### VC100pm POWERMATCH™

Transformer-Free™ Stereo Volume Control



- POWERMATCH<sup>™</sup> design allows up to 24\* VC100pm's connected to one amplifier.
- Wire runs can be looped from room to room, saving wire costs and time.
- Eliminates the need for a stereo interface.
- Premium Transformer-Free<sup>™</sup> sound quality with ultra high power handling.
- Detachable wire terminal reduces installation time.
- Slim wall mount design.
- All Knoll Transformer-Free™ products are patent pending.

In use for more than 20 years, Knoll patent pending V-Pad Transformer-Free<sup>™</sup> volume controls are the safest, most reliable high power volume controls available anywhere. The POWERMATCH<sup>™</sup> design automatically impedance matches, eliminating the need for a load center or stereo interface while allowing up to 24\* VC100pm's and speakers to be safely connected to one amplifier. This saves equipment and wire costs while reducing installation time. The relatively small size of the VC100pm with its clearly superior sound quality makes it the ideal choice for all systems.

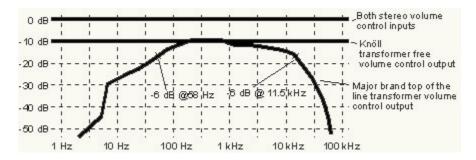
The patent pending VC100pm has a smooth action with a lighter "feel" when adjusting levels. The VC100pm V-pad design does not generate heat like a transformer or L-pad that can dissipate large amounts of power in low and off positions creating early failures, wall damage or even a fire hazard. Nor is there any sonic degradation at low operating levels. Instead the VC100pm presents the listener with a full frequency response and original dynamic range at all volume positions and power levels. The stereo signal passes to the speakers without the compression effect associated with all transformer volume controls.

Knoll V-pad Transformer-Free™ technology is the best and most reliable solution for new construction, renovations and upgrades of existing stereo systems.

\* The maximum number of VC100pm's per amplifier is dependent on the minimum speaker impedance rating of the amplifier or receiver.

# Fig 1. Volume Control Frequency Response

With identical paralleled inputs and 8 ohm output loads, the -11 dB attenuation output frequency response of a Knoll Transformer-Free<sup>™</sup> versus a top-of-the-line major brand autoformer volume control is shown.

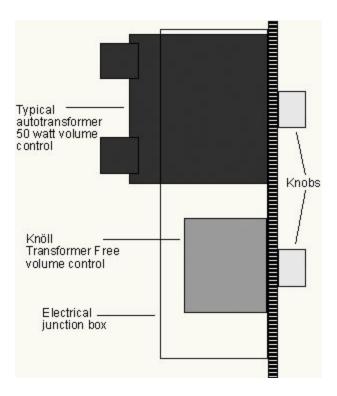


## **Specifications:**

Peak RMS Power Rating	350 watts per channel
Continuous RMS Power	100 watts per channel
Frequency Response	DC to 500,000 Hz at all power levels up to 400 watts +/-0.1 dB
Mount Depth	2.25" (5.7 cm)
Electrical Junction Box	Fits single gang
Speaker Impedance	2 - 16 ohms (single or multiple speakers)
Connection	Detachable Screw terminals
Colors and Styles	Order as white, ivory (bone), or almond colors with a Decora™ style or standard plate with matching knob

Note: Decora<sup>™</sup> plates do not include single or multi gang cover plates.

Fig 2: Size difference of transformer versus Transformer-Free™ Stereo Volume Controls (top view)



## Wire Requirements:

Speaker wire for the VC100pm should be copper, minimum 18 gauge. Runs longer than 33' (10 m) should be minimum 16-14 gauge wire. Two wire pairs (left and right) are run from the stereo amplifier, receiver or nearby VC100pm to the VC100pm volume control, then one wire pair continues to each speaker. When "pre-wiring", leave an extra 3' (1 m) at each end to allow easy component installation.

## Maximum Number of VC100pm's per Amplifier:

Amplifiers Speaker Impedance Rating		2-8	4-8	6-8	8
	1-16	2-16	4-16	6-16	8-16
Maximum number of VC100sp's per amplifier	24	12	6	4	2