

VAT20 VAT40 VAT100

MONAURAL ATTENUATORS



■ FEATURES

- Choose 20, 40 or 100-watts
- Mounts in single-gang box
- Phoenix-style Connectors
- Loop Out Connection
- Clever Lock-on Knob
- Low Insertion Loss
- Stainless Steel or White

■ DESCRIPTION

The VAT Series from Penton Audio USA are constant-voltage attenuators that feature high-quality components and clever engineering. Models have a ten position make-before-break contacts with a positive off position. Series includes 20, 40 and 100-watt models with an optional premounted priority relay (specify -PS).

Models consist of an auto-transformer, wallplate and a low-profile, locked-on knob. By specifying colors, mounting plates with matching knobs are chosen: (-W) for white, (-S) for stainless steel with a contrasting black knob.

Installation is quick with the VAT's molded-in orientation arrow, installer-friendly phoenix-style connector and the inventive (patent applied for) locked on knob, that is secured without a setscrew.

■ APPLICATION

Installed constant-voltage speakers may need to vary in level intensity on a regular basis independent of other speakers in the system. Attenuators provide this feature. Since models are often in plain sight, aesthetic considerations demand that popular colors are available.

Applications include restaurants, hotel/motels, executive offices, boardrooms, churches, retail environments and country clubs among others.

■ SPECIFYING

Part numbers are constructed by first listing the model number, followed by (-PS) if a priority switch is required and lastly the color required (-W) for white and (-S) for stainless steel.



■ SPECIFICATIONS

• POWER RATING (RMS)

VAT20: 20 watts
VAT35: 40 watts
VAT100: 60 watts

• TRANSFORMER TYPE:

Auto Transformer

• DISTORTION:

Less Than 1% at Rated Output

• INSERTION LOSS:

0.5 dB

• FREQUENCY RESPONSE:

20-20kHz \pm 1/2 dB

• TOTAL ATTENUATION:

30 dB

• ATTENUATION PER STEP:

3 dB

• ATTENUATION POSITIONS:

10 plus Off

• CONNECTOR (PHOENIX-STYLE)

Non-priority: 6 Pin
Priority: 8 Pin

• CONNECTIONS

Speaker: +/-
Amp In: +/-
Loop Out: +/-

• CONNECTIONS PRIORITY MODELS

Speaker: +/-
Amp In: +/-
Loop Out: +/-
DCV (DC Voltage): +/-

• KNOB PROTRUSION, INCH (MM):

0.5" (13)

• KNOB MATERIAL AND FINISH:

-S: Black
-W: White

• MOUNTING PLATE MATERIAL

White: ABS
Stainless Steel: Stainless Steel

• MOUNTING PLATE REQUIREMENTS

VAT20: Single Gang
VAT40: Single Gang
VAT100: Single Gang

• DIMENSIONS, INCH (MM)

VAT20: 4.53" x 2.76" x 1.79"
(115 x 70 x 45.5)
VAT40: 4.53" x 2.76" x 2.19"
(115 x 70 x 55.5)
VAT100: 4.53" x 2.76" x 2.30"
(115 x 70 x 58.5)

• NET WEIGHT LBS (GRAMS)

VAT20: 0.51 (233)
VAT20-PS: 0.53 (240)
VAT40: 0.67 (306)
VAT40-PS: 0.69 (315)
VAT100: 0.76 (346)
VAT100-PS: 0.78 (355)

VAT20 VAT40 VAT100

ARCHITECTS' AND ENGINEERS' SPECIFICATIONS:

Unit shall be Penton Audio USA Model (VAT20, VAT40, VAT100) attenuator or approved equal. The power rating shall be (20 watts, 40 watts, 100 watts). Attenuation range shall be 30 dB with steps of 3 dB, and have make-before-break contacts with a positive off position. Switch shall be make-before-break and have silver plated contacts to eliminate noise and contact loss. Outputs shall be via 6-pin or 8-pin phoenix-style connector.

Unit shall have suffix denoting color and features listed below:

- S stainless steel wallplate with black locked-on knob.
- W white wallplate with matching locked-on knob.

All models shall fit in standard single-gang Raco 560 box. Each wallplate shall have a dial scale to indicate attenuator position.

PS Option

Specified attenuator shall include a priority relay. Relay shall be an SPDT, 24 VDC type.

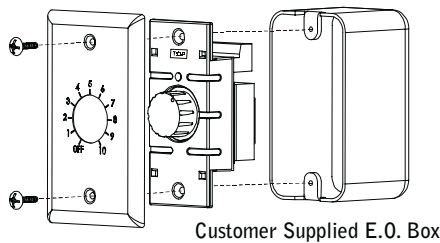


Fig 4: Installation View

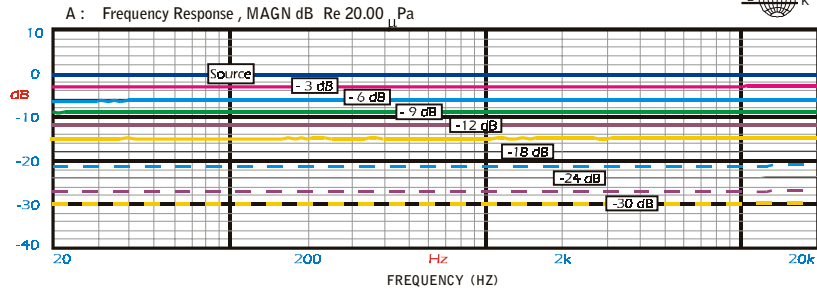
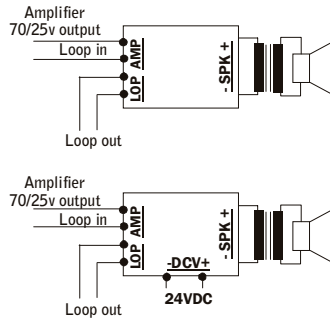


Fig 1: Frequency Response

Input 70.7 Volt @ Various Frequencies, Measured @ Output

Hz	20	50	100	250	500	1000
VAT 20 (volts)	70.3	70.4	70.6	70.6	70.8	70.7
VAT 40 (volts)	70.4	70.5	70.6	70.6	70.7	70.7
VAT 100 (volts)	70.4	70.5	70.6	70.6	70.8	70.7

Fig 2: Saturation Test



Connection for VAT20/40/100

1. Connect amplifier 70/25v line output to a pair of "AMP" and another pair of "LOP" as loop out to as shown on the diagram.
2. Connect "SPK" to loudspeaker with 70/25v line transformer.

Connection for VAT20-PS/40-PS/100-PS

1. Connect amplifier 70/25v line output to a pair of "AMP" and another pair of "LOP" as loop out to as shown on the diagram.
2. Connect "SPK" to loudspeaker with 70/25v line transformer.
3. Connect "DCV" to remote unit with 24vdc.

Fig 3: Circuit Diagram

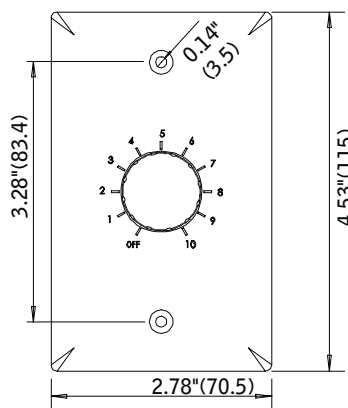


Fig 5: Front View

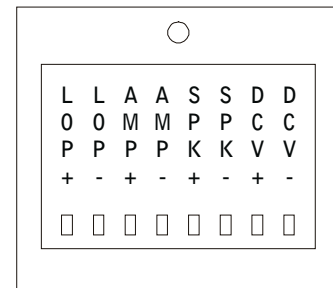


Fig 6: Side View

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Specifications subject to change without notice

SS02-5011