

**Grampian**

**RIBBON  
MICROPHONES  
G.R.1 & G.R.2**

The Grampian ribbon microphones, types G.R.1 and G.R.2 have been produced after many years of experimental research in the field of high fidelity microphones.

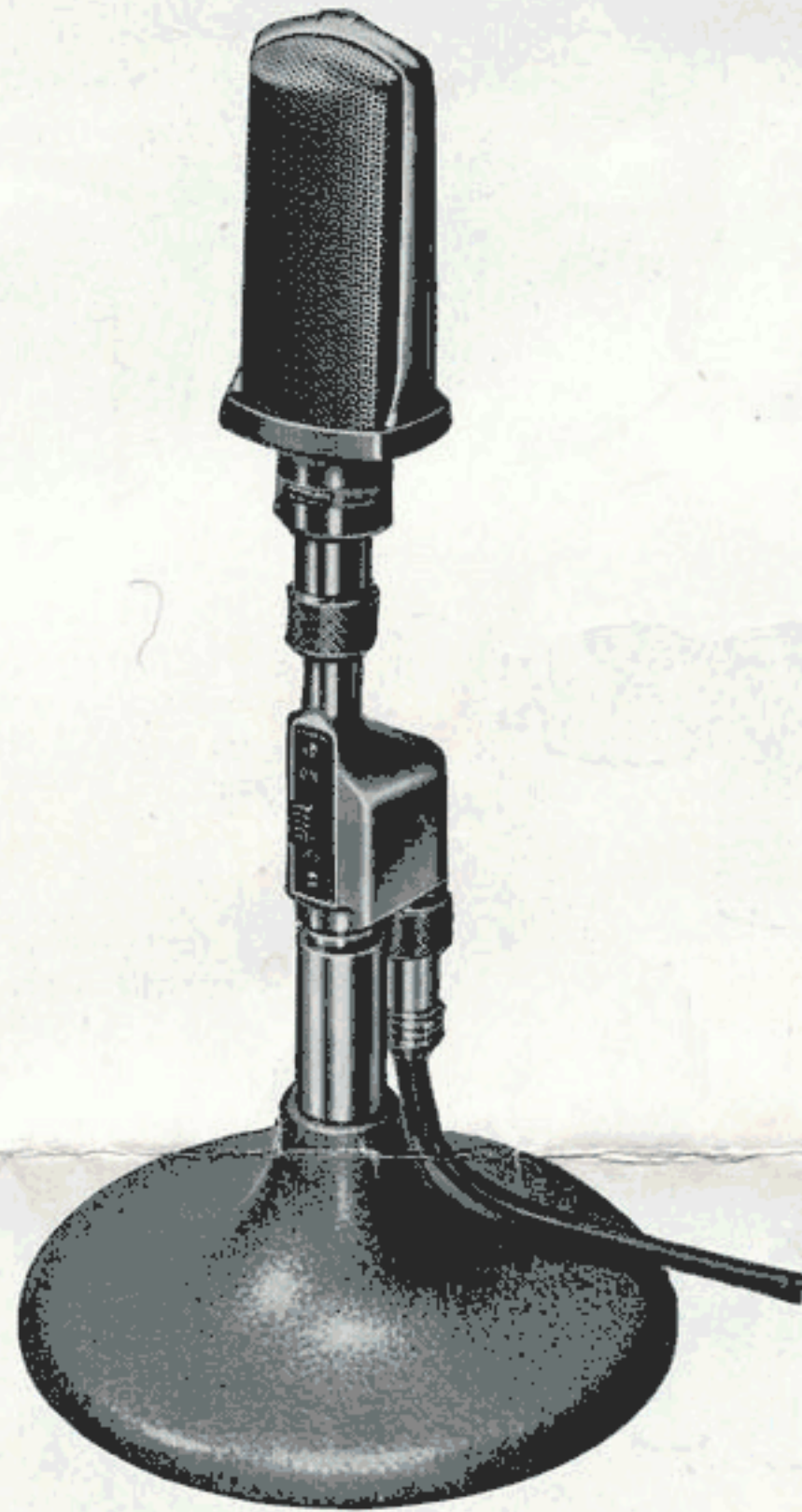
The exceptionally wide flat frequency response, virtually level from 40 Hz to 15 kHz combined with the excellent transient response make these microphones ideal for studio and similar work where a high standard of fidelity is essential.

Compact and unobtrusive in appearance, the case is formed from a pressure die cast frame with heavy gauge perforated brass covers, all finished in satin chrome. Connection is by a two pin plug with locking ring.

Two basic types, the G.R.1 and the G.R.2 are available and each of the types in various impedances.

The type G.R.1 has a semi-cardioid response and is suitable for use in sound reinforcement installations where feedback between the loudspeaker and the microphone is a problem. This microphone has approximately 10 db suppression of the higher frequencies reaching its rear face, and, because of its slightly lower sensitivity at lower frequencies, it will normally be necessary to place it nearer the sound source than the type G.R.2. The rear face of the microphone is identified by its oxidised colour, the front face having the normal satin chrome finish.

The type G.R.2 microphone has a "figure - of - eight " bi - directional polar response in both the horizontal and vertical planes. This means that the instrument is most sensitive at the front and back and least sensitive at the sides and top and bottom. This directional property is very useful in that the instrument can be positioned for maximum pick-up of the wanted



sounds and minimum pick-up of unwanted sounds and noise. It also has the effect of enabling the microphone to be placed approximately 1½ times farther away from the sound source than is possible with the pressure-type microphones which are equally sensitive in all directions.

A special feature of these microphones is the ease with which the ribbon can be replaced should this become necessary through accidental damage.

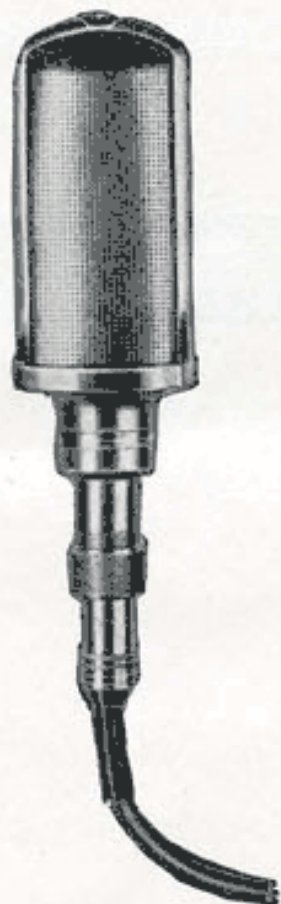
These microphones are manufactured in a special section of our Works, under strictly controlled conditions with stringent test and inspection at every stage.

Each and every microphone is individually tested both aurally and on Bruel & Kjoer visual and graphic recording test equipment for conformity to a prescribed performance.

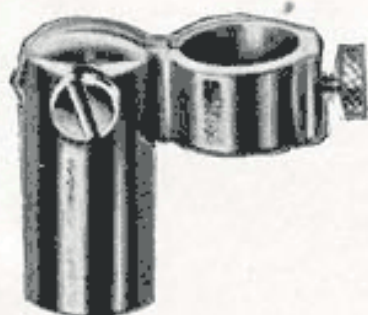
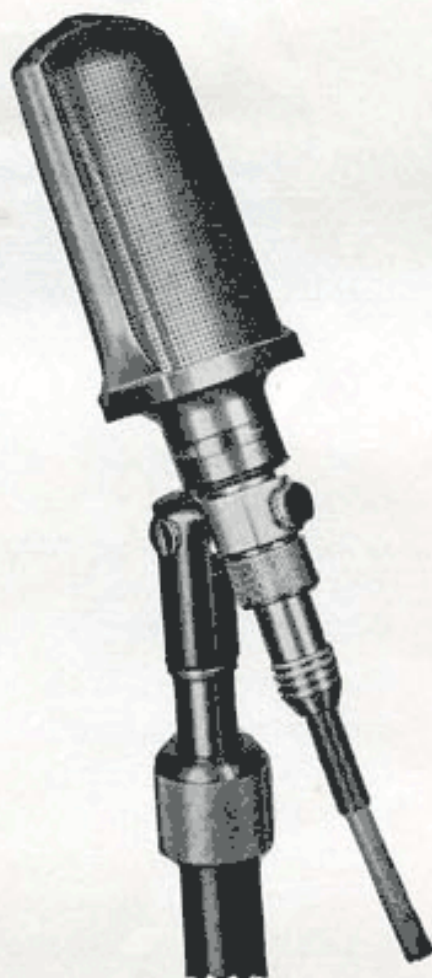
Specimen response traces are shown on page three.



## MOUNTINGS & STANDS



← The microphone can be used either with:—



← — the swivel holder, type GR/SH which has a non-loss retaining screw to clamp the microphone which may be tilted up to 45° from the vertical if required.



← Alternatively, the switch unit type GR/SU may be used. This unit, finished in satin chrome to match the microphone, incorporates an "on/off" switch with self-cleaning contacts.



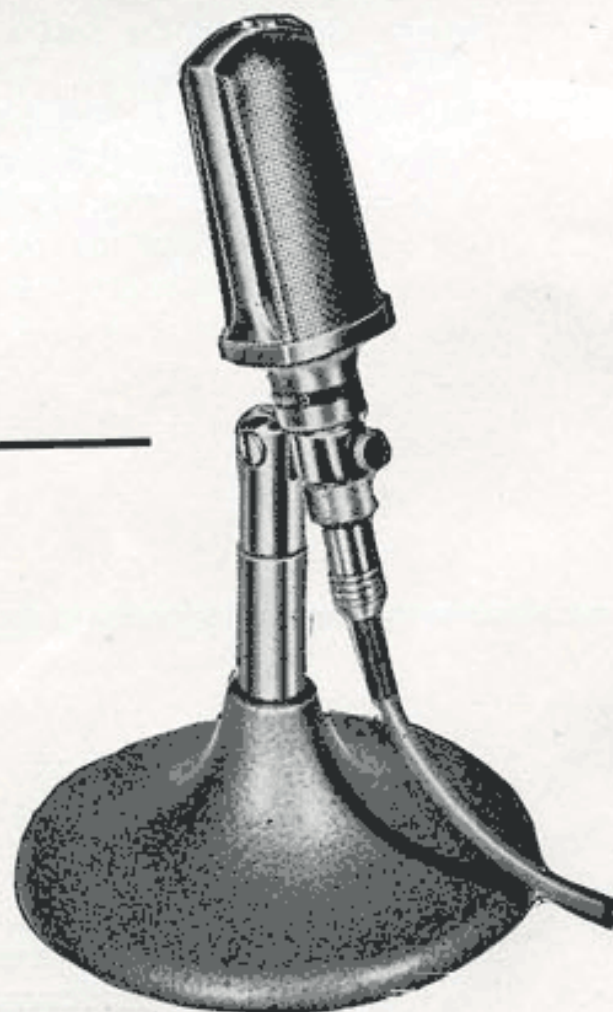
← Circular Desk Base, type. Alloy casting, finished in grey hammer enamel. Thread size  $\frac{5}{16}$ " B.S.F. Diameter  $5\frac{1}{2}$ " (140 mm), Height  $3\frac{3}{4}$ " (95 mm), Weight 14 ozs. (.4 Kg.).

*See back page for details of other type stands.*



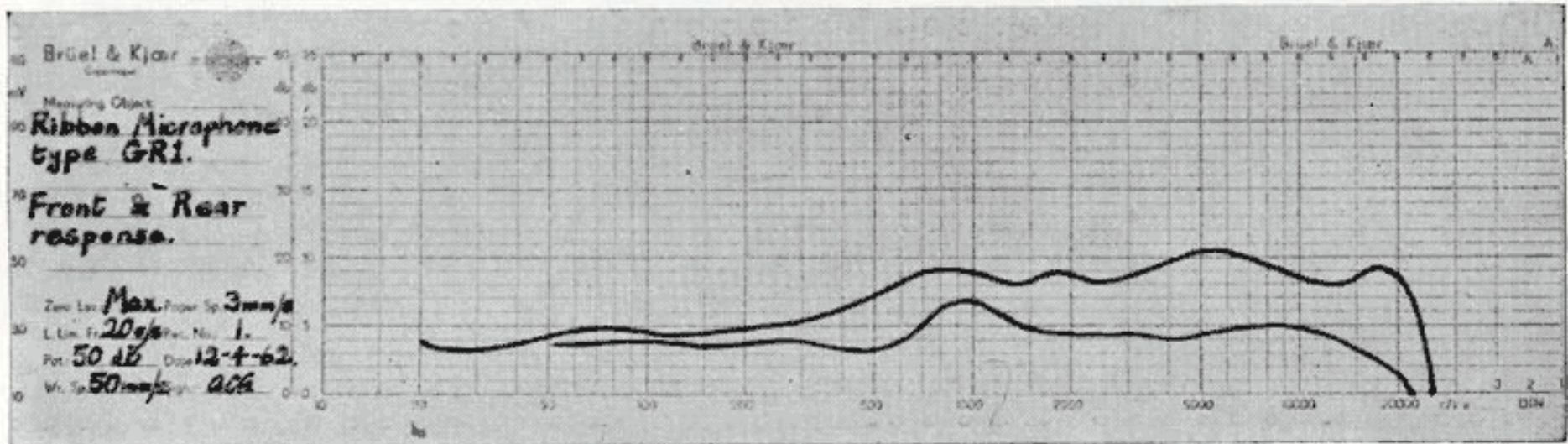
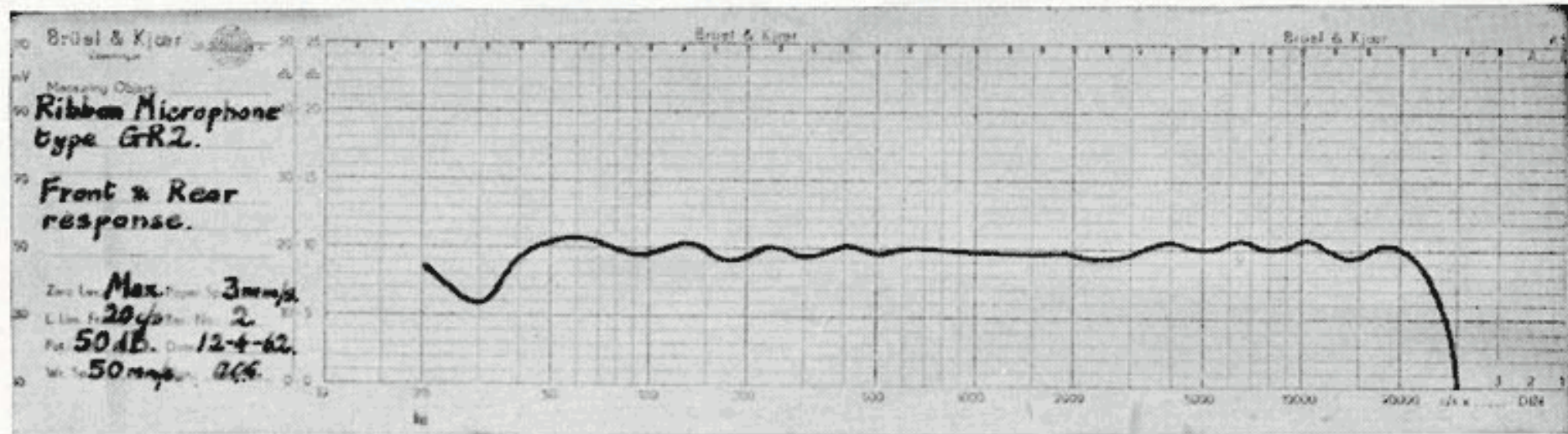
The microphones are supplied complete with the swivel holder and an 18' screened lead fitted with connector.

Available as an extra is a leathercloth covered padded instrument case which will hold the microphone, the "on/off" switch unit and a spare connector. The case does not hold a lead.





## TYPICAL RESPONSE CURVES



## TECHNICAL DATA

Frequency response 40 Hz to 15,000 Hz.

Output levels: at 1 kHz.

GR1/L & GR2/L	25/30 ohms ..	31.6 uV/dyne/cm <sup>2</sup> or -90 dB ref 1 volt/dyne/cm <sup>2</sup>
GR1/X & GR2/X	200 ohms ..	86 uV/dyne/cm <sup>2</sup> or -81.5 dB ref 1 volt/dyne/cm <sup>2</sup>
GR1/M & GR2/M	600 ohms ..	0.15 mV/dyne/cm <sup>2</sup> or -76.5 dB ref 1 volt/dyne/cm <sup>2</sup>
GR1/H & GR2/H	50,000 ohms ..	1.37 mV/dyne/cm <sup>2</sup> or -58 dB ref 1 volt/dyne/cm <sup>2</sup>
Weight of microphone	..	9 ozs. (.255 Kg.)
Height	.. ..	5½" (14 cm)
Width	.. ..	1¾" (4.4 cm)
Depth	.. ..	1¼" (3.2 cm)
Finish	.. ..	Satin chrome

## TYPES

GR1/L or GR2/L  
25/30Ω

GR1/X or GR2/X  
200Ω

GR1/M or GR2/M  
600Ω

GR1/H or GR2/H  
50K Ω

### Accessories

Microphones with protective cover, 18' screened lead and connector and GR/SH swivel holder in standard cardboard box

As above and with padded instrument case

On/Off switch unit, type GR/SU ...

Circular desk base, type GR/CB ...

Swivel holder, type GR/SH ...

GR connector plug only ...

GR connector with 9' screened lead ...

GR connector with 18' screened lead ...

GR connector with 36' screened lead ...

Jack plug fitted to lead ... extra

GR cable socket ...

GR extension lead 9' with connector plug and cable socket ...

GR extension lead 18' with connector plug and cable socket ...

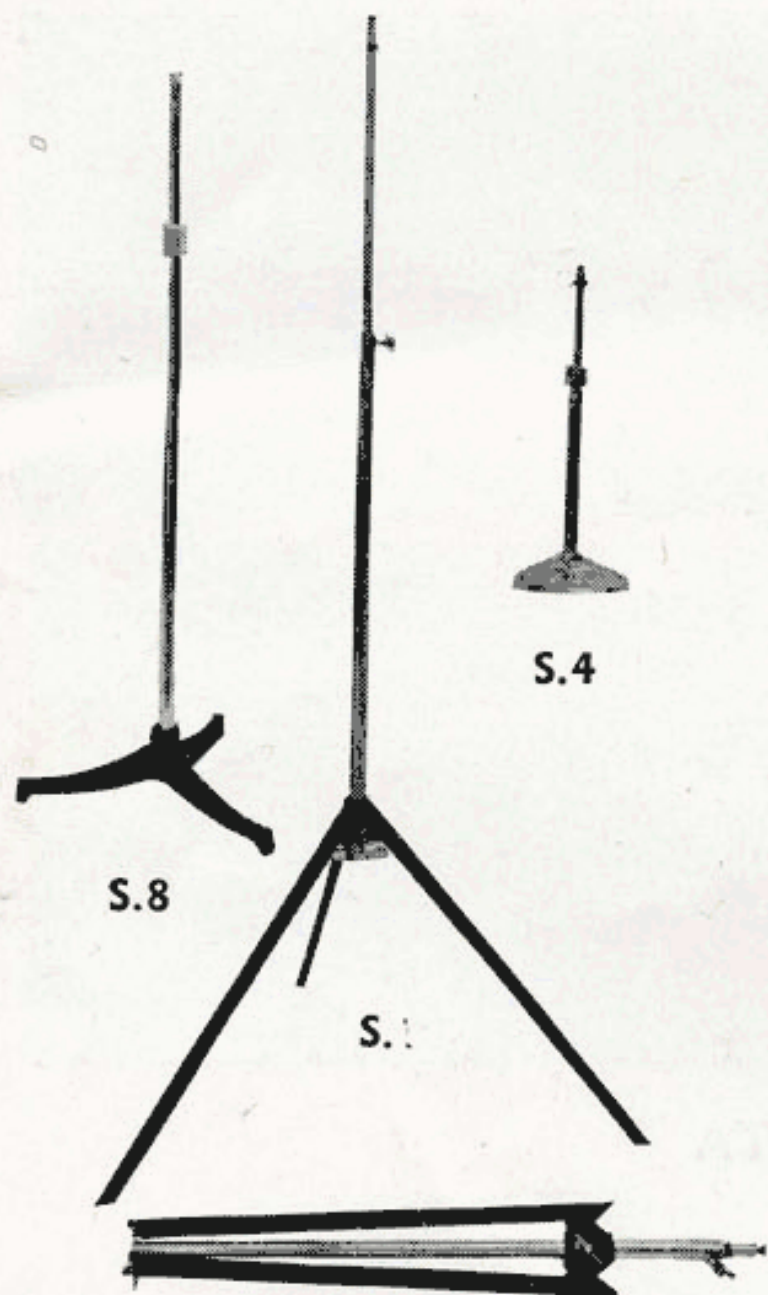
GR extension lead 36' with connector plug and cable socket ...

(Please note—GR type connectors and cable sockets are not interchangeable with DP4 types)

The lead length normally supplied is 18 feet long. Low and medium impedance leads may be of any length but high impedance leads should not exceed 25 feet. If you wish to employ a long microphone line and your equipment has a high impedance input, you should use a low impedance microphone and a G.7 matching unit at the amplifier end. For details of units see back page



## MICROPHONE STANDS



### TYPE S.1.

A light-weight folding stand, firm when erected and compact when closed, finished in black crackle paint and chrome plate.

Height erected. Max. 59" (1500 mm.)  
 Height erected. Min. 39" (990 mm.)  
 Height closed 35" (890 mm.)  
 Weight 3½ lbs. (1.6 Kg.)

### TYPE S.4.

A high-finish chromium-plated table stand with black base for banquet or similar use.

Height extended 20½" (520 mm.)  
 Height closed 12" (304 mm.)  
 Base diameter 6" (152 mm.)  
 Weight 2 lbs. 14 ozs. (1.3 Kg.)

### TYPE S.8

A heavy-base floor stand, suitable for stage use, etc. Base in black crackle paint, with polished tubes.

Height extended 61" (1549 mm.)  
 Height closed 42" (1066 mm.)  
 Weight 14½ lbs. (6.5 Kg.)

All stands terminate with a  $\frac{5}{16}$ " B.S.F. thread screw. (7.93 mm.)

Also available  $\frac{1}{2}$ " 26 T.P.I. (12.7 x 26 T.P. 25 mm.)

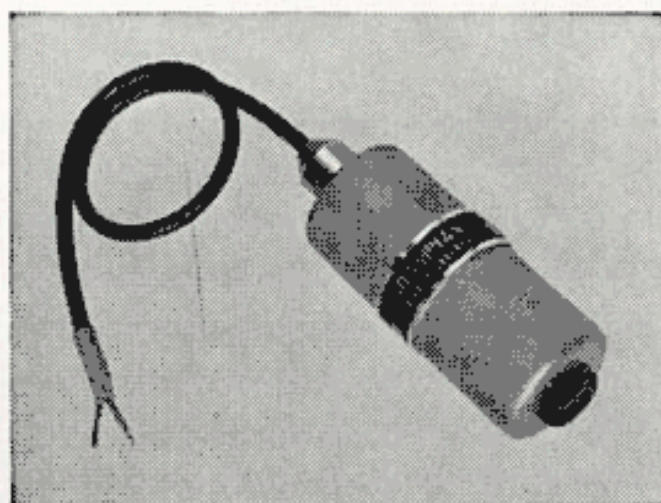
## MICROPHONE MATCHING UNITS SERIES G.7.

A range of microphone transformers or matching units for use with Tape Recorders, Home Cine Sound equipment, Amplifiers, etc. in cases where the impedance of the microphone is different from the input impedance of the main equipment, or when the same microphone is to be used with various amplifiers, recorders or vice versa.

Consisting of a double wound transformer housed in a Mu-metal case, it is provided with a jack socket on the primary side for input and a short screened lead on the output for connecting to the input of the amplifier.

Length  $3\frac{5}{8}$ " x  $1\frac{1}{4}$ " dia. Weight  $5\frac{1}{2}$  ozs.  
 (92 x 31 mm.) (159 grms.)

The "low to high" model, type G7/LH is of special advantage in instances where it is required to use a very long microphone lead. It permits the use of a low impedance microphone in conjunction with high impedance input equipment, without the instability and treble loss which occurs if the high impedance leads are extended.



Input	Output	Type
15-30 ohms	High Impedance	G7/LH
15-30 ohms	600 ohms	G7/LM
600 ohms	High Impedance	G7/MH
High Impedance	600 ohms	G7/HM
15-30 ohms	200 ohms	G7/LX
200 ohms	High Impedance	G7/XH

NOTE High Impedance = 50,000 ohms or greater

## GRAMPIAN REPRODUCERS LTD.

HANWORTH TRADING ESTATE

FELTHAM

MIDDLESEX

Phone: 01-894 9141/3

Telegrams: REAMP, FELTHAM