WF-2000 FAQ

Q01: How to avoid the WF-2000 DO output memory effect is the connection between the modules is lost?

A01: Users can enable the WF-2000 Utility "Safe Value" function to achieve this requirement.

P Module Configuration Pair Connection DO Value	DO Status (Safe Value) Action CH 0 © OFF C ON CH 1 © OFF C ON CH 2 © OFF C ON CH 3 © OFF C ON CH 4 © OFF C ON CH 5 © OFF C ON	Function Type Safe Value SV Active Time (ms) 5000
	Parameter Upload Interface Wireless v COM1 v Status Bar	Read Para. Write Para. EXIT

Q02: Why WF-2000 Utility(v2.0 or later) can't execute on Windows OS?

A02: ICP DAS WF-2000 Utility(v2.0 or later) requires .NET Framework v4.0,this program will automatically detect the .NET Framework v4.0 installed as well or not. Users can install .NET Framework v4.0 in the following website.

Microsoft .NET Framework 4 (Web Installer)

http://www.microsoft.com/en-us/download/details.aspx?id=17851

Microsoft .NET Framework 4 (Standalone Installer) http://www.microsoft.com/en-us/download/details.aspx?id=17718

Q03: How to increase the connection distance?

A03: We suggest replacing the High-power antenna as follow to increase the connection distance, such as ANT-8 / ANT-15 / ANT-18, etc.
<u>http://www.icpdas.com/root/product/solutions/industrial_wireless_communication/wlan_products/ant-8.html</u>
<u>http://www.icpdas.com/root/product/solutions/industrial_wireless_communication/wlan_products/ant-15.html</u>
<u>http://www.icpdas.com/root/product/solutions/industrial_wireless_communication/wlan_products/ant-15.html</u>



ducts/ant-18.html

- Q04: Why WF-2000 series could not establish a connection with the wireless AP in an encrypted mode setting?
- A04: Please check the WF-2000 series encryption configuration, WF-2000 Series supports the following encryption mode only.
 - 1. WEP-64
 - 2. WEP-128
 - 3. WPA-TKIP
 - 4. WPA2-AES

Not support the WPA2-TKIP.

Q05: How to establish a connection with the smart phone?

A05:

A. Smartphone support Ad Hoc Connectivity

a. WF-2000 Wi-Fi network configuration (CONFIGURATOIN) a1. Set the Wi-Fi Mode as "Ad-Hoc", the rest are reserved factory default settings

etwork					Wi-Fi			General		
Net ID	1			•	Wi-Fi Modes	Ad-Hoc	-	F/W Version	1.3	
DHCP Enab	de				SSID Auto :	Search Sea	arch	Date Created	2013/11	/5
IP Address	192	168	255	1	SSID	WF-20	55	🔽 Auto Disconn	ect	
Subnet Mask	255	255	255	0	Encryption	NONE	•	Comm. Net ID	1	•
Gateway	192	168	255	254	Wireless Key			RS-232	COM3	•
MAC Address	00-1	D-C9-	01-99	-99	Wireless CH	2		Write	Read	ь

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

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Wi-Fi	▲ ≑ (j)	Wi-Fi	● ≑ (j)	Wi-Fi	○
10.0000 ··· \$	₽ \$ (j)	WF-20 " Is No to the Inte	t Connected ernet	1000045-00	₽ \$ (j)
DEVICES		Join Anyway	(?	P580 其他	₽
WF-20	≈ (i)	WF-20	? (j)		



- 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"

3G		53% 🔳
VVI-FI	WF-20	
524.005	1	
自動加入		\bigcirc
IP Address		
DHCP	BootP	Static
IP Addreess	19	92.168.255.6
Subnet Mask	25	55.255.255.0

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

Wireless		Wireless					
Basic Advanced Se	curity Access WDS	Rasic Advanced Security Access WrDs					
This page is used to configu your Access Point. Here you network parameters. Disable Wireless LAN In	re the parameters for wireless LAN clients which may connect to may change wireless encryption settings as well as wireless terface	This page allows you setup the wireless security. Turn on WEP or WPA by using Encryption Keys could prevent any unauthorized access to your wireless network. Authentication type: Open System Shared Key Auto Security: WPA2 Set WEP Key					
Band:	802.11b/g 💌	Use 802.1x Authentication					
Mode:	Access Point	WPA Authentication Mode: C Enterprise (RADIUS) Personal(Pre-Shared Key)					
ESSID:	ICPDAS	WPA Cipher Suite:					
Channel Number:	11 -	WPA2 Cipher Suite: 💟 AES					
A secondaria di Citantes		Pre-Shared Key Format: ASCII (8-63 characters)					
Associated Clients:	Show Active Clients	Pre-Shared Key: 12345678					
Apply Cancel		Pre-Shared Key Format Pre-					

- b. WF-2000 Wi-Fi network configuration (CONFIGURATOIN)
 - 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



Vetwork.			Wi-Fi			General	
Net ID	1	¥	Wi-Fi Modes	AP	-	F/W Version	1.0
DHCP Enab	ole		SSID Auto	Search Search		Date Created	2013/11/12
IP Address	192 168 25	5 1	SSID	ICPDAS		🔽 Auto Disconn	ect
Subnet Mask	255 255 25	5 0	Encryption	WPA2	•	Comm. Net ID	1 •
Gateway	192 168 25	5 254	Wireless Key	12345678		RS-232	сомз 👻
MAC Address	00-1D-C9-01-	99-99	Wireless CH	2	~	Write	Read

c. Smartphone Wi-Fi network configuration

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

Wi-Fi	62% 🗖 🔿	••••	88 - 883	[ICPDAS]			62% 🔳 🔿	····∘ ≎ 〈 ⊇⊇ Wi-Fi	62% 🔳
		R.M.	Inj	out Passwo	ord		MA.		
Wi-Fi								Wi-Fi	
KCPDAS-EE	€	Password	•	•••••	••			ICPDAS	• 중 ()
ICPDAS	e 🕈 🚺								
P680	ê 🕈 🚺							P680	₽ ≈ (j)
其他								其他	
		1 2	3 4	56	7	8	9 0		
		- /	:;		\$	&	@		
		#+=		?	1	,	\boxtimes		
		ABC		space			Join		

d. Network configuration of Smartphone d1. Set as "DHCP" mode

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〈 Wi-Fi	ICPDAS	
IP 位址		
IP 位址 DHCP	BootP	
IP 位址 DHCP IP Addreess	BootP	2.168.0.142



- 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

Currently connected to:	** ^	c	urrently connected to:	+1
Network 2 Internet access		P Connect to a Network	Network 2 Internet access	
No network access		Type the network security key	No Internet access	
Wireless Network Connection	A 1	W	fireless Network Connection	^
ICPDAS-EE		Security key: 12345678	PDAS Connecte	d .11
ICPDAS	lin.		PDAS-EE	Itee
Connect automatically	nnect	P	380	1200
P880	10.		yhome	lite
lilyhome		OK Cancel 87	74-4401	.all
STECO	att	09	00617912	
Open Network and Sharing C	enter		Open Network and Sharing Cente	er

- e4. Open "WF-2000 Utility v2.0"
- e5. Click "Search" button to search WF-2000 devices , it will obtain an IP address

VF-	2000 Utility Device	v2.0	- California		5	100		
S	learch	Configuration	11.7.8		1.41/4/2010/01	2000		
_	Name	Alias	102 169 0 249	Mask 955 0.0	Gateway	MAU 00.1D.C0.01.00.00	Net ID	DHCP

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



Q06: How to establish a connection between WF-2000 I/O modules and personal computer? A06:

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.

	^{(ነ} ባ ⁰ Wireless Network Connect	tion
	Network Tasks	Choose a wireless network
	🚭 Refresh network list	Click an item in the list below to connect to a wireless network in range or to get more information.
	💐 Set up a wireless network	((Q)) STECO
	for a home or small office	Security-enabled wireless network
	Related Tasks	((Q)) ICP DAS
	(i) Learn about wireless	C Security-enabled wireless network (WPA)
	networking	((Q)) ICPDAS
	Change the order of preferred networks	C Security-enabled wireless network (WPA)
	Sections advanced	WF-2015 On Demand
	secongs	Unsecured computer-to-computer network
		Because security is not enabled on this network, information sent over this network might be visible to others. To connect to this network, click Connect.
Change Windows Firewall settings		
Open Network Connections		
Repair		
View Available Wireless Networks		Connect

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

	⁽¹⁾ Wireless Network Connec	tion 🛛 🕹
	Network Tasks	Choose a wireless network
	Sefresh network list	Click an item in the list below to connect to a wireless network in range or to get more information.
	Set up a wireless network	WF-20 Connected 📌 🛆
	for a nome of small office	Unsecured computer-to-computer network
	Related Tasks	You are currently connected to this network. To disconnect from this network, click Disconnect.
	Learn about wireless networking	
	Change the order of preferred networks	((Q)) 0900613139
	Ghange advanced	C Security-enabled wireless network
Wireless Network Connection	settings	((p)) STECO
		County-enabled wireless network
You are connecting to the unsecured network "WF-2055". Information		((q)) Bita2515
sent over this network is not encrypted and might be visible to other		C Security-enabled wireless network (WPA2)
people.		((p)) ICP DAS
Connect Anyway Cancel		



Q07: How to configure the WF-2000 DI / DO series to Pair Connection mode? A07: Use two WF-2055 devices for operation example

- A. The configuration of first WF-2055
 - a. CONFIGURATOIN 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.

Network					Wi-Fi			General	
Net ID	1			•	Wi-Fi Modes	Ad-Hoc		F/W Version	1.3
DHCP Enab	le				SSID Auto :	Search Se	arch	Date Created	2013/11/5
IP Address	192	168	255	1	SSID	WF-20	55	🔽 Auto Disconne	ect
Subnet Mask	255	255	255	0	Encryption	NONE	•	Comm. Net ID	1 •
Gateway	192	168	255	254	Wireless Key			RS-232 -	сомз 🗸
MAC Address	00-1	D-C9-	01-99	-99	Wireless CH	2	-	Write	Read

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.

Remote IP Address 192 . 168 . 255 . 2 Remote Net ID 1	Remote Port Number 502 Scan Time (ms) 500
Local DO Base Address	Remote DI Base Address
VO Count 8	Communication Timeout (ms)
Active	Read Para.
Parameter Upload Interface RS-232 V COM5 V	Write Para.
Status Bar	ΕΧΙΤ



- B. The configuration of second WF-2055
 - a. CONFIGURATOIN 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.

Network			Wi-Fi			General	
Net ID	1	•	Wi-Fi Modes	Ad-Hoc	•	F/W Version	1.3
DHCP Ena	ble		SSID Auto S	Search Searc	:h	Date Created	2013/11/5
IP Address	192 168 255	5 2	SSID	WF-20		Auto Disconn	ect
Subnet Mask	255 255 255	5 0	Encryption	NONE	•	Comm. Net ID	1 •
Gateway	192 168 255	5 254	Wireless Key			RS-232	COM3 👻
MAC Address	00-1D-C9-01-9	9-99	Wireless CH	2	•	Write	Read

- 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.

PAIR CONNECTION	
Remote IP Address 192 . 168 . 255 1 Remote Net ID 1	Remote Port Number 502 Scan Time (ms) 500
Local DO Base Address	Remote DI Base Address
I/O Count 8	Communication Timeout (ms)
Active	Read Para.
Parameter Upload Interface RS-232 COM5	Write Para.
Status Bar	EXIT

- C. Connection Test of Pair 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.

