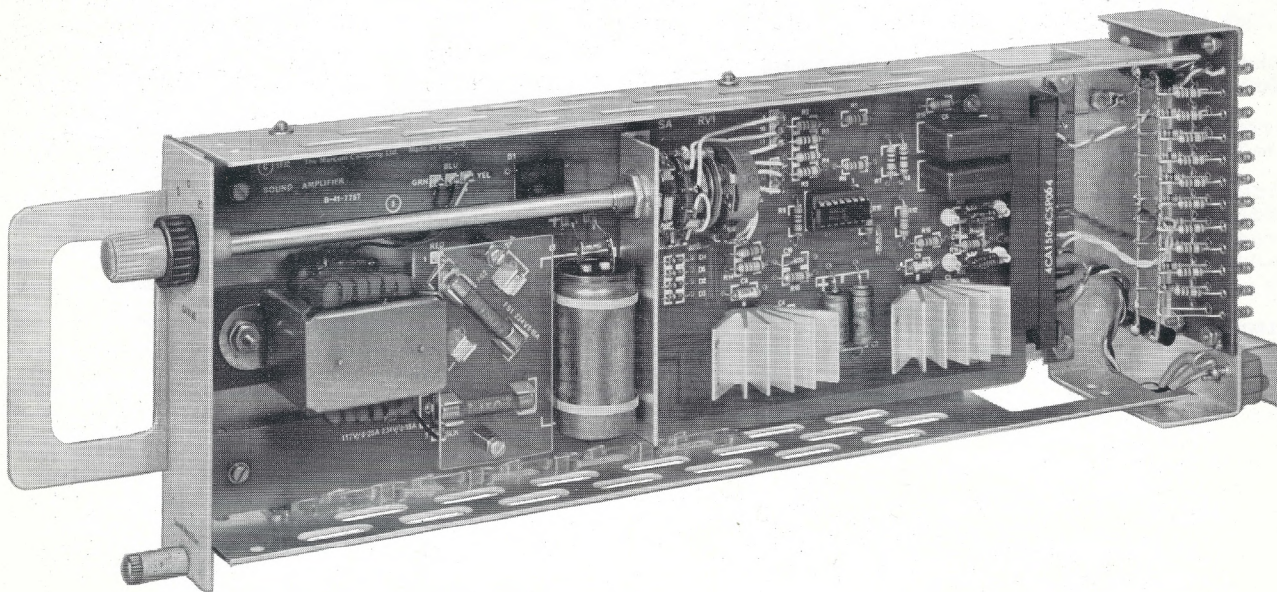




## Sound Amplifier

# B1337



### Features

**Compact design**

**Excellent specification**

**100 outputs per frame**

**Integral power supply**

**Common frame for sound and vision amplifiers**

**No audio transformers**

**Alternative 15Ω  
loudspeaker output**

### Introduction

The B1337 may be used as a sound distribution amplifier providing ten isolated 600Ω outputs, or as a loudspeaker amplifier providing 2.0W into 15Ω. The unit may be mounted alongside a B4004 V.D.A. and fitted in a common 133mm (5.25in) rack mounting frame type B4308 which takes the form of a 'picture window'.

### Description

The complete amplifier including power supply is built on a plug-in module. The mounting frame carries a tag board at the rear for the sound input and output connexions. A.C. input is via a connector block.

The amplifier is a transformerless device with a balanced high impedance input. The splitting resistors providing isolation between the ten outputs are mounted on the rear tag board attached to the mounting frame.

Each amplifier has front panel gain controls providing a gain range of -6 to +26dB. This is achieved by means of 0, +10 and +20dB switch positions, and a fine control of ±6dB.

The amplifier incorporates four silicon integrated operational amplifiers and is designed to be highly stable.

A very large amount of negative feedback is employed and the amplifier is capable of feeding into a short circuit without damage.

### Ordering Information

To ensure that you are supplied with equipment exactly to your requirements please make sure that the ordering information is clear.

When ordering please state:

- 1) A.C. input voltage.
- 2) If a rack mounting frame Type B4308 is required (accommodates up to 10 modules).
- 3) Whether additional copies of the handbook are required.
- 4) Whether spares are required.



# Data Summary

**A.C Input:** 100V–125V, 200V–250V, 48Hz–65Hz. (2.5W input for 0dBm fed to ten 600Ω loads), 6W input for +20dBm fed to ten 600Ω loads.

## INPUT

**Input impedance:** 20kΩ balanced.

**Input level:** +20dBm max.

## OUTPUT

**Output level:** +20dBm maximum into each of ten 600Ω loads, or 2.0W into a 15Ω load.

**Output impedance:**—

Into 600Ω loads, less than 50Ω.

Into 15Ω load, less than 0.25Ω.

Isolation between 50Ω outputs (1kHz) greater than 70dB.

**Voltage gain:** –6dB to +26dB, switched 0, +10 and +20dB. Fine control ±6dB.

**Signal/Noise ratio (weighted):** 70dB relative to 0dBm output.

**Frequency response:** +0.05dB –0.5dB from 30Hz to 20kHz with respect to 1kHz.

**Harmonic distortion:** Less than 0.1% at 0dB gain and 0dBm output, at 60Hz, 1kHz and 8kHz fundamental.

Less than 0.5% at +20dBm output, at 60Hz, 1kHz, and 8kHz fundamental.

**Ambient temperature:** The equipment will meet its performance specification over the range –10°C to +45°C.

## Dimensions:

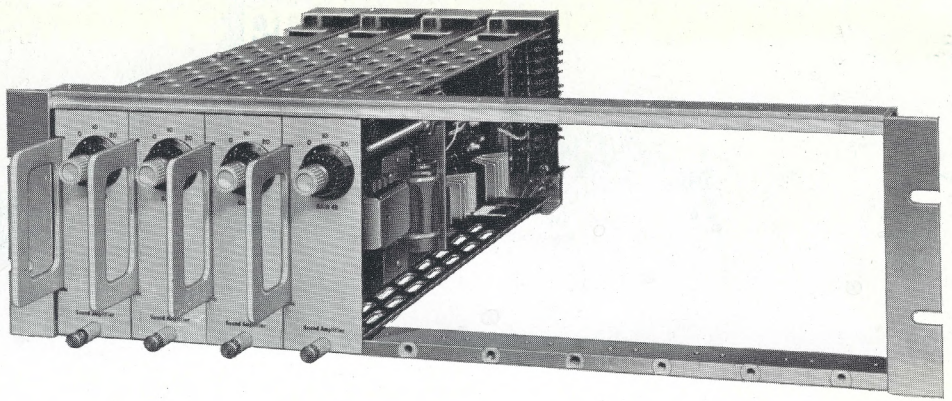
(Front panel)

Height 121mm (4.75in) for 133mm (5.25in) frame.

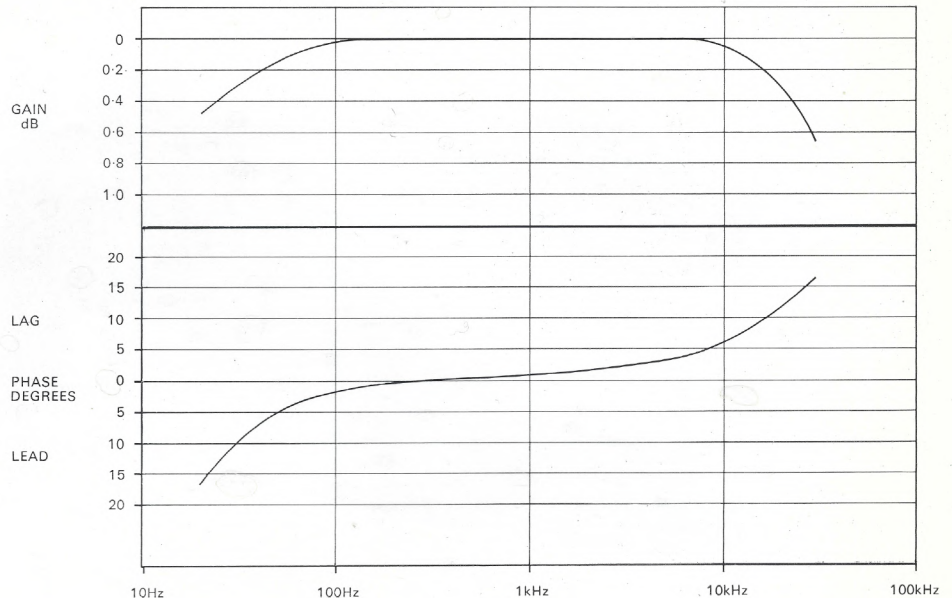
Width 407mm (1.6in)

Depth 430mm (17in) over connector.

Weight (per unit) 1.25kg (2.75lb)  
frame of 10.13kg (28.5lb)



Four B1337 amplifiers mounted in a B4308 frame



Typical performance

The information contained herein is subject to confirmation at the time of ordering.

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