



## Systemline S7 NetAmp

Control4 Driver User Guide

Version 1.0

Driver developed by



## Introduction

This driver has been designed to provide two-way control of a Systemline S7 NetAmp, via TCP/IP.

This driver has been written and tested using a Systemline S7 NetAmp SN1100 running the following software:

- Web Page Version: 0003-0004
- Bootloader Version: 20.10.14.01
- Firmware Version: 0003-0004

Driver release version: 1.0

## Systemline Configuration

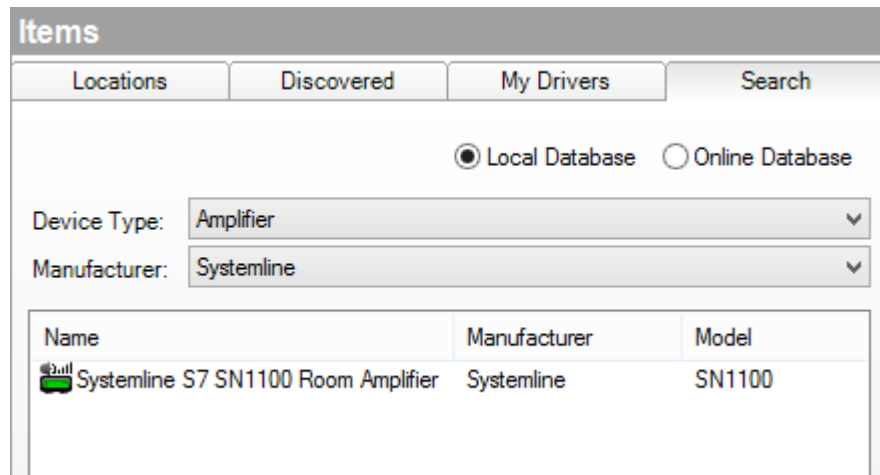
It is recommended that the Systemline S7 system be installed, configured and tested by a suitably qualified engineer, according to Systemline documentation, prior to integration with this driver. Some additional, specific configuration is required to ensure correct operation of the driver.

The NetAmp should be configured with a static IP address in the same range as the Control4 system:

1. Enter the IP address of the NetAmp into the web browser of a computer connected to the same network, to display the web interface.
2. Choose the **Network Setup** tab.
3. Enter the username and password when prompted (by default these are *admin / password*).
4. Enter your static IP address information and click **Save**.

## Driver Installation

Copy the file "amplifier\_ip\_systemline\_s7\_sn1100.c4i" from the zip package to your Control4 driver location (by default this is Documents\Control4\Drivers). Open Composer and choose the **Search** tab from the **Items** pane.

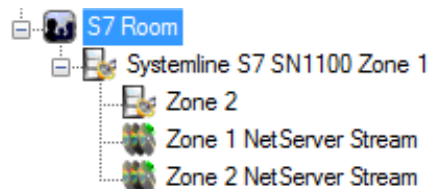


**Figure 1: Driver Search**

The driver can be found under:

Device Type: Amplifier  
Manufacturer: Systemline

Add the driver entitled "Systemline S7 SN1100 Room Amplifier" into your project. Note that the driver is added to your project with Zone 2 located as a separate (sub) device to Zone 1 and with two further sub-devices to represent the NetServer audio streams that are supplied to input 3 of each zone:



**Figure 2: Driver Zones**

## Driver Configuration

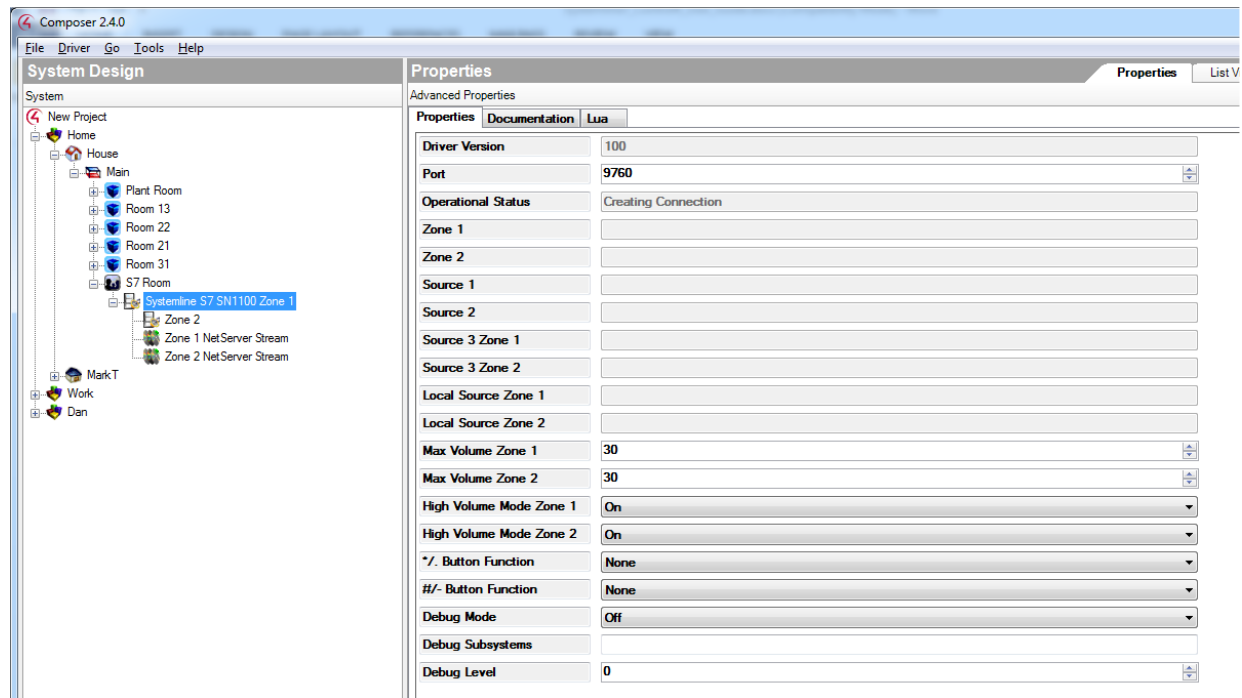
It is first necessary to create connections for the new driver; chose the **Connections** pane in Composer, and then select the **Network** tab. Double click on the *Systemline S7 SN1100 Zone 1* device in the **IP Network Connections** list and enter the NetAmp's IP address:



**Figure 3: Driver Network Connection**

Next, choose the **Control A/V** tab and create audio connections for the two zones according to normal Control4 practice. Note that the **Source 1** and **Source 2** connections should be the same for both zones, even though it is technically possible to assign them independently in Composer. **Source 3** in each zone is automatically bound to the device that represents the NetServer stream supplied to that zone. If you are just using a standard stereo input for **Source 3** in either zone rather than a NetServer stream, delete the binding to the NetServer and set up a Stereo connection instead as usual.

Now that the connections are established the driver properties should be populated with information from the Systemline amplifier; choose **System Design** and select the driver:



**Figure 4: Driver Properties**

The following properties are available, some of which are user editable:

Setting	Description
Driver Version	Reports the release version of the driver
Port	Specify the port number used to communicate with the NetAmp
Operational Status	Reports the current connection status
Zone 1	Reports the name for Zone 1, as configured in Systemline
Zone 2	Reports the name for Zone 2, as configured in Systemline
Source 1	Reports the name for Source 1, as configured in Systemline
Source 2	Reports the name for Source 2, as configured in Systemline
Source 3 Zone 1	Reports the name for Source 3 (Zone 1), as configured in Systemline
Source 3 Zone 2	Reports the name for Source 3 (Zone 2), as configured in Systemline
Local Source Zone 1	Reports the name for Local Source Zone 1, as configured in Systemline
Local Source Zone 2	Reports the name for Local Source Zone 2, as configured in Systemline

Max Volume Zone 1	Specify a maximum volume level for Zone 1 (0-30)
Max Volume Zone 2	Specify a maximum volume level for Zone 2 (0-30)
High Volume Mode Zone 1	Enable or disable High Volume Mode for Zone 1
High Volume Mode Zone 2	Enable or disable High Volume Mode for Zone 2
+/. Button Function	Defines the command sent by the +/. button on the remote control and UI
#/- Button Function	Defines the command sent by the #-/ button on the remote control and UI
Debug Mode	For support use only
Debug Subsystems	For support use only
Debug Level	For support use only

**Table 1: Driver Properties**

## Max Volume

The Max Volume properties set the maximum volume in each zone from 0-30. Note that whichever value is chosen, the Control4 level will still be 0-100; it will just be scaled to fit the given volume range.

## High Volume Mode

If High Volume mode is enabled, when a device is plugged into an input on the amplifier that is identified as controlling its own volume, the volume controls in Control4 are ignored. If High Volume mode is disabled, the volume controls will continue to work as normal.

## Button Functions

The Repeat and Shuffle functions for controlling the NetServer stream are not directly available from the Control4 remote control or standard user interface. They can be accessed by assigning them to the \*/. and #-/ keys using the corresponding properties.

## Driver Commands

The driver features a number of commands used for control. Choose the **Programming** pane and select the driver in the **Device Actions** window:

Commands    Conditionals    Loops

**Output**  
SPEAKER 1

**Input**  
☒ Set    Disconnect    Audio/Video

**Volume**  
☐ Start    ☐ Stop    ☐ Pulse    ☐ Set 0

**Bass Settings**  
☐ Start    ☐ Stop    ☐ Pulse    ☐ Set 0

**Treble Settings**  
☐ Start    ☐ Stop    ☐ Pulse    ☐ Set 0

**Balance Settings**  
☐ Start    ☐ Stop    ☐ Pulse    ☐ Set 0

**Loudness Settings**  
☐ Toggle    ☐ Set

**Mute Settings**  
☐ Toggle    ☐ Set

☒ **Device Specific Command**

Set Local Input Mode

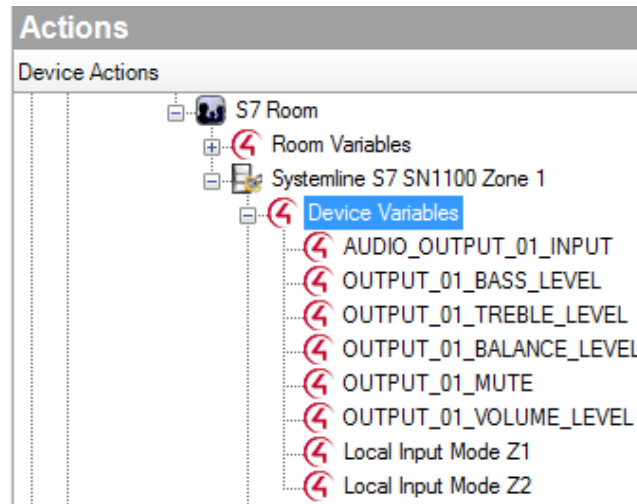
Zone	Local Input Mode
1	Auto

**Figure 5: Driver Commands**

The driver contains the usual commands found in amplifier drivers, including discrete input selection as well as the ability to raise, lower, and set bass, treble, volume and balance. Additionally exposed via the Zone 1 driver are some Device Specific Commands. **Set Repeat**, **Set Shuffle** and **Select Favourite** provide access to the NetServer stream controls that are not otherwise accessible through standard commands. **Set Local Input Mode** allows the user to choose the input mode for the local input for each zone.

## Driver Variables

The driver features a number of variables for each zone, which provide feedback from the system.



**Figure 5: Driver Variables**

Variable	Description
AUDIO_OUTPUT_xx_INPUT	The current input selected for zone xx
OUTPUT_xx_BASS_LEVEL	The current bass level for zone xx
OUTPUT_xx_TREBLE_LEVEL	The current treble level for zone xx
OUTPUT_xx_BALANCE_LEVEL	The current balance position for zone xx
OUTPUT_xx_MUTE	The current mute status for zone xx
OUTPUT_xx_VOLUME_LEVEL	The current treble level for volume xx (note: expressed as 0-100, scaled from Systemline values 0-30)
Local Input Mode Z1	The current local input mode for Zone 1 (Auto, Digital or Analogue)
Local Input Mode Z2	The current local input mode for Zone 2 (Auto, Digital or Analogue)

**Table 2: Driver Variables**



## Hiding Zone 1 and Zone 2 as Music Sources

The **Zone 1** and **Zone 2** devices may erroneously appear as music sources on the navigator for the room in which the devices are configured. To stop this from happening, select the room in the **System Design** view and select the **Navigator** tab. Press the **Modify...** button and mark the devices as Hidden.