DT6I Series 2

INTERROGATABLE 6 CHANNEL TALKING DIALLER

INSTALLATION MANUAL 2nd EDITION.

AUSTRALIAN MADE

NIDAC

NIDAC ⚠N761
DT6I Series 2
INTERROGATABLE 6 CHANNEL
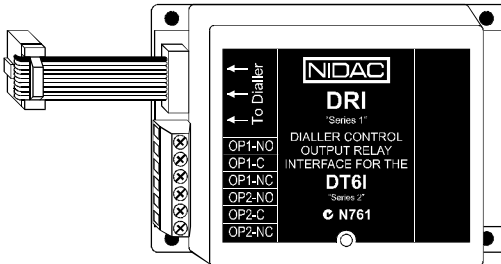TALKING DIALLER

✱ 1 2 3 4 5 6 7 8 9 0 #   8.
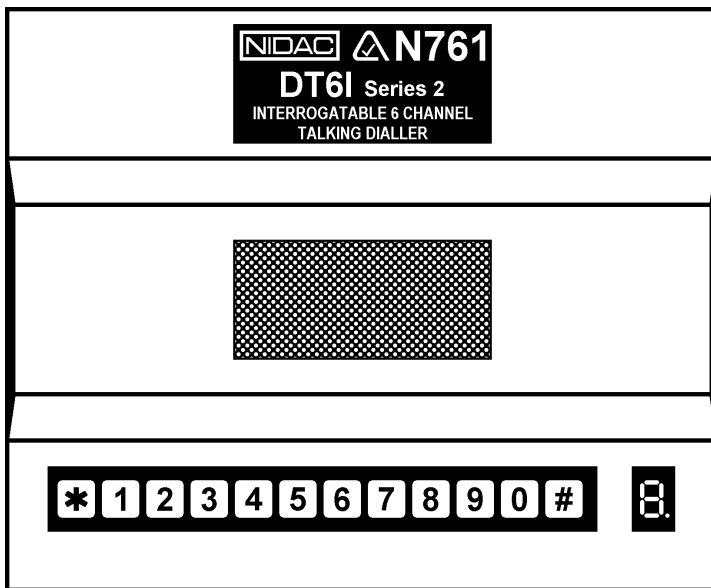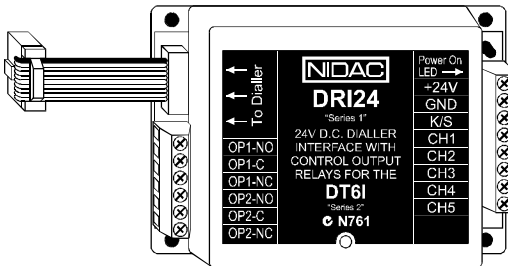
NEW FEATURES

- Simplified memory layout allowing for quicker and easier programming.
- Can now record individual messages for each of the 5 external alarm inputs.
- 2 control outputs.
- Phone line now uses RJ12 with standard connections.

NOW AVAILABLE

DRI - interface to convert control outputs to relay contacts.

DRI24 - interface to allow the DT6I to be used with 24V D.C. power supplies, convenient for use with Fire Panels, also includes the 2 control relays .

DT6I Series 2 - INTERROGATABLE 6 CHANNEL TALKING DIALLER

PRODUCT FEATURES

- A-tick approved equipment.

- 5 external alarm inputs, each with user recordable message.

- Internal battery low alarm with optional reporting.

- User recordable name/address voice message.

- Programmable delay of up to 99 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.

- Two relay control outputs.

- 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 it will perform a self test, then flash the digit 6 five times on the 7 segment display. While the DT6I is performing the self test but before the 6 is displayed, the 7 segment display may show anything, this is normal.

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

CALL SEQUENCE
Once the DT6I 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 starts by playing a list of the alarms that have been triggered followed by the user name/address message. The DT6I repeats the messages for the programmed time and only finishes the call at the end of message cycle or when cancelled.

After receiving a trigger the DT6I will attempt **up to 6** diallings to communicate the alarm information (refer to the *MAXIMUM DIALLING ATTEMPTS* section on page 11). Each phone number in the programmed phone number group will be called in order 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 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 cancelled, the DOT will remain on until the K/S (key switch) input state is changed (dialler is changed between "Away/On" and "24 hour" mode) or the DT6I makes a successful call after being triggered again. When the dialler is shutdown a "WARBLE" sound indicating shutdown is heard over the phone line. If a Program Access Code is programmed and Allow PAC After Alarm is enabled, the dialler will then wait for 30 seconds for the callee to enter the PAC then #, pressing just # during this time causes the DT6I to immediately hang up . Once the PAC has been successfully entered

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selected memories of the DT6I can then be read or altered as described in the *REMOTE DIALLER ACCESS* section on page 20.

When the DT6I is shutdown using either the Shutdown Code or K/S input the dot on the display will go off.

Should the DT6I 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 DT6I calls to report an alarm. To cancel the dialler simply enter the programmed shut down code (default = digit no. 3) on a DTMF (tone) phone while the alarm message is playing.

Note shutting down the DT6I will not shut down any local alarm, even if it is the trigger source.

Note the DT6I 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 falls below approximately 10.25 Volts. This feature can be disabled if desired, refer to the *BATTERY LOW ALARM ENABLE* section 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 + 10 pin box header.
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.
OUTPUTS	-	2 CMOS logic outputs to drive NIDAC DRI dialler control output relay interface.
TELECOM LINE	-	Single RJ12 socket (Western Jack). Supplied with lead to suit a Mode 3 phone socket or TH3 adaptor.

POWER SUPPLY

STAND ALONE	-	11.5 to 14V DC @ 150mA (max).
WITH **DRI**	-	11.5 to 14V DC @ 250mA (max).
WITH **DRI24**	-	16 to 30V DC @ 300mA (max).

COMMUNICATION

DIALLING FORMAT	-	Selectable as Decadic (pulse) or DTMF (tone).
USER MESSAGE	-	10 seconds for name and/or address.
ALARM MESSAGES	-	Five user recordable messages of 4½ seconds each.

MECHANICAL

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

INSTALLATION

All connections to the DT6I 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 (**do not** unscrew the centre screw) the cover will now lift off.

To mount the DT6I the TEB dialler mounting bracket is available.
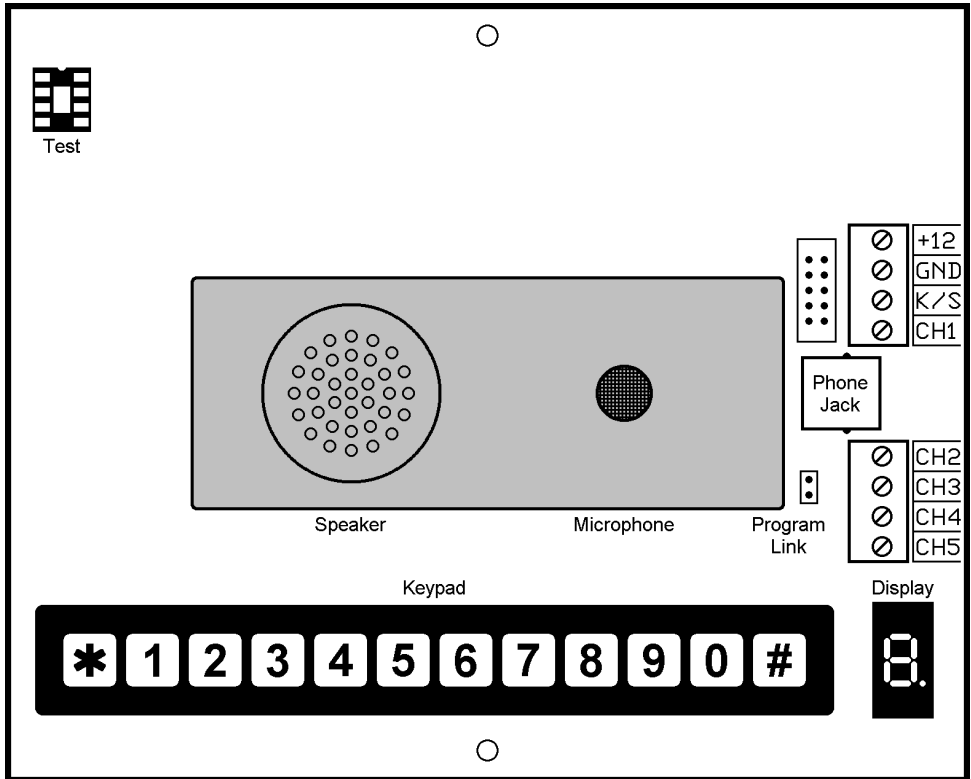
Figure 1: The DT6I with its outer cover removed.

There are 8 terminals on the DT6I board, of these 2 are power inputs, 5 are channel (alarm) inputs and 1 is the key switch input. There are also two output pins that can be controlled either via the keypad or over the phone line. The use of each of these terminals and pins 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 key switch 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 100K 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].

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Figure 2: Connecting an output that drives high to the DT6I.
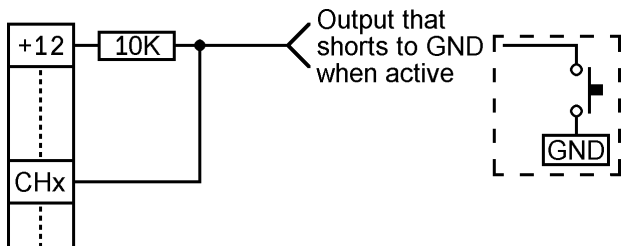
Figure 3: Connecting an output that drives low to the DT6I.

PROGRAMMING

All programming of the DT6I is done via the keypad 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.
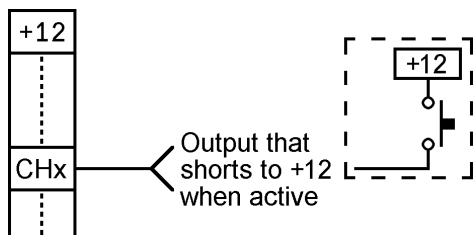
The user voice messages are recorded by speaking into the microphone located on the front of the unit. The message may be replayed through the on board speaker.

Programming of the DT6I is accomplished by first pressing the # key, a "P" will appear on the display to indicate programming, next is a single or double 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 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 12).

Programming of memories **70** to **80** and **83** to **95** require the program link to be ON.

Note that the program link does **not** have to be removed for the dialler to operate.

The format for programming is

     # <memory><code> #   for memories 00 to 89.
           or
     # <memory><voice input> #   for memories 90 to 95.

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)
70	Dialling Mode	(1 digit)
71	Message Repeat Time	(3 digits)
72	Maximum Dialling Attempts	(1 digit)

7 3	Key Switch Input Polarity	(1 digit)
7 4	Alarm Channel Input Polarity	(5 digits)
7 5	Alarm Channel Input Mode	(5 digits)
7 6	Slave / Latching Mode	(1 digit)
7 7	Cut Off Message After DTMF	(1 digit)
7 8	Power Fail Channel	(1 digit)
7 9	Power Fail Time	(2 digits)
8 0	Shutdown code	(7 digits max)
8 1	Output 1	(1 digit)
8 2	Output 2	(1 digit)
8 3	Dead Man's Timer Channel	(1 digit)
8 4	Dead Man's Timer Time	(3 digits, max value = 199)
8 5	Battery Low Alarm Enable	(1 digit)
8 6	Ring count before answering	(2 digits, max value = 20)
8 7	Second Call Bypass Time	(3 digits, max value = 199)
8 8	Program access code	(7 digits max)
8 9	Allow PAC After Alarm	(1 digit)
9 0	User name/address message	(voice data, 10 seconds)
9 1	First user alarm message	(voice data, 4½ seconds)
9 2	Second user alarm message	(voice data, 4½ seconds)
9 3	Third user alarm message	(voice data, 4½ seconds)
9 4	Fourth user alarm message	(voice data, 4½ seconds)
9 5	Fifth user alarm message	(voice data, 4½ 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)

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When accessing any of the above <memories> for programming an "A" 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 "[" 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

<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 ○ to ○ 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 12.

Example: # 1 3 4 5 6 7 8 9 #

programs 3456789 as phone number 1.

Example: # 5 ○ * 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 MODE   [Requires program link ON]

<memory 70> This memory is used to select whether Decadic or DTMF dialling is to be used.

- 0 = Decadic (Pulse) dialling.

- 1 = Normal DTMF (Tone) dialling [default].

- 2 = Slow DTMF (Tone) dialling. This selection may be necessary when using the DT6I with some PABX systems.

MESSAGE REPEAT TIME   [Requires program link ON]

<memory 71> This memory is used to set how many seconds the message is repeated for over the phone line. Note that repetition cycle will only end at the end of the recorded message, when the dialler is cancelled or has received a valid DTMF digit (refer to *CUT OFF MESSAGE AFTER DTMF* on page 13).

- 1 - 199 = Number of seconds the message is repeated for [default = 60].

MAXIMUM DIALLING ATTEMPTS   [Requires program link ON]

<memory 72> This memory is used to select the maximum number of phone calls that will be made each time the DT6I is triggered.

Note this is not how many times it will dial each phone number programmed.

- 1 - 6 = Max number of dialling attempts to be made **in total** [default = 6].

KEY SWITCH INPUT POLARITY   [Requires program link ON]

<memory 73>   This memory is used to select what voltage is required on the K/S terminal to put the dialler into "Away/On" mode.

   0 = Input at **ground** puts the dialler in "Away/On" mode, input at +5 to 15V DC puts the dialler in 24 Hour Mode.

   1 = Input at **+5 to 15V DC** puts the dialler in "Away/On" mode, input at ground puts the dialler in 24 Hour Mode [default].

ALARM INPUT POLARITY   [Requires program link ON]

<memory 74>   Each position within this 5 digit code refers to the input polarity for an "Alarm condition" for each of the five inputs on the DT6I. The number used in each position represents the following polarity for the inputs.

   0 = Transition to **ground** for Alarm on this channel.

   1 = Transition to **+5 to 15V DC** for Alarm on this channel [default].

   Example: # 7 4 1 0 0 1 0

   CH1 & CH4 go into alarm condition when a voltage is applied to the input and CH2, CH3 & CH5 go into alarm when the voltage on the input is removed.

[default is 1 1 1 1 1 , all inputs go into alarm condition when a voltage is applied]

ALARM CHANNEL INPUT MODE   [Requires program link ON]

<memory 75>   Each position within this 5 digit code refers to the operational mode for each of the five inputs on the DT6I. The numbers used in each position represent the following mode for the inputs.

   0 = The key switch input must be active (dialler in "Away/On" mode) for this alarm input to work.

   1 = This alarm input is always active [default].

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Example: # 7 5 1 1 0 0 1

CH3 & CH4 operate only in the "Away/On" mode and CH1, CH2 & CH5 operate 24 hours (in both the "Away/On" and "24 hour" modes).

[default is 1 1 1 1 1 , all inputs are always active]

SLAVE / LATCHING MODE   [Requires program link ON]

<memory 76>   This memory is used to select whether an alarm input must remain triggered for the dialler to complete its dialling sequence.

- 0 = **Slave mode**. In slave mode the dialler will dial out when the alarm 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].

CUT OFF MESSAGE AFTER DTMF   [Requires program link ON]

<memory 77>   This memory is used to select whether the dialler stops playing the alarm message once it receives a valid DTMF digit over the phone line. The reason why the message is usually stopped once a DTMF digit has been received is to minimise any errors in detecting the correct shutdown code.

Note that if there is no shutdown code programmed the message will not be stopped when a DTMF digit is received.

- 0 = The dialler **does not** stop the message after receiving a DTMF digit.

- 1 = The dialler stops the message after receiving a DTMF digit [default].

POWER FAIL CHANNEL   [Requires program link ON]

<memory 78> This memory is used to select which channel (if any) is to be used as the input for a power fail condition.

- 0   =   No channel is assigned as a power failure signal input, power failure reporting is disabled.

- 1 - 5 =   The number of the channel assigned as a power failure signal input [default = 5].

POWER FAIL TIME   [Requires program link ON]

<memory 79> This memory is used to select how many minutes the channel assigned as the power fail input must **held** in the triggered condition before the DT6I dials out the power failure alarm.

- 0 - 99 =   Number of minutes the power failure input must remain in alarm for before the DT6I dials out [default = 60].

SHUT DOWN CODE   [Requires program link ON]

<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 unless cancelled locally.

  Example: $\#\ 8\ 0\ 2\ 4\ 7\ 8\ \#$

    stores 2478 as the shut down code.

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

[default = 3 (digit number 3)]

OUTPUT 1

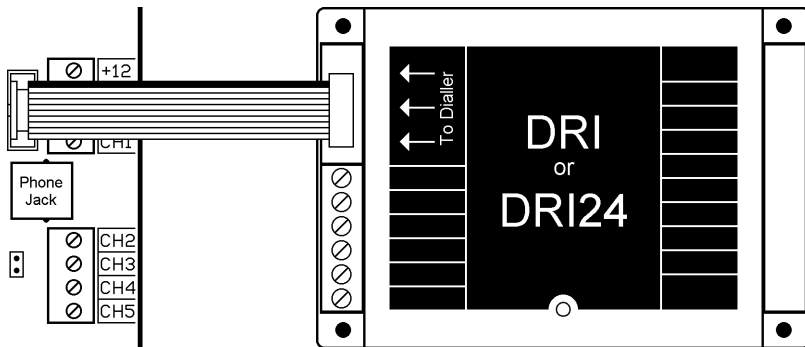<memory 81>   This memory is used to change the status of the OP1 control output.

The DT6I incorporates two digital CMOS outputs designed to control the relays on the NIDAC DRI or DRI24 relay interface. 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 (refer to *REMOTE DIALLER ACCESS* section on page 20). To check if the output is on or off from the keypad, press the $*$ 8 1 . 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.

The state of the output can be changed using the keypad. Press # 8 1 and the DT6I will display the current state of OP1 followed by the new state. For example, if OP1 is ON, press # 8 1 and the display will show a "^{O}" to indicate OP1 is currently ON, followed by a "o" to indicate OP1 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 OP1 (ON or OFF) can be determined by pressing $*$ 8 1 . Pressing # 8 1 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 a DRI or DRI24 to the DT6I.

OUTPUT 2

<memory 82>   This memory is used to change the status of the OP2 control output. It operates in the same manner as Output 1, memory 81 above except it uses memory 82 to control OP2.

DEAD MAN'S TIMER CHANNEL   [Requires program link ON]

<memory 83>   This memory is used to select which channel (if any) is to be used as the input for a dead man's timer, also referred to as an inactivity alarm.

   0   =   No channel is assigned as a dead man's timer input, the dead man's
               timer is disabled [default].

   1 - 5 =   The number of the channel assigned as a dead man's timer input.

DEAD MAN'S TIMER TIME   [Requires program link ON]

<memory 84>   This memory need only be set if one of the inputs has been allocated as the Dead Man's Timer (DMT) channel above in memory 76. 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.

   1 - 199 =   Number of hours allowed between triggers of the dead man's timer
                 input [default = 25].

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

   Example: # 8 4   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 CH1 is assigned to the DMT then CH1 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 it will

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generate an alarm call for CH1. The next time CH1 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, and active, at least once every 49 hours to trigger the DMT input.

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

BATTERY LOW ALARM ENABLE   [Requires program link ON]

<memory 85> This memory is used to select whether the dialler should dial out an alarm when the input voltage to the dialler falls below approximately 10.25 volts.

   0 = **Do not** report a battery low condition.

   1 = **Do** report a battery low condition [default].

AUTO ANSWER RING COUNT   [Requires program link ON]

<memory 86> The value set for this memory determines the number of ring tones the DT6I 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 disables the normal auto answer, however the second call bypass can still be used as described below.

   Example: # 8 6 1 5

   Sets the DT6I to answer after 15 rings.

[default = 5]

SECOND CALL BYPASS TIME   [Requires program link ON]

<memory 87>   The time, in seconds, for the DT6I to remain in second call bypass mode after the dialler has detected 4 rings or less.

"Second Call Bypass" 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, if it detects 4 rings or less the DT6I goes into its "Second Call Bypass" mode for the number of seconds set here. The DT6I will then immediately answer the next incoming call during this period.

Example: # 8 7 3 0

Sets the Second Call Bypass time to 30 seconds.

[default = 60]

PROGRAM ACCESS CODE (PAC)   [Requires program link ON]

<memory 88>   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 using the Program Access Code refer to the *REMOTE DIALLER ACCESS* section on page 20.

Example: # 8 8 1 2 3 4 #

Sets the program access code to 1234.

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

[default = blank, no code programmed]

ALLOW PAC AFTER ALARM   [Requires program link ON]

<memory 89>   This memory is used to select whether the DT6I will remain online after the alarm call has been cancelled by the shut down code, to allow the callee to enter the PAC and interrogate, reprogram or control the outputs on the dialler.

- 0 = Hang up immediately after being cancelled via the shut down code.

- 1 = Wait online for the PAC to be entered after being cancelled [default].

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USER NAME / ADDRESS MESSAGE   [Requires program link ON]

<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 DT6I 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 10 seconds has elapsed or when the $\#$ key is pressed, whichever occurs first.

USER ALARM MESSAGES   [Requires program link ON]

<memories 91-95> The data stored for these memories is the voice alarm data for each of the alarm channel inputs.

To record a user alarm message press $\#\,9$ then 1, 2, 3, 4 or 5 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 4½ seconds has elapsed or when the $\#$ key is pressed, whichever occurs first.

PHONE NUMBER GROUP TO USE

<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

<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 $\#\,\bigcirc$ followed by the group memory number (1 to 9). Up to 6 (six) numbers from 1 to 6, representing the stored phone numbers, can now be entered.

Example: $\#\,\bigcirc\,3\,1\,4\,2\,6\,4\,\#$

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 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.

REMOTE DIALLER ACCESS

The DT6I can be accessed remotely to change phone numbers, phone number groups, select a different phone number group, change the status of the outputs or interrogate the status of the DT6I. There are two methods by which the user can gain remote access to the DT6I, both method require that a Program Access Code (PAC) be programmed into the DT6I, refer to the *PROGRAM ACCESS CODE* section on page 18.

1. Dial into the DT6I (dial up the number for the phone line that the dialler is connected to). When the DT6I answers it will respond with "*Contacted dialler for*" followed by the User Name/Address 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 before the DT6I hangs up.

2. When the DT6I has been shutdown via the shutdown code after an alarm call the user has 30 seconds in which to enter the Program Access Code (this feature must be enabled, refer to the *ALLOW PAC AFTER ALARM* section on page 18). 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 before the DT6I hangs up.

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 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 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 remote access to the DT6I cannot be obtained.

PARTIAL MEMORY ENTRIES

It is NOT necessary to program all the positions of some memories. For example, if you want to change CH1 to a positive trigger and CH2 to a negative trigger, but do not want to change the other inputs, simply enter:

7 4 1 O

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 only be used for memories 74 and 75.

Note: 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 * , a "d" will appear on the display to indicate displaying, followed by the memory number (00 to 95). 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 (#)as "X" and a star (*) as "O". When replaying memories 90 to 95, 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 #

Erases 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

0   Memory Access denied. Memory number chosen is invalid or program link is off.

1   First key pressed was not a $*$ or $#$.

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 for selected memory.

OPERATING ERRORS

5   No phone numbers in memory. Program in a phone number.

P   Power failure input is in alarm. Displays every minute until corrected (no "BLARP" with this error).

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
DEAD MAN'S TIMER SET FOR ____ HOURS

NIDAC SECURITY
100%
· AUSTRALIAN OWNED ·