



Integration Note

Manufacturer:	Sonos
Model Number(s):	CONNECT, CONNECT:AMP, ZP90, ZP120
Core Module Version:	7.1
Comments:	Originally written and tested with Sonos Version 5.2 Last check Sonos 8.2.2 – ELAN v8.1.403.14
Document Revision Date:	12/20/17

OVERVIEW AND SUPPORTED FEATURES

Sonos is a multi-room wireless music system, capable of playing content stored on network-connected devices as well as streaming a number of Internet streaming services.

The Elan system is capable of communicating with the Sonos system to control what is playing on each Sonos device over a standard network connection, providing full 2-way feedback and control.

THE FOLLOWING PLAYBACK OPTIONS ARE SUPPORTED BY SONOS:

- Index digital music stored on network shares defined in the Sonos system and play via any of the Sonos players.
- Browse the local music library by Artist, Album, Composer, Genre, Track or Playlists.
- Stream Internet Services—See **Configuring Online Services** section for details.
- Now Playing and Play Queue information including metadata and album art (as available) is presented in the ELAN Viewer. Note that availability and level of detail of metadata will vary when using Internet Radio.
- The ELAN system can control Sonos from all thin client interfaces (PC, Mac, Elan Touchscreen, Android, iOS, TS2 and HR2).
- Sonos Playlists and Favorites may be played or added to the Play Queue from the ELAN interface.
- Search Artists, Albums, Composers or Tracks in the Music Library from the ELAN interface.

Note: no search functionality available from the TS2/HR2 interfaces.

THE FOLLOWING PLAYBACK OPTIONS ARE NOT SUPPORTED BY SONOS:

- Streaming services other than those specified in the **Configuring Online Services** section are not yet supported.
 - Pandora Thumbs Up/Dn: As of Sonos v8.2.2 ELAN UI does not have Thumbs functionality.
 - Spotify Browse and Search: As of Sonos v7.2 ELAN can no longer search or browse the Spotify service from the ELAN interface. However, Spotify favorites can still be created in the Sonos application and accessed in the ELAN interface. See Configuring Online Services below.
 - Any special features or third-party plugins not specifically mentioned as supported in this document should be considered unsupported.
 - Adding and removing items with a Sonos Playlist is not supported in the initial release.
 - Local Sources connected to supported Sonos devices and accessible via the Line-in feature are not supported in the initial release.
- Sonos Group functionality is not supported in the initial release.

IMPORTANT! The ELAN driver is written to integrate the Sonos version indicated at the top of this document. Any future software changes by Sonos may impact integration. It is recommended to use only the version listed in this document for full compatibility.

Any feature not specifically noted as supported should be assumed to be unsupported.

ADDING AN AUDIO ZONE

Adding the Sonos Communication Device will create source(s) in the **ELAN** system, but it will not create an audio zone, which is an important distinction, because only audio zones appear in the Viewer interface.

To get an audio zone in the viewer interface, you must add an **Audio Zone Controller**.

For whole house audio systems, this will be a device like the ELAN S8.6, for example. Refer to the Integration Note for the zone controller you plan to use for more information.

To get a single listening zone, refer to the **Generic Single Zone Controller** Integration Note for more information.

SONOS CONFIGURATION

Adding Sonos Devices

The Sonos system must first be set up using the Sonos Desktop Controller software which can be downloaded from the support section of the Sonos website (www.sonos.com).

To add Sonos devices to the system:

1. In the Sonos Desktop Controller, choose **Manage > Add a Player or Sub....**
2. If a new device is detected, you will be prompted to press a button(s) on the device to confirm its addition to the system.
3. Next, choose a name for the Sonos device (this is usually the name of the room in which it is to be located).

Repeat the above steps to add more Sonos devices to the system.

Adjust Line-Level Out

Set Sonos Line-Out Level to “Fixed” and control source volume with Auriel:

- Using the Sonos Controller for PC or Mac, select player Settings from the Zones menu. Select the player attached to your home theater, and then click Settings. Click the Line-Out tab, and choose Fixed.
- Using the SONOS CONTROL, select Settings>player Settings from the Music Menu. Touch to select the player attached to your home theater, select Line-Out Level, and choose Fixed.

Updating Firmware

You may be prompted to update the firmware on any devices you add to the Sonos system requiring an update. If not, choose **Manage > Check for Software Updates....**, and the follow the instructions to automatically update all out-of-date devices.

Populating the Music Library

The Sonos system can index a music collection from multiple locations, either on the computer running the Sonos Desktop Controller, or from a shared network location (such as a NAS drive). This music is assembled into a single “Music Library” and is available for playback via any Sonos device in the system.

To add music to the library:

1. Choose **Manage > Music Library Settings....**
2. Select a location where the music is stored, either on the local computer, or on a network attached device.

The location is added to the My Music Folders list and the Sonos Music Library is updated with the new contents. To manually update the Music Library (for example, if you add new music to one of your Music Folders), choose **Manage > Update Music Library Now.**

Configuring Online Services

A number of online services can be added to the Sonos system using the Sonos Desktop Controller software. The available online services will differ depending on your geographical region. ELAN will automatically detect supported services if they are installed in the Sonos system and make them available via the user interface.

The first time the ELAN Sonos driver is used after adding a new supported service to the Sonos system, an additional step may be required to authorize the ELAN interface to access the online service. The below table details the currently supported online services and any steps required in ELAN to initialize them:

Service Name	Steps required in ELAN
Pandora	Enter the account credentials in the ELAN interface when prompted.
Sirius	None.
Deezer	None.
Spotify	<ul style="list-style-type: none">•Launch the Sonos app, navigate to Spotify and select a Station or local playlist and “Add to Sonos Favorites.”•Your Sonos Favorites are accessible in the ELAN viewer’s transport interface via the “Star” icon in the lower bar.•Spotify metadata and basic transport control (play, pause, previous & next) will still be accessible within the ELAN interface.

Configuring KP7 Favorite Buttons

KP7 buttons can have Sonos favorites assigned to them. When the driver starts, existing favorites defined on the Sonos system are loaded into ELAN and can be assigned to the KP7 buttons via the individual KP7 pages on the Interface tab in Configurator. Select the appropriate Zone and Source and the drop-downs for the Favorite buttons will be populated with the available list. Note that this list will not refresh while you are on the KP7 page, so additions and removals will not show up until you leave and return.

A favorite can also be stored on a KP7 button by pressing and holding the button for 5 seconds. This will store whatever was last selected to play via a ELAN user interface (OSD, TS2, HHR, PC or mobile device). If this is not currently a Sonos favorite, a new Sonos favorite will be created.

Note: Only whatever was last selected to play **via a ELAN user interface** is used to choose which favorite to assign to the KP7. It does not save anything selected via another KP7 or the Sonos native user interface, nor does it just save whatever is currently playing (which might be different from what was last selected e.g. due to queuing order). So, if you want to use press-and-hold to define a KP7 favorite, always make sure to select your content via a ELAN user interface first.

Note: Sonos systems have a fixed limit of 32 favorites (at present; this may change). If ELAN is unable to create a new favorite because this limit has been reached, then it will be unable to assign the favorite to the KP7. If you find a favorite is not being saved, check the count of existing Sonos favorites.

COMMON MISTAKES

1. Not properly configuring the Sonos devices. The Sonos system should be configured according to the instructions above.
2. Not adding an Audio Zone Controller to the system. Audio Zones appear in the Viewer interface: until you add an Audio Zone, you will not see Sonos sources in the Viewer interface. Use the Single Zone Audio for a stand-alone audio zone where the Sonos is driving speakers with a stand-alone amplifier.
3. Not adding Streaming Services properly. To use streaming services, you must:
 - Add the service to the Sonos system.
 - Enter valid login details in both Sonos and the ELAN interface.
4. Sonos units use Spanning Tree protocol to create a peer-to-peer wireless mesh network. It is important that there are not multiple connections from a Sonos unit to the customer's network (e.g. if there are 2 Sonos units that are connected by Ethernet cables to the customer's network, and also via a peer-to-peer Wi-Fi link) – if this happens, it can result in significant network instability.

**** ENSURE THAT THERE IS ONLY A SINGLE NETWORK ROUTE FROM YOUR SONOS UNITS TO THE CUSTOMER NETWORK ****

Other option is to enable Spanning Tree on supported network switches. Consult a network expert if you are considering this, and look through the Sonos forums for supported compatible network equipment.

5. When saving a favorite on a KP7 button, not selecting the item to be saved via a ELAN user interface, resulting in nothing or the wrong thing being saved. See **Configuring KP7 Favorite Buttons** above.
6. Meta-data loss after power outage. It can take several minutes after a power outage for ELAN to fully restore meta-data and control from a Sonos system and it may require the viewer page to be refreshed. If frequent power outages are expected and this problem is undesirable then it is recommended to provide backup power to ELAN and Sonos to prevent this scenario.
7. No Spotify Browsing: As of Sonos version 7.2 - ELAN can no longer search or browse the Spotify service from the ELAN interface. However, Spotify favorites can still be created in the Sonos application and accessed in the ELAN interface. See **Configuring Online Services** above.