

COMMUNICATIONS DATA SHEET 302

CARRIER AND RINGING FREQUENCIES

The following are the carrier frequencies used in the BBC Carrier Systems:-

<u>FREQUENCY</u>	<u>CHANNEL</u>
5400 Hz	3
5600 Hz	2
8000 Hz	4
2600 Hz	Telegraph

The same basic telegraph frequency is used when deriving a telegraph channel on Post Office Tariff 'S' type circuits.

The following are the BBC ringing frequencies used on the Telecommunications Network VFR's and UN10/2's:-

600 Hz
700 Hz
777 Hz
860 Hz
1900 Hz

(See also CDS 302/2)

400 Hz is used for the engaged tone on PBX circuits.

Post Office signalling, Unit Signalling No. 3 (US3) 17 Hz/500/20 Hz used on Carrier and Physical Circuits.

Unit Signalling No. 7 (US7) 17 Hz/DC used on Physical circuits.

12 CHANNEL EQUIPMENT

INTRODUCTION

Pye/TMC TFM 621 equipment provides 12, 4-wire speech paths of 300 - 3400 Hz bandwidth, with out of band signalling (3.825 KHz) controlled by the E and M wires. The 12 channels are combined using f.d.m. and translated into the 60 - 108 KHz band for transmission.

CARRIER GENERATION

The carrier frequencies are derived from an 8 KHz crystal controlled master oscillator. The signalling frequency is a separate oscillator 3.825 KHz

CHANNEL NUMBER	CHANNEL CARRIER KHz	SUBGROUP CARRIER KHz	CHANNEL BAND KHz	3.825 KHz EQUIV. KHz	800 Hz EQUIV. KHz
B 12	32	96	63.7 - 60.6	60.175	63.2
B 11	28		67.7 - 64.6	64.175	67.2
B 10	24		71.7 - 68.6	68.175	71.2
B 9	20		75.7 - 72.6	72.175	75.2
B 8	16		79.7 - 76.6	76.175	79.2
B 7	12		83.7 - 80.6	80.175	83.2
B 6	32	120	87.7 - 84.6	84.175	87.2
B 5	28		91.7 - 88.6	88.175	91.2
B 4	24		95.7 - 92.6	92.175	95.2
B 3	20		99.7 - 96.6	96.175	99.2
B 2	16		103.7 - 100.6	100.175	103.2
B 1	12		103.7 - 104.6	104.175	107.2

Note 1: See Communications Department Technical Memo No. 304