

AVC2-D AUTOMATIC VOLUME CONTROL

Analogue signal processing Digital control

With all the features of the AVC2 plus a number of enhancements the AVC2-D gives full control of music levels without compromising the audio quality.

The AVC2-D has three operating modes. The first is stereo, the second is two mono channels and the third is stereo with control microphone.

The LCD displays shows the status and all the information required is clearly visible for installer and operator. There is an LED to show if the input is clipping.



The AVC2-D automatically adjusts the volume once a preset threshold has been reached to keep the audio level within that required.

When attenuating the audio signal the distortion from the AVC2-D is less than 0.01% so the quality of the audio is not compromised.

The audio signal processing is entirely analogue, control of the audio level is digital using a PIC controller. This combination gives the best control of audio levels and retains the sound quality.

In stereo mode; two thresholds can be set; so for example one level could be for daytime and the second for night.

In mode 3 with control microphone connected the sound level is controlled based on the actual SPL so changes to equipment after the AVC2-D are compensated for.

A fourth mode to be added later will monitor the level of ambient sound, and for example adjust the paging level up if noise is high.

The factory setting will not instantly react to individual peaks or dips but responds to average programme level (this is a good thing). The attack and decay is adjustable.

The factory setting gives smooth operation that is almost imperceptible as the level is automatically adjusted, with minimal effect on your systems audio quality.

A security panel on the back protects against unauthorised adjustment.



AVC2-D

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The advantages which the AVC2-D offers over compressor/ limiters are:

1. No reduction in the dynamic range of the system under normal operating conditions, therefore, the music remains punchy without the restricted sound of compressor/limiters.

Compressor/limiters are a recording studio tool designed to restrict the dynamic range of a music signal, usually to make it easier to control and mix, etc.

Using compressor/limiters in the studio they have an array of controls to set attack and release times, threshold and compression ratios. The settings will be adjusted as the music requires, but without the controls used in studios the dynamics will be restricted and may not sound particularly musical.

So why use them in music systems ?

Until we introduced the AVC2 there were few options, now the AVC2-D offers even greater control.

Simple to use and providing effective control over the audio signal without compromising music quality, the AVC2-D is probably the best piece of equipment for controlling audio volume levels on the market today.

2. The AVC2-D offers great flexibility with its different modes, allowing the set up to be tailored to the individual installations requirements.

3. The AVC2-D has no external controls for the operator to worry about which also means tampering is minimised. The LCD display and clip LED provide all the information the operator needs.

4. An anti-tamper facility which can be connected to an external switch to improve system security is included.

5. The unit has provision to connect to an external time switch (not supplied) to switch between two threshold levels if different limits are wanted for different times of day.

6. In mode 3 with control microphone connected the actual SPL is used to control sound levels. Changes to equipment after the AVC2-D or variation in ambient sound levels are compensated for.

AVC2-D

Frequency Response: 20Hz - 20Khz +/- 0.5 dB
Distortion: THD+Noise @ 1Khz
Noise 20Hz - 20Khz:

Inputs:

Outputs:

Operating Threshold Range:

Attenuator Range:

Control chain:

Modes:

Power:

Finish:

Dimensions:

Technical specification

20Hz - 20Khz +/- 0.5 dB

O/P Level +20dBu <0.01%

EIN < -90dBu

Electronically balanced, connect negative to screen for unbalanced use.

Input impedance: Balanced 20K Ohms
Unbalanced 10K Ohms

Maximum input level: +22dBu

Clip indicator: Indicates @ +20dBu

Electronically balanced, connect negative to screen for unbalanced use.

Source impedance: 100 Ohms
Minimum load impedance: 600 Ohms

Adjustable from -20dBu to +10dBu

0dB to -80dB

The control chain has a flat frequency response, however other options are available on request (eg "A" weighting").

Mode 1 Stereo channel

Mode 2 Two Mono channels

Mode 3 Stereo channel and external microphone.

Mode 4 Available shortly - This will monitor background level and adjust paging level up or down according to background sound level.

220V - 240V (Internally switchable to 110V).
IEC Mains connector; mains fuse 250mA slow blow.

Front and Rear panels - Black anodised aluminium with silver legend.
Case - Black plastic coated steel.

19" Rack mounting, 1RU
Width 482mm (19") Depth 200mm (7.9") Height 44mm (1.75")

Formula Sound reserve the right to alter the specification without notice.

