# STATIC IP

We will need the following information from **ISP** (Internet Service Provider).

- 1) **IP ADDRESS** (*ex. 99.23.75.50~55*)
- 2) SUBNET MASK (ex. 255.255.258.248)
- 3) **GATEWAY** (*ex.* 99.23.75.1)
- 4) Primary DNS (ex. 65.45.22.98)
- 5) Secondary DNS (*ex.* 65.45.23.98)

Once we have all those information from your ISP you will need to check the **physical** wiring of Network.

We recommend the following options.





Now that we know the type of Network connection we only need to configure the Network settings.

# DIAGRAM 1, 3 and 4

Since we have STATIC IP the NETWORK settings for the diagram 1, 3, and 4 will be pretty much similar. *In this case we won't need to open any ports.* 

#### Let's use Diagram 4 as example.

From our ISP we have the following information.

IP ADDRESS: 99.23.75.50~55 SUBNET MASK: 255.255.255.248 GATEWAY: 99.23.75.1 Primary DNS: 65.45.22.98 Secondary DNS: 65.45.23.98

### **NETWORK SETTING ON DVR**

**NOTE:** in this example the IP ADDRESS range is from 99.23.75.50 to 99.23.75.55, which means you can choose any number from 50~55.

IP address:	99.23.75.52
Subnet mask:	255.255.255.248
Default gateway:	99.23.75.1
Preferred DNS server:	65.45.22.98
Alternate DNS server:	65.45.23.98



<b>3)</b> In Local Area Connection Properties (on	<b>4)</b> In Internet Protocol (TCP/IP) Properties (on
General tab): Select Internet Protocol	General tab): Select "Use the following IP
(TCP/IP) -> click PROPERTIES	address", and enter the information that ISP
	dave vol
	garoyea
🕹 Local Area Connection Properties 🛛 🔹 🔀	
General Authentication Advanced	Internet Protocol (TCP/IP) Properties
Connect using:	General
Broadcom 570x Gigabit Integrated Co	You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the capacity of the setting of the se
This connection uses the following items:	the appropriate in settings.
🗹 🐨 NWLink IPX/SPX/NetBIOS Compatible Transport Prot 🔨	Obtain an IP address automatically
☑ 3 AEGIS Protocol (IEEE 902.1x) v2.2.1.0	OUse the following IP address:
Trinternet Protocol (TCP/IP)	IP address: 99 . 23 . 75 . 52
	Subnet mask: (255 . 255 . 248)
Install Uninstall Properties	Default gateway: 99 . 23 . 75 . 1
Description Transmission Control Protocol /Internet Protocol The default	Obtain DNS server address automatically
wide area network protocol that provides communication	Use the following DNS server addresses:
across diverse interconnected networks.	Preferred DNS server: 65 45 22 98
Show icon in patification area when connected	
<ul> <li>Show common address when connected</li> <li>Notify me when this connection has limited or no connectivity</li> </ul>	Alternate DNS server: 65 . 45 . 23 . 98
	Advanced
OK Cancel	
	OK Cancel

### **NETWORK SETTING ON PC**

The steps are same as "**NETWORK SETTING ON DVR**". The only thing that will change is the IP address. Since DVR is using the IP 99.23.75.52, the IP address available for PC would be 99.23.75.50~1 and 99.23.75.53~55.

This diagram will help you understand better what you have done in the Network setting.



### WHAT IP DO I USE TO CONNECT TO DVR?

In this case we use the following IP to connect remotely.

If you are trying to connect from LAN (LOCAL AREA NETWORK) DVR IP = 99.23.75.52

If you are trying to connect from OUTSIDE DVR IP = 99.23.75.52

# DIAGRAM 2 & 5

Since we have STATIC IP the NETWORK settings for the diagram 2 and 5 will be pretty much similar. In this case we will need to open ports for the DVR.

#### Let's use Diagram 5 as example.

From our ISP we have the following information. *IP ADDRESS:* 99.23.75.50~55 *SUBNET MASK:* 255.255.258 *GATEWAY:* 99.23.75.1 *Primary DNS:* 65.45.22.98 *Secondary DNS:* 65.45.23.98

## **ROUTER SETTING**

From any computer connected to this ROUTER do the following steps.

1) From WINDOWS desktop: START -> RUN -> type "cmd" -> OK
Run ? 🔀
Type the name of a program, folder, document, or
Internet resource, and Windows will open it for you.
Open: cmd
OK Cancel Browse
2) On Command windows type "inconfig /all" Write down the following information:
<b>IP ADDRESS</b> (ex. 192 168 1 100)
SUBNET MASK (ex. 255.255.0)
GATEWAY (ex. 192.168.1.1)
<b>DNS</b> (ex. 192.168.1.254)
C:\WINDOWS\system32\cmd.exe
C:₩>ipconfig /all
Windows IP Configuration
Host Name
Node Type
IP Routing Enabled No
WINS Proxy Enabled No
Ethernet adapter Local Area Connection:
Connection-specific DNS Suffix . :
Description Broadcom 570x Gigabit Integrated Con
Physical Address
Dhcp Enabled Yes
Autoconfiguration Enabled : Yes
Subnet Mask
Default Gateway : 192.168.1.1
DHCP Server
Lease Expires 2009년 4월 11일 토요일 오전 1:49:06

3) Open IE (Internet	Explorer) browser and type "192.168.1.1" to access t	o the router.
If you don't know the u company to find out.	sername and password for the router, please contact to t	he router's
about:blank - Microso	oft Internet Explorer	_ 🗆 🗙
File Edit View Favorite	s Tool Connect to 192.168.1.1	2
🕝 Back 🝷 🕥 -		📃 🍇 🛧 "
Address 🙆 http://192.168.1		Go
		~
	WRI54G	
	User name:	
	Password:	
	Remember my password	
-		
Opening page bttp:///192.1	68.1.1/	nterpet
b) Enter the STATIC In case of Linksys-V If you don't know when company or check on r	<b>Information</b> that ISP gave you as shown below. <b>IRT54G</b> it's under <b>SETUP – BASIC SETUP</b> re you can set the STATIC IP in your router, please contact outer's manual to find out.	to the router's
LINKSYS <sup>®</sup> A Division of Cisco Systems, Inc.		Firmware Version: v2.02.2
	Wireless-G Broadband	Router WRT54G
Setup	Setup Wireless Security Access Applications Adm Restrictions & Gaming Adm	inistration Status
		rrouting
Internet Connection Type	Static IP	ore
	Internet IP Address 99 . 23 . 75 . 50	
	Subnet Mask: 255.255.255.248 Gateway: 99.23.75.1	
	Static DNS 1: 65.45.22.98	
	Static DNS 2: 65.45.23.98	
	Static DNS 2:     65.45.23.98       Static DNS 3:     0.0.0.0	

### **NETWORK SETTING ON DVR**

Now that we have linked from MODEM to ROUTER, we need to link **DVR to ROUTER**. In this example we use EYEMAX 9000 SERIES. From DVR do the following:

1) From WINDOWS desktop: START -> RUN -> type "cmd" -> OK
Run ? 🔀
Type the name of a program, folder, document, or Internet resource, and Windows will open it for you.
Open: cmd
OK Cancel Browse
2) On Command windows type "ipconfig /all" – ENTER. Write down the following information:
IP ADDRESS (ex. 192.168.1.100) SUBNET MASK (ex. 255.255.255.0) GATEWAY (ex. 192.168.1.1) DNS: (ex. 192.168.1.254)
C:\WINDOWS\system32\cmd.exe
C:₩>ipconfig /all Windows IP Configuration
Host Name kdr2 Primary Dns Suffix
Ethernet adapter Local Area Connection:
Connection-specific DNS Suffix . : Description Broadcom 570x Gigabit Integrated Con
Physical Address.       : 00-0F-1F-A6-1E-7E         Dhcp Enabled.       : Yes         Autoconfiguration Enabled       : Yes         IP Address.       : 192.168.1.100         Subnet Mask       : 255.255.255.0         Default Gateway       : 192.168.1.1         DHCP Server       : 192.168.1.1         DHS Servers       : 192.168.1.254         Lease Obtained.       : 2009년 4월 10일 금요일 오전 1:49:06         Lease Expires       : 2009년 4월 11일 토요일 오전 1:49:06



**7)** Now that DVR is connected to ROUTER using fixed IP, we need to open some ports linking to DVR IP which is 192.168.1.100

The EYEMAX 9000 Series use the following PORT number as default:

Client port = 9091~9112 Web port = 80

*Every DVR use different PORT numbers, usually it can be found in NETWORK MENU of DVR. If you can't find the PORT of your DVR, please read the DVR manual or call at UNIX CCTV(<u>www.unixcctv.com</u>)* 

8) Open IE browser and type the current GATEWAY, which in this case is "192.168.1.1" to access to the ROUTER.

*If you don't know the username and password for the router, please contact to the router's company to find out.* 

File Edit View Favorites Tool	Connect to 192.168.1.1
Back         •	
	WRT54G
	User name: 🖸 admin 💌
	Password:
	Remember my password

9) The Port Forwarding Menu for LINKSYS – WRT54G it's located in:

### Applications & Gaming -> Port Range Forward

The port-forwarding menu varies depending on router but the general rule are same, which is linking the Port number to specific IP address.

In this case we are linking the Ports 9091~9112 and 80 to IP address 192.168.1.100

LINKSYS Division of Cisco Systems, Inc.							Firmwa	re Version: v2.0
					Wirele	ss-G Broadl	and Router	WRT54G
& Gaming	Setup	Setup Wireless Security Access Appli & Ga				plications Saming	Administration	Status
	Port Range	e Forward	>	DMZ				
Port Range Forward							More	
		Port Range						
	Application	Start	End	Protocol	IP Address	Enable		
-	DVR	9091 to	9112	Both 💌	192.168.1.100			
$\sim$	DVR-WEB	80 to	80	Both 💌	192.168.1.100	<b>v</b>		
		0 to	0	Both 🛩	192.168.1.0			
		0 to	0	Both 🗸	192,168,1 0			

### **NETWORK SETTING ON PC1**

The steps are same as "**NETWORK SETTING ON DVR**" from **DIAGRAM 1, 3 and 4**. The only thing that will change is the IP address. Since ROUTER is using the IP 99.23.75.50, the IP address available for PC1 would be 99.23.75.51~55.

### **NETWORK SETTING ON PC2**

The steps are same as "**NETWORK SETTING ON DVR**" from **DIAGRAM 2 & 5.** But we **skip steps 7, 8 and 9**, since we don't' need to open any ports for PC2. The only thing that will change is the IP address. Since the DVR is using the IP 192.168.1.100, we will use 192.168.1.101 for PC2, or any other number close to it.

#### The Diagram below shows what you have done on Network Setting.



### WHAT IP DO I USE TO CONNECT TO DVR?

In this case we use the following IP to connect remotely.

If you are trying to connect from LAN (LOCAL AREA NETWORK) DVR IP = 192.168.1.100 from PC2 DVR IP = 99.23.75.50 from PC1

If you are trying to connect from OUTSIDE DVR IP = 99.23.75.50

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