Remote Network Setup

Once you have completed the <u>Local Network Setup</u>, you should have an internal IP address for your DVR.

The next step in the process is to forward ports pertaining to the DVR, so that you can see your cameras remotely.

We recommend that you follow the steps in our network tutorial located at <u>www.zmodo.com/network</u>. This video walks through using our network tutorial:

Forward DVR's Ports

1) Log in to your router by entering the gateway IP, such as 192.168.1.1, in to your browser window. Enter the login information for your router. If you cannot remember this, you can check the default username/password combinations for most routers at http://www.pcwintech.com/default-router-modem-passwords. If you are unable to locate this information, please contact your router manufacturer or Internet Service Provider.

2) Once you've logged in to your router, you will need to enter the Port Forwarding section of your router. There, you'll enter the IP address, protocols, and port numbers for your DVR.

IP Address = IP address in your DVR's Network Settings

Protocol = BOTH (TCP/UDP) OR TCP

Service or Application Name can be anything you wish, like DVR1 or DVR2

Page 1 / 12

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Create 1 rule per port number; Start and End Ports will be the same number

Here are the default ports for Zmodo units (last port # is the mobile port):

H9104, H9108, H9106, H9116: 80, 9000, 18004

H9114, H9118: 80, 5050, 6050, 7050

H9124, H9128, DR-SFN6: 80, 9000, 15961

H8000/H8100 series: 80, 7777, 8888

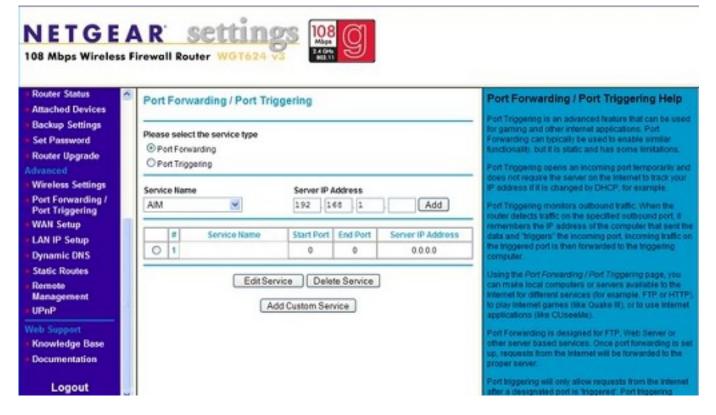
Note: If you are using a DSL internet service, you may need to use port 81 (instead of 80) as your web port. If so, be sure to change this in your DVR's network settings, and restart the unit. Once the port number is changed, you will need to use it when connecting to the unit (ie. <u>http://192.168.1.1</u> becomes <u>http://192.168.1.140:81</u>)

3)Below are screenshot samples of common router's Port Forwarding sections. Please note that exact locations may differ depending on your router's model. If your model is not listed, try looking through Advanced, Firewall, or Forwarding sections in your router to find the exact location.

Applications & Gaming		Wireless-G Broadband Router wats+a										
	Setup Wireless				Access	Applications & Garning	Administration	Status				
	Port Range F	Forward		Fort Trig	izaring I	0HZ	6v5					
Port Range Forward								Port Range Fee	rwarding:			
				Per	i Range			Certain application to open specific				
	Application	lication Start		End	Professel	IP Address	Enable	for 8 to Function Examples of the				
		0	10	Ú.	Both 💌	152.168.10.0		include servers online games .Vi	dien is request			
		0	10	0	Both 🖌	132.168.10.0		for a certain por the internet, the	router will rout			
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		Û.	10	Û	Both 🛩	152.168.10		port for working	to only those			
		0	10	0	Both M	192.168.10 0		ports you are us uncheck the Ena after you are fin	vole checkbox			
		0	10	0	Both M	182 160 10 0		More				
		0	to	0	Both 💌	192.168.10						
		0	10	0	Both M	192.168.10.0						
		Û.	10	0	Both 🛩	192.168.10.0						
		A	-	A		1						

In Linksys routers, you will typically enter Applications & Gaming, then Port Range Forward. Exact names/places will differ depending on model. Be sure to create forward 1 port range per line, and check the 'Enable' box at the end of the line, then save changes.

Netgear



In Netgear routers, you will typically look under Advanced for Port Forwarding/Triggering. Select Port Forwarding as your service type. Then, select 'Add Custom Service' for each port you forward.

D-Link

Product: DSL-27408					Firmware Version: EU_5.17
D-Lin	ĸ				
DSL-27408	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
Port Forwarding	PORT FORWARDI	ING			Helpful Hints
Application Rules	This is the ability to open	ports in your router and re-direc	t data through those ports	to a single PC on your	Check the Application Name drop down menu for
QoS Setup	network.				a list of predefined applications. If not you
Outbound Pilter	PORT FORWARDI	can still easily define a new rule.			
Inbound Filter	Remaining number o	Hore			
Wireless Filter					
DNS Setup	Name	-	External Port TCP	Internal Port TCP	
Firewall & DMZ				<u> </u>	
Advanced Internet	IP Address	<< Computer Name	UDP	UCP	
Advanced Wireless	Use Interface:	pppos_0/pppos0 *	(J	3. 19	
Advanced LAN	Use Interface:	[pppoa_0/pppoau _+]			
SYMP Setup		Add/App	ky		
Remote Management					
Routing Setup	ACTIVE PORT FO	RWARDING RULES			
Wi-Fi Protected Setup	Name Address F	xternal Port Internal Port	Protocol WAN Inter	face Edit Remove	
Logout		and the second part	Transia med inter	THE REPOVE	
20.000					

For D-Link Routers, you will enter Advanced, then Port Forwarding. Click 'Add/Apply' when you have finished each rule.

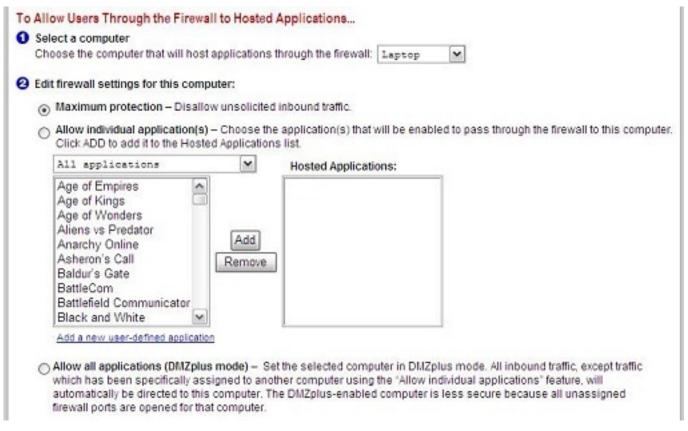
Belkin

BELKIN		Route	er Setup Utility	r Hon	ne Help Log	out Internet Status: Con	nected
LAN Setup LAN Setup DHCP Clent Unit	Fire	This funct				es such as a web server (p a your internal network, Mo	
Internet WAN Connection Type DNS MAC Address	L		Add Active World Clear entry 1	15	ly Changes	Add Clear	
Wrelexs Channel and SSID		Enable	Description	Inbound port	Туре	Private IP address	Private port
Security	1.	E			BOTH .	192.168.2.	-
	2,				BOTH .	192.168.2.	
	з.			•	BOTH -	192.168.2.	
Frewall	4.			-	BOTH .	192.168-2.	-
Virtual Dervers Cleat IP Filters	5.				BOTH -	192.168.2.	
MAC Address Pitering	6.				BOTH .	192.160.2.	-
DMZ DONS	7.	8			BOTH .	192.168.2.	-
	۵.	11			BOTH .	192.168.2.	
Security Log	9,			-	BOTH .	192.168.2.	-
Utilities		-					

For Belkin routers, access port fowarding under Firewall, Virtual Servers. Be sure to check the 'Enable' box, then hit the 'Set' button, and save your changes.

2-Wire

For 2-Wire modems, enter Firewall, then Advanced Settings.

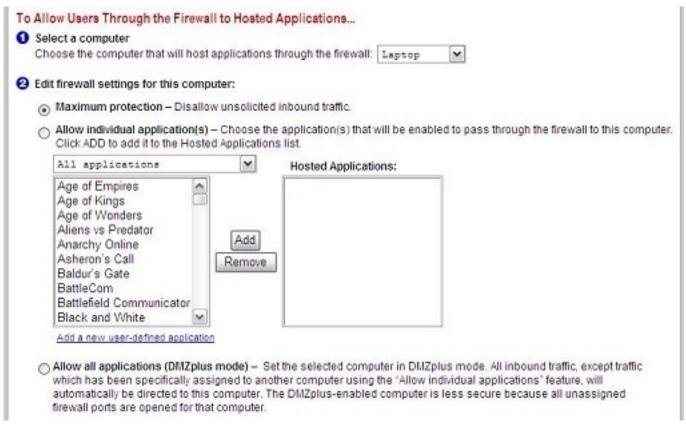


First, look for the DVR's IP address under (1) Select a computer. If you do not see the DVR's IP address here, you may need to go in to the DVR's Network Settings, and set the DVR to DHCP (instead of Static), then reboot the DVR. Once the unit reboots, check it's IP address in the Network Settings, then go back to your router to select the DVR from the list.

Next, you will need to click on "Add a new user-defined application", to come to the this new screen:

Profile Name					
Enter a name for th	e applica	tion profi	le that you	are creating	1.
Application Name:	Γ				
Definition					
ADD DEFINITION to application requires need to add multipl	s multiple	ports or			
Note: In some rare in changes in addition to appears in the applica	simple por	rt forward	ing. If the a	pplication you	are adding
Protocol:	@ TO	P	OL	DP	
Port (or Range):	From:		To:		
Protocol Timeout (seconds):				efault 86400 Iefault 600	
		_	Defau		port as defined
			above		
Map to Host Port: Application Type:	None	(Defeu			

Create your rule, and click 'Add Definition'. Create a rule for each port. Then, click Back.



When done, select each application you have created, and click 'Add', so that you see the desired applications in the Hosted Applications table. When finished, click 'Done' at the bottom of the screen.

Netopia

For Netopia routers, click on the Configure tab at the top of the page.

Home	Configure Trou	bleshoot S	Security	Install						Restart	Help
netopia.	Home Configure				1922948		6661268			0.5920515	
Quickstart LAN W/AN Advanced	 Make a change to a field or parameter. Click Submit. This change isn't permanent; you'll save it later. The Alert button (top right corner) appears. Make more changes, if desired. Click the Alert button. The Save Changes page appears. If your changes are validated, you can save them. If not, a descriptive message appears. Choose Save and Restart. The Gateway restarts with your changes. 										
	Quickstart		For most users, Quickstart includes everything needed to configure a connection Provider.							ction to your	Service
	LAN	Configu	Configuration options for the Local Area Network side of the Galeway.								
	WAN	Configu	Configuration options for the Wide Area Network connection on the Gateway.								
	Advanced Advanced configuration options for the Gateway. Consult the user document before changing any of these configuration options.							document	ation or help	o text	
					2005 M-4	topia, (nc.					
AND ADD DO DO DO DO DO				1999 (1999 - 19 97	2000 1980	opra, me.					

Next, click on Advanced.

10	Configure Troubleshoot Sec	curity Install Restart	Hel
tonia	Home > Configure > Advanced		(15)))
etopia.		Network Configuration	
tat	IP Static Routes	Build IP static route table	
<u>A</u>	IP Static ARP	Build IP static ARP table	
		NAT	
	Pinholes	Set up pinholes through NAT	
	IPMaps	Set up NAT one-to-one IP address mappings	
	Default Server	Set up NAT default server options	
	NAT Table Monitoring	Set up NAT Table Monitoring options	
		Services	
	Differentiated Services	Set up Differentiated Service options	
	DNS	Set up DNS options	
	DHCP Server	Set up DHCP server and relay-agent options	
	RADIUS Server	Set up RADIUS server options	
	SNMP	Set up SNMP community, trap and system group options	
	IGMP	Set up IGMP options	
	Access Control	Set up Access Control	
	UPnP	Enable or disable Universal Plug'n'Play	
	LAN Management (TR-06	54) Enable or disable DSL Forum LAN-Side DSL CPE Configuration services	
	Ethernet Bridge	Set up ethernet MAC bridge	
		Miscellaneous	

Page 10 / 12

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From the Advanced menu, click on Pinholes.

Home	Configure	Troubleshoot	Security	Insta	ill in the second s		Restart	Help
	Home Cor	nfigure > Advance	ed > Pinholes	į > Edi	t Pinhole			
netopia.			P	inhol	e Entry			
Quickstart		P	Pinhole Name	• [
		P	Protocol Selec	x (TCP 🛟			
Advanced		E	External Port S	Start	0			
		E	External Port E	End	0			
		le de la companya de	nternal IP Add	dress	192.168.1.0			
		Ir	nternal Port	[0			
				Sub	omit			
						-		

Create your rule, then hit 'Submit', and repeat for each port. When you have completed, click on the yellow triangle with an '!' inside (located at the top righthand corner) to save your changes.

Checking Your Connection

4) Once you have forwarded all ports necessary for your DVR, you'll want to check and make sure each of these ports was successfully opened. To check this, go to http://www.yougetsignal.com/tools/open-ports/

Here, you will see fields for **Remote Address** and **Port Number**.

To check that your ports are open, enter each port you've forwarded (one at a time) in to the Port Number field, and click 'Check'.

If you see a green flag, and a statement "Port X is open on XXX.XXX.XXX.XXX", you have fowarded your ports correctly. You are now able to view your DVR remotely.

If you see a red flag, the port is not open. Go back in to your router, and double check at all information is correct. In some cases, a port may be blocked by your ISP. To find out why, or to request it opened, please contact your ISP.

Important: The Remote Address that you see is **your DVR's external IP address**. This is the address that you will use to access your DVR from a different computer. Write this down!! And remember, ActiveX settings must be changed on each new computer that you are viewing from before you'll be able to bring your DVR up.

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