

VICEROY 243*

CONSOLE OPERATING INSTRUCTIONS AND CUSTOMER PROGRAMMING



APPROVED for use with telecommunication systems run by British Telecommunications in accordance with the conditions in the instructions for use.

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Note

If you do not have access to a VICEROY when reading this booklet, unfold these pages and refer to the diagram of the console instead.



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Introduction

This booklet has been designed to tell you how to operate the VICEROY 243. Even though the VICEROY Call Connect System offers an extensive range of sophisticated features to the operator (and to the other users of the system), the basic operation of the console is very simple. Also, the console displays give you all the information you need to handle easily all types of call.

After a description of the console itself, this book provides step-by-step instructions for answering and connecting calls, followed by instructions for using the special features of the system. Throughout the book, we assume that ***** (star) is the operator access code.

1 The Console

The console consists of a display area, a keyboard, a tone ringer and a handset.

1.1 Displays

Information on calls and the status of the system is provided by the various displays that form the upper part of the console. Each individual display is described below. The description starts at the left of the display area.

LINE STATUS

The eight LINE STATUS LEDs show the busy/free state of each exchange line. The LINE STATUS LED glows when the exchange line is busy, is dark when the exchange line is free, and flashes when on Hold.

CALL STATUS

The CALL STATUS display shows the active status of the call being handled at the console. The number of the party you are connected to is always shown at the left of the display, the other party in the connection is shown on the right. Example displays are shown below:



You are connected to extension 25.





You are connected to extension 25 and extension 28 is on Hold.

You are connected to extensions 25 and 28 in a Three-Party Connection.

VICEROY uses three symbols on the CALL STATUS display to show special functions.







This display indicates that you are connected to exchange line 2.

Exchange line 2 is recalling the console after Waiting-On-Busy at extension 28.

Exchange line 2 is recalling the console after ringing and not being answered at extension 28.

TIME

This display is a digital clock that shows the time in hours and minutes using either the 12 hour or 24 hour clock.

1.2 Keys

The lower part of the console consists of push-to-operate non-locking keys divided into three groups. On the left are 3 rows of function keys, in the middle are three rows of Direct Extension Select (DES) keys, and on the right is the dial pad. Each function and DES key contains a lamp that either flashes to indicate a call or alarm waiting to be answered, or glows steadily to indicate that the key has been operated.

1.2.1 Function Keys

The description of the function keys starts with the top left hand key. Note that there are two function keys at the bottom right of the DES key block.

	TO DEO ROY DIOOR.
NIGHT SERVICE	This key switches VICEROY into and out of Night Service, or changes the Night Answer point for particular exchange lines. The key LED glows to show that Night Service is working.
	 Pressed once — VICEROY goes into Night Service and the key LED lights.
	 Pressed twice - VICEROY returns to Day Service and darkens the key LED. If your VICEROY is so programmed, you can change the night answer points. Hold the key down - the display shows the exchange line equipment number on the left and the Designated Night Service Answer point on the right. The answer point number can be changed from the Dial Pad. You can inspect the next exchange line assignment by dialling *
ALARM	If the system detects an alarm, the tone ringer sounds and the ALARM key LED flashes. Pressing the ALARM key stops the ringer, displays the alarm code and makes the key LED glow steadily. Releasing the key blanks the display and stores the alarm code. The key LED

glows steadily to indicate that the code is stored. The key LED remains glowing steadily until the alarm is cleared using

the Operator Functions.

STATUS You can display the status of various VICEROY equipments by pressing this key. The STATUS key flashes when VICEROY detects a change in power status. After the status display has been examined, the key LED remains lit for as long as reserve power is supplied. Select the equipment to be displayed by pressing the key the required number of times: Pressed once — the display shows the Equipment Busied count on the left of the display and the Power Status (AC = primary power, dc = reservepower) in the centre. Pressed twice – the display shows the status of each exchange line (0 =free, 1 = busy, 2 = busied out, - =no line connected). • Pressed three times – the display shows the Generic feature package identity. Pressed four times — all LEDs glow, all displays show '8' and the tone ringer sounds. **BELL OFF** Press this key to switch off the console's tone ringer. The lamp in the key glows when the tone ringer is off. Switch the tone ringer on by pressing the key again. If the ringer is disabled (BELL LED glowing) incoming calls are indicated by key LEDs only. MSG WAIT This key allows you to signal any extension that you have a Message Waiting. After Message Waiting has been applied to an extension, VICEROY rings the extension at pre-programmed intervals. If you press the MSG WAIT key with the console free, the DES key LEDs light to indicate which extensions have a message waiting. CANCEL Cancel a misdialled or incomplete call using this key. EXT. METR You can examine the number of call units used by a particular extension by pressing this key and dialling the extension number. The extension number appears on the left of the CALL STATUS display, while the number of call units used is shown on the right. PAGE Holding this key down lets you access the paging equipment (if any fitted).

Console paging overrides any other user

of the paging equipment.

- HOLD You can place any extension or exchange line call on Hold, and then originate or answer another call, by pressing this key. You may return to the held call by pressing the flashing DES key, or by dialling the HOLD retrieve code and the exchange line. If you do not retrieve a held call, VICEROY recalls it to the console.
- BOTH This key allows you to establish a three party conversation. The key LED remains lit during the three party conversation. Pressing the BOTH key again removes the three party connection.
- SPLIT This key allows you to speak privately to either party in a three-party connection. Each time you press the key, the conversing party and the holding party are interchanged.
- RELEASE As soon as you press this key the active call is released from the console.
- RECALL Calls returning to the console can be answered by pressing this key.
- DIAL 0 Use this key to answer callers who have dialled the operator.
- I/C GRP 1-3 These keys let you identify and select which incoming exchange line group to answer first.
- ANSWER This key lets you answer the call that has been waiting longest at the console, whether it is an incoming group call, a dial O call or a recall.

At the bottom right of the DES key block are two more function keys:

- INTRUDE This key lets you interrupt a busy extension. All parties hear a burst of intrusion tone when the key is first pressed, and then every 6 seconds whilst the key is held down. If you are barred from intruding, you will hear Number Unobtainable tone.
- OVERFLOW If you press OVERFLOW, whilst handling calls, all calls waiting and all future calls, which are assigned to Night Service Dial Answer, will ring the night bell immediately.

EXT. METR, PAGE, INTRUDE and OVERFLOW are all programmable keys and can be arranged in any order or replaced by the two alternative keys:

- AUTO WAKE-UP To set an automatic alarm call, press and hold down the AUTO WAKE-UP key then dial the number of the extension requiring the alarm call. The time already set will appear in the display, or if the time is set, dashes. If the time is to be changed dial in the new time required. If the alarm is to be cancelled dial 9999.
- BARRING Some of your extensions might be programmed so that you can prevent their making calls between themselves. To operate this facility you press the BARRING key. To remove the restriction, press the key again. Whilst Barring is in operation the key light glows.

1.2.2 Direct Extension Selection Keys

Each extension within VICEROY has a console Direct Extension Selection (DES) key allocated to it. These keys let you:

- Ring an extension directly by pressing one of the DES keys.
- See the status of an extension. If the LED in the DES key is
 - Glowing, the extension is busy.
 - Flashing, the extension is on hold.
 - Dark, the extension is free.

1.2.3 Dial Pad

The console dial pad allows you to originate any exchange line or extension call. The pad also allows you to dial the special Operator Functions.

NOTE:

It is possible on rare occasions for a console key to become stuck down, in which case all the keys will stop working. If this happens and the key cannot be released by hand, go into NIGHT SERVICE by dialling *11 or pressing the NIGHT SERV key and call the maintenance engineer from one of the extensions.

1.3 Tone Ringer

Alarm

The console has a tone ringer which sounds a distinctive note when action is required of the operator. This may be: -

Incoming call	One short note every 6 seconds
---------------	--------------------------------

One short note every 12 seconds

In addition the operator can hear the following patterns of tones through the handset: -

Busy	One short tone every second
Intrusion	One short tone every 6 seconds
Ringing	Two short tones every 6 seconds
Unobtainable	Continuous note

2 Answering and Connecting Calls

Most of your time will be spent answering and connecting calls by using the ANSWER, RELEASE and CANCEL keys and the dial pad. We describe these keys first. Notes

1 PRESS RELEASE ON FINISHING EVERY CALL even if the caller has already cleared. This is necessary to clear the console.

2 The CALL STATUS display always shows you to whom you are connected.

3 The BOTH and SPLIT keys let you connect to a particular party in a call. (see 3.5 Using the SPLIT key).

2.1 Answering calls

When a new call arrives, the console sounds the tone ringer and flashes the ANSWER key lamp, and either the DIAL O or one of the I/C GROUP key lamps (depending on the source of the call).

To answer the call: PRESS THE ANSWER KEY

or

PRESS THE I/C GROUP KEY

The ringer now stops, the flashing lamps glow steadily and the CALL STATUS display indicates:

For incoming group calls, the equipment number of the trunk being used

OR

For dial 0 calls, the calling extension number

Notes

1 If a new call to the console occurs while a call is already being handled, the console gives a single ring. The incoming call key lamp flashes (unless it is already lit).

2 If there is more than one call waiting, pressing the ANSWER key connects you to the call that has been waiting the longest. It is possible to answer calls out of sequence by pressing the appropriate incoming call key.

3 Dial O calls can be made by extensions that are already engaged in a call. In these cases the CALL STATUS display identifies the other party in the existing call.





2.2 Connecting calls

To connect a caller to an extension:

First— PRESS THE DES KEY or DIAL THE EXTENSION NUMBER ON THE DIAL PAD

The number appears on the left of the CALL STATUS display — if the number is not the one you entered, then you have either misdialled (in which case press the CANCEL key and redial the number), or the call has been diverted.

Next -

If the extension is free, you hear ringing tone and the DES key lamp glows

OR

If the extension is busy, you hear busy tone.

2.2.1 Handling a call to a free extension

Either connect the caller to the ringing extension or wait for an answer before connecting the call. Waiting for an answer lets you announce the call. In each case make the connection by PRESSING THE RELEASE KEY, which also clears the console for the next call. (A call released to a ringing extension recalls to the console if it remains unanswered after a preset time).

2.2.2 Handling a call to a busy extension

You may notice from the DES key that the extension is busy. In this case ask the caller what he wants to do. You can either:

Wait on the busy extension

PRESS THE DES KEY. Press the RELEASE key — the call is connected automatically when the extension becomes free, or recalls to the console if it remains unanswered after a preset time.

PRESS THE HOLD KEY the call is held until it can be connected. When the extension is free announce the call and then retrieve the held call by either:

PRESSING THE APPROPRIATE DES KEY to retrieve a held extension call.





OR

Hold until the connection can be made

	OR DIAL 691 and the number of the exchange line whose LINE STATUS LED is flashing, to retrieve a held exchange line call.
OR	PRESS THE DES KEY or dial the number. Press the RELEASE key — the call is connected (see 3.3 Hold)
Try a new extension	PRESS THE DES KEY or DIAL THE NEW EXTENSION NUMBER
OR	
Intrude on the call	PRESS THE INTRUDE KEY
OR	(See 4.5 Intrusion)
Abandon the call	PRESS THE CANCEL KEY and then PRESS THE RELEASE KEY

2.3 Answering recalls

Recalls are calls that the system returns to the console for further operator action. They occur when a call released from the console is not answered after a preset time (20, 30 or 40 seconds depending on how the system has been programmed).

A recall activates the tone ringer and causes both the ANSWER key lamp and the RECALL key lamp to flash.

To answer the recall: PR

PRESS THE ANSWER KEY or PRESS THE RECALL KEY

The ringer now stops and the flashing lamps become steadily lit. The CALL STATUS display shows the caller on the left and the destination on the right.

The letter at the right hand is:

"r" if the call is a ringing recall.

OR

"c" if the call is a Wait-On-Busy recall.

After answering the recall, ask what the caller wishes to do and connect the call in the usual manner.



2.4 Originating calls

To call an extension:

To make an external call:

DIAL THE EXTENSION NUMBER or PRESS THE DES KEY

DIAL THE ACCESS CODE FOR THE REQUIRED LINE (eg 9 for an exchange, or "outside", line) and after receiving dial tone, DIAL THE EXTERNAL NUMBER.

The ANSWER or DES key lamps light up and you hear ringing, busy etc as appropriate. The CALL STATUS display shows the trunk equipment number for an external call, or the extension number for a call to an extension.

Note

When an extension user calls and asks for an external number, the call can be released to the waiting extension by pressing the RELEASE key. You can do this:

1 After dialling the access code for the required line, to let the extension user dial the required external number. Ensure that dial tone is obtained before releasing call/line to extension user.

2 After dialling the external number.

3 After the external call has been answered, by pressing BOTH, announcing the call then pressing RELEASE to connect it to the extension.

If the extension user wishes to be called back when the call has been connected instead of waiting at the console, then:

- 1 Establish the external call.
- 2 Dial the extension number or press the DES key.
- 3 Press BOTH and announce the call.
- 4 Press RELEASE.

3 Using the Call Features

3.1 Abbreviated dialling

Abbreviated dialling allows you to store frequently used numbers in the system and then dial them by keying a code for that number. For example: you can store an international number such as 0101 613 592 2122, and then dial that number by entering a 3 digit code, such as 110. The system will store up to 60 numbers each 26 digits long.

To use abbreviated dialling:

DIAL THE ABBREVIATED DIALLING ACCESS CODE (e.g. 1) and then DIAL THE ABBREVIATED DIALLING ENTRY CODE of the required number (two digits)

The system then calls the required number, with the displays showing the usual call information.

To **display** an abbreviated dialling number:

- 1 Dial '* 60'.
- 2 Dial the Abbreviated Dialling Entry Code.

The CALL STATUS display shows the Abbreviated Dialling Entry Code and up to the first 6 digits of the number. A further press of the '* key moves the number one place to the left — this can be repeated until all of the number is displayed.

3 Pressing the RELEASE key clears the displays.

To enter an abbreviated dialling number:

- 1 Display existing number. If this is to be changed or is blank:
- 2 Dial ' * 65'
- 3 Dial the Abbreviated Dialling Entry Code (two digits, eg '20')
- 4 Dial the full telephone number (including access code and any special digits)



The CALL STATUS display shows the most recently entered 8 digits of the full telephone number.

6 Press the RELEASE key to enter the number and clear the displays. (Any mistakes made before this point can be corrected by pressing the CANCEL key and starting again).

To **delete** an abbreviated dialling number:

- 1 Dial * 65'
- 2 Dial the Abbreviated Dialling Entry Code..
- 3 Pressing the RELEASE key deletes the number and clears the displays.

Notes

It is important to amend lists of abbreviated dialling numbers whenever a number is added deleted.

Some abbreviated dialling numbers require special entries. These are as follows:

- *1 This inserts a delay of 5 seconds into the dialling sequence.
- *2 This causes the system to wait for dialling tone.
- ***3** This allows the user to insert digits manually.

It is always advisable to start abbreviated dialling numbers with * 2 to avoid possible misdialled calls but this is not possible with certain internal numbers or numbers accessed through private wires, where no dial tone is returned.

3.2 Number Re-Dialling

You can re-dial the last trunk number you dialled as follows

- (a) Make any trunk call.
- (b) Use any feature but excluding outgoing trunk calls.
- (c) Dial 10
- (d) The previously dialled trunk number will be automatically re-dialled.

3.3 Hold

You can hold single-party callers at the console and carry on to use other features. It is possible to connect a held caller to an extension, to an incoming call or to an outgoing call.

3.3.1 Placing a call on hold

Place a call at the console on hold by pressing the HOLD key. The key lamp lights up to show that a call is being held, the CALL STATUS display clears and the console becomes available for new calls. If you are holding a call from an extension, the appropriate DES key will flash while the call is on Hold. The LINE STATUS LEDs flash to show which exchange line calls are on Hold.

If a call is held for longer than a preset time (20,30 or 40 secs), the lamp of the RECALL key flashes, and the tone ringer sounds.

3.3.2 Recovering a call from hold

Recover an extension call from hold by pressing the appropriate flashing DES key. The identity of the caller appears on the left of the CALL STATUS display and you are connected to that caller. The call can now be handled as usual.

Recover an exchange line call from hold by dialling 691 on the dial pad, followed by the exchange number of the line indicated by the flashing LINE STATUS LED. The exchange line number appears on the left of the CALL STATUS display, and the LINE STATUS LED glows steadily.

If you want to connect a call on hold to another party, it does not matter if you dial that party before or after recovering the held call.



|--|

3.4 Three Party Conversation

You can set up a three party conversation from the console. The conversation is restricted to three parties, including the operator, and only one of these can be a trunk call. Usually, three party conversations are set up at the request of a caller, so to set up the call:

1 Dial the number of the next party in the conversation and, when they answer, press the BOTH key.

The BOTH key glows and the party at the console is connected to the conversation.

The CALL STATUS display shows the two parties other than the operator in the conversation

2 Press the BOTH key to break the three party conversation into two separate calls, one on Hold.

The CALL STATUS display shows the extension called on the left, and the extension on hold on the right.

- You can talk to either of the two parties separately by using the SPLIT key (see 3.5 below).
- 3 Press the RELEASE key to disconnect the console from the conversation.

3.5 Using the SPLIT key

The usual programming of the system automatically splits all connections made by the console, so that, for example, incoming calls can be announced. Automatic splitting has been assumed throughout this booklet. However, calls must be manually split during a three party conversation. Split the calls as follows:

- Press the SPLIT key once to talk privately to the source of the call.
- Press the SPLIT key AGAIN to talk privately to the destination of the call.
- Pressing the BOTH key allows you to talk to both parties of the call.

The CALL STATUS display always shows you to whom you are connected.

3.6 Message Waiting

You can use the system to remind you that there is a message waiting for a specific extension. At intervals the system rings the extension with three short rings to inform the user that there is a message waiting with the operator. When the extension calls the operator, the system flashes the MSG. WAIT key to remind the operator there is a message for that extension. To apply Message Waiting:

- 1 Ring the extension by either pressing the DES key or dialling the extension number on the dial pad.
- 2 If there is no answer at the extension, press the MSG WAIT key.
- 3 Press RELEASE.

The extension will receive the distinctive message waiting ringing (three short rings) repeatedly at pre-programmed intervals. When the extension calls the operator and the operator answers the call, the MSG WAIT key will flash to remind the operator that there is a message.

To cancel message waiting, perform steps one and three above again. If you dial ***** 29, all messages waiting will be cancelled.

To find if there are any extensions with messages waiting, press the MSG WAIT key when the console is free. The system shows those extensions with messages waiting by lighting their DES key lamps.

3.7 Automatic Wake-Up

You can use the system to provide automatic wake up alarm calls to extensions. On answering the alarm call, the extension user receives either a special wake-up tone, or music (if you have a music source fitted to the system). If the extension does not answer the alarm call, of if the extension is busy, the system will repeat the call twice more at five minute intervals.

To set up an alarm call and read the time already set:

1 Dial ***71** or hold down AUTO WAKE UP key.

The CALL STATUS display shows "A71" followed by a dash.

2 Dial the number of the extension requesting the call.

The CALL STATUS display shows the extension number followed by a dash, and then four digits indicating the time already set in 24 hour notation.

If no time is already set, four dashes appear in place of the time.

- 3 If you wish to change the time set, dial the required time in 24 hour notation.
- 4 If you wish to cancel the alarm call, dial "9 9 9 9".
- 5 Press RELEASE or release AUTO WAKE UP.

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To display an alarm call without resetting it:

- 1 Dial * 72.
- 2 Dial extension number.

The CALL STATUS display shows the extension number followed by a dash, and then four digits indicating the time already set in 24 hour notation.

> If a printer is in use, each time an extension is called by the Automatic Wake-Up system or the operator makes a change to the settings, there is a printout as follows:

203 03/19 10:33 WU 10:45 Answer Representing Extension number, Date, Time now, Wake-Up, Time set and one of six alternative messages, which may be:

Set Changed Cancelled Answer No Answer Busy.

26-0130

4 Other Features

4.1 Setting the date

If your VICEROY system uses MERLIN TX 14* FeaturePhones, these require the date to be set as follows from the console:

- (a) Dial * 80.
- (b) Dial two digit date, two digit month and two digit year.
- (c) Press RELEASE.

4.2 The clock

The console TIME display is a 12-hour or 24-hour digital clock that shows the time in hours and minutes.

To set the 12-hour clock:

- 1 Dial * 14 followed by the hours (2 digits), followed by the minutes (2 digits). (Enter the hours in the 24-hour system, eg 6 p.m. is 18)
- 2 Press the RELEASE key.

To set the 24-hour clock:

- 1 Dial * 15 followed by the hours (2 digits), followed by the minutes (2 digits). (Enter the hours in the 24-hour system, eg 6 p.m. is 18)
- 2 Press the RELEASE key.

4.3 Adjusting the tone ringer

You can adjust the volume of the tone ringer from the dial pad of the console. Turn the ringer off completely by pressing the BELL OFF key (the key lamp lights up). Press the key again and hold it down so that the key lamp goes dark. From the dial pad, dial 1 to 4 for different levels of volume. The number dialled appears in the CALL STATUS display:



"1" indicates low volume

"2" indicates higher volume.

Release the BELL OFF key.

4.4 Paging

If your system is connected to paging equipment, you can page someone by holding down the PAGE key while making the announcement. The PAGE key lamp lights whilst the key is pressed. If the PAGE key lamp is on while you are not pressing the key, then someone else is using the paging equipment. Pressing the key at this point disconnects the other person and frees the equipment for your use as long as the key is pressed. You can also access the pager by dialling 68 and pressing RELEASE when finished.

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4.5 Intrusion

When a busy extension has been called, the call can be interrupted by pressing and holding down the INTRUDE key. A warn tone is heard when the connection is made, and every six seconds while the INTRUDE is held down. Releasing the INTRUDE key breaks the connection.

Notes

1 You will be heard by all the parties of the call as it is impossible to talk to the extension user privately.

2 Some extensions can have a class of service that prevents intrusion, in which case you will hear number unobtainable tone when you press the INTRUDE key.

4.6 Night service

The Night Service feature sets the call connect system into Night Service Mode, under which incoming calls may still be answered when you are not present at the console. Select Night Service by pressing NIGHT SERV. The key lamp glows. To return the system to normal Day Service press NIGHT SERV again. The key lamp then does dark. If you forget to press NIGHT SERV, the system will nevertheless go into Night Service mode if you are not handling calls and an incoming call has waited for 20, 30 or 40 seconds (according to programming). In this case, only the first call will suffer this 20 to 40 seconds delay subsequent calls will be treated as normal night calls and be routed immediately.

In Night Service, each of the eight trunk lines may be assigned to a nominated extension, to a Hunt Group, or to the Night Bells. If a line is assigned to Night Bells, it may be answered by any extension which dials the proper Night Service Dial Answer (NSDA) access code.

If your VICEROY is suitably programmed you can change the Night Service assignments as follows:

- 1 Press the NIGHT SERV key twice and hold it down. The key lamp glows.
- 2 The CALL STATUS display shows:

On the left, the first exchange line number (i.e. TRUNK STATUS number 01 to 08). On the right the assignment already given to that trunk. If it is not assigned then "- - - " appears. The assignment flashes.



- 3 If you want to change the assignment, set in the new assignment. This may be an extension, for which you may dial the number or press the DES key, or a Hunt Group, for which you will need to dial the appropriate access code, 41 to 46. If you want to assign the trunk to Night Bells, dial 8.
- 4 Press * . This will call up the next trunk line, which you can treat exactly like the first.
- 5 When all the trunks are finished, release NIGHT SERVICE.

4.6.1 Overflow

If you wish to have incoming calls ring the Night Bell immediately, rather than wait for the time out, press the OVERFLOW key. While the OVERFLOW key LED glows an incoming call can be answered without delay from an NSDA extension.

4.7 Barring Extension to Extension

You can prevent extensions making calls to other extensions. This feature is called Barring Extension-to-Extension, and your VICEROY must have this feature programmed into classes of service of both the extensions. Check with your Communications Manager to see if this feature is available.

To turn Barring Extension-to-Extension ON (and prevent extensions making calls to each other):

- 1 Dial *23 or press BARRING key.
- 2 Press the RELEASE key.

To turn Barring Extension-to-Extension OFF (and restore service to extensions):

- 1 Dial ***** 24 or press BARRING key again.
- 2 Press the RELEASE key.

4.8 Extension Metering

The system can be programmed to count how many call units each extension has accrued. Ask your Communications Manager if your system has been programmed for this feature. If your system has this feature, you can find how many call units a particular extension has used since the system's call meters were last set. You may read an extension's meter either during a call to that extension, or when the console is free.



4.8.1 Reading an Extension's Meter While Speaking to it:

To read an extension's call meter using the EXT METR key:

1 Press the EXT METR key and hold it down.

The CALL STATUS display shows the extension number on the left and the number of call units used on the right.

2 Note down the number of call units and release the EXT METR key.

4.8.2 Reading an Extension's Meter When The Console is Free:

1 Press the EXT METR key and hold it down.

The CALL STATUS display shows three flashing dashes.

2 Dial the desired extension number.

The CALL STATUS display shows the extension number on the left, and the four digit call unit count on the right.

3 Note the call unit count and release the EXT METR key.

4.8.3 Extension Unable to Make Calls Because of Full Extension Meter.

Sometimes an extension may find itself unable to dial outgoing trunk calls directly. The reason is that the extension's meter has become full, whereupon the system automatically prevents the extension making further direct outgoing trunk calls. You can reset the extension's meter to zero, and enable it to make calls once more. Assume that you are talking to the extension:

1 Press and hold the EXT METR key.

The CALL STATUS display shows the extension number and "9998" — indicating that the extension meter is full and the extension can no longer make calls.

- 2 Note the extension meter reading.
- 3 Dial 0 to clear the meter and allow the extension to make calls once more.

The CALL STATUS display shows the extension number and ''0000'' — indicating that the extension meter is reset and the extension can make calls once more.

4 Release the EXT METR key.



23		3	121
----	--	---	-----





If you are not connected to the extension when you wish to reset the extension meter, press and hold the EXT METR key, then dial the extension's number. The CALL STATUS display shows the same information described in step 1 above. Follow steps 2 to 4.

4.8.4 Removing One Extension From Service

You can use the EXT METR key to prevent an extension from making outgoing trunk calls. The method disables the extension by filling its call unit meter with 9's. Because 9999 is more than the total allowed to any extension, the system stops the extension making further calls until the operator resets the meter. To stop an extension making calls:

1 Press the EXT METR key and hold it down, then dial the extension's number.

The CALL STATUS display shows the extension number on the left and the number of call units used on the right.

- 2 Note the number of calls metered.
- 3 Dial 9

The extension's meter fills with 9's and the extension can no longer call outside numbers.

4 Release the EXT METR key.

To restore the extension to unrestricted service:

1 Press the EXT METR key and hold it down, then dial the extension's number.

The CALL STATUS display shows the extension's number on the left and "9999" on the right.

2 Dial 0

The extension's meter resets to "0000" and the extension can now make calls.

- 3 Release the EXT METR key.
- 4 An extension is also automatically restored to service if it makes an external call through you. Its meter reverts to 0000 momentarily then resumes normal counting.

4.8.5 Extension Meter Operator Function codes.

There are two operator function codes which you can use to reset an extension meter, or disable an extension meter and prevent an extension making calls. These codes are given in section 5.









4.8.6 Extension Metering Audit

If you have a printer in your VICEROY and it is switched ON, you can obtain a printed record of the contents of all the extension meters by dialling *****73. The printout will list all the extension numbers in order with a four figure number against each. This represents the contents of the meter, which may be the number of calls, the number of meter pulses or the charge, according to how your VICEROY is programmed.

4.9 Selecting a particular trunk

It is possible to select a particular trunk to dial out on as follows:

- 1 Dial *****19 followed by the equipment number of the selected trunk.
- 2 If the trunk is free, you hear external dial tone (if this is applicable) and the CALL STATUS display shows the equipment number of the trunk as usual. If the trunk is busy, you hear busy tone.
- 3 Dial out as usual, or press the RELEASE key to clear the display and free the console.
- 4 When the call is finished, PRESS RELEASE.

4.10 Removing and restoring access to a trunk

Trunks can be temporarily removed from general service as follows:

- 1 Dial *****41 followed by the equipment number of the trunk to be taken out of service.
- 2 Press the RELEASE key.

The appropriate LINE STATUS display glows steadily.

3 That trunk can no longer be used by the extensions but you can still access it by using *19 as above.

To restore a trunk to service:

- 1 Dial * 51 followed by the equipment number of the trunk that is to be restored to service.
- 2 Press the RELEASE key.

The appropriate LINE STATUS goes dark to show that the trunk is back in service.

Note

If an extension tries to access a trunk that has been taken out of service, they hear busy tone.

4.11 Faults and alarms

VICEROY has an automatic monitoring and fault diagnosis package that continually checks the system for faults. If a fault is found, it is reported at the console, the tone ringer gives the distinctive alarm ring (see 1.3 Tone Ringer) and the ALARM key LED flashes. Pressing the ALARM key stops the ringer and the ALARM lamp remains steadily lit. Holding down the ALARM key causes the system to show information on the type and cause of the alarm in the CALL STATUS display. This information should, in most cases, be noted and reported to the appropriate person, eg the maintenance engineer or communications manager.

An alternative way of stopping the ringer and storing the alarms information is:

- 1 Dial *****13
- 2 Press RELEASE

4.11.1 Other types of Alarms

POWER FAILURES, where the system has switched to the secondary power supply, cause the STATUS key to flash. Press the STATUS key once to display the status of the power supply:

This display shows that the system is running on the primary power supply (a.c. mains).

This display shows that the system is running on the secondary power supply (d.c. battery backup).

After you have examined the status display, the STATUS key LED will remain glowing for as long as the system is running on secondary power.

4.11.2 Testing the console lamps

To test the console lamps and displays, press the STATUS key four times. All of the console lamps should light and the displays should all show the figure 8 and a dot. Faulty lamps and displays are easily detected by this method.

4.12 Call Information Logging

If your VICEROY system is equipped with a Call Information Logging system, the durations of calls made are recorded. In the record the first three groups represent the date, time and duration of the call. The source of the call is in column 4 and the destination in column 6. Other details recorded show the method of call handling and the access codes used.



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5 Operator Function Codes

This section contains a short summary of all the special codes the operator may dial in order to perform various system functions

To adjust tone ringer

- (a) Press BELL OFF twice and hold down
- (b) Dial 1 to 4 to change sound
- (c) Release BELL OFF.

To turn Night Service ON:

- (a) Dial * 11
- (b) Press RELEASE

(also see Night Service key operation)

To turn Night Service OFF:

(a) Dial * 12

(b) Press RELEASE

(also see Night Service key operation)

To view and store Alarms and turn off bell:

- (a) Dial * 13
- (b) Press RELEASE

To set 12-hour clock:

- (a) Dial * 14
- (b) Dial 2-digit hours and 2-digit minutes
- (c) Press RELEASE

To set 24-hour clock:

- (a) Dial * 15
- (b) Dial 2-digit hours and 2-digit minutes
- (c) Press RELEASE

To perform a Lamp test

- (a) Dial * 16
- (b) Press RELEASE

(also see Status key operation)

To turn Background Music ON (where provided):

- (a) Dial * 17
- (b) Press RELEASE
- To turn Background Music OFF (where provided):
 - (a) Dial * 18
 - (b) Press RELEASE
- To Access Trunk by Equipment Number:
 - (a) Dial * 19
 - (b) Dial trunk equipment number
 - (c) Make the call
 - (d) Press RELEASE

To change Night Service assignment

- (a) Dial ***** 21
- (b) Dial the trunk equipment number
- (c) Dial the new 2 or 3 digit extension number
- (d) Press RELEASE

(also see Night Service key operation 1.2.1)

To turn Extension Metering ON (and restore an extension to service)

- (a) Dial * 22
- (b) Dial extension equipment number
- (c) Note meter reading. This will be 9998 if the extension had reached its full quota of calls allowed and 9999 if the extension had been barred deliberately.
- (d) Dial O
- (e) Press RELEASE

To turn Extension Metering OFF (and take an extension out of service)

- (a) Dial * 22
- (b) Dial extension equipment number
- (c) Note meter reading
- (d) Dial 9
- (e) Press RELEASE

To turn Barring – Extension to Extension ON:

- (a) Dial ***** 23
- (b) Press RELEASE

To turn Barring – Extension to Extension OFF:

- (a) Dial * 24
- (b) Press RELEASE
- To cancel all Messages Waiting
 - (a) Dial * 29
 - (b) Press RELEASE

To cancel and clear Alarm

- (a) Dial * 31
- (b) Press RELEASE

To review an Abbreviated Dialling number

- (a) Dial ***** 60
- (b) Dial entry number
- (c) Press * to scroll whole number
- To enter an Abbreviated Dialling number
 - (a) Dial ***** 65
 - (b) Dial entry number
 - (c) Dial access code
 - (d) Dial directory telephone number
 - (e) Press RELEASE

To set an alarm call

- (a) Dial **+** 71
- (b) Dial extension number
- (c) Dial time in 24 hour notation
- (d) Press RELEASE

To cancel an alarm call

- (a) Dial * 71
- (b) Dial extension number
- (c) Dial 9999
- (d) Press RELEASE
- To display alarm call
 - (a) Dial *72
 - (b) Dial extension number
 - (c) Press RELEASE

To set the date on TX-14 FeaturePhones

- (a) Dial * 80
- (b) Dial date
- (c) Press RELEASE

To recover a trunk call from HOLD

- (a) Dial 691
- (b) Dial trunk number
- To print out Extension Metering Audit
 - (a) Dial ***73**
 - (b) Press RELEASE.

6 Limited Programming

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When VICEROY was first installed, the installation engineers programmed it in the configuration selected as best suited to the requirements of the business. However conditions can change and you might like to consider some of the many options that can be selected by simple reprogramming. Discuss these fully with British Telecom staff who will always be glad to explain the very wide range of options available by simple programming from the console, without any changes of equipment.

6.1 Security Codes

The installation engineer has a number, or Security Code, which he uses whenever he needs to examine or change any feature of your VICEROY. This is equivalent to a key with which he is able to unlock the system. After dialling his Security Code he is able, among other things, to reprogram the VICEROY completely. On installation, you will also be given a User Security Code, which you can use similarly to vary the program. You will also be told which parts of the program you are able to change. The User Security Code is always a four figure number, usually 1234 at the beginning. You will always be able to change your User Security Code and we advise you to do so. You should keep the number to yourself so that no one else will be able to tamper with the system. At the same time you should note it down somewhere because if you forget it. you may have to call for help from the maintenance engineer.

6.2 User Limited Programming

The installation engineer can change the parts of the program the user is allowed to alter but the following list shows most of the items normally made available to operators. You will never be able to gain access to the engineer's own Security Code.

- 1 Classes of Service
- 2 Access Barring
- 3 Pickup Groups
- 4 Extension Numbering
- 5 Hunt Groups
- 6 User Security Code

It is unlikely that you will ever want to change more than about one or two of the items listed but even less likely that you will want to change any items not listed.

The item listed are all explained in the Appendix. For each item there is an explanation, followed by a diagrammatic illustration of the procedure and a form on which you should record the changes you make in pencil.

6.3 Entering Programming Mode

All programming is done using the keys STATUS and RELEASE and the numeric keypad, including the symbol * (star). All the displays needed appear in the CALL STATUS display on the console. In order to do any programming you must first enter the Programming Mode as follows:

1 Press the STATUS key three times and hold it down the third time.

The CALL STATUS display will show "243" and some other symbols.

2 Dial your User Security Code number.

The CALL STATUS display will start to flash.

- 3 Release the STATUS key.
- 4 Press #

The CALL STATUS display will show ''?601'' with the number flashing.

You are now in Programming Mode.

To leave Programming Mode at any time:

1 Press RELEASE.

You are now back in normal operating mode.

6.4 Programming Symbols

To illustrate programming, we use certain standard symbols as follows:

SYMBOL

MEANING

Enter the number shown over the symbol on the numeric keypad of the console.



General symbol for the console display.



The shaded position on the symbol shows that the corresponding position in the console display is flashing.



Enter on the numeric keypad the digits shown in the positions marked by the broad arrow.

The first item in the Appendix shows the procedure for getting into Programming Mode in symbolic form.



6.5 Points to watch out for

You cannot do any programming when the board is busy. It is best to carry out programming during silent hours or at least when very few calls may be expected. If a call does come through whilst you are doing programming you will have to get back into Operating Mode by pressing RELEASE and deal with the call. Then you can get back into Programming Mode and restart whatever you had started before.

6.6 Errors

If you make a mistake at any time during programming, dial # . This will return the CALL STATUS display to its previous state and you can start again. At worst you will only have to re-enter the data for one Register.

If VICEROY detects that you have made an error (for instance by attempting to enter an impossible extension number), it will flash an Error Message on the CALL STATUS display. These Error Messages take the form:

803 P620

This indicates Error Code 03 in Programming Command 620.

The Error Codes are all listed for reference at the end of the Appendix.

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Appendix — Limited Programming

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		Intering and Leaving Programming Mode
AC	TION	DISPLAY SHOWS:
		÷
1.	Press STATUS three times and hold it down	243-01
2 .	User Security Code	,
3.	Release STATUS	
4.	#	
	You are no	ow in Programming Mode

5. Press RELEASE

You are now out of Programming Mode

Notes

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Individual extension users can be assigned features selected from three packages, ranging from the Executive or full feature package to the most restricted. The guide below is intended to aid the selection of the appropriate package for each extension or group of extensions.

	Cla	ss of Serv	vice
	1	2	3
Extension Features	Executive	Normal	Restricted
Nicht Comice Diel Acous	V///////		X////////
Night Service Dial Answer			
Call Transfer			
Group Pickup			
Wait-on-Busy			
Callback-on-Busy			
Diversion-on-Busy			
Diversion of All Calls			
Diversion on No Reply			
Three-party Connection			
Abbreviated Dialling			
Last number Redial			
Exchange Line Access			
Call Hold Retrieve			
Diversion External			
Paging			
Executive Intrusion			

ACTION











COS Required



5.



Equipment Number



COS Number

	1 1
	1 1
	1 1
	1 1

		1
		1
 1 1		1
 1		1

(Repeat steps 3, 4 & 5 as often as required)

6. Leave Programming Mode

-		 _	 	
1				

EQUIPMENT NUMBER	COS	EXTENSION NUMBER	NAME
01			
02			
03			
04			
05			
06			
07			
08			
09			
10			
11			
12			
13			
14			
15			
16			

Notes

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VICEROY can prevent extensions from making calls to the Exchange (outside calls). This feature is called Discriminatory Barring. VICEROY allows you to select one of three Barring Restriction Codes for each extension, known as Restriction 1, Restriction 2 and Access Allowed. Ask your installer exactly what each of these codes is programmed to do.

Discriminatory Barring Programming

ACTION

DISPLAY SHOWS:

1. Enter Programming Mode





(Repeat steps 3, 4, 5 and 6 as required)

7. Leave Programming Mode

1			1 1	
1				
	 	G 5.	 	

Discriminatory Barring Form

EQUIPMENT NUMBER	RESTRICTION CODE	EXTENSION NUMBER	NAME
01			
02			
03			
04			
05			
06			
07			
08	 		
09			
10			
11			<u> </u>
12			
13			
14			
15			
16			

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SUPER 10 offers the feature that one extension can answer a call ringing at another extension, by dialling a special Code (see Extension Feature Guide). This feature is called Dial Call Pickup. To use this feature, both extensions must belong to the same Pickup Group.

SUPER 10 supports up to seven independent Pickup Groups. You may wish to put all extensions in one Pickup Group so that any extension can answer a call ringing at any other extension. Alternatively, you may wish to program all seven Pickup Groups so that only extensions within one office can answer that office's calls. The Table below is provided to help you plan your Pickup Groups. Once you have completed the Table, transfer the information on it to the Pickup Group Form.

EXTENSION NUMBER	1	2	3	4	5	6	7
				-		U	'

ACTION

DISPLAY SHOWS:

1. Enter Programming Mode







Equipment Number



0 = No Pickup Group1 to 7 = Pickup Groups 1 to 7

Enter Required Pickup Group









(Repeat steps 3, 4, 5 & 6 as often as required)

7. Leave Programming Mode

EQUIPMENT NUMBER	PICKUP GROUP	EXTENSION NUMBER	NAME
01			
02			
03			
04			·
05			
06			
07			
08			
09			
10			
11			
12			
13			
14			
15			
16			

Notes

When VICEROY is first installed, it is already programmed to use extension numbers in the range 20 to 35. Each extension number is assigned to a particular equipment number. VICEROY uses equipment numbers to identify physical cables leading to individual extensions. You can identify someone's equipment number as follows:

- a) Find their extension number
- b) Perform steps 1 and 2 shown on the next page
- c) Dial "*" until you see the extension number displayed in the third and fourth windows of the console display (see the illustration of the console display in step 3 overleaf).
- d) Note the equipment number displayed in the first and second positions of the console display.
- e) When you have found all the equipment numbers you require, leave programming mode.

If you try to assign an extension number which is already programmed into VICEROY, the system will report an error (EO3 — Numbering Plan Conflict). The correct way to reassign extension numbers is to clear all the extensions which are to be changed first, and then to assign the new extension numbers. This method is described in detail in the programming instructions given overleaf.

If you change any extension numbers, do not forget to change their DES keys.

To change extension numbers







(Repeat steps 6, 7 & 8 for all new extension numbers)

9. Leave Programming Mode



EQUIPMENT NUMBER	EXTENSION NUMBER	NAME
01		
02		
03		
04		
05		
06		
07		
08		
09	,	
10	j	
11		
12		
13		
14		
15		
16		

Notes

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If it is important that certain calls are answered by a particular group of extensions (for example, calls to a Sales Team from potential customers) then you can program the VICEROY to treat that group of extensions as a Hunt Group. Then, if a call is made to a busy member of the Hunt Group, VICEROY hunts for the next free extension within that Group and rings that extension. In this way, frequent calls are shared by members of the Hunt Group, and fewer calls are lost because of busy lines.

There are two types of Hunt Group: Circular and Terminal. In a Circular Hunt Group, VICEROY searches the Group for the first free extension. The search starts at the extension in the Group AFTER the one which answered the previous call. If VICEROY comes to the end of the group, it continues its search from the first member of the Group. In this way calls are distributed evenly throughout the Group.

In a Terminal Hunt Group, VICEROY always starts its search for a free extension at the first member of the group. In this type of Hunt Group the first few extensions in the group receive the majority of the calls, while the last members of the Group are rarely troubled.

If VICEROY comes to the last member of the group without finding a free extension, it returns a busy signal to the caller.

It is also possible to link Hunt Groups so that, if all the members of one Group are busy, VICEROY will start searching for free extensions among the members of the linked Hunt Group.

VICEROY supports up to six Hunt Groups, which may be Circular or Terminal. Each Hunt Group may have up to eight members. By linking Hunt Groups, it is possible to make all VICEROY extensions members of a Hunt Group. However, it is not possible to join Hunt Groups in such a way that the Hunt Groups function in a complete cycle.

Hunt Group Programming

AC	TION		DISPLAY SHOWS:
1.	Enter Programming Mode		
	Command No.(631-636) *		
2.			
	Enter Register No.1		
3.		7	
			Hunt Group Type 0 = circular 1 = terminal
30 I	Hunt Group Type Required		
4.			
			Hunt Group Linking 0 = unlinked
F	lunt Group Linking Required *		1→6 = linked to Hunt Group 1→6
5.			
		-	
6.	Enter Register No. 2		
			Extension Number
E	Extension Number Required *		Number
7.			
(Re	epeat steps 6 and 7 as required)		
8.	Leave Programming Mode		

Hunt Group 1 Programming Form (Command 631)

REGISTER NUMBER	HUNT TYPE	HUNT GROUP LINKING
1		
А	В	С

REGISTER NUMBER	EXTENSION NUMBER		
2			
3		1	
4			
5			
6			
7			
8			
9			
Α	В	С	D

Hunt Group 2 Programming Form (Command 632)

REGISTER NUMBER	HUNT TYPE	HUNT GROUP LINKING
1		
Α	В	С

REGISTER NUMBER	EX	EXTENSION NUMBER	
2			
3			
4			
5			
6			
7			
8			
9			
A	В	С	D

Hunt Group 3 Programming Form (Command 633)

REGISTER NUMBER	HUNT TYPE	HUNT GROUP LINKING
1		
А	В	С

REGISTER NUMBER	EXT	EXTENSION NUMBER	
2			
3			
4			
5			
6			
7			
8			
9			
Α	В	С	D

Hunt Group 4 Programming Form (Command 634)

REGISTER NUMBER	HUNT TYPE	HUNT GROUP LINKING
1		
Α	В	С

REGISTER NUMBER	EX	EXTENSION NUMBER	
2			
3			
4			
5			
6			
7			
8			
9			
А	В	с	D

Hunt Group 5 Programming Form (Command 635)

REGISTER NUMBER	HUNT TYPE	HUNT GROUP LINKING
1		
A	В	С

REGISTER NUMBER	EXT	EXTENSION NUMBER	
2			
3			
4			
5			
6			
7			
8			
9			
Α	В	С	D

Hunt Group 6 Programming Form (Command 636)

REGISTER NUMBER	HUNT TYPE	HUNT GROUP LINKING
1		
А	В	С

REGISTER NUMBER	EXT	EXTENSION NUMBER	
2			
3			
4			
5			
6			
7			
8			
9			
Α	В	С	D

When your system was first installed, the User Security Code was ''1234''. We recommend that you change the code immediately to some number of your own choice. The steps given below show you how to do this.



···	
ERROR CODE	FUNCTION
E01	Illegal Command Number entered
E02	Digit (0 9) dialled while error code was being displayed
E03	Number (access code) already exists (i.e. Numbering Plan Conflict)
E04	Data out of range
E05	Illegal extension number length
E06	Illegal extension number block. When programming extension numbers by block, all the extension numbers in the block must have the same number of digits (i.e. 1,2 or 3 digits)
E07	Too many digits dialled
E08	Illegal range of equipment numbers used in block programming (01-16)
E09	Attempt to access command 975 by the User Access Code instead of System Access Code
E10	Command or data accessed is not available in this features package
E11	Data entered is protected
E12	Data field incomplete — enter all data for field that was flashing
E13	Busy Lamp field numbering conflict
E14	DES Key Assignment Conflict
E15	Error programming loop into an extension hunt table
E16	Duplicate assignment of programmable function key

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E17	Attempt to program non-idle key
E18	Special set prime line programming error
E20	Invalid double-digit command
E21	Invalid control digit
E22	Control digit in wrong position
E23	Attempt to program middle of digit string
E24	Deny digit string conflict
E25	Access barring digit string register overflow
E26	Embedded empty access barring register
E27	Access barring digit area full
E28	Access barring table number out of range
E29	Access barring table prefix too long
E30	Access barring table prefix conflict
E55	Attempt to display the System Security Code when not enabled
E56	Attempt to display User Security Code when not enabled
E57	Attempt to display DISA access code when not enabled
E58	Attempt to enter Command 971 while in timed DES key mode

Τ