

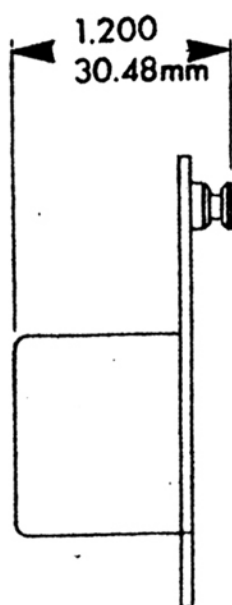
PRE-AMPLIFIER

THE AM4101 PRE-AMPLIFIER IS PRIMARILY INTENDED FOR USE AS A MICROPHONE PRE-AMPLIFIER IN THE 4000 SERIES SYSTEM. IT MAY BE USED AS AN INDIVIDUAL MODULE IN OTHER ASSEMBLIES IF THE INPUT AND OUTPUT PARAMETERS SERVE THE REQUIRED PURPOSE.

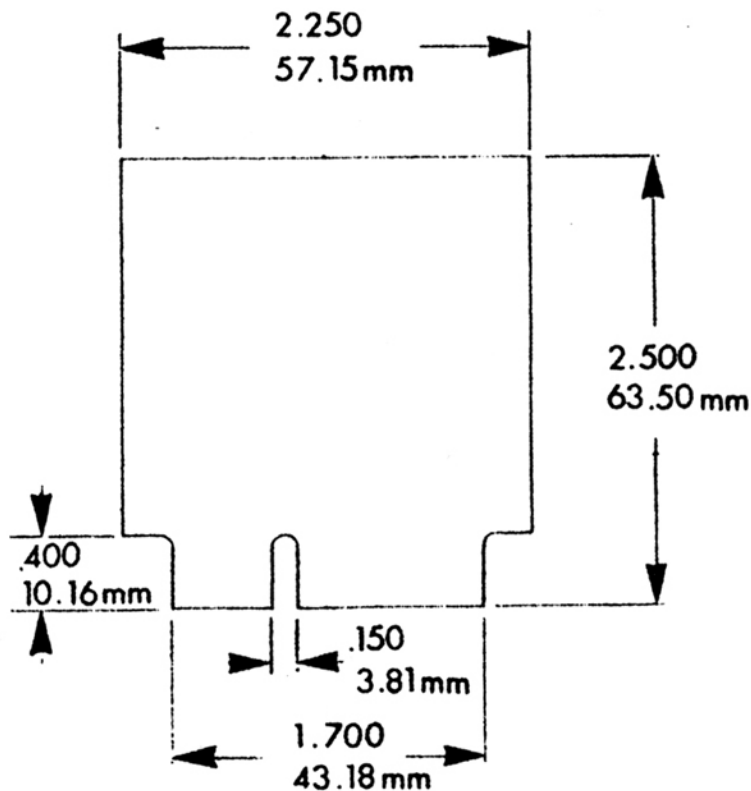
GENERAL DESCRIPTION

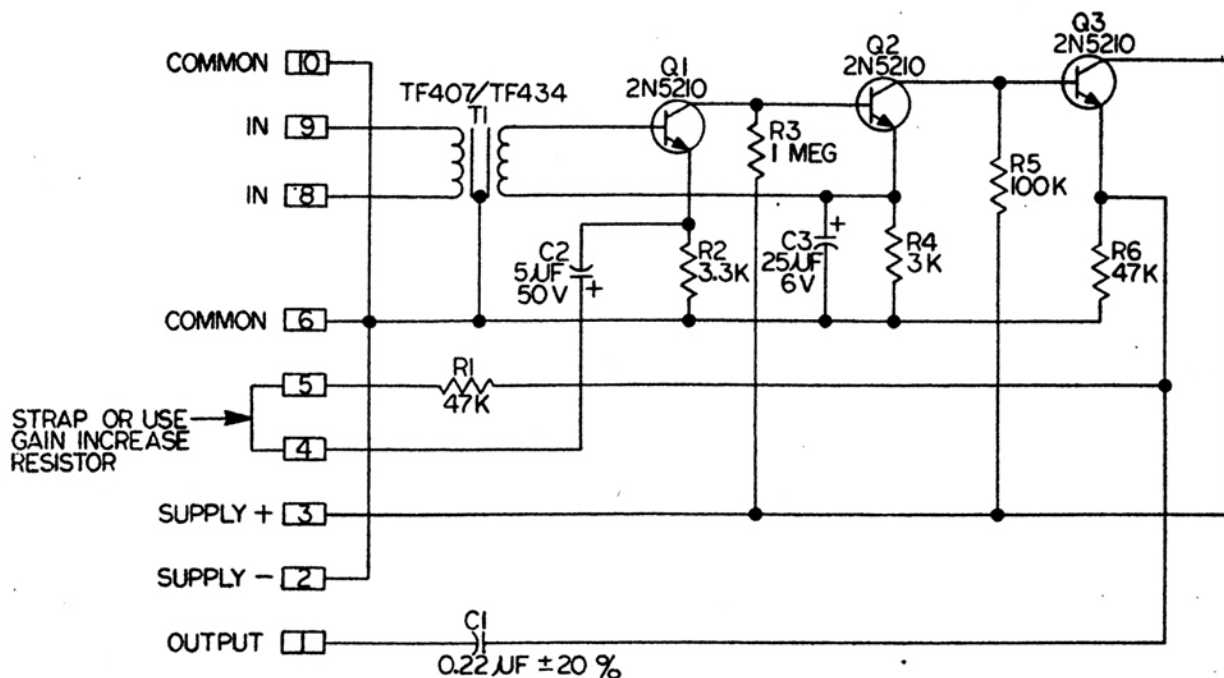
The AM4101 pre-amplifier is designed for microphone pre-amplification into a system load of 100K ohms. It is constructed on a plug-in printed circuit card and does not contain controls or adjustments.

The AM4101 is made available with two different input transformers. The "A" version is provided with a good quality microphone input transformer with performance characteristics sufficient for most applications. If a better frequency response and improved low frequency distortion is required, the AM4101B with a high quality input transformer should be used.



4100 SERIES





ELECTRICAL SPECIFICATIONS

SOURCE IMPEDANCE:

250 ohms nominal

GAIN:

-54 dbm causes 250 mv/100K ohms out
Change of feedback resistor changes gain:

22K ohms	+3 db
56K ohms	+6 db
100K ohms	+9 db

FREQUENCY RESPONSE:

(A) ± 1 db 30 hz to 15 KHz
(B) $\pm .5$ db 30 hz to 15 KHz

LOAD IMPEDANCE

200K ohms nominal

OUTPUT MAX.

5 volts RMS/100K ohms

HARMONIC GENERATION:

Less than .2% at 1 KHz

NOISE:

Equivalent input -122 dbm

POWER REQUIREMENTS:

42 volts dc/750 uA

SIZE:

2-1/4" wide X 2-1/2" long

MATING CONNECTOR:

Cinch 252-10-30-24D

MOUNTING:

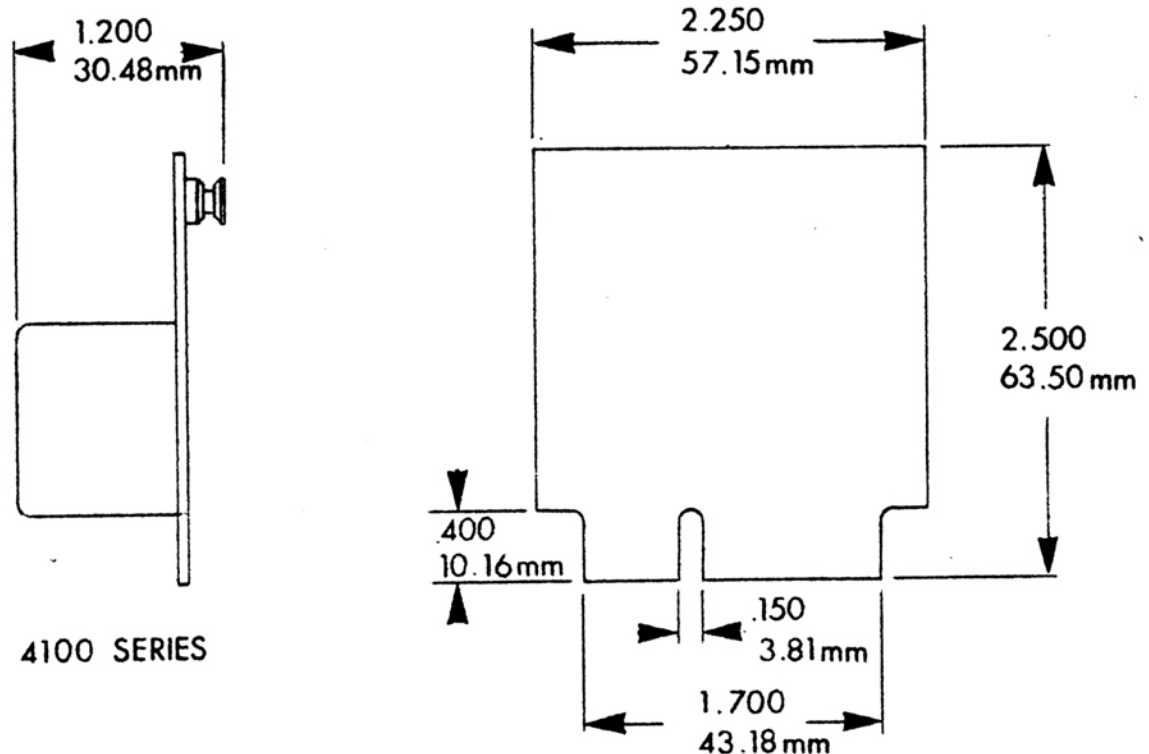
The 4101 type amplifier may be mounted in TRY-4000

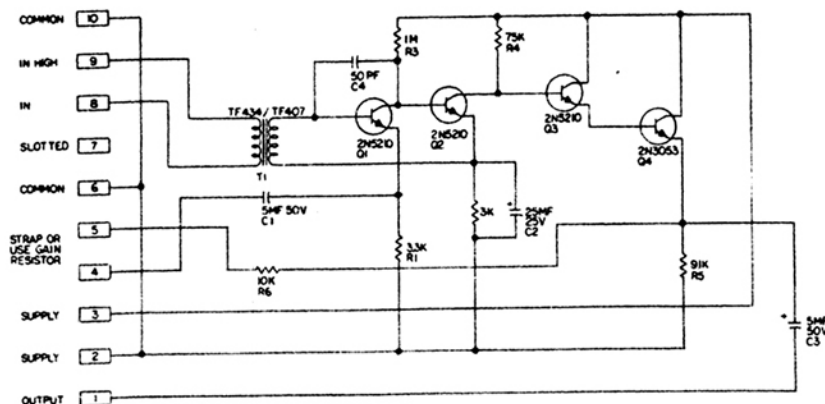
THE AM4102 PRE-AMPLIFIER IS PRIMARILY INTENDED FOR USE AS A MICROPHONE PRE-AMPLIFIER IN THE 4000 SERIES SYSTEM. IT MAY BE USED AS AN INDIVIDUAL MODULE IN OTHER ASSEMBLIES IF THE INPUT AND OUTPUT PARAMETERS SERVE THE REQUIRED PURPOSE.

GENERAL DESCRIPTION

The AM4102 pre-amplifier is designed for microphone pre-amplification into a system load of 10K ohms. It is constructed on a plug-in printed circuit card and does not contain controls or adjustments.

The AM4102 is made available with two different input transformers. The "A" version is provided with a good quality microphone input transformer with performance characteristics sufficient for most applications. If a better frequency response and improved low frequency distortion is required, the AM4102B with the high quality input transformer should be used.





1 ALL RESISTORS 5% 1/2 WATT

ELECTRICAL SPECIFICATIONS

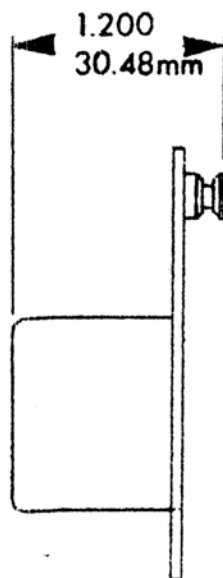
SOURCE IMPEDANCE:	250 ohms nominal
GAIN:	-54 dbm causes 250 mv/10K ohms out Change of feedback resistor changes gain:
	22K ohms +3 db
	56K ohms +6 db
	100K ohms +9 db
FREQUENCY RESPONSE:	(4102A) $\pm$ 1db 30 hz to 15 KHz (4102B) $\pm$ 5db 30 hz to 15 KHz
LOAD IMPEDANCE:	10K ohms or more
OUTPUT MAX:	8 volts RMS/10K ohms
HARMONIC GENERATION:	Less than .1% at 1 KHz
NOISE:	Equivalent input -122 dbm
POWER REQUIREMENTS:	42 volts dc/3 mA
SIZE:	2-1/4" wide X 2-1/2" long
MATING CONNECTOR:	Cinch 252-10-30-24D
MOUNTING:	The AM4102 type amplifier may be mounted in TRY-4000.

THE AM4103 PRE-AMPLIFIER IS PRIMARILY INTENDED FOR USE AS A MICROPHONE PRE-AMPLIFIER IN THE 4000 SERIES SYSTEM. IT MAY BE USED AS AN INDIVIDUAL MODULE IN OTHER ASSEMBLIES IF THE INPUT AND OUTPUT PARAMETERS SERVE THE REQUIRED PURPOSE.

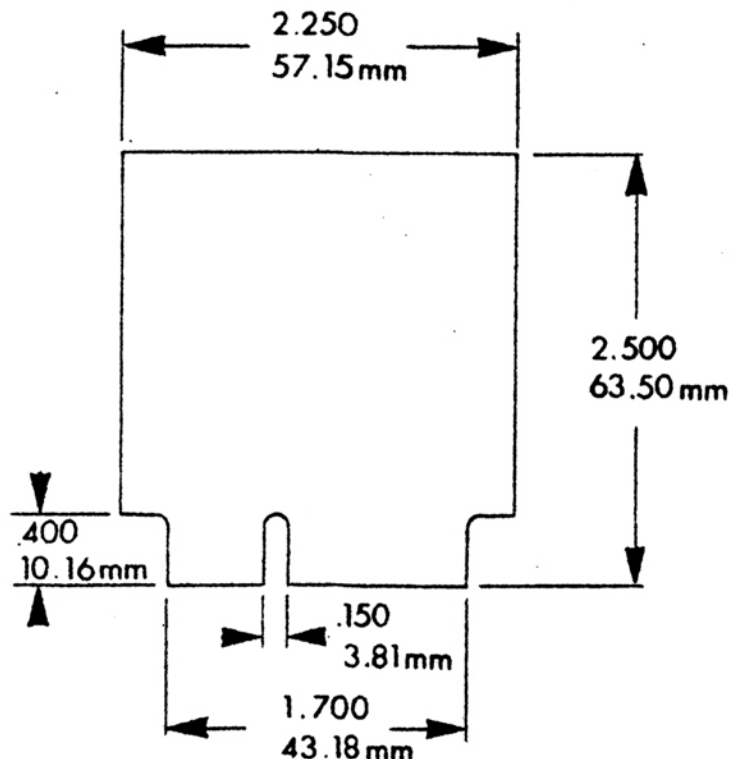
GENERAL DESCRIPTION

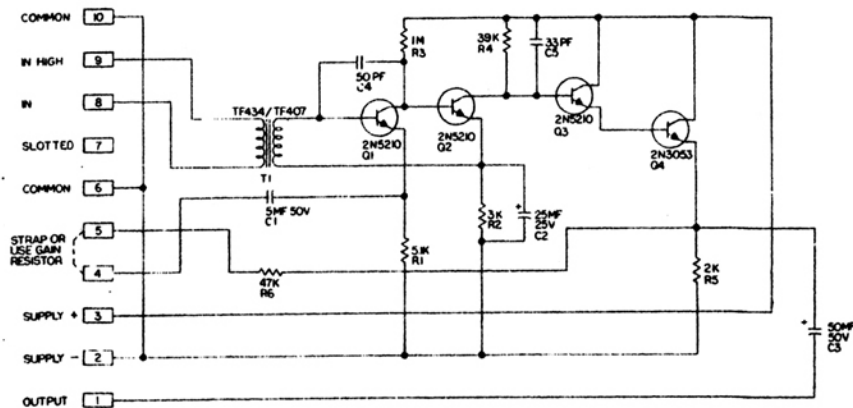
The AM4103 Pre-Amplifier is designed for microphone pre-amplification into a system load of 600 ohms. It is constructed on a plug-in printed circuit card and does not contain controls or adjustments.

The AM4103 is made available with two different input transformers. The "A" version is provided with a good quality microphone input transformer with performance characteristics sufficient for most applications. If a better frequency response and improved low frequency distortion is required, the AM4103B with the high quality input transformer should be used.



4100 SERIES





ELECTRICAL SPECIFICATIONS

SOURCE IMPEDANCE:

250 ohms nominal

GAIN:

Max 60 db

Change of feedback resistor changes gain:

180K ohms	60 db gain
150K ohms	59 db gain
100K ohms	56 db gain
51K ohms	53 db gain
20K ohms	50 db gain
0 (strap)	47 db gain (mir)

FREQUENCY RESPONSE:

± 1 db 30 hz to 15 KHz

LOAD IMPEDANCE:

600 ohms or more

OUTPUT MAX:

+ 14 dbm/600 ohms

HARMONIC GENERATION:

Less than .1% at 1 KHz

POWER REQUIREMENTS:

42 volts dc/36 ma

SIZE:

2- $\frac{1}{4}$ " wide X 2- $\frac{1}{2}$ " long

MATING CONNECTOR:

Cinch 252-10-30-24D

MOUNTING:

The AM 4103 type amplifier may be mounted in TRY-4000 or MG 91.

LANGEVIN

AM 4301A
PRE-AMPLIFIER

THE AM4301 PRE-AMPLIFIER IS PRIMARILY INTENDED FOR USE AS A MICROPHONE PRE-AMPLIFIER IN THE 4000 SERIES SYSTEM. IT MAY BE USED AS AN INDIVIDUAL MODULE IN OTHER ASSEMBLIES IF THE INPUT AND OUTPUT PARAMETERS SERVE THE REQUIRED PURPOSE.

The AM4301 Pre-Amplifier is designed for high impedance microphone pre-amplification into a system load of 100K ohms or more. It is constructed on a plug-in printed circuit card and does not contain controls or adjustments.

ELECTRICAL SPECIFICATIONS

SOURCE IMPEDANCE: 100K ohms nominal

GAIN: 33 dbm causes 250 mv/100K ohms out

Change of feedback resistor changes gain:

22K ohms	+ 3 dbm
51K ohms	+ 6 dbm
91K ohms	+ 9 dbm

FREQUENCY RESPONSE: ± 1 db 30 hz to 15 Khz

LOAD IMPEDANCE: 100K ohms nominal

OUTPUT MAX: 5 volts RMS/100K ohms

HARMONIC GENERATION: Less than .2% at 1 Khz

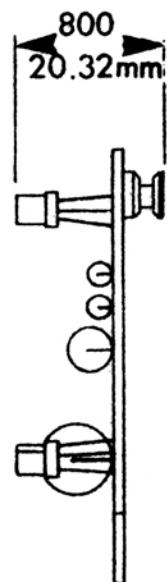
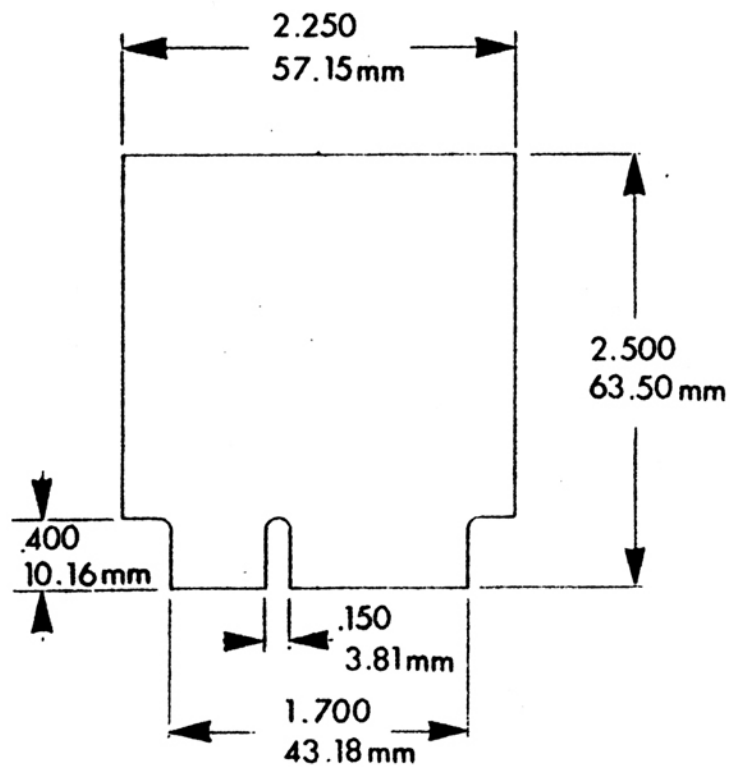
NOISE: 70 microvolts

POWER REQUIREMENTS: 42 volts dc/750 mA

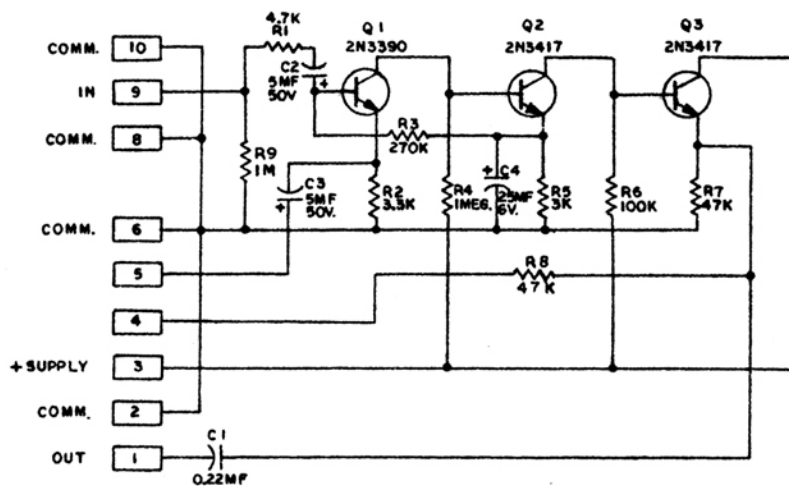
SIZE: 2-1/4" wide X 2-1/2" long

MATING CONNECTOR: Cinch 252-10-30-24D

MOUNTING: The 4301 type amplifier may be mounted in TRY-4000.



4300, 4500 & 4700
SERIES



THE AM4302 PRE-AMPLIFIER IS PRIMARILY INTENDED FOR USE AS A MICROPHONE PRE-AMPLIFIER IN THE 4000 SERIES SYSTEM. IT MAY BE USED AS AN INDIVIDUAL MODULE IN OTHER ASSEMBLIES IF THE INPUT AND OUTPUT PARAMETERS SERVE THE REQUIRED PURPOSE.

The AM4302 Pre-Amplifier is designed for high impedance microphone pre-amplification into a system load of 10K ohms or more. It is constructed on a plug-in printed circuit card and does not contain controls or adjustments.

ELECTRICAL SPECIFICATIONS

SOURCE IMPEDANCE:	100K ohms nominal
GAIN:	-34 dbm causes 250 mv/10 K ohms out
	Change of feedback resistor changes gain:
	22K ohms + 3 dbm
	51K ohms + 6 dbm
	91K ohms + 9 dbm
FREQUENCY RESPONSE:	± 1 db 30 hz to 15 Khz
LOAD IMPEDANCE:	10K ohms nominal
OUTPUT MAX:	5 volts RMS/10K ohms
HARMONIC GENERATION:	Less than .2% at 1 Khz
NOISE:	70 Microvolts
POWER REQUIREMENTS:	42 volts dc/ 3 mA
SIZE:	2-1/4" wide X 2-1/2" long
MATING CONNECTOR:	Cinch 252-10-30-24D
MOUNTING:	The 4302 type amplifier may be mounted in TRY-4000.

