



LS10 (Serial or IP)  
RS20i (Serial or IP)

Control4 Driver User Guide

Driver developed by



## Introduction

This driver has been designed to provide control of a Datasat LS10 or RS20i Amplifier via RS232 or IP. This driver has been written and tested using a Datasat RS20i amp, firmware version 103.05 ciRS20v10305\_rel.

## Datasat Configuration

It is recommended that the Datasat system be installed, configured and tested by a suitably qualified engineer, according to Datasat documentation, prior to integration with this driver.

**Note:** Where RS232 is the communication method, please ensure that the Datasat amplifier is configured to use a baud rate of 115200bps.

## Driver Installation

Copy the following files from the zip package to your Control4 driver location (e.g. Documents\Control4\Drivers):

amplifier\_rs232\_datasat\_RS20i.c4i  
amplifier\_rs232\_datasat\_LS10.c4i  
amplifier\_ip\_datasat\_RS20i.c4i  
amplifier\_ip\_datasat\_LS10.c4i

Open Composer and choose the **Search** tab from the **Items** pane.

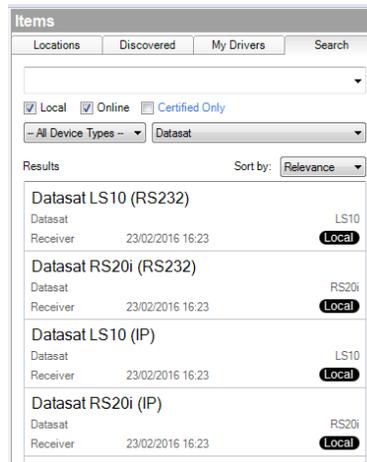


Figure 1: Driver Search

The driver can be found under:

Device Type: Receiver  
Manufacturer: Datasat

Add one of the serial or ip drivers into your project.

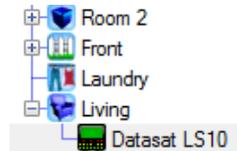


Figure 2: Driver

## Driver Configuration (IP)

In the **Connections** pane, select **Network** from the top.



Figure 3: Network Tab

Double click on the Datasat (IP) device and then enter the IP address of the device.

 Datasat LS10	Living	c4:lua_gen	IP	172.16.104.88
 Home Controller HC800	Meeting Ro...	c4:control4_hc800_...	UUID	c4:control4_hc800_homecontroller-home-co...

Figure 4: Network Connections

## Driver Configuration (Serial)

Choose the **Connections** pane in Composer, and then select the **Control/AV** tab. Click on the Datasat (Serial) device and drag the serial contact you will use to the Home Controller serial port you will use for the device.

Control & Audio Video Connections				
Datasat LS10				
Name	Type	Connection	Input/Output	Connected To
<b>Audio/Video Inputs</b>				
Stereo 1	Audio	STEREO	Input	
Stereo 2	Audio	STEREO	Input	
USB	Audio	USB	Input	
Toslink 1	Audio	DIGITAL_OPTICAL	Input	
Toslink 2	Audio	DIGITAL_OPTICAL	Input	
SPDIF 1	Audio	DIGITAL_COAX	Input	
SPDIF 2	Audio	DIGITAL_COAX	Input	
HDMI 1	Audio	HDMI	Input	
HDMI 2	Audio	HDMI	Input	
HDMI 3	Audio	HDMI	Input	
HDMI 4	Audio	HDMI	Input	
HDMI 5	Audio	HDMI	Input	
HDMI 6	Audio	HDMI	Input	
HDMI 7	Audio	HDMI	Input	
HDMI 8	Audio	HDMI	Input	
<b>Audio/Video Outputs</b>				
HDMI Out	Audio	HDMI	Output	
Analog Audio Out	Audio	MULTI_STEREO	Output	
<b>Control Inputs</b>				
Datasat Serial RS-232 Co...	Control	RS_232	Input	
<b>Room Control</b>				
Room Selection - Output	RoomControl	AUDIO_SELECTION	Output	Front->Audio End-Point 1, Front->Video's Audio End-P...
Room Selection - Output	RoomControl	AUDIO_VOLUME	Output	Front->Video Volume 1, Front->Audio Volume 1

RS_232 Output Devices			
Device	Name	Location	Connections
Home Controller HC800	SERIAL 1	Meeting Room	
Home Controller HC800	SERIAL 2	Meeting Room	

Figure 5: Driver Serial Connection

**Note:** The amplifier must be configured to use a baud rate of 115200bps for serial communications.

Now that the connections are established the driver properties should be populated with information from the amp the next time you start the Home Controller up.

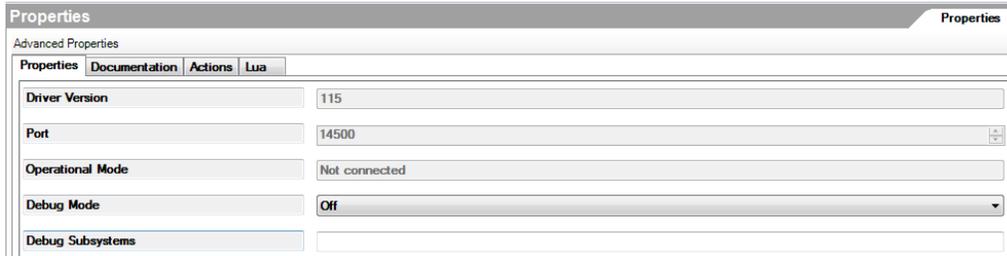


Figure 6: Driver Properties

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

Setting	Description
Driver Version	Reports the release version of the driver
Port (IP only)	The TCP port the device is using
Operational Status	Reports the current connection status
Debug Mode	For support use only
Debug Subsystems	For support use only
Debug Level	For support use only
Stereo 1, Stereo 2 ... Digital 9 to 16 (RS20i only)	Select the RS20i input preset that each connection maps to.

Table 1: Driver 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:

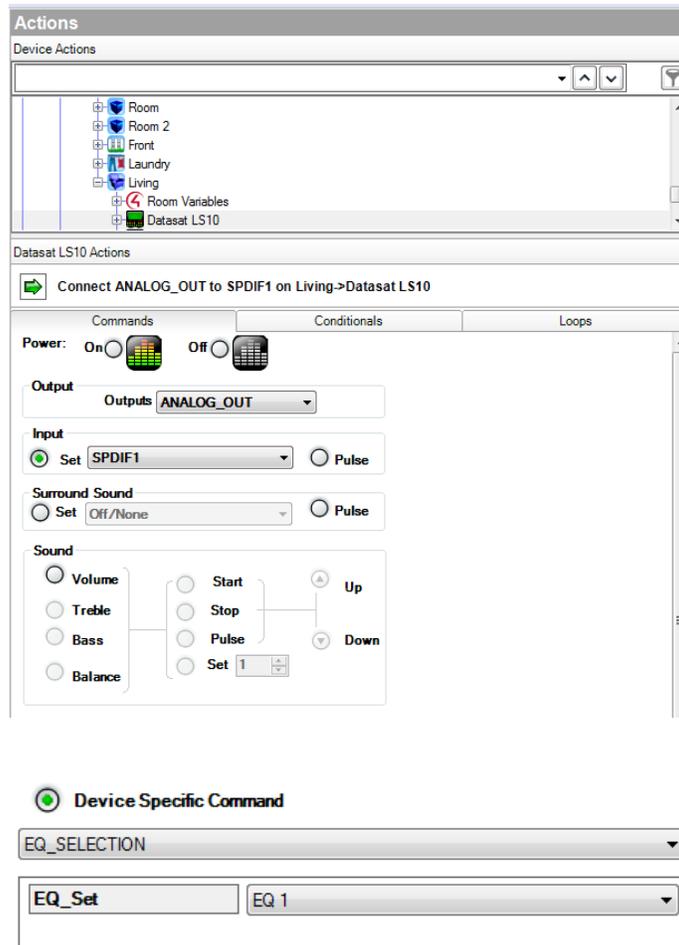


Figure 7: Driver Commands

The driver contains the usual commands found in amplifier drivers, including discrete input selection as well as the ability to raise, lower, and set volume. Additionally exposed are some Device Specific Commands. These can be seen in the drop down box in Figure 7.

## Driver Variables

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

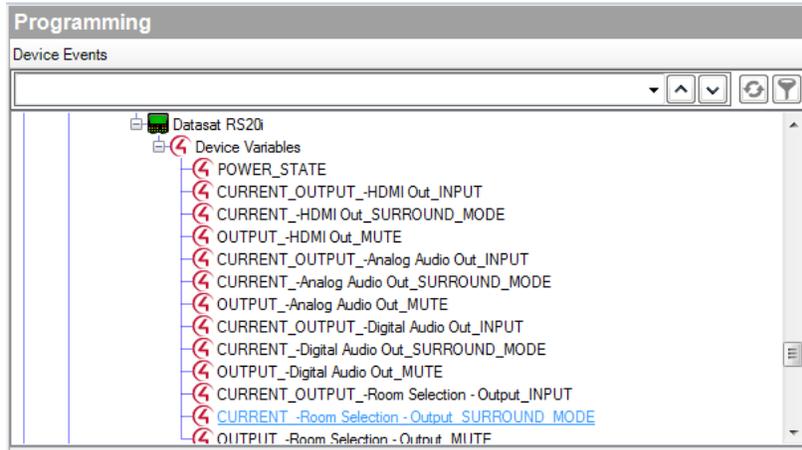


Figure 8: Driver Variables

Variable	Description
POWER_STATE	The current power state
CURRENT_OUTPUT_XX_INPUT	The current input
CURRENT_XX_SURROUND_MODE	The current surround mode
OUTPUT_XX_MUTE	The current mute status

Table 2: Driver Variables