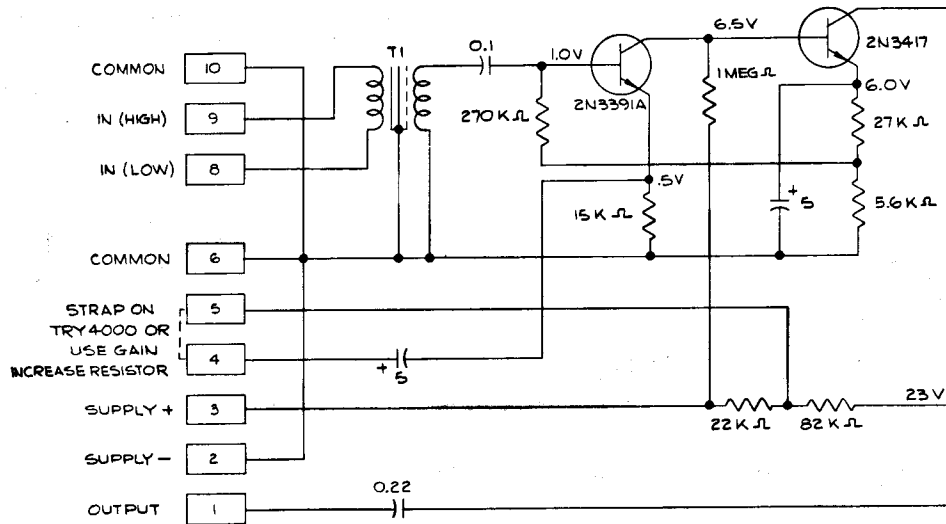


AM 4100 AMPLIFIER



THE AM4100 AMPLIFIER IS PRIMARILY INTENDED FOR USE AS A LOW-IMPEDANCE MICROPHONE PREAMPLIFIER. It is equipped with an input transformer whose primary winding is ungrounded, allowing balanced or unbalanced operation.

INPUT IMPEDANCE

To be driven from a source between 150 and 250 ohms. All data on this sheet were obtained with 250 ohm source. Actual input Z is over 1000 ohms, providing a virtual "bridge" of the source.

GAIN

-54 dbm input from 250 ohm source causes 0.25 v rms output (when strapping on tray is for lowest gain). Provision of a fixed resistor (or MG4007, which is variable) between terminals 4 and 5 on TRY4000 will raise gain per table below:

Increase, db	R, Kohm	Increase, db	R, Kohm
3	15	9	68
6	36	12	110

FREQUENCY RESPONSE

Uniform ± 1.0 db from 30 Hz to 15 kHz (with lowest gain strapping).
Uniform ± 2.0 db from 30 Hz to 15 kHz (with gain raised 12 db).

OUTPUT IMPEDANCE

To be loaded with 250,000 ohms or more. Actual dynamic output impedance is under 1000 ohms with low gain strapping and under 10,000 ohms with gain raised 12 db.

HARMONIC GENERATION (PER CENT)

At 5.0 v rms (1000 Hz): Total harmonic generation will not exceed 0.2 with unit strapped for low gain, 0.4 with gain raised 12 db. There is a slight rise in THG at low frequency end, caused primarily by the input transformer. This will not exceed 0.5 at 30 Hz, and is largely independent of gain strapping. There is a slight rise in THG at the high frequency end. This will not exceed 0.3 at 15 kHz with unit strapped for low gain, 1.0 with gain raised 12 db.

NOISE

Noise generation is lower than an equivalent input signal level of -116 dbm.

POWER REQUIREMENT

Demand from 42 v DC supply is approximately 220 microamperes. Do not power from a supply that is over 50 v DC. Supply must contain less than 1.0 millivolt total noise.

SIZE

Constructed on printed-wiring card whose overall dimensions are 2 1/4" wide x 2 1/2" long. ("Long" dimension includes printed-on plug terminals.) No part on the board extends more than 1 1/4" from its surface.

MOUNTING

To be mounted in TRY4000 Tray. When seated in tray, maximum overall dimensions are: From flat side of tray to top of tallest part on AM4100, 1 5/8". Flat mounting area (length includes solder lugs on tray connector), 2 7/8" long x 2.450" wide.

When the TRY4000 (containing AM4100 Amplifier) is mounted to panel by means of the BKT 4000 Bracket and a gain control (not supplied), minimum mounting centers are 1 3/4".

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Because of a policy of inaugurating changes in solid-state equipment at irregular intervals in order to maintain "state of the art" performance, Langevin reserves the right to modify design of this product without notification.