# Integration Note

| Manufacturer: | Sonos |
| --- | --- |
| **Model Number(s):** | **Sonos ALL Models up to ver. 7.0** |
| **g! Core Module Version:** | **8.0.278** |
| **Driver Developer:** | **Core Programming Limited** |
| Document Revision Date: | 03/01/2017 |

## OVERVIEW & SUPPORTED FEATURES

This driver is designed to work in conjunction with the ELAN Sonos Player Driver and provides a means of volume control and muting for the Sonos player.

In addition, it offers a "Virtual Matrix" function enabling the ability to add up to three additional "virtual" sources that can route the auxiliary input from another Sonos unit to this Sonos player.

This is an advanced driver for expert installers only.

THE FOLLOWING OPTIONS ARE SUPPORTED BY THIS DRIVER:

**Volume Ramping:** This driver is able to offer fast volume ramping to a linked Sonos player.

**Muting:** Mute can be toggled on and off, with the driver tracking state enabling the "mute on" and "mute off" commands to be used in event maps

**Absolute Volume:** Through Event Maps, defined volumes can be selected (i.e. to make the player turn on at a set level). Available commands are: Decrease Volume by x, Increase Volume by x, Set Volume To, Volume Down 10%, Volume Down 5%, Volume Up 10%, Volume Up 5%.

**Power On/Off**: The driver will automatically pause the active source on power off

**Virtual Matrix:** The driver offers the ability to receive the auxiliary input feed from up to six other Sonos units

**Event Mapping:** As described above, event mapping allows events in the Sonos Driver to initiate a command (or group of commands) in g!

**Bass, Treble, Loudness:** These can be set and controlled from the zone settings page.

**Voice Enhancer & Night Mode**: These commands are unique to the PLAYBAR and are controlled from the zone settings page.

**Basic Transport Commands:** Pause, Play, Skip Forward & Skip Back are available by event map.
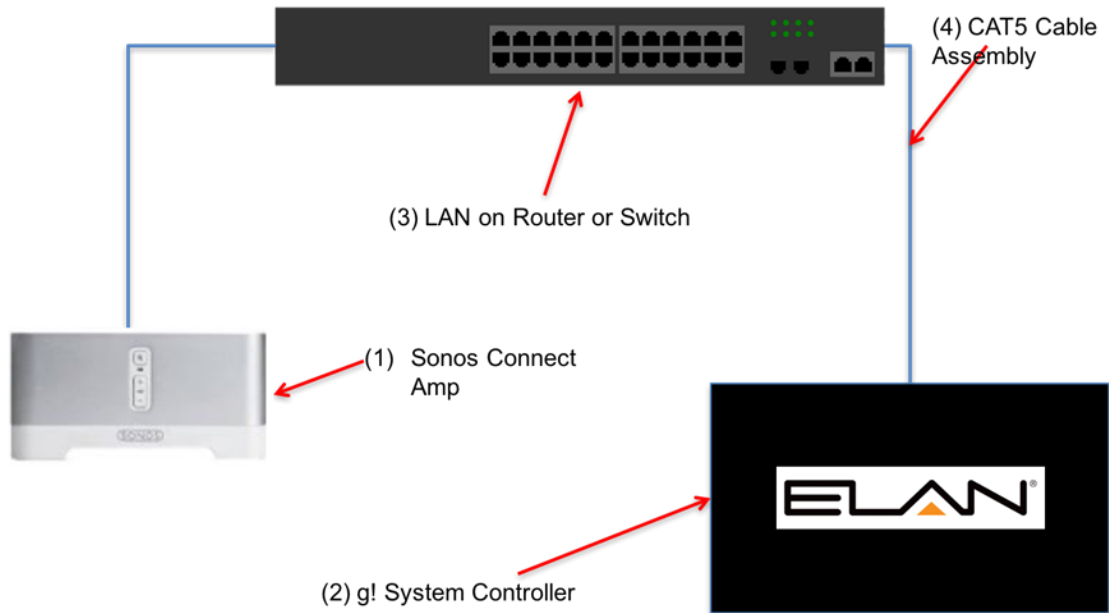
**Party Group**: This driver can be configured to group the player to a master player. This enables both players to play the same content with no audio sync issues.

**Enable & Disable Wi-Fi:** These controls are available in Configurator, making it easier to setup Sonos on a wired network.

| Any feature not specifically noted as supported should be assumed to be unsupported. |
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## CONNECTION DIAGRAM: ETHERNET CONTROL

**Refer to the Bill of Materials and Wiring Diagram that follow.**



(4) CAT5 Cable Assembly

(3) LAN on Router or Switch

(1) Sonos Connect Amp

(2) g! System Controller

## BILL OF MATERIALS

| # | Device | Manufacturer | Part Number | Protocol | Connector Type |
|---|--------|--------------|-------------|----------|----------------|
| 1 | Sonos Player | Sonos | Various | Ethernet | RJ-45 Female |
| 2 | g! Controller | ELAN | Various (e.g. SC2) | Ethernet | RJ-45 Female |
| 3 | Network Switch | Various | Various | Ethernet | RJ-45 Female |
| 4 | Network Cable | Various | Various | Ethernet | RJ-45 Male |

## SONOS CONFIGURATION

Your Sonos Player first needs set up according to the manufacturer's instructions and then needs to be added to Configurator as a source.  To do this please consult the Elan Sonos Player Driver Integration Note.

**Recommended Action : DHCP Lease**

We recommend you assign a DHCP lease to your Sonos Player for all interfaces it supports (Wired and Wi-Fi).

Doing this ensures the Sonos will work properly even if the unit is reset to factory defaults.

**Disable WiFi:**

If you are using Sonos hardwired to your network, then it is highly recommended that you disable the built-in Wi-Fi. Otherwise the Sonos player will still attempt to use the Wi-Fi link to other players for communication and audio streaming.

This can easily be done from the button of the driver configuration page.

| Apply | Disable Wi-Fi | Enable Wi-Fi | Update Driver |

If you accidentally disable Wi-Fi on a device that it not being hardwired, simply plug the device in on a temporary connection and enable the Wi-Fi from configurator.
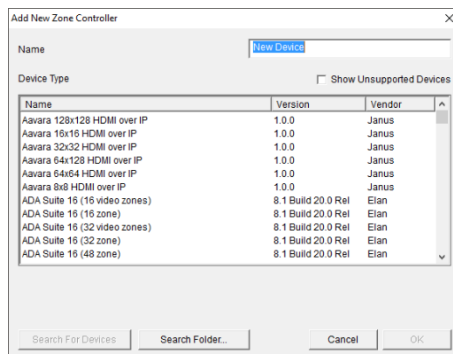
## g! CONFIGURATION

The installation process will involve loading a Zone Controller driver from a downloaded file.

Note: No communication device is needed for this IP driver.
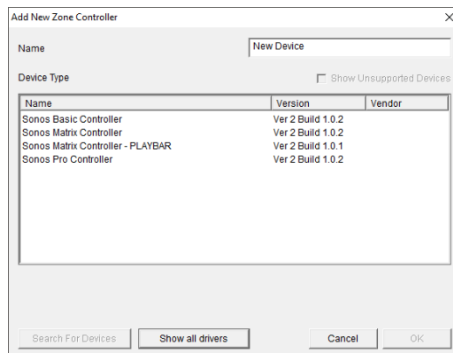
## INSTALLATION PROCESS

It is recommended that you follow the below installation process to ensure you are running the latest version of the driver.
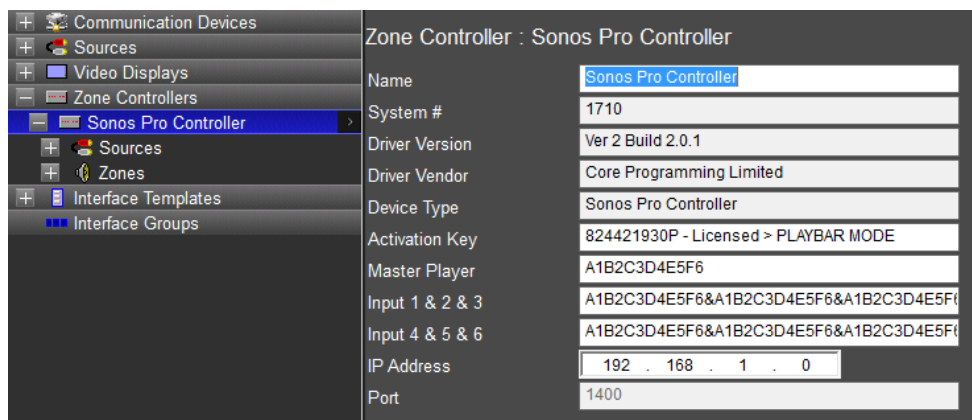
1. Download the latest version of the driver from the ELAN dealer support site or get it from your order confirmation email. If the file is zipped, then extract it to a known location.

2. Under the Media tab in configurator, right click Zone Controllers and select Add New Zone Controller.
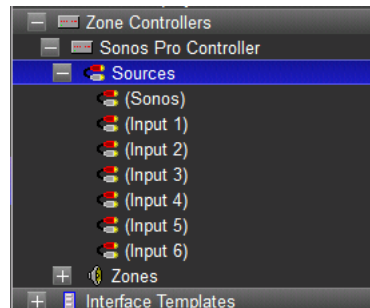


3. On the next window use the Search Folder button to point Configurator to the location you saved the driver.



4. Select the driver and click OK.

5. The driver activation is covered in the next section.

6. Enter the IP address of the Sonos player you wish to control.

7. Under the ZONE CONTROLLERS tab, select the Sonos Zone Controller you have just added and navigate to the available sources option:



8. For the first source select the Sonos player that you wish to control from the drop down list and click ok. Choose an icon and set a name if required. (Please note, for the Source to appear you must have already added the full Elan Sonos Player Driver and discovered the connected players):



9. The additional six sources are all "Virtual" and correspond to the **Virtual Feed** Field and the configuration page. In the **Source Device** field, select the device that is connected to the aux input on the Sonos Player you are wanting to receive the feed from. For example, you may have the audio out of your cable receiver plugged into here.

   Once you have set up your sources, you then need to let Configurator know which external Sonos device each source is linked to. This is done via entering the mac address of each Sonos device into the corresponding Global Source field. Please remove any punctuation and only include numbers (e.g. to add Source 2 here, you enter the mac address of the Sonos Player to which Source 2 is connected. If the mac address is F8:52:12:C9:00:E1, you would remove the ":" so the number entered would read – "F85212C900E1". The "First" auxiliary input on the driver is designed for its own input, enter the PLAYER MAC address here. Remember to click apply on completion:



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10. PLAYBAR Mode:

When using the driver to control a PLAYBAR simply app a "P" to the end of your license key. This will instruct the driver to setup Input 1 for use with an Optical port to suit the PLAYBAR.

11. Party Group Mode: To use the grouping function in the driver you will need to specify the master player that you wish to group to. This is done by entering the master players MAC address under "Master Player". Grouping and un grouping is done from the zone settings page in the viewer.

## DRIVER LICENSE

This driver requires a license key to function. Pricing and license keys can be obtained by visiting www.intrinsicdev.co.uk

The controller MAC address is needed to generate a license key.

### INSTALLATION:

The license key is entered on the main properties page of the driver.

| Generic Media Source : Apple TV | |
|---|---|
| Name | Apple TV |
| System # | 27041 |
| Driver Version | Ver 2 Build 2.0.23 |
| Driver Vendor | Core Programming Limited |
| Device Type | Apple TV |
| Status | Apple TV 4 Connected OK |
| Activation Key | 456378146 - Licensed |
| ELAN IP Address | 192.168.1.20 |
| IP Address | 192 . 168 . 1 . 113 |
| Port | 3689 |

Once you enter the product license key as shown above click "Apply" to save it and then within 20 seconds the driver will process the key.

After 20 seconds the driver will update the Activation Key window with the status of the license key. To see this update, you must refresh the screen by selecting another tab or device and then going back to this driver. You will either see, as above, that the driver is activated correctly or, as below, the driver is not activated.

| Activation Key | 456378145 - Not Licensed |
|---|---|

Please check the status of the driver activation before logging a support ticket.

## g! CONFIGURATION DETAILS

The following table provides settings used in Configurator. Please refer to the Configurator Reference Guide for more details.

In the table below:

- o "<Select from list>"          Select the appropriate item from drop down.
- o "<User Defined>", etc.        Type in the desired name for the item.
- o "<Auto Detect>", etc.         The system will auto detect this variable.

| Devices | Variable Name | Settings (Ethernet) |
|---|---|---|
|  |  |  |
| Zone Controller | Name | <User Defined> (Default <Auto Detect>) |
|  | System # | <Auto Detect> |
|  | Driver Version | <Auto Detect> |
|  | Driver Vendor | Core Programming Limited |
|  | Device Type | Sonos Matrix Controller |
|  | Activation Key | <User Defined> (Enter key supplied by Intrinsic Dev) |
|  | Virtaul Feed 1 & 2 | <User Defined> (Enter MAC address of Sonos AUX Inputs) |
|  | Virtual Feed 3 & 4 | <User Defined> (Enter MAC address of Sonos AUX Inputs) |
|  | Virtual Feed 5 & 6 | <User Defined> (Enter MAC address of Sonos AUX Inputs) |
|  | IP Address | <User Defined> (Enter IP address of Sonos player that you wish to control) |
|  | Port | <Auto Detect> |
|  |  |  |

## COMMON MISTAKES

1. Not entering the correct IP for Sonos.
2. Not having the latest firmware installed, this driver **REQUIRES** at least ELAN FW 8.0.278.
3. No communication device is needed.

## ELAN DEVELOPER PARTNER INFORMATION

This ELAN driver was written and supported by:



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