

## **NETWORK SET UP GUIDE FOR**

RVH1004/US411 RVH1008/US811 RVH1016/US611

1<sup>st</sup>G/2<sup>nd</sup>G/3<sup>rd</sup>G UGI H.264 DVR

SUPPORTING ROUTER DLINK LINKSYS NETGEAR Belkin

Network Setup- p1

### Introduction

Thank you for purchasing our RVH series DVR. Welcome to this step by step network set up guide for our ICatch/Rayvision DVRs, US411/RVH1004, US811/RVH1008, and US611/RVH1016.

Following this guide you should be able to connect your DVR to the Internet, and then you can view your DVR anytime anywhere on any computer.

#### STEP-1 Activate DDNS Service.

All of our RVH series DVRs provide free Full DDNS service, allowing you to connect your system to the Internet, even if you don't have Static IP address.

**A.** Every DVR comes with a software CD like the one shown below.



You can also find the user manual to the DVR inside this CD quick start guide and central management software.

On the CD there is a sticker with the username and password. Each DVR is unique, so do not use the same username or password you've already used before.

B. To start visit the following website to activate your Free DDNS service using the provided user name and password on the CD sticker :

http://i-dvr.net/logon.asp

At the website, key in the **user name and password indicated** on the CD sleeve, and then click "Logon".

| User Name: | ic000001           |        |
|------------|--------------------|--------|
| Password:  | •••••              |        |
| Pass       | word is case sensi | itive. |

C. After you are log in, go to the "Add New Record" section, and enter a name of your choosing in the blank space under "host.Domain". The "IP" section displays your current dynamic IP address. After you enter a name of your choosing, click "insert" under "actions".

| r example, "<br>erefore, IE a | hostname"<br>ddress will be | e "hostname.i | -dvr.net"              |                        |         |
|-------------------------------|-----------------------------|---------------|------------------------|------------------------|---------|
|                               |                             |               |                        |                        |         |
|                               |                             |               |                        |                        |         |
| dd New Record                 | T                           |               |                        |                        |         |
|                               | host.d                      | omain         | IP                     | actions                |         |
|                               | hostname                    | .i-dvr.net    | 220.135.105.67         | insert                 |         |
|                               |                             |               |                        |                        |         |
|                               |                             | System        | n will automatically s | how the current compu  | iter IF |
|                               |                             | 14 Ala a      | DVP ID is known w      | w con tune it in the e |         |

After you click "insert", your complete host domain will be displayed in the "Host Manager" section. Your complete host domain will be the name of your choosing plus .i-dvr.net.



Please note, remember to log in to this website once in a while and click on the "update" bottom under "actions". This will refresh your dynamic IP address with the host to ensure your host domain is kept updating with your dynamic IP.

#### STEP- 2 Set up your DVR

Now we need to set up the DVR so it will enable the DDNS service.

**A.** Enter DVR  $\rightarrow$  Main Menu  $\rightarrow$  Network Setup  $\rightarrow$  DDNS. Activate DDNS functions and input related information on the screen.

| N                      | ETWORK | SETUP |   |     |    |     |   |       |
|------------------------|--------|-------|---|-----|----|-----|---|-------|
| ADSL D                 | нср    |       |   | LA  | N  |     |   |       |
| IP Address:            |        | 192   | 0 | 168 | 0  | 1   | 0 | 88    |
| Subnet Mask:           |        | 255   | e | 255 | 0  | 255 | 0 | 0     |
| Gateway:               |        | 192   | ö | 168 | a  | 1   |   | 1     |
| DNS:                   |        | 168   | 0 | 95  |    | 1   |   | 1     |
|                        |        |       |   |     |    |     |   |       |
| HTTP Setup             |        |       |   |     |    |     |   |       |
| DDNS Setup             |        |       |   |     |    |     |   |       |
| Mail Setup             |        |       |   |     |    |     |   |       |
| MENU] OK; [ESC] Cancel |        |       |   |     | OK |     | C | ancel |

Click on "LAN" so it's dark red and in the panel below, enter the following information:



**B.** Enter DVR  $\rightarrow$  Main Menu  $\rightarrow$  Network Setup  $\rightarrow$  "HTTP Setup" on the left hand side; check the top box for "Enable HTTP Service", then change the "Port" to (8888) Click Ok to save.



**C.** Enter DVR  $\rightarrow$  Main Menu  $\rightarrow$  Network Setup  $\rightarrow$  DDNS. Activate DDNS functions and input related information on the screen.

|  |  | Key in the information website http://i-dvr.net/ | you obtained earlier on our | <sup>·</sup> host domain |
|--|--|--|-----------------------------|--------------------------|
|  | 1000000 <b>x</b><br>0000000 <b>R3</b>                | P20 90%  | 11/16/2009<br>17:17:26      |                          |
|  |  | DDNS SETUP                                       |                             |                          |
| Check to Enable<br>DDNS without<br>Enabling DDNS<br>Service will not<br>work | Enable DDNS<br>Host Name:<br>User Name:<br>Password: | ez-dns   |                             |                          |
|  | [MENU] OK; [ESC] Can                                 | icel 💮 O   | Cancel                      |                          |
|  |  |  |                             |                          |

STEP-3 Set up your Router

Router is the bridge between your DVR and the Internet. We have already set up both the DVR and the Internet, now we need to connect them with the router.

Due to the various brand and model of routers in the market, this guide might not cover all the aspect of setting your router. If you have any problem following the guide or need assistance, please **consult a Network specialist**.

This guide is mainly going to cover DLINK, LINKSYS and NETGEAR routers.

Before you set up your router, please make sure that your computer and DVR are hardwired connected to the router (not wirelessly).

#### A. DLINK Router

In the address bar, type in default gateway "Http://192.168.0.1" and you will see the below image. Click "Log In" without any password if you never change the password before.



In the "ADVANCED" tab on the top, click on the "VIRTUAL SERVER" on the left, and you will be prompted with the below image. In the name area, type in any name you want to give to your DVR, in my example, I use "DVR". Key in the "IP ADDRESS" we previously set in the DVR, in my example, I use "192.168.0.212". Enter both the "Public Port" and "Private Port" the same port we set in the DVR before, in my example, I use "8888". After you finish, check the box at the front and click "Save Settings" on the top to exit.

| Product Page: DIR-62 | 5               |  |   |                    | Hard                | ware Version: C1  | Firmware Version: 3.04                                   |
|----------------------|-----------------|--|---|--------------------|---------------------|-------------------|--|
| D-Lini               | k               |  |   |                    |                     |                   | $\prec$  |
| DIR-625              |                 | SETUP                                    | ADVANCED  | TOOLS              |                     | STATUS            | SUPPORT  |
| VIRTUAL SERVER       | VIRT            | UAL SERVER                               |   |                    |                     |                   | Helpful Hints  |
| PORT FORWARDING      | The V           | irtual Server option                     | n allows you to define a si                     | ngle public port   | on your router fo   | or redirection    | Check the Application                                    |
| APPLICATION RULES    | to an<br>online | internal LAN IP Ad<br>services such as f | dress and Private LAN por<br>TP or Web Servers. | t if required. Thi | s feature is useful | for hosting       | for a list of predefined                                 |
| QOS ENGINE           | Save            | Settings Don't                           | Save Settings                                   |                    |                     |                   | one of the predefined<br>server types, click the         |
| NETWORK FILTER       |                 |  |   |                    |                     |                   | arrow button next to the                                 |
| ACCESS CONTROL       | 24\             | IRTUAL SERVI                             | ERS LIST  |                    |                     |                   | the corresponding field.                                 |
| WEBSITE FILTER       | -               |  |   | Port               | Traffic Type        |                   | You can select a computer<br>from the list of DHCP       |
| INBOUND FILTER       |                 | Namo                                     |   | Public             | Protocol            | Schedule          | dients in the Computer<br>Name drop down menu,           |
| FIREWALL SETTINGS    |                 | REMOTE DESKTOP                           | Application Name                                | 3389               | TCP T               | Always 💌          | or you can manually enter<br>the IP address of the       |
| ROUTING              | ~               | IP Address                               |   | Private            |                     | Inbound           | computer at which you<br>would like to open the          |
| ADVANCED WIRELESS    |                 | 192.168.0.xxx                            | Computer Name                                   | 3389               | 6                   | Filter            | specified port.  |
| WI-FI PROTECTED      |                 | Name                                     | <<  | Public             | Protocol            | Schedule          | Select a schedule for when<br>the virtual server will be |
|                      | -               | FTP                                      | Application Name                                | 21                 | TCP 💌               | Always 💌          | enabled. If you do not see<br>the schedule you need in   |
| ADVANCED INCINIONA   | J•              | IP Address                               | <<  | Private            |                     | Inbound           | the list of schedules, go to<br>the Tools → Schedules    |
|                      |                 | 192.168.0.xxx                            | Computer Name                                   | 21                 | 6                   | Allow All         | screen and create a new<br>schedule.                     |
|                      |                 | Name                                     |   | Public             | Protocol            | Schedule          | Select a filter that                                     |
|                      | V               | ISSH SERVER                              | Application Name                                | 22                 |                     | Always 📩          | that can access this virtual                             |
|                      |                 | IP Address                               |   | Private            |                     | Inbound<br>Filter | server to hosts that you<br>trust. If you do not see the |
|                      |                 | 1145.199.0'xxx                           | Computer Name                                   | ·]  22             | 6                   | Allow All         | filter you need in the list<br>of filters, go to the     |



#### **B. LINKSYS Router**

In the address bar, type in default gateway "Http://192.168.1.1" Click "Log In" with blank Username and "admin" for Password if you never change the password before.

| 7                     |                     |   |
|-----------------------|---------------------|---|
| WRT300N<br>User name: | 6                   | ~ |
| Password:             | Remember my passwor | d |
|                       | Remember my basswor | 0 |

In the "Applications & Gaming" tab on the top, choose "Port Range Forward".

Under "Application", enter a name for your DVR.

In my case, I use "**DVR**". Enter "**8888**" to "**8888**" under "Start – End port". In the IP Address section, enter "**212**" as we set in the DVR. Check the "Enable" box then click "Save Settings".

| LINKSYS <sup>®</sup><br>A Division of Cisco Systems, Inc. |                |         |      |              |            |             |                          | Firmware \                          | /ersion: v7.00.7 Beta                    |
|---|----------------|---------|------|--------------|------------|-------------|--------------------------|-------------------------------------|--|
| Applications  |                |         |      |              |            | Wir         | eless-G Broad            | band Router                         | WRT54G                                   |
| & Gaming  | Setup          | Wireles | s    | Security     | Ac<br>Rest | cess        | Applications<br>& Gaming | Administration                      | Status                                   |
|   | Port Range For | ward    | Port | t Triggering | 1          | DMZ         | l QoS                    |                                     |  |
| Port Range Forward  |                |         |      |              |            |             |                          | Port Range F                        | orwarding:                               |
|   |                |         |      | Port R       | ange       |             |                          | Certain applica<br>to open specif   | ations may require<br>ic ports in order  |
|   | Application    | Start   |      | End          | Protocol   | IP Addres   | s Enable                 | for it to functio<br>Examples of th | on correctly.<br>Tese applications       |
|   | PS3A           | 80      | to   | 80           | TCP 💌      | 192.168.1.1 | 08                       | include server<br>online games.     | s and certain<br>When a request          |
|   | PS3B           | 443     | to   | 443          | TCP 💌      | 192.168.1.1 | 08                       | for a certain p<br>the Internet, th | ort comes in from<br>e router will route |
|   | PS3C           | 5223    | to   | 5223         | Both 💌     | 192.168.1.1 | 08                       | specify. Due to                     | o security<br>may want to limit          |
|   | PS3D           | 3478    | to   | 3478         | UDP 💌      | 192.168.1.1 | 08                       | port forwardin<br>ports you are     | ig to only those<br>using, and           |
|   | PS3E           | 3479    | to   | 3479         | UDP 💌      | 192.168.1.1 | 08                       | uncheck the E<br>after you are f    | nable checkbox<br>finished.              |
|   | PS3F           | 3658    | to [ | 3658         | UDP 💌      | 192.168.1.1 | 08                       | More                                |  |
|   |                | 0       | to   | 0            | Both 💌     | 192.168.1.0 |                          |                                     |  |
|   |                | 0       | to   | 0            | Both 💌     | 192.168.1.0 |                          |                                     |  |
|   |                | 0       | to   | 0            | Both 💌     | 192.168.1.0 |                          |                                     |  |
|   |                | 0       | to   | 0            | Both 💌     | 192.168.1.0 |                          |                                     |  |
|   |                |         |      |              | Save Set   | tings Canc  | el Changes               |                                     | Cisco Systems<br>aulliuaaulliua          |

**C. NETGEAR Router** 

In the address bar, type in default gateway "Http://192.168.1.1" and click "Log In" with "admin" for Username and "admin" for Password if you never change the password before, then you will see the below screen.

| 7                     |    |        |
|-----------------------|----|--------|
| WRT300N<br>User name: | £  | ~      |
| Password:             |    | ď      |
|                       | ОК | Cancel |

Scroll down to the "Advanced" heading at the lower-left corner of the window. Click on the link labeled as "Port Forwarding" underneath the "Advanced" heading.

Click on the "Service and Name" button. Choose the "HTTP" option from the drop-down.

Click inside the "Server IP Address" text box and type in the IP address that we set earlier in the DVR, in my case, I use

"192.168.1.212". Click on the "Add" button.

Click on "Save" and then click on "Logout." Make sure you set the "Start Port" and "End Port" to "8888" as we set in the DVR.



### **D. Belkin Router**

Open a Web Browser on your computer. Please type in Http://192.168.2.1 In the address bar of the Web Browser, Click Login in the upper right hand corner of the page. The router does not ship with a password, so just click submit.



Click on Virtual Servers under Firewall in the menu on the left



Enter the following information

Click Enabled

Type "**DVR**" in description of the application, Type the "**8888**" for both of the inbound port fields

Select "**BOTH**" for the Type, Private IP address: Enter "**212**", Type the "**8888**" both of the Private port fields.

|    | Enable | Description | Inbound port | Туре  | Private IP address | Private port |
|----|--------|-------------|--------------|-------|--------------------|--------------|
| 1. |        |             |              | тср 💌 | 192.168.2.         | · · ·        |
| 2. |        |             |              | тср 💌 | 192.168.2.         | -            |
| з. |        |             |              | тср 💌 | 192.168.2.         |              |

Click the Apply Changes button.

#### STEP- 4 Connecting the DVR to the Internet

Now load up your Internet Explorer and in the address bar, type in "http://host domain:port number", in my example, it is "http://Rayvision.i-dvr.net:8888" and press Enter key.

| 4                       |                      |
|-------------------------|----------------------|
| 1123599016              |                      |
| User name:<br>Bassword: | <u>s</u>             |
|                         | Remember my password |

You should be prompted with "User Name and "Password". Now you need to type in the User Name and Password to the DVR, not the information on the CD sleeve.

The default User Name is "admin" and the Password is "123456", and then hit the Enter key.

Then you will see the following page. Now you can either choose the first option "Internet Explorer 6, 7, 8" or "Download DVR Remote Desktop" for PC or MAC.



Choose "Internet Explorer 6, 7, 8" if you want view the DVR in Internet Explorer.

This is suggested if you are using a public computer. Choose "Download DVR Remote Desktop" if you want to save a copy of the viewing software onto your computer, recommended if you are using your personal computer.

| 2 Lo | gin      |               | E | 3 |
|------|----------|---------------|---|---|
| DVR  | Address: | 192.168.0.212 | ~ |   |
| DVR  | Port:    | 86            |   |   |
| User | name:    | Admin         |   |   |
| Pass | word:    | •••••         |   |   |
|      | 1        | OK Cancel     | 1 |   |
|      |          |               | J |   |

Enter the "DVR Address" as the Host Domain; my example is "Rayvision.i-dvr.net". Enter "Port" as "8888". Enter the default Username as "admin" and "Password" as "123456" if you haven't changed it in the DVR setting. Click "Ok" to connect.

Congratulation, you have successfully connected your DVR to the Internet.

You will be able to control the DVR anywhere and anytime as if you are in front of the actual DVR.

#### STEP-5 Using Static IP Address

If you have Static IP address, please skip step one

# Here is the DSL setup Quick check list without it your remote view will not work;

- 1- Make sure your DSL Router/Modem is bridged, if your DSL modem/router not bridged you have two routers back to back and your remote view will not work.
- 2- Make sure the connection type setup in your Router is set to PPOE if it is not & you have internet connection that mean your DSL Modem/router is not bridged correctly and your Network remote view will not work.
- 3- Make sure the Router port forwarding is set correctly and is active with the same port number as the DVR (under HTTP setup) with the same IP address as the one you had assign to your DVR if you are off by one number or one zero your remote view will not work.
- 4- Make sure the DVR Network is set to LAN and the IP address match the port forwarding IP in your Router and the Gateway match he IP address to the Router itself.
- 5- Make sure HTTP server is enabled (under network) and the port number matches the port number range in the port forwarding in the router.

# Skipping any of the listed steps will result in your DVR not been viewable on line

If you still have any question regarding connecting your DVR to the Internet and you cannot find the answer you need in this guide, please consult a network specialist for assistance.