



Arcam Radia | AVA-Series | IP & Serial

Driver Installation Guide

by Janus Technology

Product Manual

For full hardware documentation, refer to the manufacturer's product documentation for the Arcam Radia AVA-Series range (AVA15 / AVA25 / AVA35 / AVP45):

Summary

This Crestron driver provides two-way control of the following Arcam Radia AV Receiver/Processor models via TCP/IP.

The driver is provided as a SIMPL+ module (.usp), which references the AVASeries SIMPL# library, compiled together into a SimplWindows module (.umc).

A demo file (Rebrand_Demo.smw) has also been provided in a .smw format to allow for easy copy-and-paste integration into your project, demonstrating the system configuration options.

Features

The driver provides the following functionality:

- Two-zone power, mute and volume control
- Input source selection per zone (HDMI x7, Digital x4, Analogue x4, Bluetooth, Network Streaming) plus Zone 2 Follow Zone 1
- Absolute and step volume control, with native and Crestron analog scale feedback
- Room EQ (Dirac) slot selection and feedback
- 2-channel and multi-channel upmixer mode selection and feedback
- Bass, Treble, Sub Trim and Sub Stereo Trim adjustment (absolute dB and step)
- Lip Sync adjustment (absolute and step)
- Display brightness control
- HDMI output routing (Output 1, Output 2, or both)
- Simulated IR remote passthrough (navigation, transport, OSD)
- Now Playing metadata and Bluetooth status feedback for network audio sources
- System identity feedback (model, software version, network IP)

Requirements

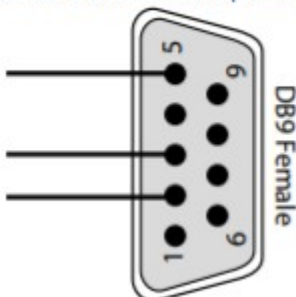
Crestron Hardware:

- Any Ethernet-enabled Crestron processor supporting SIMPL+ modules

Connection Methods:

- TCP/IP - static IP address or DHCP reservation strongly recommended (port 50000)
- RS232

Serial connector specification



Connector 1 pin	Function
1	RS232 Ground
2	Tx (From AVA)
3	Rx (To AVA)
5	RS232 Ground

Data transfer format

Parameter	Value
Transfer Rate	115,200bps
IP port	50000
Data	8 bits
Parity	None
Stop bits	1
Control Flow	None

Supported Products

The following models are supported by this driver. The model is detected automatically from the connected unit - no installer configuration is required beyond IP Address and Port.

Model	Notes
Arcam Radia AVA15	No Zone 2. No Auro-3D or IMAX Enhanced decoding.
Arcam Radia AVA25	Zone 2. Auro-3D and IMAX Enhanced supported.
Arcam Radia AVA35	Zone 2. Auro-3D and IMAX Enhanced supported.
Arcam Radia AVP45	Pre-amplifier/processor (no amplifier channels). Zone 2. Auro-3D and IMAX Enhanced supported.

Table Key

D	Digital
A	Analog
S	String

Inputs

* Not all devices support all functionality listed below.

Signal	Type	Description
UNIT_POWER_ON	D	Pulse to power on both Zone 1 and Zone 2 together.
UNIT_POWER_OFF	D	Pulse to power off both Zone 1 and Zone 2 together.
UNIT_POWER_TOGGLE	D	Pulse to toggle power on Zone 1 and Zone 2 independently (each zone flips its own current state).
ZONE1_POWER_ON	D	Pulse to power on Zone 1.
ZONE1_POWER_OFF	D	Pulse to power off Zone 1.
ZONE1_POWER_TOGGLE	D	Pulse to toggle power on Zone 1.
ZONE1_MUTE_ON	D	Pulse to mute Zone 1.
ZONE1_MUTE_OFF	D	Pulse to unmute Zone 1.
ZONE1_MUTE_TOGGLE	D	Pulse to toggle mute on Zone 1.
ZONE1_VOLUME_UP	D	Pulse to increase Zone 1 volume by one step.
ZONE1_VOLUME_DOWN	D	Pulse to decrease Zone 1 volume by one step.
ZONE2_POWER_ON	D	Pulse to power on Zone 2.
ZONE2_POWER_OFF	D	Pulse to power off Zone 2.
ZONE2_POWER_TOGGLE	D	Pulse to toggle power on Zone 2.
ZONE2_MUTE_ON	D	Pulse to mute Zone 2.
ZONE2_MUTE_OFF	D	Pulse to unmute Zone 2.
ZONE2_MUTE_TOGGLE	D	Pulse to toggle mute on Zone 2.
ZONE2_VOLUME_UP	D	Pulse to increase Zone 2 volume by one step.
ZONE2_VOLUME_DOWN	D	Pulse to decrease Zone 2 volume by one step.
ZONE1_HDMI1	D	Pulse to select HDMI 1 as Zone 1's input.
ZONE1_HDMI2	D	Pulse to select HDMI 2 as Zone 1's input.
ZONE1_HDMI3	D	Pulse to select HDMI 3 as Zone 1's input.
ZONE1_HDMI4	D	Pulse to select HDMI 4 as Zone 1's input.
ZONE1_HDMI5	D	Pulse to select HDMI 5 as Zone 1's input.
ZONE1_HDMI6	D	Pulse to select HDMI 6 as Zone 1's input.
ZONE1_HDMI7	D	Pulse to select HDMI 7 as Zone 1's input.
ZONE1_HDMI_ARC	D	Pulse to select HDMI ARC as Zone 1's input.
ZONE1_DIGITAL1	D	Pulse to select Digital 1 as Zone 1's input.
ZONE1_DIGITAL2	D	Pulse to select Digital 2 as Zone 1's input.
ZONE1_DIGITAL3	D	Pulse to select Digital 3 as Zone 1's input.
ZONE1_DIGITAL4	D	Pulse to select Digital 4 as Zone 1's input.
ZONE1_ANALOGUE1	D	Pulse to select Analogue 1 as Zone 1's input.
ZONE1_ANALOGUE2	D	Pulse to select Analogue 2 as Zone 1's input.
ZONE1_ANALOGUE3	D	Pulse to select Analogue 3 as Zone 1's input.
ZONE1_ANALOGUE4	D	Pulse to select Analogue 4 as Zone 1's input.
ZONE1_BLUETOOTH	D	Pulse to select Bluetooth as Zone 1's input.
ZONE1_NETWORK_STREAMING	D	Pulse to select Network Streaming as Zone 1's input.
ZONE2_HDMI1	D	Pulse to select HDMI 1 as Zone 2's input.
ZONE2_HDMI2	D	Pulse to select HDMI 2 as Zone 2's input.
ZONE2_HDMI3	D	Pulse to select HDMI 3 as Zone 2's input.
ZONE2_HDMI4	D	Pulse to select HDMI 4 as Zone 2's input.
ZONE2_HDMI5	D	Pulse to select HDMI 5 as Zone 2's input.

ZONE2_HDMI6	D	Pulse to select HDMI 6 as Zone 2's input.
ZONE2_HDMI7	D	Pulse to select HDMI 7 as Zone 2's input.
ZONE2_HDMI_ARC	D	Pulse to select HDMI ARC as Zone 2's input.
ZONE2_DIGITAL1	D	Pulse to select Digital 1 as Zone 2's input.
ZONE2_DIGITAL2	D	Pulse to select Digital 2 as Zone 2's input.
ZONE2_DIGITAL3	D	Pulse to select Digital 3 as Zone 2's input.
ZONE2_DIGITAL4	D	Pulse to select Digital 4 as Zone 2's input.
ZONE2_ANALOGUE1	D	Pulse to select Analogue 1 as Zone 2's input.
ZONE2_ANALOGUE2	D	Pulse to select Analogue 2 as Zone 2's input.
ZONE2_ANALOGUE3	D	Pulse to select Analogue 3 as Zone 2's input.
ZONE2_ANALOGUE4	D	Pulse to select Analogue 4 as Zone 2's input.
ZONE2_BLUETOOTH	D	Pulse to select Bluetooth as Zone 2's input.
ZONE2_NETWORK_STREAMING	D	Pulse to select Network Streaming as Zone 2's input.
ZONE2_FOLLOW_ZONE1	D	Pulse to set Zone 2's input to follow Zone 1 (Zone 2 mirrors whatever source Zone 1 is playing). *
ROOM_EQ_OFF	D	Pulse to turn Room EQ (Dirac) off.
ROOM_EQ_1	D	Pulse to select Room EQ (Dirac) slot 1.
ROOM_EQ_2	D	Pulse to select Room EQ (Dirac) slot 2.
ROOM_EQ_3	D	Pulse to select Room EQ (Dirac) slot 3.
UPMIXER_2CH_LAST_MODE	D	Pulse to recall the last-used 2-channel upmixer mode.
UPMIXER_2CH_STEREO	D	Pulse to set the 2-channel upmixer mode to Stereo.
UPMIXER_2CH_DOLBY_SURROUND	D	Pulse to set the 2-channel upmixer mode to Dolby Surround.
UPMIXER_2CH_DTS_NEURAL_X	D	Pulse to set the 2-channel upmixer mode to DTS Neural:X.
UPMIXER_2CH_DTS_VIRTUAL_X	D	Pulse to set the 2-channel upmixer mode to DTS Virtual:X.
UPMIXER_2CH_AURO_3D	D	Pulse to set the 2-channel upmixer mode to Auro-3D. Requires a model with Auro-3D support (see Supported Products).
UPMIXER_2CH_AURO_2D	D	Pulse to set the 2-channel upmixer mode to Auro-2D. Requires a model with Auro-3D support (see Supported Products).
UPMIXER_2CH_MCH_STEREO	D	Pulse to set the 2-channel upmixer mode to Multi-Channel Stereo.
UPMIXER_2CH_STEREO_DOWNMIX	D	Pulse to set the 2-channel upmixer mode to Stereo Downmix.
UPMIXER_MCH_LAST_MODE	D	Pulse to recall the last-used multi-channel upmixer mode.
UPMIXER_MCH_NATIVE	D	Pulse to set the multi-channel upmixer mode to Native.
UPMIXER_MCH_NATIVE_UPMIXER	D	Pulse to set the multi-channel upmixer mode to Native Upmixer.
UPMIXER_MCH_DOLBY_SURROUND	D	Pulse to set the multi-channel upmixer mode to Dolby Surround.
UPMIXER_MCH_DTS_NEURAL_X	D	Pulse to set the multi-channel upmixer mode to DTS Neural:X.
UPMIXER_MCH_DTS_VIRTUAL_X	D	Pulse to set the multi-channel upmixer mode to DTS Virtual:X.
UPMIXER_MCH_AURO_3D	D	Pulse to set the multi-channel upmixer mode to Auro-3D. Requires a model with Auro-3D support (see Supported Products).
UPMIXER_MCH_AURO_2D	D	Pulse to set the multi-channel upmixer mode to Auro-2D. Requires a model with Auro-3D support (see Supported Products).
UPMIXER_MCH_MCH_STEREO	D	Pulse to set the multi-channel upmixer mode to Multi-Channel Stereo.
UPMIXER_MCH_STEREO_DOWNMIX	D	Pulse to set the multi-channel upmixer mode to Stereo Downmix.
LIPSYNC_UP	D	Pulse to increase Lip Sync delay by one step (5ms).

LIPSYNC_DOWN	D	Pulse to decrease Lip Sync delay by one step (5ms).
BASS_UP	D	Pulse to increase Bass by one step (1dB).
BASS_DOWN	D	Pulse to decrease Bass by one step (1dB).
TREBLE_UP	D	Pulse to increase Treble by one step (1dB).
TREBLE_DOWN	D	Pulse to decrease Treble by one step (1dB).
SUBTRIM_UP	D	Pulse to increase Subwoofer Trim by one step (0.5dB).
SUBTRIM_DOWN	D	Pulse to decrease Subwoofer Trim by one step (0.5dB).
SUBSTEREOTRIM_UP	D	Pulse to increase Sub Stereo Trim by one step (0.5dB).
SUBSTEREOTRIM_DOWN	D	Pulse to decrease Sub Stereo Trim by one step (0.5dB).
DISPLAY_BRIGHTNESS_FULL	D	Pulse to set the front panel display brightness to Full.
DISPLAY_BRIGHTNESS_DIM	D	Pulse to set the front panel display brightness to Dim.
DISPLAY_BRIGHTNESS_DIMMER	D	Pulse to set the front panel display brightness to Dimmer.
DISPLAY_BRIGHTNESS_OFF	D	Pulse to turn the front panel display off.
HDMI_OUT_1	D	Pulse to route HDMI output to Output 1 only.
HDMI_OUT_2	D	Pulse to route HDMI output to Output 2 only.
HDMI_OUT_1_AND_2	D	Pulse to route HDMI output to both Output 1 and Output 2.
NAVIGATE_UP	D	Pulse to send the Navigate Up command (simulated IR remote).
NAVIGATE_DOWN	D	Pulse to send the Navigate Down command (simulated IR remote).
NAVIGATE_LEFT	D	Pulse to send the Navigate Left command (simulated IR remote).
NAVIGATE_RIGHT	D	Pulse to send the Navigate Right command (simulated IR remote).
OK	D	Pulse to send the OK/Select command (simulated IR remote).
BACK	D	Pulse to send the Back command (simulated IR remote).
OSD	D	Pulse to send the On-Screen Display command (simulated IR remote).
MENU	D	Pulse to send the Menu command (simulated IR remote).
INFO	D	Pulse to send the Info command (simulated IR remote).
DECODE	D	Pulse to send the Decode command (simulated IR remote).
INPUT_SOURCE_CYCLE	D	Pulse to cycle to the next Input Source (simulated IR remote).
SKIP_BACK	D	Pulse to send the Skip Back (previous track) command (simulated IR remote).
SKIP_FORWARD	D	Pulse to send the Skip Forward (next track) command (simulated IR remote).
PLAY_PAUSE	D	Pulse to send the Play/Pause command (simulated IR remote).
ZONE1_VOLUME_SET	A	Set Zone 1 volume to an absolute level. Standard Crestron analog scale (0d-65535d) - connect to a fader/gain/bargraph symbol.
ZONE2_VOLUME_SET	A	Set Zone 2 volume to an absolute level. Standard Crestron analog scale (0d-65535d) - connect to a fader/gain/bargraph symbol.
BASS_DB_X10_SET	A	Set Bass to an absolute level. Signed dB x10, two's complement (-120d to +120d, i.e. +-12.0dB in 1dB steps).
TREBLE_DB_X10_SET	A	Set Treble to an absolute level. Signed dB x10, two's complement (-120d to +120d, i.e. +-12.0dB in 1dB steps).
SUBTRIM_DB_X10_SET	A	Set Subwoofer Trim to an absolute level. Signed dB x10, two's complement (-100d to +100d, i.e. +-10.0dB in 0.5dB steps).
SUBSTEREOTRIM_DB_X10_SET	A	Set Sub Stereo Trim to an absolute level. Signed dB x10, two's complement (-100d to +100d, i.e. +-10.0dB in 0.5dB steps).

SERIAL_RX	S	not connected/used in this IP version of the driver.
CONSOLE_COMMAND	S	Send a debug console command to the driver (e.g. debug print on) - for diagnostic use only.
INPUT_NAME_SET	S	Set a custom name (up to 10 characters) for the currently-selected input.

Parameters

Parameter	Description
IP_ADDRESS	IP Address of the device.
PORT	TCP port for the connection (Phase 3 Comm Protocol default: 50000).

Outputs

Signal	Type	Description
CONNECTED	D	HIGH when the driver has an active TCP connection to the device.
UNIT_IS_ON	D	HIGH when Zone 1 (the main zone) is powered on - mirrors ZONE1_IS_ON.
ZONE1_IS_ON	D	HIGH when Zone 1 is powered on.
ZONE1_MUTE_IS_ON	D	HIGH when Zone 1 is muted.
ZONE2_IS_ON	D	HIGH when Zone 2 is powered on. *
ZONE2_MUTE_IS_ON	D	HIGH when Zone 2 is muted. *
MODEL_MISMATCH	D	HIGH if the connected unit's reported model does not match what was expected.
NET_PLAYBACK_IS_PLAYING	D	HIGH when network audio playback is currently playing.
NET_PLAYBACK_IS_PAUSED	D	HIGH when network audio playback is currently paused.
BT_IS_CONNECTED	D	HIGH when a Bluetooth device is connected.
ZONE2_IS_AVAILABLE	D	HIGH if the connected model has a Zone 2 - see Supported Products.
AURO3D_IS_AVAILABLE	D	HIGH if the connected model supports Auro-3D decoding - see Supported Products.
IMAX_ENHANCED_IS_AVAILABLE	D	HIGH if the connected model supports IMAX Enhanced decoding - see Supported Products.
ZONE1_HDMI1_IS_SELECTED	D	HIGH when Zone 1's input is set to HDMI 1.
ZONE1_HDMI2_IS_SELECTED	D	HIGH when Zone 1's input is set to HDMI 2.
ZONE1_HDMI3_IS_SELECTED	D	HIGH when Zone 1's input is set to HDMI 3.
ZONE1_HDMI4_IS_SELECTED	D	HIGH when Zone 1's input is set to HDMI 4.
ZONE1_HDMI5_IS_SELECTED	D	HIGH when Zone 1's input is set to HDMI 5.
ZONE1_HDMI6_IS_SELECTED	D	HIGH when Zone 1's input is set to HDMI 6.
ZONE1_HDMI7_IS_SELECTED	D	HIGH when Zone 1's input is set to HDMI 7.
ZONE1_HDMI_ARC_IS_SELECTED	D	HIGH when Zone 1's input is set to HDMI ARC.
ZONE1_DIGITAL1_IS_SELECTED	D	HIGH when Zone 1's input is set to Digital 1.
ZONE1_DIGITAL2_IS_SELECTED	D	HIGH when Zone 1's input is set to Digital 2.
ZONE1_DIGITAL3_IS_SELECTED	D	HIGH when Zone 1's input is set to Digital 3.
ZONE1_DIGITAL4_IS_SELECTED	D	HIGH when Zone 1's input is set to Digital 4.
ZONE1_ANALOGUE1_IS_SELECTED	D	HIGH when Zone 1's input is set to Analogue 1.
ZONE1_ANALOGUE2_IS_SELECTED	D	HIGH when Zone 1's input is set to Analogue 2.
ZONE1_ANALOGUE3_IS_SELECTED	D	HIGH when Zone 1's input is set to Analogue 3.
ZONE1_ANALOGUE4_IS_SELECTED	D	HIGH when Zone 1's input is set to Analogue 4.
ZONE1_BLUETOOTH_IS_SELECTED	D	HIGH when Zone 1's input is set to Bluetooth.
ZONE1_NETWORK_STREAMING_IS_SELECTED	D	HIGH when Zone 1's input is set to Network Streaming.
ZONE2_HDMI1_IS_SELECTED	D	HIGH when Zone 2's input is set to HDMI 1.
ZONE2_HDMI2_IS_SELECTED	D	HIGH when Zone 2's input is set to HDMI 2.
ZONE2_HDMI3_IS_SELECTED	D	HIGH when Zone 2's input is set to HDMI 3.
ZONE2_HDMI4_IS_SELECTED	D	HIGH when Zone 2's input is set to HDMI 4.
ZONE2_HDMI5_IS_SELECTED	D	HIGH when Zone 2's input is set to HDMI 5.
ZONE2_HDMI6_IS_SELECTED	D	HIGH when Zone 2's input is set to HDMI 6.
ZONE2_HDMI7_IS_SELECTED	D	HIGH when Zone 2's input is set to HDMI 7.
ZONE2_HDMI_ARC_IS_SELECTED	D	HIGH when Zone 2's input is set to HDMI ARC.
ZONE2_DIGITAL1_IS_SELECTED	D	HIGH when Zone 2's input is set to Digital 1.
ZONE2_DIGITAL2_IS_SELECTED	D	HIGH when Zone 2's input is set to Digital 2.
ZONE2_DIGITAL3_IS_SELECTED	D	HIGH when Zone 2's input is set to Digital 3.
ZONE2_DIGITAL4_IS_SELECTED	D	HIGH when Zone 2's input is set to Digital 4.
ZONE2_ANALOGUE1_IS_SELECTED	D	HIGH when Zone 2's input is set to Analogue 1.
ZONE2_ANALOGUE2_IS_SELECTED	D	HIGH when Zone 2's input is set to Analogue 2.
ZONE2_ANALOGUE3_IS_SELECTED	D	HIGH when Zone 2's input is set to Analogue 3.
ZONE2_ANALOGUE4_IS_SELECTED	D	HIGH when Zone 2's input is set to Analogue 4.

ZONE2_BLUETOOTH_IS_SELECTED	D	HIGH when Zone 2's input is set to Bluetooth.
ZONE2_NETWORK_STREAMING_IS_SELECTED	D	HIGH when Zone 2's input is set to Network Streaming.
ZONE2_FOLLOW_ZONE1_IS_SELECTED	D	HIGH when Zone 2's input is set to follow Zone 1. *
DISPLAY_BRIGHTNESS_IS_OFF	D	HIGH when the front panel display brightness is currently Off. Reflects the unit's own 3-state response scale (Off/Dim/Full), which is not the same as the 4-value DISPLAY_BRIGHTNESS_* push button scale.
DISPLAY_BRIGHTNESS_IS_DIM	D	HIGH when the front panel display brightness is currently Dim.
DISPLAY_BRIGHTNESS_IS_FULL	D	HIGH when the front panel display brightness is currently Full.
UPMIXER_2CH_IS_LAST_MODE	D	HIGH when the 2-channel upmixer mode is Last Mode.
UPMIXER_2CH_IS_STEREO	D	HIGH when the 2-channel upmixer mode is Stereo.
UPMIXER_2CH_IS_DOLBY_SURROUND	D	HIGH when the 2-channel upmixer mode is Dolby Surround.
UPMIXER_2CH_IS_DTS_NEURAL_X	D	HIGH when the 2-channel upmixer mode is DTS Neural:X.
UPMIXER_2CH_IS_DTS_VIRTUAL_X	D	HIGH when the 2-channel upmixer mode is DTS Virtual:X.
UPMIXER_2CH_IS_AURO_3D	D	HIGH when the 2-channel upmixer mode is Auro-3D.
UPMIXER_2CH_IS_AURO_2D	D	HIGH when the 2-channel upmixer mode is Auro-2D.
UPMIXER_2CH_IS_MCH_STEREO	D	HIGH when the 2-channel upmixer mode is Multi-Channel Stereo.
UPMIXER_2CH_IS_STEREO_DOWNMIX	D	HIGH when the 2-channel upmixer mode is Stereo Downmix.
UPMIXER_MCH_IS_LAST_MODE	D	HIGH when the multi-channel upmixer mode is Last Mode.
UPMIXER_MCH_IS_NATIVE	D	HIGH when the multi-channel upmixer mode is Native.
UPMIXER_MCH_IS_NATIVE_UPMIXER	D	HIGH when the multi-channel upmixer mode is Native Upmixer.
UPMIXER_MCH_IS_DOLBY_SURROUND	D	HIGH when the multi-channel upmixer mode is Dolby Surround.
UPMIXER_MCH_IS_DTS_NEURAL_X	D	HIGH when the multi-channel upmixer mode is DTS Neural:X.
UPMIXER_MCH_IS_DTS_VIRTUAL_X	D	HIGH when the multi-channel upmixer mode is DTS Virtual:X.
UPMIXER_MCH_IS_AURO_3D	D	HIGH when the multi-channel upmixer mode is Auro-3D.
UPMIXER_MCH_IS_AURO_2D	D	HIGH when the multi-channel upmixer mode is Auro-2D.
UPMIXER_MCH_IS_MCH_STEREO	D	HIGH when the multi-channel upmixer mode is Multi-Channel Stereo.
UPMIXER_MCH_IS_STEREO_DOWNMIX	D	HIGH when the multi-channel upmixer mode is Stereo Downmix.
CURRENT_UPMIXER_IS_LAST_MODE	D	HIGH when the currently active upmixer mode is Last Mode.
CURRENT_UPMIXER_IS_STEREO	D	HIGH when the currently active upmixer mode is Stereo.
CURRENT_UPMIXER_IS_NATIVE	D	HIGH when the currently active upmixer mode is Native.
CURRENT_UPMIXER_IS_NATIVE_UPMIXER	D	HIGH when the currently active upmixer mode is Native Upmixer.
CURRENT_UPMIXER_IS_DOLBY_SURROUND	D	HIGH when the currently active upmixer mode is Dolby Surround.
CURRENT_UPMIXER_IS_DTS_NEURAL_X	D	HIGH when the currently active upmixer mode is DTS Neural:X.
CURRENT_UPMIXER_IS_DTS_VIRTUAL_X	D	HIGH when the currently active upmixer mode is DTS Virtual:X.
CURRENT_UPMIXER_IS_AURO_3D	D	HIGH when the currently active upmixer mode is Auro-3D.
CURRENT_UPMIXER_IS_AURO_2D	D	HIGH when the currently active upmixer mode is Auro-2D.
CURRENT_UPMIXER_IS_MCH_STEREO	D	HIGH when the currently active upmixer mode is Multi-Channel Stereo.

CURRENT_UPMIXER_IS_STEREO_DOWNMIX	D	HIGH when the currently active upmixer mode is Stereo Downmix.
ZONE1_VOLUME	A	Zone 1 volume level. Crestron standard analog scale (0d-65535d) - matches ZONE1_VOLUME_SET's scale, for a bargraph/gain symbol.
ZONE2_VOLUME	A	Zone 2 volume level. Crestron standard analog scale (0d-65535d) - matches ZONE2_VOLUME_SET's scale, for a bargraph/gain symbol. *
ZONE1_NATIVE_VOLUME	A	Zone 1 volume level, native/percent scale (0d-100d) - use for numeric text/logic, not a bargraph.
ZONE2_NATIVE_VOLUME	A	Zone 2 volume level, native/percent scale (0d-100d) - use for numeric text/logic, not a bargraph. *
ZONE1_MAX_VOLUME	A	Zone 1 volume ceiling as configured on the device, native/percent scale (0d-100d). Read-only feedback.
ZONE2_MAX_VOLUME	A	Zone 2 volume ceiling as configured on the device, native/percent scale (0d-100d). Read-only feedback. *
ZONE1_INPUT_IS	A	Zone 1's currently selected input, raw protocol value (96d-114d).
ZONE2_INPUT_IS	A	Zone 2's currently selected input, raw protocol value (96d-114d). *
LIPSYNC_MS	A	Current Lip Sync delay in milliseconds (0d-250d, 5ms steps).
BASS_DB_X10	A	Current Bass level. Signed dB x10, two's complement (-120d to +120d).
TREBLE_DB_X10	A	Current Treble level. Signed dB x10, two's complement (-120d to +120d).
SUBTRIM_DB_X10	A	Current Subwoofer Trim level. Signed dB x10, two's complement (-100d to +100d).
SUBSTEREOTRIM_DB_X10	A	Current Sub Stereo Trim level. Signed dB x10, two's complement (-100d to +100d).
ROOM_EQ_SLOT_IS	A	Current Room EQ (Dirac) slot. 0d=Off, 1d-3d=Slot 1-3, 10d=Not Calculated (feedback-only).
UPMIXER_2CH_IS	A	Current 2-channel upmixer mode, raw value (0d-10d) - see UPMIXER_2CH_LABEL for a readable name.
UPMIXER_MCH_IS	A	Current multi-channel upmixer mode, raw value (0d-10d) - see UPMIXER_MCH_LABEL for a readable name.
CURRENT_UPMIXER_IS	A	Currently active upmixer mode (whichever is really in use), raw value (0d-10d) - see CURRENT_UPMIXER_LABEL for a readable name.
DISPLAY_BRIGHTNESS_IS	A	Current front panel display brightness, response scale (0d=Off, 1d=Dim, 2d=Full).
HDMI_OUT_IS	A	Current HDMI output routing (0d=Output 1+2, 1d=Output 1, 2d=Output 2).
SERIAL_TX	S	used in this IP version of the driver.
CONNECTION_STATUS	S	Readable description of the current connection state (e.g. Connected, Disconnected).
INPUT_NAME	S	Current custom name of the selected input, as reported by the device.
NOWPLAYING_SOURCE	S	Now Playing source name, for network audio sources.
NOWPLAYING_TRACK	S	Now Playing track title, for network audio sources.
NOWPLAYING_ARTIST	S	Now Playing artist, for network audio sources.
NOWPLAYING_ALBUM	S	Now Playing album, for network audio sources.
INCOMING_FORMAT_ZONE1	S	Description of the incoming audio format currently detected on Zone 1.
INCOMING_FORMAT_ZONE2	S	Description of the incoming audio format currently detected on Zone 2. *
MODEL_NAME	S	The connected unit's reported system model name.
SW_VERSION_MCU	S	The connected unit's MCU software version.

NETWORK_IP	S	The connected unit's own network IP address, as reported by the device.
BT_STATUS_TEXT	S	Readable description of the current Bluetooth connection status.
SAMPLE_RATE_ZONE1	S	Description of the incoming audio sample rate currently detected on Zone 1.
SAMPLE_RATE_ZONE2	S	Description of the incoming audio sample rate currently detected on Zone 2. *
CURRENT_UPMIXER_LABEL	S	Readable name of the currently active upmixer mode.
UPMIXER_2CH_LABEL	S	Readable name of the current 2-channel upmixer mode.
UPMIXER_MCH_LABEL	S	Readable name of the current multi-channel upmixer mode.
ROOM_EQ_LABEL	S	Readable name of the current Room EQ (Dirac) slot.
ZONE1_INPUT_SOURCE_LABEL	S	Readable name of Zone 1's currently selected input.
ZONE2_INPUT_SOURCE_LABEL	S	Readable name of Zone 2's currently selected input. *
ZONE1_VOLUME_TEXT	S	Zone 1 volume level as readable text, for a numeric display.
ZONE2_VOLUME_TEXT	S	Zone 2 volume level as readable text, for a numeric display. *

Support

If you require support for this driver, please create a support ticket at:

<https://support.janustechnology.co.uk/>

Please provide the following information with your request:

- Driver version you are using
- Firmware version of your Arcam Radia device
- Firmware version of your Crestron system
- A full description of the issue and steps to reproduce it

Troubleshooting

- Confirm the correct IP address is entered
- Confirm the correct Port is entered (default 50000)
- Verify the Arcam Radia device can be pinged from the Crestron controller - if the ping fails, check network configuration and cabling
- We recommend using a static IP address or a DHCP-reserved address

Change Log

Version 1.0.0.x (Development) - Initial Release

Release Date: 21 July 2026

Notes:

- Initial IP and RS232 driver release.

Disclaimer of liability

The company shall not be liable for any issues, damages, or costs that may arise from the use of our driver software. While we strive to ensure that all versions of our driver are backward compatible, we cannot guarantee that this will always be the case. Users are advised to thoroughly test the driver in their specific environments and configurations before deployment to ensure compatibility and proper functionality. The company makes every effort to provide a reliable and functional product, but the driver is provided “as is” without warranties of any kind, either express or implied. The user assumes full responsibility for any loss, damage, or disruption caused using our driver, including, but not limited to, hardware malfunctions, data loss, or system failures. By using our driver, you acknowledge that you have read and understood this disclaimer, and you agree to release and hold harmless the company from all liabilities associated with its use.