

# Marconi H.F Drive Assemblies

## Four Spot-frequency Drive Unit Type H 1505

The H 1505 drive unit is designed to operate on four crystal-controlled spot frequencies and to be used with the manually-tuned 7½ kW transmitters Types H 1100 and H 1102 and the 1 kW transmitter Type H 1000.

The H 1505 drive unit provides i.s.b, s.s.b, f.s.k or c.w modulation on four crystal-controlled spot frequencies in the range 2-27.5 MHz. Three different editions are available for incorporating in the transmitters Type H 1100 or H 1102, the Wideband Amplifier Type H 1000 or a separate drive assembly known as the Type H 1620. The H 1000 or H 1100 series transmitter provides h.t and l.t supplies when the drive unit is incorporated.

### DATA SUMMARY

**Services:** i.s.b, s.s.b, f.s.k (F1 and F6), c.w.

**Frequency range:** 2-27.5 MHz.

**Frequency tolerances:** 15 parts in 10<sup>6</sup> from 10°C to 40°C or 2 parts in 10<sup>6</sup> when fitted with ovens.

**Output level:** 0.75 W, 0.5 W and 10 mW editions. (75 Ω impedance.)

**Intermodulation products:** Better than -46 dB for standard two-tone test.

**A.F input levels:** -20 to +10 dBm into 600 Ω.

**A.F bandwidth:** Up to 3 KHz or 6 KHz (nominal) in each sideband, depending on edition.

**Supplies required:**  
+300 V, 150 mA stabilized;

+150 V, 40 mA stabilized;  
-150 V, 40 mA stabilized;  
+50 V, 40 mA stabilized;  
6.3 V a.c, 9 A stabilized.

**Keying input:** ±6 V to ±80 V into 2000 Ω;  
-9 V to -80 V single current.

### Frequency shift:

(a) from ±70 Hz to ±500 Hz, centred on either 2 kHz or 4 kHz in one (normally the lower) sideband.

(b) On duplex, ±300 Hz or ±600 Hz total centred on 2 kHz or 4 kHz.

### Keying Speed:

200 baud maximum on c.w or f.s.k.

## Spot-frequency Drive Assembly Type H 1620

The H 1620 drive assembly is a cabinet containing one or two drive units Type H 1505 complete with their own power supplies and audio and r.f patching facilities.

Separate outlets of the two drive units can be combined to provide a simultaneous two-frequency drive, suitable for application to the 1 kW Wideband Amplifier Type H 1000.

### DATA SUMMARY

As spot-frequency drive unit Type H 1505.

**Power supplies:** 200-250 V, 50 Hz a.c.

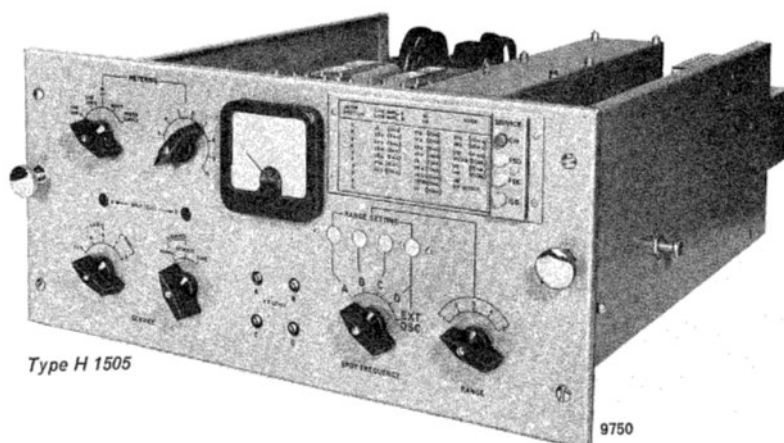
**Power consumption:** 270 W.

### Dimensions:

Height 6 ft 10½ in. (210 cm)

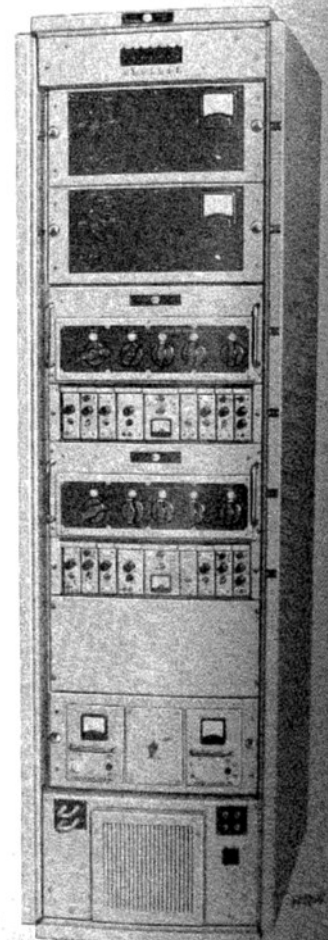
Width 23¼ in. (59 cm)

Depth 2 ft 4½ in. (72 cm)



## Six Spot-frequency Drive Unit Type H 1509

This drive unit is designed to operate on six crystal-controlled spot frequencies and to be used with manual and self-tuned transmitters. The drive is also suitable for use with wideband transmitters such as the Type H 1000 described on page 237. Up to four drive units Type H 1509 can be housed in Drive Assembly H 1609 (see page 236).



Synthesizer Drive Type H 1602

**THE MARCONI COMPANY LIMITED**  
Radio Communications Division

Marconi House, Chelmsford, Essex  
Telephone: Chelmsford 53221. Telex: 2020  
Telegrams: Expanse Chelmsford Telex