AA35

35 Watt Strategy Series Mixer Amplifier





AA35

Features

- 1 Mic In w/ Phantom Power
- 2 Stereo Line In
- Dual Line Out
- · Pre Out/Power In Patch
- · Remote and VOX Activated Mute
- Route Any Source Combination or Entire Mix Bus to Zone 2 (MOH Out)
- Special Low Cut Filter is 6dBu/Octave At 400Hz and also Bypasses Front Panel Bass Control to Allow Use with Paging Horns like the Atlas Sound APX40TN and AP-15T

Genenal Description

The AA35 is a three input channel mixer amplifier designed for distributed business paging and background music (BGM) systems, small to medium speech privacy systems, and in applications where music on hold (MOH) plus paging is required.

With one microphone input and two stereo line inputs, the AA35 will accommodate a variety of input sources including paging microphones, CD players, and digital music receivers. A dip switch selectable matrix allows the creation of a Zone 2 mix from any or all of the input sources for music or messaging on hold applications. 25V, 70.7V, and 8Ω outputs are provided.

The output power of 35 Watts will match nicely with Atlas Sound FAP, SM, SD, and GD series loudspeakers. In fact, in an 11' ceiling application, the AA35 will provide power for up to 117 SD72W loudspeakers tapped at .25 Watts each while providing upwards of 84dB in the direct sound field at ear height!

Specifications

Power Output Max. Average Power @ 50Hz – 20kHz

with.5% THD (10-80kHz filter) 8Ω, 1kHz,

0.5% THD 35 Watts RMS

Transformer Outputs 8Ω 35 Watts RMS

25V 35 Watts RMS 70.7V 35 Watts RMS

Frequency Response 50Hz – 20kHz

THD+N .5% or less at 1kHz, rated output

.1% or less at 1kHz, 5Watt output

Sensitivity

Input 1 Line/Tel 316mV (-10dBV) 10kΩ (optional

 600Ω tranformer available)

Mic .316mV~3.16mV (-50dBV~ -30dBV) Inputs 2/3 Line 316mV (10dBV) 10kΩ

Outputs Transformer coupled, balanced, 8Ω,

25V, and 70.7V

Zone 2- 8Ω Unbalanced 1 Watt Zone 2- 600Ω Balanced 1.5V

Output Regulation Less than 2dB, no load to full load

Signal to Noise Ratio Mic >55dB

Line >55dB
Telephone >55dB
Input 2/3 >75dB

Tone Controls Bass ±10dB @ 100Hz

Treble ±10dB @ 10kHz

Indicators Power, signal, peak

Power Consumption 90 Watts

 Width
 8.27" (210mm)

 Height
 3.66" (94mm)

 Depth
 10.87" (276mm)

 Weight
 10.2 lbs (4.64kg)





AA35 (Back View)

Architect and Engineer Specifications

The mixer/amplifier shall control and mix up to three input signals and deliver an audio output of 35 Watts into $8\Omega,\,25\text{V},\,\text{and}\,70.7\text{V}.$ The amplifier output shall be transformer isolated with a frequency response 50Hz-20kHz (-3dB) with less than 0.5% THD at rated output. The output regulation shall be less than 2dB, no load to full load. It shall be capable of operation from a 110/120VAC 50/60Hz line. The mixer/amplifier shall be convection cooled. The amplifier shall have thermal and short circuit protection.

The mixer/amplifier shall have a switch-selectable MIC/TEL balanced input to accept either low impedance microphone or Tel/Line Level signals with -60/-10dBV sensitivity. The MIC/TEL input shall include a Phoenix (Euro Block) type connector. The MIC/TEL input impedance shall be 600Ω . The MIC/TEL input shall include an auto mute (VOX Mute) sensitivity control for Input 1. The MUTE SENSE control will allow threshold adjustment of mute activation. The mixer/amplifier shall include two stereo summing auxiliary inputs, unbalanced, -10dBv, with dual-RCA jacks. The auxiliary input impedance shall each be $10k\Omega$. The mixer/amplifier shall include two Zone 2 outputs, a 1 Watt at 8Ω output and transformer isolated 600Ω output with a maximum level of 1.5VRMS. The mixer/amplifier Zone 2 output shall be assignable from any of the 3 inputs via the rear panel dipswitch. The Zone 2 output shall have one rear panel mounted rotary level control for both outputs. The mixer/amplifier shall incorporate rear panel terminals via Phoenix connector for the REMOTE MUTE function, controlled by an external switch closure. A rear panel dipswitch shall allow assignment of Input 2 and/or Input 3 to respond to the mute function activation. The Mute assignment shall not affect the Zone 2 output.

The mixer/amplifier shall have a Pre-Out RCA unbalanced output. The Pre Out shall be POST Tone and the Low Cut Filter. The mixer/amplifier shall have a Power Amp input for use with an external signal processor. The mixer/amplifier shall have a Line A and B RCA unbalanced output.

The Line outputs are POST tone controls, Low Cut Filter and Power Amp In. Both the Line and Pre Outputs shall be calibrated to 0dBV and equals 1VRMS out. The mixer/amplifier shall have a 400Hz 6dB per octave low cut filter. The filter can be defeated via the dipswitch located on the rear panel. When engaged the Bass Tone control is bypassed.

The AA35 front panel shall include Inputs 1, 2, and 3 volume controls. System Signal, Peak and Power LEDs shall also be incorporated. The mixer/amplifier front panel shall also include bass and treble tone controls (100Hz and 10kHz, $\pm 10 dB$). The tone controls shall not affect the Zone 2 output. The mixer/amplifier front panel shall include an AC Mains power switch.

A rear panel AC receptacle (un-switched) shall be included for connection of external equipment.

Dimensions (W x H x D) shall be 8.27" x 3.66" x 10.87" (210mm x 276mm x 93mm) with feet or 3.48" (88.4mm) H without feet. Net weight shall be 10.2lbs. (4.64kg). Front panel finish and material shall be black ABS resin and case finish (and material) shall be black powder coated sheet steel.

The mixer/amplifier shall be Atlas Sound Model AA35.

The optional rack-mount bracket kit shall be an Atlas Sound AARMK2-5.

The optional input transformer shall be an Atlas Sound AAIT-600.

The optional level control security covers shall be an Atlas Sound AAVCC-5.

