# Crystal Vision



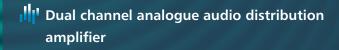
# AADA-VF

# Analogue audio distribution amplifier

The AADA-VF is a dual analogue audio distribution amplifier. It can be configured as either a stereo amplifier with four outputs of channel 1 and four outputs of channel 2, or as a mono amplifier with eight outputs of channel 1.

With low noise and distortion and highly robust inputs and outputs, the remotely-controllable features include audio silence detection (with adjustable threshold level and duration), overvoltage detection and extensive gain adjustment from -30dB to +30dB in 0.5dB increments.

With up to 20 cards (40 audio channels) fitting in the Vision 3 frame, the AADA-VF saves you rack space and can be housed alongside any other interface or IP cards from the Vision range.



- Configure as stereo amplifier with four outputs of each channel, or as mono amplifier with eight outputs of channel 1
- Low noise and distortion
- Robust fully floating inputs and outputs
- <mark>||||</mark>| Extensive audio gain adjustment
- Audio silence detector for each channel
- Overvoltage detector for each channel
- Flexible remote control and monitoring using frame integrated control panel,
  VisionPanel remote control panel, ASCII and
  JSON protocols, SNMP and the web browser-based VisionWeb Control
- Save rack space: 96mm x 325mm card allows up to 20 AADA-VF in 3U

# DISTRIBUTE ANALOGUE AUDIO ANYWHERE

The AADA-VF analogue audio distribution amplifier allows the flexible distribution of analogue audio in any broadcast environment.

The AADA-VF has the essential low noise and distortion which allows the audio to pass through more stages of processing without a loss in quality. It features two separate audio distribution amplifiers, each with an electronically balanced input and four floating outputs which are very robust – should one side be connected to ground, the other will double in amplitude to maintain the difference between the balanced signals, giving a correct single-ended system.

Each output also has an individual line driver which gives excellent isolation between them, meaning a damaged signal injected on to one of the outputs will not affect any of the others.

# **CONFIGURE YOUR INPUTS AND OUTPUTS**

The AADA-VF can be configured either as a stereo amplifier with four outputs of channel 1 and four outputs of channel 2, or as a mono amplifier with eight outputs of channel 1.

The AADA-VF is used with just one frame rear module, the single slot VR21.

# **ADJUST THE GAIN**

The AADA-VF features the most extensive gain adjustment Crystal Vision has ever offered, meaning it can handle a wide variety of input signals and allowing you to easily match the audio to your standard setting. With fine adjustments in 0.5dB increments, the gain controls will give +/- 30dB of gain relative to the input level, although care must be taken not to exceed the maximum output level of +24dBu. Each channel can be adjusted independently.

# **MONITOR YOUR AUDIO**

A number of useful monitoring tools ensure you remain aware of exactly what's happening to your audio at all times.

Useful for alerting you that your audio signal has failed or that there is no input, each channel has an individual audio silence detector – with adjustable threshold level and duration to prevent false alarming during quiet audio periods. The audio silence level setting can be selected from -30dBu to -42dBu in 1dBu steps. If the audio signal level falls below the selected level for a chosen period of time from two to 120 seconds, then it is considered 'silent'. Both audio channels share the same silence time and threshold settings.

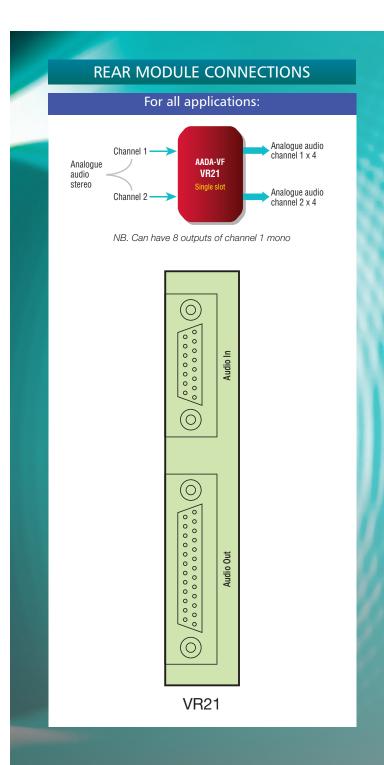
There is also an overvoltage detector for each channel, with the overvoltage threshold level shared by both channels and adjustable between +12dBu and +24dBu in 1dBu steps.

Both these monitoring tools can be used with SNMP to trigger alarms.

# **FLEXIBLE CONTROL**

All control is done remotely. The control and monitoring options for the AADA-VF include an integrated control panel on the Vision frame, the VisionPanel remote control panel, our ASCII and JSON protocols, SNMP and the VisionWeb web browser control.

There is remote control of dual channel/single channel mode, audio gain, the silence indication time delay and threshold and the overvoltage threshold, and remote



monitoring of audio silence and overvoltage for each channel.

The interactive VisionWeb GUI for the AADA-VF is available at www.crystalvision.tv and allows you to explore the full functionality of the product.



# **SAVE RACK SPACE**



Housed in the Vision frames, the AADA-VF is a space-saving 96mm x 325mm card that sits in one frame slot – allowing up to 20 distribution amplifiers in 3U.

# Analogue Analogue Variable audio input audio gain outputs channel 1 +/-30dB (left) CPU Remote control Mono Analogue audio input Variable Stereo gain channel 2 +/-30dB (right) Analogue audio outputs x 4

THE INPUTS AND OUTPUTS

### **SPECIFICATION**

#### **MECHANICAL**

Standard Vision card 96mm x 303mm (96mm x 325mm including finger pull)

Weight: 160g

Power consumption: 5 Watts

#### **AUDIO INPUTS**

Two analogue audio inputs, electronically balanced

High impedance input (>20 kohm)

Maximum level: +24dBu (>+24dBu inputs clipped to

output +24dBu)

### **AUDIO OUTPUTS**

Eight analogue audio outputs, electronically balanced, using VR21 frame rear module

Can be configured as a stereo amplifier with four outputs of channel 1 and four outputs of channel 2, or as a mono amplifier with eight outputs of channel 1

Low impedance outputs: 50 ohm

Maximum level: +24dBu

#### **PERFORMANCE**

Signal to noise ratio: 108dB, 0dB gain, 0dBFS = +24dBu

(20Hz to 20kHz)

Frequency response: +/-0.05dB (20Hz to 20kHz)

Total Harmonic Distortion (THD): <0.003% 20Hz to 20kHz,

+24dBu

Common mode rejection: >80dB (20Hz to 20kHz)

Interchannel crosstalk: <-100dB, 10kHz

#### **GAIN ADJUSTMENTS**

Adjustment: -30dB to +30dB in 0.5dB steps (factory default

set to OdB)

Each channel can be adjusted independently

#### SILENCE DETECTORS

Set period of silence before indication from two to 120 seconds in one second increments

Set silence threshold between -30dBu and -42dBu in 1dBu steps (factory default set to -30dBu)

Both channels share the same silence time and threshold settings

#### **OVERVOLTAGE DETECTORS**

Set overvoltage threshold between +12dBu and +24dBu in 1dBu steps (factory default set to +24dBu)

Both channels share the same overvoltage settings

#### **LED INDICATION OF:**

Power okay

#### **REMOTE CONTROL**

Control from integrated control panel on Vision frames and remote panel

VisionWeb Control is available via the web server on the frame and allows control and monitoring using a standard web browser on a computer, tablet or phone

SNMP monitoring and control available as standard

Control using ASCII and JSON protocols

Remote control of dual channel/single channel mode selection, audio gain, silence indication time delay and threshold and overvoltage threshold

Remote monitoring of audio silence and overvoltage for channel 1 and audio silence and overvoltage for channel 2. No input also constitutes silence

### ORDERING INFORMATION

AADA-VF Dual channel analogue audio distribution amplifier

Vision 3 3U frame with active front panel featuring smart CPU and integrated control panel

for up to 20 Crystal Vision cards from the Vision range

VR21 Single slot frame rear module. Allows 20 AADA-VF in 3U. Gives access to two

analogue audio inputs with four analogue audio outputs of each channel (or eight

outputs of one input)

VisionPanel 3U Ethernet remote control panel with touch screen

VisionWeb Control VisionWeb web browser control included within frame software

SNMP monitoring and control included in frame



Performance and features are subject to change. Figures given are typical measured values. AADA-VF0117