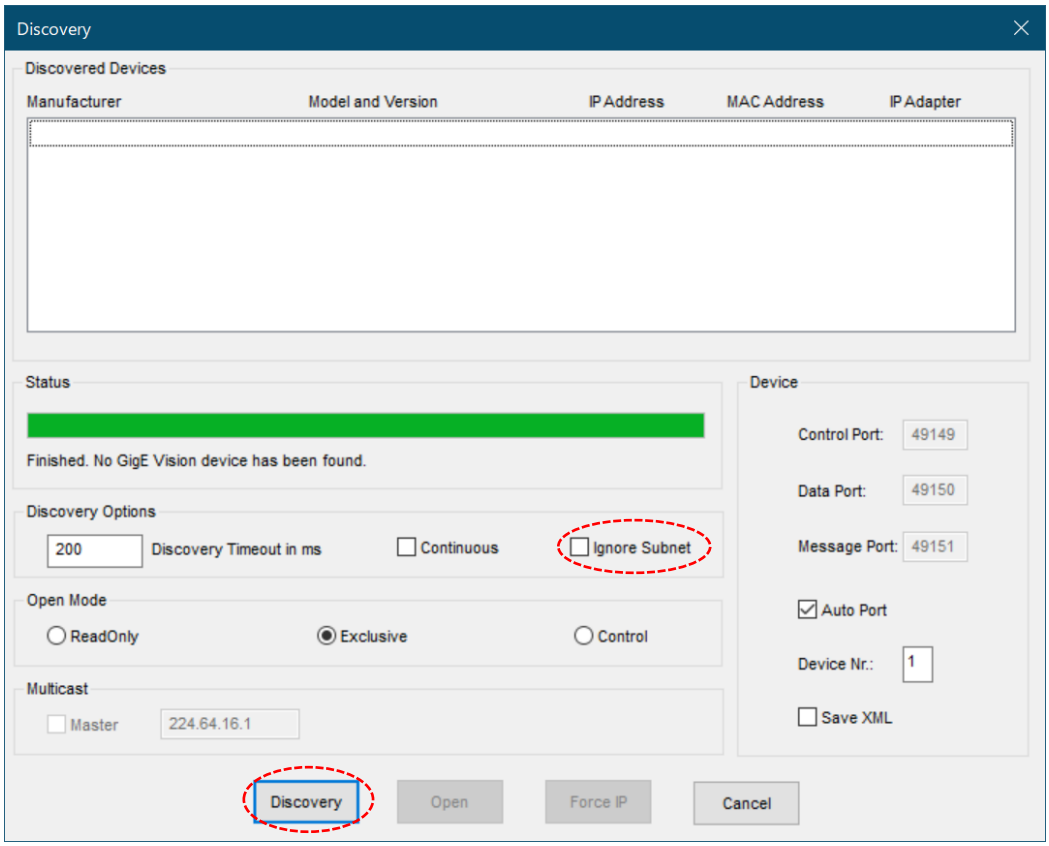


## 2. Set a temporary IP address using the temporary IP address setting function (Force IP)

### 2.1 Start KOWA GEV Viewer

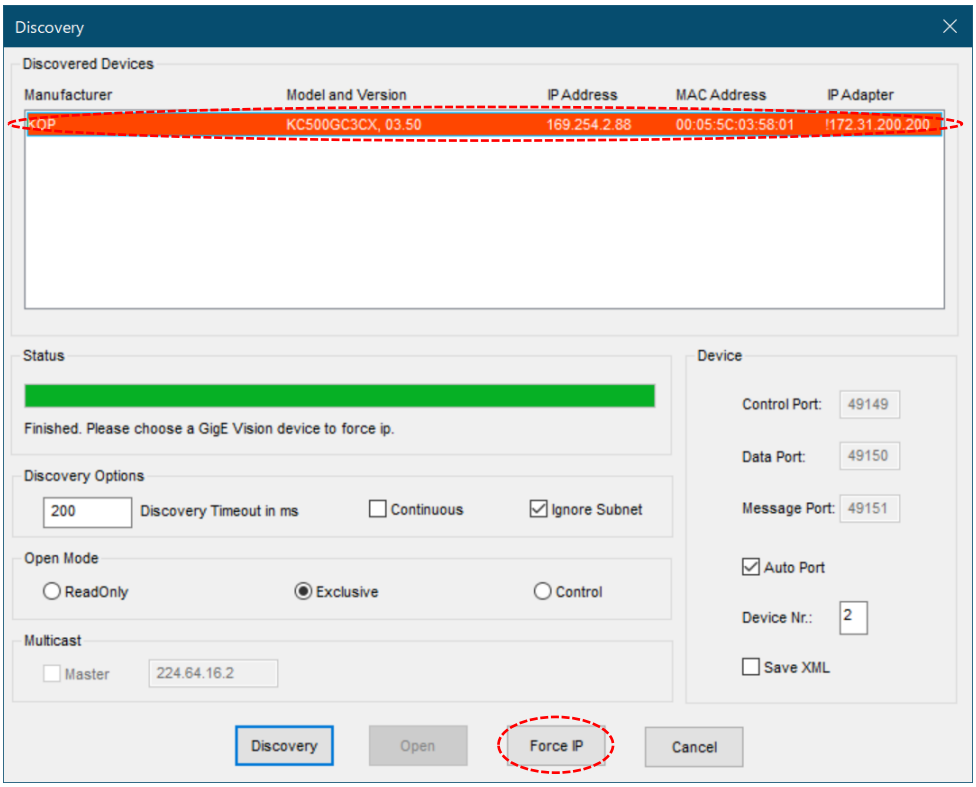
Launch KOWA GEV Viewer and click the “**Discovery**” button to open the Discovery screen.

Check “**Ignore Subnet**” and click the “**Discovery**” button. Cameras set to different networks are displayed.



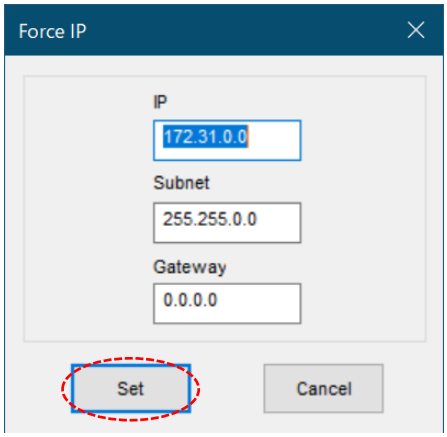
A camera is displayed in red if there is a mismatch between the network settings of the camera and the host PC. (If it is displayed in blue, you can connect with “Open”)

If the camera is not displayed, it may be solved by changing the settings of the host PC. Please refer to Troubleshooting described later (from p.8).




## 2.2 Setting with Force IP

Set a temporary IP address using the Force IP function. Select the camera to be connected and click the “**Force IP**” button.



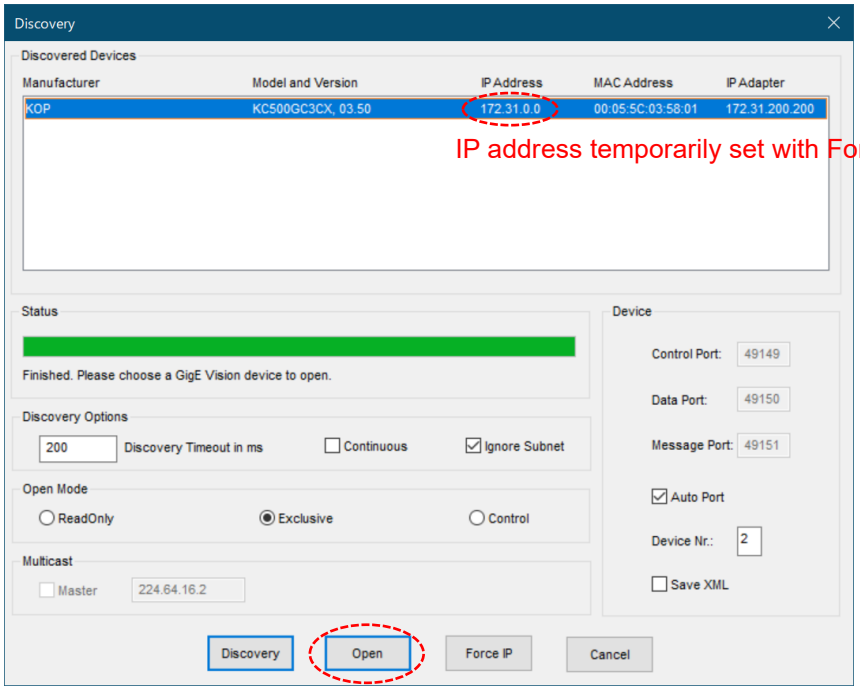

The set value is automatically set according to the IP address of the host PC, so just click the "**Set**" button.

## 3. Connect to the camera with a temporary IP address and set a new IP address

### 3.1 Open the camera

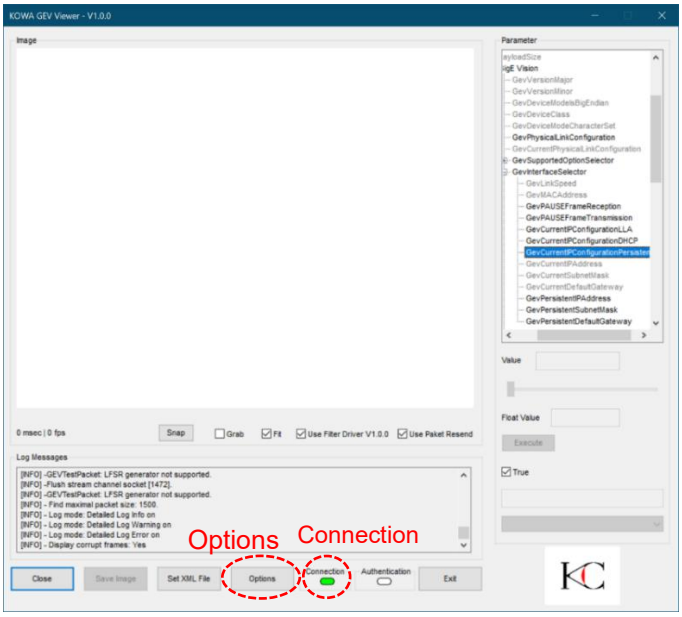
After setting the IP address with Force IP, click the "**Discovery**" button again and the camera will be displayed in blue.

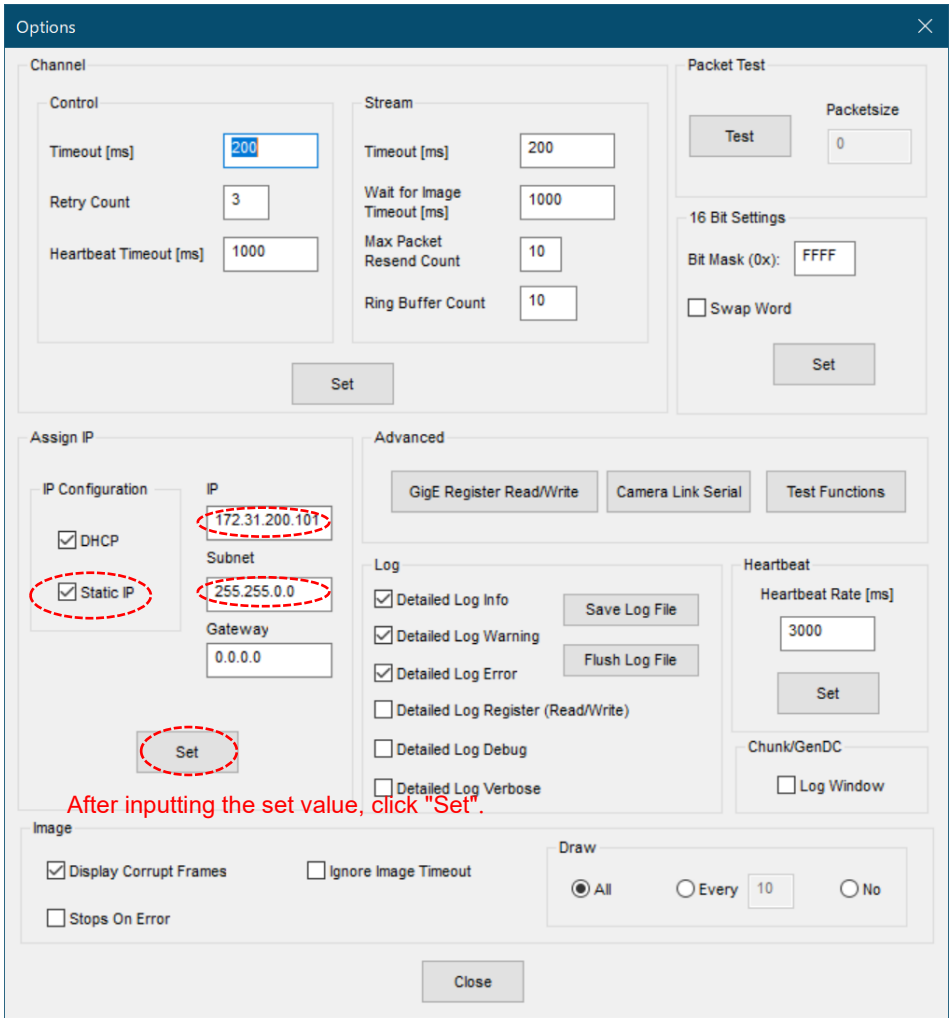
Click the "**Open**" button to connect to the camera.




### 3.2 Set a new IP address

"**Connection**" lights up in green when the camera has been connected. Once connected, click the "**Options**" button.






Check “**Static IP**” in “**IP Configuration**”. Input the **IP address** and **Subnet** (subnet mask) according to the network confirmed in "1.2 Confirmation on IP Address and Subnet Mask (p.2)", and click the "**Set**" button. The new IP address is now set for the camera. (If both "Static IP" and "DHCP" are checked, "Static IP" takes precedence.)

Click the "**Close**" button to return to the main screen, and disconnect the camera with the "**Close**" button on the main screen.

**Camera restart is required for the new IP address setting to be effective.**

**[**One Example of IP Address Setting**]**

| Equipment | IP Address | Subnet Mask |
|---|---|---|
| Host PC | 192.168.1.1 | 255.255.255.0 |
| Camera | 192.168.1.101 | 255.255.255.0 |

In a simple network configuration, the IP address for the camera is the same as the IP address for the host PC up to "xxx.xxx.xxx.", and only the last digit is different. Set the subnet mask to "255.255.255.0".

Set so that equipment with the same IP address do not coexist within the same network.

## 4. Restart the camera and check the connection

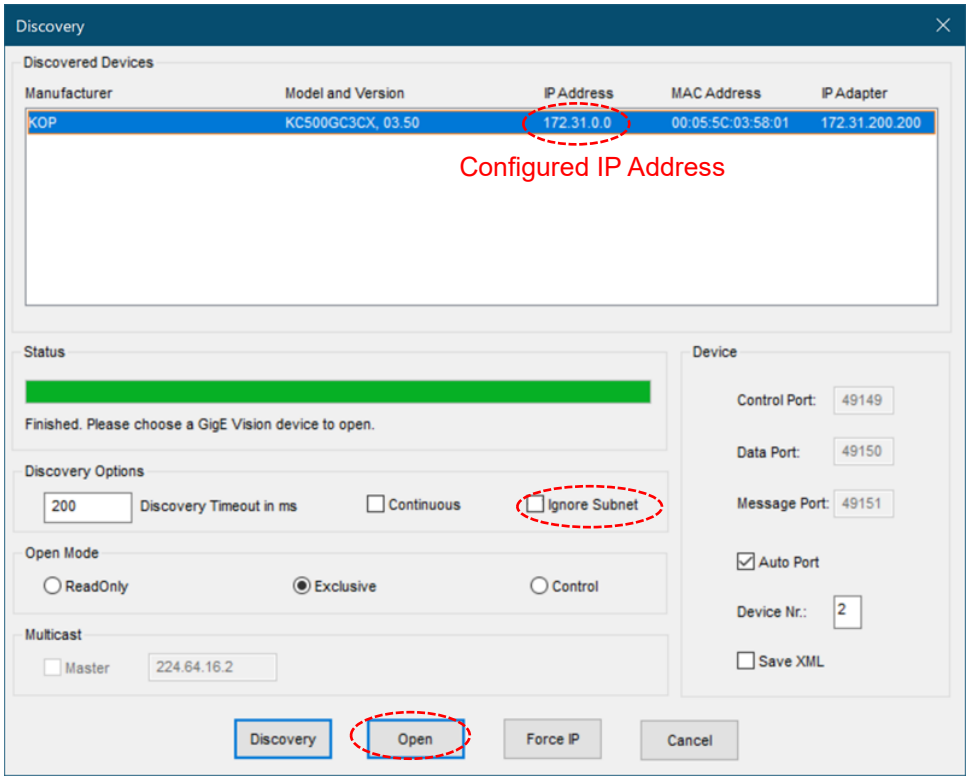
### 4.1 Restart the camera

Turn off the power for the camera once and then turn it on again. In the case of PoE, disconnect the cable connected to the camera, wait about 5 seconds, and then connect it.

### 4. 2 Check connection

Uncheck "**Ignore Subnet**" on the Discovery screen, click the "**Discovery**" button, and confirm that the camera is displayed in blue.

It takes about 30 seconds after restarting the camera until it is recognized by KOWA GEV Viewer.

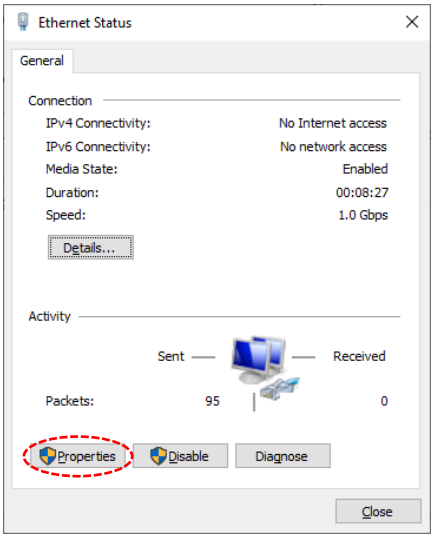



IP address setting is now complete. (Click the "**Open**" button to connect to the camera.)

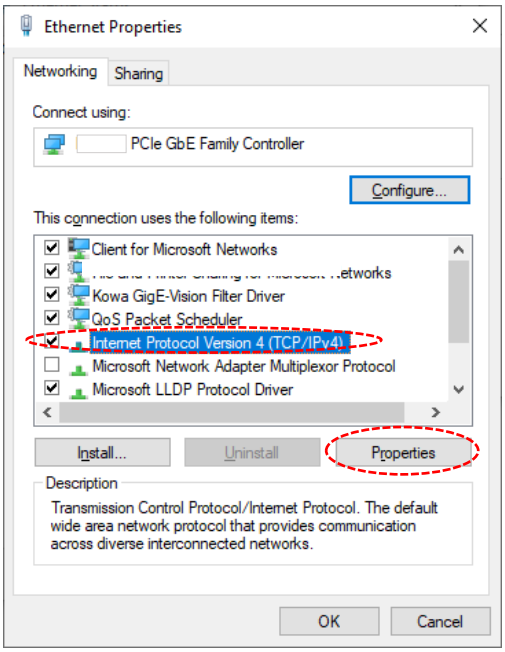
## ■Troubleshooting　Fixed IP Addressing for Host PC

If the camera cannot be found with the “**Discovery**” operation by “**Ignore Subnet**”, it may be solved by changing the IP address of the host PC. Fixed IP addresses are used in network environments where DHCP or LLA cannot be used.

**[**1**]** Open the status screen of the network adapter to which the camera is connected using the same operation as "1.1 Open 'Change setting on adapter' (p.1)" and click "**Properties**".



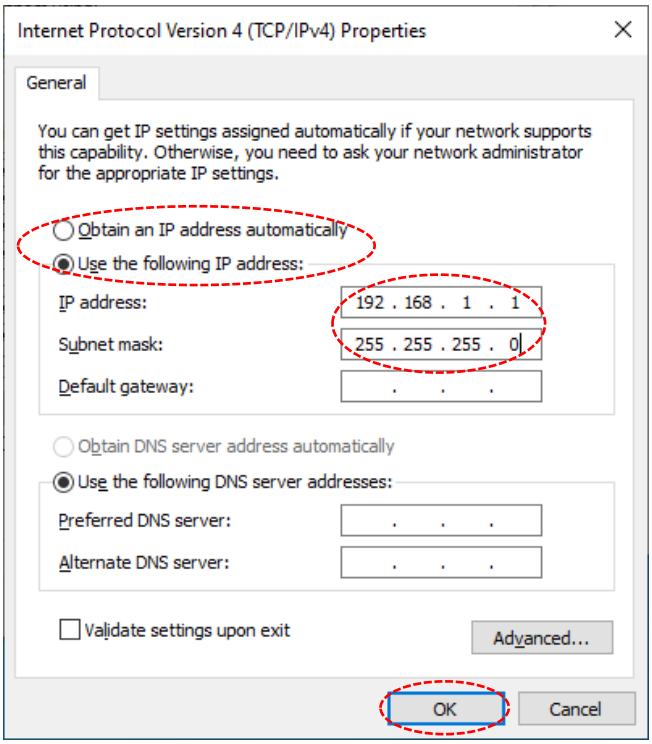

**[**2**]** Select "**Internet Protocol Version 4 (TCP/IPV4)**" and click "**Properties**".



**[**3**]** Setting IP Address

(1) If "**Acquire an IP address automatically**" is selected, select "**Use the following IP address**".

(2) Refer to p.6 **[**One Example of IP Address Setting**]** and input the "IP Address" and "Subnet Mask" and click "OK".




**[**4**]** Try to connect again from "2. Set a temporary IP address using the temporary IP address setting function (Force IP) (p.3)".

**If the problem cannot be solved, there is a possibility of communication failure caused by network security measures such as the firewall, antivirus software, a VPN, etc. Please contact your PC and network administrator.**