Pumps, Pumping Systems and Ancillaries

NEWTON DIALER

Operational Manual

JN NEWTON WATERPROOFING

Enhanced Alarm Capability

CE

Rev 1.1 - 28 July 2017

The Newton Dialer provides a means of communicating alarm information from a Newton High Water Level Alarm (PA50), Newton Pump Controller (CP9) or Newton Control Panel Pro (CP2), to a standard or mobile telephone. The unit is normally included within systems that include a Newton Victron Power Inverter which provides the necessary power and battery backup. The unit is also connected to a standard telephone line and behaves like another extension to the telephone and does not affect its normal operation or that of any other extension fitted.

IMPORTANT

Please read both this manual and the one supplied by the manufacturer of the dialler. Once both have been read and understood, use this manual when used with Newton equipment. This manual should be read in conjunction with the Installation Manual of the Newton Alarm or Control Panel that is providing the alarm triggers, as they contain detailed explanation of the triggers supplied and the exact method of connection to this Dialler:

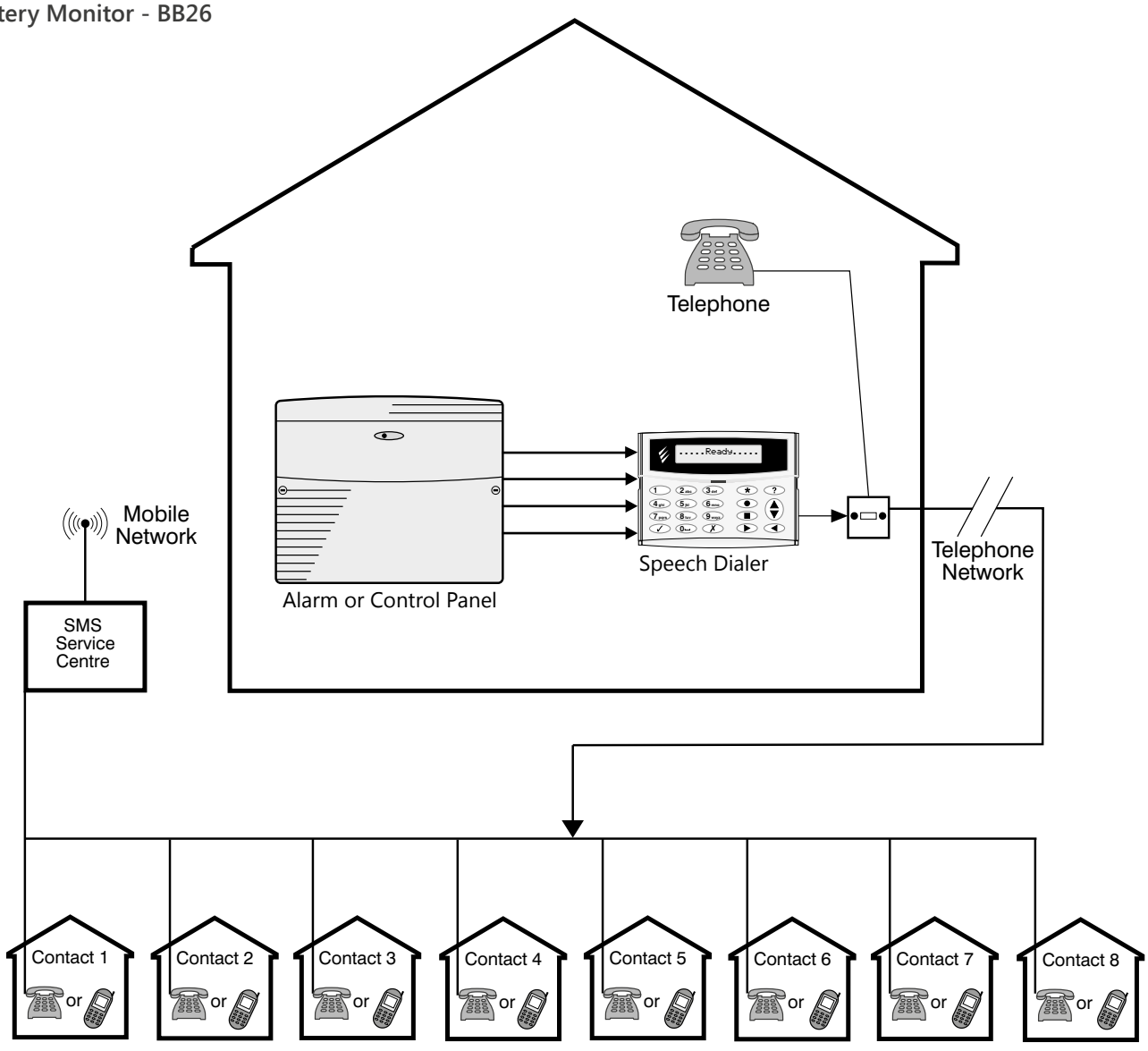
DEVICES TO BE USED WITH THIS DIALER

Newton High Water Level Alarm - PA50
1 x Alarm trigger

Newton Pump Controller - CP9
1 x Alarm trigger

Newton Control Panel Pro - CP2 (CP7 has this Dialer already fitted and programmed)
1 x Alarm trigger, 1 x Power fail trigger, 1 x Pump failing trigger

Battery Monitor - BB26



INPUTS

The Dialer has four trigger inputs; each input can be assigned a voice message and/or a text message (Speech & Text only). The trigger inputs are connected to the Newton Alarm (1 x Alarm trigger), Pump Controller (1 x Alarm trigger) or Control Panel Pro (3 x trigger outputs - Alarm, Power Cut & Pump Failure). Other devices can be directly connected to the trigger inputs. The polarity of the trigger inputs can be programmed as either +ve or -ve applied.

CONTACTS

Up to 8 contacts may be stored in the unit; each contact can be assigned a name, telephone number, message type and acknowledgment type. Contact type can be chosen for each number – by default it is Voice or Text (meaning the Dialer will dial the number first and then, if unsuccessful, will send a text message) and can be changed to Voice Only or Text Only, depending on the homeowners preferences.

NOTE: The unit must **NOT** be used to call the Police via the Emergency Services phone numbers.

VOICE MESSAGES

The Dialer is supplied with a pre-recorded message. However it's a good idea to record more bespoke messages, for example containing the home address.

The Dialer has a built-in microphone and speaker so that audio messages can be recorded and replayed directly from the unit. Up to four separate voice messages can be stored; each message can be up to 32 seconds long. Message 1 is related to trigger input 1; message 2 is related to trigger input 2 and so on. Voice messages should therefore be recorded to reflect the type of alarm that is connected to the trigger input, e.g. if input 1 is connected to the "Fire" output on the alarm/fire control panel then message 1 should state that there is a fire alarm at the premises.

TEXT MESSAGES

The Dialer can also send text messages to mobile telephones using the SMS text service (Short Message Service). The unit does this by calling a SMS service centre, which takes the text message from the Dialer and forwards it to the contact's mobile telephone. The unit can store up to four 32-character "alarm" messages and one common "site details" message. When the unit sends a text message, it appends the "alarm" message to the "site details" message. The "site details" message would normally hold the name or details of the premises being protected.

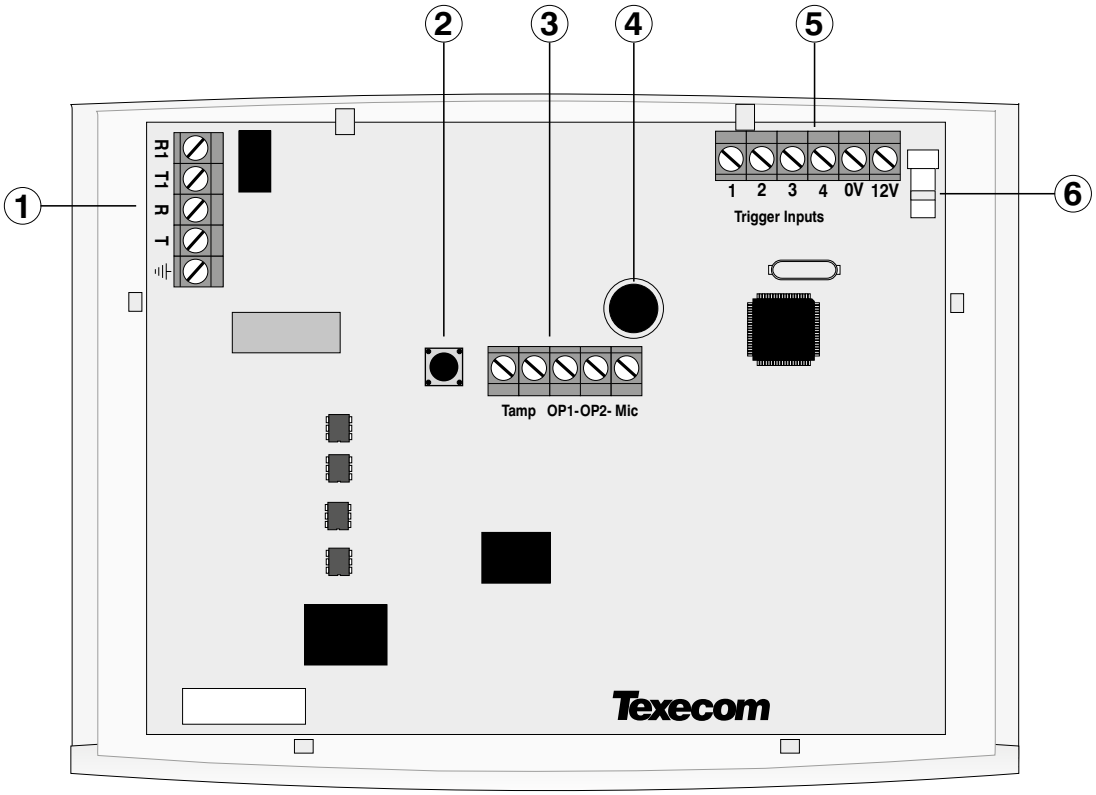
ACKNOWLEDGEMENT

On receiving a voice message call from the Dialer the contact person answering the call can acknowledge it at any time by pressing number [8] key on their telephone. If the voice message is not acknowledged or the call dropped then the Dialer repeats the call two more times (number of call attempts can be changed) before dialling the next available contact. Each contact can be configured to either acknowledge the call only or acknowledge and stop the dialling sequence, i.e., after pressing the [8] key on their telephone, the call is acknowledged and no more contacts are dialled.

CONTEXT SENSITIVE HELP

When programming or operating the Dialer, you can press the help key and the unit will scroll the relevant information on the display.

PCB LAYOUT



1. Telephone connections (TNV)
2. Tamper switch (Not used)
3. Programmable outputs, tamper and remote microphone connections (SELV)
4. Microphone
5. Trigger Inputs and power supply connections (SELV)
6. Loudspeaker connector (SELV)

Connection terminals on the Dialer are described as either “Safety Extra Low Voltage” circuits (SELV) or “Telecommunications Network Voltage” circuits (TNV).

- It is important that the TNV connections are only connected to the PSTN, and SELV circuits are only connected to other circuits designated as SELV circuits
- Interconnection circuits should be such that the equipment continues to comply with the requirements of 4.2 of EN 41003 for TNV circuits and 2.3 of EN 60950 for SELV circuits, after making connections between circuits

SPECIFICATIONS

Supply Voltage:	10 - 14VDC
Current Consumption:	35mA (Standby), 100mA (Active)
Trigger Inputs:	4; +ve applied or -ve removed (5 - 24VDC)
Outputs: 2;	Open collector switched -ve @100mA
Telecommunications Approval:	CTR21
REN Rating:	1
Dialling Formats:	Pulse or DTMF
Dimensions:	140mm x 115mm x 30mm
Packed Weight:	360g

INSTALLATION: GENERAL

The unit requires a 12V @100mA DC power source. One of the following must be purchased with the dialer:

a) If the Dialer is to be used with a Newton Victron Power Inverter Battery Back-up System, the battery Connection for Dialler is required - Purchase Code PA6.

b) If no battery back up system is to be installed, the Mains Adapter for Dialler is required - Purchase Code PA7.

A 1.5 metre telephone lead is supplied with the unit, which plugs directly into any standard telephone socket. It is therefore recommended that the unit be sited as near to a telephone socket as possible. If this it not possible an approved BT extension lead may be required or the unit can be hardwired to the telephone socket using the appropriate cable.

MOUNTING

- Open the unit by carefully inserting a small flat-blade screwdriver into each slot at the base of the unit. Gently push the screwdriver to ease the retaining clips upward, DO NOT LEVER OR TWIST. Excessive force is NOT required
- Remove the front flap and front cover and unplug the loudspeaker from the main circuit board
- Mount the unit using at least three appropriate countersunk screws (no larger than No. 6). A keyhole slot has been provided to assist mounting and aid levelling
- Pass the necessary cables into the base through the cable entries and then secure the base of the unit to the wall

WARNING: The telephone cable must be routed into the base using either the top right or bottom right knockout cable entry. A screw mount cable tie has been provided to allow the telephone cable to be secured to the base of the unit. The cable tie should be fitted to either the top or bottom right fixing holes.

TRIGGER CONNECTIONS

Before making any connections to the unit, isolate ALL power from the device supplying the trigger (AC mains and battery). Do not continue if there is power still present on the device.

+12V & 0V: These terminals must be connected to the 12V power supply, either via the plugged 12V adapter or directly from the 12 volt battery where a Newton Victron Power Inverter System is employed.

Trigger 1 - 4: These terminals should be connected to the relevant outputs of the Alarm, Pump Controller or Control Panel Pro. When the input is triggered the Dialer will initiate the calling sequence and play the relevant speech and/or text message.

NEWTON HIGH WATER LEVEL ALARM - PA50

The terminals for the connection to the Dialer are at the top left of the inside of the Alarm Face-Plate. Use normal two-core bell wire and make a connection with one of the two coloured wires between the NO (Normally Open) terminal of the Alarm and Trigger Input 1 of the Dialer, with the other wire connecting the C (Common) terminal of the Alarm with the OV Trigger Input of the Dialer.

NEWTON PUMP CONTROLLER - CP9

The terminals for the connection to the Dialer are at the top of the inside circuit board of the Pump Controller. Use normal two-core bell wire and make a connection with one of the two coloured wires between the NO (Normally Open) terminal of the Panel and Trigger Input 1 of the Dialer, with the other wire connecting the C (Common) terminal of the Panel with the OV Trigger Input of the Dialer.

NEWTON CONTROL PANEL PRO - CP2

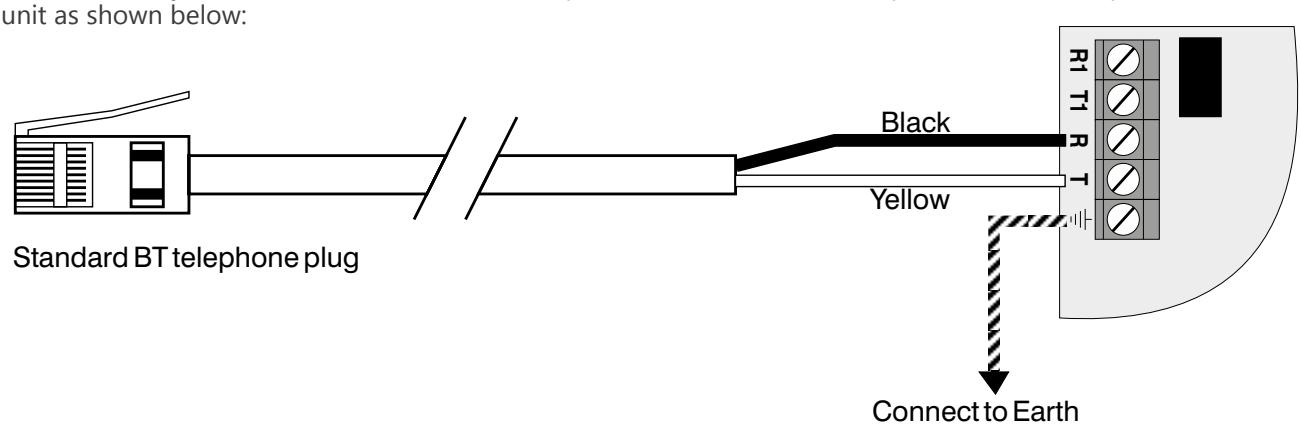
Order CP7 which has the Dialer already fitted and programmed. For Dialer installation to an existing panel refer to the CP2 Operational Manual.

VICTRON BATTERY MONITOR - BB26

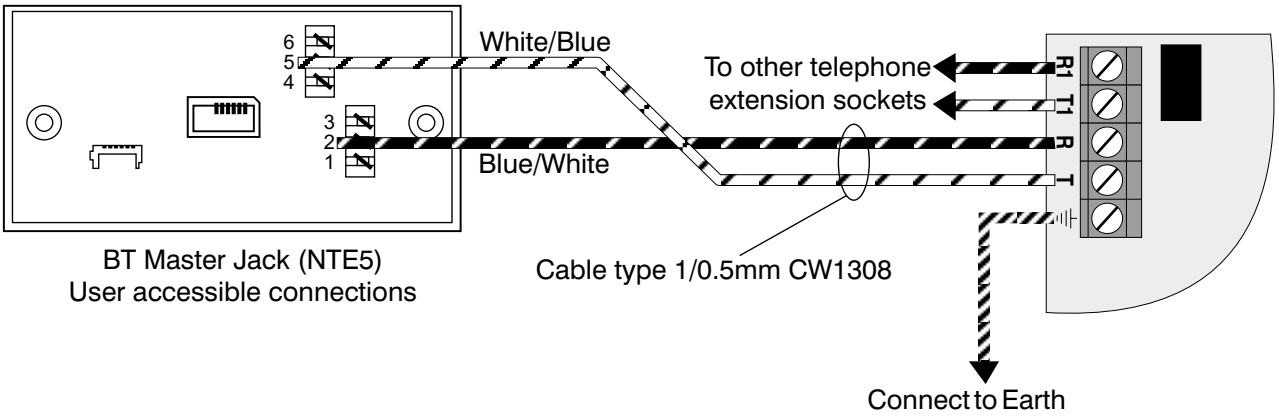
If the Battery Monitor is included in battery back-up system and the Dialer is powered from the battery it can be used to send information about low battery voltage through the Dialer to the homeowner. Use normal two-core bell wire and make a connection with one of the two coloured wires between one of the relay terminal of the Monitor and Trigger Input 2 of the Dialer, with the other wire connecting the second relay terminal of the Monitor with the OV Trigger Input of the Dialer. Set the Low Voltage Relay on the Monitor to 9,5 V.

CONNECTIONS TO THE TELEPHONE LINE

The easiest way to connect the Dialer to the telephone line is to use the telephone lead that is provided with the unit as shown below:



However, if the lead is not long enough or the serial connection is required, the Dialer can be hard wired to the telephone socket as shown below:



WARNING: Failure to fit an earth cable may prevent proper operation of the system and will invalidate the product warranty. The telephone cable must be secured using the screw mount cable tie provided.

COMMISSIONING

1. Once all necessary connections have been made to the unit, reconnect the loudspeaker to the main circuit board and clip the cover on to the base taking care not to trap any cables
2. Re-apply mains power to the control panel and reconnect the battery
3. The Dialer will enter its initialisation mode (15 seconds), during which you can:
   - Press the red record ⦿ key 5 times to load the factory default parameters then the ✓ key. The display will show: "CLEARING NUM...PLEASE WAIT..."
   - Press the ⇕ key to select the language then ✓ key to accept
4. After the unit has finished initializing/loading defaults the display will show "....DISABLED...."The unit will beep twice. To select the programming mode enter the default pass-code of ①②③④
5. The display will show "✓ to Select:- Contact Details" The unit is now ready for programming and testing. Please refer to the "Operating Instructions" for full details
6. After the Dialer has been programmed and tested, secure the front cover with screw and screw cap that is provided in the spares pack. We suggest inputting your own mobile number for this test.

STANDARDS

The Speech Dialer is manufactured to meet all European Area telecommunication network requirements. These devices have been approved for use with Council Decision 98/482/EC for pan-European single terminal connection to the public switched telephone network (PSTN). However due to differences between the individual PSTNs provided in different countries, the approval does not in itself give unconditional assurance of successful operation with every PSTN network termination point.

In the event of problems, you should contact Newton Waterproofing Systems.

The Speech Dialer conforms to European Union (EU) Low Voltage Directive (LVD) 73/23/EEC (amended by 93/68/EEC) and Electro-Magnetic Compatibility (EMC) Directive 89/336/EEC (amended by 92/31/EEC and 93/68/EEC).

The CE mark indicates that this product complies with the European requirements for health, safety, environment and customer protection.

WARRANTY

All Newton products are designed for reliable, trouble-free operation. Quality is carefully monitored by extensive computerised testing. As a result the Speech Dialer is covered by a two-year warranty against defects in material or workmanship.

Newton Waterproofing Systems standard terms and conditions apply and we will not accept responsibility or liability for any damages whatsoever based on a claim that the Dialer failed to function correctly.

Due to our policy of continuous improvement, Newton Waterproofing Systems reserve the right to change specification without prior notice.

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