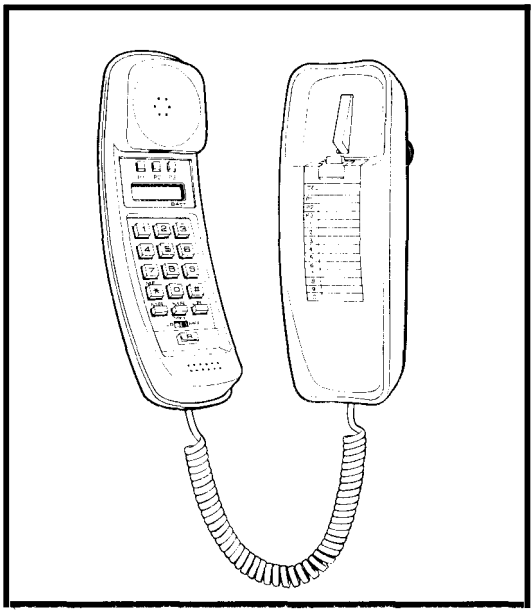

Minstrel™ Plus

User's guide

British
TELECOM

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

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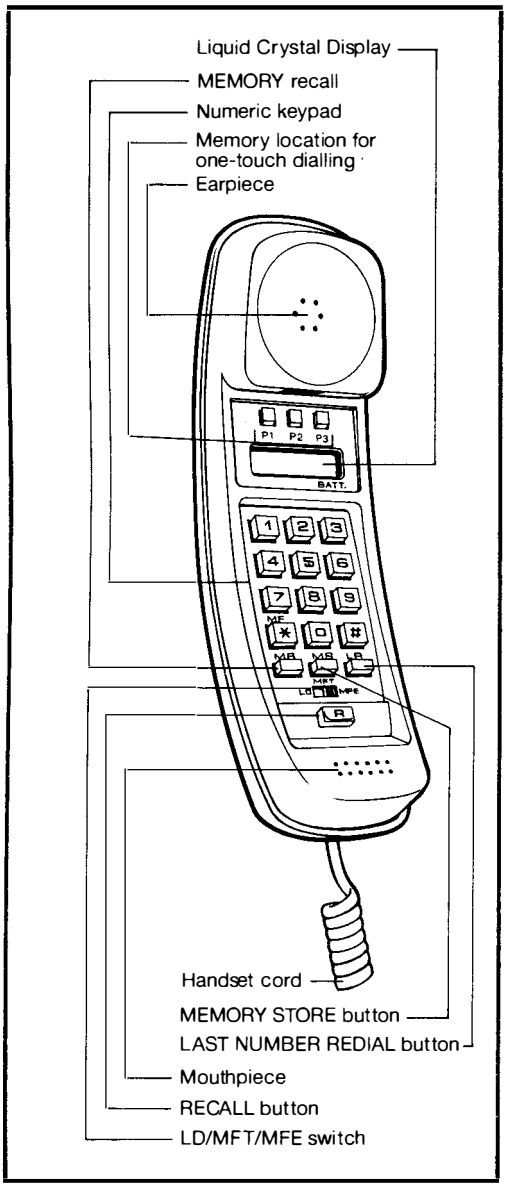
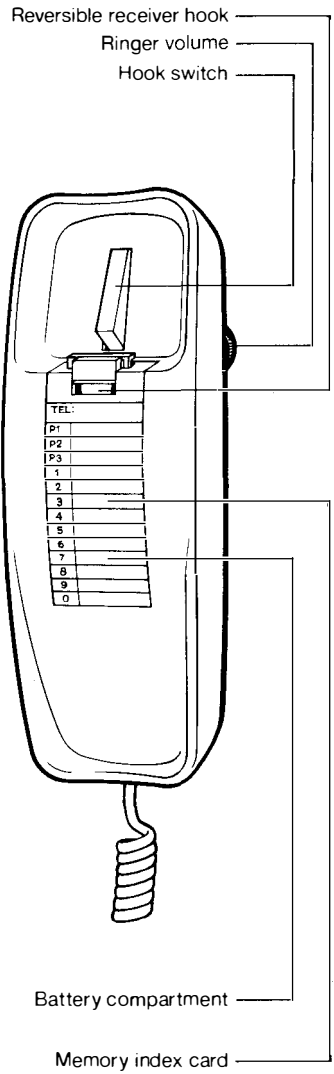

Liquid Crystal Display
MEMORY recall
Numeric keypad
Memory location for one-touch dialling
Earpiece
P1 P2 P3
BATT.
1 2 3
4 5 6
7 8 9
MF
* 0 #
MR MS LR
MFT
LD MFE
R
Handset cord
MEMORY STORE button
LAST NUMBER REDIAL button
Mouthpiece
RECALL button
LD/MFT/MFE switch


Reversible receiver hook
Ringer volume
Hook switch
TEL:
P1
P2
P3
1
2
3
4
5
6
7
8
9
0
Battery compartment
Memory index card

6 Installing your phone

Fitting the batteries

warning Unplug the phone from the phone socket before inserting or changing the batteries.

This telephone uses two AAA size, 1.5V batteries; they enable the phone to save information in its memory if it is temporarily disconnected from the phone line, and ensures the correct operation of the telephone at all times.

caution Use alkaline batteries to avoid damage to the phone

Insert the batteries as follows:

1 Remove the plastic cover over the memory index card, and then remove the memory index card.

2 Loosen and remove the screw to remove the clear plastic battery cover.

3 Insert the two batteries, ensuring that they are correctly located, following the diagrams inside the battery compartment.

4 Replace the battery cover, screw, memory index card and plastic cover.

Changing the batteries

Change the batteries at least once a year. Remember:

- Always replace *both* batteries.
- Don't mix different types of battery.
- Use alkaline batteries.
- Make sure that the batteries are fitted the right way round.

Wall installation

1. Mark and drill two holes in the wall as shown on the template on the last page of this booklet.
2. Fit masonry plugs if required.
3. Drive in the two screws, leaving sufficient clearance for the telephone to be hooked over the screw heads and dropped into the correct position.
4. Feed the telephone line cord through the groove in the base of the telephone.
5. Slide out the reversible receiver hook and refit it so that the catch is uppermost (see page 5). This catch holds the handset in place when the phone is not in use.
6. Hook the telephone onto the screw heads.

note If you wish to revert to desk-top use, remember to return the receiver hook to it's original position.

Setting the signalling mode

New exchanges being installed by British Telecom will enable you to set up calls using the new Touch Tone signalling. This means that you will hear a series of tones when dialling a number rather than the usual clicks. This means that your calls will be set up quicker. In order to get the best out of British Telecom's modern network, you need to set the dialling switch correctly by following these directions prior to using your telephone:

The diagram on Page 4 shows the location of the dialling switch.

To set the Signalling Mode

Step 1 Move the LD/MFT/MFE switch on your handset to MFT (the middle setting) using a small screw driver or similar object.

Step 2 Try to make a call in the normal way.

Step 3 If you can make a call you are connected to a modern Touch Tone signalling exchange and should leave your switch at this setting.

Step 4 If dial tone continues and you cannot make a call move the switch back to the LD position on the left of the switch and replace the handset. This completes the setting of the signalling mode for your line until your exchange is modernised.

Using Minstrel Plus with a Switchboard

Recall Mode Selection

If you have a modern switchboard you will need to move the LD/MFT/MFE switch to suit the type of switchboard you have and the recall mode it uses.

(To be continued)

If you are uncertain you should contact your Communications Manager or the maintainer of your switchboard.

The two types of recall are:

Earth Recall	— switch to MFE
Timed Break Recall	— switch to MFT

Summary

Your signalling and recall switch should be set by you according to the following chart.

MFT (TouchTone)
For telephones connected to modern digital exchanges and/or some (non-BT) modern switchboards.

MFE (TouchTone)
For telephones connected to most modern switchboards, including all modern BT switchboards.

LD
Telephones connected to old exchanges

Adjusting the ringer volume

Rotate the ringer volume control clockwise to decrease the ringer volume, and anti-clockwise to increase the ringer volume as indicated on the base.

To switch the ringer off, rotate the ringer volume control clockwise until you hear a click.

To turn the ringer on, rotate the volume control anti-clockwise to the desired volume.

Using your phone

Answering a phone call

When the telephone rings, simply lift the receiver and speak into the mouthpiece.

Making a phone call

Lift the receiver. You will hear the dialling tone.

key the number by pressing the buttons on the numeric keypad.

When the call is finished, hang up the receiver.

You can also dial a number using the memory features described on the following pages.

If you are using the telephone in a wall-mounted position, you must ensure that the handset is replaced firmly in order to disconnect the line.

Changing the signalling mode during a call

When the signalling mode is set to LD (pulse dialling), you can start dialling a number using the pulse dialling method and then change to MF (Touchtone dialling) at some point by pressing the button marked * and labelled MF.

This is useful for new services such as 'Home Banking' for remote data entry using MF tones. When you replace the handset the phone returns to LD dialling mode.

Storing numbers in memory

There are two ways of storing numbers in the memory: a one-touch system which allows you to store three numbers, and a two-touch system which allows you to store an additional ten numbers. Each memory location can store up to 16 digits.

One-touch memory location
Lift the handset

press MS

key the number

press a memory button (P1, P2 or P3.)

Two-touch memory location
Lift the handset

press MS

key the number

press MS

press a keypad button (0 to 9) to select a memory location.

Don't forget to fill in the memory index card after storing a number.

Dialling a number from memory

One-touch memory location
Lift the handset

press the memory button (P1, P2 or P3)

Two-touch memory location
Lift the handset

press MR

press the appropriate keypad button

Erasing a stored number

If you want to erase a number in the stored memory, simply store a new number into this memory location.

Dialling complex stored numbers

Your Minstrel plus phone can be changed to Touchtone dialling after finishing pulse dialling by pressing the button marked * and labelled MF.

You can dial combinations of numbers, typically for combining access and authorisation codes with stored or unstored telephone numbers.

press *

There is a 4 second pause in the dialling sequence and t appears in the display.

The dialling is now MF and you can continue to dial the rest of the numbers.

The phone reverts to LD dialling when you replace the handset.

Combining numbers stored in different memory locations

You can make calls using two separate numbers from the memory for instance, one key for the dialling code, followed by another key for the phone number.

Lift the handset and wait for the dial tone

press the memory button which holds the dialling code. Wait for the digits to be dialled.

press the memory button which holds the remainder of the telephone number. Wait for the digits to be dialled.

note if an access digit is used to obtain a PSTN line from behind a PABX then after dialling from memory, wait for secondary dial tone before proceeding.

Combining stored numbers with manually dialled numbers

You can dial a number as a combination of a stored number and a manually dialled number

Lift the handset

press the memory button you require and wait for the number to be dialled

key the second part of the number in the usual way.

Last number redial (up to 32 digits)

If the last phone number that you dialled was engaged, or there was no answer, the number, up to 32 digits, can be redialled by lifting the receiver and pressing LR.

The phone will then dial the number for you automatically.

note Do not use this facility when the telephone is connected as a PBX extension

Memory cue

You can dial a call as a combination of the phone no. stored in last no. redial memory and a manually dialled number.

Lift the handset

press **LR**
key phone no.—for example, 1234567

You can also dial the last no. redial memory and the number stored in memory location.

Lift the handset

press **LR**
press memory location

Memory check

you can check the number in memory by pressing **MR,** ✱ button and a keypad button (0-9) (or one-touch memory location). The number will show in the LCD digit by digit without being dialled out.

To check the number stored in the one-touch memory location.

Lift the handset

press **MR**
press ✱ button
press a memory location (P1, P2 or P3)

To check the number stored in the two-touch memory location.

Lift the handset

press **MR**
press ✱ button
press a keypad button (0 to 9)

Using the RECALL button - for private exchange systems

When to use the RECALL feature
If you have a private exchange (PABX) system that offers such features as

- call transfer
- conference call
- ring back, and so on

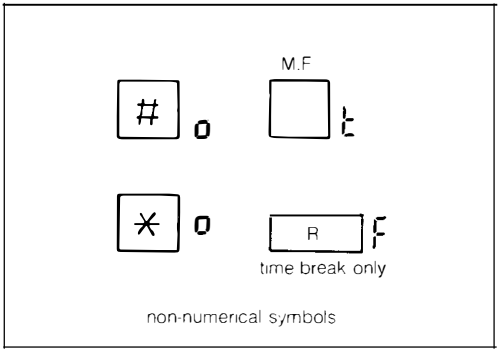
You can have access to these features by using the RECALL button.

The liquid crystal display

The liquid crystal display at the top of the phone can display the following:

- the number that you are dialling
- the number in a memory location

If a phone number is more than 10 digits long, only the last 10 digits are displayed.



16 Problem solving

If your Minstrel Plus does not appear to be working properly first check the technical details given on page 19 to see that the Minstrel Plus is compatible with your installation.

Here are a few more simple checks that you can make:

- Check the Minstrel Plus is plugged into the wall socket correctly.
- Check that the correct signalling mode is selected.
- Check that the handset has been replaced correctly.
- Check that you've programmed the memory correctly.
- Check with the operating instructions to see if there is something you've failed to do.
- Check that the battery terminals are clean.
- Check that you have not switched the ringer volume off.

If you have carried out these checks and the Minstrel Plus is still not working properly then refer to the following section. DO NOT ATTEMPT TO OPEN THE TELEPHONE TO INVESTIGATE THE FAULTS YOURSELF.

If you cannot make a call from your telephone.

There may be no dialling tone for example - disconnect any extension phones and try to make a call again on your first phone. If you succeed in getting through, re-connect your extension phones until you locate the faulty phone or socket. To establish if it is the phone or the socket that is faulty connect it to a socket where there is a phone that you know is working properly. If the problem continues, the extension phone is likely to be at fault.

If you cannot make a call with only the first phone connected you should report the situation to the British Telecom fault service. Their number is usually 151, check your phone book to be sure. Once you have spoken to an engineer he will be able to give you more advice and may do a remote test on your installation.

Please remember that if you call an engineer to visit your premises, unless it is to repair a line fault, British Telecom will charge a call-out fee. This is because only rented phones are covered for engineering visits and repairs.

If you cannot get through to a number from any phone, although you can hear a tone.

You should check that all handsets on your installation are properly replaced before trying to make a call again.

If your tonecaller does not operate

Connect the phone to a socket that you know is working properly - provided of course that there is more than one socket on your installation. Ensure that the tonecaller is not switched off. If the problem continues the tonecaller could be at fault (but check that the total REN value of all your telephones does not exceed four)

Maintenance of your Minstrel Plus telephone when connected to a private branch exchange

When the telephone is connected to a PBX by the standard plug and socket, maintenance may be carried out by any person so long as the telephone is unplugged before maintenance activity commences. However, if the telephone is repaired by anyone other than British Telecom, its staff or its agents, the British Telecom guarantee will of course no longer be valid.

Care of your Minstrel Plus

We recommend that you clean your Minstrel Plus with a damp cloth. Do not spray aerosol polishes into any of the openings or vents and avoid the use of abrasive cleaners as these will damage the phone's finish.

To preserve the appearance of the exterior finish, avoid placing the telephone in direct sunlight. Since your telephone is an electrical device you should avoid using it near water.

The coiled handset cord will remain in good condition if care is taken to ensure that it does not twist or knot.

Conditions of use

Your telephone has been approved by BABT (British Approvals Board for Telecommunications) for use on any business or domestic exchange line, but only for the uses described in the book: any other usage will invalidate approval.

You may use this telephone on a direct exchange line but it must be a direct exclusive line (DEL) and not a shared service or 'party-line'

You may also use this phone with an approved, compatible PABX (Private Automatic Branch Exchange), including those which return secondary proceed indication. However, there is no guarantee that all approved PABX/telephone combinations will give satisfactory performance and if you have any queries, please consult your supplier, who should have an up to date list of PABXs with which this phone is compatible.

You should only connect your telephone to a new modular phone socket. If you do not have the new type of socket and wish to use the phone on a direct exclusive line, installation can be arranged through British Telecom (or other operator). Complete the postcard enclosed with the phone and post it to your nearest Telecom Sales Office, quoting the approval number. Alternatively, please consult your PABX maintenance engineer

This telephone is not suitable for use as an extension to a payphone or for use with a 1 + 1 carrier system.

The label indicating that BABT approval has been obtained is on the base of the telephone, together with information which tells you that

- the telephone is manufactured for British Telecom in Malaysia,
- the model number is 5021 AR,
- the REN number is 1.

This apparatus has been approved for the use of the following facilities:

- simple telephone operation
- Loop Disconnect (LD) or Multi-frequency (MF) dialling
- last number re-dial (up to 32 digits)
- memory storage for three one-touch and ten two-touch telephone numbers with up to 16 digits each
- adjustable ringer volume
- 'recall' for PABX (timed break or earth system).

Any other use will invalidate the approval of the apparatus if, as a result, it ceases to conform to the standards against which approval was granted.

How many sockets and telephones can you have?

On a direct line, you can have as many sockets as you like, so you can move your telephone from room to room if you wish.

Although it is possible to connect any number of sockets to the line, it is important to limit the number of phones to ensure that each phone will receive enough current to ring. A standard line provides enough current for any number of phones so long as their 'ringer equivalence number' or REN adds up to no more than 4.

Your telephone has a REN of 1.0. Any other instruments should be assumed to have a REN of 1.0 unless otherwise stated.

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