THE Labgear HIGH-POWER MINIATURE TRANSMITTER

MODEL LG 300 Mk. II.

★ Handsome modern styled cabinet.

★ Latest dual-shade grey enamel finish.

★ Thoroughly shielded

★ Scientifically designed cooling

★ Every part under-run for reliability

★ Built-in L.T. transformer.

★ Super-stable, calibrated V.F.O.

★ Absolute minimum of controls.

★ Only 1 sq ft of table space (approx.)

★ Fully covered by our official Guarantee

★ Covers 10, 15, 20, 40, 80m Bands.

★ “Man-sized” 813 P.A. (extra).

★ “Loafs” along at 150 watts, A1 or A3

★ Pi-network output circuit.

★ Extensively harmonic filtered.

★ Tuned harmonic rejector

★ Harmonic check point

★ Continuously adjustable drive control

★ Improved clumper valve circuit

★ Reduced power “tune-up” facility.

DETAILED SPECIFICATION OVERLEAF

SOL : DESIGNERS, MANUFACTURERS AND DISTRIBUTORS (IN U.K.)

Labgear

INSTRUMENTS & COMMUNICATION EQUIPMENT
CAMBRIDGE

LABGEAR LIMITED,
CROMWELL ROAD,
CAMBRIDGE, ENGLAND

Telephone : 47301
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THE Labgear HIGH-POWER MINIATURE TRANSMITTER

MODEL LG 300 Mk. II

GENERAL

This fully band-switched transmitter represents an ambitious yet economical approach to high-power working with a minimum space requirement.

Many of the most experienced Amateurs feel uneasy about the operation of power amplifier valves in a confined space at the very top limit of their ratings and the use of an 813 (or equivalent) valve in the Labgear transmitter will be enthusiastically welcomed by those who normally operate at full licenced power.

The standard of engineering ensures the maximum possible efficiency together with an absolute minimum of spurious emissions. This transmitter should be coupled to our E 5034 Low-Pass Filter in those areas where TVI is troublesome.

Particular note should be taken of the fact that no transmitter, however well designed, is completely harmonic free. Moreover, in those cases where harmonics have been attenuated to a limit set only by economic considerations, as in the Labgear LG300 transmitter, some residual TVI may be caused by spurious harmonic generation external to the transmitter (e.g. contact rectification by metallic objects in the vicinity of the transmitting aerial).

SPECIFICATION

Nominal power input: 150 watts using the Labgear companion power unit/modulator which can be supplied as an additional item.

Maximum power input: 250—300 watts approximately, using an external power unit and modulator of suitable ratings. (1250V max. H.V. for ‘phone operation) (1500V, max. H.V. for C.W. operation)

Bands covered:

\[
\begin{align*}
3.5 & \quad 3.8 \text{ Mc/s} \\
7.0 & \quad 7.3 \text{ Mc/s} \\
14.0 & \quad 14.35 \text{ Mc/s} \\
21.0 & \quad 21.45 \text{ Mc/s} \\
28.0 & \quad 29.7 \text{ Mc/s}
\end{align*}
\]

Calibrated

Frequency control: Highly stable built-in series-tuned Colpitts V.F.O.

Exciter: Band switched using type 5763 valves throughout.

Output circuit: Pi-network to match 52—80ohm co-ax.

Metering: Separate meters for grid and anode current of 813 P.A. Valve.

Keying: Jack No. 1: buffer keying.

Jack No. 2: oscillator keying — for break-in working.

Netting: Full facilities provided.

Shielding: Comprehensive.

Lead filtering: All leads filtered for T/V harmonics.

Power requirements:

- (i) 110/200—250 V., 40—60C/s. (Mains)
- (ii) 300 V., 200 mA.
- (iii) 150 V. 30 mA, stabilised.
- (iv) 1000 V., 200 mA.

Cabinet Dimensions: Approx. 14” wide x 11” deep x 19” high

Weight: 50 lbs. approx.

Catalogue No: E 5035

The Company reserves the right to vary the price and/or the specification without prior notice.
POWER SUPPLY UNIT & MODULATOR
A MATCHED COMPANION UNIT FOR THE LG 300 Mk. II TRANSMITTER

GENERAL
This unit has been specifically designed for use with the LABGEAR LG300 Mk. II transmitter and is matched in every way, electrically, in physical dimensions and in styling. It allows the transmitter to be operated at 150 watts input with full high-level modulation. A complete set of interconnecting leads fitted with the appropriate plugs and sockets is included. Microphone and morse key are not supplied. A socket is provided for remote "transmit/stand-by" control.

SPECIFICATION

Valve Line-up:
1 x ECC81 two-stage voltage amplifier
1 x 6N7 phase inverter.
2 x QV06-20 class AB1 modulators.
4 x 5R4GY rectifiers.
1 x VR150/30 voltage stabiliser.

Audio power output: Approximately 80 watts into 5,600 ohm load, at less than 10% total harmonic distortion.

Frequency response: 350-5000 c/s (not exceeding ±3dB).

D.C. outputs for transmitter: 1000v. at 180mA. 300v. at 200mA. 150v. at 30mA stabilised.

Amplifier input: Suitable for high impedance microphone.

Controls: Mains on-off; Excitor HT; P.A. HT; CW/ Phone; Audio gain.

Modulation indicator: Bulb in series with modulator H.T. feed.

Mains supply: 200-250 v. 40-60 c/s. 700 watts consumption at full modulation.

Dimensions: Approximately 14" wide x 11" deep x 19" high.

Weight: 96 lbs.

Catalogue No.: E.5036.

The Company reserves the right to vary the price and/or the specification without prior notice.

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