Networking the D1 Hardware Compressed DVR

Preface:

This is a manual to configure your network to remotely view your D1 Hardware Compressed DVR in a Windows 7 Environment with a Linksys WRT54GL Router; to learn how to navigate other routers menus in order to accomplish the same task in this guide please visit <u>http://www.portforward.com/</u>. This guide is to help you understand what steps you would need to take to get your eDigitalDeals D1 Hardware Compressed DVR setup for remote viewing. We highly recommend having the help of an IT or Networking professional when performing these steps. We do not offer technical support for Networking; if you have any problems you should call your IT Dept, Internet Service Provider, and/or your router manufacturer. We hope you find these instructions educational and helpful for your networking purposes. You can also refer to <u>http://www.yougetsignal.com/</u> for an online port forwarding tester.

Step 1: Find out what ports need to be forwarded.

In the D1 DVR software there are three ports that need to be forwarded for remote viewing outside the network on Internet Explorer, CMS (NVR) Client, or Smart Phones. The defaults are *Remote Port: 5100, PDA Connect Port: 5101,* and *Web Server Port: 80*. All of these can be changed to other numbers (ports) to accommodate any and all routers and firewalls. You can find your *Network Setup* under the *System* page in your *Settings*.

NETWORK SETUP								
Remote Connection Enable	Remote Port 5100	Remote Buffer Priority smooth						
PDA Connection Enable	PDA Connect Port 5101	Web Server Port 80						
Use DNS Disable 💌 🛄	1	Permit Max Connect Video Num 128						

Step 2: Find out what Internal IP Address you need to forward the ports to. Minimize your Hybrid nDVR Server Software and go to your Start Bar. In the search box and type *cmd*, you will need to right click *cmd* and click *Run as administrator*

🔤 cmd	Open
Documents (224)	Run as administrator
CMD.EX_	MediaInfo
🚳 iviicons	7-Zip
🚳 delmmc 📲	Scan with AVG
Pictures (1)	Pin to Taskbar
🖶 cmdrun	Pin to Start Menu
Microsoft Office Outlo	Restore previous versions
	PowerISO
FW: Item # 350527705	Send to 🕨
FW: Open Quote #211	C.4
Fw: open quote 2010.	Conv
Files (9)	сору
IMT4E	Delete
Search Everywhere	Open file location
	Properties
cmd 🐂	× Snut down P

This should bring up a command prompt, in the command line type ipconfig and press Enter. You need to find out what your IPv4 Address and Default Gateway are and make note of these numbers. They should start with 192.168. or 10.1. This is the current Internal IP address of the Hybrid nDVR Server. Type exit in the command line to close the command

I	Ethernet adapter Local Area Connection:
prompt.	Connection-specific DNS Suffix .: Link-local IPv6 Address : fe80::935:2d70:3f33:29d4×11 IPv4 Address : 192.168.1.106 Subnet Mask : 255.255.255.0 Default Gateway : 192.168.1.1

Step 3: Log into your router and forward the ports.

Open up your internet browser. In the address bar type in your *Default Gateway* (ex. 192.168.1.1) and press Enter. You should be prompted with your routers log on information. The default information is listed in your routers user manual. If you do not have the user manual you will have to go to your router manufacturer's website to download it or call them for the information. Once you are in your router's main menu should look sort of like this:

LINKSYS [®] A Division of Cisco Systems, Inc.				Firmware Version: v4.30.11				
	Wireless-G Broadband Router WRT54GL							
Setup	Setup Wireless	s Security Access Restrictions	Applications & Gaming	Administration Status				
	Basic Setup	DDNS I	MAC Address Clone	Advanced Routing				
Internet Setup								
Internet Connection Type	Automatic Conf	Automatic Configuration - DHCP : This setting is most						
Optional Settings (required by some ISPs)	Router Name:		commonly used by Cable operators.					
	Host Name: Domain Name:			Host Name : Enter the host name provided by your ISP.				
	MTU:	Auto 💌		Domain Name : Enter the domain name provided by your				
	Size:	1500		More				
Network Setup Router IP	Local IP Address:	192 . 168 . 1 . 1		Local IP Address : This is the address of the router.				
	Subnet Mask:	255.255.255.0 💌	Subnet Mask : This is the					
Network Address Server Settings (DHCP)	DHCP Server:	Enable Disable		sublict mask of the router.				
	Address: Maximum Number of DHCP Users:	192.168.1. 100		DHCP Server : Allows the router to manage your IP addresses.				
	Client Lease Time:	0 minutes (0 means one day)		Starting ID Address - The				
	Static DNS 1:	0.0.0.0		address you would like to start				
	Static DNS 2:	0.0.0.0		wiin.				
	Static DNS 3:	0.0.0.0		Maximum number of DHCP Users : You may limit the				
	WINS:	0.0.0.0		number of addresses your router hands out.				
Time Setting	Time Zone:			More				
	(GMT-08:00) Pa							
	Automatically adj	Time Setting : Choose the time zone you are in. The router can also adjust automatically for daylight savings time.						
				սիսիս				
		Save Settings	Cancel Changes	cisco				

There should be a tab at the top where it would say Gaming, Applications and Gaming, or Port Forwarding (Your Port Forwarding could also be under Firewall Settings or Advanced, for an exact location please visit http://www.portforward.com). Once you have found the Port Forwarding section it should look something like this:

LINKSYS® A Division of Cisco Systems, Inc.								Fim	nware Version: v4.30.11	
Applications	Wireless-G Broadband Router WRT54GL									
& Gaming	Setup	Wire	less	Secur	ity A Res	ccess trictions	Applications & Gaming	Administratio	n Status	
	Port Range Fo	orward	1	Port Trig	gering [DMZ	QoS	2		
Port Range Forward									2 72	
				Por	t Range			Certain app	e Forwarding : plications may require	
	Application	Sta	irt	End	Protocol	IP Addres	ss Enable	for it to fund Examples o	cific ports in order tion correctly. f these applications	
		0	to	0	Both -	192.168.1.)	include service online game	vers and certain s. When a request	
		0	to	0	Both 💌	192.168.1.)	for a certain the Internet,	port comes in from the router will route	
		0	to	0	Both 💌	192.168.1.		the data to t specify. Du	he computer you e to security	
		0	to	0	Both 💌	192.168.1.		port forwar	ou may want to limit ding to only those	
		0	to	0	Both 💌	192.168.1.		uncheck the	e Enable checkbox	
		0	to	0	Both 💌	192.168.1.	0	More	e mnoneu.	
		0	to	0	Both 💌	192.168.1.				
		0	to	0	Both 💌	192.168.1.				
		0	to	0	Both 💌	192.168.1.				
		0	to	0	Both 💌	192.168.1.)		34	
									ahaha	
					Save Se	ttings Ca	incel Changes		CISCO	

In the screenshot above it shows Port Range Forwarding. It is the same thing as Port Forwarding but you can do ranges of ports (ex. 100-144) instead of one port per line. You need to fill the form with the information you have gathered:

Application–A description of what your port forwarding, on other routers it might be a drop down box (you would then want to select other or custom), ours is a blank text field so I typed DVR for all three of the ports that we need forwarded.

Start –The first port 5100.
End–The first port 5100(again).
Protocol–TCP.
IP Address–the DVR's Internal IP Address. (ex. 192.168.1.106)
Enable–To enable your port forwarding. You need this checked for the port to actually be forwarded.
Click Save Settings to save your changes. Your ports should now be forwarded and you should be able to view your cameras outside the network.

If your Router is reset due to a power outage, or for any other reason, the DVR's Internal IP Address might change. This will nullify any port forwarding. You will need to repeat step 2 to find out the correct Internal IP Address and then repeat step 3 to change the forwarding IP Address. If you would like to setup the DVR for a static Internal IP Address (that will not change) we HIGHLY Recommend having an IT or Networking Professional do it for you. You can also find instructions here: http://portforward.com/networking/static-win7.htm. If the ports are properly forwarded in the router, if you have no other firewalls installed on their network, or no anti-virus software on their PC-based DVR, and if still do not have network access to their DVR, call your Internet Service Provider to see if traffic is being blocked on the selected port(s), or change the port number assigned to their DVR to one that is not being blocked. Again we recommend you have a Professional available when you follow these instructions in case your network access fails.