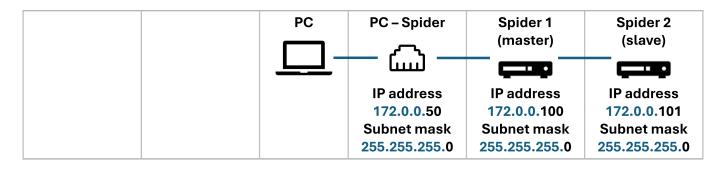
# **Quick Start - IP Connection**

In this section, we discuss IP connectivity between Spider and PC.

## **Network configuration**



The Spider modules and PC need to be on the same subnet to detect each other:

- First three numbers of IP address must match
- Fourth number must be unique for each device.

By default, the Spider modules are configured on the 172.0.0.x subnet:

- Spider(s) IP address start: 172.0.0.100
- Spider(s) subnet mask: 255.255.255.0

Set your PC IP address to another static IP address on 172.0.0.x:

- PC IP address: 172.0.0.50 or similar
- PC subnet mask: 255.255.255.0
- PC default gateway: none

#### How to set PC IP address

	😰 Network Connections –		Ethernet - CI-Network Properties	Internet Protocol Version 4 (TCP/IPv4) Properties X		
Q view network connections	$\leftarrow \rightarrow \lor \uparrow $		Networking Sharing	General		
← All Work Apps	Organize 👻 Disable this network		Connect using:	You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.		
Best match	Bluetooth Network Con Not connected Bluetooth Device (Perso	Bridge Connections	Configure This connection uses the following items:	Obtain an IP address automatically O Use the following IP address:		
View network connections Control panel	Ethernet Network cable unplugge Intel(R) Ethernet Connec			IP address: 172 . 0 . 0 . 50 Subnet mask: 255 . 255 . 255 . 0		
Search work and web	Ethernet - CI-Network CI-Network Lenovo USB Ethernet	💎 Properties	Generation     G	Default gateway:     Obtain DNS server address automatically		
Q view network connections - s	6 items   1 item selected			O Use the following DNS server addresses:		
work and web results			Install Uninstal Properties	Preferred DNS server: Alternate DNS server:		
view network connections		~	Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.	Validate settings upon exit Advanced		
windows 10	Vie	control panel	OK Cancel	OK Cancel		
<ul> <li>view network connections</li> </ul>						

- 1. Search for "View Network Connections" in the Start menu
- 2. Right-click on the network adapter

- 3. Click Properties
- 4. Select "Internet Protocol Version 4 (TCP/IPv4)" and click "Properties"
- 5. Select **"Use the following IP address:"**
- 6. Enter IP settings (e.g., 172.0.0.50 / 255.255.255.0)

#### How to set Spider IP address

Open Front-End IP Address Setup Tool (use the Windows search menu).

Front End IP Address Setup								
Refresh Select All Inv	verse Select	Set static IP address		Enable DHCP N				
	T	Dete						
Serial Number		IP Address	ddress Static/Dł					
2588320	192.168.3.150			Static				
2590976	1	192.168.3.151		Static				
Enter IP Addre	Enter IP Address Range							
2 Front-End(s)	2 Front-End(s) selected							
IP Range Start:	192.168.3.15	50	>	<				
IP Range End:	192.168.3.15	51						
Subnet Mask:	255.255.255.0		>	<				
GateWay:	192.169.3.1		>	<				
		Apply	<u>C</u> an	cel				

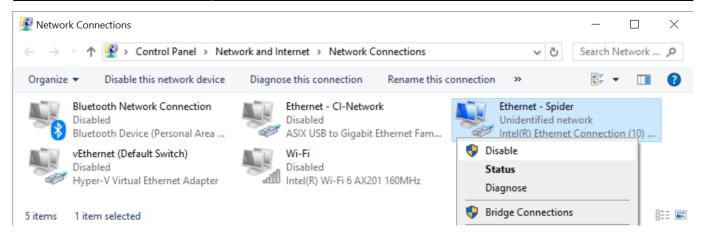
Select the module(s) and click **Set static IP address**. Fill in the IP address(es), subnet mask, and gateway as needed.

## Troubleshooting

Consider the following troubleshooting steps if the Spiders cannot be detected

#### **Disable other networks**

Temporarily disable all other network adapters and only connect one Spider to the PC.

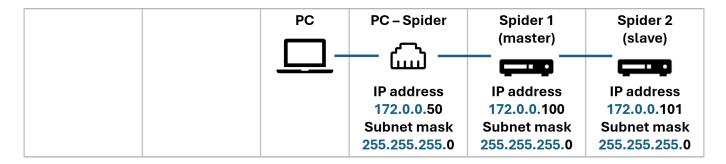


Search for **"View Network Connections"** in the **Start menu** and then right-click on all other network adapters to disable them.

If you wish to operate with the other networks turned on, see the below section "Dealing with multiple networks".

#### Set network priority

If disabling other adapters is not an option, you can also raise the priority of the Spider network adapter.



Right-click on the Spider network adapter, go to **Properties > select "Internet Protocol Version 4 (TCP/IPv4)" > Properties > Advanced**, uncheck **Automatic metric** and set **Interface metric** to 1 (lower is higher priority)

#### **Power adapters**

Check the power adapter of the Spiders. Devices with inadequate power can seem turned on while not functioning properly

#### **Check Ethernet ports**

Try using a different Ethernet port or a separate USB-to-Ethernet adapter. Check the Ethernet connector lights are blinking to indicate a live connection.

#### **Reset DNS cache**

Reset the DNS cache (open **Command Prompt** and type in "ipconfig /flushdns" and press **Enter** 

> ipconfig /flushdns

Windows IP Configuration

Successfully flushed the DNS Resolver Cache.

#### **Resetting the Spider**

If all else fails, individual Spider modules can be reset to:

- **IP address:** 192.168.1.153
- Subnet mask: 255.255.255.0
- **Default gateway:** 192.168.1.5

#### How to reset IP address:

- 1. Press and hold the **Reset** pin (you'll need a paper clip or similar) at the back of the unit for **4-10** seconds until the internal relays click
- 2. Turn off the Spider and turn it back on.

**How to reset firmware and IP address:** if the above reset fails, there is a more aggressive reset function for both IP and DSP settings:

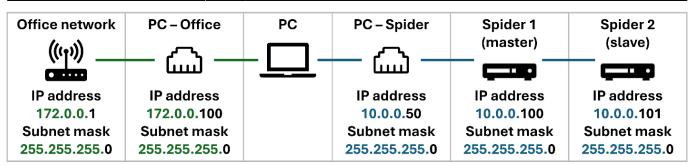
- 1. Turn off Spider
- 2. Press and hold the **Reset** pin
- 3. Then press and hold the **Power** button, while the **Reset** pin is still pressed
- 4. Keep holding both buttons for about 10 seconds
- 5. The **Play** and **Stop** button LEDs will alternating blink if the reset was successful

## **Dealing with multiple networks**

If your PC is connected to multiple networks (i.e., Internet, office network), it will have multiple IP addresses.

These multiple networks should not have overlapping IP ranges. Otherwise, our software may look on the wrong network for your Spider.

In the below example, the office network already uses the 172.0.0.x subnet, so the Spiders should be configured to another subnet, such as 10.0.0.x



#### What are my other office subnets?

Open the **Command Prompt** by typing **cmd** in your **Windows start menu**.

#### Type **ipconfig**

This will print out a list of all existing office subnets for your PC. The format should look like:

Wireless LAN adapter Wi-Fi:

#### Alternative subnets to consider

For a private network when using the Spider, any combination of IP values between 0.0.0.0 and 255.255.255.255 can be used. Below are some popular IP schemas that are popular in the IT practice:

#### 172.0.0.x subnet

By default, all Spider devices are sent out with static IP addresses starting at 172.0.0.100. We recommend setting your PC to an IP address like 172.0.0.50 for the quickest setup.

- PC IP address: 172.0.0.50
- Spider IP addresses: 172.0.0.100, 172.0.0.101, ...
- Subnet mask: 255.255.255.0
- Default gateway: (blank)

#### 10.0.0.x subnet

If your PC is already connected to another network (e.g., office Internet) that uses the 172.0.0.x subnet, consider the 10.0.0.x network.

- PC IP address: 10.0.0.50
- Spider IP addresses: 10.0.0.100, 10.0.0.101, ...
- Subnet mask: 255.255.255.0
- Default gateway: (blank)

#### 192.168.1.x subnet

- PC IP address: 192.168.1.50
- Spider IP addresses: 192.168.1.100, 192.168.1.101, ...
- Subnet mask: 255.255.255.0
- **Default gateway:** (blank)

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Permanent link: https://help.go-ci.com/general:ip-connect?rev=1721944762

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