Basic Configuration of Third-Party Routers

Overview:

This document will give a basic overview of the settings required for configuring a router for use with g! controllers and related equipment. These settings are intended as a guideline, and for the most part you may deviate from these as your particular setup may necessitate. This note only covers settings that are important to the g! System, and does not cover settings like wireless, wireless security, or setting up your router to enable internet access.

1. **DHCP Server Configuration**

   Certain devices used in a g! System, such as touch screens and your customers computers, are set to obtain their address dynamically (via DHCP) by default. Ensure that the **DHCP Server is active** in your router. We recommend a default range of **150-250**, which allows up to 100 addresses for dynamic addressing. If you decide to go with an alternate range, make sure you make allocations for devices you will be using that must be set to Static Addresses. Consult the table under (2) for more information. ***DO NOT*** *set your DHCP to the entire range (ex. 2-254).*

2. **Default IP Addresses in a g! System**

   The following table lists components that may be present in a g! installation, and the default IP addresses for each. Use this table as a guide for configuring your own network. If you do not use g! default of 192.168.0.x are instead using something like 192.168.10.x, or 10.11.80.x etc., you can simply add the last octet from the below table to the address you are using. *For example, if your router is* 192.168.10.1, *and you want to move the* **Home***Brick to the correct network but otherwise use standard addressing, change the* **Home***Brick's IP to* 192.168.10.2.

Router	192.168.0.1
DHCP	192.168.0.150 – 192.168.0.250
g! Controller (ex.Home Brick)	192.168.0.2
Access Points	Start at 192.168.0.10
SerialBrick - Irrigation	192.168.0.35
SerialBrick	192.168.0.40
SerialBrick – Pool / Spa	192.168.0.45
Audio Zone Controllers	Start at 192.168.0.50
Media Servers	Start at 192.168.0.60
Static IP Tablet / Touch Screen*	Start at 192.168.0.70
Video Cameras	Start at 192.168.0.80
Other Static IPs	192.168.0.100 – 192.168.0.149

*Note: Typically Touch Screens are configured to DHCP.
The above range is merely a recommendation if you choose to configure as static.

3. Standard Ports for Port Forwarding:

Port Forwarding is often found on a screen labeled one of the following: Port Forwarding, Port Range Forwarding, Virtual Server, Firewall Rules, or Custom Service. These settings are often contained within headings labeled like: Advanced, Security Settings, Firewall Settings, NAT/QoS, or Applications & Gaming.

Forward the following ports to the g! Controller to enable remote access:
(Typically, you will set the external and internal port both to the same port number if your router allows setting each individually.)

Default External Listening Port (g! Connect):	**TCP 2198***	**HC's**
	TCP 443*	**Legacy Controllers**
Terminal Server (HomeBrick):	**TCP and UDP 5001**	*TermServ is primarily used by Technical Support*
Terminal Server (HC and MultiBrick):	**TCP 2199**	*TermServ is primarily used by Technical Support*

*May be changed on the System>System tab in Configurator. 2198 is a recommended alternate port to 443.

If you cannot find where to perform port forwarding in your router, check www.portforward.com

NOTE: DO NOT enable NAT Translation on Port Forwarding in Packedge Routers. Doing so gives all incoming connections on those ports the IP address of the router. This causes Gateway to see incoming Viewer connections as local and it will accept ANY password provided.