



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.

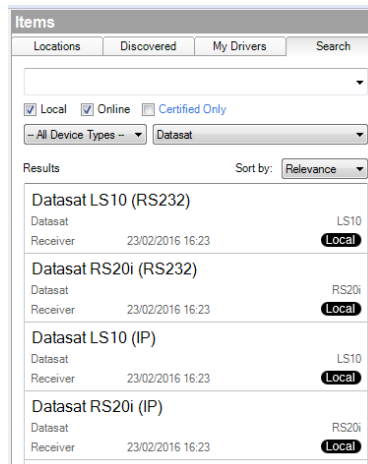


Figure 1: Driver Search

The driver can be found under:

Device Type: Receiver
Manufacturer: Datasat

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

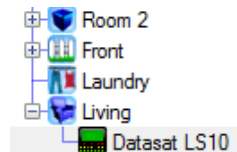


Figure 2: Driver

Driver Configuration (IP)

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

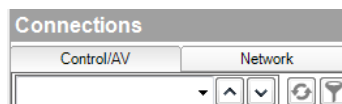


Figure 3: Network Tab

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)

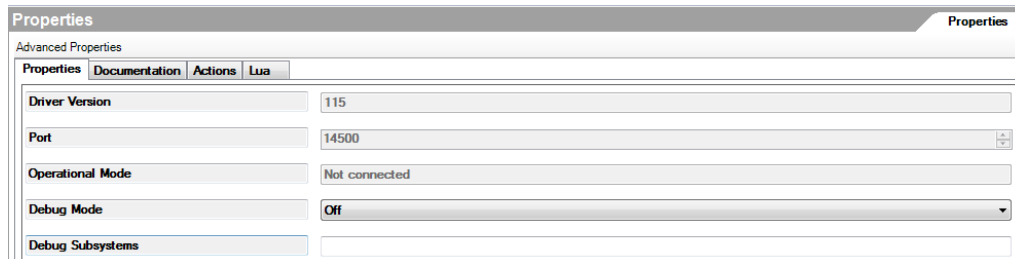
Choose the **Connections** pane in Composer, and then select the **Control/AV** tab. Click on the Datasat (Serial) device and drag the serial contact you will use to the Home Controller serial port you will use for the device.

| Control & Audio Video Connections | | | | | |
|-----------------------------------|-------------|-----------------|--------------|---|--|
| Dataset LS10 | | | | | |
| Name | Type | Connection | Input/Output | Connected To | |
| Audio/Video Inputs | | | | | |
| 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 | | |
| Audio/Video Outputs | | | | | |
| HDMI Out | Audio | HDMI | Output | | |
| Analog Audio Out | Audio | MULTI_STEREO | Output | | |
| Control Inputs | | | | | |
| Dataset Serial RS-232 Co... | Control | RS_232 | Input | | |
| Room Control | | | | | |
| 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.



The screenshot shows a 'Properties' window with a tabbed interface. The 'Properties' tab is selected, showing fields for Driver Version (115), Port (14500), Operational Mode (Not connected), Debug Mode (Off), and Debug Subsystems (empty).

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:

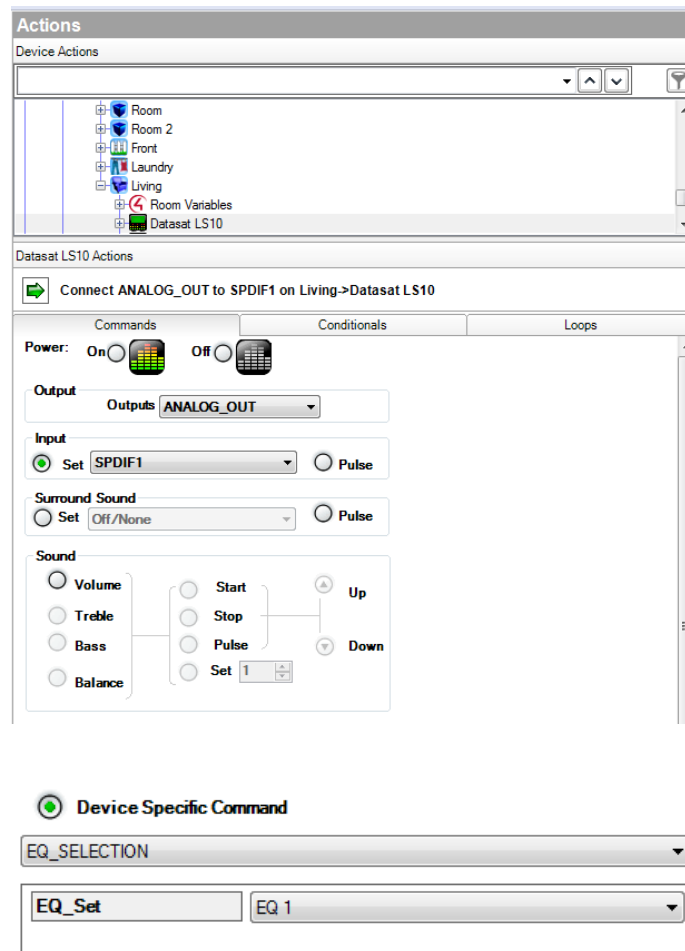


Figure 7: Driver Commands

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.

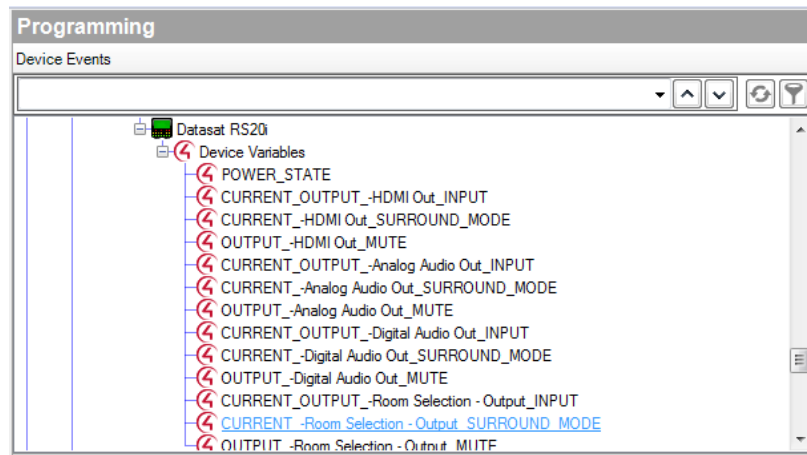


Figure 8: Driver Variables

| 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