



The Model 1B uses advanced techniques that provide desirable musical characteristics but slightly limit the speaker's peak and continuous power handling abilities. These limitations are typical of all high quality dynamic loudspeakers that put quality ahead of quantity. They require that a few common sense precautions be observed.

■ Peak Power Cautions

Modern amplifiers are capable of delivering several times their rated power on brief peaks in the music. This presents no problem to the speakers as long as an amplifier within the recommended power range is used and care is taken to learn the limitations of the amplifier.

When an amplifier attempts to deliver more power than it is capable of producing, it is pushed into a form of distortion known as clipping. This type of distortion can cause severe damage to the speakers. To avoid clipping distortion, several precautions should be followed:

■ Many amplifiers have clipping indicators that blink or flash when the amplifier clips and these indicators should not light during musical peaks.

■ The position of the volume control has no absolute relationship to power output percentage. Half rotation is not half power, and may actually be clipping

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■ Continuous Power Cautions

At some time you may have heard the Model 1B played for a brief period at a volume level that will cause serious damage if continued long term. Heat in a speaker is a by-product of the process of reproducing music and at high volume levels the drivers' voice coils are not able to dissipate the heat fast enough to prevent a temperature increase.

Consequently, a volume level that can be withstood by the speakers for a few minutes can cause severe damage if

continued for an entire album or CD. To avoid speaker damage from continuous high power application, several precautions should be followed:

■ Note the Power De-rating Curve on page two of this notice and keep the volume level of your system within the

acceptable power range at all times.

■ Special caution should be exercised during parties or other occasions that are normally associated with long-term

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**Maximum Recommended
Amplifier Power
100 Watts per Channel RMS**

See text for additional cautions
with more powerful amplifiers.

Peak Power Continued

the amplifier. If the system sounds loud or distorted, you are at or beyond its limit.

■ If you hear any distortion from your system, immediately reduce the volume level. Distortion is usually a sign of a component being overdriven and greatly increases the chances of speaker damage.

■ If your amplifier exceeds the maximum recommended power rating of the Model 1B, use extreme caution when playing music at a high volume. You must always be aware of the increased potential for damage.

Continuous Power Continued

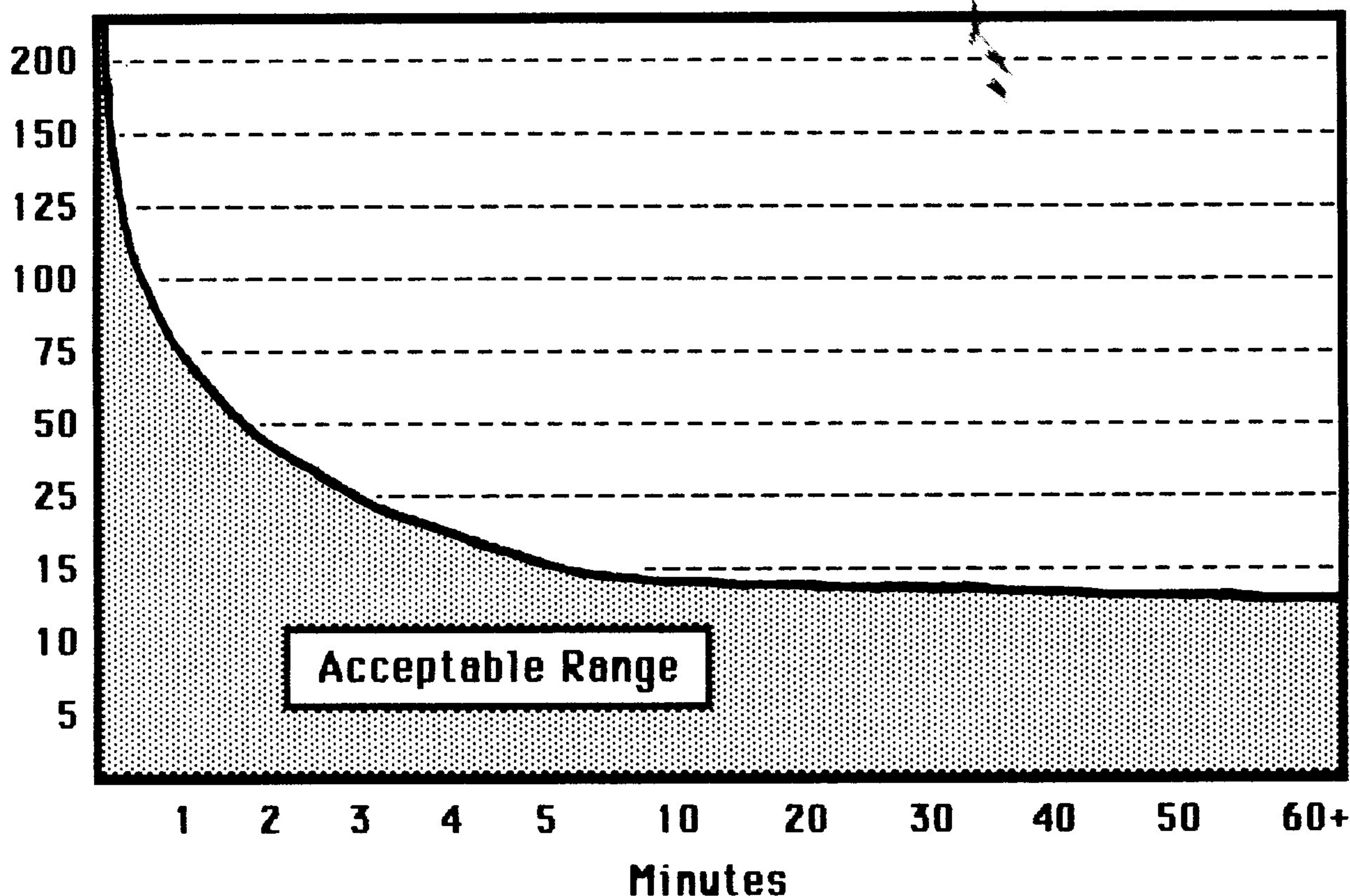
loud listening levels. Keep the volume at a point where normal conversation is possible in the same room as the speakers.

■ Unlike other types of music, high intensity electronic music does not contain quiet sections during which the speakers cool down. Extra care must be taken to listen for system distress and to follow the Power De-rating Curve when listening to this type of music.

■ Do not allow anyone to operate your system who is not familiar with the system's limitations and this notice.

Keep in mind that a Stradivarius violin is not held in such high esteem because it plays louder than other violins, but because it sounds better.

RMS Watts



RMS Power De-rating Curve for Vandersteen Model 1B and other high quality dynamic loudspeakers with similar number and size of drivers.