CONFIGURE ROUTERS to PORT FORWARD

Instruction Manual

English Version1.0



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INTRODUCTION

The purpose of this manual is to help distributors, installers and customers in general to configure their routers for use with **a network device** such a digital video recorder, video server etc. Our goal is to provide enough information to configure the router and successfully connect to the cameras over the internet. This manual shows most common router models on the market. If your router it is not listed in the manual identify the other routers listed and see if there is a similar one. Let us know if your router is not listed so we may add it in future revisions.

THE ROUTER CONFIGURATION.

The router configuration screen is the last step in the process to view and access the cameras over the Internet (WAN). The connection and configuration will depend from the network topology, configuration and environment. Most digital video recorders and Network devices commonly are connected in a Local Area Network (LAN) and the Router is connected usually to a DSL modem or cable modem. The Router configuration is vital to connect properly to the internet and view the cameras from a remote location.



ROUTER with a 4 ports switch in a WAN / LAN environment.

Router : A router is a device that forwards data packets along networks. A router is connected to at least two networks, commonly two LANs or WANs or a LAN and its ISP network. Routers are located at gateways, the places where two or more networks connect, and are the critical device that keeps data flowing between networks and keeps the networks connected to the Internet. When data is sent between locations on one network or from one network to a second network the data is always seen and directed to the correct location by the router. They accomplish this by using headers and forwarding tables to determine the best path for forwarding the data packets; and they use protocols such as ICMP to communicate with each other and configure the best route between any two hosts. The Internet itself is a global network connecting millions of computers and smaller networks — so you can see how crucial the role of a router is to our way of communicating and computing.

PORT FOWARDING AND DMZ OPTIONS

Before you start working with your router is important to :

- 1. Assign a **static IP address** and select the ports to your **network device**(*), (See **Appendix B** for more information).
- 2. Have ready your **router (gateway) IP address** to access the router menus (See **appendix A** for more information).
- 3. Have the **port list** ready according with your product needs to create the forwarding rules. (See page 7 with all products listed).

The information provided in this manual is to guide and help the customer create **forwarding rules or port forwarding for** specific ports on a router.

There are to ways to work with the router ports. The procedure may vary with the router manufacturer option screens. The two options are:

1 . PORT FORWARDING RULES 2. THE DMZ

1. THE PORT FORWARDING RULES.

In order to allow users to access your **Network Device (*****)** on the Internet (WAN) we need to create forwarding rules. That means we need to open ports on the Router and forward (Port forwarding) the data from a specific IP address. Once the Router has the ports opened the data will pass-through the Router. Every router internally works and interacts with two IP addresses. One is the internal IP address or gateway. The one works with your LAN and the other one is the external IP for the internet communications.

When a **Network Device** sends data to a remote router on the internet , the router receive the information and needs to know what to do with the data. The port forwarding feature what it does is to tells the router where to send the data with the computer or network device attached to the LAN.

(*)**Network device**: Any IP addressable device or electronic equipment connected in a LAN such a Digital video recorder, video server or computer.

When you create and enable the ports on the router (**The term is referred as** <u>forwarding rules</u>), the router takes the data off the external **IP address: port** number (this is called a socket) and sends that data to an internal **IP address: port** number. The port forwarding rules are created per port.

Example using port 2000 : When the router receives the data from the **external IP address**, the router works with the internal **NAT** (Network address translation) and communicates the information from the external IP to the internal IP address. The information from a distant **router** comes with a specific

forwarding rule and that rule contains information related to port 2000. That means the internal IP address (gateway) on your LAN will communicate only with the network device on the LAN configured to receive the data for port 2000. If you have one network device working with port 2000, only this device will be able to use port 2000. That means only a port number can be used for a program or network device. For example if you have a customer using 2 video servers connected on the same LAN, you have to give each one a different port to communicate on the same network or over the internet.

2. THE DMZ feature. (demilitarized zone)

This feature allows you to open all the ports at once in your router for your <u>Network device</u> _IP address. The DMZ takes the IP address of the device on your network and forwards all ports. This is really a nice feature if you are having problems forwarding ports for some program or device. It can be a life saver if your router will not allow you to properly forward ports. The <u>Network Device</u> with the DMZ enabled is now wide open to internet traffic. If the network device attached to the router is a Digital video recorder or a Video server for example , the unit will not be able to catch a virus, or risk being hacked because these units are stand alone and designed with an embedded operating systems. On the other hand there is a risk if you are using a computer instead. If you are using a computer on your LAN it is better to forward the ports only and not use the DMZ option.



For a more detailed explanation of the port forwarding procedures visit : http://www.portforward.com/help/portforwarding.htm

LIST OF PORTS FOR LOREX NETWORK DEVICES

FAMILY	MODELS	PORTS	COMMENTS
IPSC	IPSC2230 Day Night Camera	TCP port 80 UDP Port 9001	Default Port : 80
IPSC	IPSC2206 PAN/TILT DIGITAL ZOOM NETWORK CAMERA	TCP port 80 UDP Port 9001	Default Port : 80
Video server	L4202	Any	Default port is 80. Only one port is needed. Suggested alternated port : 2000
DVM Software		5600-5700	Default ports : 5600 and 5700 TCP ports:
			modify this value. However, it should generally have a value between 5501 and 64000. Values below 5501 are considered reserve values for Windows and routers. Values above 6400 are not valid.
4 channel PCI	01 20450		Send data port - All communication must be done through a designated port. By default data is sent out from the local system through port 5600. Users can modify this value. However, it should generally have a value between 5501 and 64000. Values below 5501 are considered reserve values for Windows and routers. Values above 6400 are not valid. communicated can also designate a specific port through which it communicates data. By default the target system data port is also set to port 5600. Users can modify this value. However, it should generally have a value between 5501 and 64000. Values below 5501 are considered reserve values for Windows and routers. Values above 6400 are not valid
4 channel PCI	QLR0450	1	Default ports:
video capture card		4 ports needed Any port from a range from 2000-65000	 Video port :2000 Audio port: 2001 PTZ control : 2002 Remote Search :2003
4 channel USB video capture card	QDU470	4 ports needed Any port from a port range from 2000-65000	Default ports: • Video port :2000 • Audio port: 2001 • PTZ control : 2002 • Remote Search :2003

NETWORKABLE 2 PAGE - 8 CHANNEL 21" COLOR QUAD WITH 4 NIGHT VISION CAMERAS	L21Q784	80	http1 : 80 TCP http2 :blank (any port)
NETWORKABLE 2 PAGE - 8 CHANNEL 14" COLOR QUAD WITH 4 COLOR NIGHT VISION CAMERAS	L14Q684C	80	http1 : 80 TCP http2 :blank (any port)
IP Camera	IPSC1240	80	http1 : 80 TCP http2 :blank (any port)

- Note : Port 80 is the http port for the Internet browser and it is usually blocked by the Internet Service Provider. We recommend using a different port like 2000 to avoid possible problems.
- For example using 192.168.1.5, on the web browser type <u>http://192.168.1.5:2000</u>

ROUTERS SECTION

This section shows the procedure to create port forwarding rules. The information is presented by manufacturer and model.

LINKSYS

BEFDSR41W, BEFN2PS4, BEFSRU31, BEFSRU31, BEFSR41 V1& V2, BEFSR V2FW 1.40.2, BEFSR41 V3 V4 & V5, BEFSR81, BEFSX41, BEFSX41-CA, BEFVP41 V1&V2, BEFVP41-CA, BEFW11S4, BEFW11S4 v2,v3, & 3.2, BEFW11S4 V4, BEFW11S4-CA v2 & v4, WRT51AB, WRT55AG

Log in to the Router's Web-based Utility. (This is usually done by opening your web browser, entering 192.168.1.1 in the Address field (or your "default gateway" IP address from your PC), and pressing the Enter key. You should see the following screen.



Press the **STATUS** Tab and write the WAN IP address for future reference for the remote connection .

To open the ports press on the **ADVANCE** tab on the top and Select **Port Range Forwarding**

staniced Application	Ext.Pert	Protectal TCP	Protocal 10P	IP Address	Enable
	To I	- E	E	192.160.1.0	C
	0 Te I	- c		192.168.1.0	17
	0 Tp 0	- r	E	192.160.1.0	0
	D THE	- r	17	192.160.1.0	
	F To F	- C	17	192.169.1.0	F
	0 To B	- E	•	192.160.1.0	
	D To D	E .	E	192.168.1.0	E
	0 To 8	- F		192.160.1.0	57
	0 To 8	- E	F	192.160.1.0	17
	0 to 0	- r	F	192.164.1.0	17
	1 Feb Frenchel	- 1	of Tenner		
		19	and the galaxy of the		
	ANDY DAKE	4			

On the left hand side put the name of the application.

Application name: can be any description of your Network Device attached on you LAN

You are forwarding ports in the **Customized Application** box.

In the **Ext. Ports** box put the port ranges you wish to forward. If you are unsure of the port range/ranges check the Ports list page or the **network device (*)** model you are working with.

Example :

For **port 1080**, start with port 1080, and end with port 1080.

Check on the protocol type **TCP**, **UDP**, or just both. Check both if you are unsure of the protocol type. In the **IP Address** box, enter your **Network device(*)** IP address

Click the **Enable** check box on the right hand side.

If you have more ports continue with the next line.

Click **Apply** at the bottom of your screen to save your changes

DISABLE BLOCK WAN REQUEST FEATURE.

Press the **Advance** tab and select the **Filters** tab.

Click and disable the **Block Wan request** feature.

When finish click on **Apply** to save the changes.

illined.	810-256
THURSDAY CARDIN	192 350 1.0 -0
	192.160.10 -9
	192.160.1/0 - 0
	192.166.3.2 - 1
	192.3an.3 <i>3</i> 9 -19
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ritte Manhairrent	C English C Direction Fact \$1000
Renate Gaugines	C Enable # Disable
	W nunden C micadan nites [1402
	Ante Conce

DMZ OPTION

If you don't want to enable the port range forward feature you can use the DMZ option to open all the port at once.

Click on the Advance tab on the top

Click on the DMZ Host option

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DMZ HOST	This the feat	i feature se Internet ca ture as you	ts a local u n access ir with to use	ser to be e /out data f r special-pu	posed form the rpose s	to the DMC ervice	Internet. Ar host. Enable	ny user or I the
DMZ Havi IP Address	192.1	68.1.0	1					
	App	sky Caeso	at					

Enter your **network device (*) IP** address and press apply.

LINKSYS. wireless

BEFSR41-CA, BEFSX41 V1.50, BEFW11S4 v1.50.10, BEFW11S4 v1.50.14, RT31P2, WAG54G, WRK54G, WRT54G, WRT54G v1.1 v2 & CA, WRT54G v2.04, WRV54G, WRV54G-CA

Log in to the Router's Web-based Utility. (This is usually done by opening your web browser, entering 192.168.1.1 in the Address field (or your "default gateway" IP address from your PC), and pressing the Enter key.) You should see the following screen.

R	BA
Linksys BEFSR41, User name:	/BEFSR11/BEFSRU31
Password:	Remember my password

Press the **STATUS** Tab and write the WAN IP address for future reference for the remote connection .

To open the ports press on the **Applications** and **Gamming** Tab on the top. Click on **Port Range Forward** Option

						Wind	nan G Brea	damed Router	WRITERE
& Gaming	tria Inclass	w	-	Senio	~	octa Notana	aphistore Gereig	Administration	Straw
Port lunge for with								Mare-	
	ALCONTANT.			Per	n Range				
	Application	- 10		Bed	Protecti	P Address	Endler		
		ø		9	Both +	1921081.0			
	1	0	+	1	Bath 🛏	100.1881.0			
		0		1	Buth	102 1081 0	0		
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	1	0			Both -	192 148.1 0	D		
	1	0			Buth .				
		0		1	Bath *	10.1881.0			

On the left hand side put the name ** of the application. You are forwarding ports in the **Application** box.

** **Application name**: can be any description of your Network Device attached on your LAN

In the Start and End boxes put the port ranges you wish to forward. If you are unsure of the port range/ranges check the Ports list page or the network device model you are working with.

Example :

For **port 1080**, start with port 1080, and end with port 1080.

Check the protocol type **TCP**,**UDP**, or just both. Check both if you are unsure of the protocol type. In the **IP Address** box, enter your **Network Device (*)** IP address to forward the ports to.

Click the **Enable** check box on the right hand side.

If you have more ports continue with the next line.

Click **Save Settings** at the bottom of your screen to save your changes

DISABLE BLOCK WAN REQUEST FEATURE.

Press the SECURITY tab

Click and disable the **Block Wan request** feature.

When finish click on **Save Settings** to save the changes.



DMZ OPTION

Click on the **DMZ** option

If you don't want to enable the port range forward feature you can use the DMZ option to open all the port at once.

Click on the **APPLICATIONS AND GAMMING** Tab on the top.



Enter your local network device IP address and press Save Settings

DLINK

Models DI-514, DI-524, DI-604, DI-614+, DI-624, DI-704P (revB), DI-704P (revC), DI-704UP, DI-707P, DI-714P+, DI-754, DI-764, DI-774, DI-784, DI-804HV, DI-808HV, and DI-824VUP:

Open your web browser and enter the IP address of your router (192.168.0.1). Enter username (admin) and your password (leave blank).



Press the **STATUS** Tab and write the WAN IP address for future reference for the remote connection .

To <u>open the ports</u> press on the **ADVANCE** Tab on the top. Click on **Virtual Server** Option

Enter the name of the service (Ex. Your DVR description) you are trying to forward ports for in the **Name** box.

H	lome	Advance	d To	ols	Status	Hel
Vietura	al Server	used to allow in	daract upon	accurs to LAD	renirar	
Allina	ar Daiyar IS	USED LD BILOW IN	renier neere	access 10 1244	561 11C0 8.	
		C Enabled C	Disabled	-	-	
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1.116.687						
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Enter the private **network device (*) IP address** into the **Private IP** box.

Select the protocol type from the **Protocol type** drop down box. If you are unsure of the protocol type select both if available. If both is not an option you would need to create a duplicate configuration, one with TCP selected the other with UDP selected.

Enter the private port into the **Private Port** box. Generally you should enter the same port into the **Public Port** box. For port information check the Ports list page or the **Network Device** (*) model

Example using port 1080 :

- Private Port 1080
- Public Port 1080.

The schedule should be set to **Always**. Put a dot in the **Enable** circle at the top to enable your profile. If you have more ports continue with the next line. Click **Apply** at the bottom of your screen to save your changes.

DMZ OPTION

If you don't want to **enable the ports** feature you can use the **DMZ** option to open all the ports at once.

Click on the **Advance** Tab and Select the **DMZ** Option.



SMC

2804WBRP-G, 2804WBR V1, V2, 7804WBRB

DMZ Option Only

Open a web browser. In the address bar type the IP address of your router. This IP address is **192.168.1.2** by default. Press **enter**



Step 2:

You should now see a login screen and it should be prompting you for a password. We want to log in as administrator, so enter your administrator password here. By default the administrator password is **smcadmin**. Click the login button to log into the router.

Step 3:

Click **Firewall** on the left hand menu. This will drop down a sub-menu on the left hand side.



Step 4:

Click **DMZ** in the left hand menu. This will open up the screen below.

Natworks					4	MC2804WBRP-	Home @Loogut
							a strange of colloce
# SETUP WIZARD	DMZ	Z(Demi	ilitarize	d Zone)	<u>k</u>		
SYSTEM	Fran	have a la	ncal chert	PC that ea	annet nie an leter	net and cation properly from beh	int the NAT fint-wall then you can
WAN	open	the clies	it up to un	restricted t	heb-way internet a	ccess by defining a Virtual DMZ	Host.
LAN	Freih	In THEP	CYM	6 Ma			
WIRELESS	_	n contra					
EIDEWALL	Nutsp	ple PCs c	ton be exp	pased to the	e internet for two	way communications e.g. interni statis ID subvises for that DC	et gamling video conterencing, or
FINEWALL	44, 18.4	connecto	uno. re u	Se ale Lon	-, ibe must set a	state in dustess ist distric.	
Arrens Control							
» Access Control - » MAC Filter		Public IF	P Addres			Client PC IP Address	
s Access Control s MAC Filter s URL Blacking	1.	Public IF	P Addres	•		Client PC IP Address 192,168,2,0	
a Access Centrel » MAC Filter » URL Blacking » Schedule Rute	1. 2.	Public 8	P Addres	. [0		Clent PC IP Address 192,168,2,0	
s Access Control s MAC Filter s URL Blacking s Schedule Rule s Infoision Detection	1. 2. 3.	Public # 0.0.0.0 0	P Address	.p	p	Client PC IP Address 192,168,2,0 192,168,2,0 192,168,2,0	
s Access Control • MAC Filter • CRL Blacking • Schedule Rule • Intrusion Detection • DNZ	1. 2. 3.	Public IF 0.0.0.0 0	P Add es	0. 0.	q. q.	Client PC IP Address 192,168,2,0 192,168,2,0 192,168,2,0	
s Access Control s MAC Filter s URL Blanking s Schottula Rule s intrusion Detection s DMZ DDNS UR n.B	1. 2. 3. 4.	Public # 0.00.0 0 0	P Addres	0. 0.	q, q,	Client PC IP Address 192, 168,2,0 192, 168,2,0 192, 168,2,0 192, 168,2,0	
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s Access Control s MAC Fifer + URL Bhrining > Schendale Rude > Shon Detection > Sho? DDNS UP nP TOOLS STATUS	1. 2. 3. 4. 5. 6.	Public 6 0.0.0.0 0 0 0 0	P Addres	9. 9. 9. 9. 9.	q. q. q. q.	Classit PC 19 Address 192,168,2,0 192,168,2,0 192,168,2,0 192,168,2,0 192,168,2,0 192,168,2,0	
s Access Control s UAC Fite + UAC Barring > Schedula Rule > Innuision Detection > DMZ DDNS UP nP TOOLS STATUS	1. 2. 3. 4. 5. 6. 7.	Public 15 0.0.0.0 0 0 0 0 0 0	P Addres	q. q. q. q. q.	q. q. q. q. q.	Clevit PC P Address 192.168.2 () 192.168.2 () 192.168.2 () 192.168.2 () 192.168.2 () 192.168.2 () 192.168.2 ()	

Step 5:

A Static IP address is need for this function. Click in the **Enable DMZ Yes** radial button. In the **Public IP address** box, you enter the **network device** IP (*) address you wish to open to the internet.

Click **Apply** at the bottom of the page.

Click the **STATUS menu** at the left and write the **WAN Internet IP address** for future reference for the remote connection .

Actiontec

GT701-WG, GT704WR, R1020S, R1020S(U), R1520SU, R1524SU-1

Enter the IP address of your router in the address bar of your browser.. By default the IP address should be set to 192.168.0.1.

Action	teč
	Main Menu
	Setup / Configuration
	Status
	Utilities
FOI	Help
	Copyright 2001-2002 Actiontec Electronics Inc.

Click **setup/configuration**. You should see the following menu.



Click **ADVANCE** at the side of the menu. You will see the following menu

Click on Port Forward on the left hand side. You should see the following menu.

Port Forwarding	
Some Internet applications enter the required port rand application into the space b options, or click Next to co	require certain ports to be forwarded. Please ges and IP Address of the computer running the selow, then click add. Click Advanced for more ntinue.
IP Port Range	Protocol IP Address
to	
Add	Remove
1144 - 6 -	with stand and the state
List of Po	Twatted Ports
	Advanced
	Beck Next
Enter the follow	wing information :
	-
IP Port Range	Enter a port range
in i ortrango.	
Example · E	or part 1000 start with part
1080, and e	əna witn port 1080.

- **Protocol** : Select the protocol type , TCP or UDP

- IP address : Enter your Network device (*) IP address.

Click on **ADD** to add the settings to the box below.

If you have more ports to open repeat the procedure.

To finish click on Save and RESTART

DMZ OPTION.

If you don't want to use the **port forward** feature you can use the **DMZ** option to open all the ports at once

Click **setup/configuration**. You should see the following menu.

Basic Setup	Set Up / Configuration
Admin Username/Password	This section will guide you through the configuration of your Cable/DSL. Router.
Advanced Setup	In most cases, only Basic Setup is required, In the event that you can not access the Internet after completing the Basic Setup, it is possible that you Internet Service Provider may require additional configuration.
	In this case, use the Advanced Setup process to configure your Cable/DSL Router by clicking on the Advanced Setup option from the menu to the left
	Please click the "Begin Basic Setup" button below to start the basic setup.
	Begin Basic Setup

Click **ADVANCE** at the side of the menu. You will see the following menu

WAR ize Address The following settings will be configured in the order below. To skip shead, please click on the selected setting from the menu to the left, click Next to continue. Wireless Mac Authenbrötion • WAN IP Address • Bernote Management Data Services Blocking • WAN IP Address • Det Forwarding Services Blocking • Wireless Advanced Settings • Det Forwarding DMC botting • Wireless Advanced Setting • Det Forwarding DM2 Hosting • Wireless Advanced Setting • DM2 Hosting On Towarding • Website Blocking • Det Forwarding DM2 Hosting • Website Blocking • LAN IP Address On Towarding • Website Blocking • LAN IP Address DM2 Hosting • Website Blocking • LAN IP Address DM2 Hosting • Website Blocking • LAN IP Address Bock Next • Det Power Static Routing • Det Management • Det Management Static Routing • Det Management • Det Management Static Routing • Det Management • Det Management Static Routing • Mac Address Cloning • Next Static Routing • Det Management • Det Manag	WAI IP Address Wireless Settings Wireless MAC authentication Wireless Advanced sattings LAN IP Address DHCP Server Services Blocking Website Blocking Website Blocking Website Blocking Barnote Management Boot Forwarding DM2 Heating DM2 Heating DM2 Heating DM2 Heating DM2 Heating DM2 Heating DM2 Heating DM3 Heating Static Routing Static	The following settings will be configured please click on the selected setting from continue. • WAN IP Address • Wireless Settings • Wireless Authentication • Wireless Authentication • Wireless Authentication • UnCP Server • Services Blocking • Website Blocking • Website Blocking	i in the order below. To skip shead, in the menu to the left. Click Next to Perforwarding DM2 Hosting Firewall Static Routing LPAP NAC Address Cloning Next
Save and Restart	Save and Restart	opvright 2001: 2002, 2003, 2004. <i>Action</i> tec Elect	
			tronics Inc.
			teonie: Inc.

Click on **DMZ Hosting** option

DMZ Hosting

Your Cable/DSL Router can be configured to support Online Gaming and Internet Conferencing services on a network computer. To use this feature, enter the IP Address of the computer in the DMZ Host field below.

Warning: Using a computer in DMZ mode opens the computer to outside intrusion, creating a security risk.

DMZ Host IP Address

Con @off

Back. Next

Enter the **Network device** (*) IP address, Then you click in the **On** radial button.

Now click on **Save and Restart** on the left hand side. The following menu should appear.

	[Main]	[Setup]	[Status]	[Utilities]	[Help]
	Save a	nd Restart			
onfiguration	Please clic	k the Save and I	Restart button bel	ow to save your se	ttings and
	restart yo	ur Gateway.			
	THE NUT	allin	Save and Rester		
	A VY C				

To finish click Save and Restart.

Click the **STATUS menu** and write the **WAN Internet IP address** for future reference for the remote connection .

NETOPIA

CAYMAN 3300

Enter the IP address of your router in the address bar of your browser.. By default the IP address should be set to 192.168.1.254.

	Please type y	your user name and password.
3	Site:	192.168.62.1
	Realm	Realm1
	User Name	admin
	Password	XXXX
	Save this	password in your password list

Enter your user name and password. By default the username is **admin**, and the password is blank. Click the **OK** button to log in to your router.



Click the **Expert Mode** link on the left hand side of your screen.



Home	Configure Tro	ubleshoot Security	/ Install	Restart Help
	Home		-	
netopia.		Ger	neral Information	1976 - Paris I.
	Hardware	Netopia Model 3347V	Wireless DSL Ethern	et Switch
onfigure	Serial Number	9437188		
roubleshoot ecurity	Software Version	7.5.0	BreakWater Firewall	ClearSailing
asic Mode	Product ID	1225		
vocess Control ogin	Date & Time	Tue Nov 9 14:57:03 2005	Safe Harbour	On
			WAN	
	Status	Up	Data Rate (Kbps)	Downstream: 8000 Upstream: 800
	Local Address	0.0.0.0	Peer Address	0.0.0.0
	Connection Type	Always On		
	NAT	On	WAN Users	Unlimited
			LAN	
	IP Address	192.168.1.254		
	Netmask	255.255.255.0	Ethernet Status	Up
	DHCP Server	On	DHCP Leases	0 out of 253 leases in use
	1	© 20	04 Netopia, Inc.	

- Click on **CONFIGURE** link on the top.
- Click on the ADVANCE link

	Network Configuration
IP Static Routes	Build IP static route table
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
	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
Access Control	Set up Access Control
UPnP	Enable or disable Universal Plug'n'Play
LAN Management (TR-064)	Enable or disable DSL Forum LAN-Side DSL CPE Configuration services
Ethernet Bridge	Set up ethernet MAC bridge
	Miscellaneous
System	Configure System parameters
Syslog Parameters	Set up Syslog
Internal Servers	Configure internal web and telnet ports
Software Hosting	Set up Software Hosting
Clear Options	Restore the Gateway to its factory configuration
Time Zone	Time Zone settings
VLAN	Setup VLAN Configuration

On the **ADVANCE** Network menu click on the **PINHOLES** Option.

This menu option will allows you to enable the port forwarding option.





Example : If you open a range of ports from <u>80 to 1080</u>, use 80 as the lowest port.

Click the **Submit** button

If you need to open more ports click on the **ADD** button and repeat the procedure. (*) See page 5 for more information

If you finished click on the **Alert** button.

The Alert button is a Yellow triangle at the left top area of your menu



Click on SAVE and Restart

ve Changes ade to the Gateway database. You must save the cha ay in order for the changes to take effect. ve Database y changes made to the database y changes and restart Gateway ck Database withe contents of the database ate edited database are to settings before edits ret to settings before edits	chang
ade to the Gateway database. You must save the cha ay in order for the changes to take effect. re Database y changes made to the database y changes and restart Gateway ck Database withe contents of the database are edited database are to settings before edits rel	chang
ade to the Gateway database. You must save the cha ay in order for the changes to take effect. re Database y changes made to the database y changes and restart Gateway ck Database with contents of the database ate edited database are to settings before edits rel to settings before edits	chang
ve Database y changes made to the database y changes and restart Gateway ck Database we the contents of the database ate edited database are to settings before edits rel to settings before edits	
ve Database y changes and restart Gateway y changes and restart Gateway y changes and restart Gateway we de contents of the database ate edited database er Database pre to settings before edits ret is settings before edits	
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y changes and restart Gateway sck Database we the contents of the database are edited database ert Database are to settings before edits edit	
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w the contents of the database late edited database ere to batabase ore to settings before edits	
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edi	
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	© 2003 Netopia, inc.

WESTELL DSL MODEM/ROUTER

B90-2200- 30-05 (Bellsouth)

Open a web browser like internet explorer or Netscape



Enter the IP address of your router in the address bar of your browser. By default the IP address should be set to 192.168.1.1.

۲	Please type 3	your user name and password.
	Site:	192.168.62.1
	Realm	Realm1
	User Name	admin
	Password	XXXX
	Save this	password in your password list

You should see a box prompting you for your username and password. Enter your username and password now. By default the username is blank, and the password is **NOLOGIN**. Click the **OK** button to log in to your router.

BallSouth®	Connection Informatio	n
	DEI	Up
USLACCESS	Connection	
nternet Service	User ID	94
	IP Address	
	IP Gateway	
	Primary DNS	
Home	Secondary DNS	
Diognostics		
Remote Access		
Update Modem		estart connection disconnect
Reset Modern		
Modem Self Test	Modem Info	
Expert Mode	Modem Name	WireSpeed Dual Connec
	Model	B90-220030-04
	Serial	038410482115
	Software Version	01.06.33
	MAC Address	00:60:0f:e3:a5:ee
	Warranty Date	December 13, 2003
	Local Network	

Click the **Expert Mode** button on the left hand side of your screen.

Then under Home click the **Service Configuration** button on the left hand side of your screen.

	Connection Configuration	
astAccess* Internet Service	VPI VCI Protocol	8 35 PPPoE
Home	User ID	Example: username@bellsouth.net
Configure Connection DHCP Server	Password	Provided by your ISP.
IP Passthrough NAT	Confirm Password	Automatica
Statistics Diagnostics	Static IP Address	0.0.0
Remote Access Update Modern	Primary DNS Server Secondary DNS Server	0.0.0.0
Modern Self Test Basic Mode	Connection Type	On-Demand ¥

In the new menu that appeared under Configuration, click the **NAT** button.

Configure Connection DirCh Server Service Name	Select A Service	enable delete
NAT Statutales Dagewates Randa Access Randa Access Backets Modern Backets Carlore Modern Self Fest Static NAT	e Service Mode Host Device	edit
ntinue on next page	••••	



Enter a name for the program or device you are forwarding ports for in the **Service Name** box. Ex : DVR

Enter the ports to forward into the **Global Port Range** boxes.

Example: for port 2000-2000

The smallest port number should go into the box on the left, while the largest port number should go into the box on the right.

Main port the program uses into the **Base Port** box. This is your lower port from your list.

Examples: If you are using only one port like 2000 enter 2000-2000. If your are using a range of port like 80-1080, the base port is 80

Select the protocol type using the UDP or TCP radial buttons.

Click the **Next** button when you are done making changes.

Service Details

Service Name ***DVR** Type **Port Forwarding**

Port 1	
Protocol:	TCP
Global Port(s):	2000
Base Host Port:	2000

add

After clicking 'Close' you can enable your new service from the 'Serivce Name' select box.

close

If you need to add additional ports, click the **Add** button.

When you are done adding ports/protocol types, click the **Close** button

Continue on Next page....

Once you finished to the service conf	adding all the ports go back iguration screen
FostAccess° Internet Service	
Home Connection DHCP Server IP Patternaph Bageseries Degeneries Degeneries Reset Modern Madem Sail Test Basier Moder	NAT Configuration Partice Name Service Name
Use the Service Na and select the first created for your ne DVR). Then click the Ena will need to repeat that you created	ame drop down box to find configuration you just twork device name (Ex ble button to enable it. You this step for each service
Once you press ena will appear	able the following screen
	×
Host Dev	rice 192.168.1.46 💌
	or specify
IP Address	
	done
Select and find you address or enter yo the ports and comp Press Done to finis	The second secon

2200 (Verizon)

Versalink 327W

Open a web browser like internet explorer or Netscape



Enter the IP address of your router in the address bar of your browser. By default the IP address should be set to 192.168.1.1

Enter Nets	work Passwo	rd ?)	<
?	Please type ;	iour user name and password.	
9	Site:	192.168.62.1	
	Realm	Realm1	
	User Name	admin	
	Password	xxxx	
	Save this	password in your password list	
		OK Cancel	
			1

You should see a box prompting you for your username and password. Enter your username and password now. By default the username is blank, and the password is **NOLOGIN**.

Click the **Ok** button to log in to your router.

Home	Home Status Configuration Maintenance Troubles	shooting Help
	Connection Overview	annaction
	Connection Name PPP State My Connection DOWN	us
	profile editor	
	Profile with the " is your default profile. To n to your default profile click on the profile et	nana changas Altar buttan.

Click on **Configuration** on the top Menu and Select **Service configuration**



Click the **Define Customer Service** button to move to the next page.

Custom Service

Set Up a Port Forwarding entry based on your specific ports

next cancel

- Port Fowarding Ranges of Ports
- Forward a range of WAN ports to an IP address on the LAN

\varTheta Trigger Ports

Forward a range of ports to an IP address on the LAN only after specific outbound traffic

Put a dot in the **Port Forwarding Ranges of Ports** radial button. Then click **next** at the bottom of this page.

Service Name:	My New Service
	The above name will be saved as this Services description
Global Port Range:	0 – 0
Base Host Port:	0
Protocol:	OTCP OUDP
	next back cancel

Enter a name for the program or device you are forwarding ports for in the **Service Name** box. Ex : DVR , Video server or PC.

Enter the ports to forward into the **Global Port Range** boxes.

Example: for port 2000-2000

The smallest port number should go into the box on the left, while the largest port number should go into the box on the right.

Main port the program uses into the **Base Port** box. This is your lower port from your list.

Examples: If you are using only one port, for example 2000, enter 2000-2000. Your base port will be 2000.

If your are using a range of port like 80-1080 the base port is 80.

Select the protocol type using the UDP or TCP radial buttons.

Click the **Next** button when you are done making changes.



If you need to add additional ports or you need to specify both protocol types, click the **Add** button. Then repeat the above steps, and specify the other protocol or add another port.

Once you finished adding all the ports go back to the service configuration screen

Current Profile:	Detault]	INCHA	eur	
Service Name	Select A Service * * ' Denotes Custom Ser	vice	enable	deiete	coit
Service Name	Service Mode	Host Device	da	Lails	delete
datine custo	mservice				

Use the **Service Name** drop down box to select the first configuration you just created at your device name (Example: DVR).

Then click the **Enable** button to enable it. You will need to repeat this step for each service that you created

Once you press enable the following screen will appear



Select and find your network device (*) **IP address** or enter your IP address to forward the ports and complete the procedure, Press **Done** to finish

BELKIN

F5D5231-1

Open a web browser like internet explorer or Netscape



Enter the IP address of your router in the address bar of your browser. By default the IP address should be set to 192.168.2.1.

Login		
	Befere you can change any settings, you need to log miwith a paceword. If you have not yet out a costom pasaword, then leave this field blank and click "Submit."	
	Password	
	Default = leave blank	

You should prompted for your password. Enter your password now. By default the password is blank. Click the **Ok** button to log in to your router.



On the left hand side you will see a series of four menus.

In the one titled firewall click **Virtual Servers**. This will bring you to the following menu.



We are going to be working in the table portion of this menu to forward ports. All the settings to forward a port or series of ports will go on one line. If you want to forward additional ports you can fill out a second line with additional information.

Description box. A good description would be the name of the network device (*) (Ex DVR) you are forwarding ports for.

Inbound Port box . Enter the port range. This range would be specified by entering the starting port number in the first box under inbound ports and the ending port number in the second box under inbound ports. Do the same thing for the **Private Port** boxes.

- Type :Select the protocol type . TCP or UDP or Both .

Note : If you are unsure of the protocol type, just select both.

Continue on next page......

- Enter your network device (*) **IP address** you wish to forward in the **Private IP Address** box.

- Put a check in the **Enable** checkbox..

Click on Apply changes to finish

(*) See page 5 for more information

DMZ Option

On the Setup screen select DMZ at the left area of your menu



NETGEAR

RP614v1 & v2, WGR614, WGT624v1 & 2,

Open a web browser like internet explorer or Netscape



Enter the IP address of your router in the address bar of your browser. By default the IP address should be set to 192.168.0.1.

·	Site:	192.168.0.1
	Realm	
	<u>U</u> ser Name	admin
	Password	000
	Save this	password in your password list

You should see a box prompting you for your username and password. Enter your username and password now. By default the username is **admin**, and the password is blank. Click the **Ok** button to log in to your router

Setup Wizard	Basic Settings		Help
Settop Basic Settings Content Filtering Logs	Does Your Internet Connection Require A Le ② Yes ○ No	ngden 7	The infinite industry causes are not congruent arguing and an answer the obtained states of the COEAH Constantion. Resident Click are shown in the redenant clickness. The convert addings of information for that news apprending the
Block Siles Block Services Schedule	Internet Service Provider	Other	Partial column Templar industry states to the construct the type page appears in the column if you are using item Exercise industry line and main in the column column
Router Status	Password		proce intendy to the reliability to be exclerin, intentione, scroll down unbly you reactivity
Attached Devices	Ner Timeout (in Minutes)	5	Basic Settings Help
Set Password Router Upgrade	Domain Name Server (DNS) Address		Heater I now any reflexes up from reader for provide instance the matterial sufficiency endepends the magnetic on many
	O Use These DNS Servers		Enviro Your Induction Commettion Result & A Logist
Port Forwarding Port Triggering WAN Setup LAN IP Setup	Primary DHS Becondary DHS		Ensure these controls is a set to the special distance type Remain wells store 100 ¹⁰ if while means to annex the presence of the set
Dynamic DNS Static Routes Remote Management	(Cancer (App	1	Notice Kyous have unstabled PPPN indicative south as Water at the device spectrum 2, technical theory Pacified AOL 2019 attraction and anti-serve, there was have PPPNE (Interest Yang)
UPAP			Adment Service Provider
Web Support Knowledge Base			Setting your (SP # bits writed in the build conversion, strategies in an of One
T Design			AGL Deventhoused (150, we California
Logour			IT WOLL Cablie or WOLL DOL or surrended the router well automaticable by cardigation with the resource).

The basic settings window will be visible

On the menu bar to the left under **Advanced** click **Port Forwarding** You should now be at the Port Forwarding

menu as shown below. Ports Service & Game Server IP Address Add Server HTTP • Service Name Start Port End Port Server IP Address # 01 FTP 21 21 192168.0.100 • 2 HTTP 80 80 192.168.0.101 Add Custom Service EditService Delete Ser

To create a new port forward <u>service</u> click on **Add Custom Service** button.

WINELESS OF THE STATE	ETGEAR Cable/DSL Web Safe Router RP614
Setup Wizard Setup Basic Settings Content Filtering Logs Block Sites Block Services Schedule	A Ports - Custom Services

Enter the information requested on the menu.

- Service Name : Enter the description of your DVR or device or service (PC) . Ex DGR200

-Starting port. Enter the lowest port
-Ending port. Enter the Highest port
-Server IP address: Enter your network device(*) IP address

- Click **Apply** at the bottom of the menu to finish.

DG824M V1.3

DMZ Option

Open a web browser like internet explorer or Netscape



Enter the IP address of your router in the address bar of your browser. By default the IP address should be set to 192.168.0.1.

1	Site:	192.168.0.1
	Realm	
	User Name	admin
	Password	
	Save this	password in your password list
		OK Cancel

You should see a box prompting you for your username and password. Enter your username and password now. By default the username is **admin**, and the password is blank. Click the **Ok** button to log in to your router

Setup Wizerd	Basic Settings	Help
Settop Basic Settings Content Filtering B Loga	Does Your Infernet Connection Regular & Login? ③ Yes ○ No	The Infert 4 forthings analysis among out to compare insignable and concerning the obtained when SETOBAH Constantials. Restars Concernent to the indexest of concerns. The survey contents of infert and were applying in the
= Block Sites = Block Services = Schedule = E-meil Maintenance = Router Status	befernet Service Provider Other Ungen Password	Performance interaction and the second of
Attached Devices Backup Settings	Service Name (If Required) Idle Taneout (in Minutes)	Basic Settings Help
Set Password Router Upgrade Advanced Port Forwarding Port Forwarding Port Netup ULAN IP Setup Dynamic DNS Staffic Routes Remate Management UPAP	Deministration Street (BHS) Address © Cle Actionatorial From till® © Use These DNS Servers Primary DNS 0 0 0 0 Becondum DHS 0 <t< td=""><td>Event in the use operating at the source of the sourc</td></t<>	Event in the use operating at the source of the sourc
Web Support Knowledge Base Logout		Salad and (2017) A standard in the pail down mean otherware leaded Other AGL Encoderand (76), or Cable #25), Cable or 261, 2011, or subscript the roader set of the cable of the research with the research

The basic settings window will be visible

On the menu bar to the left under **WAN Setup Options**

You should see the WAN setup menu

WAN Setup	
Connect Automatically, as Required	
Disable SPI Firewall	
Default DMZ Server 192 . 168 . 1	. 0
Respond to Ping on Internet Port	
MTU Size (in bytes)	1500
Apply Cancel	

Click on **Default DMZ server** and enter your network device (*) IP address .

Click on **Apply** to Save the settings.



Enter the following information:

-Application name. Enter the name of the program (Ex. Your DVR, video server description).

-Protocol: TCP or UDP.
-Port Range . From (the lowest port) To (the Highest port)
-Protocol timeout (seconds) : ----For TCP enter : 86400
----For UDP enter : 600

-Map to Host port : Leave it empty -Application type: Set to None

Click **ADD Definition** to add this definition to your router.

Click the **BACK** button at the bottom page to go back to the previous menu.



Select a computer option:. device (your network device(*) IP address) or computer your want to forward.

On the **Applications** list scroll down and find the Application you just created and highlight it.

Click the **ADD** button to move it to the **Hosted Application** box at your right.

Click **DONE** button at the bottom of the screen to finish

Note : If you have multiple ports , you have to create an application for every range of ports

ZOOM

X4 5551

Enter the IP address of your router in the address bar of your browser. By default the IP address should be set to 10.0.0.3

\$	Please type y	our user name and password.
I	Site:	192.168.62.1
	Realm	Realm1
	User Name	admin
	Password	жкж
	Save this	password in your password list

You should prompt for your password. Enter your password now. By default the password is blank. Click the **Ok** button to log in to your router

			0		S			
200m)	system status	+ AUSL Status	• Basic Semp	 Advanced Setup 	> nep			
stom Status			SV	stem Stat	tue			
page displays			0,	stem otu				
iding firmware rmation, WAN and			Item		Status			
mation and a list of		ADSL Status		Showtime/	Data			
hected DHCP clients.		SAW Version:		Zoom X4 G	S Ver 1.0.1-42			
		Time		12:15:23 Thu Jan 01	15:07:33 1970			
		Time Zone:		GMT				
		Daylight Saving	Time:	OFF				
			1	WAN Status	5			
	Interface	Encapsulation	IP Address	Mask	Gateway	Lower Interface	VPI/VCI	Status
	ppp-0	PPPoA		255.255.255.255	1	aal5-0	8/35	Up
							The second se	

Click the **Advanced Setup** button at the top of your screen. You should now see the following screen.

zoom > Syst	em Status + ADSL Status	► Basic Setup → Advanced Setup	2 → Help
dvanced Setup		Advanced Setup	
ection includes a umber of options for pecialized or advanced		Configuration	
ettings. These options should be configured by sees with knowledge of	WAN Configuration	IP Filtering	Firewall
OSL and networking settings or under the	Port Settings	DHCP	NAT
direction of a technical support representative.	Bridging	IP Routing	RIP
Any changes made will not be permanent until	Dynamic DNS	Blocked Protocols	LAN
ou have committed the changes using the Write Settings to Flash outton at the bottom of	SNMP	Bridge Filter	
any configuration page.	-	Status	
or each page is available or clicking the Help icon.	ADSL Status	TCP/IP Status	ATM Status
	PPP Status	EoA Status	IPoA Status
		Administration	
	User Configuration	Diagnostics	System Log
	Firmware Update	Backup/Restore Config	Reboot
	Set Date and Time		

Click the **Advanced Setup** button at the top of your screen. You should now see the following screen

	NAT Rule - Add
NAT Rule Information	
Rule Flavor:	RDR 💌
Rule ID:	
IF Name:	ALL
Protocol:	ANY
Local Address From:	
Local Address To:	
Global Address From:	
Global Address To:	
Destination Port From:	Any other port 💌 0
Destination Port To:	Any other port 💌 65535
Local Port:	DISCARD (9)
	Save Changes Close

In the middle of this page you will see a **NAT Options** drop down box. Click the down arrow and select **NAT Rule Entry**

		NAT	Options: N/	AT Rule Entry 💌		
ule IC	IF Name	Rule Flavor	Protocol	Local IP From	Local IP To	Action
	ALL	NAPT	ANY	0.0.0.0	255.255.255.255	⊕ p Stats
Add	1 have saved 1	our changes you	must write th	e new settings to fi	ash to make them n	ermanent

Take note of the **Rule ID's** that are in use.

Usually you want these rule numbers to increment by 10. So the new rule you create should be 10 more than the largest rule number here. At the bottom of the page click **Add**. You should now see another window

	NAT Rule - Add
NAT Rule Information	
Rule Flavor:	RDR 💌
Rule ID:	
IF Name:	ALL
Protocol:	ANY 💌
Local Address From:	
Local Address To:	
Global Address From:	
Global Address To:	
Destination Port From:	Any other port 💌 0
Destination Port To:	Any other port 💌 65535
Local Port:	DISCARD (9)

Enter the following Settings

- 1. **Rule Flavor** drop down box. Select **RDR** from the list.
- 2. Enter a number in the **Rule ID** box. This number needs to be unique, so some number that was not listed on the services page.(any number not listed)
- 3. IF Name box. Select ALL
- 4. **Protocol** drop down box : Select the protocol type of the ports you are forwarding.(if you don't know select ALL)
- 5. Local Address From : Enter your local device network (*) IP address
- 6. Local Address To : Enter your local DVR Ip address
- 7. Global Address From: Enter 0.0.0.0
- 8. Global Address To Enter 0.0.0.0
- **9. Destination Port From :** Enter your lower port of your port range
- 10. **Destination Port To** : Enter the highest port of your port list .
 - a. Example 80 1080
- 11. Local Port box : Put a zero in it.
- 12. Click the **Save Changes** button at the bottom of your screen.

Once again click on **Advance setup** button at the top of your screen .Click on the **IP filter button**

Advanced Setup				IP Filt	er C	onfi	gurat	ion		
section includes a number of options for specialized or advanced settings. These options should be configured by users with knowledge of DSL and networking			Security Leve Private Defau	t Action:	one 💌	Publi DMZ	ic Default / Default Ac	action: Deny tion: Deny	- -	
direction of a technical	Rule	UE.	Apply	Disection	Rule	1. 1/5	Log	Rule	Oper.	Action
support representative. Any changes made will	ID	WF.	Inspection	Direction	Action	In VF	Option	Description	Status	(s)

The **Security Level** drop down box should be set to none.

The **Private Default Action**, **Public Default Action** and **DMZ Default Action** should all be set to *Accept*.

Click the **submit** button at the bottom of the page. Now we are going to save these changes.

Make sure to write your settings to flash, and reboot your router before the settings will take effect.

EFFICIENT (SIEMENS)

Speedstream 5100,5200, 5400, 5500

Enter the IP address of your router in the address bar of your browser. By default the IP address should be set to 192.168.254.254

? >	Please type :	your user name and password.
9	Site:	192.168.254.254
	Realm	speedstream
	User Name	1
	Password	
	Save this	s password in your password list

Enter your username and password now. By default both the username and password are blank. Click the **Ok** button to log in to your router.

Profile Login	
Profile Login	Voornamo: admin Password OK

On the main menu click **Login**. Select **admin** from the **username** drop down box. Enter the admin password in the **Password** box. Click the **Okay** button to get back to the main menu..

Click on the SETUP Menu.



Select Protocol drop down box. Then enter the port range in the **TCP/UDP Ports** box.

At the right side of the screen enter the lowest port number and highest port number should go in the box on the right.

Example TCP 80 - 1080

Click the **Redirect selected protocol/service to IP address** radio button.

Enter the **IP address** you wish to forward this service to in that box. (your network device (*) IP address)

Then click **Apply** to save your changes.

ZyXEL

Zywall1, Zywall2WE, Zywall2, Zawall10, Zywall100

Enter the IP address of your router in the address bar of your browser.



By default the IP address should be set to 192.168.1.1



You should prompted for your password. Enter your password now. By default the password is 1234. Click the Ok button to log in to your router. In the left hand menu click **SUA/NAT**.

You should now see the following menu.

Defa	ult Server		0.0	.0.0	
#	Active	Name	Start Port	End Port	Server IP Address
1	Г		0	0	0.0.0.0
2	Г		0	0	0.0.0.0
3	Г		0	0	0.0.0
4	Γ		0	0	0.0.0.0
5	Г		0	0	0.0.0.0
6	Π		0	0	0.0.0.0
7	Г		0	0	0.0.0.0
8	Г		0	0	0.0.0
9	Π		0	0	0.0.0.0
10	Г		0	0	0.0.0.0
11			0	0	0.0.0.0
		Ар	ply	Reset	

Enter the following information to open the ports:

-- Check on the **Active** check box -Name : Enter the name of your network device (Example video server) -Start Port: Enter your lower port of your list Example: opening ports from 80 to 1080 --- *Start port* : 80 --- End Port : 1080 End Port: Enter the highest port

Server IP address: Enter your network device (*) Ip address.

Repeat the procedure to open more ports if needed.

Press Apply to finish.

The firew	vall prote	ects again	ist Denia	al of Se	rvice (Do	S) attack	s when it	is enal	oled.
Eirowall	Dulor St	all 	area la II	-	IM E	ypass I	rlangle Re	ute	
n%	Rules Su	orage sp	ace in u	7%					100%
		-							
Packet D	irection:	LAN to	LAN/Zy	WALL	-				
Configur	ed rules	for this pa	acket di	rection	are displa	ayed in t	he summa	ary tab	le
Action fo	r nackets	s that don	't match	firewa	li rules.	C Block	· Forwa	ard	
Elon	a parata ti	hat don't	match t		loc	5100			
LUG	Jackets	nat uon t	match ti	nese ru	165.				
	and the second second								
# St	atus A	ource ddress	Destin Addr	ation ress	Service Type	Action	Schedule	Log	Alert
# S1	atus A	Gource ddress	Destin Addr	ation ress	Service Type	Action	Schedule	Log	Alert
# St	atus A	iource ddress	Destin Addr	ation ress	Service Type	Action	Schedule	Log	Alert
# St • En	atus A	ource ddress	Destin Addr	ation ress	Service Type	Action	Schedule	Log	Alert
# St • En Insert Move	atus S Anpty New Rul Selected	ource ddress	Destin Addr	(Rule	Service Type I	Action	Schedule (Rule)	Log	Alert r).
# St • En Insert Move Edit	atus A	ourco ddress e Before I Rule (so I Rule	Destin Addr 1 elect an	(Rule Index I	Service Type Vanber). Number).	Action	Schedule	Log	Alert r).
# St • En Insert Move Edit Delete	atus A npty New Rul Selected Selected	e Before I Rule (so Rule I Rule	Destin Addi 1 alect an	ation ress (Rulo Index I	Service Type Vanber). Number)	Action	Schedule	Log	Alert r).
# St • En Insert Move Edit Delete	atus A npty New Rul Selected Selected	o Before I Rule I Rule	Destin Addr	ation ress (Rule Index I	Service Type I	Action To 1	Schedule	Log	Alert r).
# St • - En Insert Move Edit Delete	atus A npty Now Rul Solocted Selected Selected	cource ddress e Beforc I Rule (so I Rule I Rule	Destin Addr 1 blect an Apply	(Rule	Service Type Number). Number) ⁻	Action To 1	Schedule	Log	Alert r).
# St • En Insert Move Edit Delete	atus SA npty Now Rul Selected Selected	Sourco ddress e Beforc I Rule (so I Rule I Rule I Rule	Destin Addr 1 elect an	ation ress (Rule Index I	Service Type Vumbor). Numbor)	Action Fo 1	Schedule (Rule	Log	Alert I):

UNICOM wireless

DMZ Option only

Enter the IP address of your router in the address bar of your browser.

? >	Please type your user name and password.				
3	Site:	69.239.240.241			
	Realm	NeedPassword			
	User Name	1			
	Password				
	🗖 Save this	password in your password list			
		OK	Cancel		

Enter your User name and password to access the main menu (if needed)



Click on LAN at the left side of the menu



Click on **Internet** on the **Advanced** menu at left side of the screen.



To enable the **DMZ** option, click enable on the first line.

Select a PC. Click the drop down menu at the right and locate your network device (*) IP address.

Press Save to save the settings

Click On the Status menu on the left



Write down your Internet IP address for reference. Press Restart to save the settings

GIGAFAST

EE-400-R

DMZ Option only

Enter the IP address of your router in the address bar of your browser. The default IP address is 192.168.8.1

Enter Nets	ork Password				<u>?×</u>
? >	Please type your	user name an	d password.		
8	Site: 6	9.239.240.241			
	Realm N	leedPassword			
	User Name				
	Password				
	Save this pas	sword in your	password list		
			OK	Ca	ncel

Enter your User name and password to access the main menu. By default the user name is blank and the password is **admin**.

		学館 Englist	1
		Device Info	
Device Info	Hardware Release ID	R1.06	
7 Sofus	Firmware Version	V1.94Tb	
WAN	WAN Connection Type	DHCP Client (Detached)	
LAN	Dial-up Duration	00:08:00 / 00:00:00	
Advanced	WAN MAC Address	00-90-47-00-45-8F	
Access Control	WAN IP Address	0.0.0.0	
MAC Filter	WAN Subnet Mask	0.0.0.0	
Service Time	WAN Gateway	0.0.0.0	
LAN PC Management	WAN DNS	0.0.0.0 - 0.0.0.0	
Virtual Server	LAN MAC Address	00-90-47-00-45-90	
DMZ	LAN IP Address	192.168.8.1	
Auto 2-Way Applications	DHCP Server	192,168,8,17 - 128	On
Dynamic DNS		TX0	(
UPnP	WAN Traffic(Bytes)	Rx0 Duration 00:32:45	Clear

In the menu on the left hand side of your screen, click **Advanced**. In the menu under Advanced click the **DMZ** link.



By default the DMZ page is disabled. Click the **Enable** radio button.

Enter your Network device (*) IP address on the DMZ menu

Then click the **Save and Restart** button.

Appendix A

HOW TO ACCESS THE ROUTER CONFIGURATION SCREEN.

The Router configuration is the most important step in the process to view the cameras on the Internet. Most of the routers are similar on the access, graphics interface and configuration. The first step to access the router configuration screen it is to know the router IP address or "Gateway". Usually the Web Browser is commonly used to access the router configuration.

Type the name of a program, folder, document, o Internet resource, and Windows will open it for yo

OK

? X

•

Cancel Browse.

If you don't know what is your router IP address (gateway) do the following procedure:

Open: and

- Press on Start
- Click on RUN
- Type **cmd** and click OK

DOS command prompt window



In the DOS window type ipconfig and press ENTER

The information from your DOS prompt will show you the information related to your network. This information will be:

- a- Your computer IP address.
- b- Your Subnet mask
- c- Your Default gateway.

This information includes the **Default Gateway IP address**. This is the information we need to access the **router menus.** Write down this information for later use.

Once you have the router IP address (gateway), open the Internet Explorer and type in the address bar <u>http://192.168.1.1</u> and press ENTER



You will see the **LOGIN** screen. Enter the **user name** and **password** to access the Router menus and configuration. (if needed).

Appendix B

SELECTING AND ASSIGNING AN IP ADDRESS FOR YOUR NETWORK DEVICE.

Selecting an IP address for your **network device** (DVR, Video server, PC) is important. With the IP address you will be able to communicate on the Network properly. To obtain an IP address for your **Network device** try the following options.

1. FROM THE IT ADMINISTRATOR.

1. FROM THE IT ADMINISTRATOR. Medium to large networks are administrated usually by an IT Administrator. In many cases is recommended to ask what IP address can be used on your **network device** (*) (see page 5 for more information)

2. THE "GUESSING " METHOD"

If it is difficult to get and IP address for the network , this method will help you to find an IP address easily for your **network device (*)**.

2.1. ADDING A NUMERIC VALUE. First at all, we have to get some information from a computer connected to the same network. See **Appendix A** to see how to get the information off the computer.

Examples.

If the computer connected on the same network has an IP address (example) as 192.168.1.68, try adding **5** numbers to the last octet (example, -> 68 + 5 = 73). The resulting number will be 192.168.1.73.

2.2 CHECKING THE IP ADDRESS. Once we have an IP address we want to try, we have to check if someone is using the IP address before we assign it to the Network device (*).

Go back to the computer at the DOS prompt windows according with procedure on Appendix A

On the DOS prompt Type the following command :

ping 192.168.1.73

press ENTER

C:\WINNT\system32\cmd.exe
Microsoft Windows 2000 [Version 5.00.2195] (C) Copyright 1985-2000 Microsoft Corp.
U:∖>ping 192.168.1.73
Pinging 192.168.1.73 with 32 bytes of data:
Request timed out. Request timed out. Request timed out. Request timed out.
Ping statistics for 192.168.1.73 : Packets: Sent = 4, Received = 0, Lost = 4 (100% loss), Approximate round trip times in milli-seconds: Minimum = 0ms, Maximum = 0ms, Average = 0ms
U:\>

If you receive a "**reply from**" that means somebody is already using this IP address on the network.

(*) See page 5 for more details...

Let's try to use another IP address adding another number to the last octet (lets add 4 numbers, 73 + 4 = 77) and try again. Example <u>192.168.1.77</u>

Type : ping 192.168.1.77 press ENTER



If you get a **"request timed out"**, the message means nobody is using the IP address and this means you can use it on your **network device**.

2.3. APPLYING THE SETTINGS. Once we selected the new IP address <u>192.168.1.77</u>, we will

need to use the same **subnet mask** and the same **default gateway** from the computer. In addition to these values we need to make sure what port needs to be assigned to work properly according with the listed ports of your network device. (See page 7 for a complete list).

The final values (example) for the Network device will be:

EXAMPLE

IP address	192.	168.	1	77
Subnet mask	255	255	255	0
Default Gateway	192.	168	1	1

Once you assigned the **IP address** on your network device . Perform a **ping** command to the device according with the ping procedure, If you have a **reply** from your respective device **IP address** that indicates your the connection is working properly on the LAN.

🖾 C:\WINNT\system32\cmd.exe	
U:\>ping 192.168.1.77	
Pinging 192.168.1.77 with 32]	oytes of data:
Reply from 192.168.1.77: bytes Reply from 192.168.1.77: bytes Reply from 192.168.1.77: bytes Reply from 192.168.1.77: bytes	=32 time<10ms TTL=64 =32 time<10ms TTL=64 =32 time=1ms TTL=64 =32 time<10ms TTL=64
Ping statistics for 192.168.1 Packets: Sent = 4, Receiv Approximate round trip times Minimum = Øms, Maximum =	.77: ed ='4, Lost = 0 (0% loss), in milli-seconds: 1ms, Average = Oms
U:>>	

TROUBLESHOOTING

PROBLEM	SOLUTION
I can't access the router configuration screen	 Check your cable connections Check if you entered the correct router (gateway) IP address Check if your computer has a Firewall blocking the IP address
I can access my router configuration screen but I don't have internet connection	 If you are using a DSL modem, check if you connection is down. Call your ISP to solve the problem.
I opened all the ports on the router and I can't still connect to my remote Network device (DVR, video server)	 Check your DSL modem, make sure your connection is UP. Check the information on your network device has the correct information: <i>IP address, subnet mask and default gateway</i> according with the Appendix A. Check if you opened the correct ports.(see page 7) Check your cable connections. Call your router manufacturer.
I installed the Network viewer program and entered the WAN IP address I still can't see my cameras	 Check if your computer is using a Firewall application like Norton Firewall. Check if you configured the correct port to receive the data from your remote location. If your network device support web browser, try using the IP address and port (if needed) to see the cameras. If you can watch the cameras on your Internet browser, the problem could relate to an Internal firewall application. Check if your password is correct. Check if your wan IP address is correct

It's all on the web



- **User Manuals**
- (P) Quick Start Guides

- Specification Sheets
- 💻 Software Upgrades
- **Constant Series** Firmware Upgrades



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