# NVR

# **User Guide**

June, 2015 Rev1.0

Index
1. Product Summary
2. Package
3. Device Model and Appearance
3.1. NVR Appearance4
3.2. Common Mode NVR Port4
3.3. POE Mode NVR Port
4. Ready for Operating NVR
5. NVR Basic Operation
5.1. Browse
5.2. Navigation Menu
5.3. Login9
5.4. Main Menu9
5.4.1. General setting9
5.4.2. Channel setting10
5.4.3. Record Plan11
5.4.4. Network Setting12
5.4.5. System Management13
5.4.5.1. Menu Display14
5.4.5.2. Record Backup15
5.4.5.3. Account Management16
5.4.5.4. Restore to default16
5.4.5.5. Abnormity alarm setting17
5.5. QuickPlay and Query Recording17
5.6. Access to NVR by IE Browser 19

## **1. Product Summary**

The NVR is a network video recorder capable of recording video from up to 4 HD IP cameras.

The main features for the NVR are as below:

- 1) Compatible with our M series and X series IP camera, to search the IP Cameras, to control their PTZ and other functions;
- 2) Support P2P connection;
- 3) With embedded operation system, low power consumption chip for long time operating stably;
- 4) Support Onvif revision 2.2;
- 5) Support 4 channel 720P recording, support to live view and play back the video;
- 6) Support recording audio and talking;
- 7) Support Maximum 4TB Hard Disk;
- 8) Built in WEB SERVER, easy to view video and configure NVR by IE browser.

## 2. Package

Common mode NVR package list

- NVR (Not including HDD) \*1
- 12V power adapter \* 1
- USB Mouse\* 1
- HDMI cable \*1
- Network cable\*1
- Screw kit\*1
- CD\*1

sPoE mode NVR package list

- NVR(Not including HDD) \* 1
- 720P IP camera \* 4
- 12V power adapter \* 1
- USB Mouse \* 1
- sPoE converter cable\* 4
- Screw kit\*1
- HDMI cable\*1
- Network cable\*1
- CD\*1
- Quick Installation Guide\*1

## 3. Device Model and Appearance

## 3.1. NVR Appearance



Figure1

There are three status indicator, red, blue and green at the front panel. Red indicator: power indicator, it will switch on after powering on the NVR; Blue indicator:record indicator, it will switch on after launching record;

Green indicator:network indicator, it will switch on after connecting with network. Tips: The front pannel of common mode NVR and POE mode NVR is same, not any difference.

## 3.2. Common Mode NVR Port



- 1) DC 12V power in;
- 2) USB ports for connecting USB mouse and USB disk;
- 3) RJ45 network port, connect NVR to Internet by network cable
- 4) HDMI HD output port, used for connecting the monitor with HDMI port;
- 5) VGA output port, used for connecting the monitor with VGA port;
- Audio output jack: used for connecting external speaker to play audio from IP camera;
- 7) Audio input jack: used for connecting external Microphone to talk with IP camera;
- 8) Reset Button: restore to factory default.

## 3.3. PoE Mode NVR Port



Figure3

- 1) DC 12V power in;
- 2) USB ports for USB mouse and USB disk
- 3) HDMI HD video output jack, used for connecting the monitor with HDMI jack;
- 4) VGA video output jack, used for connecting the monitor with VGA port;
- Audio output jack: used for connecting external speaker to play audio from IP camera;

Audio input jack: used for connecting external microphone to talk with IP camera;

- 6) Reset Button: restore to factory default;
- 7) POE network port, just used for our company's IP camera with 12V power supply, don't allow to connect other network device, otherwise it damage the device.
- 8) LAN RJ45 network jack, not support PoE power on.

Tips:

- The S-POE supports 5 way output, one way is for backup output, other 4 way are used for connecting 4 IP camera.
- The 5 S-PoE ports is used for private PoE power on protocol, only used for attached IP cameras with PoE port.

## 4. Ready for Operating NVR

You need to do the following before you use the NVR.

- 1) Buy a hard disk with SATA port, Maximum 4TB;
- 2) Install the hard disk: open the NVR top cover; connect the data and power cable of the NVR to hard disk, and then fix the hard disk to bottom cover with screws, and then fix the top cover.









 Connect the NVR to internet by network cable, also need to connect our company's M/X series IP camera.

The typical connection diagram for common and S-PoE mode NVR as below.

Common mode NVR connection diagram as Figure6



## PoE mode NVR connection diagram as Figure7 and Figure 8



Figure7



Figure8

## 5. NVR Basic Operation

You just click mouse to operate the NVR. The basic operation of the mouse is shown as below:

- Right click on monitoring window, it will pop up a right-mouse menu;
- Login to it and get administrator authorization;
- Left click to select some items;
- Click soft keyboard where you need to input characters, it will pop up a soft keyboard, you can click corresponding characters to input them.

Tips: Right click is used for return or quit button.

#### 5.1. Browse

It will access to live view interface when the device launch normally, and display the date and time in each picture, there are a row status icon under screen, detail as below.

	Recording	9-	Alarming
<b>-</b> &	Close monitoring	ব্য	Close talking
-(1)	Monitoring		Talking

## 5.2. Navigation Menu

Main Menu/QuickPlay/Record Mode/System Info/View 1/View 4/Exit Menu/Close System.



Figure8

## 5.3. Login

Right click to select Main Menu, a login dialog will pop up. Default user name: admin; password: 123456.

Syste	System Login						
User Name Password (	admin 🔻						
ОК	Cancel						



## 5.4. Main Menu



Figure10

#### > General

System Language, System Time, IP address setting, HDD record management, lock screen management and pack Duration.

#### Channel setting

Set up monitor channel, protocol,LAN search, bit rate, frame rate and IPC parameter.

#### Record Plan

To set up record mode and record time for each channel.

#### > Network setting

To set up HTTP port, TCP port, UPNP and DDNS.

## 5.4.1. General setting

You can set up some basic setting before connecting the NVR and IPC here.

Language setting: English/Simplified Chinese;

Auto Logout: support maximum 60 minutes;

Pack duration: support maximum 90 minutes.

	Mair	n Menu				
General Sel	All Reco	rd Plan	Networ	k	ŝ	<b>O</b> Syster
Language		E	NGLISH			V
System Time		2015-	04-24 10:05	:21		₩
Networking Type			DHCP			W
IP Address	192	· 168	· 3		107	
Gateway	192	· 168	· 3		1	
Subnet Mask	255	· 255	· 255		0	
First DNS Server	202	· 96	· 134		33	
Alternate DNS Server	192	· 168	· 1		2	
HDD Full		0	verwrite			V
Auto Logout			10		Ì	nin.
Pack Duration			90			min.

Figure11

## 5.4.2. Channel setting

You can search connected IP camera at the channel interface, and also can set up the bit rate and frame rate.

Search Protocol: support M/X series camera; please confirm the camera is belong to which series when you search camera.

HY\_X\_IPC: X series IP camera

HY\_M\_IPC: M series IP camera

Tips:The IPC Encodset is save changes button, click IPC Encodset to finish the changes after you changed bit rate and frame rate.

		Main Menu				
General	Sel All	Record Plan	Network	System		
Channel	1 🔻	)				
Protocol	HY_X_IPC V	โ				
IP Address	192 . 168 . 3	3 . 116				
Port	80					
User Name	admin	Bit Rate Cor	ntrol [FRI_STRI	EAM 🔻		
Password		Bitrate Volu	m 4096Kb	o/s     ▼		
MAC Address	D8:A3:C3:A4:D5	AD Frame Rate	(FPS) 25	T		
		Connec	Disconnect	IPC Encodset		
O Device Info MAC Address Sender IP Address Port  Protocol HY X IPC  Search						
Protocol HY	_X_IPC ▼ Se	earch				

Figure12

## 5.4.3. Record Plan

The record plan is calculated as 7 day/24 hours.

#### Recording type:

Regular record: include scheduled record and manually record.

Alarm record: include motion detection/GPIO alarm and sound monitoring alarm.

**Copy:** You can copy a channel setting to other channel.

Tips:

- > The NVR launch continued record by default as 7 day/24 hours.
- > You need to enable the alarm function of the camera when launching the alarm record, and then the NVR will launch the alarm record successfully.
- > The App. button, it can't save setting after the NVR reboots.
- > Record file type: A-Alarm record; R---Regular record.

		Main Menu		
General	Sel All	Record Plan	Network	System
Channel 🧲	1 v			
Planned rec	ording type 🛛 🕞	Regular 🔻		
0 Sun. Mon. Tue. Wed. Thu. Fri. Sat.	1 2 3 4 5 6			
Scheduled r	recording time	Select All Clear	All	
	Сору	Refresh	ОК Арр.	Cancel



## 5.4.4. Network Setting

You can modify the following item here.

- > TCP port,HTTP port
- UPNP port
- > DDNS (Dyndns, NO-IP, Oray)

#### Tips:

- 1. The UPNP is unavailable by default, you can enable the function as you need (After enabling UPNP, the Port setting is unable automatically, the device change to UPNP automatically)
- 2. Need to enable UPNP function of the router when you use the UPNP function.
- 3. Supply a free DDNS for each device from manufacturer.

		Main Menu		
General	Sel All	Record Plan	Network	System
Port			**	
UPNP port r	mapping		▶	
DDN			▶	
			OK	Cancel

Figure14

#### 5.4.5. System Management

You can manage the following item of the NVR here. HDD management:query hard disk status, format hard disk; Display: can set up output parameters of the VGA/HDMI screen; Record backup: can buck up file by USB mobile device; Account management: support administrator, operator and visitor three level user authorization; Default: restore corresponding parameter to default setting; Auto Maintain: maintain system run duration and recording file; Alarm Set: the NVR alarms when it work abnormally;

**Upgrade:** support USB disk upgrade.

		Main Menu		
General	Sel All	Record Plan	Network	System
HDD Ma	inage		••	
Displ	ay		▶	
Back	up		••	
Acco	unt 🔤		₩	
Defa	ult		••	
Auto Ma	intain		••	
Alarm	Set		••	
Upgra	ide		••	
				Cancel

Figure15

## 5.4.5.1. Menu Display

Transparency: can set up Menu window to transparency;

Channel Name/Time Display/Channel Display:OSD setting;

**Boot Guide:** it will launch the setup wizard after the NVR starts, and lead you to set up the connection both the NVR and IP camera.

**Resolution:** can control resolution of the VGA and HDMI output.

	Display
Transparency	Opacity y Channel Name Modify
Time Display	Channel Display √
Boot Guide Resolution	√ 1024×768 @60HZ ▼
	Default OK Cancel App.

Figure16

## 5.4.5.2. Record Backup

You can select recording file backup to USB portable disk by record type, channel and time.

Tip: NVR supports max 32G USB portable disk.

			Backup	
1	│		/Total Device 29.32 GB Rea	
			Back-up	
	Selected Device	e sdf1(US	SB DISK) 🛛 🔍	
	Туре	All 🔻	Channel 1	V
	Start Time	🗾 (2015 · 04 ·	24 00:00:00	Remove All
	End Time		24   10 : 09 : 57	Add
	2 □ CH Ty 1 ☑ 1 F			Size(KB) 20:59 125296
	2 🗹 1 F	15.04.24 09:2	1:51 15.04.24 10:	09:57 791696
	PageUp	PageDown	Select/Cancel bac	k-up device 🗌 AVI
			naining time 0:14:16	Stop
	етест васк-и	Erase	Stop	
				ОК

Figure17

#### 5.4.5.3. Account Management

After the device works properly, you need to login it, it will supply the corresponding function as login user authorization.

There are 3 users, admin, user and default, the password of admin and user is 123456 by default. The admin is high authorization user by default, the user is low authorization by default, only can monitor and playback.

Default User: used for internal system, can't be deleted. It will login by the user automatically when there is not login user here.

		Account		
3 1 2 3	User admin user default	Group admin user user	Status Login Local Normal Default User	
Add	User Modify Us	er Password	[	ОК

The username of admin can't be changed, but its password can be changed.

Figure18

#### 5.4.5.4. Restore to default

You can ticked all or partial system setting restore to default.

tting entries that			
	at you want to de	fault.	
$\checkmark$			
$\overline{\checkmark}$			
$\overline{\checkmark}$			
$\checkmark$			
	OK	Cancel	App.

Figure19

## 5.4.5.5. Abnormity alarm setting

You can manage the abnormity event for No Disk, Disk No Space, Net Disconnection, IP Conflicted and Disk Error.

Abnormity			
No Disk	🗹 Show Message 🛛 📈 Buzzer		
Disk No Space Less 20 %	Show Message Buzzer		
Net Disconnection	Show Message Buzzer		
IP Conflicted	Show Message Buzzer		
Disk Error	Show Message Buzzer		
	OK Cancel App.		

Figure 20

## 5.5. QuickPlay and Query Recording

The QuickPlay play back the video by time, you can select the video to play back it by time scale.

You can access to record playback interface by playback shortcut, and then play back the recording;



Figure21

You can click the button to switch between playback shortcut and query recording freely.



Figure22

## 5.6. Access to NVR by IE Browser

Login IP address of the NVR (default IP: obtain automatically; default port: 80), the default user is admin, password is 123456.



Figure24

Tips:

- > Please download ActiveX controls and install it when you use it at first time.
- > The Web language will change automatically by NVR system language.
- Stream change button: ( the system enable second stream by default )



First Stream

0	Þ	۲	Cam 01
0	Þ	۲	Cam 02
0	Þ	۲	Cam 03
•	Þ	0	Cam 04