Thank you for purchasing our product.

This manual is applicable to DDNS Management System. This manual may contain several technically incorrect places or printing errors, and the content is subject to change without notice. The updates will be added into the new version of this manual. We will readily improve or update the products or procedures described in the manual.
1. Introduction

DDNS Management System is Dynamic Domain Name Server of Sparsh. It provides DDNS service to all Sparsh devices like DVR and IP camera which need to work in public network.

- **DDNS Express Service**: without any account on portal
- **DDNS management System**: managed with user

For proper use of the router, strictly follow the steps 1 to 5. Configure your router, computer and DVR equipments as described in the following steps.

**Step 1. Connecting Cables**
1. Connect the internet service line (xDSL/Cable Modem) to your router’s Internet (WAN) port.
2. Connect Ethernet cables from your computer and DVRs to the LAN (1 to 4) ports of the router.

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**Step 2. Connecting your local computer to the router**

**Step 3. Connecting DVR to the router**

**Step 4. Connecting the router to the internet service line**

**Step 5. Configuring router’s port forwarding**

**Step 6. Accessing DVR using DDNS service in dynamic IP environment**
Step 2. Connecting your local computer to the router

Step 2.1 Connection Setup
1. Click [Start] on your computer.
2. Open the <Control Panel><Network Connections>. The “Network Connections” window appears.
3. Select <Local Area Connection> and right click on it.
4. Select <Properties>.
5. “Local Area Connection Properties” window appears.
6. Select <Internet Protocol (TCP/IP)> and click [Properties] button.
7. Select <Obtain an IP address automatically> and <Obtain DNS server address automatically>, and click [OK] button.
8. Click [OK] button to finish the setup.

Step 2.2 Confirming the Connection
1. Click [Start] on your computer.
2. Click [Run…].
3. On the appeared command dialog, type ‘cmd’ in the <Open> box and click [OK]
4. In the DOS command window [cmd.exe], type ‘ipconfig’ and press [Enter].

5. Run the Internet Explorer, and enter the <Default Gateway> IP address found from the “cmd.exe” window into the address field, and press [Enter].
6. The router’s login page will appear if all connections are properly established.

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**Step 3. Connecting DVR to the router**

1. Go to main menu and then go to system
2. Set DVR IP address
3. Enter the <IP>.
4. The IP address consists of 4 fields, and the first 3 fields should be same to those of <Default Gateway> address of your computer which can be found in Step 2, and the last field should be unoccupied number (between 2 and 254).
   e.g. IP : 192.168.1.200
5. Enter the <Gateway> and <Subnet Mask> as same to those of your computer found in Step 2.
   Set the <Port(TCP)> and <HTTP Port> by referring to next page.
6. Set mobile port for mobile streaming Mobile port under main menu<System<NetService <Mobile
Step 3.2 Checking DVR connection on your computer

1. Run the Internet Explorer, and enter the <IP> and <HTTP Port> of the DVR into the address, and press [Enter]. Example: http://192.168.1.200:80
2. If the connection establishes properly, the Web Viewer screen appears.
3. If the connection fails, check Steps 1, 2 and 3 to confirm the connection setup.

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What is port?

As usual, the <HTTP Port> uses port 80. If the port is not set, it is automatically regarded to 80 in http protocol. For example, http://www.yahoo.com and http://www.yahoo.com:80 are regarded the same. Hence, if the <HTTP Port> has been changed other than 80, you need to specify the address as: http://<IP>:<HTTP Port>

Example: http://192.168.1.200:80 to connect to the DVR using internet browser. (Only when the port is set to 80, you can omit the port in the address.) It is recommended to set <HTTP Port> to port number between 1024 and 65535. If the port is not set to 80, accessing can be restricted depending on your service provider’s security policy or Firewall configuration.

DVR uses <HTTP Port> and <Port(TCP)> for web connections. <HTTP Port> is used for accessing DVR by using an internet browser. <Port(TCP)> is used for receiving video from DVR to internet browser. When configuring multiple DVR, <HTTP Port> and <Port(TCP)> settings should be configured differently for each device.

DVR #1 Port (TCP): 4520, HTTP Port: 80
DVR #2 Port (TCP): 50000, HTTP Port: 2000

Step 4.1 Port forwarding guide by router

Run the Internet Explorer and enter the <Default Gateway> of the computer, which is the router’s IP address found in Step 2, into the address field and press [Enter].

Step 4.1-Case 1. D-LINK DIR-330

1. Select <Advanced>. Set the <HTTP Port> for port forwarding. Check the <Checkbox> to select it.
2. Enter a name for the DVR port in the <Name> field. Example: DVR1
3. In the <Public Port>, enter the <HTTP Port> defined in Step 3, e.g. 80~80
4. In the <Private Port>, enter the <HTTP Port> defined in Step 3, e.g. 80~80
5. In the <IP Address>, enter the DVR’s IP address defined in Step 3, example 192.168.1.200
6. For the <Traffic Type>, select <Any>.
7. Similarly do port forwarding for media port (34567~34567) & Mobile port (34599~34599).
Step 4.1-Case 2. NETGEAR 614SS

1. Click <Port Forwarding / Port Triggering> in the left menu.
2. Select <Port Forwarding>.
3. Set the <HTTP Port> for port forwarding.
   - Set the <Add Custom Service> for port forwarding.
   - Enter a name for the DVR port in the <Service Name> field, e.g. DVR1
   - Enter the <Starting Port> and <Ending Port> while Matching to that of <Http Port> defined in Step 3. e.g. 80
   - In the <Server IP Address>, enter the DVR's IP address defined in Step 3. Example: 192.168.1.200
   - Click [Apply] button to finish the setting.

4. Set the <Media Port> & for port forwarding follow similarly step as for HTTP.
5. Similarly Set the <Mobile Port> & for port forwarding follow similarly step as for HTTP.

Step 4.1-Case 3. LINKSYS WRT54G

1. Click <Applications & Gaming>.
2. Set the <http Port> for port forwarding.
   - Enter a name for the DVR port in the <Application> field, e.g. DVR1
   - In the <Start> and <End> fields, enter the <HTTP Port> defined in Step 3. e.g. 80
   - Select [Both] for the <Protocol>
   - In the <IP Address>, enter the DVR's IP address defined in Step 3. e.g. 192.168.1.200
   - Check the checkbox of <Enable> column for the specified port
3. Set the <Port (media port)> for port forwarding.
   - Enter a name for the DVR port in the <Application> field, e.g. DVR2
   - In the <Start> and <End> fields, enter the <Port(media)> Defined in Step 3.
   - Select [Both] for the <Protocol>
   - In the <IP Address>, enter the DVR's IP address defined in Step 3. E.g. 192.168.1.200
   - Check the checkbox of <Enable> column for the specified port.

4. Click [Save Settings] button on the bottom.
5. Once finished, completion screen appears.
Step 5.1 - Case 4. BELKIN F5D8236-4

1. Click <Firewall>-<Virtual Servers> on the left menu.
2. Set the <HTTP Port> for port forwarding.
   - Check the <Enable> checkbox to mark selected.
   - Enter a name for the DVR port in the <Description> field. e.g. DVR1
   - In the <Inbound port>, enter the <HTTP Port> defined in Step 3. e.g. 80
   - For the <Type>, select [Any].
   - In the <Private IP address>, enter the DVR's IP address defined in Step 3. Example: 192.168.1.200
   - In the <Private port> field, enter the <HTTP Port> defined in Step 3. Example: 80

3. Set the <Media Port> & for port forwarding follow similarly step as for HTTP.
4. Similarly Set the <Mobile Port> & for port forwarding follow similarly step as for HTTP.

5. Once finished, click [Apply Changes] button.

Step 5 Accessing DVR using DDNS service

Since the router's WAN IP address may vary in xDSL/Cable connections hiring dynamic IP allocations, DDNS (Dynamic Domain Name Server) service is provided for accessing the DVR with fixed DDNS address in dynamic IP network environments.

Step 5.1 DVR DDNS configuration

Go to main menu of DVR, click system and then click Net services.

1. Click DDNS and select SPARSH DDNS from drop down menu.
2 Enable DDNS
3 Create a domain name for your DVR e.g. demo.spars-ddns.com
4 Leave DDNS user name & password fields empty and click register to register your DVR on Sparsh DDNS.

5 After successful registration you will get below message on DVR screen.

Congratulations you DVR is now registered on sparsh DDNS management system and you can open your DDNS account and manage DVR.

**Step 5.2 Accessing DVR using DDNS address**

1. Run the Internet Explorer and enter the DDNS address found in Step 5.1 into the address field and press [Enter].
2. DVR’s Web Viewer screen appears.
3. If failed with accessing, go to Step 5.1 and check the Settings again.

**Step 5.3 Accessing DVR using DDNS Management System:**

**5.3.1 Login Page**
Open Internet Explorer
In the address bar, www.sparsh-ddns.com

**5.3.2 Register User**
If you don’t have an account, please click “Sign Up” to create a new user. Please fill all mandatory fields and click Sign Up.
After sign up below page will appear.

5.3.3 Activate User
In order to activate user, please check your email and click on the confirmation link sent on your email.

Note: if you do not receive activation email please click “resend confirmation mail” at DDNS home page.
Open email and click on confirm my account.

5.3. 4 Login DDNS Management System
After creating a user, enter in User name and password, and then click “Login” to enter DDNS Management System.

Note:
Forgot password: incase user forgot his password, he can retrieve it by clicking forgot password and following password retrieving instructions.

Unlock password: After five wrong password attempts your account will be locked, and you can unlock by following unlock instructions.

Access to device
Click on device URL to access you DVR.
After following URL you will be able to open your DVR.

Device Status
Device status shows the status of device during last update.