TELEPHONE DIALLER

AT-171

approved by italian PP. TT.

N. IT/96/TS/006
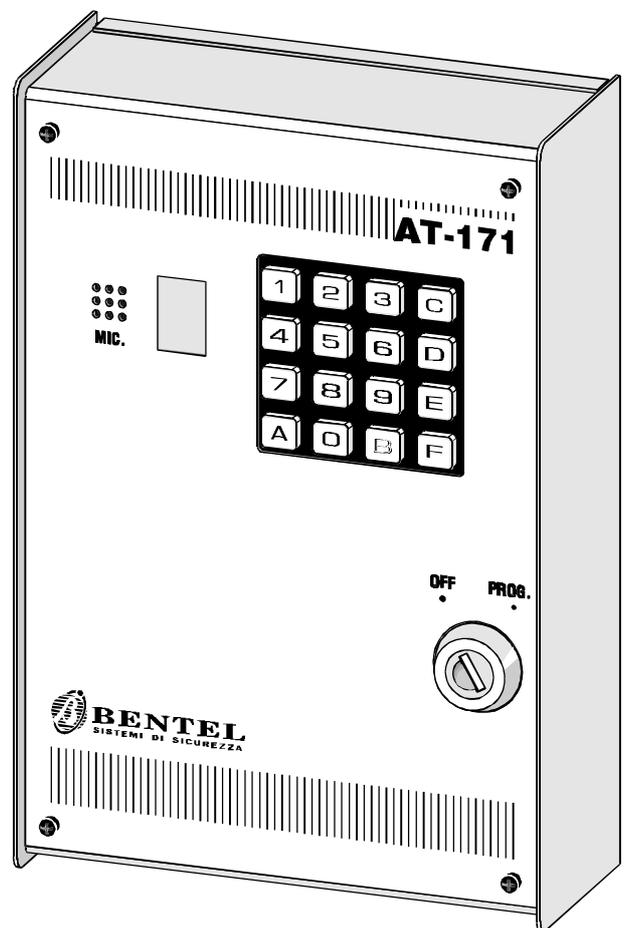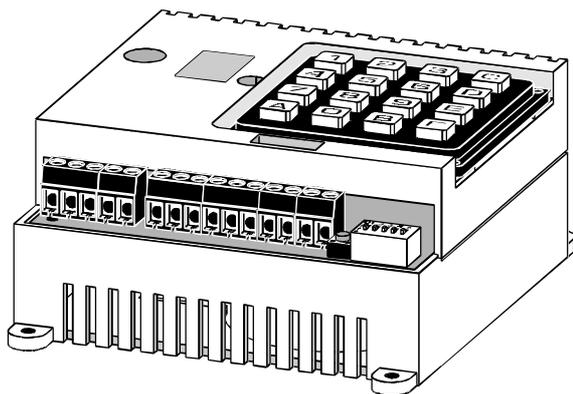
Installation and use manual

BENTEL
SISTEMI DI SICUREZZA

1 – GENERAL FEATURES

❑ 2 independent channels with priority management.

❑ Possibility of programming a 1 channel mode with double lenght recordable alarm message.

❑ 7 programmable telephone number (modifiable) for each channel.

❑ 15 digits available for each telephone number.

❑ Possibility of recording 2 separate alarm messages lasting a maximum of 10 s each one or one alarm message lasting a maximum of 20 s.

❑ Possibility of repeating the alarm message for 20, 40, 60 or 80 seconds.

❑ Possibility of repeating up to 5 times the calling cycle.

❑ Keypad number programming.

❑ Possibility of programming disable.

❑ Alarm inhibition line.

❑ Tone control circuit.

❑ Message playback on loudspeaker.

❑ Telephone line check.

❑ Alarm block by programmable code.

❑ Electronic telephone line interface.

❑ Power supply: 12 Vdc ±10%.

❑ Stand-by current: 15 mA; max 250 mA.

❑ Operative temperature: -10 °C ÷ +50 °C.

❑ AT-171 dimensions (W*H*P): 108*125*53 mm.

❑ AT-171 weight: 0.3 Kg.

2 – DESCRIPTION

The AT-171 telephone dialler is supplied in a plastic container suitable for being fixed inside the control panel where it must be connected. For external installation of the telephone dialler it is possible to request the ATM-171 metallic container. This container is furnished with housing for a 12 V - 1.2 Ah accumulator, an electric lock for enabling the programming and the protection against sabotage attempts. The AT-171 is also available already assembled and connected in the above mentioned container.

The alarm start when the positive on terminal [L1] and/or [L2], drop. On alarm, the device, automatically and with a pre-established time-out, dials in order all the memorized telephone numbers and transmits the associated message.

+ ***The alarm message will be played back only if the called user answers to the AT-171 (e.g.. saying "hallo").***

By means of the programming switches **8** (see paragraph "PROGRAMMING DIP-SWITCHES") it is possible to obtain specific functions, such as, the implementation of *dial tone check*, recording inhibition and partial inhibition of the numbers that are to be programmed.

The appliance is equipped with a telephone type keypad with the addition of several letters, having the following functions:

C - cancellation of wrong digits keyd in.
D - visualization.
E - enablement of programmed procedures.
F - cancellation of setting procedure.

A display shows the various operative and control stages. In normal condition the display is off. If the device receives no command during the 20 second time-out, automatic switch-off occurs and alarm command reception is enabled.

For programming functions press button **5** or turn the key on PROG. then release it (only with ATC-171 model): the central sector of the display illuminates.

+ ***During the implementation of various programming procedures (display on) and or data cancellation or verification, the alarm command is disactivated.***

Obviously, there is no verification of alarm conditions if no telephone numbers are memorized.

3 – TELEPHONE NUMBERS PROGRAMMING PROCEDURE

DESCRIPTION

3.1 Set the programming phase by pressing key "A".

3.2 Choice one of the two channel by pressing the key "1" for channel 1 or the key "2" for channel 2.

3.3 Select the ordinal number that is to be associated with the telephone number (first, second, etc.). In the example the forth.
The flashing dot indicates that number programming may begin.

3.4 For example, number (0035) 846335 is required, key in the sequence: the display will show figures entered.
Every number can be checked and correct if wrong (see step 3.5).
If necessary it's possible to enter a pause after any figure.
Two possibilities:
0.8 s by pressing **"A"** key;
5 s by pressing **"B"** key.

+ ***During the alarm, as soon the AT-171 detects a tone on the line, stops the 5 s pause.***

3.5 If a number is keyed in incorrectly, cancel by means of key "C". This key acts on one key at a time, and it is active only before the use of key "E".

3.6 In order to inhibit an incorrect procedural phase so as to allow re-setting, press key "F", this induces the requirement of total repetition of the procedure. This key also, is active only before the use of key "E".

3.7 Press key "E" for number storage.

3.8 In phase 3.3 (flashing dot), instead of programming a new number, it is possible to visualize the previous number stored, by pressing key "D".
On the display the figures will appear together with letter **A** or **L** depending on the length of the pause entered.

4 – NUMBER ELIMINATION

If memorized telephone number elimination is required, follow the instruction below:

4.1 Press key "A".

4.2 Choice the desired channel pressing the proper key (for example the first one).

4.3 Select the number that is to be eliminated (e.g. the first).
The dot on the display begins to flash.

4.4 Press key "E"

5 – RECORDING PROCEDURE

DESCRIPTION

Alarm messages are sent to the programmed telephone number in case of alarm. AT-171 can store:
- ➢ in *two channels mode*, 2 messages lasting 10 seconds each one;
- ➢ in *one channel mode*, 1 message lasting 20 seconds.

5.1 Press key "B" twice.

5.2 Press the key of the channel you are programming (for example the first one): the display will show the letter F.

5.3 Press key "E": so beginning the countdown from 9 to 0 seconds, during which the message is recorded. The recommended recording distance is 10 cm from the microphone.

+ *If it is setted the one channel mode, the countdown from 9 to 0 is repeated twice (20 seconds).*
In the case of the recording of a substitute message the previous message will be cancelled.

6 – PLAYBACK PROCEDURE

For messages playbacks proceed as follows:

6.1 Press key "B".

6.2 Choice the message you want to play by pressing the appropriate key (for example the first one): message will be played.

7 – ALARM CYCLE PROGRAMMING PROCEDURE

7.1 In order to set the number for repetition of telephone numbers and associated message (from 1 to 5), e.g. required repetition 3, press keys:

7.2 For alarm cycle visualization press key "A" twice,

7.3 and visualization command "D".

7.4 The display shows the cycles number memorized (default = 4).

8 – MESSAGE "TIME-OUT" PROCEDURE

DESCRIPTION

It is possible to program the time-out of the alarm messages by following the instructions below.

8.1 Press key "B".

8.2 Press key "D".

8.3 Set the message time-out requirements by pressing key "1" for 20 seconds, "2" for 40 seconds, "3" for 60 seconds or "4" for 80 seconds.

8.4 In order to verify message time-out press keys:

the display shows the number associated with the time-out (default = 2).

9 – PULSE OR TONE DIALLING

It is possible to choose between pulse or tone dialling by following the instructions below.

9.1 Press key "A".

9.2 Press key "B"

9.3 Press key "1" if pulse dialling is required.

9.4 Press key "0" if multifrequence (tone) dialling is required.
To display the type of dialling set proceed as described above, following the instructions in points 9.1, and 9.2 then, press key "D": the display shows the letter **P** (pulse) when impulse dialling is selected and the letter **t** (tone) when multifrequence is selected.
  + *The AT-171 telephone dialler comes already set for pulse dialling.*

10 – KEYPAD ALARM BLOCK

When AT-171 is implementing alarm procedure, it may be inhibited by entering the apposite code (only numbers and pauses). This code compiled of a maximum of 15 digits, must be programmed beforehand. For example, in order to program 5375, proceed as follows:

10.1 Press key "A".

10.2 Press key "1".

10.3 Press key "7".

10.4 The flashing dot indicates the number programming may begin.

10.5 Key-in the code number sequence, as in the example 5, 3, 7 and 5 by pressing the relative keys.

10.6 Press key "E" for code storage.

To stop an occurring alarm with this code simply press the keys "5", "3", "7" e "5".

If code visualization is not desired, key in the code according to the specified modality and then cancel by following number cancellation procedure, the code is not cancelled but stored.

In order to inhibit an alarm by means of this code, press "E" in the place of the first digit followed by the remaining digits, e.g. "E" then 375.

+ *The alarm block by means of the keypad is not effective when the AT-171 is carrying out the selection of a number.*
It is not possible to enter a telephone number in the 7th position of the 1st channel by entering the code to block the alarm, unless the telephone number recorded in this position has been used as a code for the block of the alarm.

11 – TERMINAL BOARD DESCRIPTION

1	[⏚]	**Heart:** *this terminal must be connected to the grounding conductor*, this save the AT-171 from the extra-voltages on the telephone network. If the grounding conductor is not available, the terminal [⏚] could be connected to one of the terminals [⏚].
2 / 3	**[LE]**	**External incoming telephone line:** connect to these terminals the telephone line coming from outside.
		+ *The AT-171 must be connected before other telephone appliances on the same line; connect these last to the terminals [LI].*
4 / 5	**[LI]**	**Internal outgoing telephone line**: connect to these terminals all the telephone appliances that must be connected to the same line of the AT-171 (telephone switchboards, telephones, faxes, modem, etc.).
6	**[L1]**	**Priority alarm line:** when the **positive drop** on this terminal the programmed numbers for **channel 1** are selected and the correspondent alarm message is playback.
7	**[L2]**	**Secondary alarm line:** when the **positive drop** on this terminal the programmed numbers for **channel 2** are selected and the correspondent alarm message is playback.
		+ *In the one channel mode the terminal [L2] is not active.*
8 / 9	**[⏚ / B.A]**	**Alarm inhibition line:** by applying **temporarily** the terminal [B.A] to the ground (⏚) the alarm interruption is forced.
10 / 11	**[A.S.]**	**Antitamper:** the terminals are opened if the ATM-171 cover is not perfectly closed (switch **3** not pressed).
12 / 13	**[⏚ / +12]**	**Power supply:** the AT-171 must be powered by a 12 Vdc ±10%; it absorbs in stand-by 15 mA and 250 mA maximum when working.
14 / 15	**[CH.]**	**Programming enable:** when these terminals are **temporarily** connected together (for example by means of a electric key) the programming phase is enabled.
		+ *The programming enable is obtained also pressing the button 5.*

12 – ACTIVATION MODE

It is possible to set the activation mode of the telephone dialler by means of the jumper **8**:

➢ if the jumper is inserted between the pins 1 and 2 (default), the dialler will be activated by drop of positive on terminal [L1] or [L2];

➢ if the jumper is inserted between the pins 2 and 3, the dialler will be activated by a negative command on terminal [L1] or [L2].

13 – CHANNEL 1 PRIORITY

The channel 1 has the priority on channel 2; this means that if there is an alarm on channel 1 and at the same time on channel 2, the AT-171 suspends the phase occurring on this last to switch itself on the prior channel.

14 – PROGRAMMING DIP-SWITCHES

+ ***After the dip-switches setting must be pressed the reset button (2) otherwise the setting done don't have their effect.***
1 By this switch in OFF position (default) the AT-171 is in *one channel mode*: this meas that only the L1 terminal is active. In this case the alarm message may last 20 seconds.
By this switch in **ON** position the AT-171 is in *two channels mode* and it is possible to control 2 different alarms (by means of terminals L1 and L2). In this case the alarm messages last 10 seconds each one.
2 By the switch in **ON** the numbers which have already answered AT-171, are excluded from the next alarm cycles. In fact AT-171 is able to detect the answer of the user who has been called.
By the switch in OFF, all the numbers shall be called during all programmed alarm cycles.
3 With the switch in **ON** position, the user is given the possibility to reprogram **only the first of the seven numbers** (so avoiding number cancellation due to error) and the code for keypad alarm inhibition. In this case it is also impossible to modify the number of alarm cycles and message time-out procedure.
4 With the switch in **ON** position, message recording is inhibited, therefore the recorded message is protected in the case of possible procedural errors, although playback is still possible.
5 By the switch in **OFF** the *dial tone check* is enabled: the AT-171 checks the presence of the dial tone and if does not detect it, disconnect the telephone line and then it connects to it again; on the 4th attempt the number is composed even if the checking is negative.
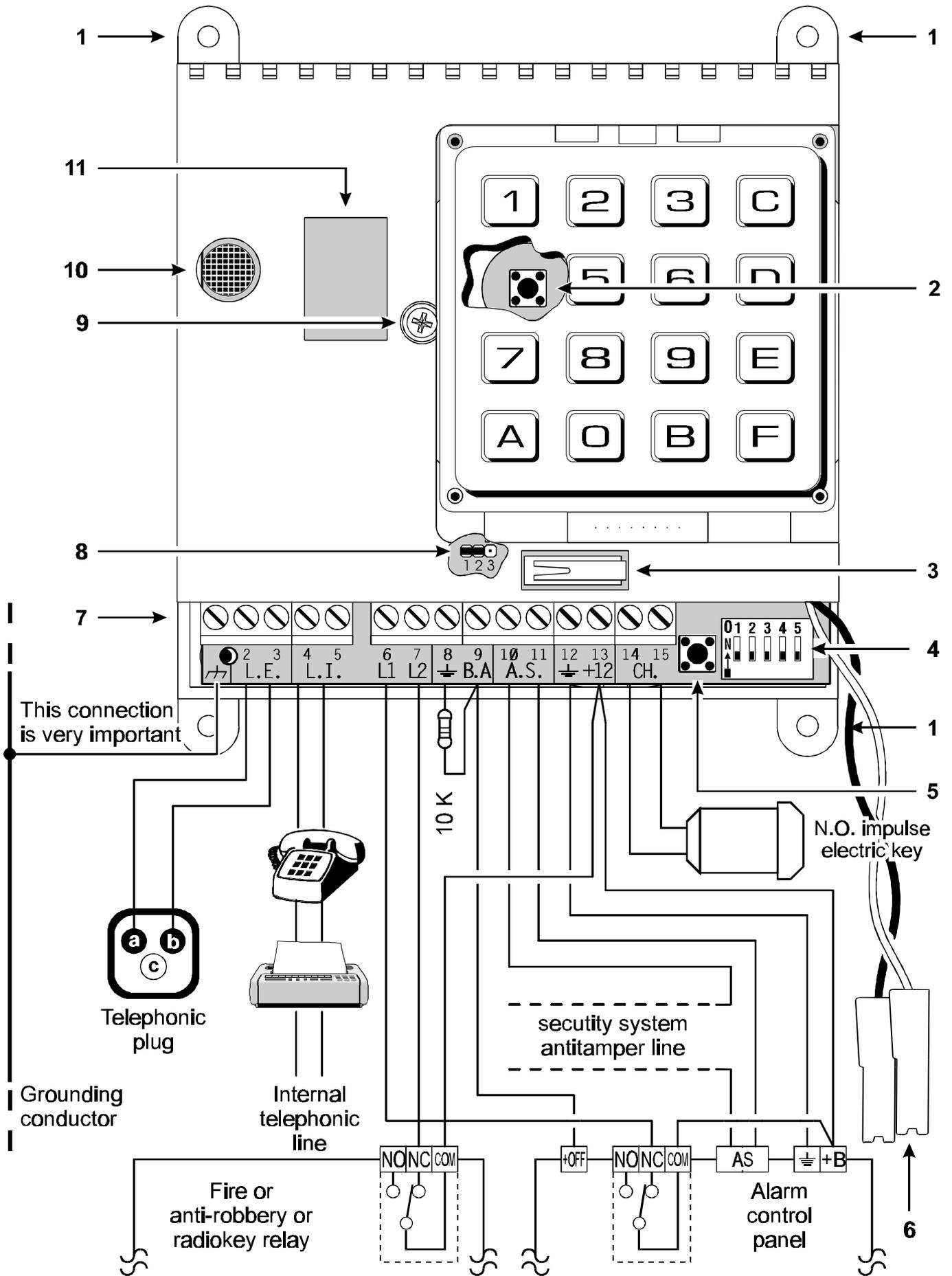+ ***During the test phase, with the telephone line disconnected, this switch is kept in the ON position.***

MEANINGS OF SOME DISPLAY SYMBOLS			
⌐	*Alarm: before starting to dial.*	⌐ └	*Appears during acknowledgement of central tone.*
⌐ _	*Pause in the number sequence.*	A.	*Playback of L1 message.*

IDENTIFICATION OF PARTS			
1	*4 holes to fixing AT-171 Module (∅ 3.5 mm).*	**7**	*Terminal boards for the connection.*
2	*Reset button.*	**8**	*Jumper to set activation mode.*
3	*Antitamper switch.*	**9**	*Screw to remove the cover of the AT-171 Module.*
4	*Dip-switches to programming functioning mode.*	**10**	*Microphone to record the messages.*
5	*Button to enable the programming.*	**11**	*Led display.*
6	*Connectors to connect the battery (not supplies).*		

Figura 1 *Identification of parts and example of connection.*

Text labels visible in the figure:

- 1
- 11
- 10
- 9
- 2
- 8
- 3
- 7
- 4
- 5
- This connection is very important
- L.E.
- L.I.
- L1 L2
- B.A
- A.S.
- +12
- CH.
- 10 K
- N.O. impulse electric key
- Telephonic plug
- Grounding conductor
- Internal telephonic line
- security system antitamper line
- Fire or anti-robbery or radiokey relay
- NO NC COM
- +OFF
- AS
- +B
- Alarm control panel
- 6