

# Private Automatic Branch Exchange 5 (PABX 5)

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Descriptive  
Leaflet

**DLD 415**

Private Automatic  
Branch Exchange

**This automatic system, available in two sizes, meets the telephone requirements of organisations needing up to five exchange lines and twenty extensions.**

**It offers internal telephone service and public exchange service to the extensions without the aid of a switchboard or operator.**

**One person can deal with the majority of incoming calls if a special telephone is provided.**



## Description

Selected extensions, known as designated extensions, are used to answer incoming exchange line calls and transfer them, if necessary, to other extensions.

Calls are made directly between extensions by dialling the appropriate number.

Lines can be provided to other Private Branch Exchanges (PBXs). These PBXs can be automatic or manually operated.

The automatic equipment, which is enclosed by a metal cover, and the power unit are rack-mounted against a wall.

## Designated extension facilities

Any number of extensions can be designated to answer incoming exchange calls.

An external extension can be designated if a separate bell circuit is provided.

**Attendant's telephone** Where it is necessary for one person to answer the majority of incoming calls, two designated extensions can be terminated on a special telephone with switching unit, enabling two calls to be handled at the same time.

An incoming exchange call rings bells sited near the designated extensions. The call can be answered from any of these extensions simply by lifting the handset.

The incoming exchange call can be transferred to another extension by pressing a button on the telephone, dialling the required number and, if the person answering agrees to take the call, replacing the handset.

If the person cannot take the call or suggests that it should go to another extension, the exchange call can be regained on the designated extension by pressing the button on the telephone.

If a transfer does not succeed for any reason, the incoming call rings the bells again and the designated extension user can regain the call by lifting the handset.

An incoming exchange call can be offered to an engaged extension. By dialling an additional digit (1), the designated extension can interrupt the call in progress on the required extension. A ticking sound warns of the intrusion.

If the person on the required extension agrees to take the new call, he terminates his present one. As soon as the extension is free its bell rings and he answers, and the designated extension handset is then replaced to transfer the call.



## Facilities common to all extensions

The following facilities apply equally to designated and non-designated extensions.

Calls are made between extensions by dialling two-digit numbers between 20 and 29 for the smaller installation, and 20 and 39 for the larger size.

Exchange calls can be made from extensions by first dialling a single digit (usually 9) to obtain an exchange line.

Any extension can be barred from making exchange or inter-PBX calls. Any non-designated extension can be barred both from making or receiving exchange or inter-PBX calls.

Any extension engaged on an exchange call, can hold it while making enquiry of another extension, or over an inter-PBX circuit. The original extension can then return to the call or transfer it, as required.

Inter-PBX lines can be arranged as extensions over which exchange calls can be connected, or as private circuits over which they cannot.

Outgoing calls to other PBXs can be obtained by dialling a single digit code (7, 8 or 0 if 9 is used for exchange lines) to get the appropriate circuit. It may be possible to dial direct to the extension of another PABX.

Incoming calls on inter-PBX lines are dialled direct to the required extensions, or to one of the other PBXs by dialling the appropriate code.

## Night service facilities

All designated extensions normally have night service facilities.

Night service can be controlled by a button fitted on the attendant's telephone if one is provided, or if not, on any telephone.

When the button is operated, extensions with limited facilities during the day can be given full facilities at night, and those with full facilities can be limited at night.

Similarly, extensions which are barred from making exchange calls during the day can be allowed to make them at night, while other extensions may be restricted.

It can also be arranged that additional or different calling bells can be rung for incoming calls during the night.

## Mains failure arrangements

If the mains supply fails, all existing calls are disconnected and each exchange line is connected automatically to a particular extension. Each of the selected extensions then has all the facilities of a direct exchange line. The remaining extensions cannot be used during the failure.

When the supply is restored exchange calls in progress are not interrupted, but as each one ends the exchange lines are switched back to the PABX.

## General information

Telephones in two-tone grey, two-tone green, light ivory, topaz yellow, lacquer red, concord blue, or black can be provided on the extensions.

If wallphones are required, the choice of colour is limited to two-tone grey, light ivory, or black. The attendant's telephone is two-tone grey.

**Alarms** A red lamp is provided on the attendant's telephone to indicate when a fuse blows in the automatic equipment. If the lamp glows the fault should be reported immediately.

If the attendant's telephone is not required, the lamp can be fitted to any telephone, or a fuse alarm panel can be provided.

**Tones** Dialling, ringing, engaged, 'warn' and number unobtainable tones are provided from a unit in the PABX equipment.

**Accommodation** The steel rack which bears the equipment and power unit is installed in the most convenient position near the centre of the bulk of the extensions.

The equipment rack stands on the floor and is fixed to a wall. To allow easy access for maintenance purposes, a space of at least 3' (910 mm) must be available in front of the equipment.

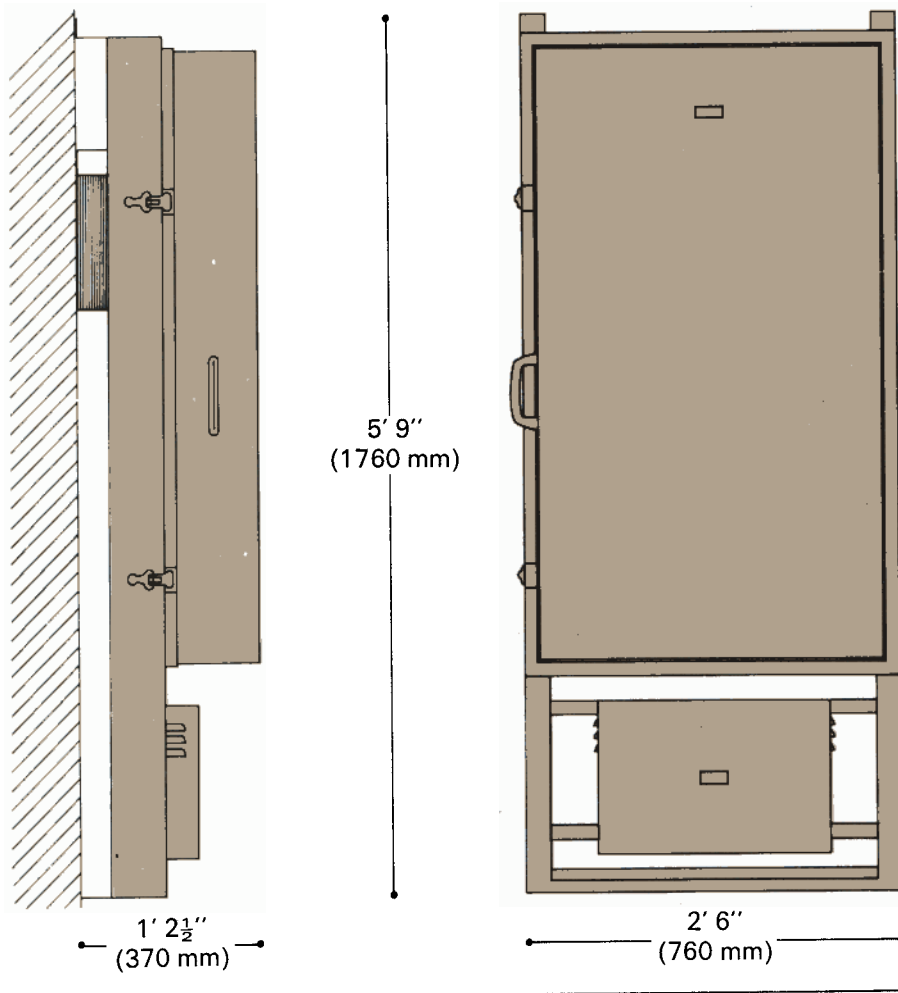
The equipment rack is the same size for both installations. Equipped for the smaller installation it weighs approximately 414 lb (188 kg), and for the larger, when fully equipped, 558 lb (253 kg). Customers should ensure that the floor strength is adequate.

The equipment is mains powered from a 3-pin switched socket outlet, of at least 5-amp rating, provided by the customer.

## PABX 5 capacity

Size	3 + 10	5 + 20
The capacity of the smaller installation can be increased to the capacity of the larger. Greater capacity that that can be obtained only by changing the unit for a different type of PABX.		
<b>Exchange lines</b> Reduced by one for each inter-PBX line provided.	3	5
<b>Inter-PBX lines</b> Each one provided, reduces the exchange lines accordingly.	3	5
<b>Extensions</b> Includes two used by the attendant's telephone if provided.	10	20
<b>Connecting circuits</b>	2	4

## Dimensions



### 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.

Rental and connexion charges are quoted in DLD 1 the preface sheet for section D descriptive leaflets.

**Your Telephone Sales Office will gladly supply any further information**

**Post Office  
Telecommunications**