WF-2000 series FAQ

APPLICATION

ICP DAS Co., Ltd.

Ver.1.3.0 2024/12/23

Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

Contents

Q1: How to increase the connection distance? 3
Q2: How to establish a connection with the smart phone and WF-2000(Non RevB version)? 4
Q3: How to establish a connection with the smart phone and WF-2000(Non RevB version)? 8
Q4: How to configure the WF-2000(Non RevB version) DI / DO series to Pair Connection mode? 9
Q5. How can I make Wi-Fi connection range larger than 1km? 12
Q6. WF-2000 (RevB/C Version) DI/DO Pair Connection (One-to-one mode)..... 13
Q7. WF-2000 (RevB/C Version) DI/DO Pair Connection (one-to-many mode) 24

Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

Q1: How to increase the connection distance?

A1: We suggest replacing the High-power antenna as follow to increase the connection distance, such as ANT-8 / ANT-15 / ANT-18, etc.

ANT8: https://www.icpdas.com/en/product/ANT-8

ANT15: https://www.icpdas.com/en/product/ANT-15

ANT18:https://www.icpdas.com/en/product/ANT-18

LRI Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

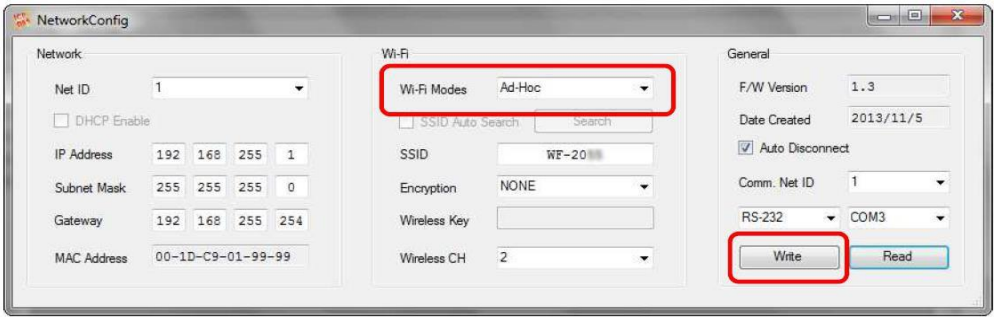
Q2: How to establish a connection with the smart phone and WF-2000(Non RevB version)?

A2:

I. Smartphone support Ad Hoc Connectivity

A. WF-2000 Wi-Fi network configuration

a1. Set the Wi-Fi Mode as "Ad-Hoc", the rest are reserved factory default settings



B. Smartphone Wi-Fi network configuration

b1. Open the Smartphone Wi-Fi interface, select the WF-20xx devices join the network and confirmed.



C. Smartphone network IP address and subnet mask settings

c1. Entry the IP address as "192.168.255.x", where "x" is a number between 1 and 254 except WF-2000's IP address.

c2. Subnet mask as"255.255.255.0"

LRI Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000



D. After the above settings, you can use your Smartphone to connect to the WF- 2000 (IP address "192.168.255.1")

II. Smartphone does not support Ad Hoc connection method (need to use with a wireless AP)

A. Configuration of wireless AP

a1. Set SSID as "ICPDAS"(Can be arbitrarily set)

a2. Set Encryption as"WPA2-PSK(AES) " · Key as"12345678"(If you cancel this setting without encryption)





B. WF-2000 Wi-Fi network configuration

b1. Checked "DHCP Enable" checkbox to enable DHCP function

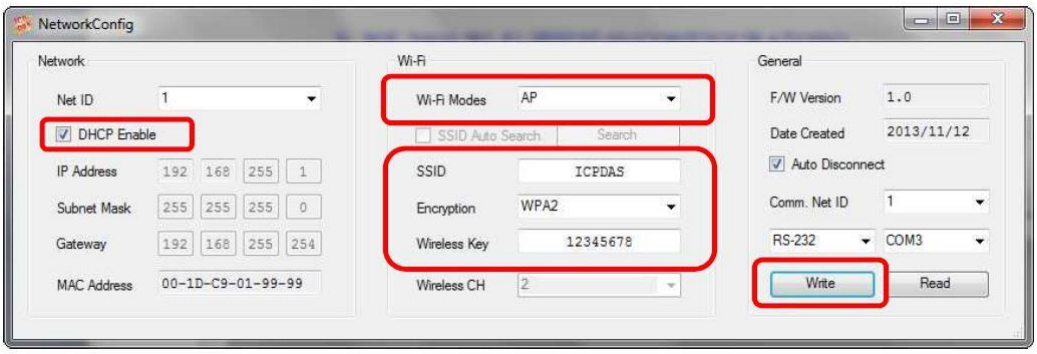
b2. Set Wi-Fi Mode as "AP"

b3. Set SSID as "ICPDAS"

b4. Set Encryption as "WPA2" · Wireless Key as"12345678"(If you cancel this setting without encryption)

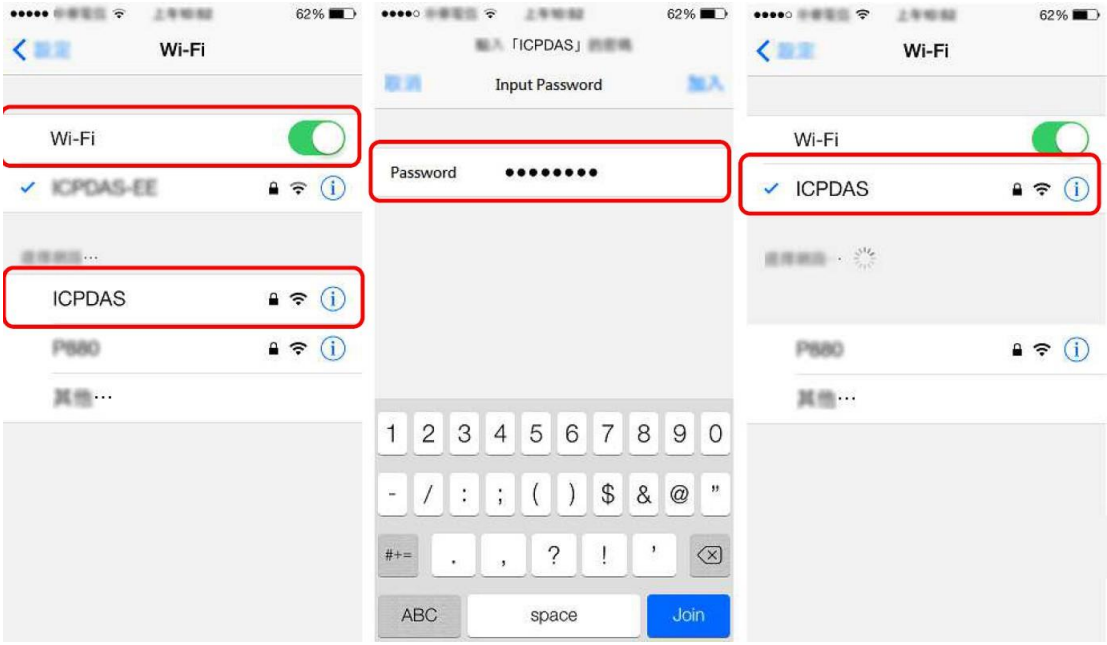
b5. The rest are reserved factory default settings

LRI Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000



C. Smartphone Wi-Fi network configuration

c1. Open the Smartphone Wi-Fi interface, · select "ICPDAS" network · set key as "12345678"and join the network



D. Network configuration of Smartphone

d1. Set as "DHCP" mode



E. Search WF-2000 IP address

e1. Please connect the computer to the wireless AP.

e2. Open the Wi-Fi interface, select "ICPDAS" network and set key as "12345678" to join the network.

LRI Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000



e4. Open "WF-2000 Utility v2.0"

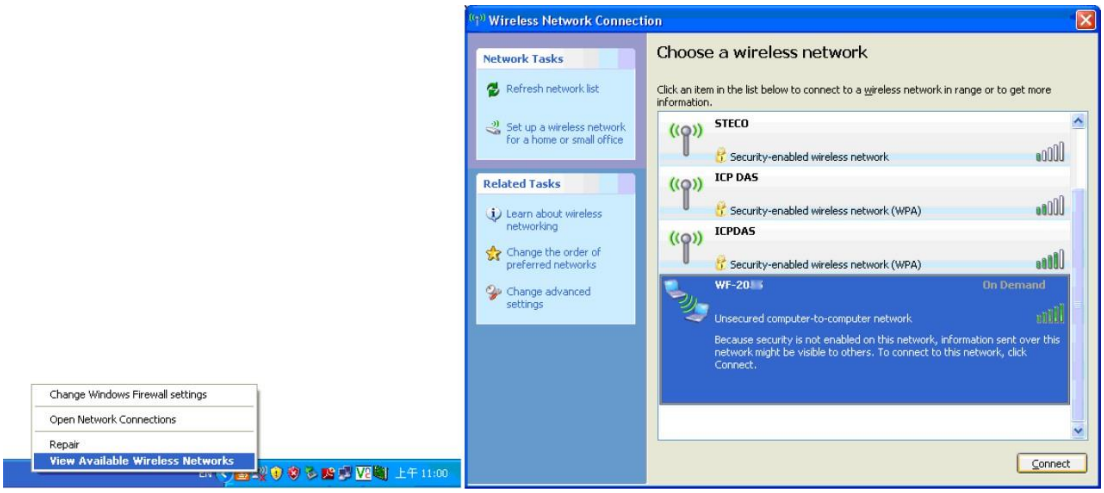
e5. Click "Search" button to search WF-2000 devices · it will obtain an IP address as the device list.

F. After the above settings, you can use your Smartphone to connect to the WF-2000 (IP address "192.168.0.248")

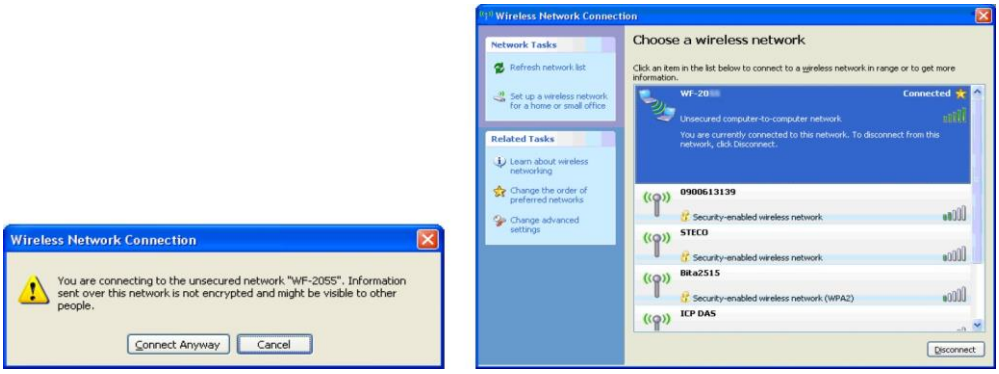
Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

Q3: How to establish a connection with the smart phone and WF-2000(Non RevB version)?

a. View available wireless networks and you can see the "WF-20xx" wireless network in the list. Select the "WF-20xx" and press the "Connect" button.



b. Press the "Connect Anyway" button for the next step. After waiting for a while, there will appear connection success screen.



LRI Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

Q4: How to configure the WF-2000(Non RevB version) DI / DO series to Pair Connection mode?

A4: Use two WF-2055 devices for operation example.

I. Smartphone support Ad Hoc Connectivity

A. The configuration of first WF-2055

a. Configuration Setting

a1. Set the Local IP as "192.168.255.1"

a2. The rest are reserved factory default settings.

a3. Click the "Write Para." button to take the parameters effect.



B. Pair Connection Setting

b1. Set the Remote IP as "192.168.255.2"

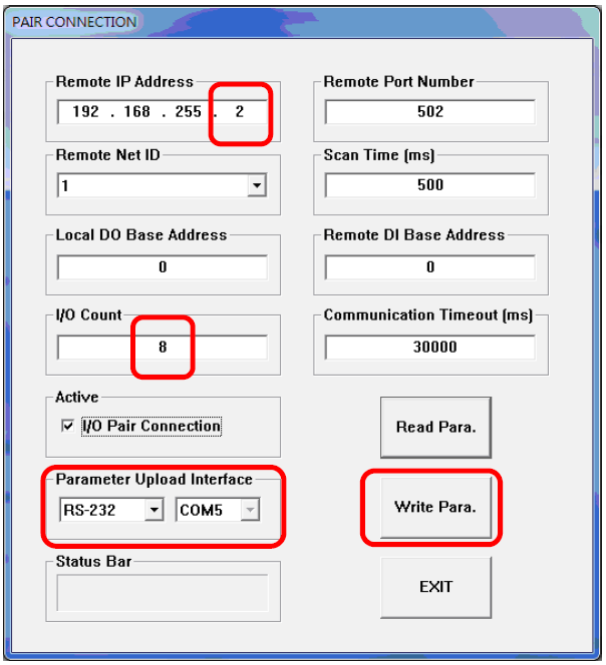
b2. Set the I/O count as "8"

b3. Checked "I/O Pair Connection" checkbox to enable pair connection.

b4. The rest are reserved factory default settings.

b5. Click the "Write Para." button to take the parameters effect.

LRI Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000



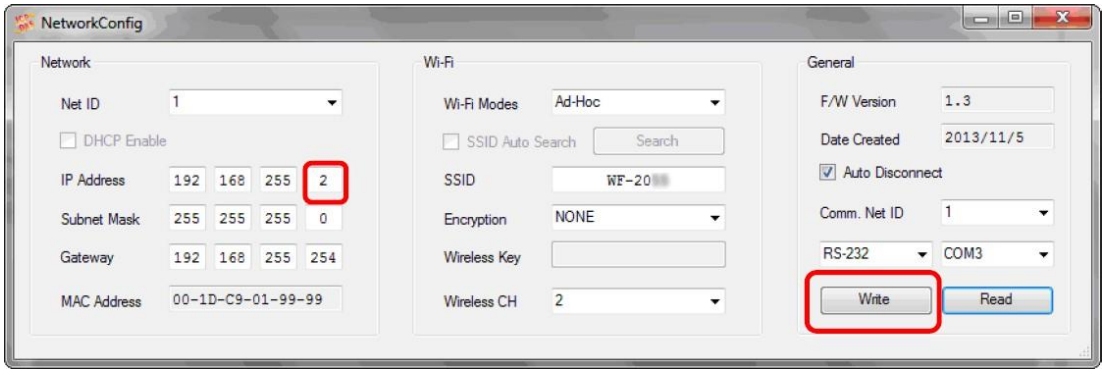
II. The configuration of second WF-2055

A. Configuration Setting

a1. Set the Local IP as "192.168.255.2".

a2. The rest are reserved factory default settings.

a3. Click the "Write Para." button to take the parameters effect.



B. Pair Connection Setting

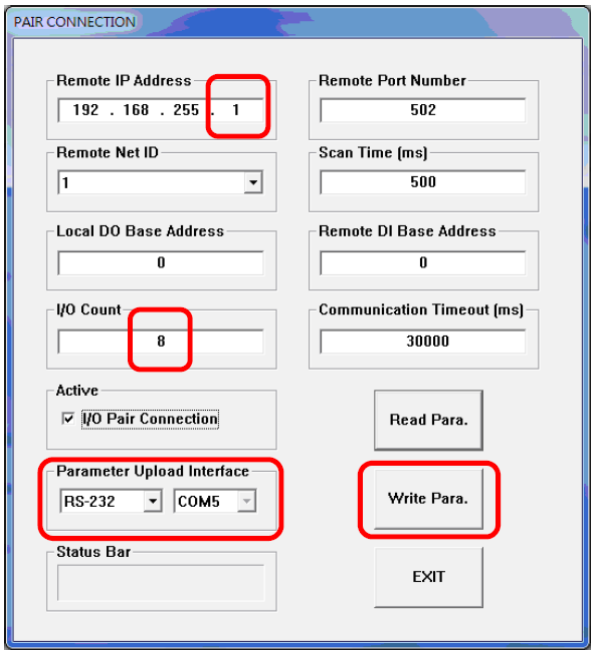
b1. Set the Remote IP as "192.168.255.1".

b2. Set the I/O count as "8".

b3. Checked "I/O Pair Connection" checkbox to enable pair connection. b4. The rest are reserved factory default settings.

b5. Click the "Write Para." button to take the parameters effect.

LRI Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000



C. Connection Test of Pairb Connection

c1. After completion of the above settings, re-power on the two sets of WF- 2055.

c2. The connection will established automatically after about 10 seconds.

c3. Any one of WF-2055's DI is triggered, then another WF-2055's corresponding DO will automatically output.

LRI Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

Q5. How can I make Wi-Fi connection range larger than 1km?

A5: External antenna and PA are required. We test with ANT-15 and ALFA APAG05- PoE. We make the connection test with WF-2571 and its diagram is show below. The both NB(Notebook) make the remote desktop connection with each other. The communication environment is LOS.

NB1 + WF-2571 + PA + ANT-15 <----- Ad-Hoc > ANT-15 + PA + WF-2571 + NB2

(NB: Notebook)

The connection failed on 2020m. That is larger than 1km. ALFA APAG05-PoE:
https://www.alfa.com.tw/products/apag05-poe?variant=36473964003400

ANT-15
https://www.icpdas.com/en/product/ANT-15

Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

Q6. WF-2000 (RevB/C Version) DI/DO Pair Connection (One-to-one mode)

A6:

I. Utility and Hardware Connection

1. Download Utility

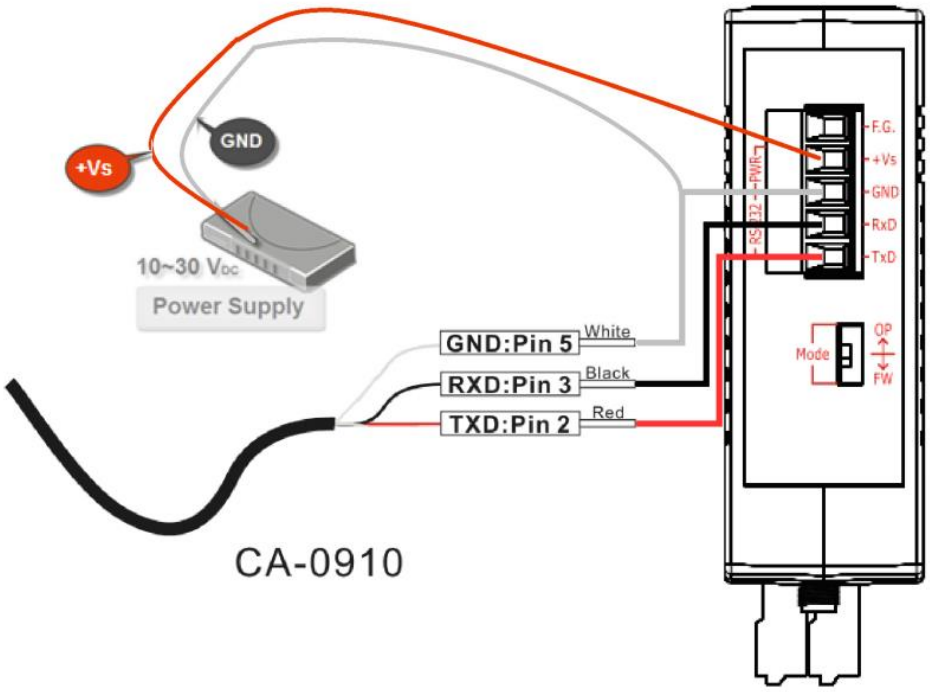
The WF-2000 has three version. One is 「Non RevB」, another is 「RevB」and the other is 「RevC」. You will need to download the appropriate version of the utilty.

Non RevB Version: https://www.icpdas.com/tw/download/file.php?num=16881

RevB/ RevC Version: https://www.icpdas.com/tw/download/file.php?num=16882

2. Hardware Connection

The utility use the RS-232 to set the configuration. It needs to make sure the mode switch at 「OP」 position. The RS-232 connection shows as following:

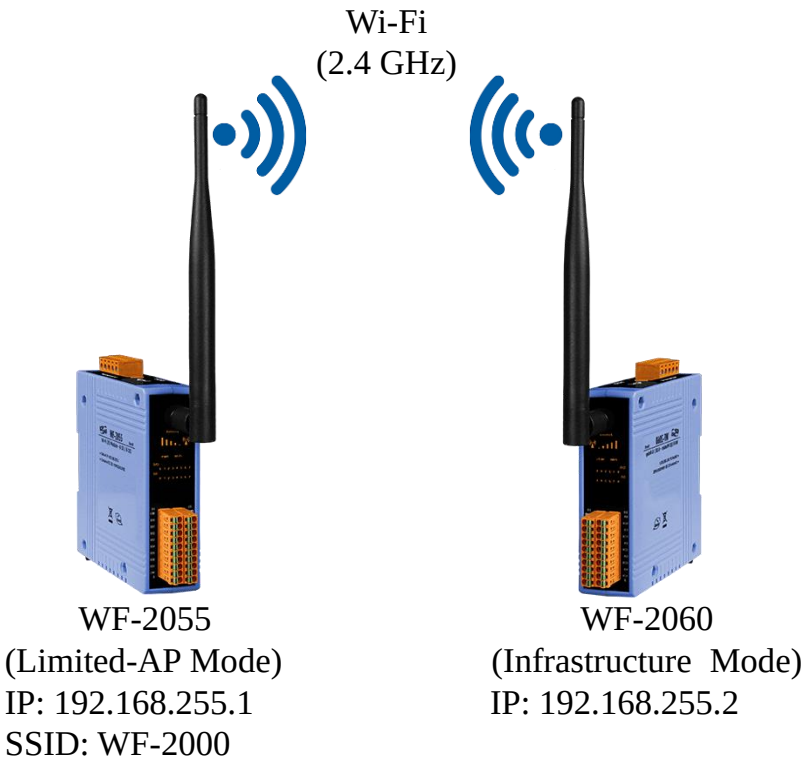


Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

II. System Architecture

1. Wi-Fi Connection

The application uses WF-2055 and WF-2060. One is Limited-AP mode, another are Infrastructure mode. The WF-2055 and WF-2060 connect by Wi-Fi and setting in same network segment.



2. Pair Connection Configuration

DI Source	Channel	DO Output	Channel
WF-2055	DI 0	WF-2060	Relay Output 0
	DI 1		Relay Output 1
	DI 2		Relay Output 2
	DI 3		Relay Output 3
WF-2060	DI 0	WF-2055	DO 0
	DI 1		DO 1
	DI 2		DO 2
	DI 3		DO 3

The WF-2060's Relay output 0 change to ON when the WF-2055's DI 0 is ON. When DI 0 of WF-2055 is OFF, the relay Output 0 of WF-2060 will be OFF. The relay Output 0 of

Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

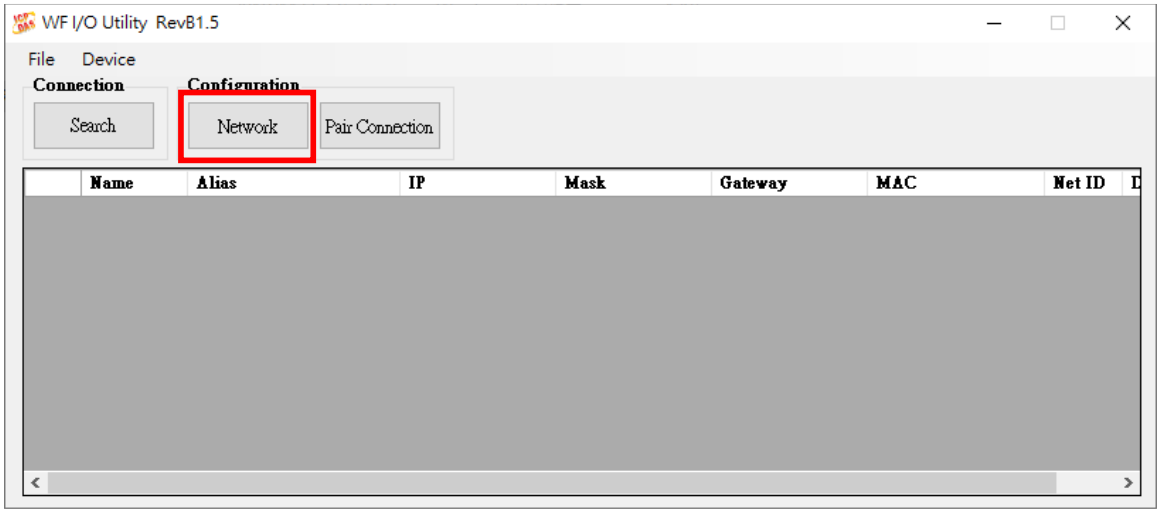
WF-2060 will bind the state of WF-2055 DI 0.

III. Wi-Fi Configuration

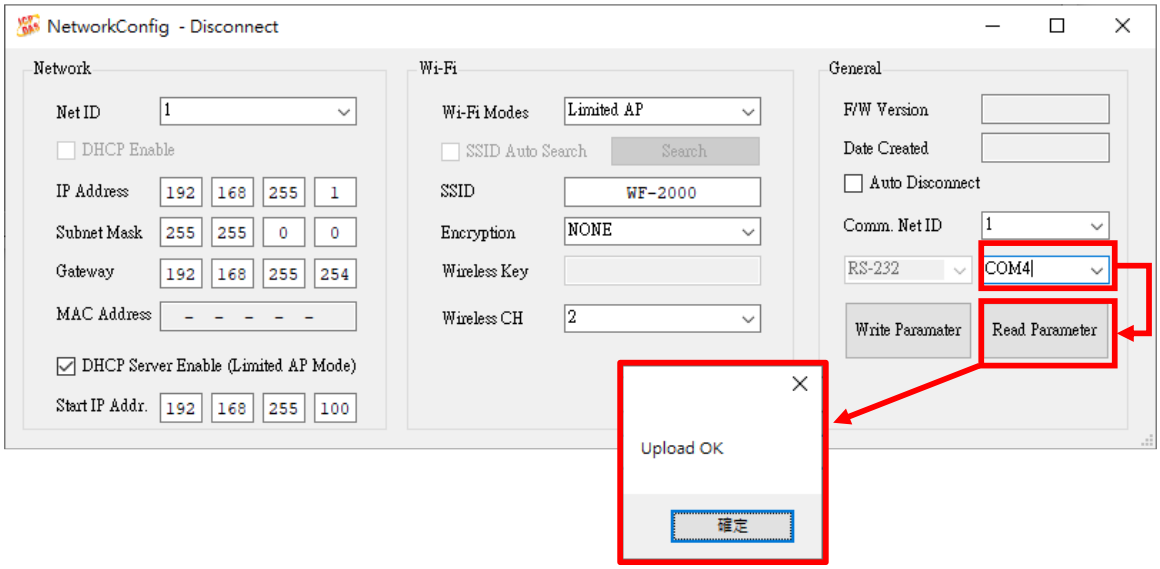
We will introduce how to configure WF-2000 to Limited-AP and Infrastructure mode in this chapter. This method allows two WF-2000s to be connected to each other. You can set both WF-2000s to Infrastructure mode to connect to the same Wi-Fi AP.

1. WF-2055 Configuration (Limited-AP mode)

A. Step 1: Click 「Network」 to enter Wi-Fi configuration.

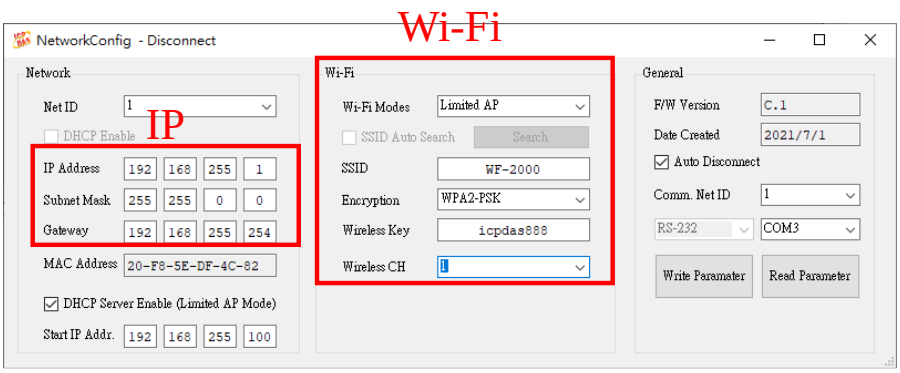


B. Step 2: Select COM Port of WF-2055 and click 「Read Parameter」. The utility displays 「Upload OK」 message after the Wi-Fi parameters read successfully.



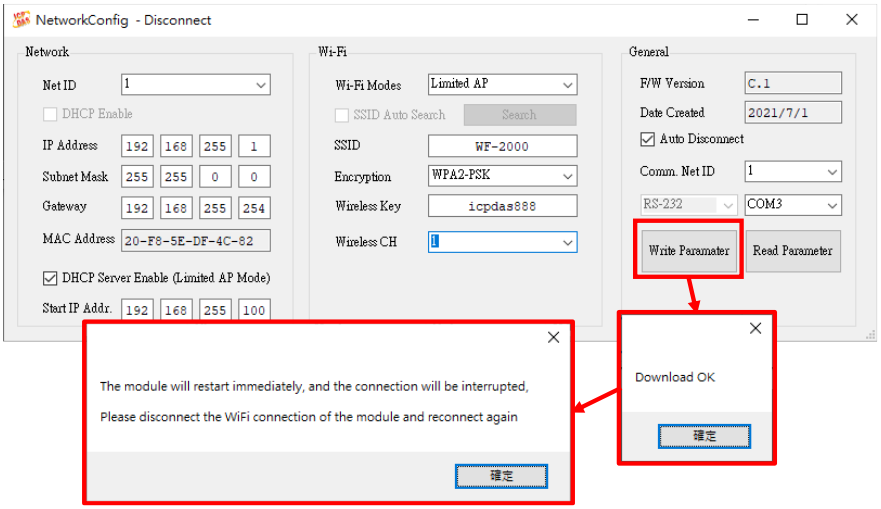
LRI Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

C. **Step 3**: Wi-Fi parameter and IP setting (The IP's segment must be same with WF-2060).



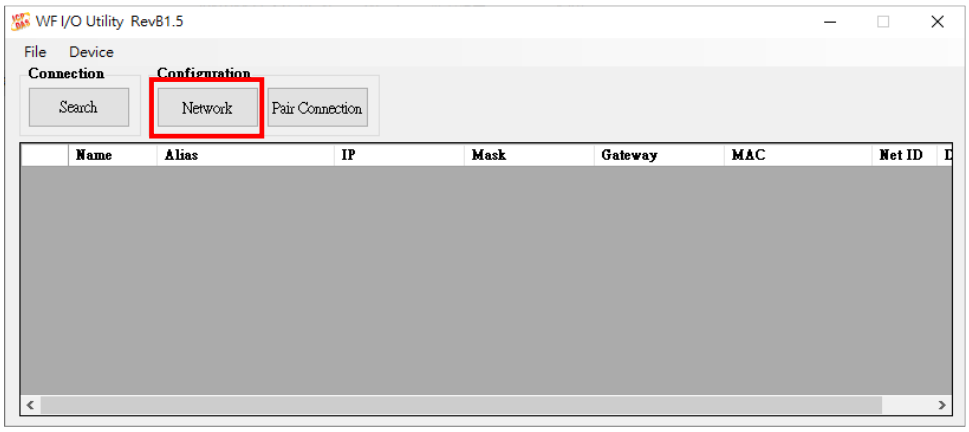
Name	Description
IP Parameter	
IP Address	**IP of WF-2055**
Subnet mask	**Mask of WF-2055**
Gateway	**Gateway of WF-2055**
Wi-Fi Parameter	
Wi-Fi Mode	**Wi-Fi mode. WF-2055 is「Limited-AP」mode.**
SSID	**AP's SSID**
Encryption	**Wi-Fi encryption(Recommended for WPA2-PSK mode)**
Wireless Key	**Wi-Fi password**
Wireless CH	**AP's Wi-Fi channel(Recommended for CH 1/6/11)**

D. **Step 4**: Click 「Write Parameter」to write the Wi-Fi parameter. The utility displays 「Download OK」 message and reboot after the Wi-Fi parameters write successfully.

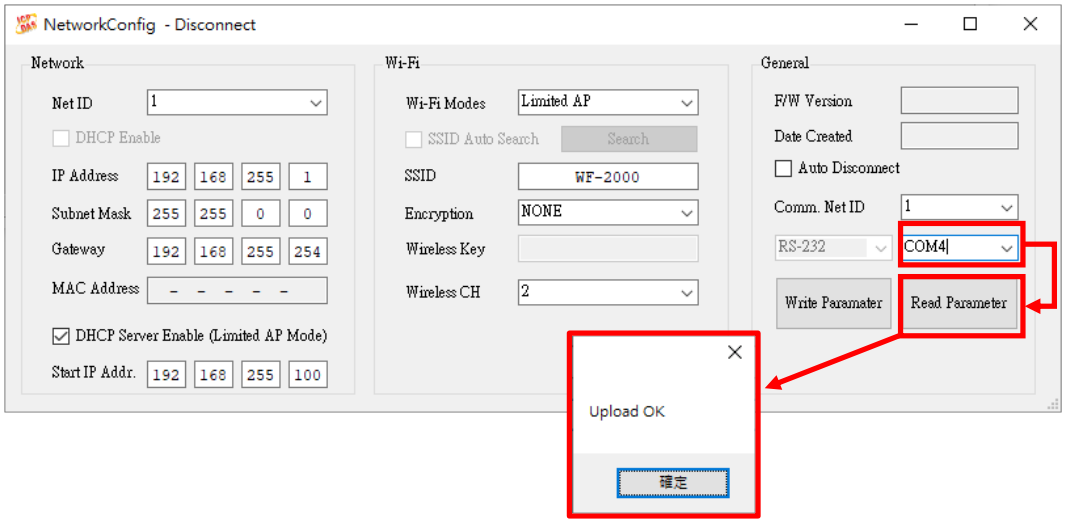


2. WF-2060 Configuration (Infrastructure mode)

A. Step1: Click 「Network」 to enter Wi-Fi configuration.



B. Step2: Select COM Port of WF-2060 and click 「Read Parameter」. The utility displays 「Upload OK」 message after the Wi-Fi parameters read successfully.



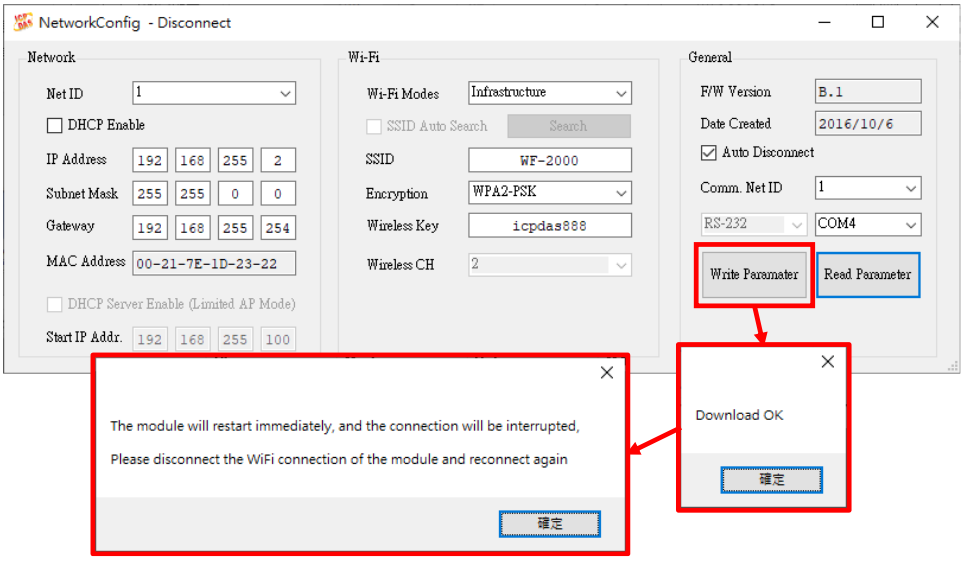
C. Step 3: Wi-Fi parameter and IP setting (The IP's segment must be same with WF-2055).



LRI Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

Name	Description
IP Parameter	
IP Address	IP of WF-2060
Subnet mask	Mask of WF-2060
Gateway	Gateway of WF-2060
Wi-Fi Parameter	
Wi-Fi Mode	Wi-Fi mode. WF-2060 is「Infrastructure」mode.
SSID	To connect the SSID of a Wi-Fi AP
Encryption	Wi-Fi encryption (Same with Wi-Fi AP's encryption)
Wireless Key	Wi-Fi password (Same with Wi-Fi AP's password)

D. Step 4: Click「Write Parameter」to write the Wi-Fi parameter. The utility displays「Download OK」message and reboot after the Wi-Fi parameters write successfully.



IV. Pair Connection

You need to make sure that the Wi-Fi connection between the two WF-2000s is normal before setting up the Pair Connection. You can observe the signal LED and PWR LED of the module. If the connection is successful, the signal LED will light up at least once; the PWR LED will flash once a second or remain on constantly.

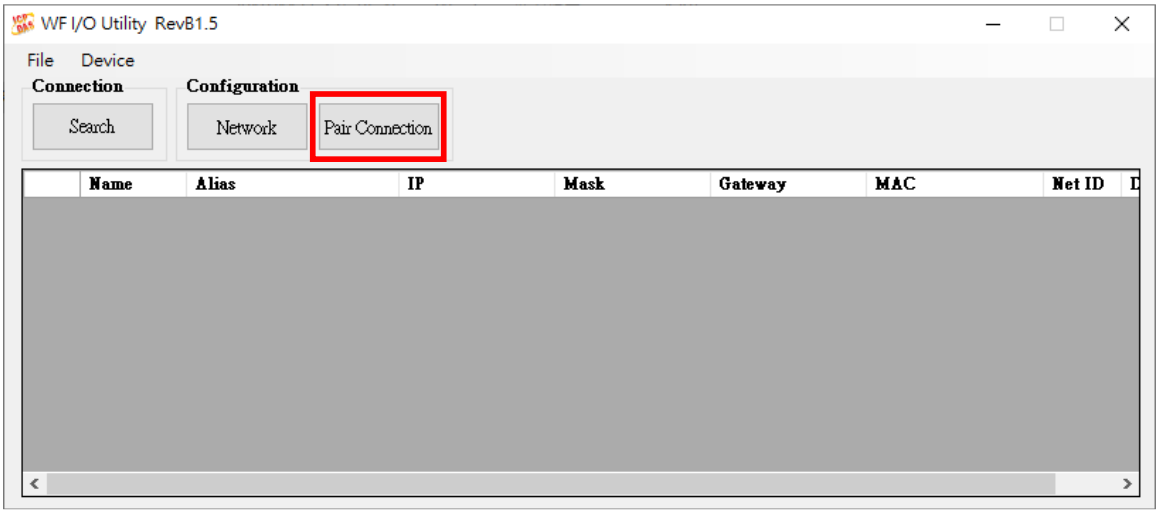
This section describes how to configure the following Pair Connection:

LRI Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

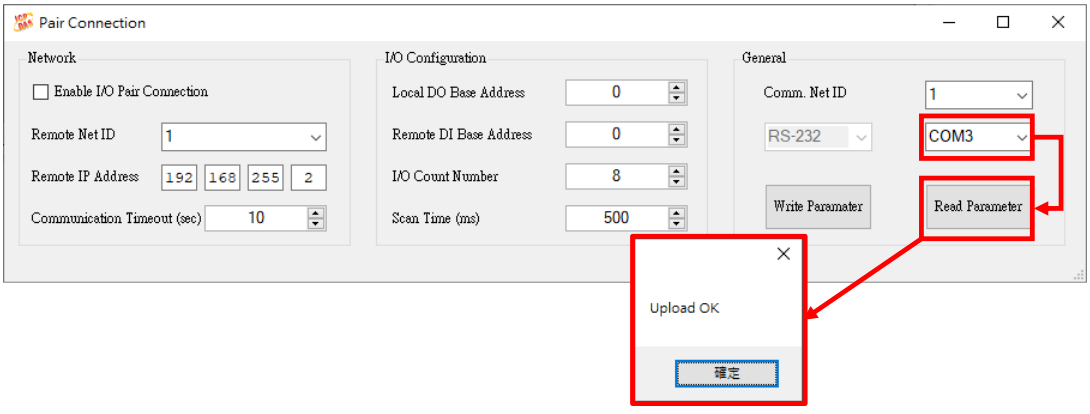
DI Source	Channel	DO Output	Channel
WF-2055	DI 0	WF-2060	Relay Output 0
	DI 1		Relay Output 1
	DI 2		Relay Output 2
	DI 3		Relay Output 3
WF-2060	DI 0	WF-2055	DO 0
	DI 1		DO 1
	DI 2		DO 2
	DI 3		DO 3

1. WF-2055 Configuration (WF-2055's DO 0~3 mapping to WF-2060's DI 0~3)

A. Step 1: Click 「Pair Connection」 to enter pair connection configuration.

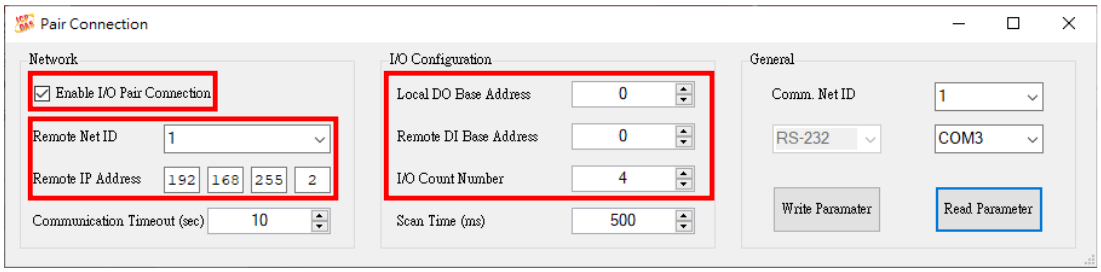


B. Step 2: Select COM Port of WF-2055 and click 「Read Parameter」. The utility displays 「Upload OK」 message after the pair connection parameters read successfully.



LRI Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

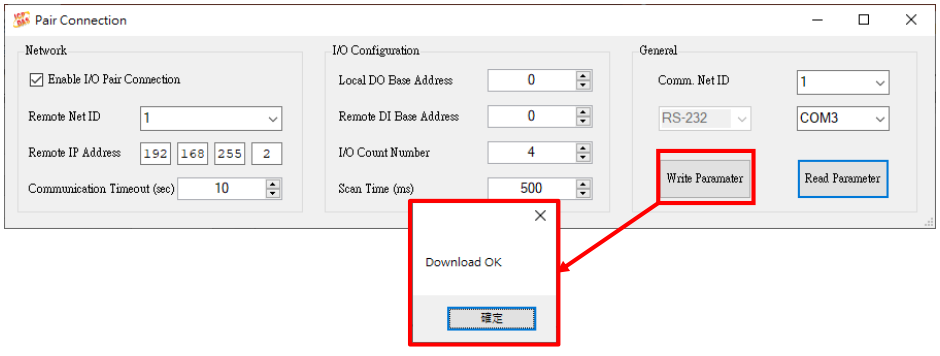
C. Step 3: Click 「Enable I/O Pair Connection」,module information and I/O mapping relationship.



Name	Description
Module Information	
Remote Net ID	**Mapping Device Net ID. (WF-2060's net ID)**
Remote IP Address	**Mapping Device Net ID IP(WF-2060's IP)**
I/O mapping	
Local DO Base Address	**WF-2055 DO start address for Pair Connection. The setting is 0 mean that corresponds to WF-2055 DO 0.**
Remote DI Base Address	**WF-2055 has to perform Pair Connection from the DI of the mapping device, which is 0, starting from WF-2060 DI 0.**
I/O Count Number	**The I/O amount for pair connection, which is 4, mean DO 0~3.**
Scan Time(ms)	**Pair connection refresh time(min time is 500 ms)**

The DO 0~3 of WF-2055 will correspond to DI 0~3 of WF-2060 with the above settings.

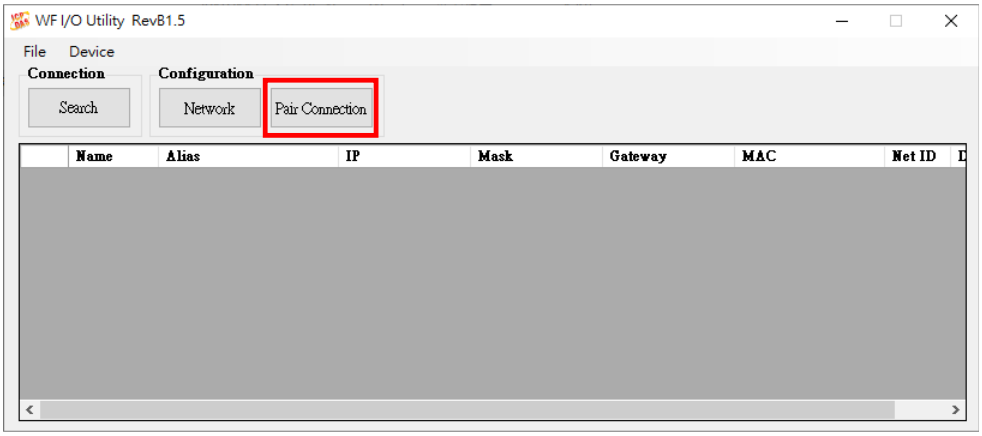
D. Step 4: Click 「Write Parameter」 to write configuration. The utility displays 「Download OK」 message after the pair connection parameters write successfully.



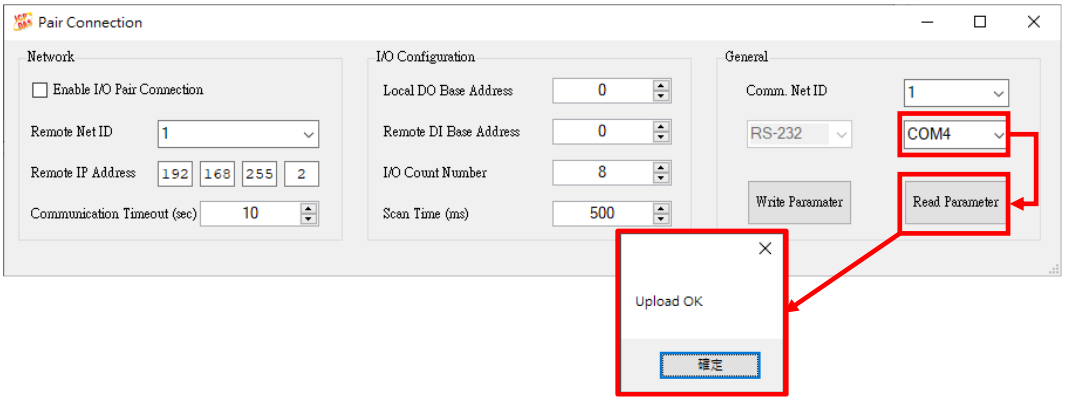
LRI Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

2. WF-2060 Configuration (WF-2060's Relay Output 0~3 mapping to WF-2055's DI 0~3)

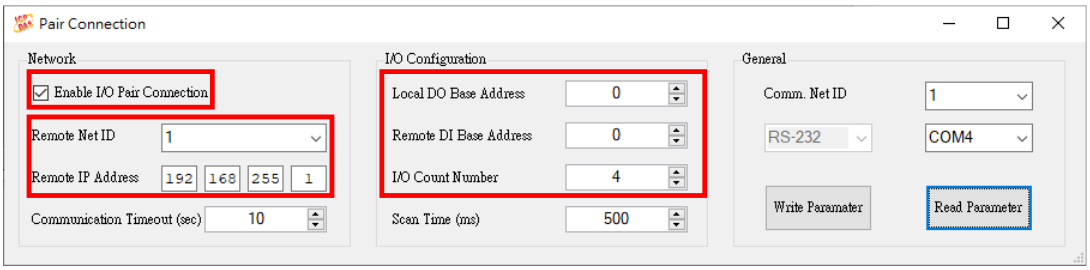
A. Step 1: Click 「Pair Connection」 to enter pair connection configuration.



B. Step 2: Select COM Port of WF-2060 and click 「Read Parameter」. The utility displays 「Upload OK」 message after the pair connection parameters read successfully.



C. Step 3: Click 「Enable I/O Pair Connection」,module information and I/O mapping relationship.

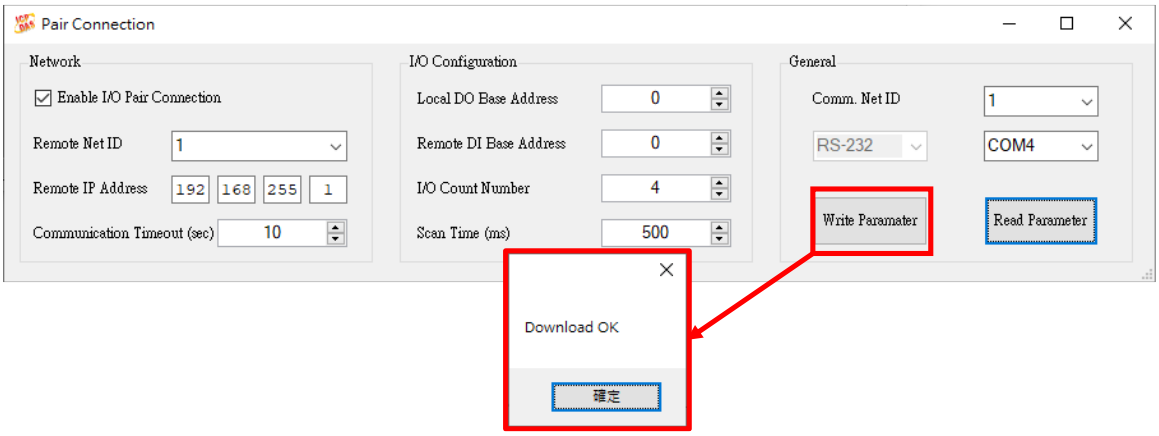


LRI Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

Name	Description
Module Information	
Remote Net ID	**Mapping Device Net ID. (WF-2055's net ID)**
Remote IP Address	**Mapping Device Net ID IP(WF-2055's IP)**
I/O mapping	
Local DO Base Address	**WF-2060 DO start address for Pair Connection. The setting is 0 mean that corresponds to WF-2060 DO 0.**
Remote DI Base Address	**WF-2060 has to perform Pair Connection from the DI of the mapping device, which is 0, starting from WF-2055 DI 0.**
I/O Count Number	**The I/O amount for pair connection, which is 4, mean DO 0~3.**
Scan Time(ms)	**Pair connection refresh time(min time is 500 ms)**

The DO 0~3 of WF-2060 will correspond to DI 0~3 of WF-2055 with the above settings.

D. Step 4: Click 「Write Parameter」 to write configuration. The utility displays 「Download OK」 message after the pair connection parameters write successfully.



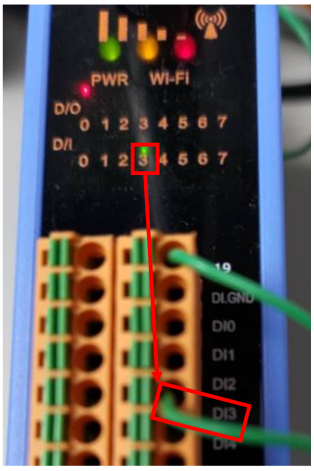
V. Pair Connection Verification

Please re-power on the module after setting up the WF-2000's Pair Connection. To make sure the Wi-Fi connection between the two modules is normal. If the Wi-Fi connection is successful, the signal LED will be on and the PWR LED will go from fast flash to slow flash or constant light.

1. DI Trigger Verification

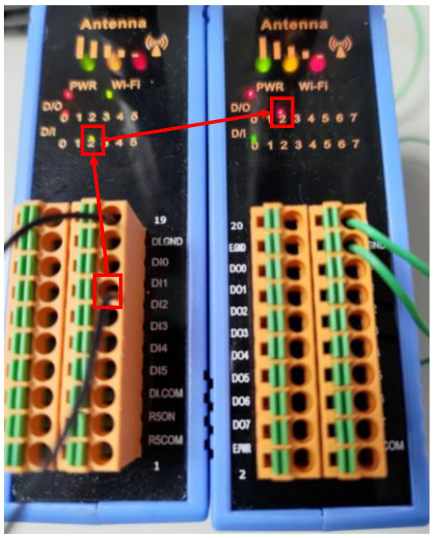
LRI Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

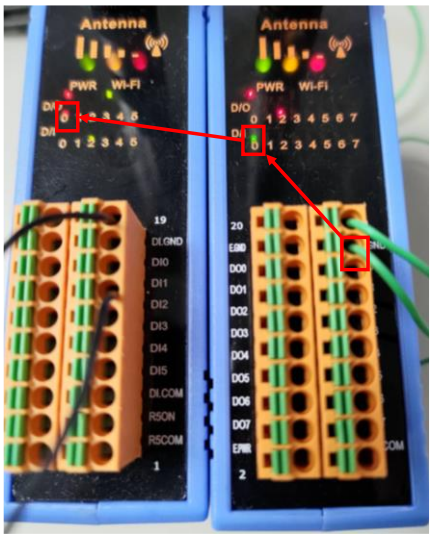
Step 1: You can short the DI x (0~7) to DI.GND of WF-2000 GND. The corresponding DI LED will light up after shorting.



2. Pair Connection Verification

Step 1: You can short the DI and DI.GND of the WF-2000 and the DO LED of the corresponding device will light up.





Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

Q7. WF-2000 (RevB/C Version) DI/DO Pair Connection (one-to-many mode)

A7:

I. Utility and Hardware Connection

1. Download Utility

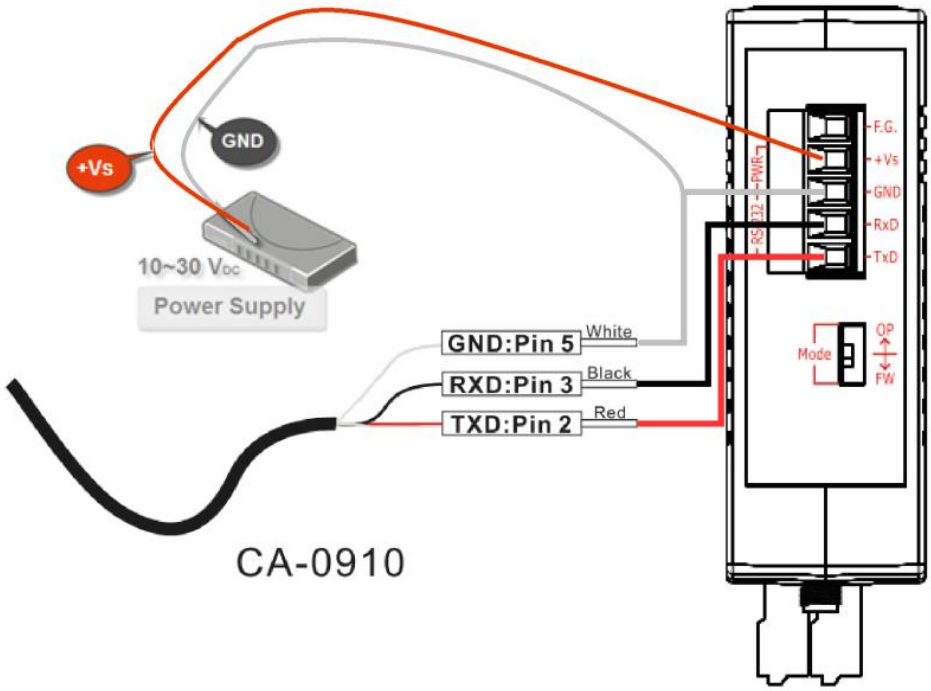
The WF-2000 has three version. One is 「Non RevB」, another is 「RevB」and the other is 「RevC」. You will need to download the appropriate version of the utilty.

Non RevB Version: https://www.icpdas.com/tw/download/file.php?num=16881

RevB/ RevC Version: https://www.icpdas.com/tw/download/file.php?num=16882

2. Hardware Connection

The utility use the RS-232 to set the configuration. It needs to make sure the mode switch at 「OP」 position. The RS-232 connection shows as following:

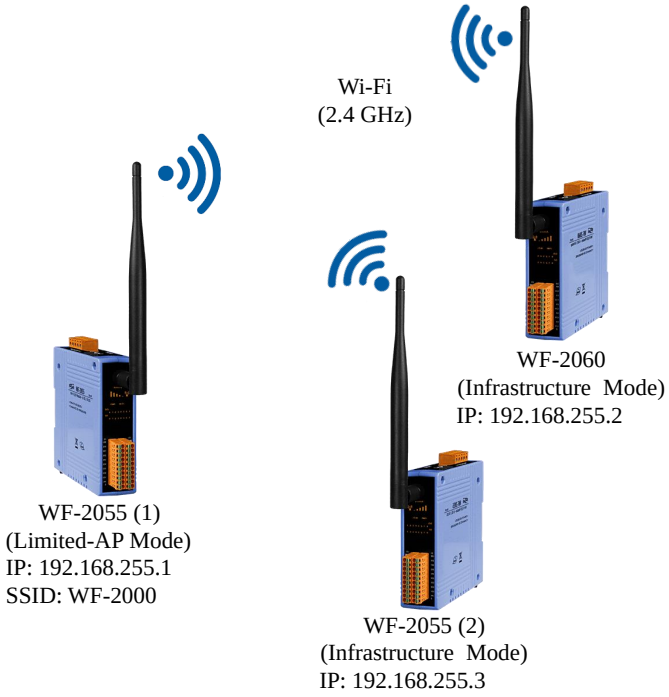


Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

II. System Architecture

1. Wi-Fi Connection

The application uses two WF-2055s and one WF-2060. One is Limited-AP mode, another are Infrastructure mode. The WF-2055 and WF-2060 connect by Wi-Fi and setting in same network segment.



2. Pair Connection Configuration

DI Source	Channel	DO Output	Channel
WF-2055(1)	DI 0	WF-2060 WF-2055(2)	DO 0
	DI 1		DO 1
	DI 2		DO 2
	DI 3		DO 3
WF-2060	DI 0	WF-2055(1)	DO 0
	DI 1		DO 1
	DI 2		DO 2
	DI 3		DO 3

The WF-2060/WF-2055(2) digital output 0 change to ON when the WF-2055(1) DI 0 is ON. When DI 0 of WF-2055(1) is OFF, the relay Output 0 of WF-2060/WF-2055(2) will be OFF. The relay Output 0 of WF-2060/WF-2055(2) will bind the state of WF-2055(1) DI 0.

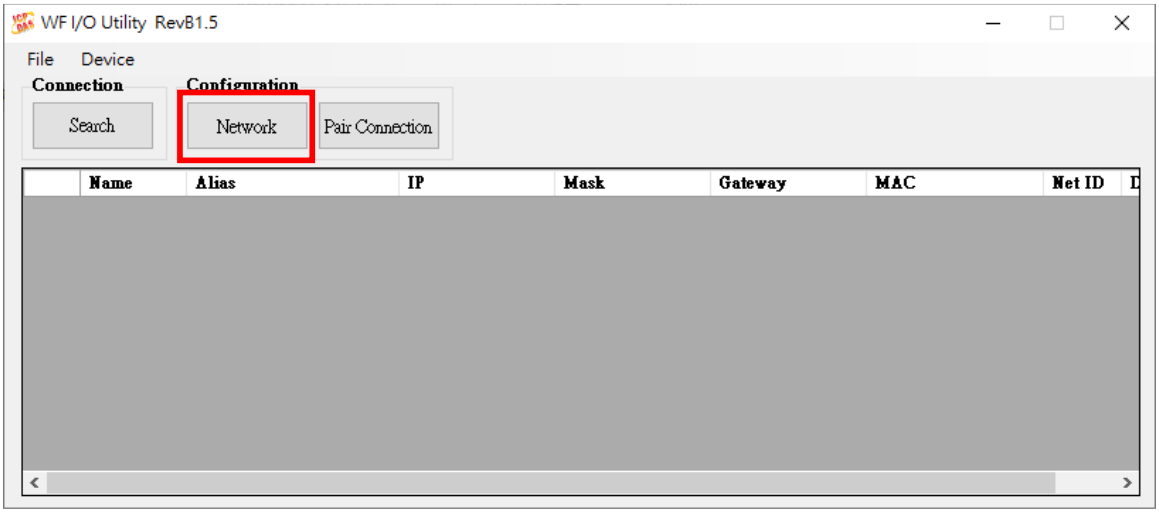
Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

III. Wi-Fi configuration

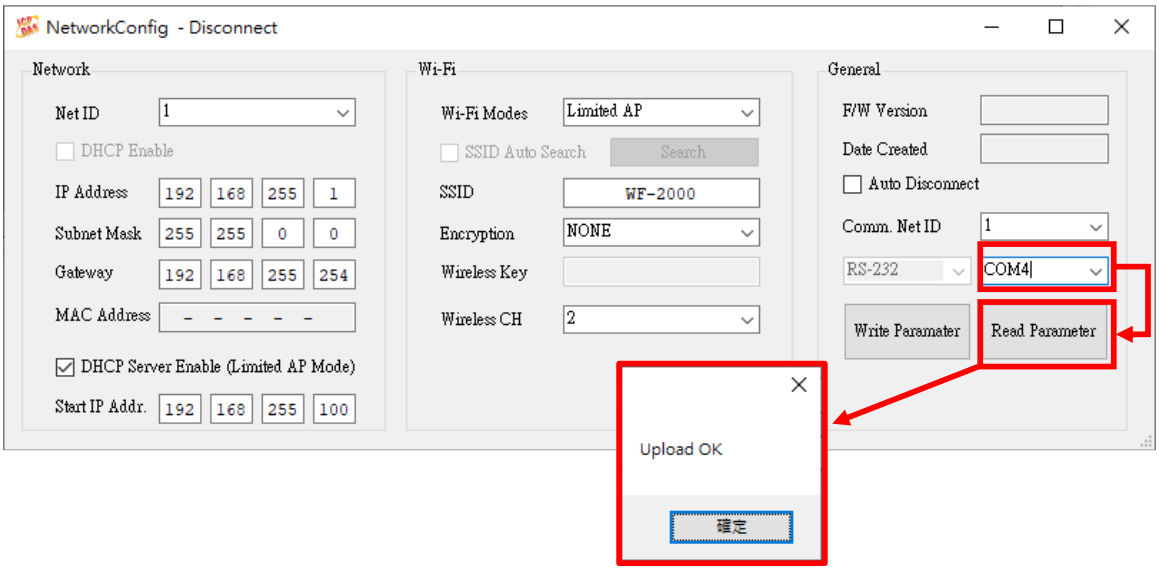
We will introduce how to configure WF-2000 to Limited-AP and Infrastructure mode in this chapter. This method allows two WF-2000s to be connected to each other. You can set both WF-2000s to Infrastructure mode to connect to the same Wi-Fi AP.

1. WF-2055(1) Configuration(Limited-AP mode)

A. Step1: Click 「Network」 to enter Wi-Fi configuration.

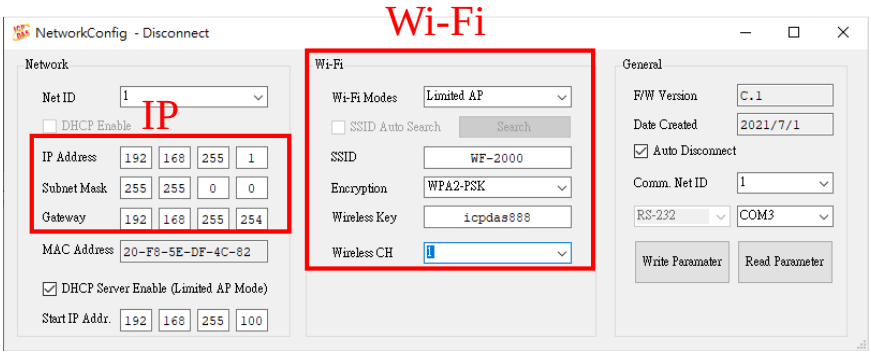


B. Step 2: Select COM Port of WF-2055 and click 「Read Parameter」. The utility displays 「Upload OK」 message after the Wi-Fi parameters read successfully.



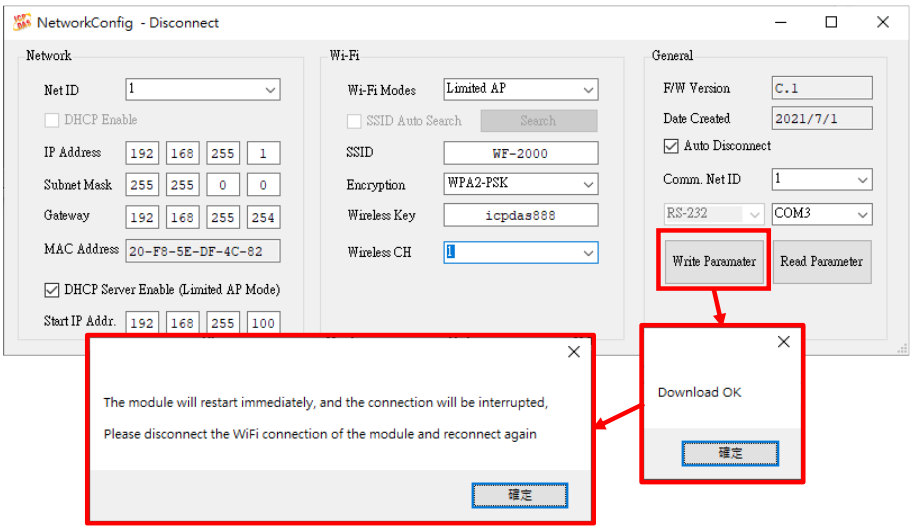
LRI Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

C. Step 3: Wi-Fi parameter and IP setting (The IP's segment must be same with WF-2055(2) and WF-2060)



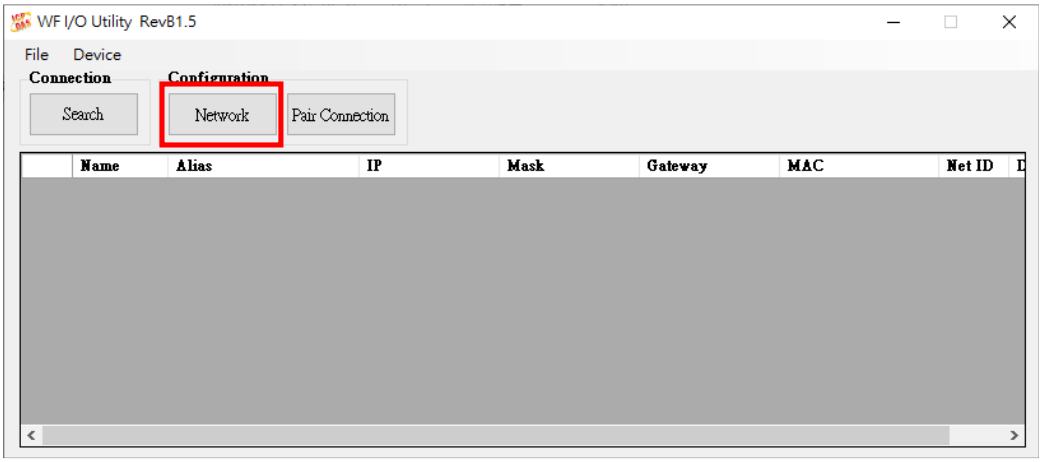
Name	Description
IP Parameter	
IP Address	**IP of WF-2055(1)**
Subnet mask	**Mask of WF-2055(1)**
Gateway	**Gateway of WF-2055(1)**
Wi-Fi Parameter	
Wi-Fi Mode	**Wi-Fi mode. WF-2055(1) is「Limited-AP」mode.**
SSID	**AP's SSID**
Encryption	**Wi-Fi encryption(Recommended for WPA2-PSK mode)**
Wireless Key	**Wi-Fi password**
Wireless CH	**AP's Wi-Fi channel(Recommended for CH 1/6/11)**

D. Step 4: Click 「Write Parameter」to write the Wi-Fi parameter. The utility displays 「Download OK」 message and reboot after the Wi-Fi parameters write successfully.

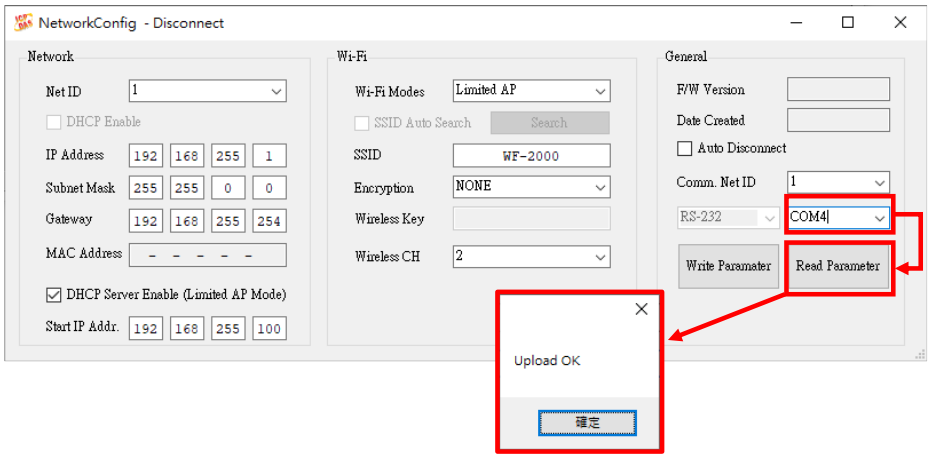


2. WF-2060 Configuration (Infrastructure Mode)

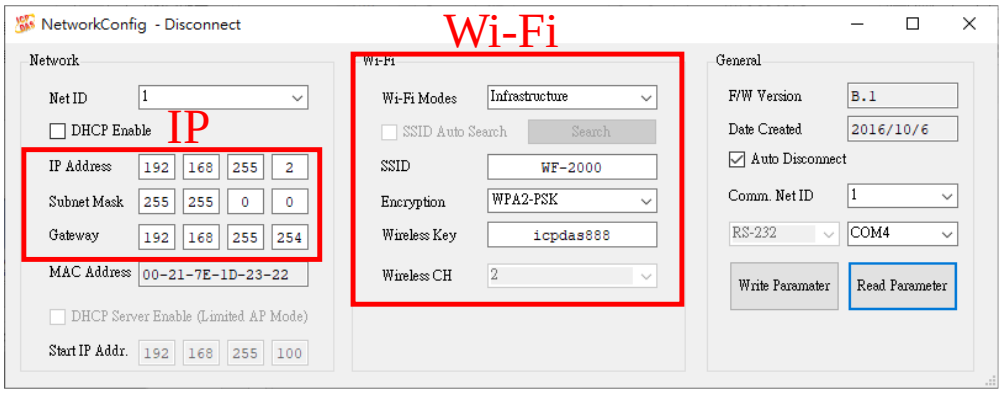
A. Step1: Click 「Network」 to enter Wi-Fi configuration.



B. Step2: Select COM Port of WF-2060 and click 「Read Parameter」. The utility displays 「Upload OK」 message after the Wi-Fi parameters read successfully.



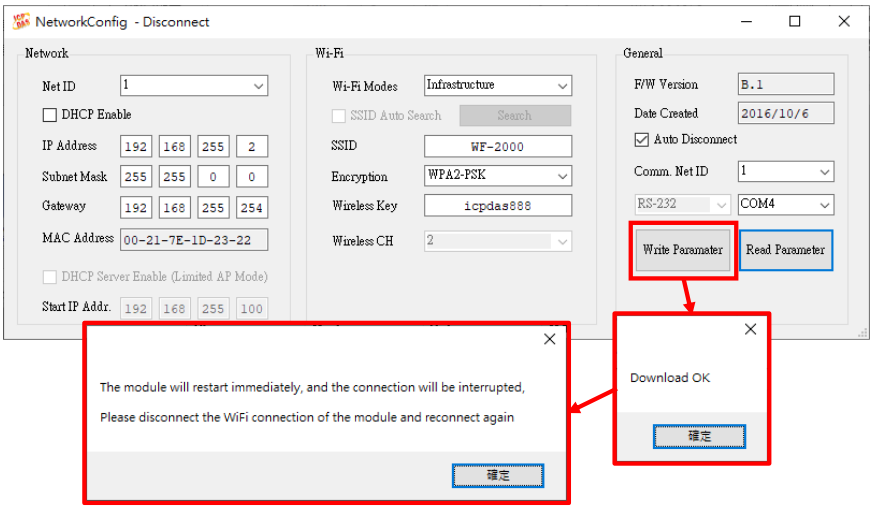
C. Step 3: Wi-Fi parameter and IP setting (The IP's segment must be same with WF-2055(1)/WF-2055(2))



LRI Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

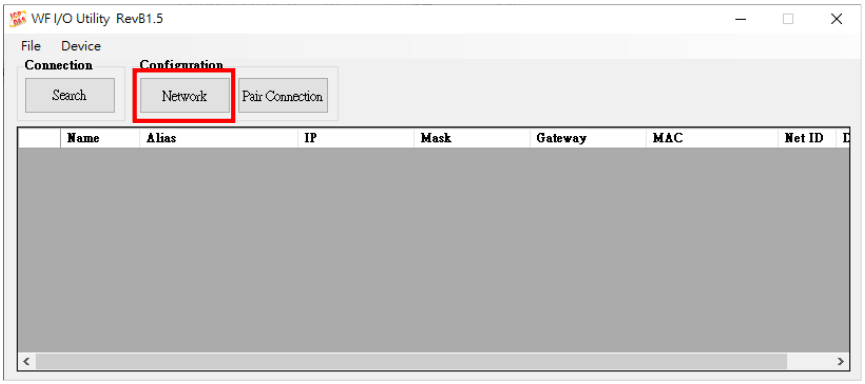
Name	Description
IP Parameter	
IP Address	IP of WF-2060
Subnet mask	Mask of WF-2060
Gateway	Gateway of WF-2060
Wi-Fi Parameter	
Wi-Fi Mode	Wi-Fi mode. WF-2060 is「Infrastructure」mode.
SSID	To connect the SSID of a Wi-Fi AP
Encryption	Wi-Fi encryption (Same with Wi-Fi AP's encryption)
Wireless Key	Wi-Fi password (Same with Wi-Fi AP's password)

D. Step 4: Click「Write Parameter」to write the Wi-Fi parameter. The utility displays「Download OK」message and reboot after the Wi-Fi parameters write successfully.



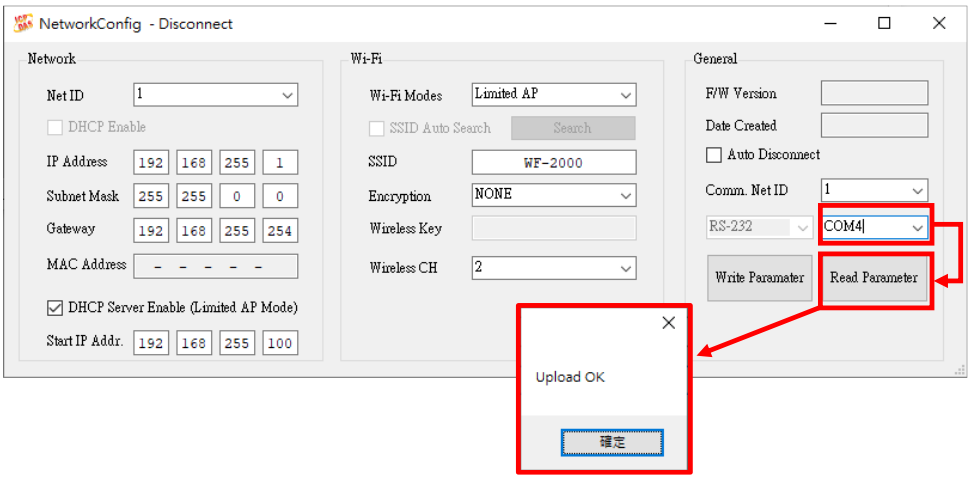
3. WF-2055(2) Configuration (Infrastructure mode)

A. Step 1: Click 「Network」to enter Wi-Fi configuration.

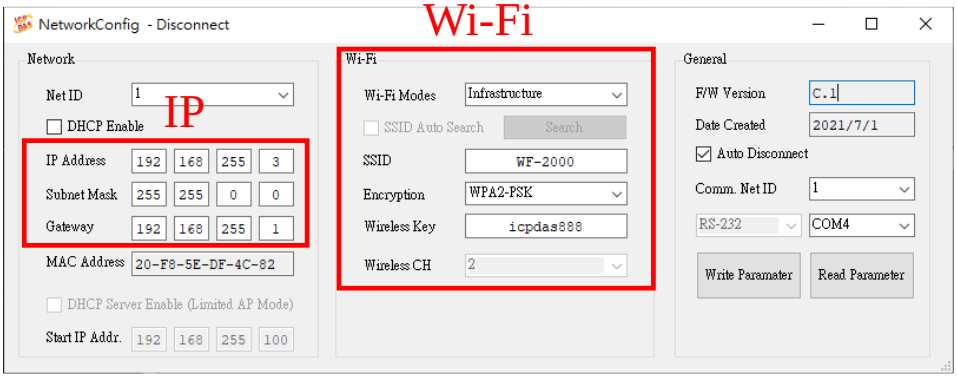


Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

B. Step 2: Select COM Port of WF-2055(2) and click 「Read Parameter」. The utility displays 「Upload OK」 message after the Wi-Fi parameters read successfully.



C. Step 3: Wi-Fi parameter and IP setting (The IP's segment must be same with WF-2055(1)/WF-2060).

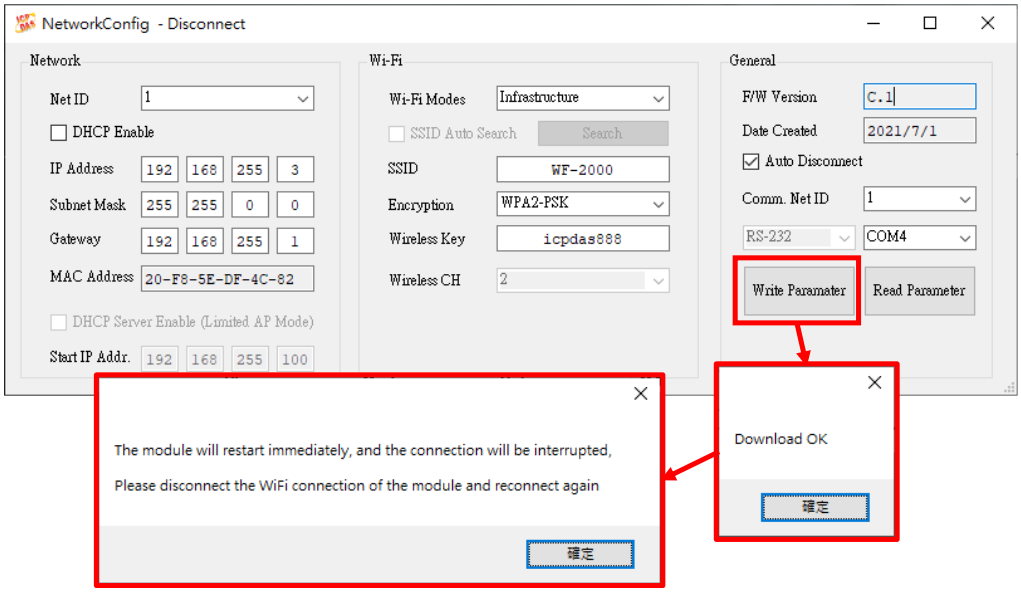


Name	Description
IP Parameter	
IP Address	**IP of WF-2055(2)**
Subnet mask	**Mask of WF-2055(2)**
Gateway	**Gateway of WF-2055 (2)**
Wi-Fi Parameter	
Wi-Fi Mode	**Wi-Fi mode. WF-2055(2) is 「Infrastructure」 mode.**
SSID	**To connect the SSID of a Wi-Fi AP**
Encryption	**Wi-Fi encryption (Same with Wi-Fi AP's encryption)**
Wireless Key	**Wi-Fi password (Same with Wi-Fi AP's password)**

D. Step 4: Click 「Write Parameter」 to write the Wi-Fi parameter. The utility displays 「Download OK」 message and reboot after the Wi-Fi parameters write

LRI Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

successfully.



IV. Pair Connection

You need to make sure that the Wi-Fi connection between the two WF-2000s is normal before setting up the Pair Connection. You can observe the signal LED and PWR LED of the module. If the connection is successful, the signal LED will light up at least once; the PWR LED will flash once a second or remain on constantly.

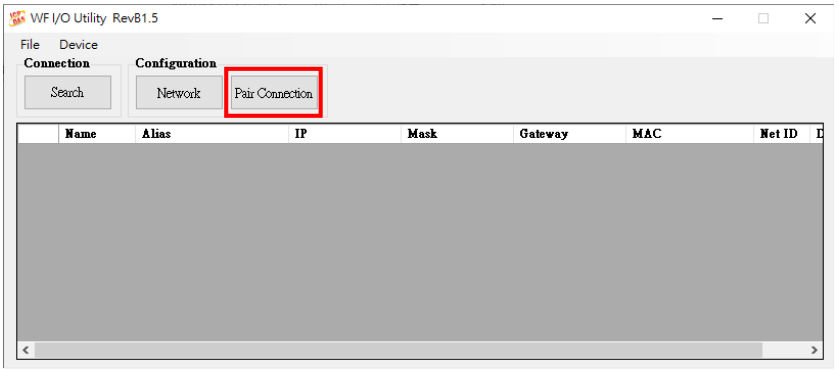
This section describes how to configure the following Pair Connection:

DI source	Channel	DO Output	Channel
WF-2055(1)	DI 0	WF-2060 WF-2055(2)	DO 0
	DI 1		DO 1
	DI 2		DO 2
	DI 3		DO 3
WF-2060	DI 0	WF-2055(1)	DO 0
	DI 1		DO 1
	DI 2		DO 2
	DI 3		DO 3

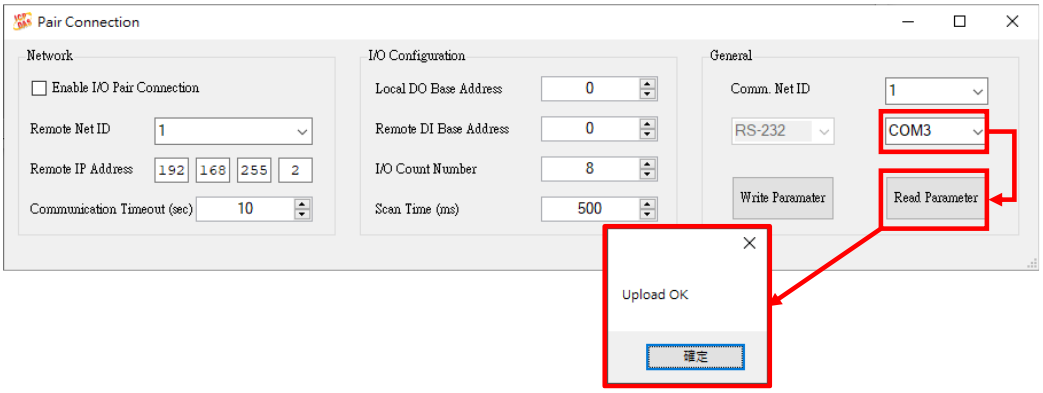
1. WF-2055(1) Configuration (WF-2055(1) DO 0~3 mapping to WF-2060's DI 0~3)

A. Step 1: Click 「Pair Connection」 to enter pair connection configuration.

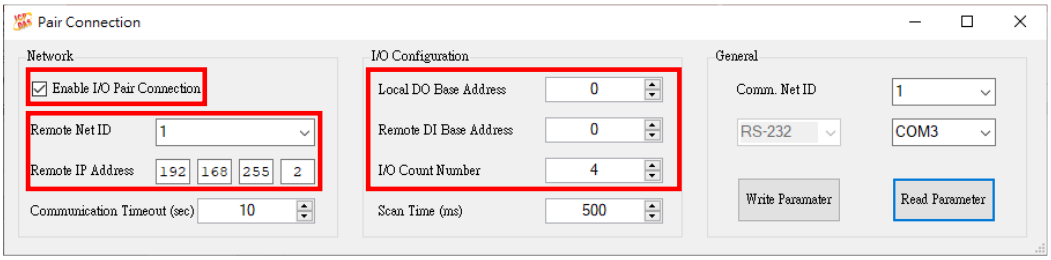
LRI Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000



B. **Step 2**: Select COM Port of WF-2055(1) and click 「Read Parameter」. The utility displays 「Upload OK」 message after the pair connection parameters read successfully.



C. **Step 3**: Click 「Enable I/O Pair Connection」,module information and I/O mapping relationship.



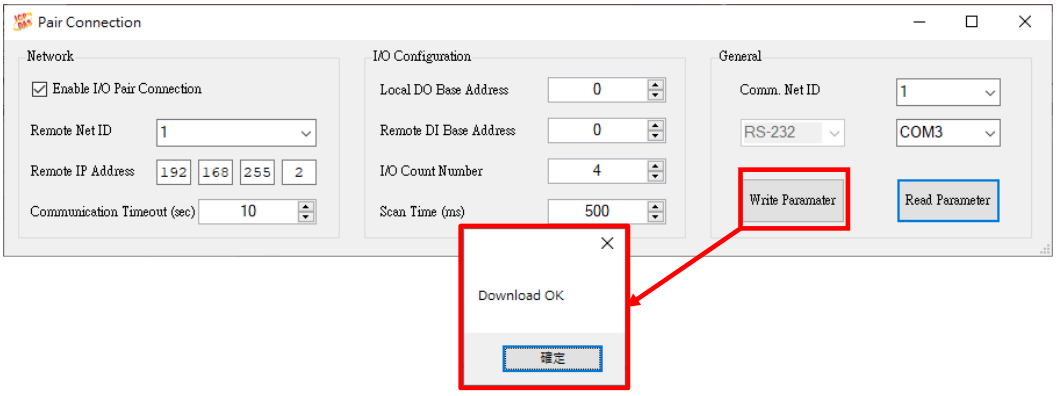
Name	Description
Module Information	
Remote Net ID	**Mapping Device Net ID. (WF-2060's net ID)**
Remote IP Address	**Mapping Device Net ID IP(WF-2060's IP)**
I/O mapping	
Local DO Base	**WF-2055(1) DO start address for Pair Connection.**

Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

Address	**The setting is 0 mean that corresponds to WF-2055 DO 0.**
Remote DI Base Address	**WF-2055(1) has to perform Pair Connection from the DI of the mapping device, which is 0, starting from WF-2060 DI 0.**
I/O Count Number	**The I/O amount for pair connection, which is 4, mean DO 0~3.**
Scan Time(ms)	**Pair connection refresh time(min time is 500 ms)**

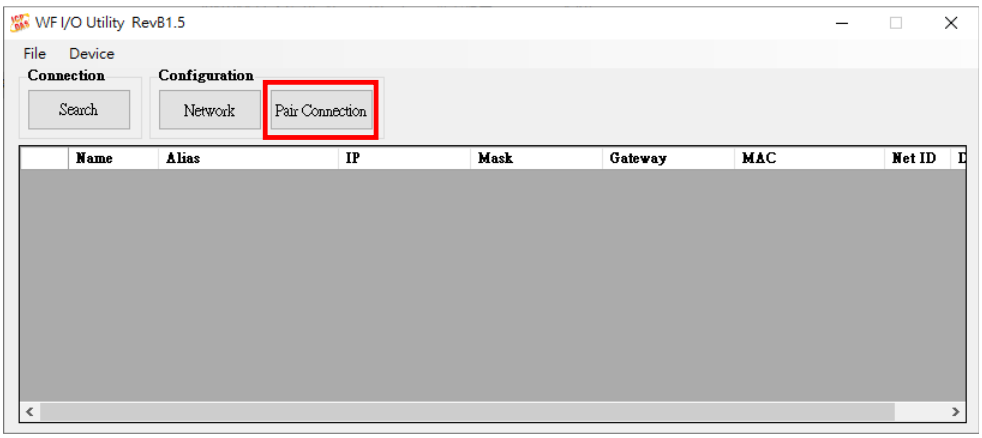
The DO 0~3 of WF-2055(1) will correspond to DI 0~3 of WF-2060 with the above settings.

D. Step 4: Click 「Write Parameter」 to write configuration. The utility displays 「Download OK」 message after the pair connection parameters write successfully.



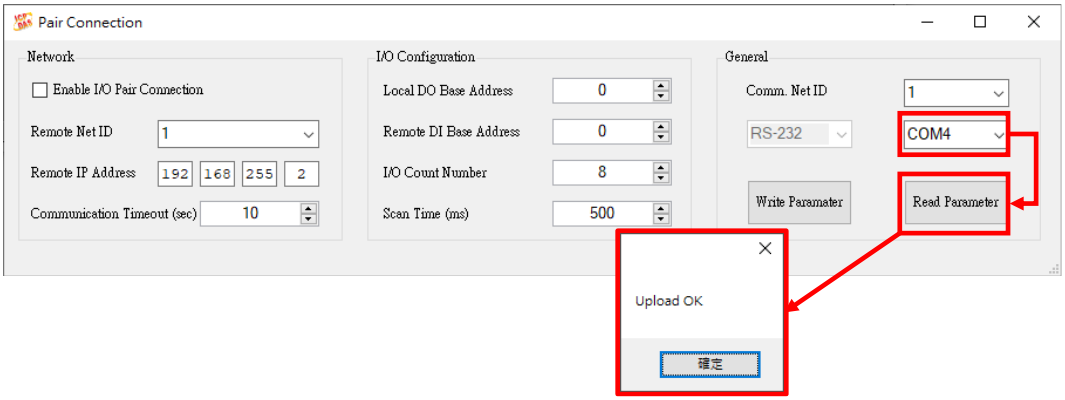
2. WF-2060 Configuration (WF-2060's Relay Output 0~3 mapping to WF-2055(1) DI 0~3)

A. Step 1: Click 「Pair Connection」 to enter pair connection configuration.

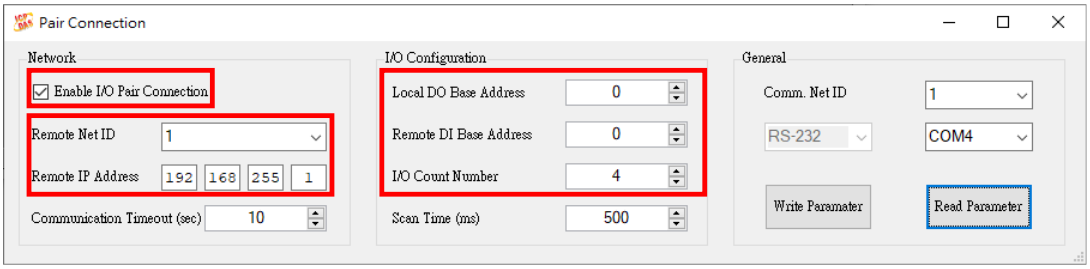


LRI Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

B. Step 2: Select COM Port of WF-2060 and click 「Read Parameter」. The utility displays 「Upload OK」 message after the pair connection parameters read successfully.



C. Step 3: Click 「Enable I/O Pair Connection」,module information and I/O mapping relationship.



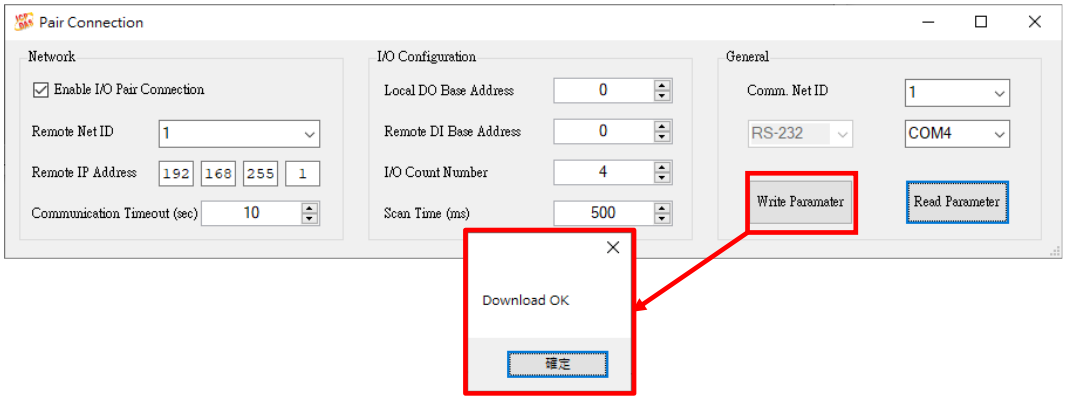
Name	Description
Module Information	
Remote Net ID	**Mapping Device Net ID. (WF-2055(1) net ID)**
Remote IP Address	**Mapping Device Net ID IP(WF-2055(1) IP)**
I/O mapping	
Local DO Base Address	**WF-2060 DO start address for Pair Connection. The setting is 0 mean that corresponds to WF-2060 DO 0.**
Remote DI Base Address	**WF-2060 has to perform Pair Connection from the DI of the mapping device, which is 0, starting from WF-2055(1) DI 0.**
I/O Count Number	**The I/O amount for pair connection, which is 4, mean DO 0~3.**
Scan Time(ms)	**Pair connection refresh time(min time is 500 ms)**

The DO 0~3 of WF-2060 will correspond to DI 0~3 of WF-2055(1) with the above

LRI Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

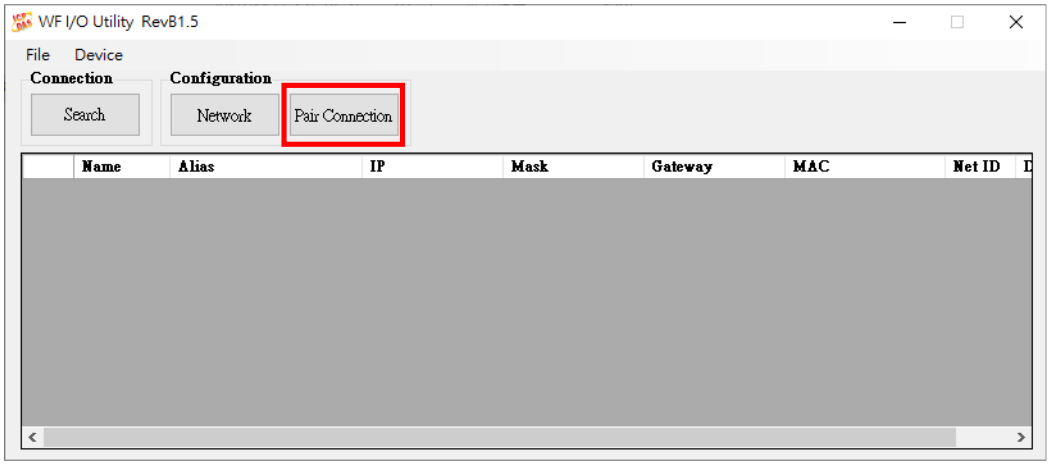
settings.

D. Step 4: Click 「Write Parameter」to write configuration. The utility displays 「Download OK」message after the pair connection parameters write successfully.



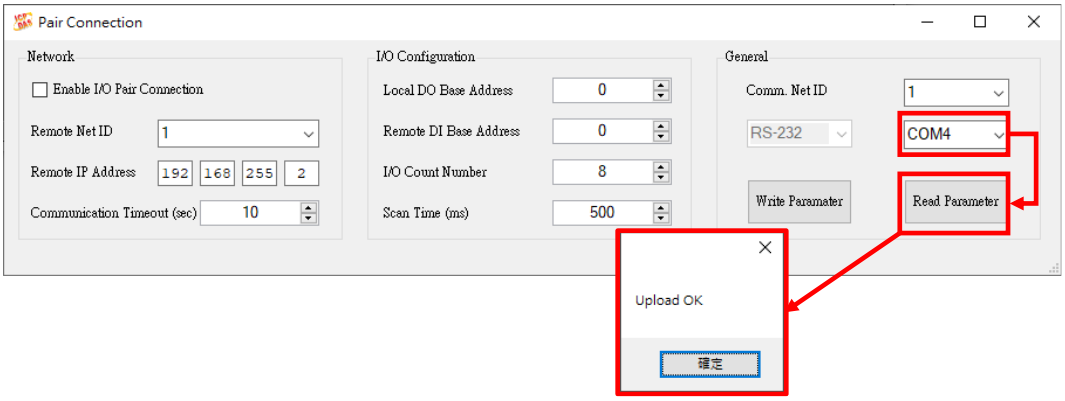
3. WF-2055(2) Configuration (WF-2055(2) DO 0~3 mapping to WF-2055(1) DI 0~3)

A. Step 1: Click 「Pair Connection」to enter pair connection configuration.

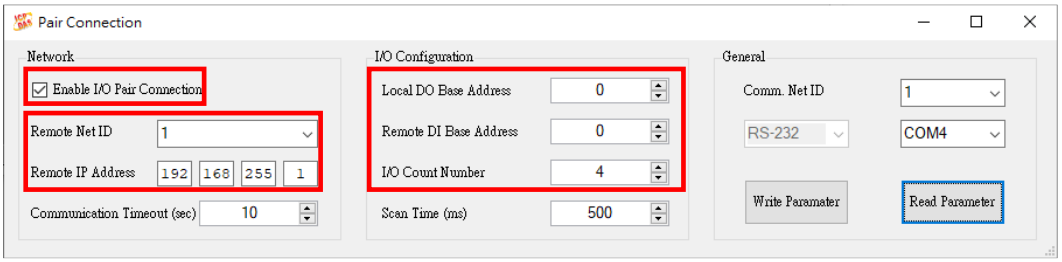


B. Step 2: Select COM Port of WF-2055(2) and click 「Read Parameter」. The utility displays 「Upload OK」 message after the pair connection parameters read successfully.

LRI Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000



C. Step 3: Click 「Enable I/O Pair Connection」,module information and I/O mapping relationship.

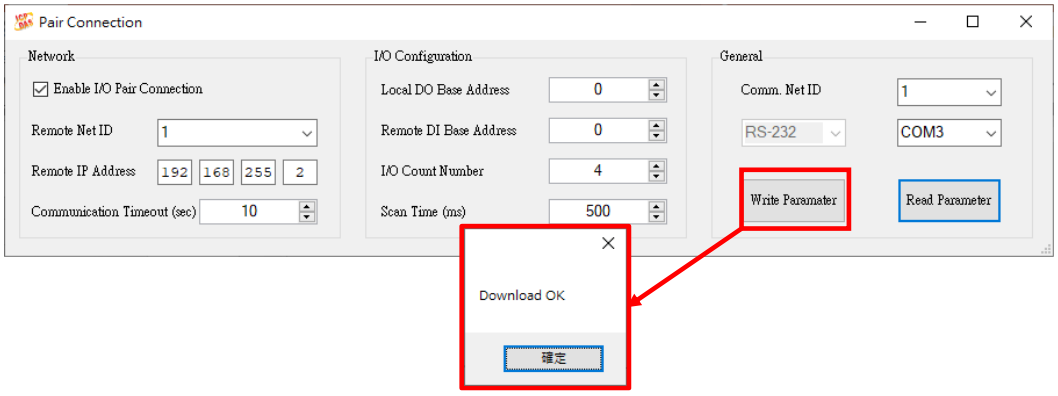


Name	Description
Module Information	
Remote Net ID	**Mapping Device Net ID. (WF-2055(1) net ID)**
Remote IP Address	**Mapping Device Net ID IP(WF-2055(1) IP)**
I/O mapping	
Local DO Base Address	**WF-2055(2) DO start address for Pair Connection. The setting is 0 mean that corresponds to WF-2055(2) DO 0.**
Remote DI Base Address	**WF-2055(2) has to perform Pair Connection from the DI of the mapping device, which is 0, starting from WF-2055(1) DI 0.**
I/O Count Number	**The I/O amount for pair connection, which is 4, mean DO 0~3.**
Scan Time(ms)	**Pair connection refresh time(min time is 500 ms)**

The DO 0~3 of WF-2055(2) will correspond to DI 0~3 of WF-2055(1) with the above settings.

LRI Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

D. Step 4: Click 「Write Parameter」to write configuration. The utility displays 「Download OK」message after the pair connection parameters write successfully.

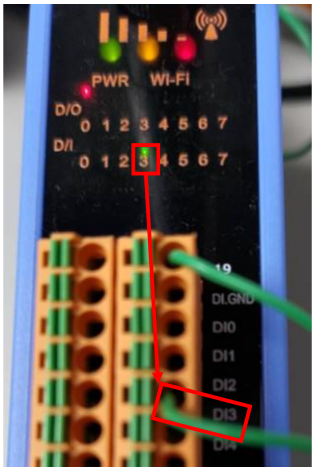


V. Pair Connection Verification

Please re-power on the module after setting up the WF-2000's Pair Connection. To make sure the Wi-Fi connection between the two modules is normal. If the Wi-Fi connection is successful, the signal LED will be on and the PWR LED will go from fast flash to slow flash or constant light.

1. DI Trigger Verification

Step 1: You can short the DI x (0~7) to DI.GND of WF-2000 GND. The corresponding DI LED will light up after shorting.

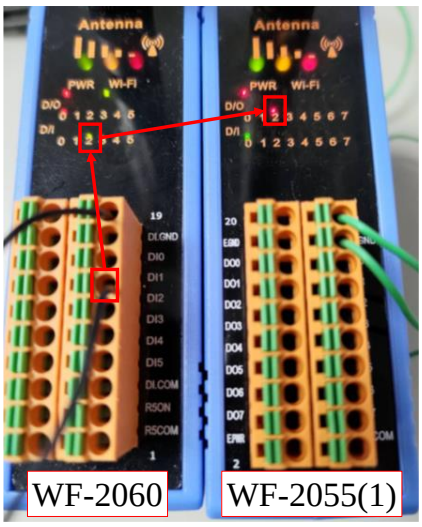


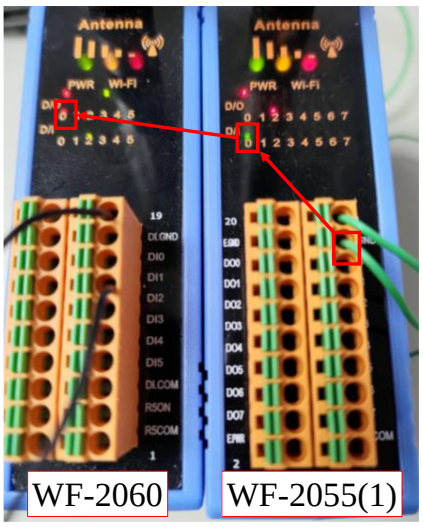
2. Pair Connection Verification (WF-2055(1) and WF-2060)

Step 1: You can short the DI and DI.GND of the WF-2000 and the DO LED of the

LRI Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

corresponding device will light up.





3. Pair Connection Verification (WF-2055(2) and WF-2060)

Step 1: You can short the DI and DI.GND of the WF-2055(1) and the DO LED of the corresponding device (WF-2055(2) and WF-2060) will light up.

