

Introduction

Some IQ™ Network Communication Cartridges (NCC-EN, NCC-WF, NCC-3G) require router Port Forwarding setup to allow communication between your computer and the controller.

Port Forwarding

The IQ Central Control software communicates with each controller on the network by sending and receiving data through an assigned IP address and a specific port. This information must be entered in the Port Forwarding section of the router setup utility.

Router IP Addresses

To enable port forwarding on your router, you will need the router IP address. To verify or determine the IP address of your router:

1. Open a Command Window by selecting the Windows Start button and typing "cmd" in the search window.
2. At the prompt, type **ipconfig /all** and press Enter.
3. The router IP address will be the same as the Default Gateway.

Online Resources

For more information, refer to the IQ Help files, the Resources section of the IQ website or view the **IQ Platform Satellite Communication Setup** video.

<https://iqweb.rainbird.com/iq>

DLink Router Setup

1. Open a web browser (IE, Firefox, etc.) and enter the router's IP address in the address bar. (The default IP address for DLink routers is normally 192.168.0.1.)
2. Enter the User Name and Password for the router. The default login is "admin" for username and password is left blank.

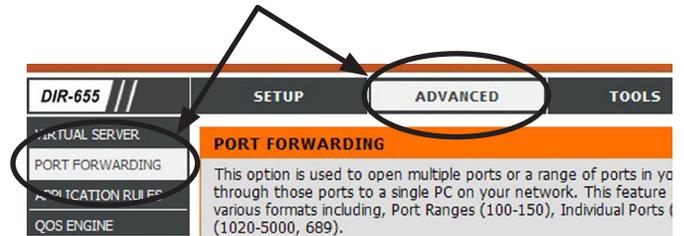
LOGIN

Log in to the router

User Name :

Password :

3. Select the Advanced tab, and then the Port Forwarding option on the left.



4. Create a custom entry by adding the following information in each field:
 - Name: Enter Rainbird IQ in the Name field. (Do not use any of the pre-configured entries in the dropdown menu.)
 - IP Address: Enter any valid IP address that will not conflict with other devices on the network. (Devices are usually listed on the Device Info page under the Status tab. Do not use any address listed in this table.)

LAN COMPUTERS	
IP Address	Name (if any)
192.168.0.100	newcpu

- Ports to Open: Enter 50005 in the TCP field.
- Do not change the Schedule and Inbound Filter fields.
- Check the Enable box on the left.

PORT FORWARDING

This option is used to open multiple ports or a range of ports in your router and redirect data through those ports to a single PC on your network. This feature allows you to enter ports in various formats including, Port Ranges (100-150), Individual Ports (80, 68, 888), or Mixed (1020-5000, 689).

24 -- PORT FORWARDING RULES

	Name	Ports to Open	Schedule
<input checked="" type="checkbox"/>	Rain Bird IQ	TCP 50005	Always
	IP Address	UDP 0	Inbound Filter Allow All
	192.168.0.75	TCP	Schedule

5. Select the Save Settings button.

6. Use the NCC Configurator software to assign the IP address and port number entered in Step 4 to the NCC cartridge installed in the controller.

Then add the local IP address of your router (as seen from other devices on the network) to the Default Gateway field. (Refer to the **Router IP Addresses** section on Page 1.)

The screenshot shows the 'Rain Bird IQ™ NCC Configurator - Ethernet NCC' window. The 'COM Port' is set to 'COM1'. The 'NCC Type' is 'NCC-EN', 'Firmware Version' is 'v1.35', and 'Modem Version' is 'VERSION 0.22 Nov 30 2010 17:24:25 E'. The 'Configuration Name' is 'NCC-EN 001'. The 'IP Address' is '192.168.0.75', 'Port Number' is '50005', 'Subnet Mask' is '255.255.255.0', 'Default Gateway' is '192.168.1.1', and 'MAC Address' is '00:08:00:D3:91:DD'. A 'Read Configuration' button is visible.

- !** **NOTE:** Refer to the **IQ v2.0 Central Control System NCC Configurator Instructions** document found on the Rain Bird website:

http://www.rainbird.com/documents/turf/man_IQ_NCC_Configurator_Instructions.pdf

7. Use the IQ Central Control software to set up a Satellite using the external IP Address of your router and the Port number 50005.

The screenshot shows the 'Satellite' configuration window. The 'Configuration' tab is active. The 'Satellite Name' is 'Satellite 001'. The 'Type' is 'LXME version 3.55, NCC-EN version 1.35, CIC Modem Version VERSION 0.22 Nov 3'. The 'Connection Type' is 'IP Connection'. The 'Phone Number / IP Address' is '68.8.5.216', 'Port' is '50005', and the 'Rain Bird cellular service' checkbox is unchecked. The 'Description' field is empty.

Netgear Router Setup

1. Open a web browser (IE, Firefox, etc.) and enter the router's IP address in the address bar. (The default IP address for Netgear routers is normally 192.168.1.1. You can also type routerlogin.net.)
2. Enter the User Name and Password for the router. The default login is "admin" for username and password is "password".

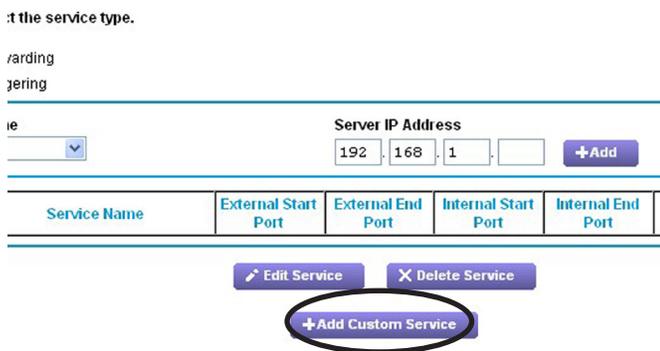


3. Select the ADVANCED tab, then Advanced Setup on the left, and then Port Forwarding/Port Triggering.



4. Select the Add Custom Service button.

Port Forwarding / Port Triggering



5. Create a custom entry by adding the following information in each field:
 - Service Name: Enter Rainbird IQ in the Name field.
 - Service Type: Select TCP/UDP.
 - Ports: Enter 50005 in both the External Starting and Ending Port fields. (Internal will auto fill.)
 - Internal IP Address: Enter any valid IP address that will not conflict with other devices on the network. (Devices are usually listed under the Administration menu, then Attached Devices. Do not use any address listed in this table.)

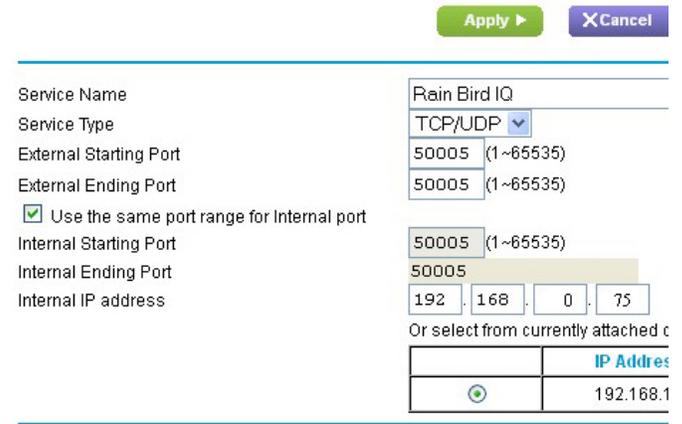
Wired Devices

Device Name	IP Address
newcpu	192.168.1.2

2.4GHz Wireless Devices (Wireless intruders also show up here)

Device Name	IP Address
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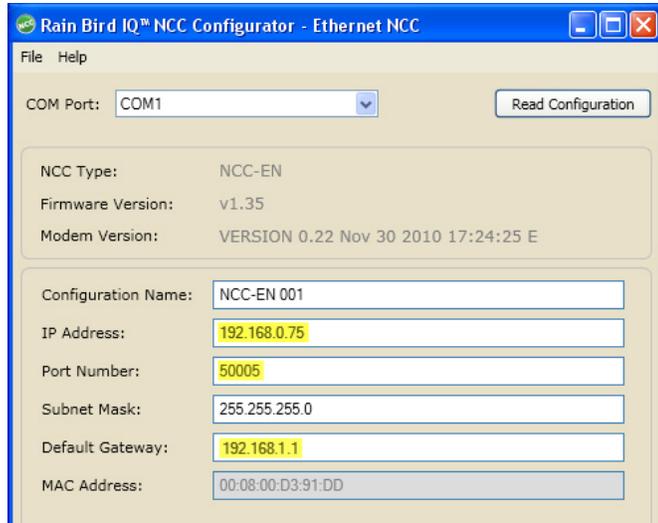
Ports - Custom Services



6. Select the Apply button.

7. Use the NCC Configurator software to assign the IP address and port number entered in Step 5 to the NCC cartridge installed in the controller.

Then add the local IP address of your router (as seen from other devices on the network) to the Default Gateway field. (Refer to the **Router IP Addresses** section on Page 1.)

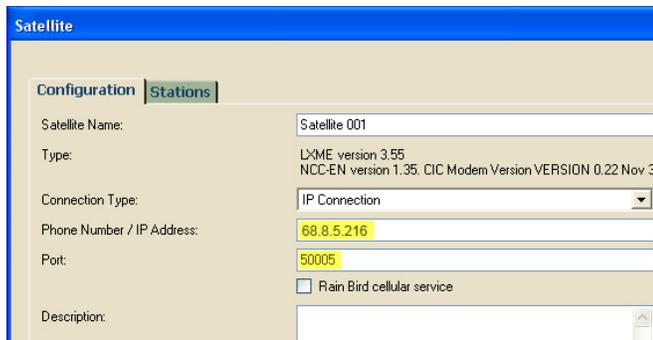


The screenshot shows the 'Rain Bird IQ™ NCC Configurator - Ethernet NCC' window. It features a menu bar with 'File' and 'Help'. Below the menu bar, there is a 'COM Port' dropdown menu set to 'COM1' and a 'Read Configuration' button. The main area displays configuration details for an NCC-EN device, including 'NCC Type: NCC-EN', 'Firmware Version: v1.35', and 'Modem Version: VERSION 0.22 Nov 30 2010 17:24:25 E'. A section for configuration settings includes fields for 'Configuration Name: NCC-EN 001', 'IP Address: 192.168.0.75', 'Port Number: 50005', 'Subnet Mask: 255.255.255.0', 'Default Gateway: 192.168.1.1', and 'MAC Address: 00:08:00:D3:91:DD'.

- !** **NOTE:** Refer to the **IQ v2.0 Central Control System NCC Configurator Instructions** document found on the Rain Bird website:

http://www.rainbird.com/documents/turf/man_IQ_NCC_Configurator_Instructions.pdf

8. Use the IQ Central Control software to set up a Satellite using the external IP Address of your router and the Port number 50005.



The screenshot shows the 'Satellite' configuration window. It has a 'Configuration' tab and a 'Stations' tab. The 'Configuration' section includes fields for 'Satellite Name: Satellite 001', 'Type: LXME version 3.55, NCC-EN version 1.35, CIC Modem Version VERSION 0.22 Nov 3', 'Connection Type: IP Connection', 'Phone Number / IP Address: 68.8.5.216', 'Port: 50005', and a checkbox for 'Rain Bird cellular service' which is unchecked. There is also a 'Description' field.

Other Routers

You can try these generic instructions which may work for other router brands or models.

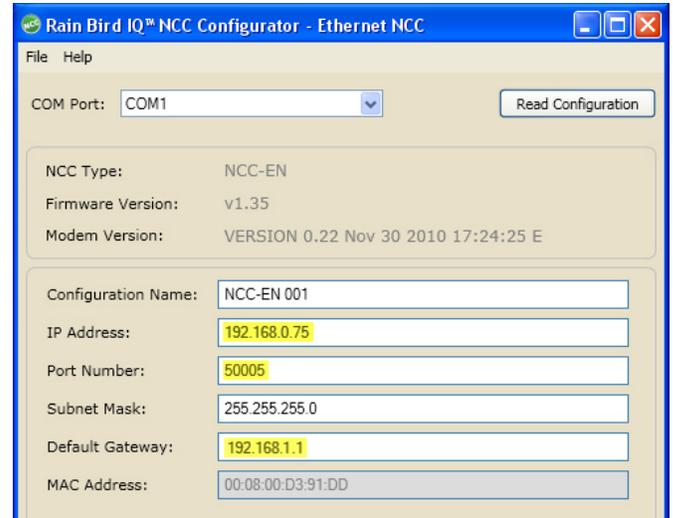
! **NOTE:** Another helpful resource for other routers can be found here:

<http://www.portforward.com>

1. Open a web browser (IE, Firefox, etc.) and enter the router's IP address in the address bar. (The default IP address for most routers is usually listed in the supplied instructions. You can also refer to the **Router IP Addresses** section on Page 1.)
2. Enter the User Name and Password for the router. The default login is also usually found in the supplied instructions.
3. Find the Port Forwarding screen, commonly found under something similar to Port Forwarding, Applications and Gaming, Virtual Servers, or Advanced Settings.
4. Create a custom entry by adding the following information. Field labels may vary slightly but the info is the same for all routers.
 - Application or Service Name: Enter Rainbird IQ in a Name field. (Do not use any pre-configured entries in any dropdown menu.)
 - IP Address: Enter any valid IP address that will not conflict with other devices on the network. (Each router will have a section, similar to Device Info, or Client Table, that lists network devices. Do not use any address in this list.)
 - Ports: Enter 50005 in all Port fields.
 - Protocol: Select either TCP or both TCP/UDP options.
 - Check any Enable box for the entry if applicable.
5. Save the entry by selecting a Save or Apply settings button.

6. Use the NCC Configurator software to assign the IP address and port number entered in Step 4 to the NCC cartridge installed in the controller.

Then add the local IP address of your router (as seen from other devices on the network) to the Default Gateway field. (Refer to the **Router IP Addresses** section on Page 1.)



! **NOTE:** Refer to the **IQ v2.0 Central Control System NCC Configurator Instructions** document found on the Rain Bird website:

http://www.rainbird.com/documents/turf/man_IQ_NCC_Configurator_Instructions.pdf

7. Use the IQ Central Control software to set up a Satellite using the external IP Address of your router and the Port number 50005.

