

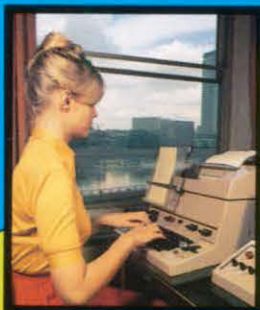
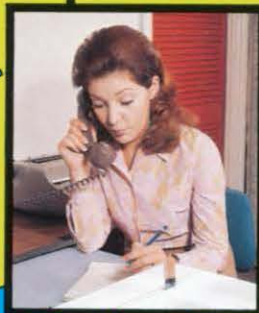
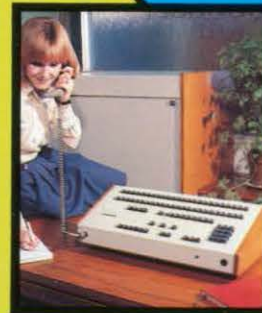
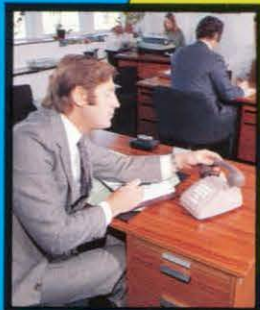
Private Circuits



Private circuits are for business users who need frequent or prolonged contact between particular points.

No call charges are payable as the customer rents the circuit for his exclusive use.

Circuits can be provided for speech or non-speech transmission.



General

A private circuit provides a transmission path for the exclusive use of a customer who requires frequent contact between a number of locations. A rental is charged based on the distance involved and on the type of circuit used, but no call charges are payable.

Circuits can be provided up to any distance within the UK, subject to the availability of Post Office plant, and can be used for a wide range of purposes, e.g. speech and non-speech communication such as data, telegraph, telemetry, music and the remote control and monitoring of distant equipment.

Circuits may terminate on Post Office equipment, privately owned equipment or a combination of both. However, permission must be received from the Post Office before privately owned equipment may be connected to private circuits. A list of permitted attachments is available for inspection at all Telephone Area Sales Offices.

Private circuits are not permitted to be inter-connected with the public telephone or telex networks.

When a private circuit is to terminate on Post Office equipment, the Post Office will advise you on the most suitable type of circuit. Where privately owned equipment is to be used, the manufacturer or supplier will advise the customer of the type of circuit required.

The choice of circuit depends on its intended use and on the configuration required.

Circuit configurations

Point-to-Point

Connects two locations. May be used for speech and non-speech purposes.

Tandem

Two, or usually not more than three circuits may be connected together at a customer's premises to form a chain and can be used for speech or non-speech purposes.

Omnibus

Connects a number of locations together so that any one location can communicate with any other. Can be used for speech or non-speech purposes.

Multipoint

For data transmission only, connecting a central station with up to 12 outstations. The central station can transmit to the outstations and vice versa but the outstations cannot communicate with each other.

Types of circuit

Speechband Circuits

Provide a frequency bandwidth of 300-3000 Hz and can be used for speech and non-speech purposes. There are two basic classifications of speechband circuits – Unscheduled Circuits and Scheduled Circuits.

Unscheduled Circuits

Are for speech use and are identified by the nominal insertion loss in decibels (dB) at a frequency of 800 Hz. The nominal insertion losses are 17 dB, 10 dB and 3 dB respectively. A 17 dB loss circuit is adequate for speech transmission between two points. If speech is to be transmitted over two circuits connected in tandem, it will be necessary to employ low loss circuits, eg a 3 dB loss circuit and a 10 dB loss circuit. Also low loss circuits are usually employed over distances greater than 11 km if automatic signalling is required.

Scheduled Circuits

Have detailed published specifications and are known as Schedules A, B, C and D. Although designed for non-speech transmission, they are also suitable for speech. Manual signalling only is available.

Telegraph Circuits

Suitable for telegraph or low speed data transmission. They can be provided with or without PO teleprinting equipment.

Program (Sound) Circuits

A range of circuits are offered mainly for the use of TV and Radio broadcast companies for the transmission of music quality signals.

Wideband Circuits

Provide a frequency bandwidth of 48 kHz or 240 kHz which can be used for high speed data transmission or, with suitable terminal equipment, can be divided into a number of individual transmission paths suitable for speech or data. Customers who have a requirement for bulk communication between two locations may find widebands more attractive than speechband circuits.

Vision Circuits

International Circuits

For further information contact your local Telephone Sales Office.

Note:

To make the most efficient use of the network it is sometimes necessary for the Post Office to provide circuits better than the specification rented. Subsequently the circuits may be re-routed or rearranged with the result that the circuit characteristics can be reduced to the level of the rented specification.

Signalling

Manual or automatic signalling can be provided with speechband private circuits.

Manual signalling is the operation of a key, or press-button, to transmit calling and clearing signals.

With automatic signalling the action of lifting the telephone handset, inserting a plug on the switchboard, or calling a number automatically sends a call signal. Also, replacing the telephone handset or withdrawing the plug automatically sends a clear signal.

Please Note

We do our best to supply our customers with the apparatus or service they ask for but we may have to provide apparatus or service which does not accord exactly with the descriptions in this leaflet.

Your Telephone Sales Office will gladly supply any further information or details of any changes in the information in this leaflet since it went to print. The address, telex and telephone numbers are shown in the preface of your Telephone Directory.

Information on a wide range of our services and apparatus is contained in the Green Pages section of most Telephone Directories.