

# Private Circuits

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Descriptive  
Leaflet

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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.



A private circuit may be rented to provide continuous contact between two points. The customer, who has exclusive use of the circuit, pays a rental based on the distance and type of circuit but is not charged for any calls made over it.

Private circuits can be used for a wide range of purposes other than speech, including the transmission of signals such as data, telemetry, telegraph, and the remote control of alarms, lights or radar.

Subject to certain conditions, speech circuits can be used for data transmission and data circuits for speech.

Privately owned equipment suitable for attachment to Post Office circuits, Post Office rented equipment, or a combination of the two may be used.

Private circuits cannot be interconnected with the public telephone network.

## **Type of circuit required**

Depending on the use to be made of the circuit, for example speech, speech and data, or data alone, circuits with different specifications will be required.

Television signals cannot be sent over the circuits described in this leaflet, your Telephone Sales Office will advise on the provision of circuits of this type.

Where Post Office equipment is required the Telephone Sales Office will advise on which type of circuit is most suitable.

Where other than Post Office equipment is used the manufacturer or supplier should advise the customer of the type of circuit required.

In certain circumstances circuits can be linked together at the customers switchboard or by specially designed switches.

## **Description**

### **Point-to-Point circuits**

These circuits, suitable for speech and non-speech purposes, connect two points by means of an exclusive communications link.

### **Tandem circuits**

Where two or more circuits are connected together by means of switching apparatus to form a chain, the circuits are said to be working in tandem.

There is a limit to the number of circuits which can be connected in tandem.

### **Omnibus circuits**

These circuits, subject to certain limitations, connect three or more points so that any one can communicate with any other.

### **Multipoint circuits**

These circuits can only be used for data-transmission. Information can be sent from a central station to as many as twelve out-stations. It is also possible for the out-stations to communicate, one at a time, with the central station, but they cannot communicate with each other.

## **Private circuits suitable for speech**

Circuits are provided with either manual or automatic signalling. Manual signalling is the operation of a ring key, press button or hand generator to transmit calling and clearing signals.

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

Circuits are designed to meet three applications :-

### **Speech between two points with manual (generator) signalling available over any distance.**

Dialling and automatic signalling are normally available up to about 15 miles where the terminal apparatus at both ends is rented from the Post Office. The circuit may be connected at the customers switchboard to another private circuit, but this may result in a loss in quality of speech over such a connexion.

### **Speech between two points with manual (generator) signalling or dialling and automatic signalling over any distance.**

The circuit is also suitable for tandem connexion with one other circuit. A lower rental is charged for circuits over 15 miles when signalling facilities are provided by the customer. There is also a reduction in rental where automatic signalling is provided by the customer at one end, and by the Post Office at the other.

## **Speech between two points with manual (generator) signalling or dialling and automatic signalling over any distance, with tandem connexions.**

This type of circuit is primarily intended for use in networks where more than two circuits are connected in tandem. A lower rental is charged on circuits of over 15 miles where signalling is provided by the customer.

## **Private circuits suitable for non-speech transmission (ie. Data facsimile, telegraph, control of alarms, etc.)**

All circuits mentioned in this leaflet, together with others of different specifications, are available for non-speech application. Ask your local Telephone Sales Office for full details of all non-speech Post Office circuits and services.

## **General information**

To make the most efficient use of the telecommunications network it is sometimes necessary for the Post Office to provide, either initially or subsequently, circuits with characteristics better than the specification rented. If customers wish to ensure that during circuit rearrangement the characteristics are not reduced to the level of the rented specification they may opt to retain their existing circuit quality at the appropriate tariff, and no upgrading connexion charge is made. If customers decide to remain on the lower tariff the Post Office will try to give prior notice of any rearrangement, but cannot guarantee to do so.

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### **Please Note.**

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

**Your Telephone Sales Office will gladly supply any further information. The address and telephone number are shown in your directory preface.**

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