



Operating Manual

A 2365 5 Zone 100W Attenuator With Override Relays



OVERVIEW

This attenuator panel can be configured as either five single attenuators or combinations or a single input to up to five outputs. Each attenuator accepts a 100V input audio signal and outputs at 100V up to a maximum of 100 watts of speaker load.

FEATURES

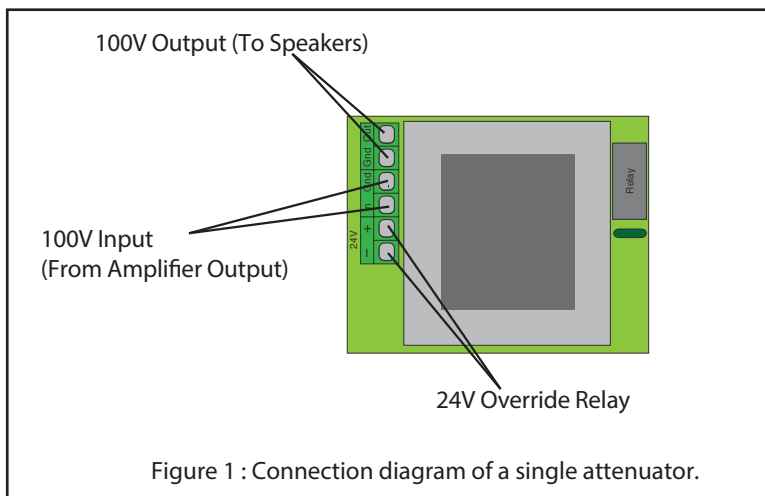
- Standard 2 unit (88mm) 19" rack mount dimensions
- Five Zone outputs
- Accepts 1 to 5 inputs
- Each zone has 10 positions plus off
- 500W total load capacity (100W per zone)
- Easy to terminate screw terminals
- Includes 24V DC override relay for bypassing volume controller settings
- Unit is supplied with screen printed blocks for installer labelling

CONNECTION DETAILS

There are five identical attenuators fitted to the 2RU panel. Each attenuator has connections for the output speakers, the input from the 100V amplifier and 24VDC input for the override relays as shown in the Fig.1 below. The speakers connected to the output must be fitted with 100V line transformers with a load no greater than 100 watts. The input must be a signal from the output of a 100V PA amplifier. (NOTE: Do not connect to voice coil (Ω) amplifiers).

For 24VDC override you will need to connect 24VDC to the terminals indicated.

(About the override feature : It is often necessary to override the volume control in an evacuation control system during an emergency situation. A relay is used to bypass the attenuation circuitry enabling an announcement at full volume regardless of the volume setting including off).



SPECIFICATIONS

Power rating:	500W Total (100W per zone)
Relay override operation voltage:	24V DC
Attenuation:	Off, 3, 6, 9, 12, 15, 18, 21, 27 and 33dB
Weight:	4kg
Dimensions:	484W x 50D x 88H mm



WIRING

Each attenuator is completely independent of the others. They can be connected to individual amplifiers or multiple attenuators can be connected to the same amplifier. For instance a 500W amplifier could be connected to all five of the attenuators in parallel, each with a load of 100W to give a total load of 500W.

Figure 2 demonstrates a system where zones 1 and 2 require different background music to zones 3, 4 and 5, but all zones require emergency volume override.

In this example amplifier 1 is connected to the zone 1 & 2 attenuators. The amplifier is rated at 250W output and its output is connected to two attenuators (in parallel) with a total speaker load of 200 watts (100W on zone 1 and 100W on zone 2). The 24V DC override relays are being activated by the A 4595 School Lockdown Controller which has a 24V DC switched output. (Note: An external relay and 24V supply may be required to activate the relays on all the attenuators of the A 2365 panel, depending on the output current available). In this diagram the 24V DC is connected to all of the attenuators (in parallel) to provide emergency volume override of all zones.

Amplifier 2 is connected to the zones 3, 4 & 5 attenuators. The amplifier is rated at 250W output and its output is connected to three attenuators (in parallel) with a total speaker load of 250 watts (100W on zone 3, 100W on zone 4 and 50W on zone 5).

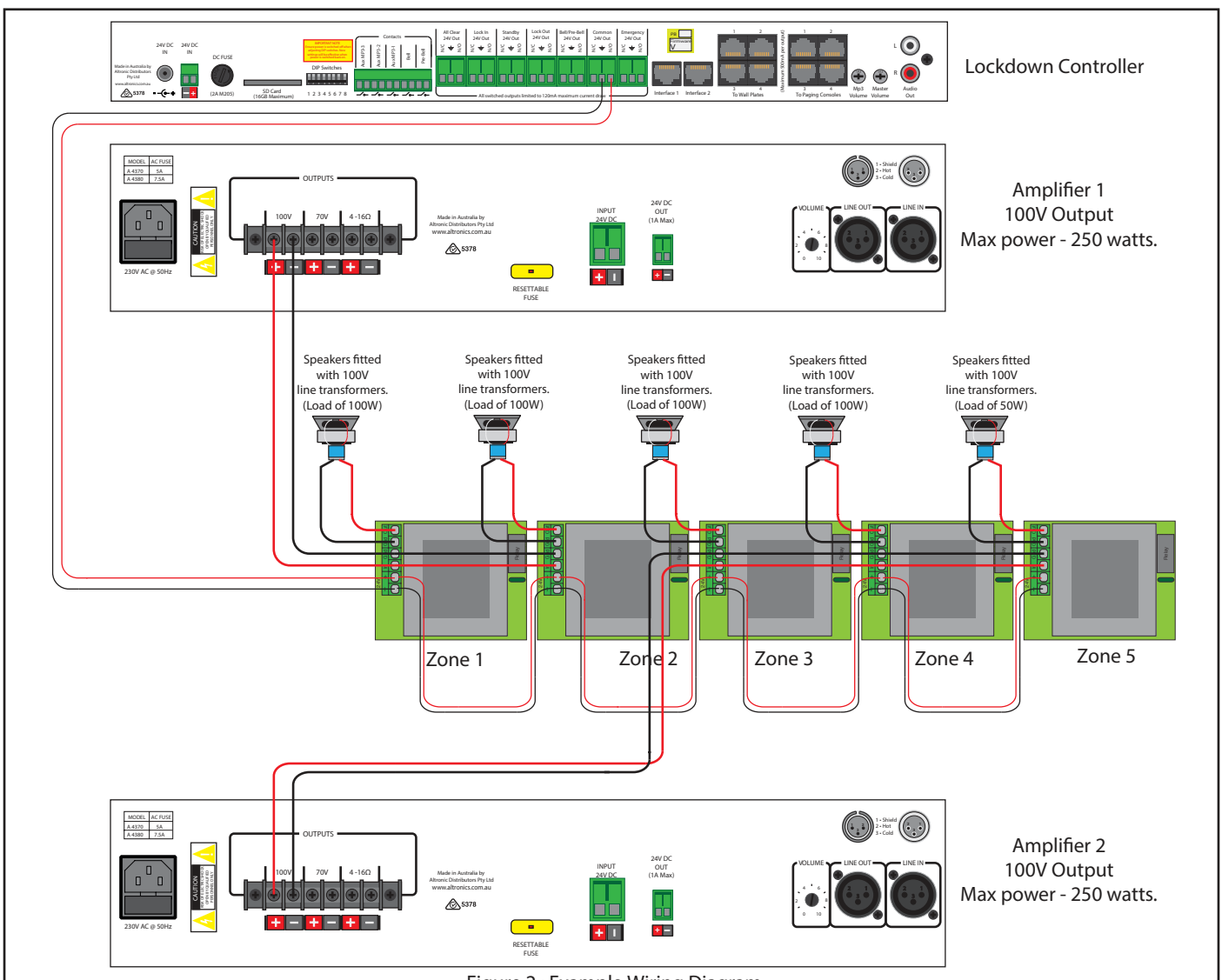


Figure 2: Example Wiring Diagram

Operation of the unit is as simple as adjusting the volume of each zone to the desired level.

TROUBLESHOOTING

1. Zone always at low volume - Check the terminal connections for both the input and output terminals to ensure the connection is secure.
2. Zone always at maximum volume - Check the 24VDC to see that it is not applied at the 24VDC terminals.

Not Field Serviceable