

Network Setting Guide

1. LAN/ WAN Introduction

A key distinction between a LAN (local-area network) and a WAN (wild-area network) involves the physical distance that the network spans.

A LAN connects network devices over a relatively short distance. A networked office building usually contains a single LAN, though sometimes one building will contain a few small LANs, and occasionally a LAN will span a group of nearby buildings. In IP networking, one can conceive of a LAN as a single IP subnet.

As the term implies, a WAN spans a large physical distance. A WAN is a geographically collection of LANs. A network device called a “router” connects LANs to a WAN. In IP networking, the router maintains both a LAN address and a WAN address.

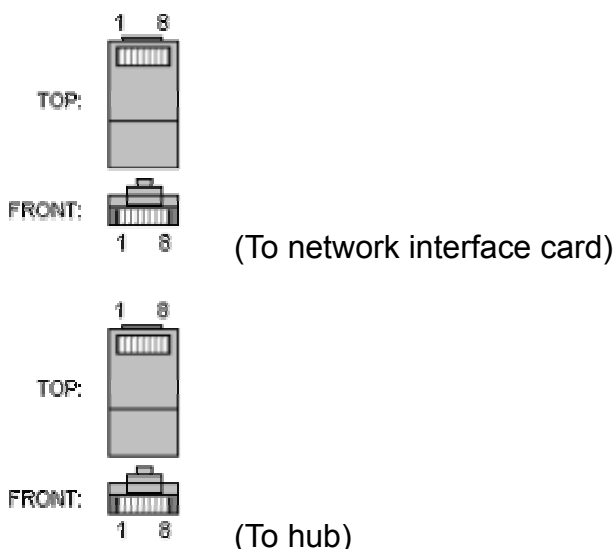
2. DVR in LAN Environment

There are two situations about the IP settings for DVR. You may configure your DVR in your LAN network or connect PC to DVR directly. The convenient IP-searching software “**IPInstaller**” has offered in the attached CD.


NOTE: If you have more than two DVR to setup, we recommend you to configure DVR one by one; otherwise the IP installer can not find the DVR in your LAN.

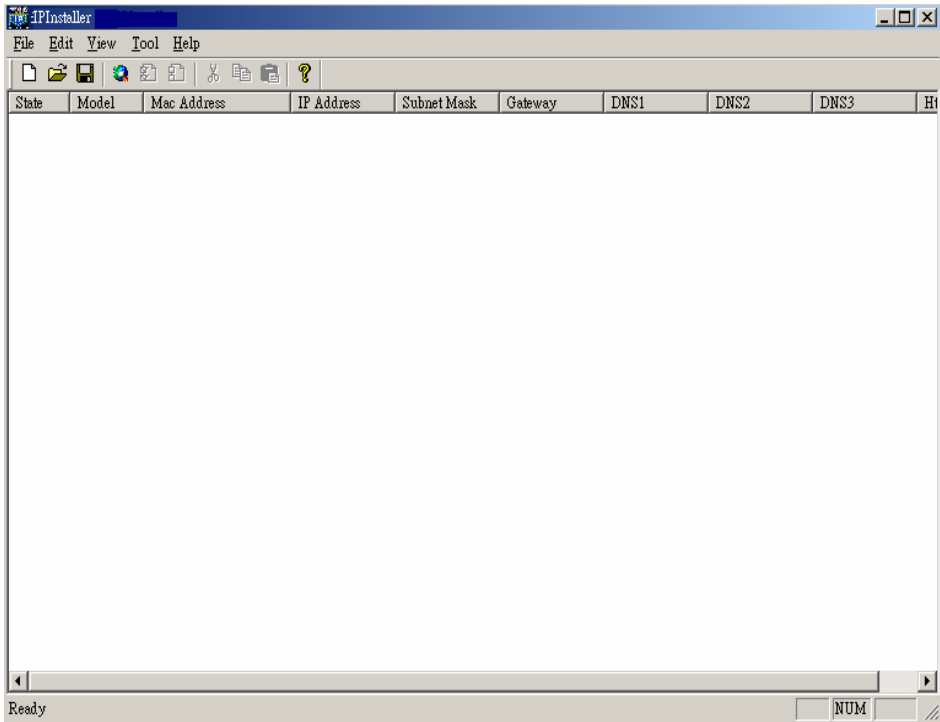
2.1 Set DVR IP through a LAN


Step 1: Connect the DVR to your LAN with a straight cable. The following is straight cable diagram and pin definition.

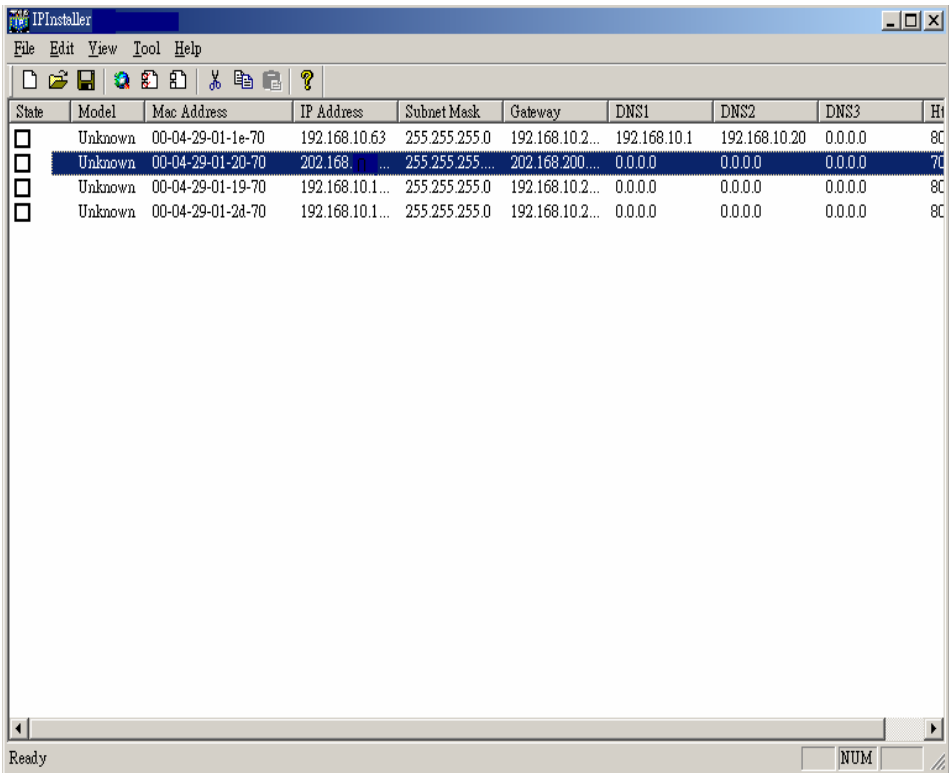


Name	Pin	Cable Color	Pin	Name
TX+	1	White/Orange	1	TX+
TX-	2	Orange	2	TX-
RX+	3	White/Green	3	RX+
	4	Blue	4	
	5	White/Blue	5	
RX-	6	Green	6	RX-
	7	White/Brown	7	
	8	Brown	8	

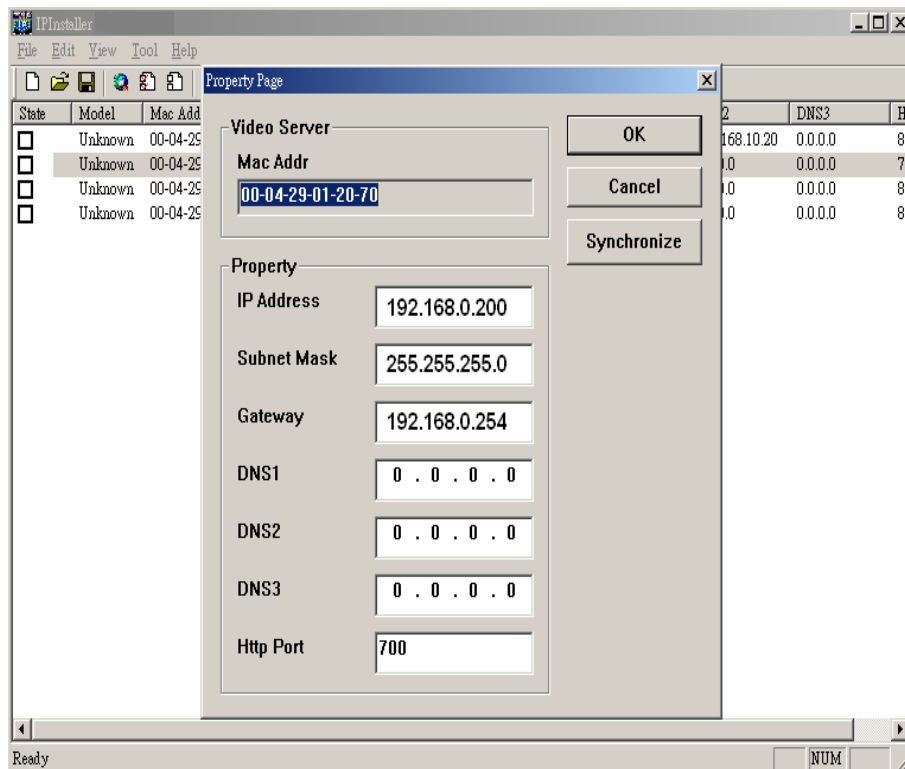
Step 2: Click the icon  to execute the IP Installer. It will show the following picture after executing IP Installer.



Step 3: Click the icon  to search the DVR in your LAN. The following is the searching result.



Step 4: Double click the DVR you want to configure, and then the following frame will pop up.

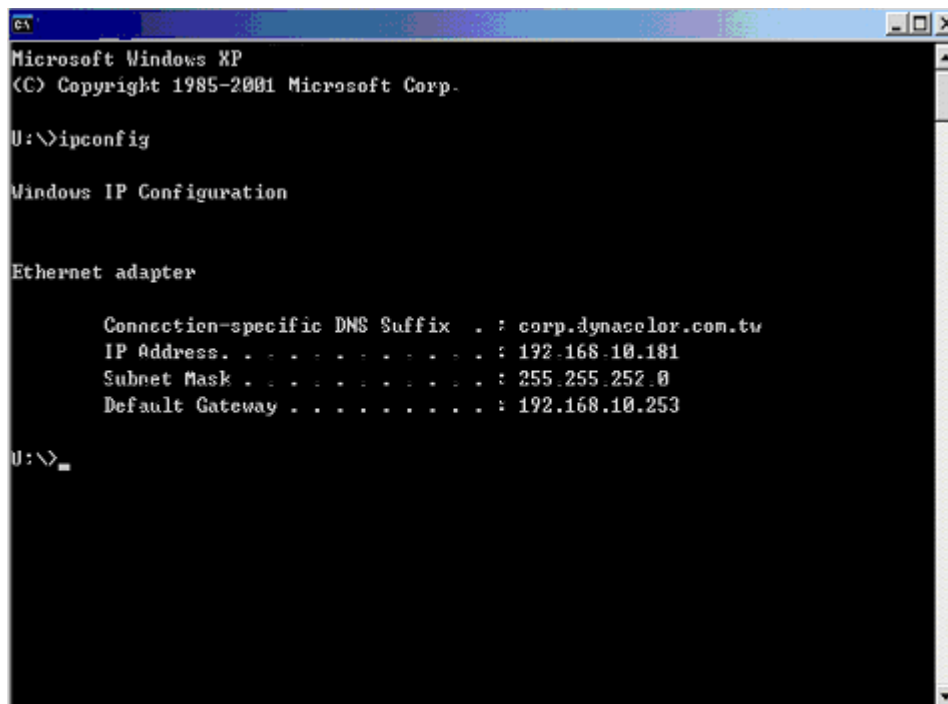


NOTE: The following is the factory value for DVR

IP: 192.168.0.1
SM: 255.255.255.0
GW: 192.168.0.254
DNS1: 0.0.0.0
DNS2: 0.0.0.0
DNS3: 0.0.0.0
Http Port: 700

The MAC address is provided by the Network Interface manufacturer. You don't need to change and also can't change it.

Step 5: IP Address: Select the proper IP for your DVR; you can type “**ipconfig**” under DOS command mode in your Windows system to find your LAN information including IP, Subnet Mask, Gateway and DNS.



```
Microsoft Windows XP
(C) Copyright 1985-2001 Microsoft Corp.

U:\>ipconfig

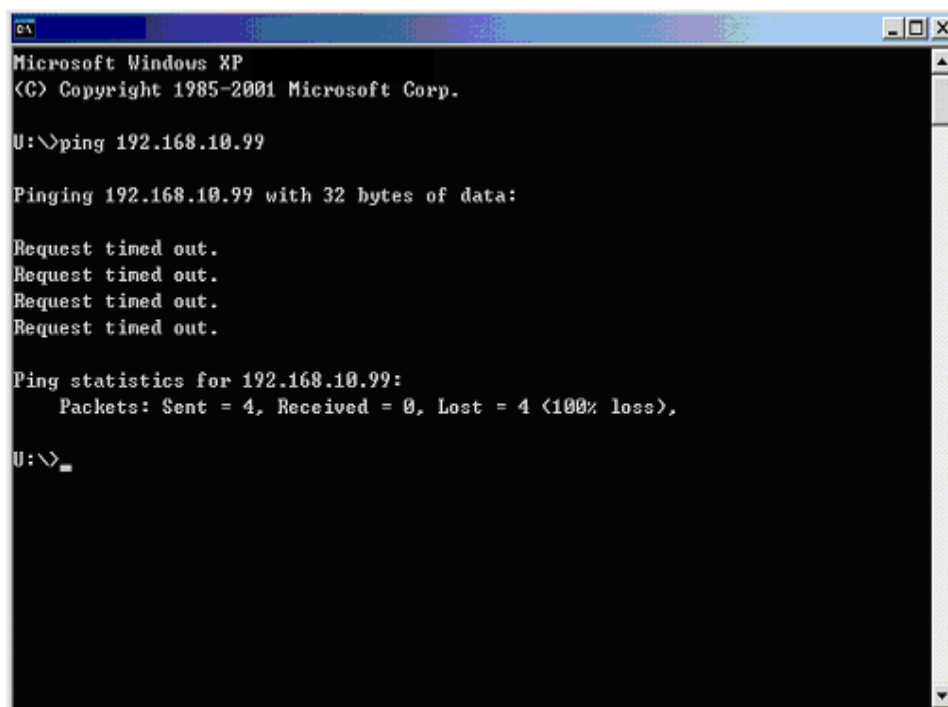
Windows IP Configuration

Ethernet adapter

    Connection-specific DNS Suffix  . : corp.dynacolor.com.tw
    IP Address. . . . . : 192.168.10.181
    Subnet Mask . . . . . : 255.255.252.0
    Default Gateway . . . . . : 192.168.10.253

U:\>
```

Then you can choose an IP which is in your LAN, then type “**Ping**” to see whether this IP was already used or not. For example, if you choose IP 192.168.10.99, you can do “ping 192.168.10.99”, then you can see the information as below



```
Microsoft Windows XP
(C) Copyright 1985-2001 Microsoft Corp.

U:\>ping 192.168.10.99

Pinging 192.168.10.99 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 192.168.10.99:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

U:\>
```

“**Request time out**” means that the IP 192.168.10.99 has no response. You can assign this IP to DVR, vice versa.

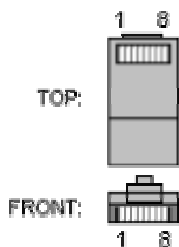
Step 6: Subnet Mask, Default Gateway and DNS: You can refer to the Subnet Mask, Default Gateway and DNS information from “**ipconfig**” command to fill in the Subnet Mask, Gateway and DNS fields. In addition, **IP Installer** provides three DNS fields. You don’t need to fill in all fields. It depends on how many DNS in your LAN.

Step 7: Http port: How to set the Http port value depends on your Network. Generally speaking, if your LAN doesn’t have firewall, you can set the port value as you want, but if firewall exists in your LAN, you need to get available TCP ports in your LAN from your IT or MIS people. Please note that the IE browser uses the TCP port **80** as communication port, if you set another value for Http port, you have to type the port number after the IP address in browser. For example, if you choose the port number as 700, you have to type http://192.168.10.99:700 to connect to DVR.

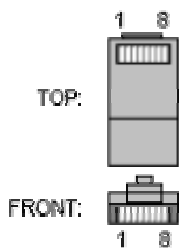
Step 8: If you complete the settings, press the icon  to save your settings.

2.2 Set DVR IP Using PC Directly

If you want to connect your PC to DVR directly, you need to prepare a cross-over cable before installation. The following is the diagram for cross-over cable.



(To network interface card 1)



(To network interface card 2)

Name	NIC1	Color	NIC2	Name
TX+ (BI_DA+)	1	White/Orange	3	RX+ (BI_DB+)
TX- (BI_DA-)	2	Orange	6	RX- (BI_DB-)
RX+ (BI_DB+)	3	White/Green	1	TX+ (BI_DA+)
- (BI_DC+)	4	Blue	7	- (BI_DD+)
- (BI_DC-)	5	White/Blue	8	- (BI_DD-)
RX- (BI_DB-)	6	Green	2	TX- (BI_DA-)
- (BI_DD+)	7	White/Brown	4	- (BI_DC+)
- (BI_DD-)	8	Brown	5	- (BI_DC-)

NOTE: That means that the white/orange cable connected to NIC 1 pin 1 should go to NIC 2 pin 3 and NIC 1 pin 2 to NIC 2 pin 6 etc.

Then you can follow the step 1 to step 8 above to configure your DVR.

NOTE: We have found the proxy function making some troubles with our DVR. Please disable the proxy function in IE browser. The following is the procedure to disable the proxy function.

- Move the cursor to the IE icon and click right on the mouse.
- Select and click the item “Reference”.
- Select and click the item “Connect”.
- Select and click the item “LAN Setting”.
- Eliminate all of the proxy settings then click confirm.

3. DVR in WAN environments

3.1 Fixed IP

Step 1: Connect the DVR and PC with cross-over cable.

Step 2: Set the related IP settings of your PC as below:

IP: 192.168.0.1
SM: 255.255.255.0
GW: 192.168.0.254

Step 3: There are two ways to set the IP of your DVR: 1) entering the initial factory default IP (<http://192.168.0.200:700/>) directly; 2) using the IPInstaller software to searching the DVR IP.

NOTE: The DVR initial factory default is as below:

IP: 192.168.0.200
SM: 255.255.255.0
GW: 192.168.0.254

Step 4: Enter the ISP network settings in your DVR. Connect the DVR to Internet to complete the while procedure.

NOTE: We strongly suggest writing down the changed default, in case that you might forget it someday.

3.2 Floating IP

A network device called a “Broadband Router” is needed to connect the DVR and DSL Modem, the D-LINK DI-604 is highly recommended.

Refer the detail setting of Broadband Router in its user manual and ISP offered connection settings.

Step 1: Connect the DVR and PC with cross-over cable.

Step 2: Set the related settings of your PC as below:

IP: 192.168.0.1
SM: 255.255.255.0
GW: 192.168.0.254

Step 3: There are two ways to set the IP of your DVR: 1) entering the initial factory default IP (<http://192.168.0.200:700/>) directly; 2) using the IPInstaller software to searching the DVR IP

The DVR initial factory default is as below:

IP: 192.168.0.200
SM: 255.255.255.0
GW: 0.0.0.0

Step 4: Set the Server settings through web page.

- 1). Server→General→Server Settings; you need to set the “Name” first.
- 2). ex. If the DVR is named as “webdvr”, then the window will be shown as below figure.

Server

Server Settings

Name: webdvr

Owner:

Owner Email:

MAC Address: 00-04-29-01-e9-70

Language: English

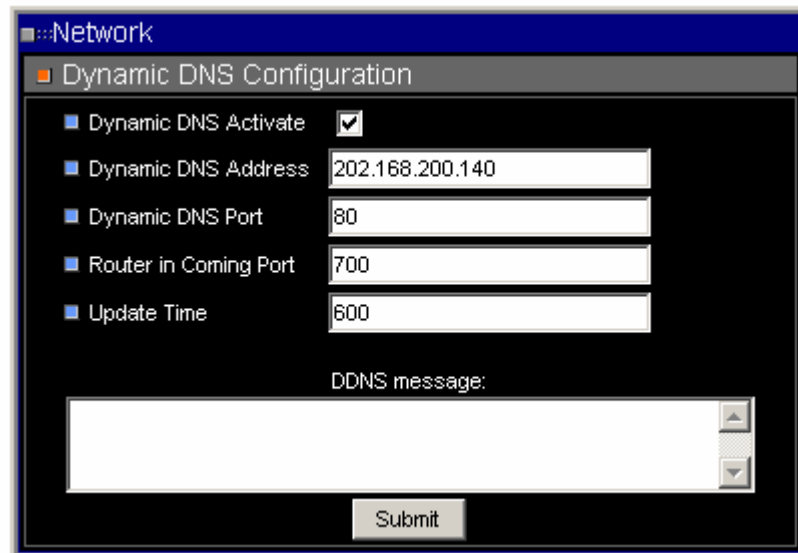
Firmware Version: 3.00

Live Video Using: ☒ ActiveX ☐ Java Applet

Submit

Step 5: The item “Dynamic DNS Activate” must be set to **Enable**, and the other related network items must be set as below table.

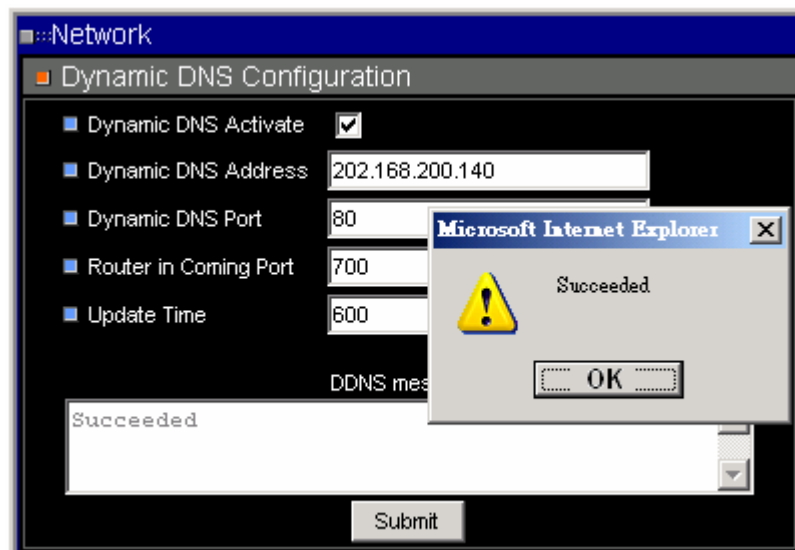
Dynamic DNS Address	202.168.200.140
Dynamic DNS Port	80
Router in Coming Port	700



The screenshot shows a window titled "Network" with a sub-tab "Dynamic DNS Configuration". It contains several configuration fields: "Dynamic DNS Activate" is checked; "Dynamic DNS Address" is set to "202.168.200.140"; "Dynamic DNS Port" is set to "80"; "Router in Coming Port" is set to "700"; and "Update Time" is set to "600". Below these fields is a text area labeled "DDNS message:" which is currently empty. A "Submit" button is located at the bottom right of the configuration area.

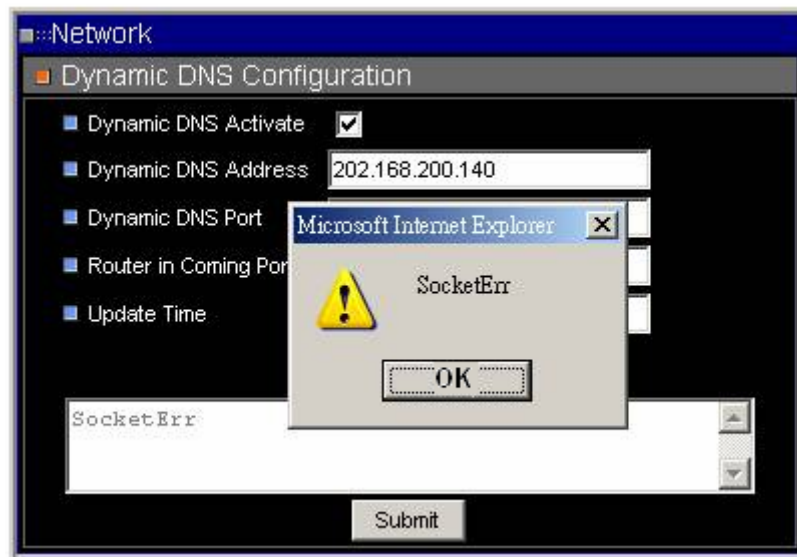
Click on the button “Submit” to finish the procedure.

If below pop-up shows up, it means the procedure has be down successfully.



This screenshot shows the same "Dynamic DNS Configuration" window as before, but with a "Succeeded" message in the "DDNS message:" text area. A "Microsoft Internet Explorer" pop-up window is overlaid on top, displaying a yellow warning icon, the word "Succeeded", and an "OK" button. The "Submit" button in the background window is still visible.

If below pop-up shows up, it means the setting is failed. Please check the dialog boxes again. If you entered all information right, it might mean that the “Sever Name” had been used, and then you have to have another name for it.



Step 5: Link the DVR and Broadband Router.

Step 6: Enter the IP Address through the web page to connect the DVR to Internet (such as <http://xxxxxxx.ddns.iview-ddns.com>).

eg. <http://webdvr.ddns.iview-ddns.com>