

Because Dynamic IP changes every few hours, weeks, months, or sometimes year, we need to use a DDNS server to track the new IP when it changes. There are many DDNS servers that you can choose, but we recommend **DynDNS.com**

The first thing we need to know is 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 3

In this case you won't need to open any ports.

Since it's DYNAMIC IP you will need to register in DynDNS.com, if you don't know how to use it, **at the end you will find explanation about** <u>DynDNS.COM</u>

NETWORK SETTING ON DVR

1) On WINDOW de	sktop: Right click MY	2) In Network Connections: Right click Local
NETWORK PLACE	ES -> click PROPERTIES	Area Connection -> click PROPERTIES
My Network Places Open Explore Search fo Who Am Map Netw Disconne Create Si Delete Rename Propertie	or Computers I work Drive ct Network Drive hortcut	LAN or High-Speed Internet Image: Connected, Firewalled Broadcom 570x Gigabit Integr Disable Status Repair Bridge Connections Create Shortcut Delete Rename Properties

3) In Local Area Connection Properties (on General tab): Select Internet Protocol (TCP/IP) -> click PROPERTIES	4) In Internet Protocol (TCP/IP) Properties (on General tab): Select "Obtain an IP address automatically".
Local Area Connection Properties General Authentication Advanced Connect using: Broadcom 570x Gigabit Integrated Co Configure This connection uses the following items: This connection uses the following items: This connection uses the following items: This connection (IEEE 802 1x) v2.2.1.0 Install Uninstall Properties Description Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.	Internet Protocol (TCP/IP) Properties
Show icon in notification area when connected Notify me when this connection has limited or no connectivity OK Cancel	Alternate DNS server:

WHAT IP DO I USE TO CONNECT TO DVR?

We do the following steps to connect from OUTSIDE

Since we are using DYNAMIC IP we don't know the current IP address that ISP (Internet Service Provider) is giving us.

We will do the following steps to find out.

From DVR or PC Open IE (Internet Explorer) browser -> type: "<u>www.whatismyip.com</u>"

🗿 What Is My IP Address? - IP Address Lookup, Internet Speed Test, IP Info, plus more - Mi	crosoft Internet Ex 🔳 🗖 🔀
File Edit View Favorites Tools Help	A
🔇 Back 🔹 🕑 🔹 📓 🏠 🔎 Search 🤺 Favorites 🤣 🔗 + 🌺 🖬 🔹	J ॐ 套· X 鸪子·
Addre 🗧 🎒 http://www.whatismyip.com/	💌 🄁 Go
What Is My IP - The fastest, easiest determine your IP address. Tags: IP Address Lookup, Information, and Location, Test Your Internet Conn	ection Speed
Internet Speed TestYour IP Address Is:WIMI Forum75.25.3.180	E Coogle [™] Custom Search Search
Tools	<u>Recent Forum</u>
IP Address Lookup IP Scan	<u>Posts</u>
DVR IP = 75.25.3.180	

Another way to connect to DVR is by using DDNS server. Explanation is found below at the end, <u>DynDNS.COM</u>

DIAGRAM 1 & 2

Since we have DYNAMIC IP, the NETWORK settings for the diagram 1 & 2 will be pretty much similar. In this case we will need to open ports for the DVR.

Let's use Diagram 2 as example.

NETWORK SETTING ON DVR

We need to link a fixed IP Address from 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



3) On WINDOW desktop: Right click MY NETWORK PLACES -> click PROPERTIES	4) In Network Connections: Right click Local Area Connection -> click PROPERTIES
My Network	LAN or High-Speed Internet
Open Explore Search for Computers Who Am I Map Network Drive Disconnect Network Drive Create Shortcut Delete Rename Properties	Disable Status Repair Bridge Connections Create Shortcut Delete Rename Properties
5) In Local Area Connection Properties (on General tab): Select Internet Protocol (TCP/IP) -> click PROPERTIES	6) In Internet Protocol (TCP/IP) Properties (on General tab): Select "Use the following IP address", and enter the information from ipconfig /all.
General Authentication Advanced Connect using: Image: Broadcom 570x Gigabit Integrated Co Configure This connection uses the following items: Image: State of the sta	General You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings. Obtain an IP address automatically Outse the following IP address: IP addre
OK Cancel	Advanced OK Cancel

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 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 Too	Connect to 192.168.1.1	
Back •		• - ^ ≥ Go
	WRT54G	<
	User name:	
	Password:	
	Remember my password	
	OK Cancel	~

9) The Port Forwardi Applications & Gan	ng Menu ning -> Po	for LINKS	SYS – N e Forw	WRT540 ard	it's located	l in:		
The port-forwarding m Port number to a speci	enu varies ific IP addre	dependin ess.	g on roı	iter but t	he general ru	ıle is sarr	ne, which is lin	nking the
In this case we are li	nking the	Ports 90	91~911	1 2 and 8	0 to IP addr	ess 192	2.168.1.100	
LINKSYS® A Division of Cisco Systems, Inc.							Firmu	vare Version: v2.02.2
Applications					Wireles	ss-G Broad	Iband Router	WRT54G
& Gaming	Setup	Wireless	Securi	ty A Res	ccess App trictions & G	olications aming	Administration	Status
	Port Range	Forward	>	DMZ				
Port Range Forward							More	
			Port	Range				
	Application	Start	End	Protocol	IP Address	Enable		
	DVR	9091 to	9112	Both 💌	192.168.1.100		K	
	DVR-WEB	80 to	80	Both 💌	192.168.1. 100			
		0 to	0	Both 🌱	192.168.1.0			
		0 +=	0	Both 🗸	102.169.1			

NETWORK SETTING ON PC

The steps are same as "NETWORK SETTING ON DVR". But we skip steps 7, 8 and 9, since we don't' need to open any ports for PC.

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 PC, or any other number close to it.

WHAT IP DO I USE TO CONNECT TO DVR? 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

If you are trying to connect from OUTSIDE Since we are using DYNAMIC IP we don't know the current IP address that ISP (Internet Service Provider) is giving us.

We will do the following steps to find out.

From DVR or PC Open IE (Internet Explorer) browser -> type: " <u>www.whatismyip.com</u> "							
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Addres 🙆 http://www.whatismyip.com/							
What Is My IP - The fastest, easiest way to determine your IP address. Tags: IP Address Lookup, Information, and Location, Test Your Internet Connection Speed							
Internet Speed Test WIMI Forum IP Address Lookup Tools • IP Address Lookup IP Address Lookup							
DVR IP = 75.25.3.180							

DynDNS.COM

Since DYNAMIC IP changes every few hours, months or sometimes year, we need to use DDNS (Dynamic DNS) server to keep updated when the IP changes.

Here are the steps to use DynDNS.com service.

1) Open IE browser and type <u>www.dyndns.com</u> then click on "Create Account"								
🗿 DynDNS.com: DNS Hosting, E-mail Delivery, VPS Hosting and Other Services - Microsoft Internet Explorer								
File Edit View Favorites Tools Help 🥂								
🔇 Back 🔻 🚫 – 💌 🛃 🏠 🔎 Search 🤺 Favorites 🚱 🔗 - 😓 👿 - 🔜 🖄 🏝 - 💥 🟭 -								
Addr ss 🕘 http://www.dyndns.com/								
Enterprise > Registry > Home/SMB > Corporate								
User: Pass: Login								
About Services Account Support News								
2) Fill out account information, check "Privacy Policy", then "Create Account"								

🗿 DynDNS.com - Account -	Account Reg	istration - Micros	soft Internet Explor	er					
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	About	Services	Account	Support	News		=		
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I agree to t	he <u>Acceptal</u>	<u>ole Use Policy</u>	<u>(AUP)</u> , and my	mailing list s	subscriptions.	>			
						Create Account			
3) An email will be	sent to y	our email a	address.						
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DynDNS.com: DNS Host	ting, E-mail Del	livery, VPS Hos	sting and Other Ser	vices - Microsoft	Internet Explo	rer 📃			
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Address 🕘 http://www.dyndns.com/									
Enterprise > Registry > Home/SMB > Corporate									
User: UnixCCTV Pass: Login									
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6) Type a Hostname, and choose a DDNS server. We recommend you to use "dyndns.org"

Click on "Use auto detected IP address" or type manually on "IP Address" if you know the current IP address.

Add New Host	ina	ame
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Note: You currently don't have any active <u>Dynamic DNS Pro upgrades</u> in your account. You cannot use some of our Host Service features. Paying for an Dynamic DNS Pro upgrade will make this form fully functional and will add several other features.

1 Host Services

		_							
	Hostname:	Junixdvr	. (dyndns.)	org	~				
	Wildcard:	Create wildcard alias for "*.host.domain.tld"							
	Service Type:	 O Host v ○ WebH ○ Offline 	with IP address łop Redirect e Hostname		0				
	IP Address:	75.25.3.1 <u>Use auto r</u> TTL value	80 detected IP address 75 is 60 seconds. <u>Edit TT</u>	. <u>25.3,180.</u> <u>1</u> .	>				
	Mail Routing:	🗌 Yes, I	et me configure Email	routing.					
]					Create Host	>			
					📋 🥑 Inter	net			
7)	Click on "NEXT" – "ACTI\	/ATE SER	VICES"						
	Host Services			Add Ne	ew Hostname - <mark>Ho</mark> s	st Update Logs			
	<u>Hostname</u>	<u>Service</u>	<u>Details</u>		Last Opt	lated			
	unixdvr.dyndns.org	Host	75.25.3.180		Apr. 13, 2009 3:2	2 AM			

Now that we have created a hostname in DynDNS.com and linked to the current IP of DVR, every time when the IP changes they DynDNS.com will update the new IP address.

From our DVR-Client we type the hostname instead IP to connect to DVR as shown below.

Login Information		×
Server Server Name : Server Type : IP Address : Port No. : Bandwidth :	UnixDVR TCP/IP PSTN unixdvr.dyndns.org 9091 Default Auto Detection	OK Cancel
Timeout : User User Name :	180 admin ✓ Remember Password	

IMPORTANT ABOUT DynDNS.COM

For that DYNAMIC IP that changes very often we recommend you to download the Updater software that provides in DynDNS.com

