# JBL Synthesis SDR 35 Series Crestron Driver

## Introduction

This driver has been designed to provide control of the JBL Synthesis SDR 35 Series series of AV receivers/processors via an IP or Serial connection.

NOTE for best control of the Synthesis SDR 35 Series, when using IP, make sure the Crestron is the only equipment controlling the Synthesis SDR 35 Series

The following models are supported:

SDR-35, SDR-38, SDP-55, SDP-58

## Driver Installation and Configuration

In SIMPL Windows, click `File > Open` and navigate to your .smw program file. The module should appear in your **Program View**.

Select **Central Control Module** in the **Program View**, then click the **Configure** button in the toolbar to select the model of your Crestron processor.

To configure the driver, navigate to the .umc files.

If you have installed the serial driver, connect the Serial_RX and Serial_TX signals and set the Baud rate to 38400. Ensure that the serial cable is connected to your JBL device.

If using the IP driver, enter the IP of the Synthesis SDR 35 Series device in your parameters. If there is a failure connect, first ensure that your device and the Crestron processor are both connected to the same network. If this does not resolve the issue, consult the manual provided by JBL.

## Device Configuration

Configure your device as per the manufacturer's instructions. To find a copy of the user manual for your device, select your model from the manufacturer's website here: https://www.jblsynthesis.com/support/

You must configure your device with your desired control method. To set your preferred control method, navigate to `Menu > General Setup > Control` on the device and set it to either RS232 or

IP.

If using IP it is recommended that you use a static IP address for the Synthesis SDR 35 Series.

If using an RS232 connection, refer to the manufacturer's documentation regarding cable wiring.

In order to power the device on while it is in standby mode please enable the following

setting HDMI Bypass and IP. To do this go to 'Menu > HDMI Settings' set "HDMI Bypass and IP" to "On".

These parameters can all be modified using the unit's control panel, or - if it is connected to a network via IP - by typing the unit's IP address into your web browser.

# Driver Commands

The driver allows control of the Synthesis SDR 35 Series unit using a Crestron touch panel or equivalent device. Commands to set the zone, source, EQ and advanced audio options are available.

Some sources, as per the Synthesis SDR 35 Series unit, can be selected but not directly controlled by the driver. Sources that allow for direct control are as follows: - Bluetooth - DAB Radio - FM Radio - Net

Common functions (play, pause, fast-forward, shuffle etc.) may be called from the driver on these sources. For a comprehensive list of commands, please consult your JBL unit's User Manual or API Guide.

# Driver Variables

This driver tracks a number of variables in order to provide feedback from the Synthesis SDR 35 Series unit. These are as follows:

### Status

- Connection status
- Power/standby status
- Software version

### Inputs

- Current source
- Current zone
- Audio input analogue/digital/HDMI

### Outputs

- Master volume

- Mute
- Source EQ/Advanced audio
- HDMI out

## Advanced audio

- Treble EQ
- Bass EQ
- Balance
- LipSync delay
- Subwoofer trim
- Subwoofer stereo trim
- Dolby Leveller
- Compression
- IMAX Enhanced
- Direct mode

## Surround Sound Modes

Surround sound modes are selected via the DECODE_MODE_SET analogue input. Feedback is provide by the corisponding STEREO_DECODE_MODE and MULTI_CHANNEL_DECODE_MODE analogue outputs.

- STEREO - 1
- MULTI_CHANNEL - 2
- DOLBY_SURROUND - 3
- NEO_6_CINEMA - 4
- NEO_6_MUSIC - 5
- 5_7_CH_STEREO - 6
- DTS_NEURAL_X - 7
- DTS_VIRTUAL_X - 8
- RESERVED is LOGIC_16 - 9
- DOLBY_VIRTUAL_HEIGHT - 10
- AURO_NATIVE - 11
- AURO_MATIC_3D - 12
- AURO_2D - 13

The Variables below show whether the unit is receiving audio in a format of either Stereo or multichannel

- ZONE1_IS_STEREO,
- ZONE1_IS_MULTI_CHAN;

## Radio

- DAB station
- DAB metadata
- FM frequency

- FM genre/RDS info
- Radio presets

**Net**

- Now playing data (artist/album/track)
- Application
- Sample rate
- Audio encoder

# Troubleshooting

- Confirm the Ethernet switch used by the JBL unit is correctly uplinked to the same network as the Crestron processor.

- Confirm that the correct IP address is defined in the Crestron parameters for the Synthesis SDR 35 Series control interface.

- Some sources do not make use of all the parameters in Advanced Audio. For these sources, unimplemented parameters will offer no control.

- If a source is not listed under **Driver Commands** above, this driver offers no direct control of that device.