

# User Instructions

## Remote Connection and Viewing Using a Security DVR

Version 1.0

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## **Introduction**

Welcome to DVRMaster.com- The complete CCTV security solutions provider.

This document will cover the instructions for one of the most asked for tech support request: Connecting and remotely viewing a Security CCTV DVR over the network or Internet.

This guide covers the steps need to set up your system. Please refer to YOUR DVR user's manual for specific instructions on how to set up and change the network setting.

## Step 1

### Connecting the DVR to the network

Connect the DVR system (PC Base / Stand Alone) to a network that has an active internet connection (using a Cat-5 Cable AKA. Ethernet Cable). You can connect your DVR to a broadband modem, router, or local network.

## Step 2

### Stand Alone System Set-up

Turn on your DVR and log in or enter your system's setup menus, usually by pressing the MENU or Setup button. Locate your system's IP Address (in the form of xxx.xxx.xxx.xxx – most likely to start with 192.168.xxx.xx).

Note: Please refer to the DVR user's manual for specific instruction on how to navigate to the Network Settings).

Go to a Computer that is connected to the same network as the DVR, and run the PING command or program. On Windows, Click the **Start** Button, choose **Run...** > (type) **CMD** > and click the **Run** button (Figure 1.) In case your DVR Is PC Based you will do this on the same System.

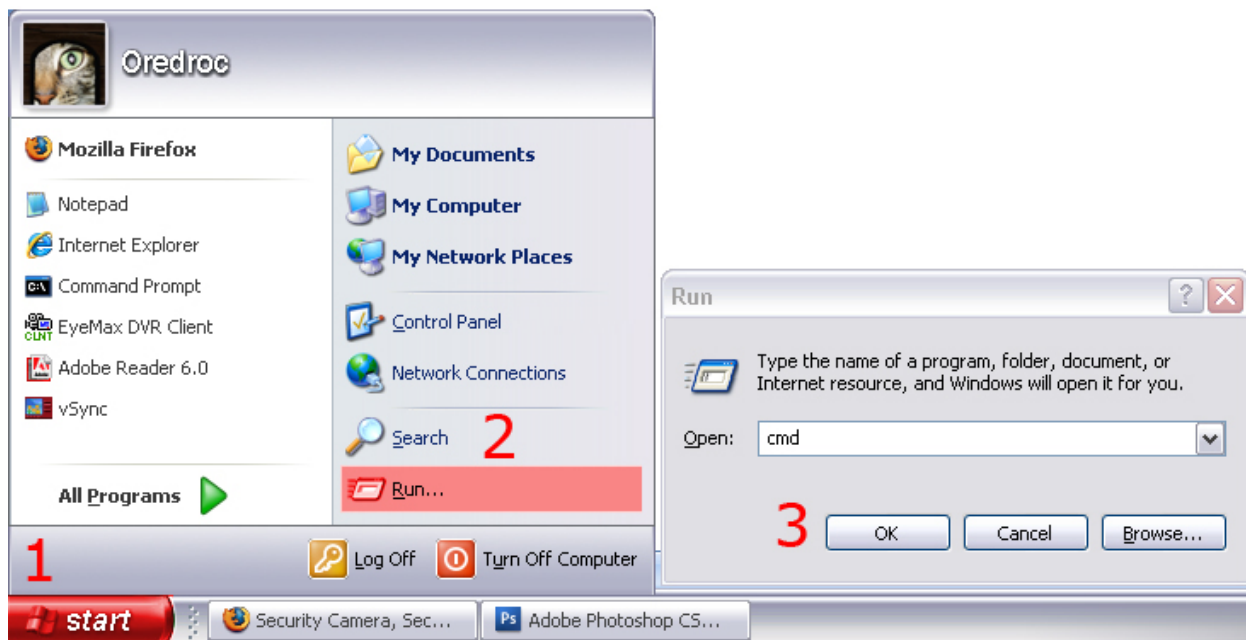


Figure 1.

In the Command prompt window that opened (Figure 2.), type "IPCONFIG". That way you can check what is the IP address of your Computer and the IP address of your Router or Modem Router. You will also see the Subnet Mask address. You will need all these settings in order to setup the DVR System, so we suggest writing them down. **(In case your DVR is PC based you only have to assign a STATIC LOCAL IP ADDRESS, refer to step 4 For More Information).**

```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings\Cordero>IPCONFIG

Windows IP Configuration

Ethernet adapter Local Area Connection:

    Connection-specific DNS Suffix  . :
    IP Address . . . . . : 192.168.1.116
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 192.168.1.1

C:\Documents and Settings\Cordero>_
```

Figure 2.

Now go back to the Network Settings on the DVR where you can see the IP address of the system. Make sure you have the **same** SUBNET MASK and the same **DEFAULT GATEWAY** (Figure 3.) settings that you copy from the Computer.

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Microsoft Windows XP [Version 5.1.2600]
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C:\Documents and Settings\Cordero>_
```

Figure 3.

Assign an IP Address (Example: 192.168.1.100) to the DVR, that is not already used on your Network. To check if the IP address you are going to assign to the DVR is not already used you can run the PING command again to try and ping that IP address. If you don't get any response, it is likely that the address is available). Go back to the Command window and type "PING [IP ADDRESS] (Example: ping 192.168.1.100) and press Enter (**In case your DVR ss PC Base You don't need to assign an IP Address because it already has one**).

**Example:** Ping 192.168.1.100 (enter)

**If the IP address is used you will get a reply:**

*Pinging 192.168.1.100 with 32 bytes of data:*

*Reply from 192.168.1.100: bytes=32 time<1ms TTL=64*

*Reply from 192.168.1.100: bytes=32 time<1ms TTL=64*

*Reply from 192.168.1.100: bytes=32 time<1ms TTL=64*

*Reply from 192.168.1.100: bytes=32 time<1ms TTL=64*

*Ping statistics for 192.168.1.111:*

*Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),*

*Approximate round trip times in milli-seconds:*

*Minimum = 0ms, Maximum = 0ms, Average = 0ms*

**If the Ip address is not used you will get a Request Time Out.**

*Pinging 192.168.1.145 with 32 bytes of data:*

*Request timed out.*

*Request timed out.*

*Request timed out.*

*Request timed out.*

*Ping statistics for 192.168.1.145:*

*Packets: Sent = 4, Received = 0, Lost = 4 (100% loss)*

Make Sure you don't use any of these IP addresses:

Subnet Mask . . . . . : 255.255.255.0

Default Gateway . . . . . : 192.168.1.1

Now that you had Assigned an IP Address to the DVR now you can use the "PING" Command to see if you get a Reply from the DVR. If you Do get a reply you had Successfully Assigned an IP to the DVR.

### Step 3

## Opening Ports in your Router

Log into the Router by typing the IP address in the Address Bar on your Internet browser (Figure 4. please refer to your router's manual for IP address and login info). You can use the "DEFAULT GATEWAY" IP address from the "IPCONFIG" Command as the router's address.

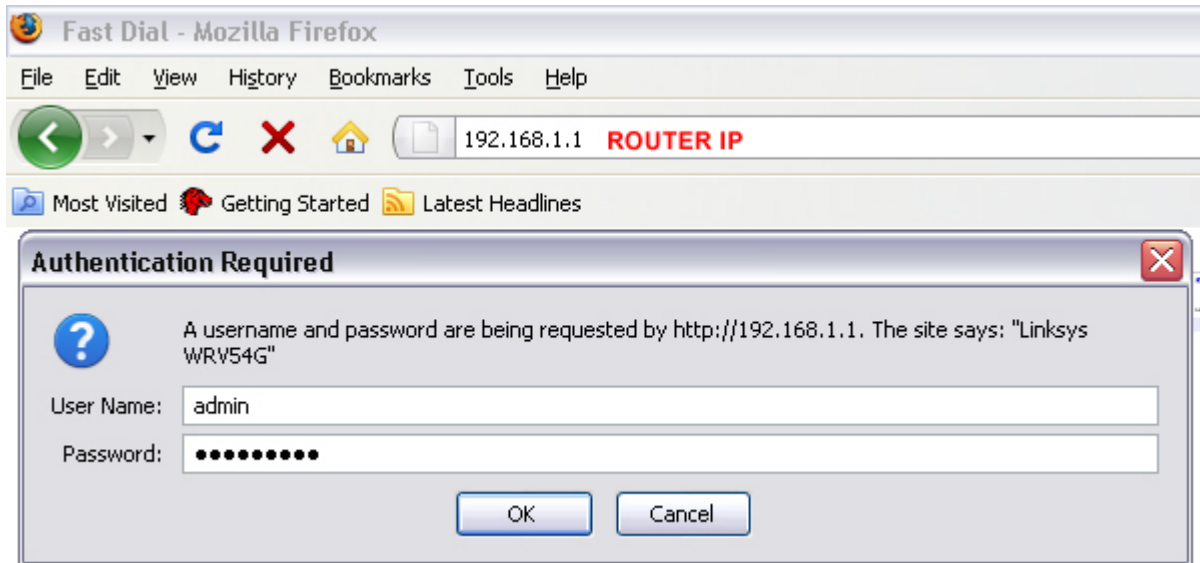
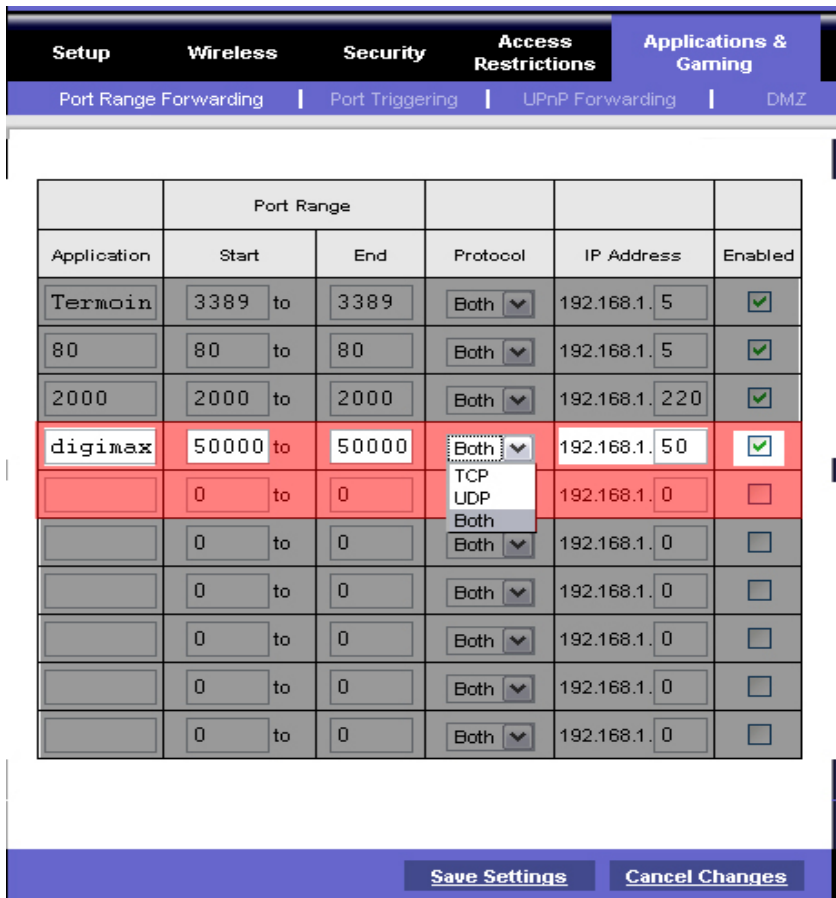


Figure 4.

### PC BASE DVR & STAND ALONE SYSTEMS:

Refer to your Router's manual to find how to create **PORT FORWARDING**. You will need to forward the ports that the DVR use in order to remotely connect to it. You will know what ports are needed to be forwarded by referring to the DVR manual. Once you had found the Port Forwarding settings on the router, forward the correct ports to the IP Address of the DVR. Please **Make sure you Forward the Ports on "TCP & UDP" Protocols**. In Figure 5 you can see an Example of how it's done.



**Figure 5.**

In case you find it hard to change the port forwarding on your router or firewall, you can contact the tech support of the unit or your Internet service provider (ISP). You can also refer to the web site below for help.

**PortForward.com** – Free help setting up your Router or Firewall :

<http://portforward.com/routers.htm>

Once Ports are forwarded you will need a Computer that is connected to the internet on the same network and go to CanYouSeeMe.org - Open Port Check Tool at <http://canyouseeme.org> (See figure 6 below).

Type the PORT number that you forwarded in the “What Port” box and click “Check”. If a Success message appears at the bottom your ports are open. If not, go back to your router or firewall and re-try the port forward process. **In case your DVR is PC Based, you need to have the DVR SOFTWARE OPEN in order to test if the ports are correctly Forwarded.**

# CanYouSeeMe.org - Open Port Check Tool

This page will serve as a free utility for remotely verifying a port is open or closed. It will be useful for users who wish to check to see if a server is running or a firewall or ISP is blocking certain ports.

Your IP: **74.62.34.58**

What Port?

**T1 Internet Access**  
Full T1 w/ Free Hardware & Install. 99.99% Uptime & 100% Port Speed!  
[Speakeasy.net/T1-Internet-Access](#)

**Protect Your Mail Server**  
Antispam Solution for your Business Block 98.5% of Spam! 30-day trial  
[www.spamtitan.com/antispam\\_software](#)

**Port Forwarding**  
Update & Fix All Drivers Instantly. Free Download. 100% Guaranteed.  
[DriversDoctor.com](#)

**10 Gig Ethernet Provider**  
Scalable Ethernet Solutions for Business Bandwidth Needs. Call Now!  
[us.ntt.net/10GigE](#)

 Ads by Google

Common Ports	
FTP	21
SSH	22
Telnet	23
SMTP	25
Web	80
Pop 3	110
IMAP	143
Other Applications	
Remote Desktop	3389
PC Anywhere	5631

Success: I can see your service on **74.62.34.58** on port **(50000)**  
Your ISP is not blocking port 50000

Figure 6.

**You Need to see “SUCCESS” in order for you to go to the Next step.**

If you get an “**Error: I could not see your service.....**” you need to contact your Router or Modem Manufacture so they can help you do the Port Forwarding correctly, or just double check if you did something wrong when forwarding the port(s).

If the test result was a “SUCCESS”, you should now see your DVR locally and From a Different PC on the same network.

## PC BASE DVR & STAND ALONE SYSTEMS:

To connect to your DVR locally you can now type the IP Address of the DVR in your Internet Browser (Only if the DVR has the WEB SERVER SUPPORT). If the DVR Does not support Web Server then you can use the SOFTWARE that came in a CD with the DVR you purchased.)

Please refer to the DVR manual on how use the DVR REMOTE SOFTWARE.

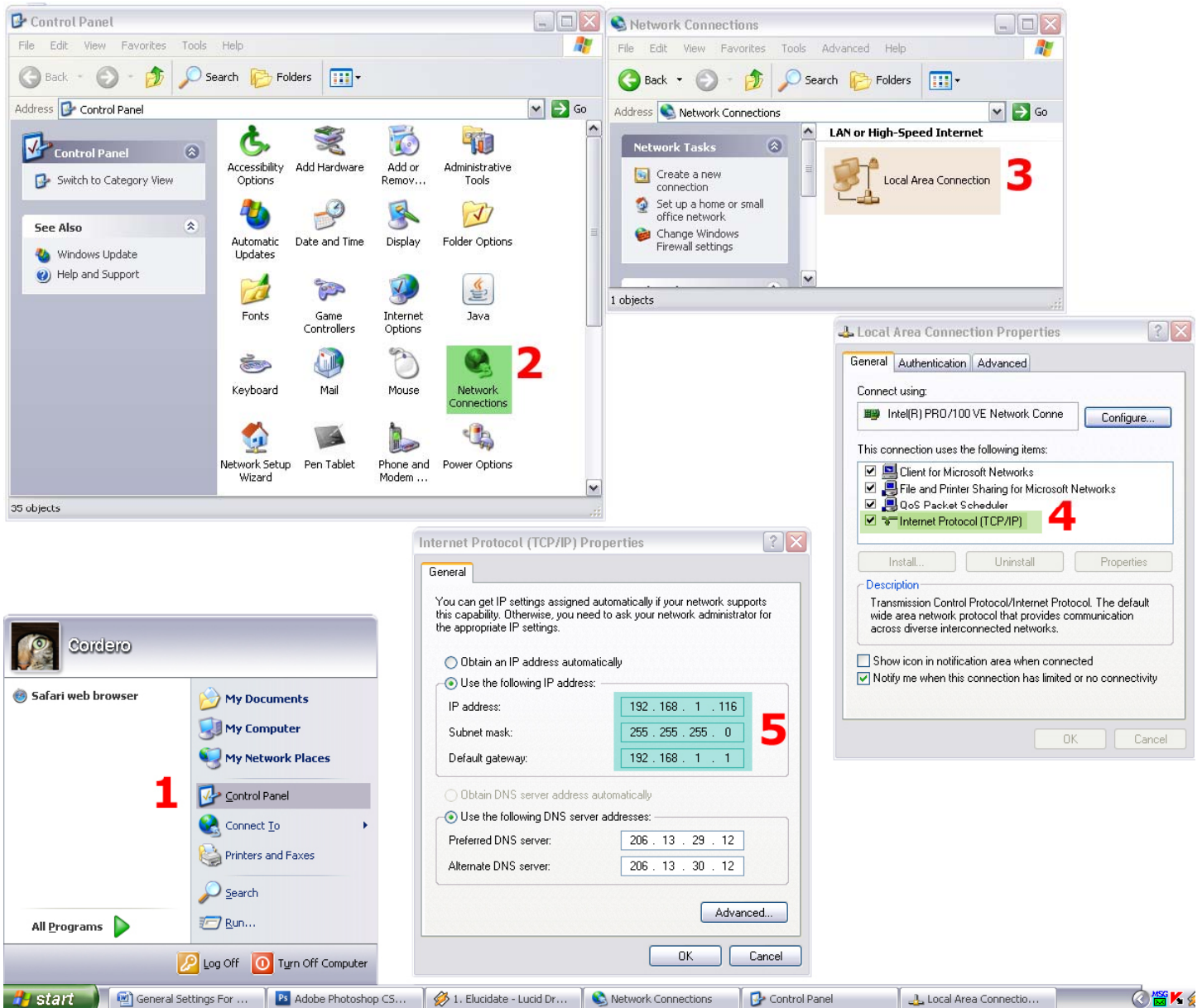
**You have successfully set-up your DVR for Remote Viewing Locally and From a Different Location over the Internet.**

## Step 4

### PC based DVR Specific Steps – Static IP Address

To set up a Static IP Address on a PC based DVR system follow these steps:

(On Windows) Got to START > Control Panel > Network Connections > Local Area Connection, Right Click and choose Properties> Internet Protocol (TCP/IP). Select and click Properties > Then type the Static IP address you would like to assign. See figure 7 for more information.



**Figure 7.**

Once you have assigned a Static IP Address to the PC Based DVR system follow the steps for forwarding the PORTS mentioned previously. Once it is done you should connect to the DVR from outside the network.

**Finish!**