

# Senator User Guide

English

TELECOM

## GUARANTEE

British Telecom plc guarantees this product for 12 months provided that:

The goods have only been used for their intended purpose, and have not been subjected to misuse, or been wilfully or accidentally damaged.

The goods have not been tampered with or repaired by anyone other than British Telecom plc, its staff or agents.

If a fault should occur in this product within 12 months of purchase you should contact the place from which you purchased the goods and, provided you produce evidence of purchase, it will either be replaced or repaired free of charge.

Do not under any circumstances attempt to remove the Central Control Unit from the wall or tamper with it in any way.

The terms of this guarantee do not affect your statutory rights.



**A British Telecommunications plc Product**

APPROVED for  
connection to telecommunication  
systems specified in the  
instructions for use subject to  
the conditions set out in them

---

S/1000/GF/1981/PR

S/1000/2-3/C/020943

## Introduction

Your telephone extension is connected to one of British Telecom's new phone systems: Senator or Ambassador ESS.

This guide describes the facilities made available by Senator.

(Your system is a Senator if it has more than 2 exchange lines or more than 4 extensions or you hear internal dial tone on lifting the handset. Otherwise, you are connected to an Ambassador system. Turn this booklet over and refer to the Ambassador guide.)

To enable you to take full advantage of Senator's facilities, you will probably have been provided with a special Systemphone. Most of the instructions in this booklet refer to these special Systemphones.

Some Systemphones include a microphone and loudspeaker. If you have a loudspeaking phone, see pages 21 and 22.

Certain extensions are provided with an ordinary telephone instead of a Systemphone. If you have an ordinary telephone, see pages 23 to 25.

Some Senator systems are connected to another switchboard (PBX). If this is the case with your system you should read the information on pages 18 and 19.

# Contents

Summary	1
Your Senator extension	2
Making calls	6
Answering calls	8
Call waiting tone	8
Controlling ringing	9
Holding a call	10
Ring back on hold	10
Transferring a call	11
Conference calls	12
Diverting calls	13
Receiving diverted calls	14
Express calling (Short code dialling)	15
Repeat last number	17
Mute/secrecy facility	17
Systems connected to a PBX via an extension (Inter switchboard working)	18
Systems connected to a PBX via a <input type="text" value="LINE"/> button	19
Using a loudspeaking Systemphone	21
Using an ordinary telephone	23
Cord storage	26
Signalling switches	27
Wall mounting	28
Fault finding	29
Mains power failure	29

## Summary

### Making a call

Lift handset **or** Press loudspeaking button

Internal:

Key extension number

External:

Press free  button

Key the number you want

### Answering a call

Internal:

Lift handset **or** Press loudspeaking button

External:

Lift handset **or** Press loudspeaking button

Press  button by flashing light

### Altering ringing

Do not lift handset

Press  and hold down

Lights by  buttons show ringer setting:

Light on = Ringing on

Light off = Ringing off

Press  button to change ringer setting

Release

### Holding a call

Press

Make or answer another call, if required

To return to held caller, press  button next to flashing light

### Transferring a call

Press

Call other extension

When extension answers, announce call and replace handset

### Setting up a conference

Press

Call other extension

Ask other extension user to press

Press your own

### Diverting calls

To nominate extension 1 to 5 to receive diverted calls:

Do not lift handset

Press  and  together and hold down

Press  for extension 1

for extension 2 etc

Release  and

To nominate extension 6 to 10 to receive diverted calls:

Do not lift handset

Press  and  together

Release  only; hold down

Press  for extension 6

for extension 7 etc

Release

To start or end diversion:

Press

### Express calling

To store a number:

Lift handset **or** Press loudspeaking button

Press

Press a keypad button

Key number to be stored

Replace handset **or** Release loudspeaking button

To make a call:

Lift handset **or** Press loudspeaking button

Press free  button

Press

Press keypad button number is stored against

### Repeating last dialled number

Lift handset **or** Press loudspeaking button

Press free  button

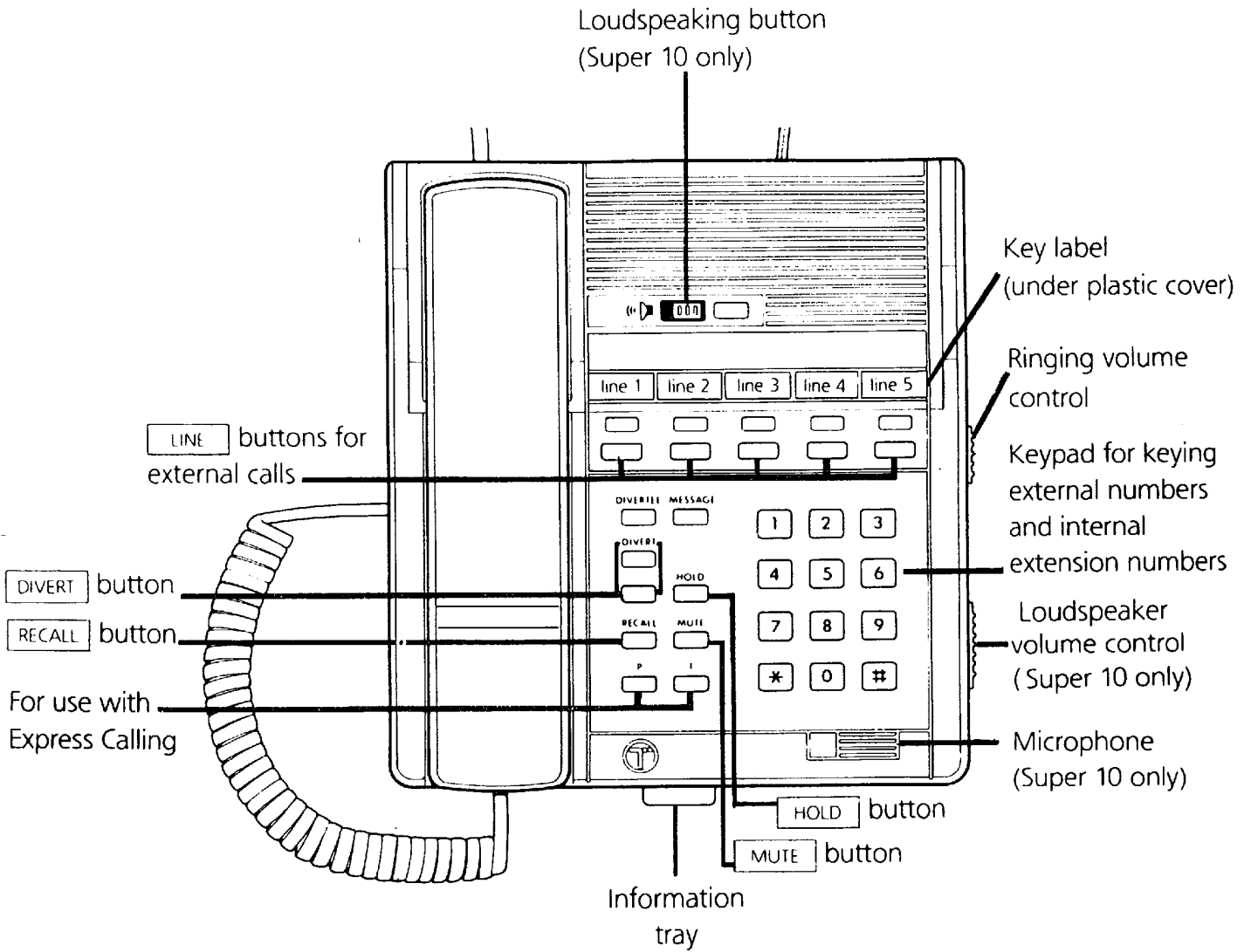
Press

### Talking without being overheard by caller

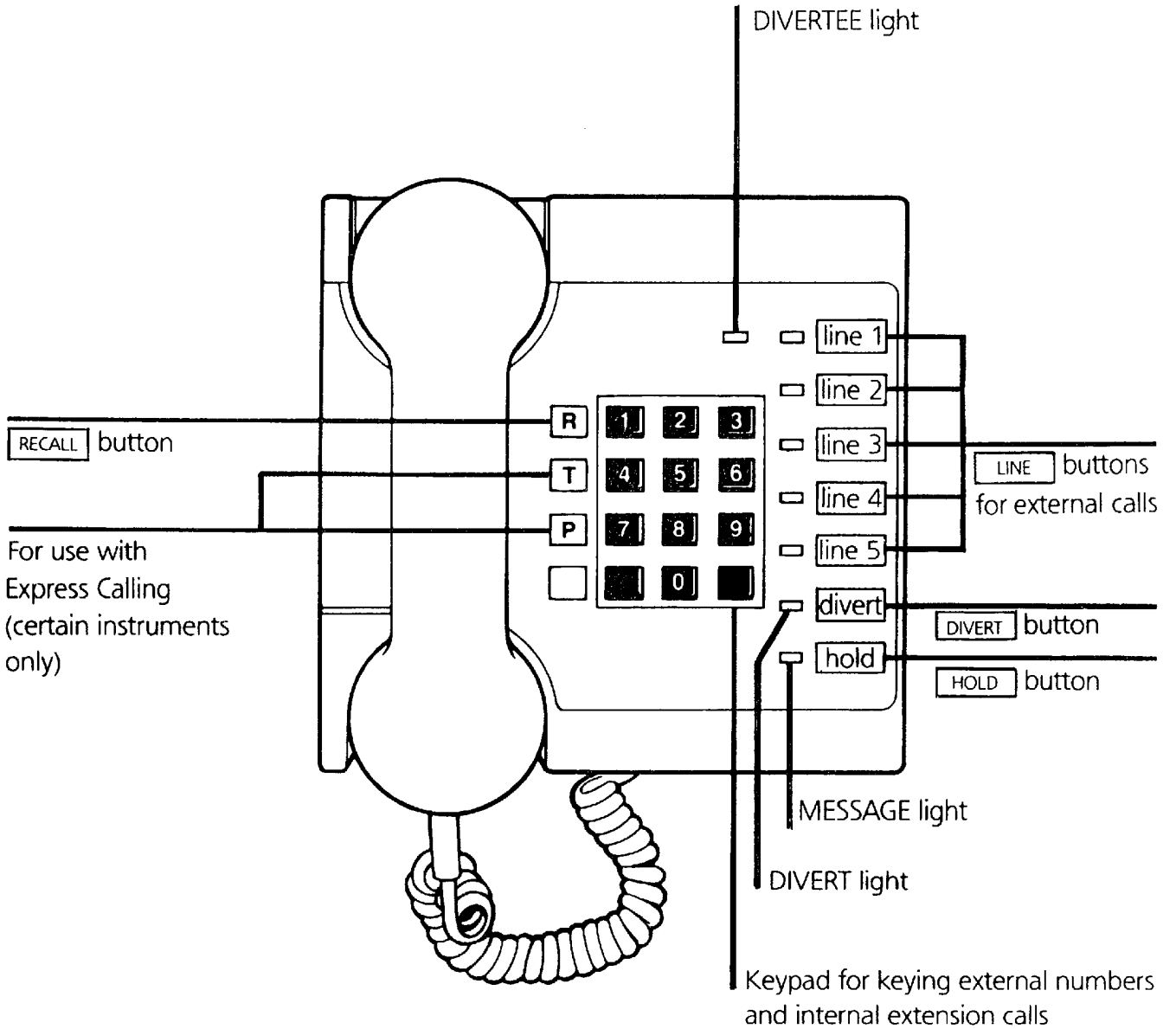
Press  and hold down

# Your Senator extension

Senator 10/Super 10







# Senator Basic/Xpress Caller



## Tones





When making calls on the Senator system you will hear a number of tones through your handset:

Internal dial tone (a continuous high-pitched sound)		The system is waiting for you to key a number.
Internal ring tone (a slowly repeated single note)		The extension you are calling is ringing.
Internal engaged tone (a rapidly repeated single note)		The extension you are calling is engaged.
Call waiting tone (a series of regular 'pips')		An external call is waiting to be answered, but all extensions are in use or have their ringing switched off.

In addition to these tones you will hear the familiar exchange dialling tone, ring tone and engaged tone when you make external calls.




## Ringling signals

Your Senator extension can ring in four ways:

Internal ringing signal (slow repeated bursts)		Another extension user is calling you.
External ringing signal (normal exchange line ringing)		An external call is waiting to be answered.
Contact signal (a single short burst)		The extension user to whom you are diverting your calls wishes to contact you.
Ring back on hold signal (a single burst every 16 seconds)		A call is waiting in 'Hold'.

## Light signals

The lights next to the LINE buttons can give these signals:

A continuous glow		The exchange line or extension next to the light is in use.
A rapid flashing		There is an incoming call on the exchange line next to the light.
An intermittent flashing		A call is being 'held' on the exchange line next to the light.

## Pressing buttons

Many of the instructions in this booklet refer to pressing buttons. Unless stated otherwise, just press the button and then release it. There is no need to hold the button down.

Failed calls are commonly caused by pressing buttons too quickly. If a call is unsuccessful, repeat it pressing each button firmly.

### The button label

(Senator 10 and Super 10 only)

You can write an identification for each of your  buttons on a label which fits under the plastic cover above the buttons.

Your instrument is provided with a sheet of labels that you can use for this purpose.

### To insert a label

Use the finger slot in the plastic cover to remove it.

Place the new label in the recess.

Replace the plastic cover by locating one end, bowing it slightly to locate the other and then pressing the cover back into position.

## Making calls

An internal call is a call to or from another Senator extension.

### To make an internal call

Lift your handset

**or**

Press the loudspeaking button down and to the left (Super 10 only).

Listen for the internal dial tone.

If you hear the dial tone, key the number of the extension you want by pressing the appropriate button on the keypad.

(For extension 10, press

If you do not hear the dial tone, all the system's internal circuits are in use; try again later.

At the end of the call:

Replace your handset

**or**

Push the loudspeaking button to the right (Super 10 only).

### Wait on busy

If you hear the engaged tone when you make an internal call, you need not replace your handset or release the loudspeaking button. Continue listening to the engaged tone. As soon as its handset is replaced, the called extension will ring.

An external call is a call on a public exchange (telephone) line or to another connected switchboard (see page 19). Each external line connected to your system is represented by a  LINE button on your Systemphone.

### To make an external call

Lift your handset

**or**

Press the loudspeaking button down and to the left (Super 10 only).

Press a free  LINE button.

A button is free if the light next to it is out. The light glows when you press the button.

Listen for the exchange dial tone.

When you hear the dial tone, key the number you want by pressing the buttons on the keypad.

If you do not hear the dial tone it means that the  LINE button you have pressed is not connected to an exchange line. Try a different button.

At the end of the call:

Replace your handset

**or**

Push the loudspeaking button to the right (Super 10 only).

The light next to the  LINE button goes out after a short delay.

## Answering calls

An internal call is signalled by your Systemphone ringing.

### To answer an internal call

Lift your handset

**or**

Press the loudspeaking button down and to the left (Super 10 only).

Speak to the caller.

The ringing stops.

An external call is signalled by a rapidly flashing light next to a  LINE button. Your extension may also ring.

You can choose not to answer the call. You can make internal or external calls in the normal way. When someone else answers the call the light will stop flashing and glow steadily.

### To answer an external call

Lift your handset

**or**

Press the loudspeaking button down and to the left (Super 10 only).

Press the  LINE button next to the rapidly flashing light.

Speak to the caller.

If your extension was ringing, it stops. Other extensions continue to ring.

The light glows steadily.

## Call waiting tone

If you hear the call waiting tone (see page 4) during an internal call it means that an external call is waiting to be answered, but that every extension is in use, or has had its calls diverted (see page 13), or its ringing switched off for that line (see next page).

## Controlling ringing

Incoming external calls may make your Systemphone ring. If you wish, you can switch ringing off for one or more exchange lines, so that external calls on those lines are signalled only by the flashing light. (You can not switch ringing off for internal calls, except by diverting your calls; see page 13.)

### To alter ringing

Do not lift your handset.

Press the  button and hold it down.

If you want to alter ringing for a line, press the appropriate  button.

Release

The light next to a  button glows if ringing is on for that line. If the light does not glow, ringing is off.

If the light next to the button was glowing it will go out and ringing will be switched off for that line; and vice versa.

After a power failure, all extensions will ring for all incoming calls.

### To alter ringing volume (Senator 10 and Super 10 only)

Adjust the volume control switch on the side of the instrument.

Move the switch to the back for high volume, to the front for low volume.

If you have two switches on the side of your instrument, the ringing volume control is the one nearer the back.

## Holding a call

Senator enables you to 'hold' a call on an exchange line whilst you make or answer another call. The 'held' call can be either incoming or outgoing.

### To hold a call

Tell your caller what you are going to do and ask him to hold on.

Press

Senator puts your caller into Hold. The light next to the  button used to make or answer the call flashes intermittently.

You are now free to answer or make internal or external calls in the normal way. The held caller can not overhear your conversation with the third party.

You can hold more than one exchange line call at the same time.

### To return to a held caller

Press the  button next to the intermittently flashing light.

Senator reconnects you to the caller held on that line. The light next to the button glows steadily.

## Ring back on hold

If you hold a call and then replace your handset, your phone will ring briefly every 16 seconds to remind you to deal with the held call.

# Transferring a call

Senator enables you to transfer an external line call to any other extension on your system.

## To transfer a call

Tell the caller that you are going to transfer him and ask him to hold on.

Press

Senator puts the caller into Hold. The light next to the  button flashes intermittently.

Call the extension to which you want to transfer the caller, in the normal way.

When the extension answers, explain that you are transferring a call to him.

The original caller in Hold cannot hear what you are saying.

Replace your handset (unless you are holding more than one call; see below)

Senator automatically connects your caller to the other extension user.

## If the other extension user is engaged or does not answer or cannot accept the call

Press the  button next to the intermittently flashing light.

Senator reconnects you to the caller in Hold.

## If you are holding more than one call

Tell the other extension user which line the call you are transferring is on and ask him to press the appropriate  button.

If you just replace your handset the other extension user will be connected to the call which you put in Hold last.

## To accept a call that is being transferred to you

Wait for the other extension user to replace his handset

**or**

Press the  button next to the intermittently flashing light.

## Conference calls

A conference call is one between three callers in which each can hear and be heard by the other two. Senator enables you to set up a conference call between yourself, an outside caller on an external line and another internal extension user.

Ordinary telephones (see page 23) and inter-switchboard calls (see page 18) cannot be included in a conference call.

### To set up a conference

Tell your outside caller what you are going to do and ask him to hold on.

Press

Senator puts your caller into Hold.

Call the other extension in the normal way. Ask if the extension user is willing to join the conference.

If the extension user agrees to join the conference:

Ask him to press his  button.

When he does so your DIVERTEE light will flash rapidly.

Press your own  button.

The DIVERTEE light goes out and the conference is established.

If the extension user cannot join the conference:

Press the  button next to the intermittently flashing light.

You are reconnected to the caller in Hold.

### If you are invited to join a conference

Press your  button.

Your DIVERTEE light flashes rapidly. When it goes out you can hear and be heard by the other two callers.

If either extension user replaces the handset during the conference, the outside caller will still be connected to the remaining extension.

## Diverting calls

You can instruct Senator to divert incoming calls from your extension to another extension. First, you must tell the system which extension is to receive your diverted calls.

### To tell the system which extension is to receive diverted calls

Do not lift the handset.

If the extension is from 1 to 5:

Press  and  and hold them down together.

Press  if calls are to be diverted to extension 1,  if calls are to be diverted to extension 2 and so on.

Release  and

If the extension is from 6 to 10:

Press  and  and hold them down together.

Release  but continue to press

buttons 1 to 5 now represent extensions 6 to 10. Press  if calls are to be diverted to extension 6,  if calls are to be diverted to extension 7 and so on.

Release

### To divert your calls to the other extension

Press

The green light next to the button should glow steadily.

Any calls for your extension will now be automatically transferred to the extension you nominated, without ringing your phone. External calls are signalled by the flashing light and you can choose to answer them or to make internal or external calls in the normal way.

During diversion, only the extension user who receives your diverted calls can ring you or transfer calls to you. If this happens, your phone will ring once and the MESSAGE light will glow until you lift your handset.

If you do not answer and the other extension user replaces his handset, the MESSAGE light will continue to glow. You should contact the other extension user as soon as is convenient.



**You can divert calls** at any time, even if your phone is ringing or you are engaged on a call.

**You cannot divert calls if**

- the other extension user is already diverting his own calls.
- someone else is diverting their calls to you.
- you have not told the system which extension is to receive diverted calls.

In all these cases the DIVERT light will not glow when you press DIVERT

**To end call diversion**

Press DIVERT again.

The DIVERT light goes out. If a call for you is ringing the other extension, your phone will immediately start to ring.

## Receiving diverted calls

If another extension user has diverted his calls to you, your DIVERTEE light will glow. More than one extension can be diverting calls to you at the same time.

Diverted internal calls are signalled in the same way as your own calls, except that the DIVERT light also flashes. Remember that diverted callers will be expecting the other extension user to answer, not you.

For external calls, the DIVERT light flashes and your phone rings if the other extension is set to ring for external calls. If not, the DIVERT light does not flash and your phone rings only if you have set it to do so (see page 9).

**To contact the extension user who has diverted his calls to you**

Make a call to his extension in the normal way.

His phone rings once only. You will not hear the normal ringing tone.

If the other extension user does not answer, replace your handset. His MESSAGE light will glow to warn him that you wish to speak to him.

You cannot contact the other extension user whilst his phone is in use and you will not hear the normal engaged tone if you try.

## Express calling

stemphones which have buttons labelled **P** and **T**. If your phone does not have these buttons, ignore this section.

You can store up to ten telephone numbers in your Systemphone, one against each keypad number button. Then you can instruct the system to call these numbers for you by pressing just two buttons.

### To store a number

1 Lift your handset

**or**

Press the loudspeaking button down and to the left (Super 10 only).

2 Press **P**\*.

3 Press the button on the keypad that you want to store the number against.

This button must be one of the digits 0 to 9.

4 Key the full telephone number that you want to store against the button.

You must include the local, national or international dialling code, where appropriate. The number can be up to 18 digits long.

5 Replace your handset

**or**

Push the loudspeaking button to the right (Super 10 only)

**or**

Press **P** **P** and repeat steps 3 and 4 to store another number.

6 Make a note of the number you have stored against the button.

\*On some older Xpress Systemphones (models 8521 and 8551), you must press **P** and hold it down while you carry out steps 3 and 4. Then release **P** and replace the handset. Check the model number on the base of your instrument to see if it is of this type.

### To change a stored number

Repeat the procedure given above, keying the new number.

## To make a call by Express Calling

Lift your handset

**or**

Press the loudspeaking button down and to the left (Super 10 only).

Press a free  button.

You should hear the exchange dial tone. If you do not, try a different button.

Press

Press the keypad button that the number you want to call was stored against.

Senator will automatically connect you to the number; there may be a short pause before the number rings. If no number is stored against that button, you will hear the dial tone.

## The information card

(Senator 10 and Super 10 only)

The information card under the Systemphone gives brief details of how to use the Express Calling facilities. You can also write on the card the number that you have stored against each of the ten buttons on the keypad, or the name of the person that the button can be used to call.

To use the information card, pull it towards you using the tab.

When not in use, push the card back under the Systemphone. The card can be stored in two positions: with the tab projecting in front of the Systemphone or, if you apply more pressure, with the tab completely underneath.

## Repeat last number

This facility can only be used from Systemphones which have buttons labelled **P** and **T**. If your phone does not have these buttons, ignore this section.

Senator stores the last telephone number that you have keyed. This may be an external number or an internal extension number.

### To re-call a stored external number\*

Lift your handset

**or**

Press the loudspeaking button down and to the left (Super 10 only).

Press a free **LINE** button.

Press **T T**

You should hear the exchange dial tone. If you do not, try a different button.

Senator automatically re-calls the last number that you keyed.

Remember that if you make an internal call, the stored external number will be replaced by the extension number.

\*Before trying to re-call the stored number, you must replace the handset or push the loudspeaking button to the right (Super 10 only) and wait for the light next to the **LINE** button to go out.

## Mute/Secrecy facility

Your Systemphone's handset microphone is extremely sensitive and can pick up conversations even when it is covered by a hand.

To prevent the caller hearing what you are saying to other people in the room:

Press **MUTE** and hold it down whilst you are talking.

When you want to continue talking to the caller, release **MUTE**.

This facility can be used with both internal and external calls.

## Systems connected to a PBX via an extension

(Inter switchboard working)

One or more of the extensions on your Senator system may be connected to another switchboard (PBX) via an adaptor. This section explains how to make calls using this facility, if provided.

### To make a call to an extension on the other PBX

Lift your handset

**or**

Press the loudspeaking button down  
and to the left (Super 10 only).

Key the number of the Senator extension connected to the PBX.      You hear two bursts of ringing tone.

- ✓ If the other PBX has an internal dial tone, wait until you hear it.

Key the number of the extension  
you want to speak to.

Exchange line calls can be transferred to the extension on the other PBX in the normal way.

You can divert your calls to the extension (ie the other PBX) provided there is an operator or dedicated extension which can answer them (see page 13).

Incoming exchange line calls to your Senator system will ring the other PBX (and can be answered there) if the red illuminated button on your adaptor box is glowing. To turn the light on (or off), press the button. (The adaptor box will normally be positioned next to the Senator Central Control Unit.)

You cannot make exchange line calls via the other PBX.

Extensions on the other PBX can call specific Senator extensions by dialling an access code followed by the Senator extension number.

## Systems connected to a PBX via a **LINE** button

Your Senator system may be set up so that an external line, controlled by a **LINE** button, is connected to another switchboard (PBX). This section explains how to make calls using this facility, if provided.

### To make a call to an extension on the other PBX

Lift your handset

**or**

Press the loudspeaking button down and to the left (Super 10 only).

Press the **LINE** button connected to the PBX.

You hear the PBX dial tone, if it has one.

Key the number of the extension you want to speak to.

### To make an external call

Lift your handset

**or**

Press the loudspeaking button down and to the left (Super 10 only).

Press the **LINE** button connected to the PBX.

You hear the PBX dial tone, if it has one.

Key the PBX external access code.

You may hear the exchange dial tone.

Key the number you want.

## To use Express Calling or Repeat Last Number\*

Lift your handset

or

Press the loudspeaking button down and to the left (Super 10 only).

Press the  button connected to the PBX.

You hear the PBX dial tone, if it has one.

Key the PBX external access code.

You may hear the exchange dial tone.

Press  to Repeat Last Number, or  and a keypad button to use Express Calling.

If you wish, you can include the PBX external access code in your stored number for Express Calling. With modern PBXs, you do not need to key the access code before pressing  twice to Repeat Last Number.

You may have one or more  buttons connected to a PBX, and others connected directly to exchange lines. If so, use the procedures on this page for the lines connected to the PBX, and those in the rest of this booklet for the direct lines.

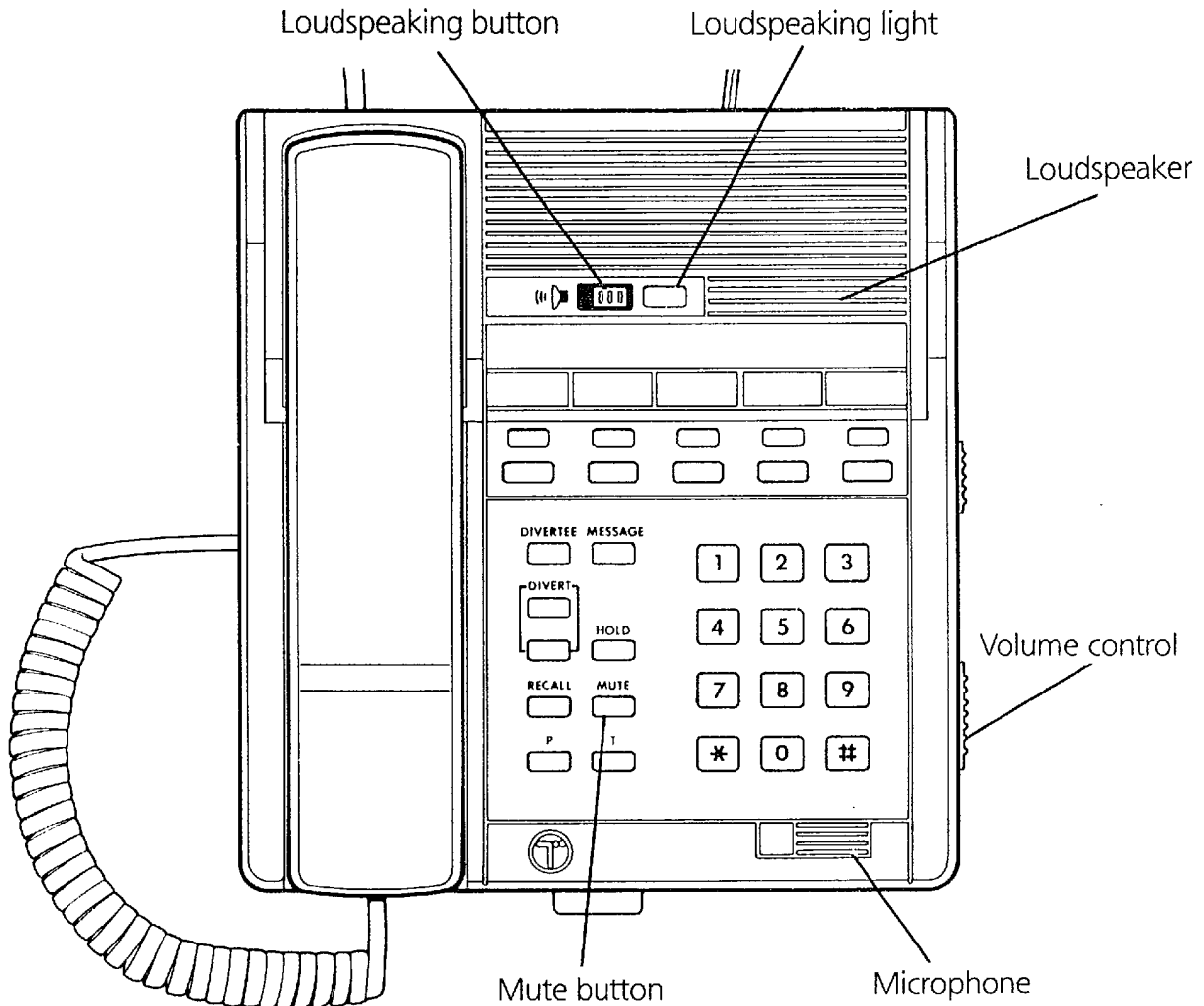
\*Before trying to repeat the last number, you must replace the handset or push the loudspeaking button to the right (Super 10 only) and wait for the light next to the  button to go out.

# Using a loudspeaking Systemphone

(Senator Super 10 only)

If your Systemphone looks like the diagram below, it has loudspeaking facilities. You can make and answer calls without having to use the handset. Your caller can be heard by other people in the room.

This section explains how to make and answer calls using these loudspeaking facilities.



## Installing your Systemphone

Your loudspeaking Systemphone has a transformer which must be plugged into a 13A mains power socket. The socket must be within 3 metres of the phone, bearing in mind the route to be taken by the power cable.

The Systemphone's line cord must also be plugged into a Senator extension socket.

### **To make or answer a call**

Press the loudspeaking button down and to the left.

The loudspeaking light glows.

Follow the normal procedures as explained in the relevant sections of this guide, but without lifting the handset.

When speaking to the caller, direct your speech at the microphone.

For maximum clarity, you should be two to three feet from the microphone.

### **To prevent the caller hearing what you are saying to other people in the room**

Press  and hold it down.

### **To transfer from the loudspeaker to the handset during a call**

Lift the handset.

### **To transfer from the handset to the loudspeaker during a call**

Press the loudspeaking button down and to the left. Hold it down.

The loudspeaking light glows.

Replace the handset.

### **To end a loudspeaking call**

Push the loudspeaking button to the right.

The button pops up and the light goes out.

### **To alter the volume of the loudspeaker**

The loudspeaker volume control is on the side of the Systemphone and is the one nearer the front.

Slide the switch towards the back of the phone for higher volume, towards the front for lower volume. This control affects the volume at which you can hear your caller, but not the volume at which the caller can hear you.

On occasion, you may find that the handset gives better sound quality than the loudspeaker.

### **If the loudspeaking facilities are not working**

Check that the plug-in transformer (connected to the Systemphone by a black power cable) is plugged into a mains socket and that the power is on.

### **If there is a mains power failure**

During mains failure the loudspeaking facilities will not work. However, you can still use your Systemphone in the normal way under mains fail conditions (see page 29).

## Using an ordinary telephone

This section explains how to use the Senator system if your extension phone is an ordinary dial or push button telephone.

### To answer a call

Lift your handset.

Speak to the caller.

### To make an internal call

Lift your handset.

Dial or key 0.

If you hear the internal dial tone, dial or key the number of the extension you want.

(For extension 10, dial or key 0.)

If you do not hear the internal dial tone, it means that all the system's internal circuits are in use; try again later.

### To make an external call

Lift your handset

#### **Either**

Dial or key 9 to use the first available free line.

#### **or**

Dial or key 81 to use line 1, or 82 to use line 2, and so on.

If you hear the exchange dial tone, dial or key the number you want. (On certain multi-frequency (MF) exchanges, you may have to press \* before keying the number.)

If you do not hear the dial tone there is no free exchange line: try again later, or wait; you will be connected as soon as a line becomes free.

You can make an enquiry call or transfer a call to another extension, if your telephone has a **RECALL** button and provided your system is not connected to a PBX with an earth recall. (If in doubt, consult your supplier.)

### **To make an enquiry call**

Tell your caller what you are going to do and ask him to hold on.

Press **RECALL**

Senator puts your caller into Hold.

Make your enquiry as a normal external or internal call.

To return to the held caller after making an internal call:

Replace your handset briefly and then pick it up again.

To return to the held caller after making an external call:

Press **RECALL**.

Senator reconnects you to the original caller, and puts the third party in Hold.

### **Brokerage facility**

If you have held a call on one exchange line and made an enquiry call on the other, you can switch between the two conversations by pressing **RECALL**. Senator puts the enquiry call into Hold and reconnects you to the previously held call. You can switch as many times as you require.

## To transfer a call

You can only transfer calls which you have made or answered yourself, not calls which have been previously transferred to you.

To transfer a call:

Tell your caller what you are going to do and ask him to hold on.

Press **RECALL**.

Call the extension to which you want to transfer the call in the normal way.

When the extension user answers explain that you are transferring a call.

Replace your handset.

Senator puts your caller in Hold.

The caller in Hold cannot hear what you are saying.

Senator automatically connects your caller to the other extension.

If the other extension user is engaged or does not answer or cannot accept the call:

Replace your handset briefly and then pick it up again.

Senator reconnects you to the caller in Hold.

## Controlling your phone's ringing

Incoming exchange line calls will ring your telephone if the red illuminated button on the adaptor box is glowing. To turn the light on (or off), press the button. (The adaptor box will normally be positioned next to the Senator Central Control Unit.)

You can also control the ringing from your telephone.

To make your telephone ring for external calls:

Dial or key 41

The light on the adaptor box glows continuously.

To stop your telephone ringing for external calls:

Dial or key 40

The light on the adaptor box goes out.

## Other facilities

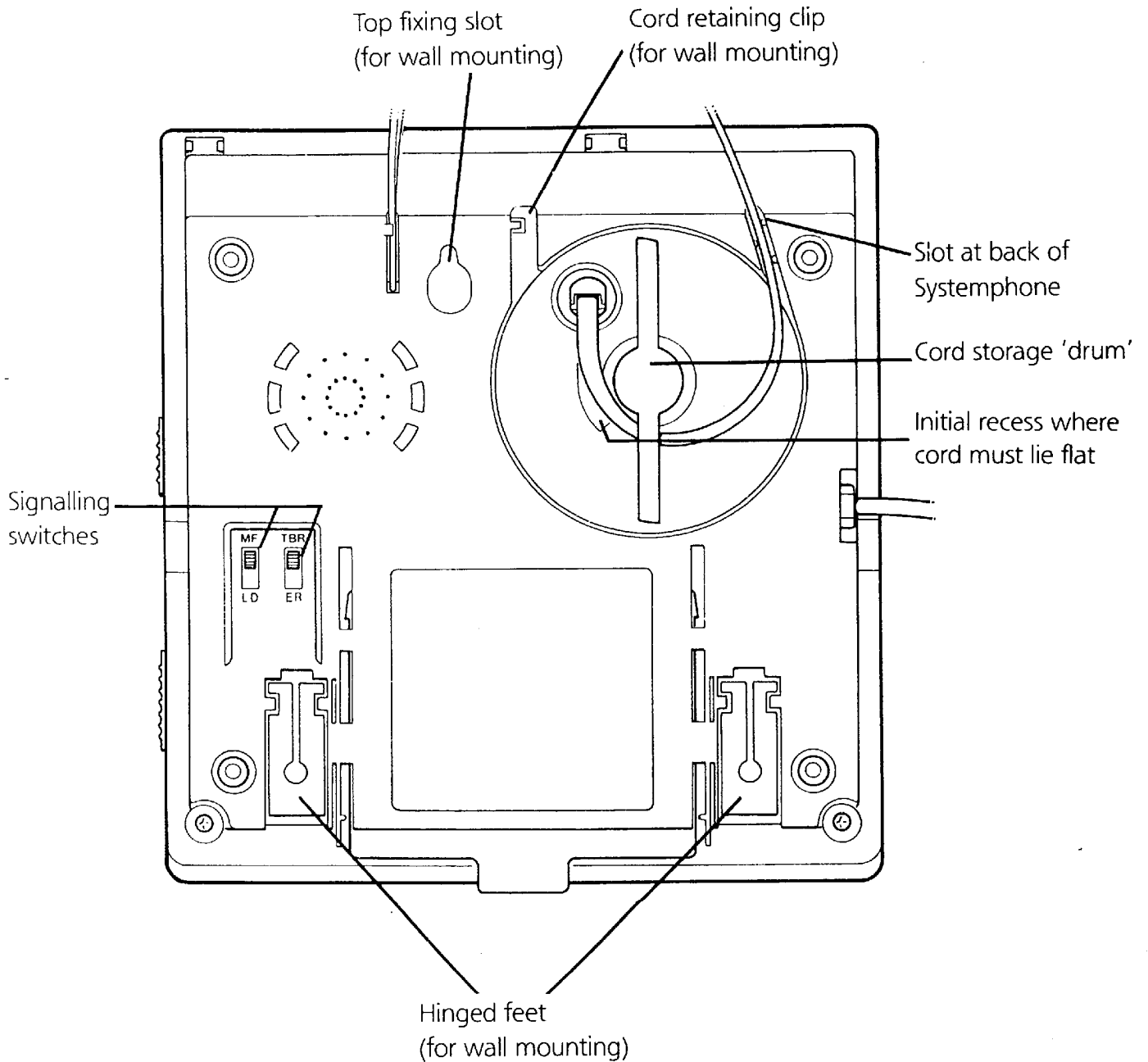
You can receive diverted calls but you cannot divert your own calls or take part in a conference. You receive no light signals for calls.

# Cord storage

(Senator 10 and Super 10 only)

Your Systemphone is connected to its telephone socket by a 3 metre long line cord.

If you do not need the full 3 metre length, unused cord can be kept neatly out of the way by wrapping it round the 'drum' in the base of the phone. The cord should be fed through the slot at the back of the Systemphone to enable it to lie flat on your desk.



# Signalling switches

(Senator 10 and Super 10 only)

The two slide switches underneath your Systemphone control:

- the type of signalling it uses: either multi-frequency (MF) or loop disconnect (LD)
- the type of recall it uses: either timed break (TBR) or earth (ER).

These switches will be set correctly for your system at installation and will not normally need adjusting.

They may need to be changed if:

- your local public telephone exchange is upgraded, or
- a switchboard (PBX) to which your system is connected is changed.

In either case, the network or PBX supplier should advise you of any changes required to the signalling switches.

Some new facilities provided by the public network may require the use of MF signalling (see the instructions for the facility). If necessary, you can adjust the switch to change from LD to MF during a call in order to use such a facility.

**Do not forget to change the switch back when you have finished using the facility.**

You may wish to record the original setting of the switches in the box below for future reference:

MF	TBR
<input type="checkbox"/>	<input type="checkbox"/>
LD	ER

Put an 'X' to show where each switch was set on installation.

Note that all extensions on a system will have the switches set in the same way.

## Wall mounting

(Senator 10 and Super 10 only)

If you wish, you can mount your Systemphone on a wall above a telephone socket. Screws and wallplugs for doing this are supplied with your phone.

### To wall mount your Systemphone

Using the template provided in the centre of this guide, mark the position of the three screws on the wall.

Drill holes at the marked positions 1½ inches deep, using a ¼ inch or 6mm drill, and insert the wallplugs.

Screw in each screw, leaving a gap between the wall and the screw head. The gap should be about ⅜ inch for the top screw and ⅛ inch for the two lower screws.

Tuck the line cord (and power cord, if the Systemphone is loudspeaking) behind the clip at the top of the Systemphone (see diagram, page 26).

Fit the top slot in the back of the Systemphone over the top screw.

Lift the hinged feet and place them over the lower screws.

Push the feet into position behind the screw heads.

Push the Systemphone down firmly to locate it on the top screw.

If necessary, remove the Systemphone and tighten or loosen the screws before replacing it to ensure a secure mounting.

If possible, position the Systemphone vertically above the telephone socket that it will use.

If the Systemphone is mounted correctly, the handset will stay securely in place on its rest when not in use without any other adjustment.

During use, the handset can be parked on top of the Systemphone.

## Fault finding

If your Senator Systemphone does not appear to be working correctly, please carry out these checks:

- 1 Check that all phones are plugged into their sockets.
- 2 Check that the mains power lead to the Central Control Unit (the box mounted on the wall) is plugged in and that power is switched on.
- 3 Check the fuse in the plug of the mains power lead.
- 4 If your Systemphone is a Senator Super 10, check that its power supply unit is plugged in and that power is switched on.
- 5 Check that the switches on the base of your instrument are set as they were on installation (see page 27). All extensions are set up initially with their switches in the same position. If in doubt, check the other Systemphones on your system.

If, after making these checks, the Systemphone still does not work, contact your supplier or maintainer.

## Mains power failure

If the power to a Senator system is turned off, each exchange line is connected directly to particular extensions as shown below:

- Line 1 connects to extensions 1 and 6
- Line 2 connects to extensions 2 and 7
- Line 3 connects to extensions 3 and 8
- Line 4 connects to extensions 4 and 9
- Line 5 connects to extensions 5 and 10

Each Systemphone can make and answer calls on its own exchange line like an ordinary telephone. There is no need to press the  button. You can use the Express Calling and Repeat Last Number facilities.

During mains failure no lights show on your Systemphone. You cannot make calls to another extension, or transfer or divert calls, or set up a conference call.

When power is restored you will find that your phone's ringing has been reset (see page 9). You will also have to tell the system again which extension is to receive your diverted calls (see page 13).

## Notes

### Statement of equipment suitability

The Senator Telephone System may be connected to:

- a) Direct exchange lines
- b) An approved PABX in subsidiary working mode
- c) BT facilities which are loop-disconnect or multi-frequency signalling
- d) PBXs with C-wire signalling

The Senator System may not be connected to lines providing a shared service.

The Senator System is not suitable as an extension to a pay-phone.

### Connection of parallel equipment

The approval of this terminal to interim requirements does not imply that the terminal or other approved apparatus connected in parallel with it will function when other apparatus is so connected, in parallel.

### Ringer Equivalence Number (REN)

The REN of this system is assumed to be 3.0. The REN shall in no case exceed 4.0.

The REN value of the apparatus is calculated from the expression:

$$\text{REN} = 3/n \text{ where } n \text{ is}$$

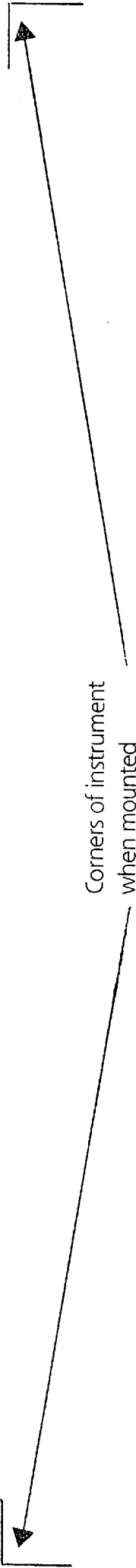
- either** the maximum number of items of apparatus connected for which all ringing detectors including the BT Bell No 59D function correctly as specified in the relevant product standard;
- or** the value stated by the supplier to be the maximum number of items of apparatus that should be connected simultaneously to the line;
- or** 10

whichever is the smallest number.

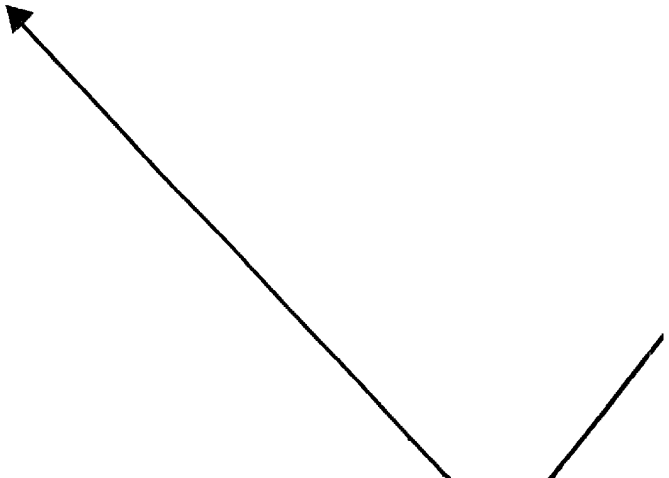


## Template

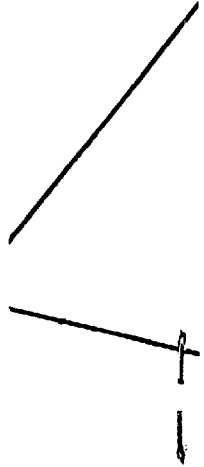
Use this template to mark the position of the screws when wall-mounting your Systemphone.



Corners of instrument  
when mounted



Drill holes for  
screws at  
these positions





If possible,  
position template  
so that this arrow  
is directly above  
the telephone  
socket.

