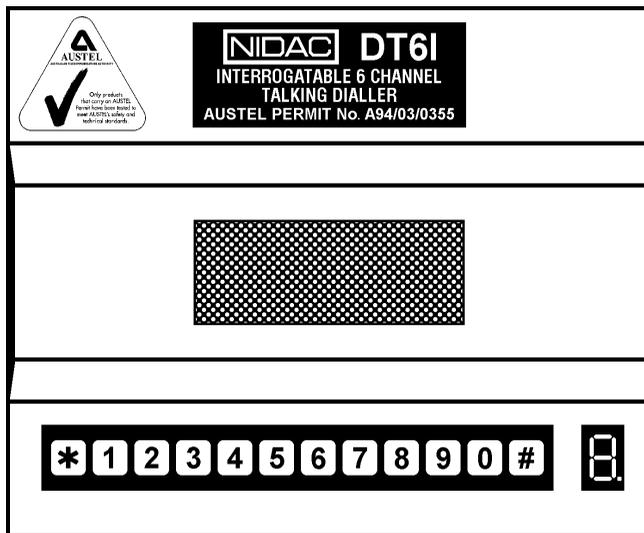


# DT6I/S

## INTERROGATABLE 6 CHANNEL TALKING DIALLER.

### INSTALLATION MANUAL. 1st EDITION.



# NIDAC DT6I/S - INTERROGATABLE 6 CHANNEL TALKING DIALLER

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## **PRODUCT FEATURES**

- AUSTEL permitted equipment. AUSTEL permit number A94/03/0355.
- 5 external alarm inputs.
- Internal battery low alarm with optional reporting.
- Each input is selectable as being one of: fire, burglary, duress, power failure, medical alert, test, dead man's timer (inactivity alarm) or one of the three user designated alarms.
- Pre-recorded alarm messages for all the above input conditions plus battery low.
- User recordable name/address voice message.
- Three user recordable alarm messages.
- Programmable delay of 1 to 90 minutes for reporting power failure.
- Non volatile memory stores programmed data and voice messages for 10 years without power.
- 6 user programmable phone numbers.
- 9 user programmable phone number groupings.
- Relay control output.
- Ability to ring into to the dialler to change phone numbers, phone number groups and read the dialler's status.
- Up to 6 dialling attempts at communicating an alarm condition.
- Remote shutdown of dialler via user programmable shutdown code (1 to 7 digits) on DTMF phones.
- Fully programmable through the on board keypad.
- Programmed information can be verified by replaying it on the 7-segment display (numeric data) or through the on board speaker (recorded voice).
- Programmable polarity on all input.
- Programmable selection of "24 hour" or "Away/On" mode on individual alarm inputs.
- Dialler Key Switch input to select between "24 hour" and "Away/On" mode.

## DIALLER OPERATION

### POWER UP

When power is applied to the DT6I/S it will perform a self test, then flash the digit 7 five times on the 7 segment display. While the DT6I/S is performing the self test but before the 7 is displayed, the 7 segment display may show anything, this is normal.

### ACTIVATION

The DT6I/S can be triggered either internally or externally. An external trigger can be an alarm on any one of the alarm inputs. There are two internal triggers, a battery low alarm and a dead man's timer.

### CALL SEQUENCE

Once the DT6I/S has been triggered, it will seize the phone line and hold it for 3 seconds to clear any calls that may be in progress. It then waits a further 3 seconds to get a line out before dialling a number. After dialling a phone number the DT6I/S starts by playing a list of the alarms that have been triggered followed by the user name/address message. The DT6I/S repeats the messages for the programmed time and only finishes the call at the end of message cycle or until cancelled.

After receiving a trigger the DT6I/S will attempt **up to 6** diallings to communicate the alarm information (the maximum number of dial attempts can be set from 1 to 6, refer to the *DIALLING VARIABLES* section on page 11). Each programmed phone number in the programmed phone number group will be called until either the dialler has been shut down, or the maximum number of dial attempts have been made. If the phone number group used contains less than the maximum dial attempts, the DT6I/S will redial the first number in the group followed by the second and so on, until the maximum number of dial attempts have been made.

During the dialling of an alarm the DOT on the display will flash at a rate of twice per second. If after dialling the maximum number of attempts the dialler has not been shut down the DOT will remain on until the K/S (keyswitch) input state is changed (dialler is changed between "Away/On" and "24 hour" mode) or the DT6I/S makes a successful call when given another trigger. When the dialler is shutdown a "WARBLE" sound indicating the shutdown is heard over the phone line and the display dot will go out.

Should the DT6I/S be unable to attempt any calls because it has not been programmed with enough information, it will display error number 5 (no phone numbers in memory) on the seven segment display.

### CANCELLING THE DIALLER

The dialler can be cancelled by one of three methods. These are, remote shutdown over the phone line using the programmed shut down code, local cancel by the key switch or by removing the alarm input (this last method will only work if the alarm input has been selected to operate in the slaved mode). Once the dialler has been cancelled it will not make any more calls until it receives another alarm trigger.

The remote shutdown of the dialler can be performed by anyone that the dialler calls to report an alarm. To cancel the dialler simply enter the programmed shut down code (default = digit number 3) on a DTMF (tone) phone while the alarm message is playing.

**Note** shutting down of the dialler does not shut down any local alarm, even if this is the trigger source.

**Note** the dialler should be tested on a regular basis to ensure that it is operating correctly.

### INTERNALLY GENERATED MESSAGES

There are two types of internally generated messages, a battery low alarm and a dead man's timer. Each of these messages and the instance in which they are generated is explained below.

#### Battery Low

A battery low alarm will be sent when the input voltage to the DT6I/S falls below approximately 10.25 Volts. This feature can be disabled if desired, refer to the *POWER AND MODE VARIABLES* section position 1 on page 12.

#### Dead Man's Timer

A dead man's timer alarm will be sent when the time between triggers on the DMT input is greater than that programmed in by the user. The time between triggers can be programmed to be between 1 hour and 199 hours.

**SPECIFICATIONS**

- CONNECTIONS - 8 screw terminals + 1 control pin.
- TRIGGER INPUTS - 5 user definable input channels.
- KEY SWITCH INPUT - User definable polarity. Application of the correct polarity will place the dialler into "Away/On" mode.
- OUTPUT - CMOS logic output to drive a NIDAC CR2 transistor driven relay board.
- POWER SUPPLY - 11.5 to 14V DC @ 150mA (max).
- TELECOM LINE - Single RJ11 socket (Western Jack). Supplied with lead to suit a Telecom Mode 3 phone socket or TH3 adaptor.

**COMMUNICATION**

- DIALLING FORMAT - Selectable as Decadic (pulse) or DTMF (tone).
- USER MESSAGE - 11 seconds for name and/or address.
- ALARM MESSAGES - 7 pre-recorded messages for Burglary, Power Failure, Duress (Emergency), Fire, Test, Medical Alarm, Dead Man's Timer (Inactivity Alarm) and three (3) user programmable messages of 5 seconds each.

**MECHANICAL**

- DIMENSIONS - 165mm width x 135mm depth x 45mm height.
- WEIGHT - 330 grams.

## INSTALLATION

All connections to the DT6I/S from an external alarm source are made via the two rows of 4 way screw terminal connectors found on the circuit board. To gain access to the circuit board, the outer cover will have to be removed. To do this, unscrew the two outer screws on the under side of the DT6I/S (**do not** unscrew the centre screw) the cover will now lift off.

To mount the DT6I/S the TEB dialler mounting bracket is available.

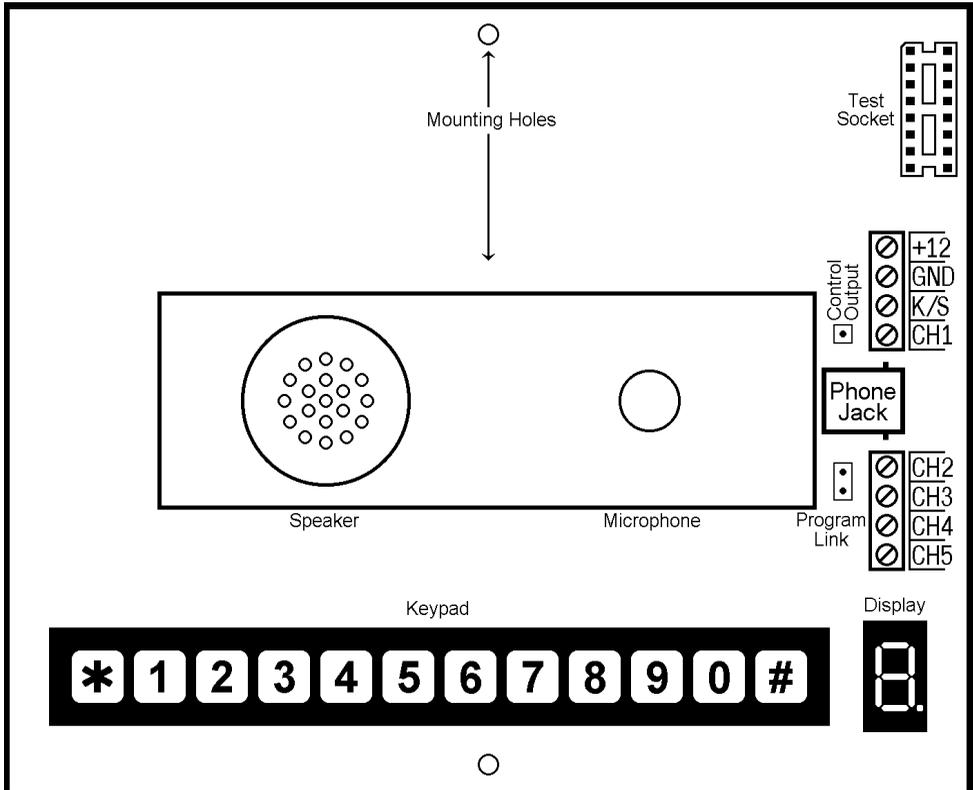


Figure 1: The DT6I/S with its outer cover removed.

There are 8 terminals on the DT6I/S board, of these 2 are power inputs, 5 are channel (alarm) inputs and 1 is the key switch input. The use of each of these terminals is described below.

- +12**            The positive input for the power supply (11.5 to 14V D.C.).
- GND**            The negative (ground) input for the power supply.
- K/S**            The key switch input. This input is driven in the same manner as the alarm inputs below. When active, the key switch input places the dialler in the “Away/On” mode [default requires +5 to 15V DC on K/S for “Away/On” mode], when the keyswitch input is not active the dialler is in the “24 hour” mode.
- CH1 - CH5**    These are the inputs for alarm channels 1 to 5. Each input is held low via an internal pull down resistor to GND. An input can be put into its alarm state by either applying voltage to it or removing voltage from it, depending upon the configuration of the input’s polarity (for further information on input polarity refer to the *INPUT POLARITY AND MODE OF OPERATION* section on page 15). To trigger an input from a source that only drives low (eg. an Open Collector output or a normally open switch to GND) the input will have to be pulled up to the positive voltage rail via a 10K resistor as shown in Figure 3 below [default requires +5 to 15V DC to trigger].
- Note** that inputs programmed for “Away/On” mode only will not trigger the dialler unless it is in the “Away/On” mode [default requires +5 to 15V DC on K/S for “Away/On” mode].

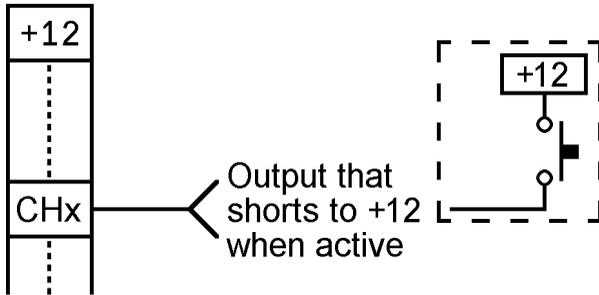


Figure 2: Connecting an output that drives high to the DT6I/S.

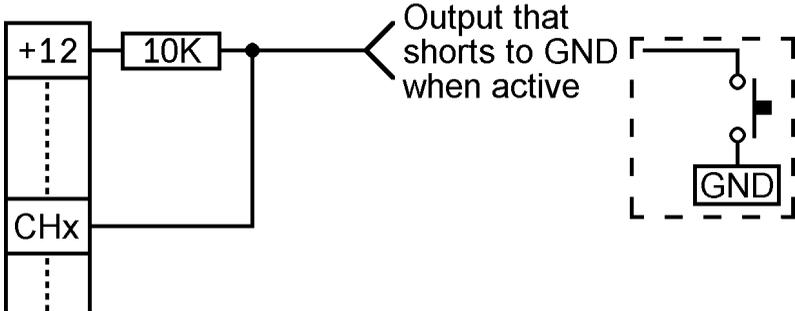


Figure 3: Connecting an output that drives low to the DT6I/S.

## **PROGRAMMING**

All programming of the DT6I/S is done via the keyboard on the unit with confirmation of programmed data being given on the seven segment display as it is entered. The internal speaker will give a short beep to indicate when a key has been pressed.

All user voice messages are recorded by speaking into the microphone located on the front of the unit. Messages may be replayed through the on board speaker.

Programming of the DT6I/S is accomplished by first pressing the [#] key, next is a one or two digit entry identifying the memory number, followed by a **code** of variable length depending on the memory. Termination of programming is accomplished by pressing the [#] key, **or** by entering the **maximum** number of digits for the memory number being programmed.

All key presses **must** be done **within 10 seconds of each other** or all information so far programmed into the currently open memory will be lost. When this occurs the speaker sounds a “BLARP” and an error 2 is displayed (refer to the *ERROR INDICATION* section on page 22).

An **error** condition is identified by the speaker sounding a “BLARP” and the display flashing “E” followed by the error number five times. The error number following the “E” refers to the error type and is useful in ascertaining why the error occurred.

Programming can only be done when the dialler is in the “24 hour” mode and memories **71** to **93** require the program link to be on.

The format for programming is

[#] <memory><code> [#] for memories 00 to 89.

**or**

[#] <memory><voice input> [#] for memories 90 to 93.

Where <memory> is any of the following single or two digit numbers:

1	First phone number	(16 digits max)
2	Second phone number	(16 digits max)
3	Third phone number	(16 digits max)
4	Fourth phone number	(16 digits max)
5	Fifth phone number	(16 digits max)
6	Sixth phone number	(16 digits max)
7 1	Dialling variables	(3 digits)
7 2	Power and mode variables	(4 digits)
8 0	Shutdown code	(7 digits max)
8 1	Input to alarm message allocation	(5 digits)
8 2	Input polarity and mode of operation	(5 digits)
8 3	Dead man's timer	(3 digits, max value = 199)
8 8	Ring count before answering	(2 digits, max value = 20)
8 9	Program access code	(7 digits max)
9 0	User name/address message	(voice data, 11 seconds)
9 1	First user alarm message	(voice data, 5 seconds)
9 2	Second user alarm message	(voice data, 5 seconds)
9 3	Third user alarm message	(voice data, 5 seconds)
0 0	Phone number group to use	(1 digit max)
0 1	Phone number group 1	(6 digits max)
0 2	Phone number group 2	(6 digits max)
0 3	Phone number group 3	(6 digits max)
0 4	Phone number group 4	(6 digits max)
0 5	Phone number group 5	(6 digits max)
0 6	Phone number group 6	(6 digits max)
0 7	Phone number group 7	(6 digits max)
0 8	Phone number group 8	(6 digits max)
0 9	Phone number group 9	(6 digits max)
#	Programmable Output	(no digits)

When accessing any of the above <memories> for programming an “R” is displayed to show that you have **ACCESS** to the memory location. If you are accessing a memory location requiring two (2) numbers then an “n” will be displayed after the first number is entered to indicate that another number is required. When all of the code digits are entered or a second [#] is pressed then a “WARBLE” sound is heard and a “L” will be displayed for 1 second indicating that the memory is now **CLOSED**.

<code> validity is dependent upon the <memory> being accessed and is described in detail on the following pages.

### **PHONE NUMBERS**

[Requires DT6I/S to be in “24 hour” mode]

<memories 1-6> The code is the actual **TELEPHONE NUMBER** being entered and may be up to 16 digits in length including pauses, which are entered with the [\*]n key combination, where the n refers to a key from [0] to [9] indicating the length of the pause in seconds. For special purposes the DTMF tones for the # and \* may be entered by using the [\*#] and [\*\*] key combinations respectively. The memory is closed by either pressing the [#] key **or** by entering the maximum 16 digits for the telephone number. To erase a phone number refer to the *BLANK MEMORY INDICATION* section on page 21.

**Example:** [#][1][3][4][5][6][7][8][9][#]

programs 3456789 as phone number 1.

**Example:** [#][5][0][\*][3][5][5][5][4][9][3][8][#]

programs a 0, a 3 second pause and 5554938 as phone number 5.

[default is **no** phone numbers programmed]

**DIALLING VARIABLES**

[Requires program link ON and DT6I/S to be in “24 hour” mode]

<memory 71> This code is used to set dialling variables which are defined by their position within the code.

**Position 1 Dial Mode**

- 0 = Decadic (Pulse) dialling [default].
- 1 = DTMF (Tone) dialling.

**Position 2 Message play time**

- 0 = 30 seconds.
- 1 = 45 seconds.
- 2 = 60 seconds.
- 3 = 90 seconds [default].
- 4 = 120 seconds.
- 5 = 150 seconds.
- 6 = 180 seconds.

**Position 3 Maximum Dialling Attempts**

- 1-6 = Maximum number of dialling attempts to be made (independent of the number of phone numbers programmed) [default = 6].

**Example:** # 7 1 1 4 3

- DTMF dialling.
- seconds message play time.
- attempt a maximum of 3 calls for each trigger.

**POWER AND MODE VARIABLES**

[Requires program link ON and DT6I/S to be in “24 hour” mode]

<memory 72> This code is used to set power and mode variables which are defined by their position.

**Note** that if the Key Switch polarity is changed then further programming will be locked out until the correct voltage is applied to the Key Switch input to put the DT6I/S into the “24 hour” mode.

**Position 1 Battery Low reporting**

- 0 = **Do not** report a battery low condition.
- 1 = **Do** report a battery low condition [default].

**Position 2 Power Fail Timer**

- 0 = 1 minute.
- 1-9 = Represents the number of 10 minute intervals the power must remain off before the condition is reported. **Note** that this will only have an effect if one of the inputs is selected as a power failure input in the *INPUT TO ALARM MESSAGE ALLOCATION* section on page 14 [default = 6, (60 minutes)].

**Position 3 Key Switch Polarity**

- 0 = Input to ground sets “Away/On” mode, input between +5 to 15V DC sets “24 hour” mode.
- 1 = Input between +5 to 15V DC sets “Away/On” mode, input to ground sets “24 hour” mode [default].

**Position 4 Slave/Latching Mode**

- 0 = **Slave mode.** In slave mode the dialler will dial out when an input is triggered and stop dialling as soon as the trigger is removed.
- 1 = **Latching mode.** In latching mode, only a momentary trigger is required to start the dialler (to stop the dial sequence refer to the *CANCELLING THE DIALLER* section on page 3) [default].

**Example:** #720310

- Do not report battery low condition.
- Report power fail when power has been off for 30 minutes.
- +5 to 15V DC on K/S input places dialler in “Away/On” mode.
- Slaved mode inputs.

**SHUT DOWN CODE** [Requires program link ON and DT6I/S to be in “24 hour” mode]

<memory 80> The shut down code may be between 1 and 7 digits in length and is used to acknowledge an alarm call. When the dialler has called a person, they can shut the dialler down by entering this code on a standard DTMF (tone) phone while the alarm message is playing, the dialler will acknowledge the code with a warble sound, hang up and not make any more calls. If this memory is blank, the dialler cannot be shut down remotely and it will make the maximum number of calls (refer to the *DIALLING VARIABLES* section on page 11) unless cancelled locally.

**Example:** #802478#

stores 2478 as the shut down code.

**Note** shutting down the dialler will not cancel any local alarms.

[default = 3 (digit number 3)]

**INPUT TO ALARM MESSAGE ALLOCATION**

[Requires program link ON and DT6I/S to be in “24 hour” mode]

<memory 81> Each input can be allocated to a specific alarm type. The number allocated to each input (represented by position) refers to which type of alarm input it is. Each input type is represented by the numbers given below, the actual voice message is given in brackets beside the alarm type.

- 1 Test (“Test call”)
- 2 Power Fail (“Power failure”)
- 3 Duress (“Emergency”)
- 4 Fire (“Fire alarm”)
- 5 Burglary (“Burglary”)
- 6 Medical Alarm (“Medical alarm”)
- 7 First user alarm message (5 seconds of user recorded voice)
- 8 Second user alarm message (5 seconds of user recorded voice)
- 9 Third user alarm message (5 seconds of user recorded voice)
- 0 Dead Man’s Timer (“Inactivity Alarm”)

**Example:** # 8 1 5 3 4 1 2

Sets input 1 as Burglary, 2 as Duress, 3 as Fire, 4 as Test, 5 as Power Failure.

**Note** only one (1) of the inputs may be allocated as a power failure input and only one of the inputs can be defined as a dead man’s timer.

[default is 1 2 3 4 5]

**INPUT POLARITY AND MODE OF OPERATION**[Requires program link ON and DT6I/S to be in “24 hour” mode]

<memory 82> Each position within this code refers to the operational mode and input polarity for an “Alarm condition” for the five inputs on the DT6I/S. The numbers used in each position represent the following settings for the inputs.

- 0 Input is active only in “Away/On” mode, GROUND for Alarm.
- 1 Input is active only in “Away/On” mode, +5 to 15V DC for Alarm.
- 2 Input is active 24 hours, GROUND for Alarm.
- 3 Input is active 24 hours, +5 to 15V DC for Alarm.

**Example:** # 8 2 1 3 3 2 2

In this example input 1 operates only in the “Away/On” mode and inputs 2 to 5 operate 24 hours (in both the “Away/On” and “24 hour” modes). Inputs 1 to 3 go into alarm condition when a voltage is applied to the input and inputs 4 and 5 go into alarm when the voltage on the input is removed.

[default is 3 3 3 3 1]

**DEAD MAN’S TIMER**[Requires program link ON and DT6I/S to be in “24 hour” mode]

<memory 83> This memory need only be set if one of the inputs has been allocated as the Dead Man’s Timer (DMT). The value set here represents the number of hours that the dialler will wait after the last triggering of the DMT input before it generates an alarm call for that input. The maximum value for this memory is 199 hours, the minimum value is 1 hour.

The Dead Man’s Timer (DMT) is a feature that will be most useful with patrolled or medical type monitoring situations.

**Example:** # 8 3 4 9 #

Sets the DMT to allow 49 hours between successive triggers of the DMT input before generating an alarm call for that input.

If input 1 is assigned to the DMT in the Input to Alarm Message Allocation memory 81 above, then input 1 must be triggered within 49 hours of the dialler being turned on and then triggered again within 49 hours of that trigger and so on. If one of these triggers is not received by the DT6I/S it will generate an alarm call for input 1. The next time input 1 is triggered it will reset the timer to give another 49 hours from that trigger.

The DMT can therefore be used to make sure that someone is there at least once every 49 hours to trigger the DMT input.

If desired the DMT input can also be tied to the dial test input so that a test call is made at the same time that the DMT is reset.

**Note** that leading zeroes (0) need not be entered but the memory must be closed with a **#** if less than 3 digits are entered.

[default = 25]

### **RING COUNT BEFORE ANSWERING**

[Requires program link ON and DT6I/S to be in “24 hour” mode]

<memory 88> The value set for this memory determines the number of ring tones the DT6I/S must detect before it will answer the phone. The purpose for the dialler answering the phone is described in the *REMOTE DIALLER ACCESS* section on page 20. The value set for this memory can be from 0 to 20. Setting this value to 0 puts the dialler into the “Second Call Answer” mode described below.

“**Second Call Answer**” mode is a means of ringing into the dialler when it is connected to the same phone line as a fax or answering machine. The way this mode works is as follows: the dialler detects any incoming ring tone, once it ceases the DT6I/S goes into its “Second Call Answer” mode for a period of one (1) minute. The DT6I/S will then immediately answer the next incoming call during this period.

**Example:** **#** **8** **8** **1** **5**

Sets the DT6I/S to answer after 15 rings.

[default = 5]

**PROGRAM ACCESS CODE**

[Requires program link ON and DT6I/S to be in “24 hour” mode]

<memory 89> This memory stores a 3 to 7 digit code used to access the programming and interrogation functions of the dialler over the phone line by ringing into it. For more information on ringing into the dialler refer to the *REMOTE DIALLER ACCESS* section on page 20.

**Example:** # 8 9 1 2 3 4 #

Sets the program access code to 1234.

**Note:** If this memory is left blank the DT6I/S will not answer incoming calls.

[default = no code programmed]

**USER NAME/ADDRESS MESSAGE**

[Requires program link ON and DT6I/S to be in “24 hour” mode]

<memory 90> The data stored for this memory is the voice data for the dialler’s location. This will usually be an address and/or name.

To record the name/address message press # 9 0 then speak into the microphone at a distance of about 15cm (6 inches). Press # at the end of the message to stop recording. While the DT6/S is recording a moving pattern is displayed in the lower half of the display. When recording stops a “WARBLE” sound is heard and a “⌈” is displayed for 1 second. Recording stops after 11 seconds has elapsed or when the # key is pressed, whichever occurs first.

**USER ALARM MESSAGES**

[Requires program link ON and DT6I/S to be in “24 hour” mode]

<memories 91-93> The data stored for these memories is the voice data for a user specific alarm condition. These might be used to describe a refrigerator failure, gas leakage, etc.

To record a user alarm message press # 9 then 1, 2 or 3 and speak into the microphone at a distance of about 15cm (6 inches). Press # at the end of the message to stop recording. Recording stops after 5 seconds has elapsed or when the # key is pressed, whichever occurs first.

**PHONE NUMBER GROUP TO USE**

[Requires DT6I/S to be in “24 hour” mode]

<memory 00> The data stored in this memory represents the phone number group to be used when dialling out. Phone number groups are described in detail below. Only one group may be selected.

To select a group, first press [#][0][0] followed by the group number (0 - 9).

**Note:** If all the phone numbers in the group selected are blank, the dialler will automatically use group 0. Group 0 is a preset group, which is not user programmable, and contains all 6 phone numbers in order from 1 to 6.

[default = 0]

**PHONE NUMBER GROUPS**

[Requires DT6I/S to be in “24 hour” mode]

<memories 01-09> The data stored in these memories is a group of phone numbers in the order they are to be dialled. A group may contain up to 6 numbers.

A typical use for these groups would be for a roster system that regularly changes.

To program a phone number group memory press [#][0] followed by the group memory number (1-9). Up to 6 (six) numbers from 1 to 6, representing the stored phone numbers, can now be entered.

**Example:** [#][0][3][1][4][2][6][4][#]

Programs the phone number memories 1, 4, 2, 6 and 4 into phone number group 3. If 6 numbers are programmed in, the last [#] is not required.

If the group contains less than the programmed maximum number of attempts, the numbers in the group will be dialled repeatedly until the DT6I/S has made the maximum number of calls, or an alarm cancel is received. For example if the group contains only 3 numbers, and the maximum dial attempts is set at 5, the 3 phone numbers in the group will be dialled in their programmed order, then the first and second numbers in the group will be redialled.

**Note:** If the group contains more numbers than the maximum number of dial attempts programmed, the last numbers in the group will not be dialled.

**PROGRAMMABLE OUTPUT**

[Requires DT6I/S to be in “24 hour” mode]

<memory #> There is no data stored in this memory location. Instead accessing the memory toggles its current state as described below.

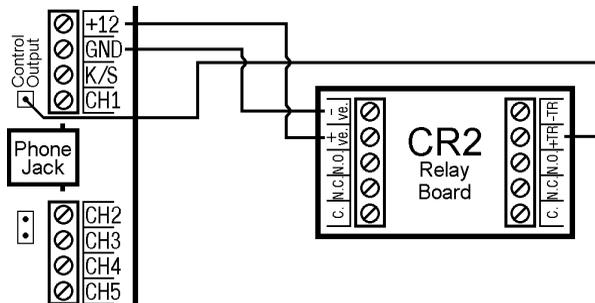
The DT6I/S incorporates a digital output designed to control the NIDAC CR2 transistor driven relay board. When in the ON state the output is at 5V, when in the OFF state it is at Ground or zero volts.

**Note** that the output can NOT drive a relay directly and attempting to do so will permanently damage the unit.

The output can be changed either via the keypad or by ringing into the dialler. To check if the output is on or off from the keypad, press the [\*] key followed by the [#] key. The display will then show a “o” (top o) to indicate the output is ON or a “o” (bottom o) to indicate the output is OFF.

To change the state of the output using the keypad, the dialler must first be in the “24 hour” mode. Press the [#] key twice and the dialler will display the current state of the relay followed by the new state. For example, if the output is to be turned OFF, press the [#] key twice and the display will show a “o” to indicate the output is currently ON, followed by a “o” to indicate it has now gone to OFF.

To change the state of the output over the phone line first refer to the *REMOTE DIALLER ACCESS* section on page 20. Once the program mode has been entered, the state of the output (ON or OFF) can be determined by pressing [\*][#]. Pressing the [#] key twice will switch the output to the opposite state (ON if it was OFF, or OFF if it was ON). All operations over the phone are confirmed by voice messages.



**Figure 4: Connecting the CR2 relay board to the DT6I/S.**

## REMOTE DIALLER ACCESS

The DT6I/S can be accessed remotely to change phone numbers, phone number groups, select a different phone number group, change the status of the output or interrogate the status of the DT6I/S. To do this simply dial into the DT6I/S (dial up the number for the phone line that the dialler is connected to). When the DT6I/S answers it will respond with “*Contacted dialler for*” followed by the User Message, after this message ends the user has 30 seconds in which to enter the Program Access Code. Using the digits on a DTMF (tone) phone enter the Program Access Code followed by a [#], if it is entered correctly the dialler will respond with “*Program mode entered*” otherwise it will reply with “*Incorrect code*”. The user is given three (3) attempts at entering the correct code.

Once the programming mode is entered each number pressed will be read back to the user as they enter them, mimicking the function of the display. Phone numbers and phone number groups can be programmed or played back using the phone’s keypad in the same way the DT6I/S’s on board keypad is used (see *PHONE NUMBERS* section on page 10). When a memory is accessed for programming, the dialler will respond with “*Access*”. Playback of the programmed memories is achieved by pressing the [\*] then the memory number. The dialler will respond with “*Memory n is*” followed by a list of the memory contents.

As well as being able to program or playback the phone numbers and phone number groups, the status of all the dialler’s inputs can be determined. This is accomplished by pressing [\*][\*] on the phone’s keypad.

**Note:** Each key press in a programming or playback sequence must be done within 10 seconds of each other or a time-out error will occur.

**Note:** After an error or completing a programming or playback sequence the user then has 30 seconds in which to start the next sequence. The DT6I/8 will automatically hang up 30 seconds after the last function has been completed after giving the message “*Time out*”.

**Note:** If no Program Access Code has been programmed into the DT6I/8, the dialler will not answer the phone when called.

## PARTIAL MEMORY ENTRIES

It is NOT necessary to program all the positions of some memories. For example, if you want to change input 1 to burglary and input 2 to emergency, but do not want to change the other input allocations, simply enter:

# 8 1 5 3 #

This will alter the first 2 positions without affecting the others.

Note the last # is needed to close off the memory.

This method of programming can be used for memories 71, 72, 81 and 82.

**Note** that you must program the positions up to and including the one you wish to change.

## REPLAY OF PROGRAMMED DATA

Programmed data can be replayed for confirmation simply by pressing the \* followed by the memory number (00 to 93). The memory contents for memories 00 to 89 will appear on the 7 segment display at intervals of 1 digit per second. A pause in a phone number will be displayed as a "P" followed by the number representing how many seconds the pause is for. A hash (#) will be displayed as "H" and a star (\*) as "D". When replaying memories 90 to 93, the recorded voice data will be replayed through the speaker.

## BLANK MEMORY INDICATION

If you display a memory location that is empty, then a "b" will appear on the display. A "b" is also displayed when you deliberately erase a memory location. Only the phone number, shut down code and program access code memories can be blank.

To erase a memory location simply open the memory location then close it immediately.

**Example:** # 1 # will erase the phone number 1 memory.

## **ERROR INDICATION**

If an error is made during the programming of data then the speaker will sound a “BLARP” and an “E” + **n** will flash 5 times on the display, where **n** is the error number as explained below. When it has ceased flashing the memory may be reprogrammed correctly. Error codes are described in detail below.

### **PROGRAMMING ERRORS**

- 1 Memory Access denied. Memory no. chosen is invalid or program link is off.
  - 1 First key pressed was a 0 to 9 or tried programming with the dialler in the “Away/On” mode (key switch input is triggered).
- 2 Too slow entering data, information is lost. When programming close with a #.
- 3 Value or key entered is out of range for selected memory or memory position.
- 4 Insufficient digits entered.

### **OPERATING ERRORS**

- 5 No phone numbers in memory. Reprogram.
- P Power fail. Displays every minute until corrected (no “BLARP” with this error).

**INDEX**

Abbreviations, terms, functions and features referred to in this manual are set out in alphabetical order below. Each entry refers to an explanatory reference in the manual. **Bold-faced** numbers indicate the main treatment of the subject.

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INSTALLED BY:		DATE: / /
FOR SERVICE PHONE:		
CUSTOMER:		
PHONE NO. 1 ( )	PHONE NO. 2 ( )	
PHONE NO. 3 ( )	PHONE NO. 4 ( )	
PHONE NO. 5 ( )	PHONE NO. 6 ( )	
PH GRP 1 = _____	PH GRP 2 = _____	PH GRP 3 = _____
PH GRP 4 = _____	PH GRP 5 = _____	PH GRP 6 = _____
CH	EQUIPMENT	ALARM MESSAGE
1		
2		
3		
4		
5		
BATTERY LOW REPORTING (YES) / (NO)		
POWER FAIL REPORTING AFTER ___ MINUTES		



**NIDAC SECURITY PTY. LTD.**      A.C.N. 004 933 242  
*MANUFACTURERS OF SECURITY EQUIPMENT*  
 2 CROMWELL STREET  
 BURWOOD, VICTORIA  
 AUSTRALIA                      3125

TEL: (03) 9808 6244  
 FAX: (03) 9808 9335