

2018

Alarm Product Operation PRESENTED BY HIKVISION ALARM DEPARTMENT

- Get familiar with wiring of Alarm Product
- Get familiar with configuration of Alarm Product



AX HUB

Video verification, Delivering Change

Product

Security Radar

All weather monitoring, superb linkage and tracking

Emergency Alarm

Quick Response to Security needs

urther

MONINGEN



INTERNAL USE ONLY



AX HUB

INTERNAL USE ONLY



Product Showcase





Product Showcase

HIKVISION



Configuration Via APP

HIKVISION[®]





Add Detector & Signal Detection





Adding Detector Mode : Once click

Signal Detection Mode : Double click

Green light---signal ok Red light---signal bad

Function Button

Detector Reset





Web Interface





Connect to PC default address: Station Mode: 192.0.0.64 AP Mode: 192.168.8.1

Account: admin

User management



Include User, Keyfob, Card add interface (Depending on the device model)

*input device SN.Number manually*push any key in the keyfob or swipe the card

#KVISION	_				1 a	admi
User Management	Car	d Manag	gement			
User	+	- Add	Delete			
Keyfob		No.	Serial No.	Name	Operation	
Card			0000700504			1
System		1	3262799581	WWW		
Wireless Devices		2	592484976	1	l m	
Communication Parameters						
Video & Audio						
× Status						
			©20)18 Hikvision Digital Technology Co., L	td. All Rights Reserved.	

Device information

HIKVISION

Version

HI	KVISION		
1	User Management	Device Information About	
	System	Device Model:	DS-PWA32-HSR
	Device Information	Device Serial No.	DS-PWA32-HSR20181016AAWRQ00306751WU
	System Options		
	Security	Device Firmware Version:	V1.0.1 build 181229
	System Maintenance	Web Version:	V4.21.1 build 181229
	Log		
	Date and Time		
	Schedule & Timer		
	Network Camera		
	Wireless Devices		
5	Communication Parameters		
<u>e</u> ;	Video & Audio		
-∿~	Status		
		©2018 Hikvisior	n Digital Technology Co., Ltd. All Rights Reserved.

Option

HIKVISION

1.Installer Access Allowed
2.Wireless Supervision
3.Arming with Fault
4.System Faults
5.Disable Function Key
6.Detect Network Camera
Disconnection
7.Battery Supervision
8.Volume

	A VISIO/N		
1	User Management	System Options Management	
	System	Installer Access Allowed	
	Device Information	Wireless Supervision	
	System Options		
	Security	Arming with Fault	
	System Maintenance	System Faults	
	Log	Disable Function Key	
	Date and Time	Disable Function Rey	
	Schedule & Timer	Detect Network Camer	
	Network Camera	Battery supervision	
	Wireless Devices	System Volume	4 Range (0 to 10)
_	Communication Parameters		
<u>.</u>	Video & Audio		
-∿-	Status		Save

©2018 Hikvision Digital Technology Co., Ltd. All Rights Reserved.

System management

1.Reboot2.Restore All3.Configuration File Import& Export4.Firmware upgrade

HIKVISION						1
User Management		Upgrade and Maintenance				
System		System Management				
Device Information		Reboot	Reboot			
System Options Security		Restore Default Settings	Partly Restore			
System Maintenanc	e		Restore All			
Log		Import Configuration File			View	
Schedule & Timer			Import			
Network Camera		Export Configuration File	Export			
Wireless Devices		Remote Upgrade				
 Communication Parar Video & Audio 	neters	Upgrade File			View	
Status		Firmware upgrade	Upgrade			
		©2018 Hikvision [Digital Technology Co.	., Ltd. All Rights Reserve	∍d.	

HIKVISION

Device Time

HIKVISION

Synchronization time and **select Time zone**

H	KVISION		👱 admin	Þ
1	User Management	Time Management DST Management		
	System	Time Zone		
	Device Information	Select Time Zone	(GMT+08:00) Beijing Urumgi Singapore	
	System Options		(
	Security	Manual Time Sync		
	System Maintenance	Date and Time	2019-01-24 10:29:11	
	Log	PC Sync	2019-01-24 10:29:10	
	Date and Time			
	Schedule & Timer			
	Network Camera		Save	
	Wireless Devices			
\$	Communication Parameters			
<u>.</u>	Video & Audio			
-\r-	Status			
		©2018	Hikvision Digital Technology Co., Ltd. All Rights Reserved.	

Time table



Late to Disarm: Enable the function and set the time. If the system is disarmed after the configured time, the person will be considered as late.

Alarm Duration: From 1~3600s

	 \mathbf{n}	. /
		v
	 ~	

1	User Management
	System
	Device Information
	System Options
	Security
	System Maintenance
	Log
	Date and Time
	Schedule & Timer
	Schedule & Timer Network Camera
	Schedule & Timer Network Camera Wireless Devices
	Schedule & Timer Network Camera Wireless Devices Communication Parameters
	Schedule & Timer Network Camera Wireless Devices Communication Parameters Video & Audio
	Schedule & Timer Network Camera Wireless Devices Communication Parameters Video & Audio Status
······································	Schedule & Timer Network Camera Wireless Devices Communication Parameters Video & Audio Status

Schedule & Timer Management

Entry Delay 1	30	s
Entry Delay 2	60	s
Exit Delay	60	s
Enable auto Arming		
	Time 00:00	
Enable auto Disarming		
	Time 00:00	
Late to Disarm		
	Time 00:00	
Weekend Exception		
Siren Delay Time (Peri	60	s
Alarm Duration	60	s

Save

©2018 Hikvision Digital Technology Co., Ltd. All Rights Reserved.

Network Camera



Add camera: support Hikvision camera or standard ONVIF camera

L User Management	Network Camera	a Management				
System	+ Add	🖉 Edit n Delete				
Device Information Option	□ No.	Network Camera IP Address	Channel No.	Network Camera Port No.	Network Camera Connection Status	
Security Settings System Maintenance						
Local Log Search Device Time				Add Network Camera		×
Time Table				Adding	IP	•
Network Camera				IP Address	10.22.102.66	•
Communication Parameters				Protocol Type	HIKVISION	•
Status				Port No.	8000	
Video & Audio				User Name	admin	✓
				Password	•••••	S
					ОК	Cancel

©2018 Hikvision Digital Technology Co., Ltd. All Rights Reserved.

Wireless Devices

You can set Zone type like Instant Zone or Delayed Zone, and change zone name

Set Stay Arming Bypass, Doorbell, or Mute(No Alarm, but have log) if you need

Control Panel Channel No: Link the zone to the camera

Zc	-			Wireless Detector	Setting
	Zone	1		Enrolled	÷
	Name	Wireless zone 1		Enrolled	- {^}
	Туре	Delayed	- Entry Delay 1	✓ Not enrolled	£63
	Detector Type	Panic Button	-	Not enrolled	
	Stay Arming Bypass			Not enrolled	
	Chime			Not enrolled	ŝ
	Silent Alarm			Not enrolled	
-	Enroll Wireless Detector			Not enrolled	÷
-	Serial No.	Q00288335		Not enrolled	ŝ
1	Panel Video Channel No.	1	-	Not enrolled	ţ
1				Not enrolled	ŝ
1		0	Cancel	Not enrolled	÷
1				Not enrolled	£63



Wi-Fi Parameters



Wi-Fi configuration: Pay attention to the Wi-Fi Working Mode is **Station mode**

Wi-Fi Operation shows **Disconnect** means connect well

HI	KVISION						上 admin	🗗 Exit	
1	User Management	Wi-Fi AP Parameters WLAN							^
-	System	Current Mode							
	Wireless Devices	Wi-Fi Working Mode:	Station Mode						
\$	Communication Parameters								
	Wired Network Parameters	WI-FI Parameters							
	Wi-Fi Parameters	Wi-Fi Name	RZS						
	Cellular Data Network Parameters	Wi-Fi Password							
	Alarm Center Parameters	Notwork Lint							
	Message Notification	NETWORK LIST							
	Hik-Connect Adding Parameters		Name	Channel No.	Signal Strength	Encryption Mode	Operat	tion	
	Event Video Email		RZS	11	100	WPA2-personal	Disconr	nect	
-∿⊷	Status		HIK-Office	6	100	WPA2-personal	Conne	ect	
ŝ	Video & Audio		TP-LINK_3C3B30	9	96	WPA2-personal	Conne	ect	
			gaoke_3E64E0	13	96	WPA2-personal	Conne	ect	
			shenjian	6	76	WPA2-personal	Conne	ect	
		<	linkeve toet	5	76	MDA2 porconal	Conno	ont >	~
			©2018 Hikvision Digital Tecl	nology Co., Ltd. All Rig	ghts Reserved.				

Cellular Data Network Setting

a Collular

Most of time Cellular Data Network connect automatically.

If not, you need configure manually. (Setting depend on SIM operator)

5	Configuration
---	---------------

1	User Management			
	System			
	Wireless Devices			
5	Communication Parameters			
	Ethernet			
	Wi-Fi			
	Cellular Data Network			
	Alarm central station			
	Event Communications			
	Cloud Registration			
	Video Verification Events			
<u>e</u> .	Video & Audio			
-∿-	Status			

			—		\times
Cellular Da	ta Network Settings				
	Enable GPRS/3G/4G				
	Phone Number	*99***1#			
	User Name				
	Access Password				
	APN				
	PIN Code				
	Data Usage Limit				
	Data Used This Month	0.0		М	
	Data Limited per Month	100		М	

HIKVISION

Save

Alarm Center Parameters



Х

- Select a protocol type from the drop-down list
- Select a server address type from the drop-down list
- Set the server address Port No.
- User name(Account).

Configuration				
1	User Management			
	System			
	Wireless Devices			
s.	Communication Parameters			
	Ethernet			
	Wi-Fi			
Cellular Data Network				
	Alarm central station			
	Event Communications			
	Cloud Registration			
	Video Verification Events			

- Video & Audio
- -/-- Status

tral station Settings			
Enable			
Protocol Type	ADM-CID	•	
Alarm Receiver Type	IP	•	
Alarm Receiver IP Addr	10.9.96.32		9
Port No.	1962	•	9
Account Code	3333	•	9

Save

Alarm cen

Message Notification



1.Alarm and Tampering Event Notification

2.Safety Event Notification

3.System Status Notification

4.Operation Event Notification



Message Notification



Alarm and Tampering Event Notification

The device will push notifications when the zone alarm is triggered or the device tamper alarm is triggered or restored.

Safety Event Notification

The device will push notifications when fire alarm, gas alarm, or medical alarm is triggered.

System Status Notification

The device will push notifications when any status in the system is changed.

Operation Event Notification

The device will push notifications when the user operate the device.

Message Notification

1/15101

HIKVISION

You can select use SMS or Phone call or all use. Support 6 phone number.

	Νυιζιν		
1	User Management	Control Client Alarm Center Cloud Mobile Phone	
-	System	Mobile Phone Index	
	Wireless Devices	SIM Card No. 13867433059	
2	Communication Parameters	Notification Type SMS V Phone Call	
	Wired Network Parameters Wi-Fi Parameters	Alarm and Tampering Event Notification	
	Cellular Data Network Parameters	Safety Event Notification	
	Alarm Center Parameters	System Status Notification	
	Message Notification		
	Hik-Connect Adding Parameters	Operation Event Notification	
	Event Video Email		
4~	Status	Save	
.	Video & Audio		

©2018 Hikvision Digital Technology Co., Ltd. All Rights Reserved.

Hik-Connect Statues

Online means Hik-Connect statues OK

Verification Code

1 User Management

Configuration

- System
- Wireless Devices
- 2 **Communication Parameters**

Ethernet

Wi-Fi

Cellular Data Network

Alarm central station

Event Communications

Cloud Registration

Video Verification Events

<u>.</u> Video & Audio

 \sim Status Cloud Registration Settings Register to Cloud Online Custom Server Address

Cloud Status

Alarm Receiver IP Addr...

Communication Mode

Verification Code

dev.sgp.hik-connect.com

Wired Network Priority

QEODVJ

0

The code should contain 6 to 12 characters (it is recommended to be more than 8 characters and the combination of numeric and letter)

Save

HIKVISION[®]

X \Box

Event Video Email

Email configuration: need to pay attention to the:

SMTP server SMTP Port and Encryption Type



Video Verification Events		
Sender Name	Alarm Panel	
Sender	hikvision_janson@outlook.com	
SMTP Server address	smtp.office365.com	
SMTP Port No.	587	
Encryption Type	TLS -	
Server Authentication		
User Name	hikvision_janson@outlook.com	
Password	•••••	
Confirm Password		
Receiver Name	ruanzaisheng@hikvision.com	
Receiver	ruanzaisheng@hikvision.com	Receiver Address Tes

HIKVISION[®]

×

Save

Event Video Email

HIKVISION

	User Name/ Password	Sender	SMPT Server address	SMTP Port	Encryption Type
Gmail	XXXX Password	XXXX@gmail.com	smtp.gmail.com	587	TLS/STARTTLS(TLS)
Ουτιοοκ	XXXX@outlook.com Password	XXXX@outlook.com	smtp.office365.com	587	STARTTLS(TLS)
hotmail	XXXX@hotmail.com Password	XXXX@hotmail.com	smtp.office365.com	587	STARTTLS(TLS)
Yahoo	XXXX Password	XXXX@yahoo.com	smtp.mail.yahoo.co m	587	STARTTLS(TLSV1.2)
126	XXXX Password	XXXX@126.com	smtp.126.com	465	SSL/TLS
Sina	XXXX Password	XXXX@sina.com	smtp.sina.com	25/465/58 7	SSL/TLS/STARTTLS(SSL/TLS)
See Far, Go Fu	rther				

Check Communication Status



You can check Wired Network Wi-Fi signal GPRS Network & Cellular Data Network Signal Strength Cloud connection Status



Video Management

HIKVISION

Ē ·	• 邮件 - ruan Janson - Outloc	• Configuration $\times + \vee$			_		_	o ×
- -	→ Ů ✿ ^① 192.168	.1.121/doc/page/config.asp				☆ ☆	l~	£
H	KVISION					1	admin	🗗 Exit
1	User Management	Wi-Fi WLAN						
	System	Current Mode						- 1
888	Wireless Device	Wi-Fi Working Mode:	Station Mode					- 1
20	Wired Network Parameters	Wi-Fi Parameters	45					- 1
-	WI-FI Parameters	Wi-Fi Name	TP-LINK_2.4G					- 1
	Cellular Data Network Parameters	Wi-Fi Password						- 1
	Alarm Center Parameters Message Notification	Encryption Mode	WPA2-personal	-				- 1
	Hik-Connect Registration Parameters	Network List						- 1
	Event Video Transfer via Email		Name	Channel No.	Signal Strength	Encryption Mo	de	Opera
20	Video & Audio		TP-LINK_2.4G	1	100	WPA2-persona	al	Discon
400	Status		- HIK-Office	1	100	WPA2-persona	al	Conn
			TPGuest017B	1	100	WPA2-persona	al	Conn
		Confirm panel	is in Station	n Mode	75	WPA2-persona	al	Conn
			©2018 Hikvision Digital Technology (Co., Ltd. All Rights Re	served.			/

Normal problem analyses and operate——AX Hub

1. When configure the detector zone type, can't save?

Reason: Most time the reason is **not exit the one-click Add mode** after adding detectors or **not exit signal detection mode** (Double click function key).Or the Hub is in **Arm Status.**

Solution : Click the function key on the Hub to exit one-click Add mode or signal detection mode or Disarm the Hub.

2. During the test process , after configure the detector, the Hub can't Arm. Reason: 1.The Detector is triggered, or tamper triggered.

2:Hub is in one-click Add mode or signal detection mode.

Solution: Check the Zone mode in website or Hik-connect, Then check the hub is out of Add mode or signal detection mode

Normal problem analyses and operate — AX Hub



3. Panel fault light always been on, but Panel Arm/Disarm is normal, what's the reason? Reason: Panel have system failure, System failure does not affect Arm/Disarm. Common events are as follows:

DC Power Fault	
Low Battery	
4G,3G or GPRS Network Fault	
Wired Network Fault	
Wi-Fi Communication Fault	
RF Signal Fault	

Normal problem analyses and operate——AX Hub

- 4. When the Hub insert SIM card, you can see the phone signal but can't connect the HIK-Connect. The Hub need restart after inserting the SIM card.
- **Reason:** Most time the reason is SIM card has **no phone bill** or **does not open network function**, and some Sim card may be required to configure the APN.

Troubleshooting methods:

- First check the SIM card inside have enough phone bill, the card has opened the network function (You can test by your mobile phone)
- 2. Search the SIM card's APN by Google , the Hub default dialing includes most SIM card APN but not
- all, so if the network is not connected, you need to set up the SIM card APN manually and then restart

it.



PART 2

Security Radar

INTERNAL USE ONLY



HIKVISION Security Radar






Product Introduction

HIKVISION

Radar Principle







Product Introduction

HIKVISION

Radar-CCTV linkage Architecture



Note : Radar supports 6 series and above PTZ camera. See Far, Go Further

Security Radar – Spec



Model	DS-PR1-60	Netowrk Interface	1 RJ45 10M/100M self-adaptive,	
Detection Range	60 m		supports POE	
Horizontal Angle	100°		Standard ISAPI protocol, NAL2300	
Detection Area	About 3000 m ²	Communication	protocol	
Max. Target Number	32	Protocol	HTTP, DNS, NTP, TCP, UDP, DHCP,	
Velocity Range	-8.7 to 8.7 m/s		ARP, and SSH	
Range Measurement	±0.75 m	Exception Detection	Cover and Wall tamper-proof, and blocking alarm	
Velocity Measurement Accuracy	±0.1 m/s	Power Interface	802.3at standard POE or 12 VDC The supplied power adapter is for	
Angle Measurement	±1°	Operation Temperature	-40 C° to 65 C°	
Zono	0	Operation Humidity	10% to 90%	
Zone		Dimension(W x H x D)	206*228*61 mm	
Alarm Output	3-ch weak current output: 0.5	IP Level	IP67	
	A/125 VAC,breakdown voltage: 1	Weight	1.84 kg	
	KV 1-ch strong current output: 10 A/240 VAC,breakdown voltage: 2.5 KV	Installation	Bracket installation, Installation Height:1.2 m to 4 m recommended height range: 2.5 m	

Security Radar – light Indicator

Relay Settings

a. Power Supply Indicator

Solid Green: Radar Power on

b. Fault Alarm Indicator

Flashing Red: Fault Alarm Occurred,

Solid Green: Alarm Restored

C. Zone Alarm Indicator

Solid Red: Zone Alarm Occurred,

Solid Green: Alarm Restored

d. Formatting Indicator

Flashing Green & Red: Formatting Successfully



Security Radar – Line Connection

- a. Alarm Output Wiring(Dry Contact Output)
 - a1: One Strong Current Output
 - a2: Three Weak Current Output Rely

Module

- b. Alarm Input Wiring(Reserved)
- c. Power Supply Wiring
- d. Network Wiring (supports PoE)
- e. Grounding



HIKVISION[®]

Security Radar – Initial Position

Set Initial Position

- I.Select a reference object about 50m away from the speed dome, and select a point (on the reference object) whose altitude is the same as the speed dome's.
- 2. Enter the IP address of the speed dome in the web browser to enter the web client. Adjust the PTZ in the live view page to make the point displayed in the frame. Click 3D Zoom to middle the point in the frame.
- Set to set the initial position.



HIKVISION

Security Radar – Initial Position



- > Allow PTZ Max.Tilt-angle
- Adjust the PTZ in the live view page to make the point displayed in the frame,.
- Set the Initial Position.





11.20 00:00-



How to add radar

How to add zone

HIKVISION

Configuration—Calibration



Document for reference :



Calibrate Radar.pdf

Security Radar – Zone Management

Zone Type

- Early Warning Zone: If the zone is triggered, there will be alarm but no record of trajectory.
- Warning Zone: With zone armed, if the zone is triggered, the CID will receive the alarm immediately. The storage of trajectory and video of PTZ can be recorded.
- Disabled Zone: If the zone is triggered, there will be no alarm and no record of trajectory neither.

Configuration				- 🗆 X
System	Zone Management	1		
Alarm Module Parameters	Zone	Zone Name	Zone Type	Configuration
Zone	1	1	Warning Zone	ŵ
Relay				
Communication Parameters				
Smart Rule Settings	7			
Radar Settings	Zone Settings			^
	Zone Name	1		
	Zone Type	Warning Zone		
	Zone Type	Warning Zone	· · ·	
			OK Cancel	
l				
	<			>

Security Radar – Zone Management

Pre-Alarm Zone

Detecting targets Trigger an event Alarm linkage Video pop-up Video recording and playback Trail display Trail recording

HIKVISION

Alarm Zone

Detecting targets Trigger an event Alarm linkage Video pop-up Video recording and playback Trail display Trail recording

Bypass Zone

Do nothing when target detected Mainly used for areas with too many moving targets

Security Radar – Camera Linkage



 System Alarm Module Parameters Communication Parameters Smart Rule Settings Udeo Record Strategy Settings Camera Linkage Settings Aming/Disarming Schedule Radar Settings Radar Settings Status Status	 System Alarm Module Parameters Communication Parameters Communication Parameters Video Record Strategy Settings Urdeo Record Strategy Settings Animg/Disarming Schedule Radar Settings Video Record Strategy Settings Status + C Cumera IP Address List Status + C Cumera IP Address List Status + C Cumera IP Address		Camera Linkage Settings
 Alarm Module Parameters Communication Parameters Smart Rule Settings Video Record Strategy Settings Aming/Disarming Schedule Radar Settings Table Settings State Setting Setti	 Alarm Module Parameters Communication Parameters Smart Rule Settings Video Record Strategy Settings Arming/Disarming Schedule Radar Settings List the camera to the zone to make the camera triggered when zone alarm occurs. List the camera to the zone to make the camera triggered when zone alarm occurs. Camera Linkage Settings List the camera to the zone to make the camera triggered when zone alarm occurs. Camera Linkage Settings List the camera to the zone to make the camera triggered when zone alarm occurs. Camera Linkage Settings List the camera to the zone to make the camera triggered when zone alarm occurs. Camera Linkage Settings List the camera to the zone to make the camera triggered when zone alarm occurs. Camera Linkage Settings List the camera to the zone to make the camera triggered when zone alarm occurs. Camera Linkage Settings List the camera to the zone to make the camera triggered when zone alarm occurs. Camera Linkage Settings List the camera triggered when zone alarm occurs. Camera Linkage Settings List the camera triggered when zone alarm occurs. Camera Linkage Settings List the camera triggered when zone alarm occurs. Camera Linkage Settings List the camera triggered when zone alarm occurs. Camera Linkage Settings List the camera triggered when zone alarm occurs. Camera Linkage Settings List the camera triggered when zone alarm occurs. Camera Linkage Settings List the camera triggered when zone alarm occurs. Camera Li	System	
	Image: Communication Parameters	Alarm Module Parameters	Link the camera to the zone to make the camera triggered when zone alarm occurs.
Smart Rule Settings Video Record Strategy Settings Image Disarming Schedule Radar Settings 10.19.112.9 Online Cone1 Cone3 Cone4 Cone5 Cone6 Cone7 Cone8	Image: Section sect	Gommunication Parameters	Camera IP Address List Status + 🗹 🗂 Zone Linkage
Video Record Strategy Settings Camera Linkage Settings Iming/Disarming Schedule Radar Settings Cone3 Cone4 Cone5 Cone6 Cone7 Cone8	Video Record Strategy Settings Comming/Disarming Schedule Comming Schedule <th>Smart Rule Settings</th> <th>10.19.112.9 Online VIII Radar Field</th>	Smart Rule Settings	10.19.112.9 Online VIII Radar Field
Camera Linkage Settings Arming/Disarming Schedule Radar Settings Camera Linkage Settings Radar Settings Camera Linkage Settings <td>Camera Linkage Settings Arming/Disarming Schedule Cone3 Cone4 Cone5 Cone7 Cone8</td> <td>Video Record Strategy Setting</td> <td>igs Zone1</td>	Camera Linkage Settings Arming/Disarming Schedule Cone3 Cone4 Cone5 Cone7 Cone8	Video Record Strategy Setting	igs Zone1
Arming/Disarming Schedule Radar Settings Cone3 Cone4 Cone6 Cone7 Cone8	Arming/Disarming Schedule Radar Settings Cone3 Cone4 Cone6 Cone7 Cone8	Camera Linkage Settings	Zone2
Radar Settings Cone4 Cone5 Cone7 Cone8		Arming/Disarming Schedule	Zone3
✓ Zone5 ✓ Zone6 ✓ Zone7 ✓ Zone8	✓ Zone5 ✓ Zone6 ✓ Zone7 ✓ Zone8	C Radar Settings	Zone4
Save	Save		Zone5
Save	Save		
Save	Save		Zone8
Save	Save		
			Save

Linkage

- Link the camera to Radar.
- Link the Camera to the zone

Security Radar – Environment Learning



To ensure the accuracy of radar detection, if there are large objects in the detection area, you need to remove the objects and make the radar complete the environment learning

- ► 1.Select the radar and click Remote Configuration in iVMS-4200, or Enter the radar IP address in the address bar of the web browser. Click Radar Settings → Environment Learning to enter the page
- 2.Click Mandatory Manual Learning to complete

6 C	onfiguration
Ē	System
<u> </u>	Alarm Module Parameters
÷	Communication Parameters
X	Smart Rule Settings
¢	Radar Settings
	Sensitivity Settings
	Detection Angle and Range
	Environment Learning

Security Radar – Tracking Strategy



Time Priority

Record the target that intrude the zone first

Range Priority

Record the target that has the shortest distance apart from the radar

Multi-Target Auto Switch

Switch the target automatically when there are multiple targets in the zone

C	onfiguration				— L
<u> </u>	System	Video Record Strategy Settings			
Ä	Alarm Module Parameters	Record Strategy	Multi-Target Auto Switch	,	
2	Communication Parameters	Switch Interval	5	S s	
	Smart Rule Settings				
	Video Record Strategy Settings		Dava		
	Camera Linkage Settings		Save		
	Arming/Disarming Schedule				
Ð	Radar Settings				

Security Radar – Scene Mode and Sensitivity

品

 \mathbf{X}

٢

Open Mode

There are no large objects in the radar detection area

Shrub Mode

There are shrubs and other objects that are likely to swing in the radar detection area. The shrub mode can also used for decrease the interference of rainstorm

Expert Mode

You can set tracking sensitivity, swing sensitivity, and signal sensitivity according to actual scenario requirements.

Configuration System Alarm Module Parameters Scene Mode

HIKVISION

onfiguration			-	-	×
System	Sensitivity Settings				
Alarm Module Parameters	Scene Mode	Open Mode -			
Communication Parameters		Expert Mode			
Smart Rule Settings		Open Mode			
Radar Settings		Shrub Mode			
Sensitivity Settings		Save			
Detection Angle and Range					
Environment Learning					

Installation

Reference of installation height and adjusting angle of radar.



radar installation height(m)	∠α=()	Max. detecting distance: walking away from radar(m)	Max. detecting distance: walking towards radar(m)	Min. detecting distance: walking away from radar(m)	Min. detecting distance: walking towards radar(m)
1.5	0	59.5	59	5	1.91
1.5	3	59.54	59.2	3.38	1.98
1.5	6	59.74	59.4	3.66	1.87
1.5	9	58.7	52	3.82	2.3
1.5	12	53	32	5.6	2.24
2	0	59.41	59.4	5.47	1.8
2	3	58.9	59.4	4.39	2.19
2	6	58.7	59	4.34	1.72
2	9	58	59.62	5.1	2.2
2	12	50.12	39.1	4.47	2
3	0	59	58.4	6.74	4.62
3	3	59.4	59.6	6.08	4.21
3	6	59	59.51	6.7	3.42
3	9	59.3	58	5.8	2.9
3	12	59.51	47.6	5.2	3.1
3.5	0	59	57.17	10.08	5.5
3.5	3	59.3	59.5	8.75	3.9
3.5	6	59.6	58.51	7.1	3.86
3.5	9	58	56.25	7.9	3.8
3.5	12	53.53	46	6.92	3.45
4	0	59	58	11.68	7.36
4	3	59.2	59.4	10.3	5.7
4	6	58.3	58.5	9.89	5.6
4	9	58.5	59.79	9.3	4.4
4	12	58	53	8.86	4.63
5	3	58.66	58.6	13.1	9.6
5	6	58.6	59.7	12	7.62

HIKVISION°

Real Performance – Testing Environment 1



HIKVISION[®]

Real Performance–Device Installation 1











Real Performance–Testing Environment 2





Real Performance–Device Installation 2







Real Performance–Highlights(Based on test)

Highlights

1. Multi-Motion Detection & Accurate Tracking

- People: Crouching, Crawling, Walking, Running
- Cars: Low speed Cars
- OSD of speed & distance
- 2. High Compatibility of Environment
 - Cold & Rainy days

3. Easy Installation & Configuration

- Multi installation method
- Draw zone manually & automatically

4. Sensitivity & Video Record Strategy Adjustable

- Shrub Mode/Open area mode/Expert mode
- Time Priority/Range Priority/Multi-Target Auto Switch
- 5. Searching Trajectory with Video Record





Real Performance–Multi-Motion Detection

Multi-Motion Detection



Crouching (0.5-2m/s)

Crawling (0.3-0.5m/s)

```
Speed range : 0.3m/s ~ 8.7m/s
```

Real Performance---OSD

~

HIKVISION

OSD of Speed & Distance







Real Performance–High Compatibility of Environment

Radar Performance in Severe Weather



People in Heavy rain



Vehicle in Heavy rain

Real Performance–Easy Installation & Configuration

Multi Installation Method

































Real Performance---Multi-Target Auto Switch

Multi-Target Auto Switch Mode





Real Performance–Draw zone Automatically





Real Performance–Searching Trajectory with Video Record

Searching Trajectory with Video Record



See Far, Go Further

IVMS-4200 supports up to 1000 trajectories

Real Performance–False Alarm

HIKVISION

False Alarm Explanation

Wide range of trees or shrubs in Extreme weather like downpour strong winds could cause false alarm.



Can be filtered by shrub mode

could lead to false alarm.

滁

Indoor scene: Large-sized glasses, walls and metals lead to false alarm



Can not be filtered currently

Real Performance–False Alarm

HIKVISION

False Alarm Explanation



- Except for straight reflected wave and ground reflected wave, the electromagnetic radiation has many scattered waves due to influence of other obstacles.
- These scattered waves will be received by radar and result in multipath propagation.
- In radar processing, multipath causes ghost targets to appear, deceiving the radar receiving.



PART 3

Emergency Alarm

INTERNAL USE ONLY



Product List



Background

HIKVISION[®]













Main Board





Siren And Alarm Input Wiring





Audible and Visual Alarm Wiring

Audible and Visual Alarm Wiring
System Topology







System Topology





See Far, Go Further

Demonstration

1.Configuration and demonstration with IVMS4200.

- 1 Connect the device to 4200
- 2 Show the basic device information
- ③ Demonstrate the Linkage Function between the Panic button with 4200
- 4 Show the meaning of the parameter in Wafting interface

2. Connect the devices with Alarm Master station

1 Connect the Alarm Master station to 4200, set SIP server address (Alarm Master station address)

HIKVISII

- 2 Set Panic Alarm Station address and setup needs to connect the SIP server address.
- ③ Click on the panic button, and Alarm master station reply it.

3.Connect the devices with HikCentral

- 1 Connect the Alarm Master station to HikCentral
- 2 Configure logical View and Event & Alarm.
- ③ Configure Pop-up windows, related camera and map.

Device information

- Device Serial NO
- Firmware Version
- Hardware Version

 Device Information Time Southard 	Basic Information			
🔮 Time	Basic Information			
Custom	Dasic mormation			
🖞 🚳 System	Device Type:	DS-PEA1-21	Number of Alarm La	1
🚳 Network	Local Zone Number:	3	Local Trigger Number:	2
🚳 Input Settings	Siren Number:	1	Analog Camera Nu	1
🗞 Output Settings	Notwork Lloor Number:	1	Analog Gamera Na	
🛯 🚳 Storage				
🛿 🚳 Image	Device Serial No.:	J1/AAWRC608/2891C		
🛙 🚳 Event	Version Information			
🛿 🚳 Alarm Management	Firmware Version:	V2.0.2 build 180705		
🗉 🚳 Status	Hardware Version:	0x901		
🗄 🚳 CCD				



SIP Setting

Server IP/Server Domain

Server Port

- > Number
- Display Name
- Registration Period

	Rem	ote Configuration				
🖲 🚳 Device Information	Configuring the SIP Parameters					
🖲 🗞 System 🖻 🗞 Network	Enabled					
@ General	Registration Status:	Unregistered	I			
@ DNS	Server IP Address:	0.0.0.0				
🏶 SIP Settings	Server Domain:					
🎡 Cloud P2P Settings	Server Port:	5065				
Platform Access	Number:	0				
🖭 🚳 Input Settings	Display Name:					
🖲 🗞 Output Settings	Registration Period:	10	Minute(s)			
🖭 🚳 Storage	rtegistration r enou.	10	minuc(5)			
🗄 🍪 Image			Save			
🕑 🚳 Event						
🖭 🌚 Alarm Management						

HIKVISION[®]

Zone Parameters

- Two Alarm in (Bcakup)
- Zone 3 is Emergency button Alarm

in

		Remo	ote Configurat	on		×
 	Config Basic Se	guring the Z		Sensitivity	Siren Output	Settings
🖃 🚳 Input Settings	1	Alarm In	Shield Zone	500mc	Close	
 Zone Output Settings Storage Image Image Event Alarm Management Status CCD 	1 2 3	Alarm In Alarm In Emergency	Shield Zone Shield Zone Shield Zone	500ms 500ms	Close Close	



Call Waiting Setting

- Max. Ring Duration(40~80s)
- Waiting Time(10~60s)

	Remote Configuration	×
 Device Information System System Network Network Network Output Settings Output Settings Siren Relay Waiting Alarm Lamp Flicking Voice Brompt 	Configuring Call Waiting Settings. Max. Ring Duration: 60 s Waiting Time: 30 s Save	, ,
 Voice Prompt Storage Storage Storage Konstant Konstant Status CCD 		

HIKVISION[®]

Video & Audio configuration

Video Format Setting

	F	Remote Configuration	1		×
 Device Information System System Network Input Settings Output Settings Storage Image 	F Configuring th Camera: Video Stream Type: Bitrate Type: Video Quality:	Remote Configuration le Image Quality, Camera1 Main Stream Constant Medium	Resolution and Video Type: Bitrate: Resolution:	Other Parameters Video & Audio 3072 K 1080P(1920*1080)	× of the Caı
 Video & Audio Video Display Image Settings Intercom Audio Event 	Frame Rate: Audio Encoding SVC: File Size Per Day:	Full Frame G711_U Close 31.0G	I Frame Interval: Video Encoding	25 * · · · · · · · · · · · · · · · · · ·	
 I alarm Management I alarm Manageme	Copy to				Save

HIKVISION[®]

Recording Schedule

- If you need recording the Video
 when someone trigger the
 Emergency button, you need
 select Local Recording and select
 Recording Schedule
- Zone 3:Emergency Call help also need select Recording Linkage

Remote Configuration *						
 Device Information System 	Configuring the 2	Zone Pa	Zone Settings		×	
 System Network Input Settings Zone Output Settings Storage Image Event Alarm Management Status CCD 	Basic Settings Zone Name 1 Alarm In 2 Alarm In 3 Emergency.	Zone T Shield Z Shield Z NCY Shield Z	Zone No.: Name: Detector Type: Zone Type: Sensitivity: Tampering Type: Audio Files: Linked S Alarm Lar Select All Recording Linkag	3 Emergency Call Help Emergency Switch ↓ Panic Alarm Zone ↓ 500ms ↓ Disable ↓ Ringtone 2 ↓ ✓ Upload Alarm Rec mp Link Linked Tri Content of the second s	Other	
			Сору То	Save Car	ncel	

HIKVISION

HikCentral Configuration

S





HikCentral Configuration





HikCentral Configuration



DS-PEA How to configure in HikCentral

i³⁄₄3002¡¿DS-PEA How to configure in HikCentral.p



Thanks!

See Far, Go Further