

## How to connect multiple SES panels to a single IP location over the Internet

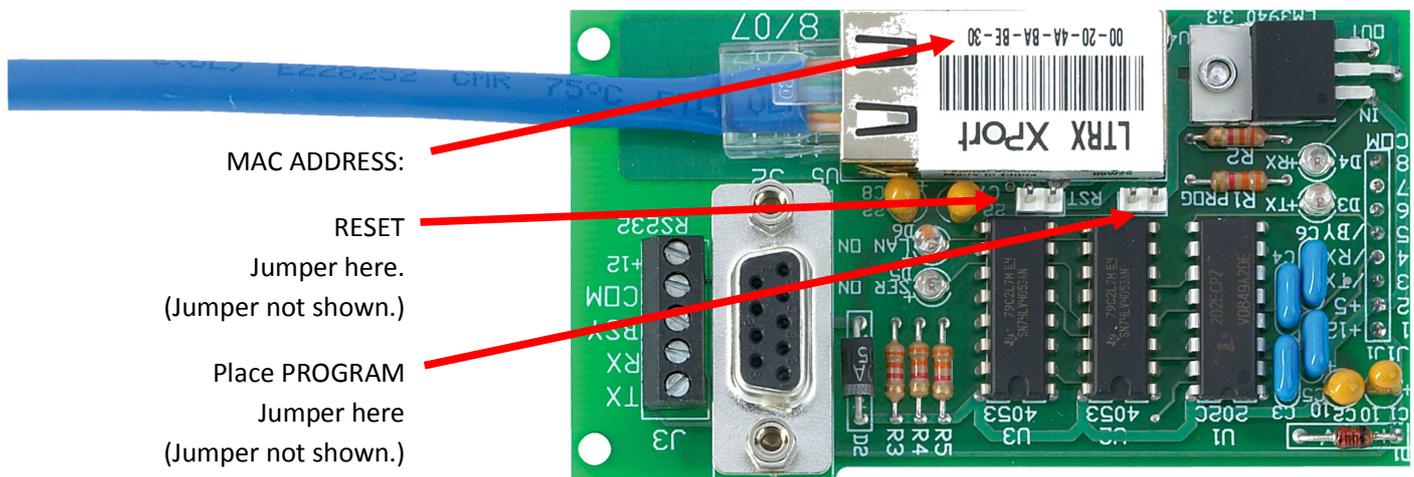
**DISCLAIMER: SES cannot provide troubleshooting support for this topic. This information is provided solely for your convenience. Please contact the router manufacturer for any router questions.**

The purpose of TSN-019 is to explain how a single SES panel can be configured for communications over the Internet. No modifications of the NIC2 are usually required. If multiple panels are used behind the same external IP address, then modifications to the NIC2s and to the network router are necessary.

To do this, the following is required:

- 1) Your ISP provider's supplied external IP address. (You can obtain this from: <http://www.whatismyip.org>)
- 2) Lantronix CPR Manager software. (Included with the NIC2; SES part number = OPTNIC2.)  
If the CD is not available it may be downloaded from the Lantronix web site at this URL link:  
[http://www.lantronix.com/ftp/cpr/Lantronix/4.3/4.3.0.3/Installers/SingleInstallFiles/setup\\_cpr\\_x86x64cd\\_4.3.0.3.exe](http://www.lantronix.com/ftp/cpr/Lantronix/4.3/4.3.0.3/Installers/SingleInstallFiles/setup_cpr_x86x64cd_4.3.0.3.exe)  
(Version number may be different.)
- 3) Your router's administration access, and any required documentation.
- 4) Access to the Web from both the NIC2 and from the host computer running Selcom Secured 7.
- 5) TSN-015: How to Change NIC2. (To configure NIC2 from DHCP to fixed IP address.)
- 6) TSN-019: How to talk to SES products over the Internet. (To configure port forwarding on commonly used routers.)
- 6) A 2-pin shorting jumper.
- 7) A web browser.

(Figure below rotated to match orientation on main CAT/TEC PC board.)



Referring to TSN-015, use a browser to access the NIC2 Device Server Configuration Manager.

Click on "Connection" selection on left side of the XPort configuration window (see illustration on next page) and set the Local Port to a port in the desired range. This will be performed for each of the three NIC2s individually. This example will assume there are 3 panels at a single site. The first panel will be set to Local Port 10001, the 2nd panel set to Local Port 10002 and the final panel set to Local Port 10003. The NIC2 device IP address has two different methods that may be required, depending on the particular router being used:

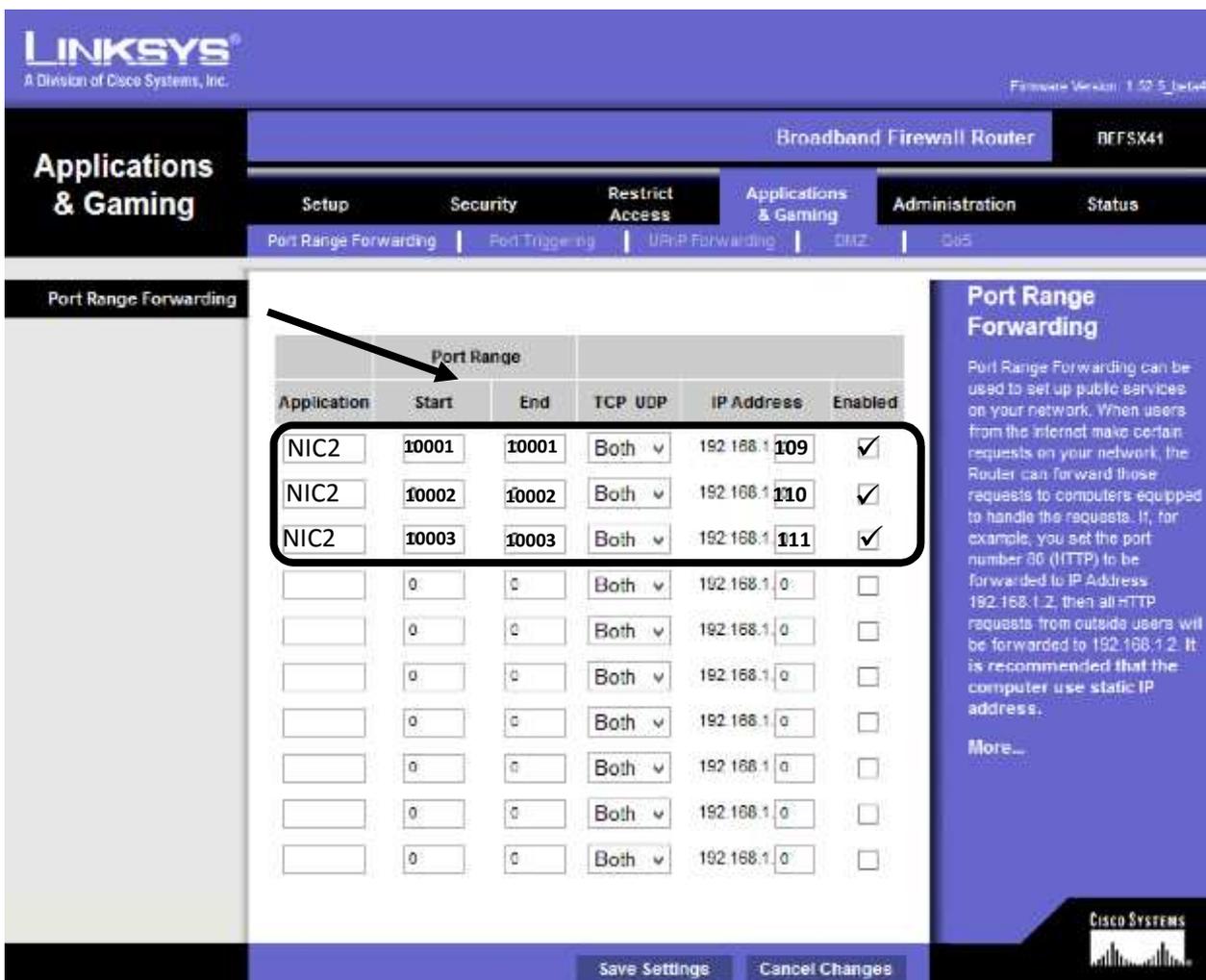
- 1) Allow the router DHCP server to assign device IP addresses and reserve the device IP addresses for the three NIC2s and assign fixed port values.
- 2) Assign static device IP addresses and fixed ports.



Click on Connection to assign Port.  
See TSN-015 Pg. 4 - 6 for more info on how to configure NIC2 from DHCP (default) to fixed IP address.

With the NIC2s configured, use a browser to log into the router as an administrator.

For most routers, individual IP device (NIC2) entries (whether fixed or reserved) will be required as shown below:



In the above example the same Application Port Forwarding rule (NIC2) was allowed to be defined multiple times. Other routers may require Port Forwarding rules with discrete (different) names.

Refer to TSN-019 for details and examples of configuring port forward settings for various commonly used routers.

## HOW TO TEST ROUTER CONFIGURATION USING SES SOFTWARE

- A) Open SES software and select your site.
- B) Edit the panel data screen.
- C) Add the IP address you previously recorded and the required Port Number for each NIC2.
- D) Apply settings and click on Finished.

**PREVIOUSLY RECORDED IP ADDRESS, ASSIGNED BY ISP PROVIDER.**

**(See step 1 on TSN-019)**

**Selcom Secured 7.x**

**Select Gate 3.x**

**Communications**

- Modem
- Serial
- TCP/IP

**Ethernet Settings**

IP Address: 66 . 89 . 68 . 202 Port: 10001

Find NIC Panels Apply

**How to Connect**

Password: 3057

- Modem dials password and has direct line to Select Gate
- Modem dials phone # via Service Provider to Select Gate
- Use Serial Connection
- Use TCP/IP (Needs NIC2 on Select Gate)

Check if Multiple Select Gates

**Ethernet Settings**

IP Address and Port

IP Address: 66 . 89 . 68 . 204 Port: 10001

Find Select Gates Apply

**Communications**

- Modem
- Serial
- TCP/IP

**Ethernet Settings**

IP Address: 66 . 89 . 68 . 202 Port: 10002

Find NIC Panels Apply

**How to Connect**

Password: 3057

- Modem dials password and has direct line to Select Gate
- Modem dials phone # via Service Provider to Select Gate
- Use Serial Connection
- Use TCP/IP (Needs NIC2 on Select Gate)

Check if Multiple Select Gates

**Ethernet Settings**

IP Address and Port

IP Address: 66 . 89 . 68 . 204 Port: 10002

Find Select Gates Apply

**Communications**

- Modem
- Serial
- TCP/IP

**Ethernet Settings**

IP Address: 66 . 89 . 68 . 202 Port: 10003

Find NIC Panels Apply

**How to Connect**

Password: 3057

- Modem dials password and has direct line to Select Gate
- Modem dials phone # via Service Provider to Select Gate
- Use Serial Connection
- Use TCP/IP (Needs NIC2 on Select Gate)

Check if Multiple Select Gates

**Ethernet Settings**

IP Address and Port

IP Address: 66 . 89 . 68 . 204 Port: 10003

Find Select Gates Apply

E) Selcom Secured 7 or Select Gate 3.0 software should now be ready to communicate with the NIC2, over the Internet.

In this example, SES software will send TCP/IP traffic to the external IP address (e.g. 66.89.68.204) on the appropriate port (e.g. 10003) and the router will port forward 10003 traffic to the reserved internal network IP address (e.g. 192.168.1.111) and communications can now occur between SES software and each NIC2 on the SES panels.

It is recommended to perform "Send Test" from the Automatic Interface screen in Selcom Secured 7 to verify correct operation of each panel.

