Networking your DVR Made Easy
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DVR NETWORKING

1. SETTING UP YOUR PC AND ROUTER

1. When setting up your DVR for networking, you will have one of two scenarios to choose from:

   A. You already have a PC inhouse or you don’t.

      1. If you don’t you will have to get a ISP provider to come to your location to setup a Static IP broadband connection for your new DVR. We recommend a static because of the reliability and performance.

         Try to get a separate modem and router option. Try not to go with the modem/router combo. You do not need a permanent PC at the location but, you will need one for the network configuration. Make sure the PC and the DVR are using the same router.

   2. If you do have a PC inhouse, you will have two scenarios. One your running a modem/router combo or two you have a separate modem and router.

      A. If you have a modem/router combo (One box), you will have to purchase another router, so you can setup the router to do port forwarding. See your router manufacturer on how to setup your router to do port forwarding. The port you will want to forward to is port 8000.

      B. If you have the separate modem/router setup already, set the router to do port forwarding. See your router manufacturer on how to setup your router to do port forwarding. The port you will want to forward to is port 8000.

NOTE: SuperCircuits does not support or do port forwarding support. You can get router port forwarding support at http://portforward.com/default.htm.
2. SETTING UP YOUR DVR WITH A STATIC IP ADDRESS.

1. Start by connecting the DVR to the router for the final installation, using ethernet straight cables.

2. At this point you should have internet access. The router is set to do port forwarding at port 8000. Make sure you have DirectX version 9.0c or later on your computer. If not go to www.microsoft.com/directx. and download. Most PC’s today will have DirectX 9c or better. How do you make sure you have DX9c or better, Go to the PC and click on the “Start” button and select the “Run” option, like below. Type “cmd” in the Open window and select OK.

3. A black box will pop up with a “C” prompt. After the “C” prompt type “dxdiag” at the dos prompt and click on the “ENTER” button. If you get a another window asking you to update or test your lastest DirectX, select NO at this time.
4. Get back into the dos window again by pressing on the “start” button and selecting the “Run” option. Type “cmd” in the Open window option and you should see your black box with the “C: \>” again. This time let’s type in “ipconfig” and press the Enter button.

5. You will see your IP (internet protocol) settings, get a piece of paper and make note of YOUR IP Address, Subnet Mask and Default Gateway address numbers.
6. Go back to your DVR, find your DVR user manual and follow instructions on how to setup your DVR for networking with the static IP address option. Enter YOUR IP, Subnet Mask, and Default Gateway numbers that you wrote down when you did your ipconfig into the DVR TCP IP settings. Do not use my numbers, this is for demonstration only. For this example only, my IP address is 192.168.5.262, Subnet Mask is 256.256.255.0, and Default Gateway 199.168.9.1. Most DVR networking settings menus will look like below.

![DVR TCP/IP Settings Menu](image)

7. Go back to the DVR IP address settings and change the last 3 numbers to something other than 262, use 30 or use any number between 001 to 245. For example, in my example the DVR IP address will be 192.168.5.30. Your DVR settings should look exactly like your IPCONFIG numbers you wrote down earlier, except for the last three numbers of your IP address, that we will change. So my DVR network settings should look like the example below. Your numbers will be different. Use the number 30 to replace your last 3 digits of your IP address. Your IP address number should look like xxx.xxx.xxx.30, every thing else should be identical to your ipconfig settings.

![PC IP settings](image)

8. Back out of the DVR menu settings and we are ready to start our testing. Go back to your PC and click on the START button. Click on the Run option.

![DVR Menu Window](image)
9. Type “`cmd`” and click “OK”.

10. A black box will pop up with a “`C`” prompt. After the “`C`” prompt type “`ping`” at the dos prompt, press the space bar and enter the **IP address of the DVR** and then click “>`ENTER`. For my example, I will enter 192.168.5.**30**. You will enter a different number because your on a different network. Type ping, hit the space bar and enter your IP address xxx.xxx.xxx.**30** and press the the Enter button.

10. A box will pop up and display “reply from” the IP address 3 to 4 times. You will also see “Packets sent = X, Received = X and Lost = X. This will tell you that, you’ve successfully connected to your DVR and we can proceed to step 23 on page 12.
If however you’re seeing “**Request timed out**” and “Packets: Sent X, Received = X, Lost = X” like below, then you have not established a LAN connection between the DVR and the computer. You will need to go back and recheck all DVR network settings.

```plaintext
C:\Documents and Settings\upintor>ping 192.168.5.30
Pinging 192.168.5.30 with 32 bytes of data:
Request timed out.
Request timed out.
Request timed out.
Request timed out.
```

This could also be due to bad ethernet cables or bad DVR Network Interface Controller (NIC). Check the Ethernet cable connection on the back of the DVR and check for the green lights and that they blink when you “ping” the DVR. If it is not blinking, this could indicate that the DVR’s network interface card is bad. If the green light is blinking, as a final check, check your network IP, Gateway, port, and Net Mask numbers on the DVR.

11. If after checking everything and we are still not connecting or pinging proceed to step 12 on this page. If all is fine and your connecting or pinging the DVR, proceed to step 23 on page 12.

12. Connect your PC straight to the DVR using a **ethernet crossover cable**. A ethernet crossover cable is different from your regular ethernet cables and should never be used for final installation. Use ethernet crossover cables for testing only. You can purchase ethernet crossover cables from Radio Shack or other electronic stores and are very common. This will help isolate the DVR from the router and the WAN (World Wide Network) and help troubleshoot what is actually causing the problem.

**NOTE:** The difference between a Ethernet Crossover and Straight Through cable. Never use a Ethernet Crossover cables for final installation or connecting a router to your modem. Use Ethernet straight cables for final installations from your DVR to the router and from the router to the modem.
13. Connect your PC straight to your DVR using an Ethernet crossover cable.

14. Go to your PC and press the “Start” button and select “Control Panel”.

15. In the “Control Panel” select “Network Connections”.
16. Right click on the “Local Area Connection” and select properties.


18. Select “Use the following IP address” and enter “192.168.1.100” for the IP address. Enter “255.255.255.0” for the Subnet mask. Press the “OK” button and exit.

19. Go to the DVR TCP/IP settings and enter the following IP address 192.168.1.30. Enter a Subnet mask of 255.255.255.0 and a port number of 8000. This time you will use the numbers above, unlike our previous steps. This is for test purposes only and will help troubleshoot.
20. Try pinging the DVR, by going to the PC DOS window

21. If your getting a “Reply” at this time, this means our equipment is working fine and you have to look at the router or your original IP settings at the beginning of our IP configuration to fix the problem. Talk with your IP provider and make sure the IP address, Subnet, and Gateway numbers are correct. Check your cables and make sure they are good. Disconnect the crossover cable and put it away for future troubleshooting. Reconnect your computer and DVR to the router and modem and successfully ping the DVR from your PC.

22. If your getting “Request timed out”, recheck your steps 13 to 21. Check your crossover cable, making sure it is good. If your still having problems call our Technical Support at 800-335-9777 and ask for Support.

23. At this point we are successfully pinging the DVR from the computer. Go to your DVR users manual and install your DVR Remote software and move on to viewing your DVR video using your PC.
4. REMOTE DVR SOFTWARE.

24. Install the remote DVR software CD that comes with your DVR. Remember to use the IP address of your modem to view your DVR remotely. The DVR remote software requires you to enter the modem IP address when trying to access the DVR. Do not use the DVR IP address to connect to your DVR remotely. To find out what your modem IP address is, go to “http://www.whatismyip.com/”.

Note: Don’t use my modem IP numbers to connect to your DVR, go to “whatismyip.com” and get your modem IP address.

Note: Your DVR remote login software might look like the example below, and you should start seeing video from your DVR.
5. Final installation.

1. Your final installation should look like below:

PC IP Address settings

(DVR TCP/IP Settings Menu)
SERVER IP 192.168.5.30
GATEWAY 199.168.9.1
NET MASK 256.256.255.000
DNS 168.095.001.001
WEB PORT 08000
RESET DEFAULT NO

NOTE: Your IP numbers will be different from the numbers on this page. Do not use my numbers. Use your IP config, and modem IP numbers to connect successfully.
I hope this user guide has made your DVR experience a great one and that your viewing your DVR from a remote site. If not, please feel free to give us feedback on how we can make this document better for future customers or how great this user guide was. Call us at 800-335-9777 or send email to our Tech Support at http://www.supercircuits.com/index.asp?PageAction=CONTACTUS