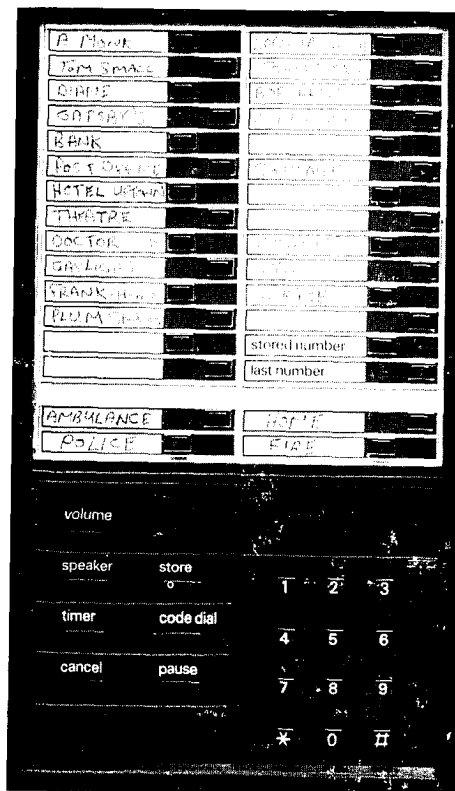




User Instructions

LOGIC* DIALER INDEX* DIALER



VORUG-006

Information subject to change since Northern Telecom reserves the right, without notice, to make changes in equipment design or components as progress in engineering or manufacturing methods may warrant.

LOGIC* DIALER



Troubleshooting

Your Dialer is powered by a 110 Volt power source through a transformer. If the power source is disrupted, stored numbers will not be affected. When power is restored, the unit will be in the same functioning state, with all the previously stored numbers intact, as it was before the power disruption. Press either the Speaker button or the Store button to check if the unit is powered. If the Speaker button light or the Store button light fail to turn on, check the power connections and power source. Once power has been disrupted it will take a few seconds after power is restored before the unit will charge up to an operating state.

If the power is on and the unit fails to operate (allowing

a few seconds time for charging up after any power disruption), try each of the functions of the unit several times, pressing and releasing the Cancel button between each attempt. If the unit still does not operate, unplug the power source for 5 seconds. Then, plug it in, wait a few seconds and try again. If all these attempts fail and you are sure the power connections are intact, call your supplier.

Making an Entry In Your Directory—Use a Pencil

The 31 number index has been designed to allow you to make quick reference listings for each of the Call buttons. The directory consists of a writing area adjacent to individual call buttons.

A separate directory card has been provided on the Privacy lid for the recording of Code Dial locations and telephone numbers.

Since you will want to reuse any particular writing space many times, it is suggested that pencil be used, rather than felt tip or ball point pen, which are not easily erased.

Care of Your Dialer

Although your LOGIC Dialer or INDEX Dialer is by no means delicate, a reasonable amount of care will help ensure trouble-free operation. Special care must be taken not to allow liquid to be spilled on the unit. Your dialer is easily cleaned with a soft, damp cloth.

INDEX* DIALER



Features:

One Button Dialing

LOGIC Dialer and INDEX Dialer have been designed to save you time, effort and frustration when using your most important business machine—the telephone, and offer many benefits to you.

Speed Up Local and Long Distance Calls

Just press one button and your number is automatically dialed—local or long distance. It saves dialing time and puts an end to many telephone frustrations.

31 Recorded Numbers for Instant One Button Selection

A 31 number directory is available for the local & long distance numbers you call most often. Once a number is in the directory, a display lets you see the actual number that is automatically dialed.

18 Recorded Numbers for Abbreviated Code Dialing

Also, with the use of the Code Dial feature, an additional 18 numbers can be stored for automatic dialing.

Flexibility

You have a choice of using the pushbutton dial on your Dialer or the regular dial on your telephone to place any calls.

Four Special Buttons Speed Priority Calls

Four of the call buttons are positioned in a separate grouping for special or emergency numbers.

Last Number Dialed for Instant Recall

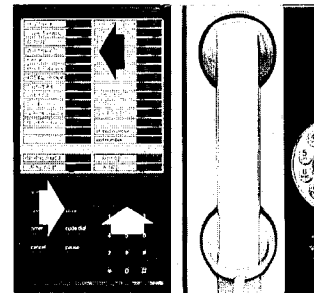
The Last Number dialed, using the pushbutton dial, a directory button, or a code dialed number is automatically recorded for instant recall. If the number was busy or you have need to call back again, pushing this button automatically dials the call again.

Rearranging the Stored Location of Telephone Numbers

You may wish to rearrange the stored location of a telephone number. With the handset on-hook and the speaker off:

1. Press and Release the Call button at the location of the number you wish to move. That number will now be displayed.
2. Press the Store button and keep it depressed. The Store button light will go on.

3. While the Store button is depressed, Press and Release the Call button at the location to which you wish to move the displayed number. (Any number previously entered in that location will be automatically erased). The Store button light will go off.
4. Release the Store button. The number is stored for use at the new location. A new number may be entered at the old location. Using the above procedure, telephone numbers may also be moved out of the Last Number and out of or to the Stored Number locations.



To Stop Dialing a Number and Terminate a Call before it is Completed

If for any reason you find it necessary to stop dialing and prematurely terminate a call while dialing is in progress, it is important to immediately press and release the Cancel button to prevent dialing problems. Pressing the Cancel button for 1 second will cause the Dialer to stop dialing, reset itself and be ready for you to place another call.

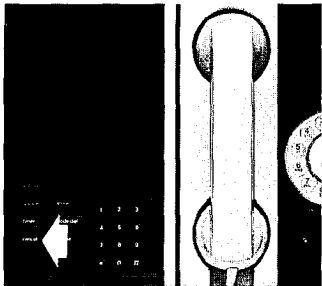
To Stop Timer

If the timer is in the Reminder mode the process may be cancelled by Pressing the Cancel button for 1 second and releasing it.

Note: The Cancel Button cannot be used in place of hanging up the handset after a call.

If you were recording a telephone number into memory while placing a call from the Dialing buttons, Pressing the Cancel button stops the dialing process, but does not delete or erase the number or partial number from memory.

Note: The cancelling button takes the unit out of the record mode and the Store light will go out. To re-record, depress the Store button and redial.



On-Hook Dialing

Calls can be made with the handset of your telephone on-hook. The handset need not be lifted until the other party has answered. Also, this feature allows you to replace your handset on-hook if the other party puts you on hold. You may then wait until you are taken off hold before lifting your telephone handset to proceed with the call.

Group Listening

The speaker in the Dialer which permits on-hook dialing also allows you to let other persons in your vicinity hear both sides of your telephone conversation.

Call Timing*

A single button push lets you time the length of a telephone conversation. When you hang up, the timer stops and the approximate duration of the call is displayed. Also, the timer can be used as a reminder to place a call. Pushing a single button while you are on hook will provide you with a dial tone when approximately three minutes have passed.

*The timer feature indicates the approximate duration of a telephone conversation for the convenience of the user and should not be used as an accurate timer for billing or any other purposes.

- 1 Privacy Lid
- 2 31 Number One Button Dialing
- 3 Loudspeaker
- 4 Volume Control
- 5 Off Hook/Speaker on Switch
- 6 Timer Button
- 7 Cancel Button
- 8 Store Button
- 9 Code Dial Selector
- 10 Dial Pad
- 11 Last Number Redial
- 12 Stored Number
- 13 Code Dial Index
- 14 Pause
- 15 LED Display

To Replace One Recorded Telephone Number With Another

Simply use the procedures described to record the new telephone number in either the 31 number index or the 18 number Code Dial memory. The new number will automatically replace the old one in the memory.

To Delete or Erase a Recorded Number

To delete or erase a number from a particular directory location.

1. Press and Release the Store button. The Store button light will go on.
 2. Press and Release the Call button to be erased. That number will be displayed.
 3. Press and Release the Pause button. The displayed number will disappear.
 4. Press and Release the Store button. The Store button light will go off.
- The telephone number at the location of the Call button used in (2) will now be erased. Note, however, that you do not need to erase a number in any location in order to enter a new number

at that location. A new number entry in any location automatically erases any previous entry in that location.

To Change a Number While Recording

While in the process of recording a telephone number into memory, you may need to stop and start over again. This would be the case if you were interrupted, made a mistake dialing, realized you had an incorrect number or otherwise decided not to proceed. In this case:

1. Press and Release, again, the Call Button (or the Code Dial buttons if in that mode) used earlier in the recording procedure.
2. Redial the desired telephone number.

the Dialer. (See note on Pauses). The full telephone number will be displayed.

4. Press and Release the Store button. The Store button light will go off. If you were in the on-hook or off-hook *dialing mode*, the entered number would be dialed out.

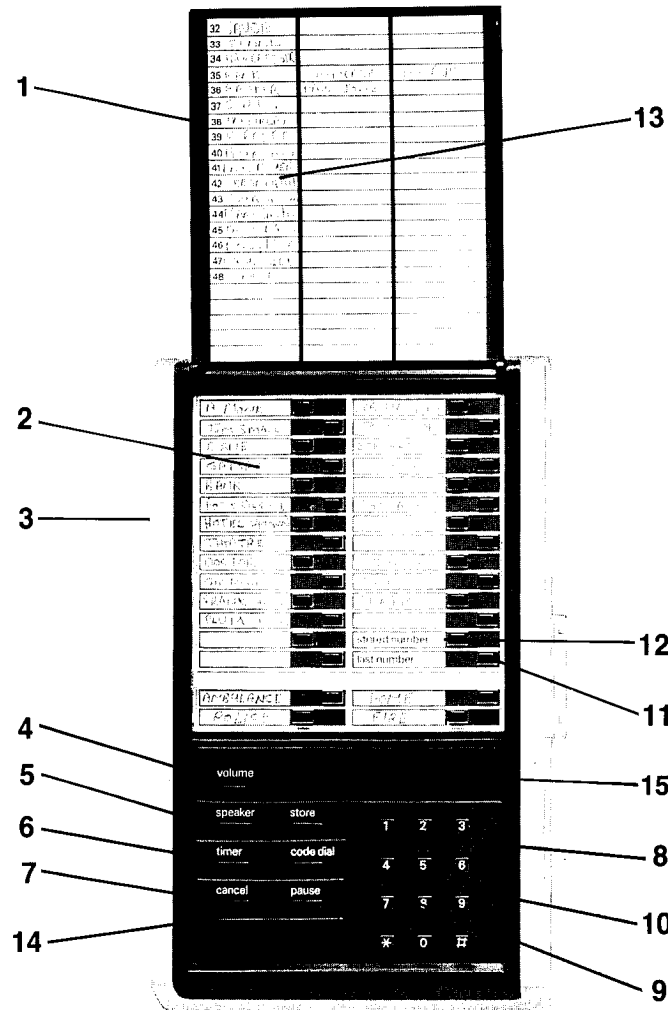
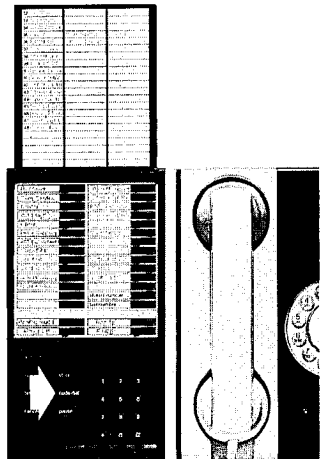
To automatically dial that number later, go into the on-hook or off-hook *dialing mode* and

1. Press and Release the Code Dial button and dial

the 2 digit code used in storing the number. The full number will be displayed and automatic dialing will proceed.

B) *After Having Dialed a Call*
After having dialed a call on the dialing buttons of the Dialer you may wish to store the number in the Code Dial memory. Before hanging up and while the number is still displayed.

1. Press the Store button and hold it down. The Store button light will go on.
2. With the Store button still held down, Press and Release the Code Dial button and dial a 2 digit code (between 32 and 49) using the dialing buttons of the Dialer. This will identify the full number in later dialing.
3. Release the Store button.



The Normal Use of your Telephone

The telephone, to which your Dialer is connected can be used in the normal manner without restriction, just as if the Dialer were not attached. You may place a call from your dialer by either lifting the telephone handset or, if you have a LOGIC Handsfree or COMPANION Handsfree unit, by pressing the handsfree "On" key momentarily.

Using the Pushbutton Dial on the LOGIC or INDEX Dialer

If your telephone has a rotary dial, you may prefer the convenience of dialing any or all of your calls by using the pushbuttons on the Dialer in the following manner:

1. Lift the handset of your telephone
2. Use the dialing push-buttons on your LOGIC or INDEX Dialer to place the call.

Further Recording and Dialing Functions:

Storing a Number for Later Automatic Dialing*

You may wish to store a number for a later redial without putting it into your permanent call directory; any number, (up to 18 digits) can be placed in the stored number position. After you have dialed the number and are still in either the on-hook or off-hook dialing mode;

1. Press and hold the Store button. The Store button light will go on.
2. Press the Stored Number button in the call directory (while holding the Store button depressed). The store button light will go off.
3. Release the store button.

To redial that number later, use the Stored Number

* This feature is not available when dialer is used with an SM-1 telephone set.

button of the call directory in the one button calling mode.

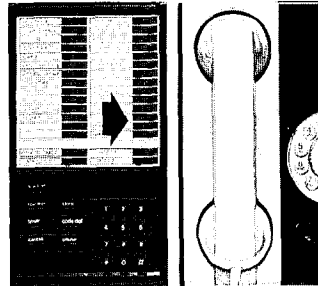
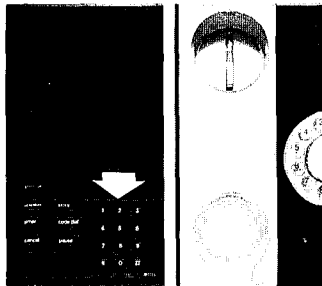
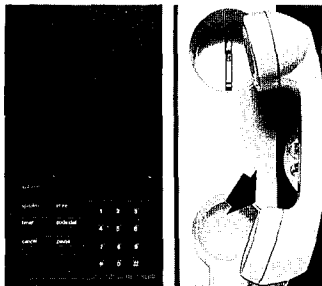
Expanding Automatic Dialing Beyond the 31 Item Directory

Code Dial

An additional 18 numbers may be stored using the Code Dial feature in the following manner:

A) *Without placing a call or just before dialing a call*

1. Leaving the telephone handset on-hook and the Speaker button off, (or, if you wish to place a call, go into the on-hook or off-hook dialing mode) Press and Release the Store button. The Store button light will go on.
2. Press and Release the Code Dial button and Dial a 2 digit code number on the Dialing Push Buttons of the Dialer (only the numbers between 32 and 49 may be used). That code number will be used in later automatic dialing of the full telephone number. (Any number previously stored under that 2 digit code number will now be displayed.)
3. Enter the full telephone number to be stored using the dialing push buttons of



Timing

Call Reminder

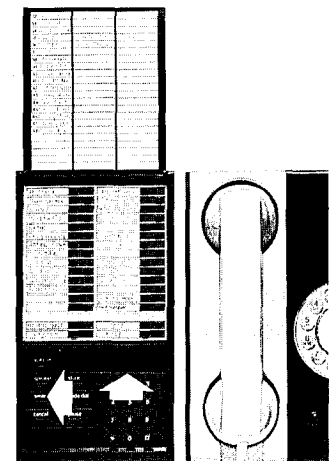
In many instances the number dialed will be busy or will go unanswered. Your Dialer will remind you to replace the call.

1. With the phone on hook and the speaker off, Press and Release the Timer button.
2. In about three minutes the Speaker button light and the speaker will turn on. A dial tone will be heard and you may proceed to place a call. If a call is not placed, the speaker and speaker button light will go off within about a minute.

Call Timer*

You may find it convenient at times to keep track of the length of your calls. To do this:

1. Press and Release the Timer button once the party has answered. The display will show time, as it elapses, in 1 second increments.
2. When you hang up, the time display will stop advancing and will show the approximate length of the call. The display will turn off in a few seconds.



*Note: The timer feature indicates the approximate duration of a telephone conversation for the convenience of the user and should not be used as an accurate timer for billing or any other purposes.

To Operate:

On-Hook Dialing

With your telephone handset on-hook you may make calls in the following manner:

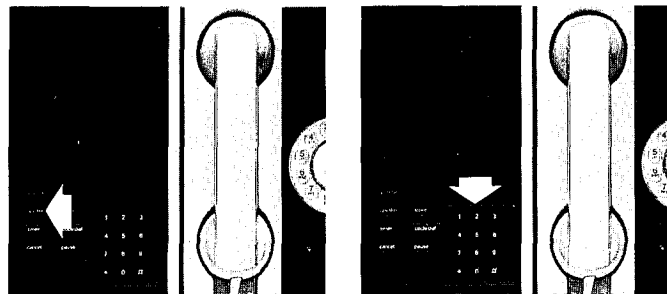
1. Press and release the speaker button on the Dialer. The speaker light will go on and you will hear the usual dial tone through the speaker.
2. Dial your call on the dialing pushbuttons of the Dialer.

The Dialer speaker lets you hear the call being processed as it is dialed and as the connection is established just as you would hear through the earpiece of your telephone handset.

3. When the other party has answered, pick up the handset of your telephone and proceed with the

conversation. The speaker and speaker light will go off. If a call placed in this way is not answered within 1 minute, the speaker and speaker light will go off. The call attempt will stop just as though you had hung up the handset in an ordinary call.

4. If the dialed party does not answer and you wish to abandon the call attempt before 1 minute press and release the speaker button. The speaker and speaker button light will go off.



Listening on Hold

If the called party places you on hold, you may want to put the handset down until the call can proceed.

1. Press the speaker button and hold it down. The speaker and speaker button light will go on.
2. Hang up the handset.
3. Release the speaker button.

Through the speaker, you will hear when you are taken off hold.

4. When you are taken off hold, pick up the handset and proceed with the call. The speaker and speaker button light will go off automatically when you go off hook.

Group Listening

If you wish others in the vicinity to hear both sides of your conversation while your call is in progress:

1. Press and release the speaker button. The speaker and speaker button light will go on and both sides of the conversation will heard through the Dialer speaker. The volume of the Dialer speaker is controlled by the "volume" thumbwheel.

To stop group listening:

2. Press and release the speaker button. The speaker and speaker button light will go off.

If you have not stopped group listening during the call, the speaker and speaker button light will go off when you hang up.

the handset is still on-hook, the call attempt will automatically be terminated. The speaker and Speaker button light will go off.

One Button Dialing of the Last Number Dialed

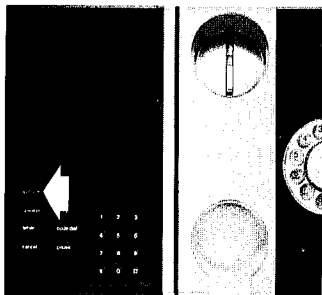
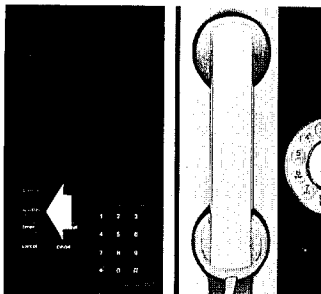
Even though not purposely recorded by you, the last telephone number which you dial, using the pushbutton dial, a directory button, or a code dialed number is automatically recorded for you in the Last Number dialed location. In order to recall the number:

1. Lift the handset (for off-hook dialing) or Press and Release the Speaker button (for on hook dialing).
2. Press and Release the Last Number dialed button in the call directory. The last number dialed on the dialer will be displayed and automatically dialed.

In on-hook dialing, the call attempt will be terminated within 1 minute if the handset has not been lifted.

Only the most recent number dialed on the dialer is recorded in the Last Number location. In anticipation of redialing calls from the Last Number location do not forget to press and release the Pause button after dialing the access code and before dialing the remainder of the telephone number. (See notes on Pause)

Note: Telephone numbers dialed on your telephone set are not recorded into memory. To take advantage of the Last Number feature of the Dialer, you must dial the telephone number on the Dialer dialing buttons.



After having Dialed a Call

After you have dialed a call using the dialing buttons of the Dialer, the called number will be seen in the display. If while proceeding with the call you wish to store the number, the following sequence should be followed:

1. Press the Store button and hold it down. Its light will go on.
2. While the Store button is still held down, Press and Release the Call Directory button at the location you want the called number stored. The Store button light will go off.
3. Release the Store button to complete storing the new number in memory.

One Button Dialing From Your LOGIC or INDEX Dialer

a) With the Handset Off-Hook

1. Lift the handset on your telephone.
2. Press and Release the Call Directory button for the number you wish to call. The number will be displayed and the call will be dialed automatically.

b) With the Handset On-Hook

1. Press and Release the Speaker button. The Speaker button light will go on and the dial tone will be heard through the speaker.
 2. Press and Release the Call Directory button for the number you wish to call. The number will be displayed and the call will be dialed automatically. Processing of the call will be heard through the speaker.
 3. When the called party has answered their telephone, pick up the handset immediately and proceed with the call. The speaker and Speaker button light will go off.
- If the called party has not answered within 1 minute &

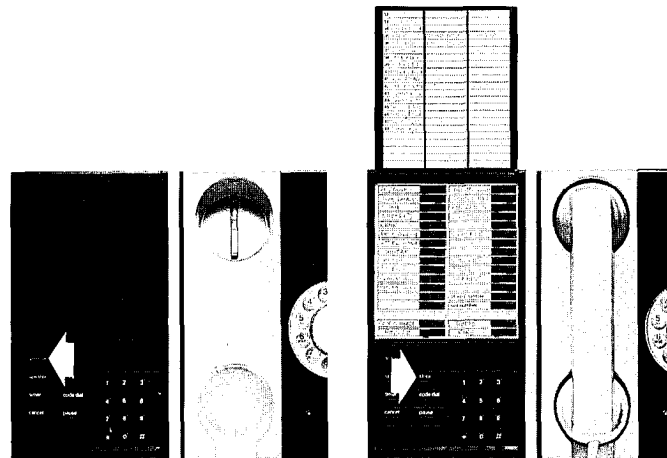
Note on Speaker

In all cases when the speaker is on and the handset is not on hook, be careful to keep the mouthpiece of the handset away from the speaker in the Dialer. Otherwise a howling or whistling noise may result. Turning down the Volume Control on the Dialer will also help reduce and eliminate such noises.

Recording a Telephone Number into the Directory Memory in Preparation for One Button Dialing

You may record numbers into memory without actually placing any calls, by simply leaving the telephone handset on-hook and completing the following steps:

1. Press and release the Store button. The Store button light will go on.
2. Select a directory location and Press and Release the Call button for that location. (If a number had previously been stored in that location,



it will appear in the display. Entering a new number in that location will erase the previous number).

3. Dial the number to be stored in that location on the dialing pushbuttons of the Dialer. That number will appear on the display.

4. Press and Release the Store button. The Store button light will go off. The new number is now stored in memory. If you are off hook, the entered number will be dialed out.

If you wish to store several numbers in one session, omit step (4) and repeat steps (2) and (3) for each number, choosing different directory locations for each number. Complete step (4) when all the numbers have been entered.

You may Record while Placing a Call

You may find it more convenient, at times, to record a telephone number into memory while actually making the call—eliminating some duplication of effort. To do this:

1. Lift the telephone handset (or for on-hook dialing, press the Speaker button) and wait for dial tone.

2. Then follow steps (1) through (4). In addition to placing the call, you have also recorded that number for future use.

Notes on the Use of the Pause Button

In some cases, placing a call requires the use of an access code. The balance of a telephone number cannot be dialed unless a second dial tone or other audible signal has been received.

For example, if you are connected to a dial switchboard, you must dial "9" and wait for a second dial tone in order to get an outside line. The pause necessary after the access code can be programmed into the memory by use of the Pause button.

When dialing or recording a number that requires an access code use the following sequence in dialing:

1. Dial the access code.

2. Press and Release the Pause button. This will program a 3 second delay at that point in the sequence. In rare cases where more than 3 seconds delay is required, more than one Push and Release of the Pause button can be used. Each Push and Release adds 3 seconds of delay.

3. Dial the remainder of the telephone number. Any number of access codes, (maximum 20 digits) commands, may be stored in any call directory location, and up to 18 digits in the stored number location. Each single Push and Release of the Pause button counts as a single digit. It is not necessary to program delays in normal long distance numbers. The long distance access number and area code do not need to be treated as access codes.

