

4 CHANNEL TELEPHONE DIALLER

B-TEL2

Installation and User manual



CE



BENTEL[®]
SECURITY



ISO 9001
9105.BNT1



ISO 9001
IT-52587



ISO 14001
9191.BNT2



ISO 14001
IT-52588

| CARATTERISTICHE TECNICHE | TECHNICAL FEATURES | ESPECIFICACIONES TECNICAS | |
|-------------------------------------|----------------------------|---------------------------------------|---------------------------------------|
| Alimentazione | Power supply | Tensión de entrada | 13.8 ÷ 27.6 V $\overline{\text{---}}$ |
| Assorbimento in stand-by | Standby current | Consumo en reposo | 50 mA |
| Assorbimento massimo | Maximum operating current | Consumo maximo | 200 mA |
| Durata impulso per linea di allarme | Alarm channel pulse length | Duración impulso para línea de alarma | 0.15 s |
| Portata linea antisabotaggio | Tamper line | Capacidad línea antisabotaje | 500 mA - 24 V $\overline{\text{---}}$ |
| Dimensioni (L x A x P) | Dimensions (L x H x P) | Dimensiones (A x A x P) | 132x220x62 mm |
| Peso (senza accumulatore) | Weight (without battery) | Peso (sin batería) | 1.2 Kg |

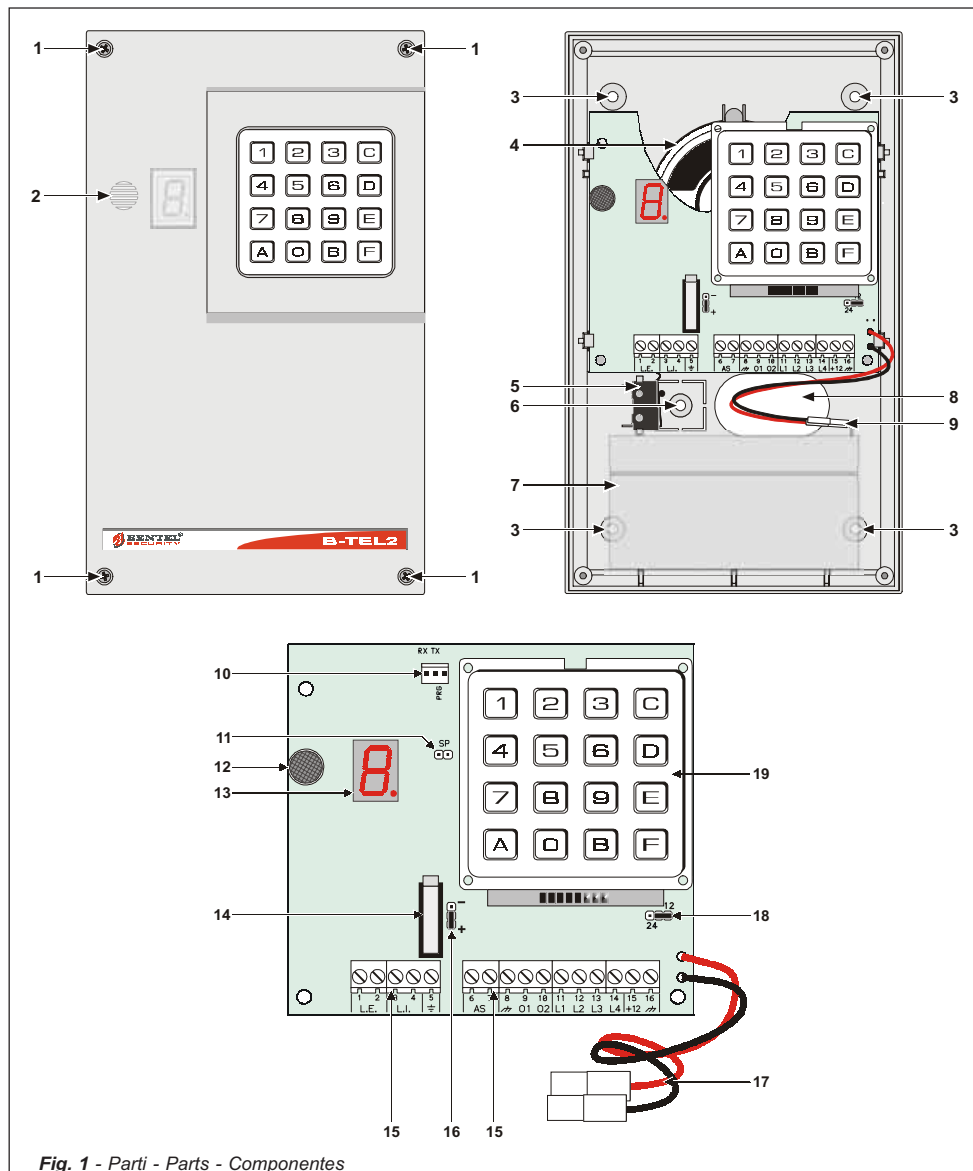






Fig. 1 - Parti - Parts - Componentes

| N. | Tab. 1 - DESCRIZIONE PARTI | Tab. 1 - PARTS DESCRIPTION | |
|----|--|---|---|
| 1 | Viti (4) per il fissaggio del pannello frontale al fondo | Screws (4) to secure front panel to backplate | Tornillos (4) para fijar los paneles frontales a l fondo |
| 2 | Griglia per microfono | Microphone grill | Parrilla para micrófono |
| 3 | Fori (4) per il fissaggio del fondo (Ø 5 mm) | Holes (4) for backplate mounting (Ø 5 mm) | Orificios (4) para fijar fondo (Ø 0,5 mm) |
| 4 | Altoparlante per la riproduzione dei messaggi | Speaker for message playback | Altavoz para la reproducción de mensajes |
| 5 | Microswitch antistrappo (opzionale) | Anti-tearing microswitch (optional) | Microswitch antiarranque (opcional) |
| 6 | Foro per vite antistrappo | Hole for anti-tearing screw | Orificios para tornillo antiarranque |
| 7 | Alloggiamento per un accumulatore da 12 V - 1,2 Ah (non fornito) | Compartment for a 12V - 1.2 Ah battery (not provided) | Asiento para un acumulador de 12 V - 1,2 Ah (no en dotación) |
| 8 | Foro per il passaggio dei cavi | Cable passage | Orificios para el paso de cables |
| 9 | Connettori per il collegamento dell'accumulatore | Battery connectors | Conectores para la conexión del acumulador. |
| 10 | Connettore per il cavetto di programmazione (Vedi Fig. 2) | Programming cable connectors (see Figure 2) | Conector para el cable de programación (ver fig. 2) |
| 11 | Connessione per altoparlante | Speaker connection | Conexión para altavoz |
| 12 | Microfono per la registrazione dei messaggi | Microphone for recording messages | Micrófono para grabar mensajes |
| 13 | Display | Display | Visor |
| 14 | Microswitch antiapertura | Anti-opening microswitch | Microswitch antiapertura |
| 15 | Morsettiera per collegamenti | Connection terminal board | Bornera para conexiones |
| 16 | Ponticello per impostazione della polarità di attivazione: | Jumper for setting activation mode : | Puente para programación de la polaridad de activación . |
| |  - + Attivazione con segnali positivi (Positivo a dare o positivo a mancare - DEFAULT) Activated by positive signal (positive command or positive drop - DEFAULT) Activación con señales Positivas (Positivos presente y positivo ausente - DEFAULT) | | |
| |  - + Attivazione con segnali negativi (Negativo a dare o negativo a mancare) Activated by negative signal (negative command or negative drop) Activación con señales negativas (Negativo presente y negativo ausente) | | |
| 17 | Cavetti per collegamento batteria | Battery connection wires | Cables para conexión batería |
| 18 | Ponticello per l'impostazione dell'alimentazione: | Jumper for setting power supply : | Puente para la programación de la alimentación : |
| |  12 24V--- (DEFAULT) | | |
| |  24 24V--- | | |
| 19 | Tastiera alfanumerica | Alphanumeric keypad | Teclado Alfanumérico |

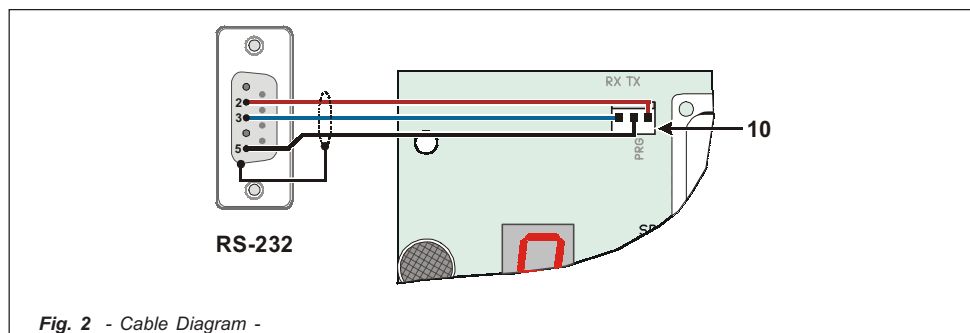


Fig. 2 - Cable Diagram -

*Hereby, Bentel Security,
declares that the above mentioned **B-TEL2** is in compliance
with the essential requirements and other relevant provisions of Directive 1999/5/EC.
The complete R&TTE Declaration of Conformity for each Panel can be found
at www.bentelsecurity.com/dc.html.*

*This device complies with CEI 79-2 2a Ed.1993.
Installation of these systems must be carried out strictly in accordance with the instructions
described in this manual, and in compliance with the local laws and bylaws in force.*

*The above mentioned BTEL99 has been designed and made
to the highest standards of quality and performance.
The manufacturer recommends that the installed system should be completely tested
at least once a month.*

*BENTEL SECURITY srl shall not be responsible for damage arising
from improper installation or maintenance by unauthorized personnel.
BENTEL SECURITY srl reserves the right to change the technical specifications
of this product without prior notice.*

INDEX

| | | | |
|---|-----------|---|-----------|
| INTRODUCTION | 29 | PROGRAMMING | 39 |
| GENERAL FEATURES | 29 | Change Installer PIN | 39 |
| Vocal and digital dialer | 29 | Programming telephone numbers | 39 |
| Telephone line | 29 | Telephone number options | 39 |
| Interface | 29 | Call attempts | 40 |
| Box | 29 | Bypass answering machine | 40 |
| DESCRIPTION | 29 | Number of rings | 40 |
| INSTALLATION | 30 | Tone on PSTN fail | 40 |
| MOUNTING | 30 | Tone check | 40 |
| DESCRIPTION OF THE TERMINALS | 30 | Pulse dialling | 40 |
| BASIC CONNECTIONS | 31 | Call all voice messages numbers | 40 |
| AUXILIARY CONNECTIONS | 31 | Call all telemonitoring numbers | 40 |
| ACTIVATION POLARITY | 31 | Confirm call result | 41 |
| PROGRAMMING BY PC | 33 | Start playing after 'Delay' | 41 |
| MAIN WINDOW | 33 | Start playing after 'Voice on-line' | 41 |
| FILE MENU | 34 | Start playing after 'Selection' | 41 |
| OPTIONS MENU | 34 | One way audio | 41 |
| COMMUNICATION MENU | 34 | Alarm events and actions | 42 |
| PROGRAMMING | 34 | Restore events and actions | 43 |
| Phonebook Page | 34 | Telemonitoring user PIN | 44 |
| Outputs Page | 35 | Input Activation Mode | 44 |
| Events/Actions Page | 35 | Stop alarm channel | 44 |
| Options Page | 35 | Outputs | 45 |
| Voice messages Page | 36 | Voice Message Settings | 46 |
| Log Page | 36 | Record Voice Messages | 46 |
| PROGRAMMING BY KEYPAD | 37 | Repeat Voice Messages | 46 |
| INTRODUCTION | 37 | OPERATING YOUR SYSTEM | 47 |
| Restore Factory Settings | 37 | DISPLAY SIGNALS | 47 |
| Access Programming Mode | 37 | KEYPAD OPERATIONS | 47 |
| Programming values | 37 | Acces User Menu | 47 |
| Confirm programmed values | 37 | Change User PIN | 47 |
| Deleting a value | 37 | Stop Alarm by keypad | 47 |
| Display programmed values | 38 | Responder | 48 |
| Firmware revision | 38 | Reading the event register (Logger) | 48 |
| Exit programming mode | 38 | Activate/deactivate outputs | 48 |
| | | SUPERKEYS | 49 |
| | | REMOTE OPERATIONS | 50 |

INTRODUCTION

GENERAL FEATURES

Vocal and digital dialer

- 4 independent alarm channels with priority management.
- Option to control Stop Alarm and Listen-in features remotely by entering a PIN into the remote telephone keypad.
- Option to associate up to three voice messages for every event, with four message choices:
 - two messages, each 32 seconds long;
 - four messages, each 16 seconds long;
 - one 32 second long message plus four messages, each 8 seconds-long;
 - eight messages, each 8 seconds long.
- Built-in multiprotocol digital communicator.
- Programmable alarm-call activation by positive drop or negative command.
- Programmable PIN to Stop Alarm via device keypad.
- 8 programmable telephone numbers.
- Protection against accidental battery polarity inversion.
- Battery and system status checks.
- 255-element logger (event register).
- Programming by software or keypad.
- Superkey function.
- 2 programmable OC (Open Collector) outputs.



Telephone line

- Test for telephone line cutting.
- Signals telephone line failures on an Open Collector output or with a speaker tone.
- Excluded line tone control.
- Overvoltage protection.
- Programmable tone or pulse dialing.

Interface

- Digital message recording/playback.
- Built-in speaker for message playback.
- Single-digit LED display.
- Alphanumeric command keypad.

Box

- Tamper protection (anti-opening and anti-tearing).
- Compartment for 12 V – 1.2 Ah battery (not provided).

DESCRIPTION

Telephone dialers are signaling devices that can call and send pre-recorded messages to a series of programmed telephone numbers. The B-TEL2 dialer is available in a plastic box (ABS) that can be attached to the exterior of the control panel to which it must be connected. The dialer is designed to operate 4 channels, and thus control 4 distinct events (such as the burglar and fire alarms). Alarm messages can be associated with each channel.

These messages are recorded in the solid-state memory, avoiding the problems associated with using magnetic tape, including: loss of message quality over time, mechanical hitches after long periods of inactivity, etc...

An internal speaker allows one to check the quality and accuracy of recorded messages.

Programming all the typical parameters of this device is simplified by the use of an alphanumeric keypad and LED display. The device can also be programmed with the appropriate software.

☛ **All programmed data (including alarm messages) are stored in the non-volatile memory for an indefinite length of time, even when power is not present.**

The plastic box is provided with tamper protection (against unauthorized openings) and optional anti-tearing protection. The box can house a 12 V - 1.2 Ah battery

INSTALLATION

MOUNTING

This paragraph describes how the B-TEL2 is installed.

☞ **Numbers in bold type between brackets [] refer to parts in Figure 1, except when otherwise indicated.**

When choosing the location to install the dialer, keep the following considerations in mind:

- It is recommended that the dialer be installed at a height of about 160cm. This height will not only facilitate keypad and microphone access, but also make it easier to view the display;
 - ensure that there are no water pipes or electric cables present where the holes for attachment will be drilled. Once the installation location has been chosen, lay the wires between the dialer and the devices to which it will be connected. Proceed with the attachment as described in the following (refer to Figure 1 to identify the parts mentioned).
1. Remove the front panel by unscrewing the four screws [1].

CAUTION - After the dialer is installed, it may be necessary to remove the front panel for maintenance or repair purposes. Bear in mind that if the tamper switch is connected to the corresponding line of an anti-intrusion system, the latter can cause an undesired alarm. Therefore, before removing the front panel of the dialer, make sure that the panel's alarm group is disabled (refer to the control panel's instructions for information on how to disable the alarm group).

2. Pass the connection cables through the opening [8] and mount the dialer using the holes [3].

DESCRIPTION OF THE TERMINALS

1-2 [L.E.] External telephone line. Connect the external telephone line to terminals 1-2 [L.E.]. The dialer must be connected before all other telephone devices that will share the same line (these devices are connected to terminals 3-4 [L.I.]).

☞ As required by active laws and regulations, terminals 1-2 [L.E.] must be connected to the telephone line by means of the appropriate plug or a telephone commutator

CAUTION - Do not connect telephone devices parallel to terminals 1-2 [L.E.]

3-4 [L.I.] Internal telephone line. These terminals are used to connect other devices that will share the line (telephone exchanges, telephones, fax, modem, etc.).

☞ the event of an alarm, the dialer will use the telephone line to which it is connected for the time necessary to carry out the programmed call cycle.

5 [↔] Ground

CAUTION - As required by telecommunication systems safety standards, the 5 [↔] terminal must be connected to the ground of the electrical circuit to protect the dialer from overvoltage on the telephone line.

6-7 [A.S.] Tamper. These terminals are connected to the tamper switch [14] and are normally closed. They open when the box's front panel is removed (anti-opening protection). Connect these terminals to the tamper line of the security system control panel.

9-10 [O1][O2] Open-Collector Output. OC (Open-Collector) output.

CAUTION - During a power failure, no voltage will be present at the [+12] terminal. In order to continue powering loads, draw the voltage directly from the battery's positive terminal.

11-12-13-14 [L1][L2][L3][L4] Alarm channels. Normally, these terminals must be connected to Positive. When Positive drops, the dialer will call the telephone numbers and playback the alarm message associated with that alarm channel.

IMPORTANT - Channel #1 is **prioritized** over other alarm channels. If channel #1 is activated, the channel #1 call cycle will be performed, even if the dialer has already begun another channel's call cycle.

15-16 [+12] [↔] Power supply. The dialer can be powered by two different voltages, 13.8 Vcc or 27.6 Vcc.

CAUTION - Before applying voltage to terminals [+12] and [L], ensure that the jumper [18] is correctly positioned.

BASIC CONNECTIONS

The basic connections are necessary for dialer function. They are illustrated, with the channels highlighted, in Figure 3. In the connection example, alarm channel L1 is connected to the normally closed contact (NC) of the burglary system and receives, under normal conditions, the positive input voltage.

The dialer's default programming allows for activation by the absence of the positive signal ('Positive drop', factory setting, see jumper [16]). Should this setting change (activation with a 'Negative command') the alarm channel must be connected to a ground output in the event of an alarm (for example, Open-Collector).



AUXILIARY CONNECTIONS

The dialer does not require auxiliary connections in order to function. However, these connections provide many useful options. All auxiliary connections are shown in Figure 3 and described in the following paragraphs.

Tamper - Connection to tamper line terminals allows detection of possible attempts to tamper with the dialer box. In Figure 3, these terminals are connected in series to the security system tamper line.

Connection to other devices - The B-TEL2 is provided with 4 alarm channels. Channel 1 can, for example, be used to connect the alarm relay of a fire-protection system (as shown in the example), or the anti-theft alarm relay of a burglary system (connected to Channel 2 in the example) or a radio-receiver relay (telecare).

Interrupt alarm cycle - An alarm channel can be used for the Stop Alarm function. For example, a momentary positive activation of the 14[L4] terminal can interrupt the alarm cycle already underway (see also "Stop Alarm" in the PROGRAMMING chapters). In order for this feature to function, Channel L4 must be programmed (by software or keypad) as "Positive command".

ACTIVATION POLARITY

The dialer can be activated with positive or negative polarity signals (as specified in Table 2). To set **activation polarity**, move the jumper [16] (see Figure 1). The dialer is factory-set to be activated with positive polarity signals.

Activation mode can be programmed via software or keypad. Keep the following considerations in mind:

⚡ With + polarity: dialer is activated by the application of a positive signal (positive command).

With - polarity: dialer is activated by the lack of a negative signal (negative drop).

⚡L With + polarity: dialer is activated by the lack of a positive signal (positive drop).

With - polarity: dialer is activated by the application of a negative signal (negative command).

CAUTION - When using positive command signals with a voltage higher than 20 V, it is necessary to connect to a 10Kohm resistor (not provided): see Fig. 4.

| Tab. 2 - POLARITY AND ACTIVATION MODE | | | |
|---------------------------------------|-------------|-------------|----------|
| Activation command for input channels | Jumper [16] | Settings | |
| | | Programming | |
| | | By Software | Manually |
| Negative command | | | |
| Negative drop (fail-safe) | | | |
| Positive command | | | |
| Positive drop (fail-safe) | | | |

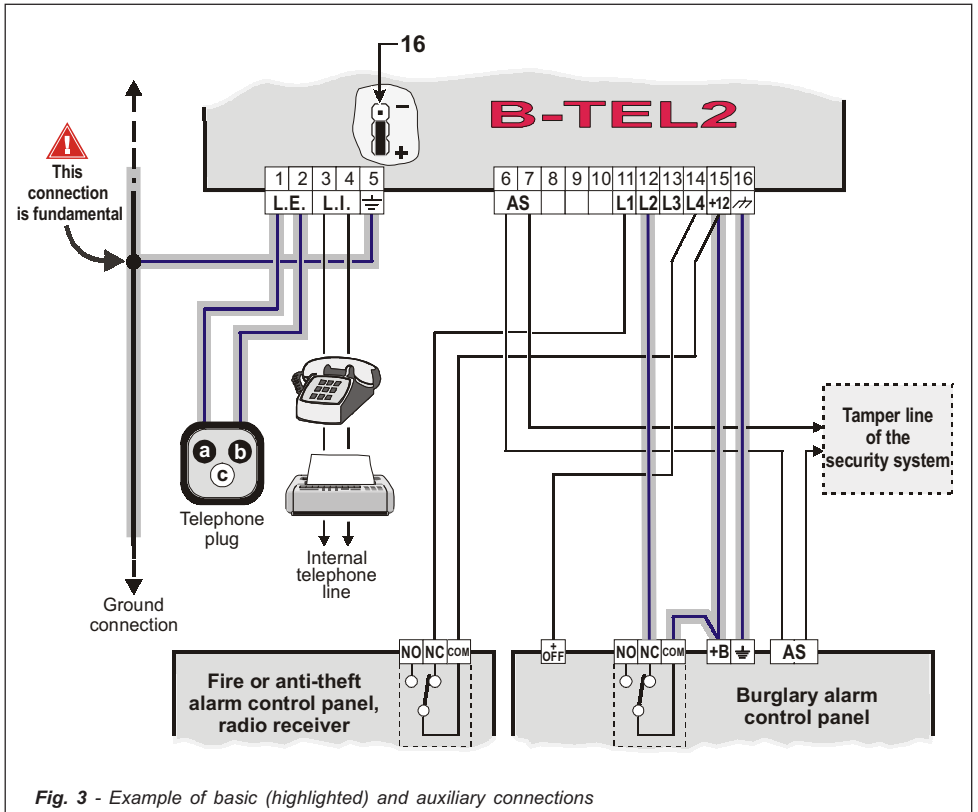


Fig. 3 - Example of basic (highlighted) and auxiliary connections

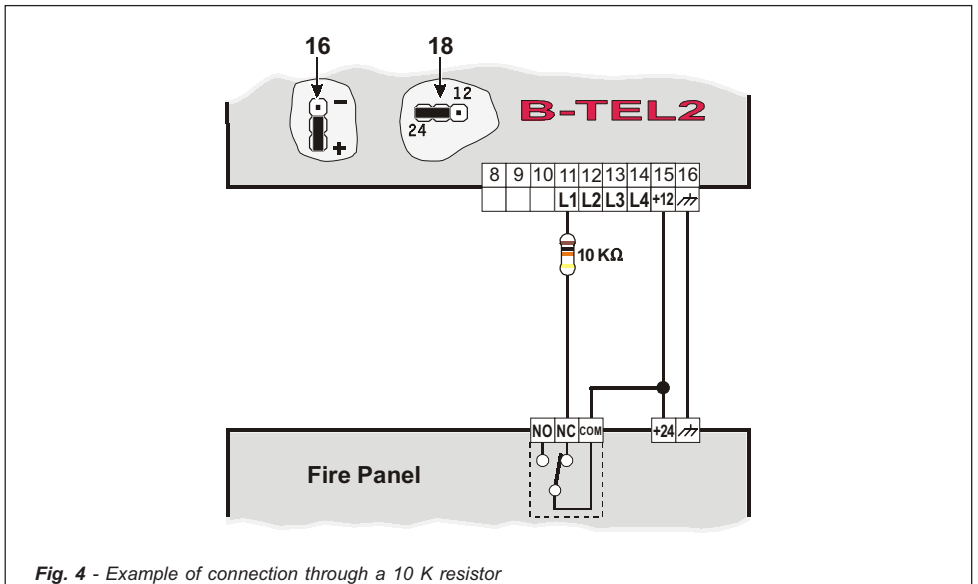


Fig. 4 - Example of connection through a 10 K resistor

PROGRAMMING BY PC

This chapter describes how to program the dialer with a PC. A PC can be used to set all the parameters necessary for dialer operation, as well as modify the dialer's operations to suit the user's specific needs and installation. This chapter also describes in detail **all the parameters** that can be programmed by the installer and the user. A particular cable (**GSM/LINK**) is also needed to program the dialer by PC. The cable diagram is shown in Figure 2. This cable is connected between the PC's RS232 serial port and the connector [10], present on the dialer's board.





Once the PC is connected to the dialer, the software application can be launched and the programming performed, as described in this chapter.



MAIN WINDOW

Once the application is launched, a window similar to the one shown in Figure 4 will appear. This paragraph describes all of the window's components.

Menu Bar - This bar contains all the different menu items used not just to program client data, but also to manage several important PC settings.

Bookmark Bar - The settings of multiple clients can be kept open at the same time (see menu **File -> Open...**). One can use the bookmark bar to instantaneously recall the settings of an open client: simply click on the corresponding "bookmark". Once the "bookmark" is selected, the right mouse key can be clicked to save data or close the client profile. Be sure to save all client data or changes before closing.

Client Info Button - Click on the  button to set client data (name, phone, address, etc.). The **Account Code** is a meter that advances automatically. This parameter does not keep track of deleted clients: therefore one will be assigned the first free number by clicking on the  button.

Send/Load All Button - With a single click, these buttons can load all parameters programmed into the dialer to the PC memory (*Board Load*, green arrow button, ) or send all client programming to the dialer's memory (*Send to Board*, red arrow button, )

Choose Programming Page Window - Various programming pages can be selected from this window. When a page is selected, a series of data to program will appear in the Parameters Area.

 Page names may not always be visible. Click on the Client Bar to view page names.

Parameters Area - This part of the window shows all parameters that can be programmed. Parameters are grouped according to the page selected and are sorted into sections to facilitate data input. See the PROGRAMMING paragraph for a detailed description of these parameters.

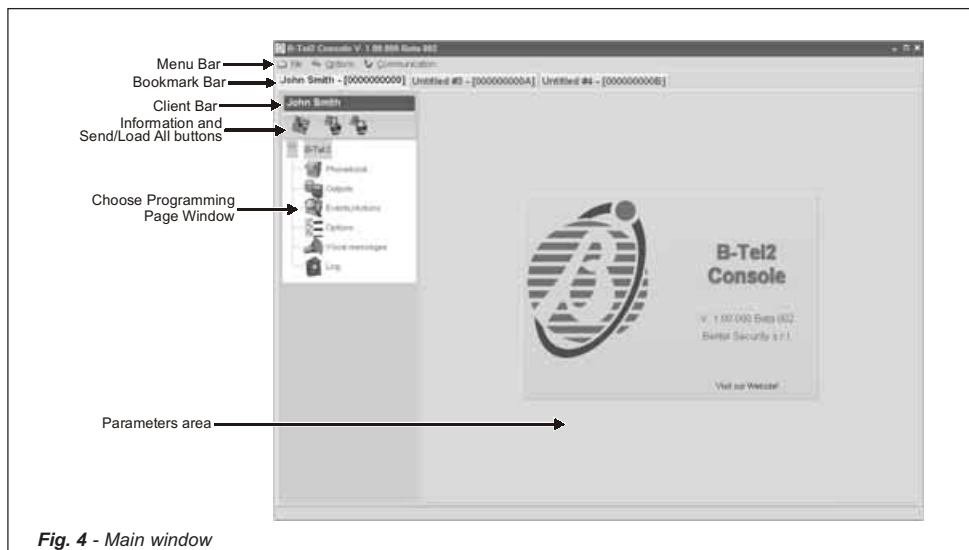


Fig. 4 - Main window

FILE MENU

Items in the File Menu include the following:

- New** Create a new client. It is recommended that one assign and save a new name for each client.
- Save** Save all of a client's settings, changes, and data to memory.
- Open** Open a client's data and settings.
- Close** Close out of all client information. Be sure to save all changes before closing.
- Export Data** Export the selected client configuration to file.
- Import Data** Import the client configuration previously saved under **Export Data**.
- Exit** Close the program and exit.


☞ One can also perform **Save** and **Close** commands by right-clicking the mouse on the Bookmark Bar.

OPTIONS MENU

This menu contains the parameters and options for correct program operation. Items in the Options Menu are the following:



- Serial Ports** Sets the serial port (RS232) to connect to the dialer through the GSM/LINK wire, as well as the number of connection attempts (preset at 3 attempts).
- Language** Allows one to select the application's default language from those available.

COMMUNICATION MENU

- Firmware Upgrade** Quickly and easily upgrades the dialer's firmware. Once the new firmware is obtained from the .HEX file, it can be loaded and sent to the dialer by pressing the  button.

PROGRAMMING

The following paragraph describes in detail all the programming pages and their relative parameters.

Send and Load buttons: Except for the Messages Page, all programming pages show the two buttons  (Load data from board, green arrow) and  (Send data to board, red arrow). On the Log page, only the **Load** button is present. Even though they look the same as the buttons in the Select Programming Page window, the action range of these two buttons is limited exclusively to the parameters of the single page currently displayed on the screen.

Phonebook Page

Up to 8 telephone numbers, each 20 digits long, can be programmed on this page. To program one (or more) telephone numbers, select the corresponding line from the list on the left and enter the data on the right.


☞ To select more numbers, click on the table row while holding down the Control key on the PC keyboard. To select a continuous series of numbers, select the first number and, holding down the Shift (or Maiusc) key on the PC keyboard, the last number.

Description - Enter the description for the selected telephone number in this box.

Telephone number - Enter the telephone number in this box (enter only numbers).

Behaviour - Select the use for which the phone number is programmed. To disable the phone number (leaving it in the memory for future use) select the *None* option.

Telemonitoring - This section is only available if *Telemonitoring* is set in the **Behaviour** section. Click the **Protocol** box to select one from those available. Every Telemonitoring protocol requires a 4-digit User PIN (5 digits for CESA protocol).

Button  - Click this button to select all telephone numbers on the list. Alternatively, clicking on the triangle to the right, one can deselect the numbers.

☞ Programmed telephone numbers will appear in the table with a different color, as explained in the *Legenda* section

Outputs Page

The parameters for the dialer's two outputs are programmed on this page.

☞ To set or cancel options, double-click the appropriate box.

Active state - The state of the non-operating output is programmed in this box:



= Open-Collector Normally Open.



= Open-Collector Normally Closed.

PSTN fault - If chosen, the output will be activated in the event of a telephone line failure.

Mains fault - If chosen, the output will be activated if power is missing for at least 15 minutes.

Low battery - If chosen, the output will be activated in the event of insufficient battery level.

FTC - If chosen, the output will be activated if a call is not completed properly.

Call routing - If chosen, the output will be activated when the dialer performs a phone call.

One way audio - If chosen, the output will be activated when listen-in is activated.

Remote control - If chosen, the output will be activated when the user uses remote commands.

Monostab. - If chosen (marked by the check ✓ symbol), the output will, upon activation, remain active for a set length of time (**ON Dur.**). Once this time is completed the output will return to the non-operating state.

ON Dur. (sec.) - This box is active only if the *Monostab.* Option is selected. Specify the monostable time from 1 to 240 seconds by clicking the mouse on the arrow that appears near the number.

Events/Actions Page

Actions the dialer must carry out in response to specific events or actions are programmed on this page.

Telephone numbers - Select one or more telephone numbers that the dialer will call when one of the events listed in the *Description* column occur. These telephone numbers are programmed on the **Phonebook Page**.

☞ To select a number, click the appropriate box. The check sign ✓ will indicate that the telephone number has been selected.

☞ The *Mains fault* event occurs only if power is missing for at least 15 minutes.

C-ID - *Telemonitoring* Contact ID PINs (3 digits) are programmed in this column.

SIA - *SIA Telemonitoring* PINs (2 digits) are programmed in this column.

☞ To set the *Telemonitoring* PINs, click the appropriate box twice and enter the PIN.

Mess. # - Up to 3 voice messages can be sent when an event or action listed in the *Description* column occurs.

☞ To select a message, double-click the appropriate box and choose the message from those available.

Options Page

The options and parameters for correct dialer operation are programmed on this page.

Selection - Click on the appropriate boxes to disable DTMF tone control, select tone dialing, or select pulse dialing.

Start playing after - manner in which a dialer sends a voice message is programmed in this section.

- If **Selection**, is chosen, the message will be sent after the remote telephone sends a response signal.
- **Voice on-line**, is chosen, the message will be sent after the remote operator responds.
- **Delay**, is chosen, the message will be sent after the timed delay, programmable from 0 to 99 seconds. Set the delay time by clicking the arrow next to the number, or clicking on the box and manually inserting the number of seconds.

Vocal messages - The parameters for voice messages are programmed in this section. These parameters are:

The number of times each message is repeated (minimum 1, maximum 9),

The duration and number of messages as specified in the following:

2 messages = two messages, each 32 seconds long (factory default);

4 messages = four messages, each 16 seconds long;

1 + 4 messages = one 32 second long message and four 8 second long messages;


8 messages = eight messages, each 8 seconds long.

A brief description can be written for each voice message by clicking on the message box.

General options - The dialer's general options are programmed in this section, described as the following:

- **Number of rings** - The number of rings after which the dialer answers the phone (if able to do so). If the installer has enabled the *Bypass answering machine* option, this option will be ignored.
- **Call attempts** - Number of times a call will be attempted in the event it is not properly completed.
- **Tone on PSTN fail** - The dialer normally shows the presence or absence of the phone line on its display.

When this option is selected, the dialer will emit a sound signal if there is a PSTN line failure. When this option is deselected, the dialer will show the PSTN line outage, but will not emit a sound signal.

● **Confirm call result** - When this option is selected, the dialer will wait for confirmation from the remote user before sending the voice message. The remote user will send confirmation by pressing the  key of the remote telephone keypad (valid only for touch tone telephones).

● **One way radio** - When this option is selected, a listen-in session will automatically begin after the cycle of electronic surveillance messages is sent.

● **Call all telemonitoring numbers** - When this option is selected, all calls to electronic surveillance programmed for a single event will be performed. If this option is deselected, the dialer will end electronic surveillance calls as soon as one is completed properly.

● **Call all voice messages numbers** - When this option is selected, all voice calls programmed for a single event will be performed. If option is deselected, the dialer will end voice calls as soon as one is completed properly.

● **Bypass answering machine** - This option allows the dialer to share the telephone line with another responding device (voicemail, fax, etc.). Select this option and the dialer will immediately respond after the first ring, if a single ring was detected within the last minute.

Codes - In this section, the Installer PIN (**Master**) and/or User PIN (**Slave**) needed to perform the necessary programming are entered. It is possible to enter PINs of at least 4 up to 6 digits.

Inputs - The input channel and stop alarm channel activation modes are programmed in this section. For more information, read the *ACTIVATION POLARITY* paragraph in the *INSTALLATION* chapter.

☞ Double-click the appropriate box to set the mode.

Voice messages Page

Voice messages are programmed on this page. The number and duration of messages are set in the *Options Page*.



PLAY Button - Press this button to listen to the voice message.




REC Button - Press this button to start recording a new voice message.




STOP Button - Press this button to stop recording or listening to a voice message.

☞ A real-time timer will show the elapsed time while recording or playing a message.

Log Page

On this page, pressing the  button allows one to see the list of the last 255 events that occurred.

It is possible to export the displayed list into a file just pressing the button .

PROGRAMMING BY KEYPAD

The dialer's keypad can be used to set all the parameters necessary for dialer operation, as well as modify the dialer's operations to suit the user's specific needs and installation. The appropriate software or the dialer's keypad, with the auxiliary display, can be used to program these parameters. When programming by keypad, the parameter is selected by pressing a series of keys. The value for that parameter is then entered.



INTRODUCTION

Restore Factory Settings

To restore all factory settings, remove all power supplies, hold down the **1**, **4**, **7** and **A** together, and then replace the power supplies.

Access Programming Mode

In order to program parameters by keypad, an Installer PIN must be entered via the keypad in the following manner:

C <Installer PIN> **E**

where <Installer PIN> is a number 4 to 6 digits long. The factory-set installer PIN is **0001**.

The device will indicate that it has successfully *entered programming mode* with a letter **P** on the display.

☞ If a PIN longer than 6 digits or an incorrect PIN is entered, the speaker will emit an error sound (boop).

☞ If, at any point during programming, 5 minutes elapse without a key being pressed, the dialer will automatically exit programming mode.

Programming values

Unless otherwise indicated, values are programmed in the following manner:

A <Section Number> **B** <Value> **E**

where <Section Number> is a 3-digit number and <Value> is the data to be programmed. For a complete list of sections, refer to Tab. 3.

When the **B** key is pressed, the letter **L** will appear on the display. At this point the value relative to the section being programmed can be entered.

If the **A** key is pressed again while the <Section Number> is being entered, dialer will exit the section and return to the standby state

Confirm programmed values

Press the **E** key to confirm and store the entered value.

Deleting a value

When programming a value, pressing the **C** key will delete the last digit entered (currently shown on the display). When the correct digit is entered, it will appear on the display in the place of the incorrect digit. If the **C** key is pressed repeatedly, it will advance until it reaches the beginning of the entered value, without exiting from the section.

Display programmed values

View the value of a previously programmed section in the following manner:

A <Section Number> **D**

where <Section Number> is a 3-digit number.

If, for example, one wishes to view the third telephone number programmed (section 103, see Table 3a), the following procedure will be used:

A to select the section;

1**0****3** to select the third telephone number;

D to view the requested value, which will be shown on the display in sequence, figure by figure, at regular intervals. After a value is viewed, or if the section does not contain any programmed data, the dialer returns to the standby state.

Firmware revision

Find out which revision of B-TEL2 firmware the board is using by entering the programming phase and keying in the following formula:

A **000** **D**

The display will show, in order, the firmware revision numbers (**1** **1** **0** **0**).

Exit programming mode

To exit programming mode at any moment, press the key **F** once or twice.

If, for example, **F** is pressed while a value is being programmed, or after **E** is pressed, the dialer returns to the standby state. However, if **F** is pressed when the display shows the letter **D**, the dialer will exit programming mode.

PROGRAMMING

If an invalid key is pressed during programming operations, the speaker will emit the classic error sound (boop). In all other cases, it will emit a normal sound (beep).

For a complete and detailed description of all parameters, consult the "PROGRAMMING BY PC" chapter.

Change Installer PIN

The Installer PIN can be changed at any time (it is factory set at **0001**). Change the Installer PIN by entering programming mode and entering the following formula::

[A] **250** [B] <New Installer PIN> [E]

where <New Installer PIN> is a number 4 to 6 digits long.

Programming telephone numbers

The dialer can store 8 telephone numbers, each up to 20 digits long. One-second pauses can be inserted into every telephone number: for example, a pause can be inserted between the number prefix and the number itself.

The dialer is provided from the factory without any programmed telephone numbers. To program a telephone number, refer to Tab. 3a.

| Tab. 3a - PROGRAMMING TELEPHONE NUMBERS | | |
|---|-----------------------|--|
| Section # | Parameter description | Notes |
| 101 | Telephone Number #1 | Programming formula: [A] <Section #> [B] <Option Number> [E] where <Option Number> is a number, maximum 20 digits long. To insert a space, press the key [A] between two digits. The dialer is provided from the factor without any stored telephone numbers. |
| 102 | Telephone Number #2 | |
| 103 | Telephone Number #3 | |
| 104 | Telephone Number #4 | |
| 105 | Telephone Number #5 | |
| 106 | Telephone Number #6 | |
| 107 | Telephone Number #7 | |
| 108 | Telephone Number #8 | |

Telephone number options

Options can be programmed for each telephone number. Refer to Tab. 3b for a list of options. The dialer is provided from the factory without any programmed options (0).

| Tab. 3b - PROGRAMMING TELEPHONE NUMBER OPTIONS | | | |
|--|-----------------------|---------|--|
| Section #. | Parameter Description | Factory | Notes |
| 141 | Telephone Number #1 | 0 | Programming formula: [A] <Section #> [B] <Option Number> [E] where <Option Number> is one of the following: 0 = None (inactive telephone number - factory setting) 1 = Voice message 2 = Contact ID 3 = Cesa 4 = Ademco 10 5 = Ademco 14 6 = Franklin 7 = Radionics 8 = Scantronic 9 = Sia |
| 142 | Telephone Number #2 | 0 | |
| 143 | Telephone Number #3 | 0 | |
| 144 | Telephone Number #4 | 0 | |
| 145 | Telephone Number #5 | 0 | |
| 146 | Telephone Number #6 | 0 | |
| 147 | Telephone Number #7 | 0 | |
| 148 | Telephone Number #8 | 0 | |

Call attempts

Program the number of times a call is attempted for each programmed telephone number by entering the following formula:

A **3****2****0** **B** <Number of attempts> **E**

where <Number of attempts> is a number between 1 and 9 (factory set at 1).

Bypass answering machine

Enable/disable Bypass answering machine by entering the following formula:

A **3****0****6** **B** **0** **E** (to **disable** bypass answering machine - factory setting)

A **3****0****6** **B** **1** **E** (to **enable** bypass answering machine)

Number of rings

Program the number of rings after which the dialer will answer an incoming call by entering the following formula:

A **3****2****3** **B** <Number of rings> **E**

where <Number of rings> is a number between 1 and 9 (factory set at 3).

☞ If the **Bypass answer machine** option is enabled, the dialer will ignore this parameter.

Tone on PSTN fail

Enable/disable notice of telephone line failure by entering the following formula:

A **3****0****3** **B** **0** **E** (to **disable** the tone - factory setting)

A **3****0****3** **B** **1** **E** (to **enable** the speaker tone)

Tone check

Enable/disable DTMF tone check by entering the following formula:

A **3****0****1** **B** **0** **E** (to **enable** Tone check - factory setting)

A **3****0****1** **B** **1** **E** (to **disable** Tone check)

Pulse dialling

Select the pulse/tone dialing by entering the following formula:

A **3****0****2** **B** **0** **E** (to select **tone** dialing- factory setting)

A **3****0****2** **B** **1** **E** (to select **pulse** dialing)

Call all voice messages numbers

Enable/disable the option to call all voice numbers by entering the following formula:

A **3****0****7** **B** **0** **E** (to **disable** the option - factory setting)

A **3****0****7** **B** **1** **E** (to **enable** the option)

Call all telemonitoring numbers

Enable/disable the option to call all Telemonitoring numbers by entering the following formula:

A **3****0****8** **B** **0** **E** (to **disable** the option - factory setting)


A **3****0****8** **B** **1** **E** (to **enable** the option)


Confirm call result

Enable/disable voice call confirmation by entering the following formula:

A **3** **0** **5** **B** **0** **E** (to **disable** voice call confirmation - factory setting)

A **3** **0** **5** **B** **1** **E** (to **enable** voice call confirmation)

 If voice call confirmation is disabled, message playback will begin after the **Start playing after 'Delay'** time has elapsed (see the following paragraph). When voice call confirmation is instead enabled, message playback will begin after a voice response is received from the remote user.

If this option is enabled (value 1), the remote user will send confirmation by pressing the  key of the remote telephone keypad (valid only for touch tone telephones).

Start playing after 'Delay'

Program the delay after which the dialer begins voice message playback by entering the following formula:

A **3** **2** **1** **B** **<Delay>** **E**

where **<Delay>** is a number between 0 and 240 seconds (factory set at 0, no delay).

Start playing after 'Voice on-line'

Enable/disable voice call confirmation by entering the following formula:

A **3** **0** **4** **B** **0** **E** (to **disable** voice call confirmation - factory setting)

A **3** **0** **4** **B** **1** **E** (to **enable** voice call confirmation)

Start playing after 'Selection'

Set on to "0" the two previous options to play the message immediately after the end of the selection, as indicated below:

A **3** **2** **1** **B** **0** **E** (Start playing after 'Delay' = 0 secs.)

A **3** **0** **4** **B** **0** **E** (**Disable** the playing after 'Voice on Line')

One way audio

Select the listen-in mode by entering the following formula:

A **3** **0** **9** **B** **0** **E** (to **disable** listen-in mode – factory setting)

A **3** **0** **9** **B** **1** **E** (to **enable** listen-in mode)



Alarm events and actions

When an alarm event occurs (alarm channel, failure, superkey is pressed, etc.) the dialer can perform up to 8 calls, send up to 3 voice messages, and/or can send a code to the electronic surveillance company.

Tab. 3d, 3e, and 3f describe these types of settings.

| Tab. 3d - ASSIGNING TELEPHONE NUMBERS IN THE EVENT OF AN ALARM | | |
|--|-----------------------------|--|
| Section # | Event description | Notes |
| 611 | Input 1 alarm | <p>Programming formula:</p> <p>[A] <Section #> [B] <Ordinal Telephone Number> [E]</p> <p>Insert one or more digits specifying the ordinal telephone number (from Table 3a) into <Ordinal Telephone Number>.</p> <p>(Ex. If the dialer is being programmed to call the 1st, 3rd and 4th telephone numbers of Tab. 3a, enter <u>1</u><u>3</u><u>4</u>)</p> <p>(These sections are factory-set at zero)</p> |
| 612 | Input 2 alarm | |
| 613 | Input 3 alarm | |
| 614 | Input 4 alarm | |
| 615 | PSTN telephone line failure | |
| 616 | Low battery | |
| 617 | Power failure | |
| 618 | SUPERKEY 1 is pressed | |

| Tab. 3e - ASSIGNING VOICE MESSAGES IN THE EVENT OF AN ALARM | | |
|---|-----------------------------|--|
| Section # | Event description | Notes |
| 621 | Input 1 alarm | <p>Programming formula:</p> <p>[A] <Section #> [B] <Voice Message Number> [E]</p> <p>Insert one or more digits (max. 3) that specify the number of voice messages to send in <Voice Message Number> .</p> <p>(Ex. If the dialer is being programmed to send the 1st and 3rd voice messages, enter <u>1</u><u>3</u>)</p> <p>(These sections are factory-set at zero)</p> |
| 622 | Input 2 alarm | |
| 623 | Input 3 alarm | |
| 624 | Input 4 alarm | |
| 625 | PSTN telephone line failure | |
| 626 | Low battery | |
| 627 | Power failure | |
| 628 | SUPERKEY 1 is pressed | |

| Tab. 3f - ASSIGNING TELEMONITORINGCODES IN THE EVENT OF AN ALARM | | | | |
|--|-----------------------------|---------------|------|--|
| Section # | Event description | Factory prog. | | Notes |
| | | Contact ID | SIA* | |
| 631 | Input 1 alarm | 11A | FA | <p>Programming formula:</p> <p>[A] <Section #> [B] <Protocol Code> [E]</p> <p><Protocol Code> > is a fixed-length string of 3 hexadecimal characters.</p> <p>(*) - SIA codes can only be modified by the appropriate software</p> |
| 632 | Input 2 alarm | 13A | BA | |
| 633 | Input 3 alarm | 13A | BA | |
| 634 | Input 4 alarm | 13A | BA | |
| 635 | PSTN telephone line failure | 351 | LT | |
| 636 | Low battery | 3A2 | YT | |
| 637 | Power failure | 3A1 | AT | |
| 638 | SUPERKEY 1 is pressed | 6AA | UX | |

Restore events and actions

When an alarm event is restored (for example, alarm channel, failure, etc.) the dialer can perform up to 8 calls, send up to 3 voice messages, and/or send a code to the electronic surveillance company.

Tab. 3g, 3h and 3i, describe this type of programming.

| Tab. 3g - ASSIGNING TELEPHONE NUMBERS FOR RESTORE EVENT | | |
|---|-----------------------------|---|
| Section # | Event description | Notes |
| 651 | Input 1 restore | <p>Programming formula: $\boxed{A} <Section \#> \boxed{B} <Ordinal Telephone Number > \boxed{E}$</p> <p>Insert one or more digits specifying the ordinal telephone number (from Tab. 3a) into $<Ordinal Telephone Number >$. (Ex. If the dialer is being programmed to call the 2nd, 4th and 7th telephone number of Tab. 3a, enter $\boxed{2}\boxed{4}\boxed{7}$)</p> <p>(These sections are factory-set at zero)</p> |
| 652 | Input 2 restore | |
| 653 | Input 3 restore | |
| 654 | Input 4 restore | |
| 655 | Restore PSTN telephone line | |
| 656 | Restore battery level | |
| 657 | Restore system power | |



| Tab. 3h - ASSIGNING VOICE MESSAGES FOR RESTORE EVENT | | |
|--|-----------------------------|--|
| Section # | Event description | Notes |
| 661 | Input 1 restore | <p>Programming formula: $\boxed{A} <Section \#> \boxed{B} <Voice Message Number > \boxed{E}$</p> <p>Insert one or more digits (max. 3) that specify the number of voice messages to send in $<Voice Message Number >$. (Ex. If the dialer is being programmed to send 1st and 3rd voice message, enter $\boxed{1}\boxed{3}$)</p> <p>(These sections are factory-set at zero)</p> |
| 662 | Input 2 restore | |
| 663 | Input 3 restore | |
| 664 | Input 4 restore | |
| 665 | Restore PSTN telephone line | |
| 666 | Restore battery level | |
| 667 | Restore system power | |

| Tab. 3i - ASSIGNING TELEMONITORING CODES FOR RESTORE EVENT | | | | |
|--|------------------------|---------------|------|--|
| Section # | Event description | Factory prog. | | Notes |
| | | Contact ID | SIA* | |
| 671 | Input 1 restore | 11A | FR | <p>Programming formula: $\boxed{A} <Section \#> \boxed{B} <Protocol code > \boxed{E}$</p> <p>$<Protocol code >$ is a fixed-length string of 3 hexadecimal characters.</p> <p>(*) - SIA codes can only be modified by the appropriate software</p> |
| 672 | Input 2 restore | 13A | BR | |
| 673 | Input 3 restore | 13A | BR | |
| 674 | Input 4 restore | 13A | BR | |
| 675 | Restore PSTN tel. line | 351 | LR | |
| 676 | Restore battery level | 3A2 | YR | |
| 677 | Restore system power | 3A1 | YQ | |

Telemonitoring user PIN

If the electronic surveillance option is associated with a telephone number (options #2 - #9 of Tab. 3b), a User PIN must also be programmed. This PIN is hexadecimal (alphanumeric) and is 4 digits long (5 for CESA protocol). The dialer is provided from the factory without any programmed User Codes. To program the electronic surveillance User PIN, refer to Tab. 3c.

| Tab. 3c - PROGRAMMING TELEMONITORING USER PIN | | | |
|---|-----------------------|---------------|--|
| Section # | Parameter description | Factory prog. | Notes |
| 181 | User PIN #1 | 0000 | Programming formula: $\boxed{A} <Section \#> \boxed{B} <User PIN> \boxed{E}$ <User PIN> is a string of 4 alphanumeric characters (ex. $\boxed{A} \boxed{2} \boxed{B} \boxed{5}$). 5 alphanumeric digits are required for CESA protocol (number 3 of Tab. 3b) (ex. $\boxed{A} \boxed{3} \boxed{C} \boxed{2} \boxed{4}$). |
| 182 | User PIN #2 | 0000 | |
| 183 | User PIN #3 | 0000 | |
| 184 | User PIN #4 | 0000 | |
| 185 | User PIN #5 | 0000 | |
| 186 | User PIN #6 | 0000 | |
| 187 | User PIN #7 | 0000 | |
| 188 | User PIN #8 | 0000 | |

Input Activation Mode

To program the activation mode of the 4 inputs, consult Table 3m. For further information, consult the ACTIVATION POLARITY paragraph in the INSTALLATION chapter.

| Tab. 3m - PROGRAMMING INPUT ACTIVATION MODE | | | |
|---|-----------------------|---------------|---|
| Section # | Parameter description | Factory prog. | Notes |
| 401 | Input 1 | 1 | Programming formula: $\boxed{A} <Section \#> \boxed{B} <Mode> \boxed{E}$ where <Mode> can be 1 or 0 (see Tab. 2 of the INSTALLATION chapter) |
| 402 | Input 2 | 1 | |
| 403 | Input 3 | 1 | |
| 404 | Input 4 | 0 | |

Stop alarm channel

It is possible to program one of the four channel inputs to perform the 'Stop Alarm' function as described in Table 3n. For further information, consult the 'Auxiliary connections' paragraph of the INSTALLATION chapter and the 'Stop Alarm' paragraph in the OPERATING YOUR SYSTEM chapter.

| Tab. 3n - PROGRAMMING THE STOP ALARM CHANNEL | | | |
|--|-----------------------|---------------|---|
| Section # | Parameter description | Factory prog. | Notes |
| 405 | Input 1 | 0 | Programming formula: $\boxed{A} <Section \#> \boxed{B} <Option> \boxed{E}$ where <Option> can be: 1 = Channel programmed as Stop Alarm 0 = Channel NOT programmed as Stop Alarm |
| 406 | Input 2 | 0 | |
| 407 | Input 3 | 0 | |
| 408 | Input 4 | 1 | |

Outputs

It is possible to program outputs to respond to one or more events. Moreover, each output can be programmed as 'Monostable' or 'Bistable'. The following Tab. 3o and 3p describe, respectively, how to program Outputs 1 and 2.

| Tab. 3o - PROGRAMMING OUTPUT #1 | | | |
|---------------------------------|------------------------------|---------------|--|
| Section # | Event description | Factory prog. | Notes |
| 411 | Telephone line failure | 1 | <p>Programming formula: A <Section #> B <Qualification> E</p> <p>where <Qualification> can equal: 1 = Event enabled to activate Output #1 0 = Event NOT enabled to activate Output #1</p> |
| 412 | System input voltage failure | 0 | |
| 413 | Low battery | 0 | |
| 414 | Failed call | 0 | |
| 415 | Begin telephone call | 0 | |
| 416 | Listen-in enabled | 0 | |
| 417 | Remote command | 0 | |
| 418 | Polarity | 0 | <p>Programming formula: A <Section #> B <Stand-by polarity> E</p> <p>where <Stand-by polarity> can be: 1 = Output #1 Normally Open (NO) 0 = Output #1 Normally Closed (NC)</p> |
| 419 | Time ON (sec.) | 0 | <p>Monostable/Bistable Programming of Output #1: A 4 1 9 B <Time ON> E</p> <p>where <Time ON> can equal: 0 = Output programmed as Bistable (factory setting) 1+240 = Time (in seconds) during which Output #1 remains active before returning to standby (Monostable)</p> |
| Tab. 3p - PROGRAMMING OUTPUT #2 | | | |
| Section # | Event description | Factory prog. | Notes |
| 421 | Telephone line failure | 0 | <p>Programming formula: A <Section #> B <Qualification> E</p> <p>where <Qualification> can equal: 1 = Event enabled to activate Output #2 0 = Event NOT enabled to activate Output #2</p> |
| 422 | System input voltage failure | 1 | |
| 423 | Low battery | 1 | |
| 424 | Failed call | 0 | |
| 425 | Begin telephone call | 0 | |
| 426 | Listen-in enabled | 0 | |
| 427 | Remote command | 0 | |
| 428 | Polarity | 0 | <p>Programming formula: A <Section #> B <Stand-by polarity> E</p> <p>where <Stand-by polarity> can be: 1 = Output #2 Normally Open (NO) 0 = Output #2 Normally Closed (NC)</p> |
| 429 | Time ON (sec.) | 0 | <p>Monostable/Bistable Programming of Output #2: A 4 2 9 B <Time ON> E</p> <p>where <Time ON> can equal: 0 = Output programmed as Bistable (factory setting) 1+240 = Time (in seconds) during which Output #2 remains active before returning to standby (Monostable)</p> |

Voice Message Settings

Before recording messages, set message duration and number of messages by entering the following formula:

A **500** **B** <Message Number/Duration> **E**

where <Message Number/Duration> is a number between 0 and 4:

0 = two messages, each 32 seconds long (factory setting);

1 = four messages, each 16 seconds long;

2 = one 32 second long message and four messages, each 8 seconds long;

3 = eight messages, each 8 seconds long.

Record Voice Messages

Follow this procedure to record voice messages:

1. Press the **A** key;

2. Key in the number **50** followed by the number of messages that will be recorded (from **1** to **8**);

3. Press the **B** key.

 At this time, any message previously recorded will be ERASED.

4. Wait until the display shows the dash **-**;

5. Move near the microphone **[2]** shown in Fig. 1 and press the **E** key to begin recording. The display will show the number of seconds left until the end of the message;

 If you wish to interrupt message recording, press the **F** key.

6. Record additional messages, as necessary, by repeating the procedure from Step 1.

Repeat Voice Messages

To program the number of repetitions for all voice messages, enter the following formula:

A **322** **B** <Number of repetitions> **E**

where <Number of repetitions> is a number between 1 and 9 (factory set at 1: a voice message will be sent only once).

OPERATING YOUR SYSTEM



CAUTION - Operation of the B-TEL2 is guaranteed only if a qualified professional installs and programs the device.

In the event of an alarm, all telephone devices connected after the dialer are isolated for the time necessary to undertake the cycle of programmed calls. To restore the telephone line, interrupt the alarm cycle as described in the "Stop Alarm by Keypad" paragraph.

DISPLAY SIGNALS

The dialer display is normally turned off in a non-operating state. However, the occurrence of any malfunctions will immediately be revealed on the display by a letter, as described in the following (in order of priority, in the event that several malfunctions are present simultaneously):

L = Battery level low.

P = External power failure.

T = PSTN telephone line failure.

KEYPAD OPERATIONS

NOTE - It is necessary to enter the User Menu in order to perform KEYPAD OPERATIONS.

Access User Menu

Access the User Menu key by entering the following formula:

C <User PIN> **E**

where <User PIN> is a number 4 to 6 figures long (the User PIN is factory set at **0002**).

When the User Menu is accessed, the letter **U** will be shown on the display.

☞ If an incorrect PIN or a PIN longer than 6 figures is entered, the speaker will emit an error sound (boop).

☞ If 5 minutes elapse without a key being pressed at any point in the programming process, the dialer will automatically exit out of the User Menu.

To exit the User Menu in advance, press the **F** key when the display shows the letter **U**.

Change User PIN

Change the User PIN (factory set at **0002**) by entering the following formula:

A **2** **5** **1** **B** <New PIN> **E**

where <New PIN> is a number 4 to 6 digits long.

Stop Alarm by keypad

Once an alarm situation has been detected, or in cases of a false alarm, the telephone dialer (and therefore any calls, including those already underway) can be stopped by **access the User Menu** and pressing the **E** key on the keypad.

It is also possible to dedicate an alarm channel specifically to the Stop Alarm function. Ask the installer to perform the wiring required for this option.

To ensure that the dialer has effectively performed the Stop Alarm, press the keypad keys. If the display remains off, the function was successfully completed. If not, key in the Stop Alarm code again.

Responder

Enable or disable the responder by entering the following formula:

A **3** **1** **9** **B** **0** **E** (disable responder, factory setting)

A **3** **1** **9** **B** **1** **E** (enable responder)


Reading the event register (Logger)

A list of the last 255 events (alarms, superkeys, restores, failures, etc.) can be viewed on the display. Access the event register by entering the following series of keys:

A **0** **0** **1** **D**

At this point, the standby character **L** will appear on the display. Press **1** to see events from most recent to first; press **2** to view events from first to last.

Each time the **1** and **2** keys are pressed, the display will show, in sequence, 3 characters. These event codes are explained in Tab. 4.

 The INSTALLER is also able to read the Logger entering the user menu with his own code and following the procedure described in this paragraph.

| Tab. 4 - READING THE EVENT REGISTER | |
|---|-----------------------------|
| Sequence of characters shown on the display | Event description |
| A L x | Input X alarm |
| r L x | Restore X alarm |
| F b A | Low battery |
| r b A | Restore low battery |
| F E E | PSTN telephone line failure |
| r E E | Restore PSTN telephone line |
| F P L | System power failure |
| r P L | System power restored |
| S U x | SUPERKEY X is pressed |
| L x F | Call to number X failure |
| L x S | Call to number X completion |

Activate/deactivate outputs

Activate or deactivate the dialer outputs by entering the following formula:

A **4** **3** **1** **B** **1** **E** (to activate Output #1)

A **4** **3** **1** **B** **0** **E** (to deactivate Output #1)

A **4** **3** **2** **B** **1** **E** (to activate Output #2)

A **4** **3** **2** **B** **0** **E** (to deactivate Output #2)

SUPERKEYS

The dialer has 3 superkeys available, of which one (Key **1**) is programmable.
 For a description of superkey function, consult Tab. 5.



| Tab. 5 - SUPERKEYS | | |
|--|---|--|
| Superkey | Factory default | Function |
| 1 | None | Programmable by installer |
| 2 (*) | Calls the first telephone number from the list (if programmed by the installer) | <p>Calls the first telephone number on the list: The call will end after 10 minutes (elapsed time will be shown, in minutes, on the display).</p> <p style="text-align: center;">To hang up in advance, press the C key or press any other key to set the counter to zero and start again in 10 minutes.</p> |
| 3 (*) | None | <p>Calls a telephone number at will:</p> <p style="text-align: center;">Dial the telephone number to call after pressing the superkey. Confirm by pressing the E key. The call will end after 10 minutes (elapsed time will be shown, in minutes, on the display).</p> <p style="text-align: center;">To hang up in advance, press the C key or press any other key to set the counter to zero and start again in 10 minutes.</p> |
| <p>(*) - During the call, pressing the 1 key will switch from listen-in to monodirectional talk and viceversa. When the microphone is active, the point on the display will appear lit.</p> | | |

REMOTE OPERATIONS

The user can perform other operations from a remote touch-tone telephone.

In order to perform remote operations, the remote operations menu (also called the DTMF menu) must be accessed. Enter the following formula on the remote telephone keypad:

<User PIN>

At least one of the following conditions is necessary in order to enter the remote operations menu:

- ➔ A voice call is received from the dialer. In this case, the menu can be entered while the message is being played back, before the dialer ends communication.
- ➔ The 'Responder' option, as described in the KEYPAD OPERATIONS paragraph, is enabled. In this case, the user will call the dialer from a remote telephone and access the remote operations menu when the dialer responds.

If the entered PIN is valid, a confirmation beep will sound and the DTMF menu will be accessed. The following operations can be performed from remote access:

- Check the status of the inputs
- Activate/deactivate outputs
- Stop alarm and cancel telephone queue
- Voice functions

Once the DTMF menu is entered, after tone confirmation, the operations listed in Tab. 6 can be performed by pressing two keys in order:

| Tab. 6 - REMOTE OPERATIONS FROM A TOUCH-TONE PHONE | | |
|--|------------------------------|--|
| Key to press (in order) | Action | Response/Confirmation |
| 0 1 | Check the status of Input #1 | Beep if channel is not in operation Boop if channel is in alarm state |
| 0 2 | Check the status of Input #2 | |
| 0 3 | Check the status of Input #3 | |
| 0 4 | Check the status of Input #4 | |
| 1 0 | Deactivate output #1 | Beep if accepted |
| 1 1 | Activate output #1 | |
| 2 0 | Deactivate output #2 | |
| 2 1 | Activate output #2 | |
| 3 0 | Erase telephone queue | Beep |
| 4 0 | Enable listen-in mode | Beep |
| 4 1 | Monodirectional talk | |