

P2P function Instruction Guide

For the ease of use for most end users who are not familiar with network setup, we released the new feature to support P2P (Peer-to-Peer) function for the whole DVR and NVR Series. With this new feature, users are free of a lot of red tape to setup the IP address and network. We build up our own P2P server to ensure internet security, therefore our customers are free of virus attack by using this technology.

One step for remote access, no need of IP address and network setup



The followings are the step-by-step operation procedures of this new P2P feature:

Mobile Device (iPhone/iPad, Android phone/Pad):

Before using the P2P function:

1. Please make sure the DVR/NVR is connected to Ethernet and the DVR/NVR firmware is **v8.20.xx** or above. To check the DVR/NVR firmware, you may click **Menu > Status** for the firmware version.

Status			
Alarm Record	Size(GB):	1464	Recorded(%): 0
Normal Record	Size(GB):	0	Recorded(%): 0
Cameras	Motion	□ □ □ □ □ □ □ □	
	Video Loss	□ □ □ □ □ □ □ □	
Alarm Inputs		□ □ □ □ □ □ □ □	
Serial No.	1052 - 8cc6 - 769c - 2642		
Version			
Hardware	01.00.00	Software	07.84.95

2. Please make sure your mobile device has installed Mobile App (TapCMS/TapCMSHD) through App Store (Apple) or Play Store/Market (Android phone).
3. Please make sure that TCP hole punching is possible for the router for the DVR/NVR. To support TCP hole punching, certain router's configurations may be needed, such as DMZ, Virtual Server, or Port Forwarding. Please consult your network administrator for the related settings for the router.

When you have made sure the above matters, please start the procedure as below:

1. From DVR side, enable the P2P (Set "On" through **Menu>Setup>Network**). The QR code will be shown on the upper right corner of the screen.



2. Activate the TapCMS/TapCMSHD in your mobile device

>Press **"Add"**

>Check **"V"** the QR code and fill in the **user name** and **password** of the DVR/NVR.

>Press **"Scan"** icon and move your mobile device to focus on the QR code shown on the display.

>The result will be shown when it is done.

>Press **"OK"** icon.

>Press the DVR/NVR name to access the DVR/NVR.

Below is the screen shot for the step by step procedures of the mobile phone:



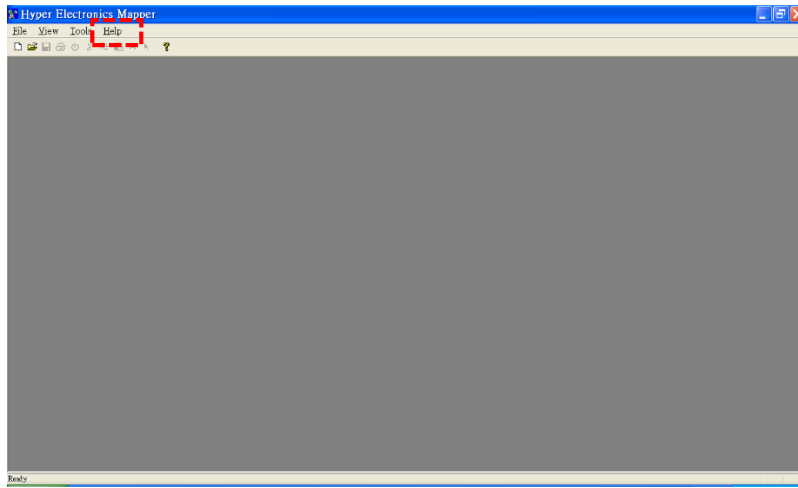
Desktop/Laptop PC:

Before using the P2P function:

1. Please make sure the DVR/NVR is connected to Ethernet and the DVR/NVR firmware is **v8.20.xx** or above. To check the DVR/NVR firmware, you may click **Menu > Status** for the firmware version.

Status			
Alarm Record	Size(GB):	1464	Recorded(%): 0
Normal Record	Size(GB):	0	Recorded(%): 0
Cameras	Motion	□ □ □ □ □ □ □ □	
	Video Loss	□ □ □ □ □ □ □ □	
Alarm Inputs		□ □ □ □ □ □ □ □	
Serial No.	1052 - 8cc6 - 769c - 2642		
Version			
Hardware	01.00.00	Software	07.84.95

2. If you are using HEM (HyperElectronicsMappers), please make sure the installed HEM version is **v6.2.0.0** or above. (Click **"Help"** to find the HEM version as shown below)



3. Please make sure that TCP hole punching is possible for the router for the DVR/NVR. To support TCP hole punching, certain router's configurations may be needed, such as DMZ, Virtual Server, or Port Forwarding. Please consult your network administrator for the related settings for the router.

When you have made sure the above matters:

A. Back up the QR code from your DVR/NVR first:

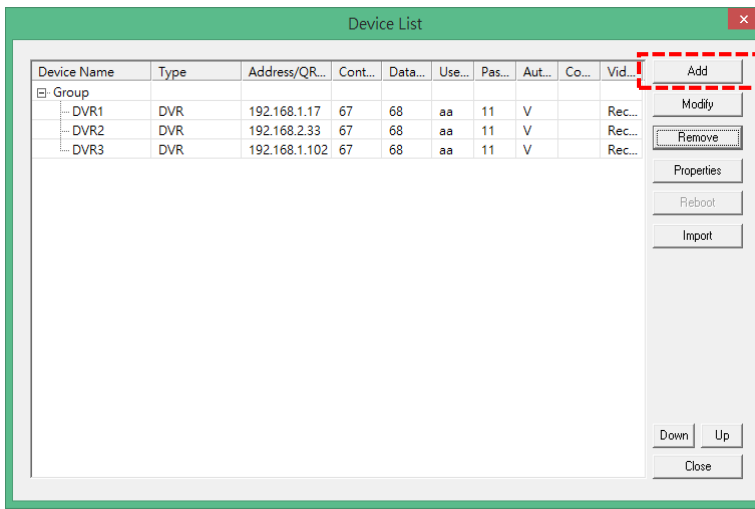
1. From DVR/NVR side, enable the P2P (Set "On" through **Menu>Setup>Network**). The QR code will be shown on the upper right corner of the screen.
2. Insert the USB storage device to the DVR. In Menu display, press ▲▼◀▶ to change the highlighted option to "**Backup Device**", and then press "**ENTER**" to call up Backup Device display as shown below:

Backup Device				
Devices	Status	-	Configuration	
USB Drive	-	Connect	Backup	Restore
USB DVD	-	Connect	Backup	Restore
Int DVD	-	Connect	Backup	Restore
Internal DVD Only:		[MODE]-Eject	[SEQ]-Load	

3. Click "**Connect**" to activate the USB drive. When the USB storage device is connected successfully, Click "**Backup**" to archive the QR code to your USB storage device.

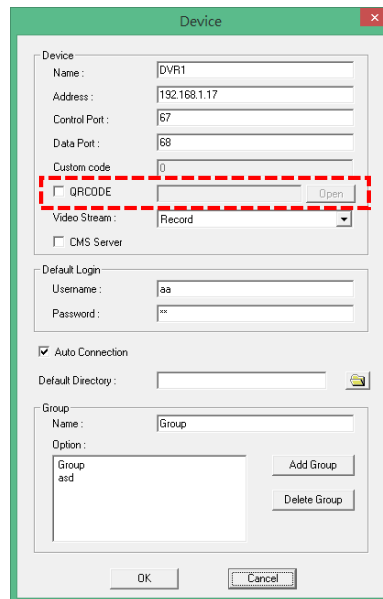
B. Connect to the DVR/NVR using QR code on your Desktop/Laptop:

1. Insert the USB storage device to your Desktop/Laptop, there should be a new folder named "**qrcode**" that was just archived from the DVR/NVR in your USB storage device.
2. In HEM program, click on **Tools** menu, and then select **Device->Config**, the Device List Dialog for this HEM station will be shown as below. Press "**Add**" to add the DVR/NVR you are going to connect through P2P (QR code)

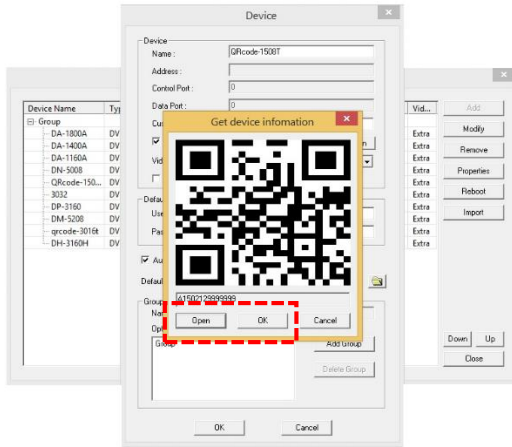


**Please note that the DVR/NVR devices for all the examples are already built in the device list. If the PC is connected to some DVR/NVRs, users may modify the IP address, Port Number, Username & Password, and then run the HEM maps (Please refer to HEM user manual Chapter 4 – HEM Running Mode) in the Examples to get a better understanding of HEM.

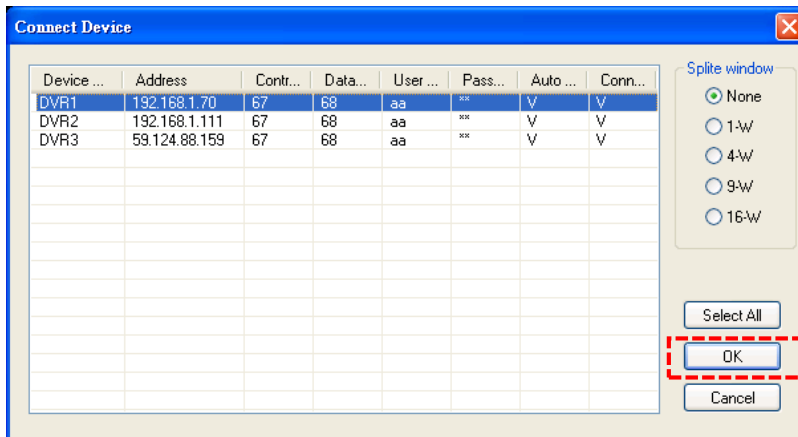
3. Click check “V” to activate the P2P function and then click “Open” to find the QR code backed up from the DVR/NVR in your USB storage.



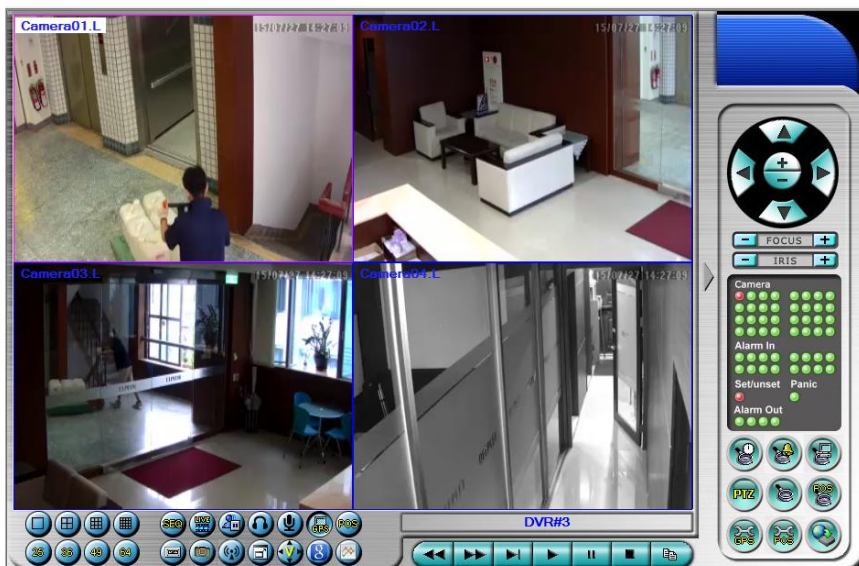
4. Click “Open” to access the QR code you have saved in the USB storage, then click “OK”.



5. You will need to fill out the **Device Name** (Any one you want to name for this device), **Custom code** (Last 2 digits of firmware. For example: V8.28.00, the custom code is **00**, except for V8.xx.95, the custom code is **-1**), **User name** and **Password**.
6. Select **Tools>Device>Connect** and select the device you added then click **“OK”** to remotely connect to the DVR/NVR using P2P (QR code):




7. If you set up the correct user name and password, you will be able to remotely access the device now:



C. If you have already used I.E browser to remote access to other DVR/NVR before:

1. You may use the I.E browser to access any one of the available DVR/NVR with IP address. (For example: <http://210.242.162.25>)



1. Click  "Properties" to add a new device by using P2P (QR code) function. For the rest of the procedure, please refer to the above steps for Desktop/Laptop PC operation.