NILES memo

Date: November 1, 2011

Re: ELAN g!/ICS Integration FAQ From: Colin Clark, Product Manager



Page 1 of 4

1) How does the ELAN g!/ICS integration work?

The new ELAN software is designed to allow an ELAN HC Controller to communicate with and control an ICS system using an Ethernet TCP/IP connection. Once configured, you can then use ELAN's new g! App from the iTunes® Store to control the ICS system from an iPhone, iPad or iPod Touch.

2) Do I need to use an RS232G to interface with the ELAN system?

No. The ELAN interface is done using a TCP/IP Ethernet Connection.

3) Is there a limit to the number of iPhones/iPads or other ELAN interfaces that can control the ICS system?

No. Because of the Ethernet control there really aren't any limits. Keep in mind that ICS source cards are only designed to be controlled by a single user at a time. This is why the "Source In Use" and "Menu in Use" messages appear when someone accesses a zone that another person in the home is already controlling. For example, if you have a system with 6 IM-Net cards, one for each user in the home, each can have their own iPhone/iPad/TS7/TS10 control running simultaneously. Keep in mind that the standard ELAN installation only allows 1 user at a time to use their iPhone/iPads to control a system. Additional viewer licenses are required for more than one concurrent user to use the system.

4) Is any additional hardware required other than an ELAN HC controller?

Yes, there is one additional piece of hardware needed. A device is needed to isolate the Niles GXR2's DHCP Server from a homeowner's network. We recommend using a device called a Smart Switch. The recommended model is a Netgear GS108T (about \$99 on Amazon.com).

5) What other changes need to be done to a home network?

The only other change required is to change the IP address scheme of the home network to a range close to the native GXR2 system addresses.

6) So, is this very different from a standard ELAN installation?

It really isn't very different from a standard ELAN installation. The only new hardware is the Netgear switch and the only new configuration step is changing the IP addressing to new number ranges. If the home uses Dynamic DHCP, as most do, the rest of the configuration is very straightforward. An installation will be more time-consuming if there are static IP addressed devices that would need to be re-configured.

7) Do I need to do a firmware update on the ICS equipment?

No, there is no new firmware required for the ICS Equipment. We do recommend that all equipment already be running our latest build, 143 or higher.

8) What hardware is required in order to set up an ICS system and control it with an iPhone, iPad or iPod Touch?

- o A Fully Installed and Configured ICS System
- o An ELAN HC Controller: HC4, HC6, HC8 or HC12
- o A Netgear GS108T Smart Switch (Version V2)
- o A D-Link DIR-628 Wifi Router is always recommended by Elan

9) Why does it need the Netgear Switch?

The Netgear GS108T is used for only one reason, to block DHCP requests from passing between the home network and the GXR2. If a dealer is familiar with networking and has another device that can block DHCP requests (inbound and outbound), he can use it, but the ELAN Tech Support team won't be able to assist with any configuration issues if they should arise if a dealer has used a different device. The GS108T is very reasonably priced at approximately \$99 retail and is easily available on Amazon.com.

10) Why does it need the D-Link router?

Again, like the Netgear switch, you have a choice of which router you may use, but ELAN recommends the D-Link in all of their installations because they have tested it and know it works. However, many other routers might work. The only functionality that is required is:

- a) Be able to set its address to 10.100.1.1.
- b) Be able to set its Subnet Mask to 255.255.0.0 Some routers do not allow this setting, for example the popular Cisco WRT610N does not allow this setting to be made and cannot be used with the g!/ICS integration.

- c) Be able to set port forwarding for ports 443, 2198, 2199 and 5001
- d) Be able to set its DHCP Address Range to "10.100.1.150 to 10.100.1.250"

The D-Link router does all of this, is reasonably priced, is easily available, and is even offered as a part dealers can order directly from ELAN (HWRTR100). Also, it is the only router that will be supported by Tech Support if there are any configuration questions or issues that arise.

11) So, can a dealer use the router that a customer already has at his house now?

As long as they have access to the router configuration settings and the router is capable of doing all of the items listed above, they should be OK. Due to the large variety of routers on the market, we cannot test all of them and have chosen to support a single model. If a dealer doesn't have time to test the customer's equipment first and wants to guarantee that everything will work at installation time, we recommend the D-Link router.

12) What software is required?

The ELAN g!/Niles integration will work with ELAN Build 5.3 and higher. The iOS app that is needed is version 5.3.120 or higher. There will be a special g! app available in the iTunes store that will be used for this integration. The app is free to download and install but keep in mind that as with any ELAN system, additional Viewer Licenses will be required if more than one user will be accessing the system concurrently with an IOS device or other ELAN interface.

13) What about the ELAN Pro App License? Does a dealer need to buy that too?

No, they don't need a Pro App. Because Niles and ELAN are all part of the AVC Group, the Niles ICS system is treated as a native ELAN product and will work without a Pro App required.

14) What if a customer already has the current g! App from the iTunes store? Will it work?

No, unfortunately, it won't have the functionality needed in order to run the ICS system. They need to remove their current app and install the new version from iTunes.

15) Are there any ICS devices that will not work with the g! system?

Yes. There are a few older or more specialized ICS items that we decided NOT to support in this integration project. What this means is that we did not write any new software to control these devices and we did not test any of them. The ICS devices that are NOT supported are:

- Video Integration using a VS6
- Control of RS-232 Devices (Lutron, Escient, Request, etc)

- Control of a Home Theater (using the HT-MSU and iRemoteTS)
- Support of Legacy Cards (IM-Server Escient, IM-Server Request, IM-Server DMS-4, IM-iPod (the first iPod Source Module).

16) Why aren't these items suppported?

Now that an ELAN HC Controller is in the home, it offers many more options for lighting, video integration, home theater control, etc than the other legacy Niles devices provided. Additionally, the Niles IM-Net card provides access to all of a customer's networked music as well as the most popular streaming media from the Internet, making the need for Escient and Request support no longer necessary.

17) What ELAN control devices won't work with the ICS system?

The g!/ICS integration currently does not support the use of ELAN's OSD (On Screen Display), the HR2 remote, or their TS2 touchscreens.

18) Will these devices be supported in the future?

It's too early to say. We think we have a great product for Niles dealers to add iPhone/iPad control to their ICS systems and want to gauge how important these other additions would be to our dealers.