# Private Automatic Branch Exchange 6 (PABX 6)

This automatic system offers internal telephone service and public exchange service at the extensions, without the aid of a switchboard operator.

A special telephone can be provided so that one person can deal with the majority of incoming calls.



The Telephone with a Built-In Switchboard

#### **Benefits**

No switchboard operator required.

Flexible answering capability for incoming calls.

Quick and efficient internal communication.

Time saving direct access by extensions to the public exchange network.

Economy of space – no separate equipment room required.

### **Description**

The system is available in 2 sizes; with capacities of up to 3 exchange lines and 10 extensions, and up to 5 exchange lines and 20 extensions.

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.

Two lines can be provided to other Private Branch Exchanges (PBXs). The PBXs can be automatic or manually-operated.

The automatic equipment and mains unit are contained in a neat grey metal cabinet.

### Designated extension facilities

Up to eight designated extensions can normally be provided. This can be increased to twelve if night service (explained later) is restricted.

Incoming exchange calls ring bells sited near the designated extensions. The call can be answered from any of these extensions by lifting the handset.

The incoming exchange call can be transferred to another extension by pressing a button on the telephone, dialling the required extension 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 automatically re-rings the designated extension.

Designated extensions are usually allowed to interrupt an engaged extension to offer an incoming exchange call, by dialling an additional digit (1). A ticking sound warns of the intrusion.

If the person on the required extension agrees to end his present call, the designated extension handset is replaced, and the new incoming call is held by the automatic equipment. When the call ends and the handset is replaced on the required extension, its bell rings and the waiting caller is connected automatically when the extension telephone is answered.

While a caller is waiting there is no tone signal, and the person using the extension has no indication that the call is still waiting.

If more than one call is held for the same extension, there is random selection of the call to be first passed to the extension when it is free.

It may be possible for an external extension to be designated in which case a separate bell circuit is provided.

### Facilities common to all extensions

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

Calls are made between extensions by dialling 2-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 pressing a button on the telephone 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.

An 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.

Inter-PBX lines can be arranged as extensions over which incoming 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 or 8) 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 extension.

## Facilities outside normal hours (night service)

Should changes to extension facilities be required outside normal hours, a "Night Service" button can be fitted at any convenient point – usually on one of the telephones.

When this button is operated, changes to the day-time facilities, on some of the extensions can be made. This includes designated to non-designated and vice-versa, variations on extension exchange line access, inter-PBX line access and the designated extension intrusion facility.

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

### Mains failure arrangements

If the mains supply fails, all existing calls are disconnected. Each exchange line is connected automatically to a particular extension. The selected extensions then have 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 call ends the exchange line is switched back to the PABX.

#### **General information**



Attendant's telephone. Where it is necessary for one person to answer the majority of incoming calls, 2 designated extensions can be terminated on a special telephone with switching unit, enabling 2 calls to be handled at the same time. Additional charges are applicable for this facility.

The attendant's telephone is only available as a 2-tone grey tablephone.

**Extension telephones.** Can be provided as either dial or push-button models, in table or wall-mounted versions and a range of colours.

Alarms. A red lamp can be provided on any telephone to indicate when a fuse blows in the automatic equipment. If the lamp glows, the fault should be reported immediately.

Alternatively, 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 metal cabinet containing the equipment and power unit is installed in the most convenient position near the centre of the bulk of the extensions.

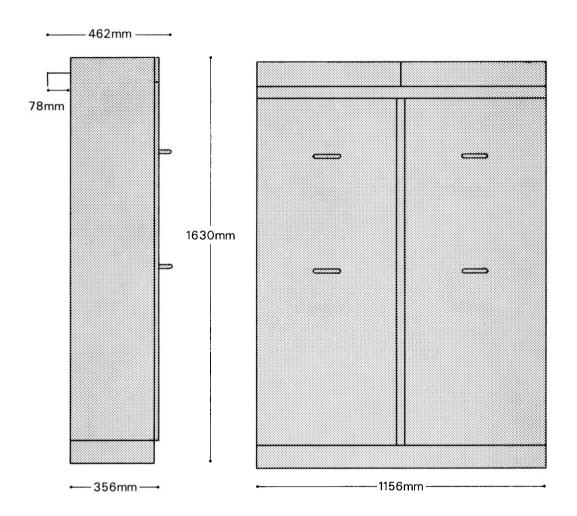
The cabinet stands on the floor and is fixed to a wall. To allow easy access for maintenance purposes, a space of at least 910 mm (3') must be available in front of the cabinet.

The cabinet weighs between 181 and 300 kg (400 and 660 lb) depending on the equipment provided. Customers should ensure that the floor strength is adequate.

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

### **PABX 6 capacity**

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



#### 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, illustrations and shades of colours shown in this leaflet.

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