



# DDNS Setup Instructions

Applies to Paragon, ECOR, and EDR/EDVR

**NOTE: On EDR/EDVR you MUST have firmware version 1.6.2 or higher installed in order to use the EverFocus DDNS service.**

1. Set up the DVR Network Menu according to the instructions detailed in the Networking chapter of the DVR's manual.
  - a. If using DHCP, all settings will be detected automatically. While DHCP is a useful tool for determining the network settings, if you set up your DVR in this manner *its IP address may change at different times for different reasons*, particularly after a power failure. *If the IP address of the DVR changes, you may have difficulties accessing your DVR* locally and/or remotely. **It is strongly recommended that you assign a fixed (static) IP address to your DVR**, and that in order to avoid address conflicts the IP address assigned be outside of the DHCP range of addresses your router issues to DHCP clients. Please do not set the DHCP address issued to the DVR by the router as its static IP address unless you take specific steps that program your router to prevent such address conflicts.
  - b. If using a Fixed IP (**recommended**), you will need to input the information manually. In order for DDNS to work, you must enter valid data, compatible with your network, for all four of the network setting fields: IP address, subnet mask, default gateway and the DNS Address (depending on your network hardware and configuration this may be the IP address of your router/gateway, or it may be the actual IP address of the local DNS server).

The DNS server IP is required because your DNS server provides critical information necessary for the DVR to communicate with the DDNS server.

You can obtain the actual DNS IP from your Internet Service Provider (ISP); or, from a PC located on the same LAN as the DVR, go to <http://www.dnsserverlist.org/> to obtain a list of the IP addresses of their recommendation of the best servers to use for your location.

2. If you are connecting through a router, make sure that you have 'opened up' all the required network ports in the *port forwarding* section of your router's setup options. That is, you have directed the router to send any incoming traffic using those IP ports to the LAN IP address of the DVR. Useful information about router port forwarding can be found at [www.portforward.com](http://www.portforward.com)

The default ports are      Paragon: 80  
   ECOR: 80, 1600  
   EDR/EDVR: 80, 1600, and 37260 - 37263

**NOTE:** Different routers may use different terms for port forwarding function. For instance, D-Link calls it *virtual server*, Netopia calls it *pinholes*.



**NOTE:** Port 80 is the default port used for web browsing. Because of this, in order to prevent the average user from hosting a web server, *most ISPs BLOCK traffic using port 80* from reaching the average site. If you only plan to view your DVR on a LAN, you can use port 80, and don't have to concern yourself with DDNS or routers. However, if you desire remote access to your DVR, perhaps using DDNS (optional), you **MUST** select functional ports and set up the port forwarding in your router. Other ports, such as 8080 and 8000 are sometimes blocked by ISPs as well.

What port(s) should you use? There are 65,535 valid IP ports to choose from. These are broken down into three groups:

- Well Known Ports 0 thru 1023
- Registered Ports 1024 thru 49151
- Dynamic and/or Private Ports 49152 thru 65535

So, rather than encounter a port conflict by choosing a port commonly used for another purpose (like port 25 for SMTP mail or port 443 for secure sockets), choose an 'unusual' port number. For example, add 50,000 to your house number: 50,123 is unlikely to lead to a port conflict. For a list of the known and registered ports, see <http://www.iana.org/assignments/port-numbers>

3. The DDNS name you choose must be unique; that is, it must not already be in use. Please go to the website <http://everfocusddns.com> and check that the name you wish to use is available.

**PLEASE NOTE:** The name of the DVR **cannot include a space, or a dot (period) or any special characters** particularly ~ ! @ # \$ % ^ & \* ( ) + < > " ; : ,

4. In the DVR's Network Menu, go to DDNS. Choose "everfocusddns.com" for the Server and put in your chosen name (verified available and without special characters) for DVR Name/hostname.
5. Press the Select or Submit/Update button to synchronize the DVR with the DDNS server. You should see an indication of "Success" on the screen. If you see "Could Not Find Server" or any other error message instead, double-check your network settings and DDNS name and resubmit the DDNS name until you get "Success".
6. You should now be able to connect by typing in the host name you created.

Example: <http://hostname.everfocusddns.com>

It is not necessary to append the HTTP port number to the DDNS name. The EverFocus DDNS server not only keeps track of your DVR's IP address, it keeps track of the ports too!