

IP Camera function



Website: http://www.we-con.com.cn/en Technical Support: support@we-con.com.cn Skype: fcwkkj Phone: 86-591-87868869 QQ: 1043098682 Technical forum: http://wecon.freeforums.net/





1. General

- 1) Firstly, user need to activate camera according to the manufacturer's hand book. And then, open onvif protocol; otherwise, it cannot be used in wecon HMI;
- 2) Set camera username and password, it is recommend that user sets same username and password for plenty of cameras;
- 3) It is essential to make sure camera and HMI are in same LAN;
- 4) Camera object can work individually without camera search module;
- 5) When HMI and camera are connected directly, please use static IP for both HMI and IP camera. For example HMI IP is 192.168.1.1, gateway is 192.168.1.1. Camera IP is 192.168.1.2, gateway is 192.168.1.1;

	НМІ	Camera
Туре	Static IP	Static IP
IP	192.168.1.1	192.168.1.2
Gateway	192.168.1.1	192.168.1.1

- 6) User name and password should be confirmed before use. Do not try with the incorrect user incorrect name and password to search or connect the camera. After more than a certain number of tries, the camera will be locked. During this period, the camera will reject any connection. Generally, it takes half an hour to unlock. User need to wait;
- 7) It is not suggested to connect the same camera with PI8000 and PI9000 series HMIs at the same time, otherwise IP camera will show blurred screen;
- 8) For PI8000 series HMI, only one camera object can be added in project, and PI9000 can support 4 cameras objects in one project;
- When the camera is disconnected due to network reasons, it will try to reconnect every 20 seconds. (frequent retry action may be considered as virus behavior);

2. Instructions for camera settings

1) Enable the camera function in Project settings as Figure 1 shows;



	tings					
Project Se	ettings HMI IP	Instalment	Extend			
⊖Sta	rtup				(1~60s):	10
Rui Passw		[Time	(5~30s):	5
	ord to into setu	l p (can be emp	oty)			
Specia	expansion					
En:	abled audio set			Set		
⊡ Ena	able camera sea	rch module		Set		
Input	device					
En:	able keyboard	Displa	y cursor			

Figure 2-1

2) Function address

Camera search configuration		Х
The maximum number of searches:	4 Range (1~20) (The maximum number of searches should be great	
function address:	than the number of online cameras) HDW200 Edit	
	Confirm Cancel Help	



For example, if the function address is HDW200, the functional address is divided as shown in Table 2-1, and the search result address is shown in Table 2-2.

Table 2-1		
Register	DescrIPtion	Length
HDW200	username	20 words
HDW220	password	20 words
HDX240.0	Falling edge trigger search	1 bit
HDX240.1	Search status	1 bit
	0 means the search is complete;	
	1 means searching;	
HDW241	First search result	80 words
HDW321	Second search result	80 words



Register	DescrIPtion	Length
HDW241	IP address	16 words
HDW257	Password correct	1 word
HDW258	Device SN code	43 words
HDW301	IP camera alias	20 words

The username and password here need to be entered manually. When searching for the camera, it will try to use this username and password to log in every IP camera and store the result of login in. If the password is correct, the "password correct" address will be displayed as 1 and the device serial number will be displayed. If the "password correct" address is 0, the device serial number will not be displayed.

3) Compile and download, trigger search to get camera information in LAN



	Searching scre	een	
Please enter ID and PSW for Car	nera	88888 <mark>88888</mark> 888	888 <mark>8888</mark> 888
id <mark>Hijklm</mark>			
psw <mark>Htjklm</mark>	Search Camera		
	Search completed	. E	
Camera No IP address	D and PSW orrect?	Camera S/N	Alias
1 BCDEFGHIJKLMNO	38888 LMNOPO	QRSTUVWXYZ[\]	SHIJKLMN
2 BCDEFGHIJKLMND	38888 LMNOPO	QRSTUVWXYZ[\]	THIJKLMN
3 BCDEFGHIJKLMNO	38888 LMNOPO	QRSTUVWXYZ[\]	SHIJKLMN
4 BCDEFGHIJKLMNO	38888 LMNOP	QRSTUVWXYZ[\]	HIJKLMN
5 BCDEFGHIJKLMND	38888 LMNOP	QRSTUVWXYZ[\]	THIJKLMN
			Ð

Figure 2-3

3. Camera object settings

1) Select camera display object, as Figure 3-1 shows;

Welcome OtMain screen 1:

	Common Object
	Button/Switch
Camera No. 888888 Bind camera	Input/Display
	Chart
ID HIJKLMN PSW HIJKLMN	Meter
Camera S/N Camera S/N	Display
Camera S/N LIVINOPQRSTOVWXYZ[1]	
Turn OFF	Indirect Window
VIDE0 Camera state 88888 Screenshot	QRCode
Alias HIJKLMN Set alias	Drop Down List
	Z
	Flow component
	Picture
	₩ ,7
	Rotation Picture
	Camera Display
	X
	Camera Control

Figure 3-1 IP camera object in PIStudio

2) Select the Net Camera and check the rtsp option as Figure 3-2 shows;



IP camera

Camera display	×
General	
Net Camera OUSB Camera Use dynamic control instruction	
Camera control instruction	
✓ Enable rtsp camera function address HAW 100 Edit	
Position χ 2 Y 41 W 450 H 350]
OK Cancel Help	

Figure 3-2

3) Function address

If the function address is set to HAW100, the function address is divided as shown in Table 3-1, and each bit of control address is assigned with a function, as shown in Table 3-2. Different values of camera status address indicate different meanings. As shown in Table 3-3, the screenshot address values means different save path (Table 3-4). For example, the value is 1 means save path is Flash/IPCameraScreenShot.

Table 3-1		
Register	DescrIPtion	Length
HAW100	User name	20 words
HAW120	password	20 words
HAW140	Alias	20 words
HAW160	Device serial number	43 words
HAW203	Camera ID	1 word



IP camera

HAW204	Camera Control	1 word
HAW205	Camera status	1 word
HAW206	Screenshot save location	1 word

Tab	le 3	-2

Register	DescrIPtion	
HAX204.0	Open camera	
HAX204.1	Close camera	
HAX204.2	Camera up	
HAX204.3	Camera down	
HAX204.4	Camera left	
HAX204.5	Camera right	
HAX204.6	screenshot	
HAX204.7	Binding camera	
HAX204.8	Set Alias	

Table 3-3

Register	DescrIPtion	
0	Disconnected	
1	connected	
2	connecting	

Tab	le	3-	-4

Register	DescrIPtion	
0	Screenshot is saved in flash	
1	Screenshot is saved in U disk	
2	Screenshot is saved in SD card	

4. Operating procedures

- 1) Fill in the camera ID address with the camera serial number searched by the camera search module, and trigger the binding address to fill in user name and password.
- 2) If user does not enable the camera search module, then they need to manually enter the information of this camera, including user name, password, device serial number. Device serial number can be



obtained by viewing the camera label.



Figure 4-1



Figure 4-2 Serial code

3) After triggering the IP camera successfully, we could see the monitor screen and we could also set a alias for the camera or control the movement of the camera(up, down, left and right, some IP camera can not support the movement) or the screenshot. These operations cannot be performed with the camera off.



Figure 4-3 Monitor interface



5. Supported model

In theory, all cameras that support ONVIF protocol and H.264 encoding can be used. The following models are tested camera models.

1) Hikvision

- DS-2CD1321D-I
- DS-2CD3T20FD-I3W
- DS-2CD1221D-I3
- DS-2CV3Q21FD-IW
- 2) Dahua
 - DH-IPC-HFW1025D
 - DH-IPC-HFW1235M-I1

6.Note

1) The alias of the camera exists in the user database. This database is retained when the user database is selected when downloading the project, otherwise the database will be deleted;

<i>i</i>			×		
PC Port: Ethernet File type: Project File	IP: 19 Password:	2 . 168 . 1 . 200 (Upload Project)	Cannot find HMI!		
Auto-scan USB port	More	🗌 Upload prohibited			
(Select item do not need to	delete)				
Data record	Alarm record	Trend Chart			
Recipe	🗌 User Manager	History XY Plot			
🔲 Instalment	User Database	Latched address			
🗌 Custom file	Hardware config				
HMI to PC PC to	HMI Sync Cloc	k Close			
Recalibration Delete s	HMI versio	n Machine Code			

Figure 6-1



- 2) So far, remote access HMI screen can't view IP camera screen;
- 3) PI8000 series HMI only support one IP camera, PI9000 series HMI can support four IP cameras at the same time;
- 4) This function requirs special HMI model, please consult the salesman before purchasing.

Version: V2.0.0 Date: Feb 2019