

# Marconidata Equipment H 6020 Series

The Marconidata H 6020 Series equipment transmits data at modulation rates of 600, 1200, 2400 and 4800 Bauds over public or private telephone circuits, in association with suitable modems, including the Marconidata U 1110 Series and the British Post Office Datel Modem No. 1. It has been designed primarily for the transmission of data 'on-line' to or from computers, but is equally suitable for 'off-line' applications with a wide variety of peripheral devices.

The Series comprises two terminals, the H 6020 Transmit Terminal and the H 6021 Receive Terminal.

The Transmit Terminal accepts data from a peripheral device at up to 50,000 characters per second. The data may be in any 5, 6, 7 or 8 unit code with or without parity and are stored in one of three ferrite core stores, which each hold a block of 35 characters or optionally 128 characters.

The Receive Terminal accumulates and stores the data a block at a time in one of two, or optionally three, ferrite core stores. A data block, which has been accepted as containing no errors, may be output in its entirety or in part at up to 50,000 characters per second, under the control of the peripheral device.

Three outstanding features of this system are the excellent automatic error control, the high transmission efficiency and the versatility in the use of peripheral devices. The residual error rate is better than  $1$  in  $10^7$  characters over lines having a bit error rate of  $1$  in  $10^4$ . The transmission efficiency is between 97 and 99% depending on the input code and block length used. Any of a wide range of peripheral devices including paper tape and card readers and punches, magnetic tape units, M.I.C.R and O.C.R document readers and most types of computers may be used for data input and output.

Two co-ordinate parity coding is used. The Transmit Terminal generates character parity, where this is not present in the input code, and a block parity character. This enables the Receive Terminal to detect the introduction of errors over the transmission path and to acknowledge receipt of the block by sending an 'accept' or 'reject' signal on the supervisory return channel as appropriate. Retransmission of a block received containing an error is initiated automatically.

The Transmit Terminal transmits blocks successively without pausing to await acknowledgement of receipt. This feature allied to the low redundancy of the error control code results in the high transmission efficiency.

Operation with a wide variety of peripheral devices is achieved by adapting the terminal's input/output interface to suit that of the selected peripherals, by means of built-in adapter units. These are supplied according to the system requirements.

## FEATURES

'On-line' or 'off-line' operation with a wide range of computers and peripheral equipments.

Simple to operate by a minimum of illuminated push button controls/indicators.

Automatic answering of telephone calls reducing the need for operator attendance to an absolute minimum.

Extremely low residual error rate.

Very high transmission efficiency minimizing line rental costs.

## DATA SUMMARY

**Modem:** The terminals are designed to work with the British Post Office Datel Modem No. 1A or with other modems which conform to C.C.I.T.T recommendations on interface conditions and working speeds, and which provide a 75-baud return supervisory channel.

**Synchronizing and phasing:** Automatic.

**Input and output:** On-line computer or peripheral equipment.

**Modulation rate:** Up to 4800 bauds.

**Line data transfer rate:** Up to 800 characters per second.

**Interface data transfer rate:** Up to 50,000 characters per second peak.

**Residual error rate:** Not worse than  $1 : 10^7$  characters with line bit error rate not worse than  $1 : 10^4$ .

**Power supplies:** 105-125 V or 210-250 V a.c., 50 or 60 Hz (as ordered).

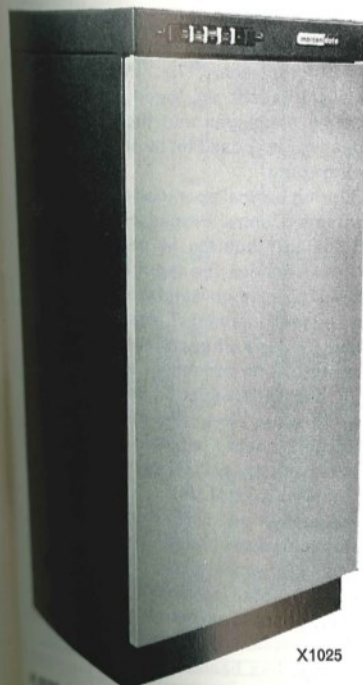
Height: 3 ft 8 in. (112 cm)

Height: 1 ft 11 in. (58.4 cm)

Depth: 1 ft 3 1/8 in. (40 cm)

## THE MARCONI COMPANY LIMITED Line Communications Division

Writtle, Chelmsford, Essex  
Telephone: Writtle 451. Telex: 99201  
Telegrams: Expanse Chelmsford Telex



X1025

H 6021 receiving terminal