

The AT-1 CONTROLLER



The AT-1 controller has been designed to be used in conjunction with the SENTRY MK2 Environmental noise control system. It provides an integrated control solution for entertainment venues.

An audio system connected to the AT-1 will be controlled at the maximum allowable level as determined by the SENTRY Mk2. This removes the worry of constantly having to watch levels to avoid being cut off completely.

More than one AT-1 may be connected to a Sentry Mk2 thus providing a complete noise control system, which can control the house system as well as visiting D.J.'s, Bands, etc.



The AT-1 Automatic volume controller

Introduction

The AT-1 has been designed to be used in conjunction with the SENTRY MK2 environmental noise control unit. It is a stereo unit and its purpose is to control the volume level of an audio system connected to it without cutting off the system completely. It will control the connected system to the maximum level allowed as defined by the Sentry Mk2, thus removing the worry of having to continually watch levels. It does this without affecting the dynamic range of the music being played, and because the control chain is microphone driven the amount of absorption which takes place when a venue is full of people is automatically catered for.

More than one unit may be connected to the SENTRY MK2 to control more than one audio system. This is particularly useful as it means that the house system and a visiting system, band, etc can be controlled to the same maximum level. The Sentry will automatically control the AT-1 that is in use.

It is in the interests of a visiting band or DJ to connect to the AT-1 where a Sentry is installed so that they do not suffer the embarrassment of being cut off if they play too loud.

In the past control units monitored the signal level passing through a system to control the maximum level available. This approach works fine but the system has to be calibrated to determine the relationship between the signal level and the actual sound pressure level being produced. This makes it impractical to control visiting systems by this method. This has now changed with the introduction of the AT-1. Because the control information is derived from a microphone system (i.e. The Sentry) calibration is no longer required; therefore any system may be connected and controlled bearing in mind a few common sense points. If the visiting system is not connected to the AT-1 the Sentry switching the available mains power in the usual manner will control it. We feel that this will encourage visiting systems to connect to the AT-1.

Connecting to and using the AT-1

The AT-1 is connected to the Sentry via a simple 4-core control cable.

The unit is fitted with two types of connector - 1/4" jacks and 3 pin XLRs for its audio connections. These may be used as balanced or unbalanced connections. The unit would normally be connected between the mixer or pre amp and the power amplifiers. If the volume of the system is below the warning threshold the AT-1 device does nothing. It only attenuates if the threshold is exceeded. If attenuation is taking place leds will illuminate to inform the user of the approximate amount of attenuation. A led is also incorporated to inform the user if the unit is being over loaded and is about to clip.

The audio performance of the AT-1 is, like all Formula Sound audio products of professional quality. i.e. low distortion, low noise, etc.

Two versions are available - a 19" 1RU package and a wall mounted unit which may be more convenient for connecting to visiting systems.

Specification

Input connectors	2 X 1/4" 3 pole jacks which will also accept 2 pole jacks; 3 pin XLRs
Output connectors	2 X 1/4" 3 pole jacks which will also accept 2 pole jacks; 3 pin XLRs Using 2 pole jacks will automatically convert the inputs and outputs to unbalanced. To use XLRs unbalanced connect pins 1 and 3 to screen.
Maximum input level	+20dBu
Maximum output level	+20dBu into a 600 ohm load at <.01% distortion
Input impedance	20K ohms balanced, 10K ohms unbalanced.
Noise	EIN <-90dBu
Attenuator range	Unity Gain to -90dB
Led Indicators.	-3dB, -6dB, -9dB, -12dB, -15dB, -18dB, attenuation. I/P CLIP
Mains power	IEC connector fused @ 250mA. 220 or 110VAC may be specified