EL.MO. SPA

USER MANUAL

TACÓRA SERIES

Control panels and signalling equipment

1 DECLARATION OF CONFORMITY AND PERFORMANCE

CE 13 TA1002: No. 0051 – CPR – 0402
TA1004: No. 0051 – CPR – 0403
TA2000: No. 0051 – CPR – 0401

CE 17 TA4000: No. 0051 – CPR – 0515

Standards: EN 54-2:1997/A1:2006
EN 54-4:1997/A1:2002/A2:2006
EN 54-21:2006 with GSM or LTE 4G module

2 GENERALS

TACÓRA series control and signalling equipment can manage a fire detection system devices, monitoring up to 45 different zones.

Model	TA1002	TA1004	TA2000	TA4000
MCP (call points)	1	1	1	1
Conventional zones	2	4	12	4
Analogue-addressable loops	-	-	1 (zones 13-44)	2 (zones 5-44)
Total zones	3	5	45	45

Control panels are compatible with EXTING extinguishing module and with MDGSME and MD4GE SMS modules.

3 ACCESS LEVELS

Panels functions can be accessed according to three different access levels:

- level 1 (public) – can be accessed by anyone from keypad and remotely by level 1 users (or above)
- level 2 (user) – can be accessed with plastic key or remotely by level 2 users (or above)
- level 3 (maintenance/programming) – accessible for authorised personnel only

Level 1 grants access to the functions available to everyone, such as those for the general monitoring of the control panel.

Level 2 grants access to test, devices exclusion and other operating functions.

On keypad menu, such functions are grouped under level 2 menu.

To access level 2:

– insert and turn anti-clockwise the plastic key provided
– alternatively, if this option has been enabled, press ENTER and type in the sequence of arrow buttons constituting the user code

The user code entry screen closes one minute after the last button is pressed.

To access level 1:

– if the key was used for access, turn it clockwise and pull it out
– if the user code was used for access, press ESC

If a control panel at level 2 receives no inputs from the front keypad for 15 minutes, the LCD backlight will start blinking and the last row of the display will show "Panel on level 2" message.

If any key is pressed, such message will disappear for 15 minutes.

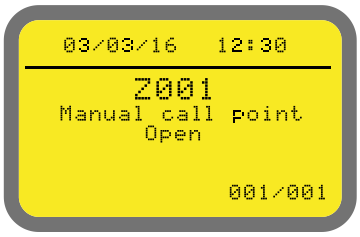
4 FRONT PANEL

Panels can be managed with the commands on the front panel or by a connected TAREPEATER keypad.

All status and functions of control panels are shown and

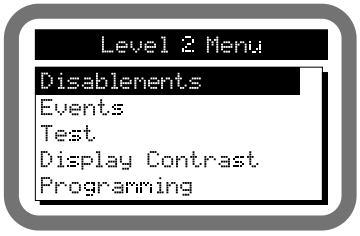
managed via panel LCD and the coloured LED indicators. The display backlight colour will change according to panel status.

GREEN - standard working mode



YELLOW - fault/anomaly status

RED - alarm/pre-alarm status



White - setup status

Fault (or alarm) indications include, at the bottom right, the number of the displayed fault (or alarm) and the total numberof faults (or alarms) detected by the control panel.
Example: 001/003 = fault (or alarm) 1 of 3.
The alarmed display shows also, at the bottom left, the number of the last alarm occurred.
If alarms and faults occur simultaneously, the faults window will be hidden.
After 10 seconds in idle mode, the window with faults will hide.

4.1 LED indicators meaning

LED name	Colour	Indication
230V	Green	230V power ON
Silencing	Yellow	Bells silenced
Pre-alarm	Red	Alarm + pre-alarm check in progress
Investigation	Yellow	Acknowledgement / Investigation timer in progress
Day/night	Yellow	Day/night mode active

LED name	Colour	ON	Blinking
Alarm	Red	Ongoing alarm events with silenced bell	Ongoing alarm events
GSM ON	Red	Telephone dialler ON	Waiting for confirmation
Disablement	Yellow	Some elements are disabled	
Test	Yellow	Some system elements are being tested	
General fault	Yellow	Ongoing fault events with silenced buzzer	Ongoing fault events
System fault	Yellow	CPU fault with silenced buzzer	CPU fault
Bells fault/ disabled	Yellow	Bells disabled	BELLS fault
GSM fault/ disabled	Yellow	GSM / LTE 4G disabled	GSM / LTE 4G fault

4.2 Buttons function

Key	Name	
	Level 1 function	Level 2 function
	Enter	
	---	Enters the selected menu. Confirms data.
	Up (↑)	
	Displays previous event.	Moves the selection upwards. Changes a field value (hold it pressed for a faster effect).
	Down (↓)	
	Displays the following event.	Moves the selection downwards. Changes a field value (hold it pressed for a faster effect).
	Escape (ESC)	
	In case of fault and alarm events, it displays fault events or goes back to alarm events.	Goes back to previous menu. Cancels the operation.

	Evacuate	
	During acknowledgement/ investigation (day mode), it resets delay timers and sets the panel to alarm condition.	**Evacuation procedure: it generates the Evacuate event and sets the panel to alarm condition.** During acknowledgement/ investigation, see level 1.
	Silencing	
	Silences the buzzer.	Silences/activates bells. Switches from Acknowledgement to Investigation.
	Reset	
	---	**Reset procedure: it resets the panel when it is in alarm or fault condition.**
	Day/night	
	---	Enables/disables the day/ night mode.

The Evacuate, Silencing, Reset and Day/night buttons are also available in the home page of the e-Connect fire interface. These controls can only be used if remote control (level 2) via e-Connect is enabled for the control panel and if the logged user has a level 2 or above password.

⚠ *Use remote control commands only if aware of their effect on the operability of the panel.*

5 MENU MAP

- Disablements
    - Zone
        - Zones list (0-44)
    - *Device
        - Devices list
    - *Output Modules
        - Outputs list
    - *Bells
        - Bells list
    - Panel Outputs
        - Zone 1-4 (TAREL24)
        - AUX 1-2
        - Bell
        - Buzzer
    - *Extinguishing unit
    - *GSM
    - *Repeater
- Events
- Devices
- Mainten. Requests
- Test
    - Zones
        - Zones list (0-44)
    - Outputs
        - Bell
        - Zone 1-4 (TAREL24)
        - Fault
        - AUX 1-2
    - *Loop Outputs
        - Outputs list
    - *Loop Bell
        - Bells list
    - Display
    - LED
    - Buzzer
- *GSM
- Display Contrast
- Programming

* menu pages that appear only if the corresponding modules are available.

For TA4000, loop module menu pages include another page for the selection of the loop.

6 MENU PAGES BROWSING

The menu can be used to access several functions, divided in sub-menus as shown in section 5 *p. 3*.

Press ↓ to go to next item, ↑ to go to previous item.

When icon ▼ appear, press ↓ while cursor is on the last item to go to next page.

When icon ▼ appear, press ↑ while cursor is on the first item to go to previous page.

Press ENTER to manage the selected item (enter a submenu, activate a function, change a status).

Press ESC to exit a menu or an item and go back to the previous menu.

7 LEVEL 2 MENU

7.1 Disablements

Each function in this menu can exclude a different kind of element (zones, modules, outputs, single devices).

Fault and alarm indications from the disabled elements will be ignored, excluded outputs won't activate but the control panel will keep monitoring the presence of elements.

An X at the right of functions indicates the presence of excluded elements.

I/O lines set as outputs and AUX2 line when EXTING module is installed cannot be excluded.

Note: disablement controls are also available on the page of BrowserOne and in the user interface of e-Connect as long as the password used to connect to the control panel is level 2 or above and the installer enabled level 2 or higher for the communication channel used by the software (e-Connect, remote assistance or Ethernet).

7.1.1 Zone

The page displays the list of all conventional and analogue-addressable zones with at least one device.
– press ENTER to enable / disable zones selected
Disabled zones are marked with an X on the right.
Note: if all analogue-addressable devices of a zone are disabled, the control panel will disable the entire zone. If you enable a zone disabled in such way, all zone devices will be enabled again.
Note: an I/O line set as input will be excluded together with the corresponding conventional zone.

7.1.2 Device

The page displays the list of all devices self-learned on this loop (except output and bell modules).
– press ENTER to disable / enable again selected devices.
Disabled devices are marked with a X on the right.
Note: item available only if at least one loop module has been installed.

7.1.3 Output Modules

The page displays the list of all addresses of self-learned output modules.
– press ENTER to disable / enable again selected modules
Disabled modules are marked with a X on the right.
Note: item available only if at least one loop module has been installed.

7.1.4 Bell

The page displays the list of all bell modules self-learned.
– press ENTER to disable / enable again selected modules
Disabled modules are marked with a X on the right.
Note: item available only if at least one loop module has been installed.

7.1.5 Panel Outputs

A list with addresses of Relay (TAREL24 optional board), Aux, Bells and Buzzer outputs will be displayed.
If EXTING extinguishing module is installed, Aux 2 output cannot be disabled and will not appear.
– press ENTER to disable / enable again outputs selected
Disabled outputs are marked with a X on the right.
Note: you can disable the buzzer while setting up or servicing the system. In order to comply with EN 54-2 standard, remember to enable again the buzzer before switching back to the standard panel operating mode.

7.1.6 Extinguishing unit

A page with the single EXTING module appears.
– press ENTER to disable / enable again the module
If disabled, it is marked with a X on the right.
Note: item available only if EXTING module is installed.

7.1.7 GSM

A page with the single GSM / LTE 4G module appears.
– press ENTER to disable / enable again the module
If disabled, it is marked with a X on the right.
Nota: item available only if MDGSME or MD4GE module is installed.

7.1.8 Repeater

The page displays the list of all repeater panels.
– press ENTER to disable / enable again selected panels
Disabled panels are marked with a X on the right.
Note: item available only if at least one TAREPEATER module is installed.

7.2 Events

The log stores the last 2000 events occurred.
– use arrow keys ↑ or ↓ to browse events list
The page shows:
- Event date and time.
- Event type.
- Zone and device generating the event.
- Description.
- Indications amount / indications total amount.

7.3 Devices

– use arrow keys ↑ and ↓ to select conventional zones or loop addresses
– press ENTER to view selected items

Zone

The page displays the list of conventional zones.
– use arrow keys ↑ or ↓ to browse zones list
Two data will be displayed: zone number (Z) and conventional zone analogue value (L).
If the I/O line is set to input, a third value is also displayed:
- I: power status of 4-20 mA input.
- B: analogue value of a balanced input.
- P: analogue value of a pull-up input.

Device

The page displays the list of loop addresses.
– use arrow keys ↑ and ↓ to browse addresses list
For each address, are displayed Type, Description, Zone, and Zones Group (if set).
For smoke detectors, also analogue value and balancing value automatically applied will be displayed in order to control the gradual accumulation of dirty material on the detector.
The balancing value is used to determine when it is time to clean the detectors (chap. 7.4 *p. 5*).
With TALOOP boards with firmware version v5 or higher, for SNI01A and SNI03A sensors:

Compensation (cmp)	Description	Maintenance request	Dirty chamber fault
1	Compensation limit reached.	Yes	Yes
2-6	Compensation limit close. The sensor keeps working but the compensation nears its maximum.		No
7-25	16 = no compensation. As the compensation increases, the value shifts towards 7 or 25.	No	
26-30	Compensation limit close. The sensor keeps working but the compensation nears its maximum.	Yes	
31	Compensation limit reached.		Yes

With earlier TALOOP firmware and/or for SNI04A, SNI06A and other earlier series sensors, the compensation status can be read but the exact value cannot, therefore the standard values 1, 6 and 16 are displayed:

Compensation (cmp)	Description	Maintenance request	Dirty chamber fault
1	Compensation limit reached.	Yes	Yes
6	Compensation limit close. The sensor keeps working but the compensation nears its maximum.		No
16	Normal operation and further compensation possible.	No	

7.4 Mainten. Requests

A list of all sensors that need cleaning appears.
The list will be emptied at reset and filled again later.

7.5 Test

7.5.1 Zones

The page displays the list of all conventional and analogue-addressable zones with at least one device.
– select a zone and press ENTER to enter/exit test mode (an X appears on the right)
– while a zone is in test mode, manually trigger an alarm (using a detector or an emergency push button of such zone)

If the control panel receives it correctly, the alarm output (REL.ALL) will turn on for 10 seconds.
When you press ESC to exit this function, all zones will exit test mode (all Xs will be removed).

7.5.2 Outputs

The page displays the addresses list of Bell, Relay (TAREL24 outputs), Fault and Aux outputs.
– select an output and press ENTER to turn it ON/OFF (while it is ON, an X appears at the right)

When you press ESC to exit this function, all outputs will be turned off (all Xs will be removed).

7.5.3 Loop outputs

The page displays the list of the addresses of all output modules self-learned on the loop.
– select a module and press ENTER to turn it ON/OFF (while it is ON, an X appears at the right)

When you press ESC to exit this function, all modules will be turned off (all Xs will be removed).

7.5.4 Loop Bell

The page displays the list of the addresses of all bell modules self-learned on the loop.
– select a bell and press ENTER to turn it ON/OFF (while it is ON, an X appears at the right)

When you press ESC to exit this function, all bells will be turned off (all Xs will be removed).

7.5.5 Display

The display pixels light up, one column at a time, starting from the left side.
The LCD backlight changes colour every second cyclically.
– check regular pixel switch on
– check backlight sequence (red-green-blue-off)
– press ESC to exit

7.5.6 LED

All front panel LEDs light up at once for about 2 seconds.
– verify its correct working

After that, the display goes back to Test menu automatically.

7.5.7 Buzzer

The control panel buzzer activates for about 5 seconds.
– verify its correct working

After that, the display goes back to Test menu automatically.

7.6 GSM

A graphic shows GSM / LTE 4G signal strength received by the antenna and, if the balance control display is active, also the SIM card remaining credit.
Nota: item available only if MDGSME or MD4GE module is installed.

7.7 Display Contrast

– use arrow keys ↑ or ↓ to increase/decrease display contrast

7.8 Programming

– press ESC to go back to LEVEL 2 MENU

8 OPERATOR INSTRUCTIONS

Control panel mode **Alarm mode** -Optical-acoustic devices active -Red display backlight -Alarm LED blinking -Buzzer ON	Press  to switch off the buzzer. **To switch off optical-acoustic devices:** Insert and turn the key counterclockwise or type  [ ][ ][ ][ ] to access level 2. Press  . Alarm LED will switch from blinking to fixed. **To view all alarm messages:** Turn the key clockwise or press  (depending on how you accessed level 2) to return to level 1. Use ↑ and ↓ to view previous/next message. **Once the conditions that generated the alarm stop:** Run a reset procedure.
Acknowledgement/Investigation -Red display backlight -pre-alarm and investigation LEDs ON -Buzzer ON -Countdown on screen	Insert and turn the key counterclockwise or type  [ ][ ][ ][ ] to access level 2. Press  . Press  within the first timer interval. Press  to switch off the buzzer. Investigate the affected area to check that it is not a false alarm. **To cancel the alarm:** Go back to the control panel and run a reset procedure before the second timer expires. **To confirm the alarm:** Run the evacuation procedure or let any timer end.
Control panel mode **Fault** -Yellow display backlight -At least one fault LED blinking -Buzzer ON	Press  to switch off the buzzer. The general fault LED will switch to fixed light. Run a reset procedure. **If the faults keep being reported:** Press  to switch off the buzzer. Use ↑ and ↓ to view all fault messages. Signal the faults to an authorised maintenance engineer. Follow his/her instructions and organise a repair service.

Reset procedure	Procedure used to stop the acknowledgement/investigation countdown and to cancel existing maintenance requests and alarm and fault events. Insert and turn the key counterclockwise or type  [ ][ ][ ][ ] to access level 2. Press  .
Evacuation procedure	Procedure used to enter the alarm status manually. Insert and turn the key counterclockwise or type  [ ][ ][ ][ ] to access level 2. Press  .

Keep a copy of this page near each keypad.
If the control unit is accessible by user code, write it in the spaces provided.

9 EU DECLARATION OF CONFORMITY

The product complies with current European EMC and LVD directives.
The full text of the EU declaration of conformity is available at the following internet address: www.elmospa.com – registration is quick and easy.

CE

10 GENERAL WARNINGS

This device has been designed, built and tested with the utmost care and attention, adopting test and inspection procedures in compliance with current legislation. Full compliance of the working specifications is only achieved in the event the device is used solely for its intended purpose, namely:

Control panels and signalling equipment

The device is not intended for any use other than the above and hence its correct functioning in such cases cannot be assured. Consequently, any use of the manual in your possession for any purpose other than those for which it was compiled - namely for the purpose of explaining the product's technical features and operating procedures - is strictly prohibited.

Production processes are closely monitored in order to prevent faults and malfunctions. However, the components adopted are subject to an extremely modest percentage of faults, which is nonetheless the case with any electronic or mechanical product.

Given the intended use of this item (protection of property and people), we invite you to adapt the level of protection offered by the system to suit the actual situation of risk (allowing for the possibility of impaired system operation due to faults or other problems), while reminding you that there are specific standards for the design and production of systems intended for this kind of application.

We hereby advise you (the system's operator) to see that the system receives regular routine maintenance, at least in accordance with the provisions of current legislation, and also check on as regular a basis as the risk involved requires that the system in question is operating properly, with particular reference to the control unit, sensors, sounders, dialler(s) and any other device connected. You must let the installer know how well the system seems to be operating, based on the results of periodic checks, without delay.

Work involved in the design, installation and maintenance of systems incorporating this product should be performedonly by personnel with suitable skills and knowledge required to work safely so as to prevent any accidents. It is vital that systems be installed in accordance with current legislation. The internal parts of certain equipment are connected to the mains and therefore there is a risk of electrocution when maintenance work is performed inside without first disconnecting the primary and emergency power supplies. Certain products include batteries, rechargeable or otherwise, as an emergency backup power supply.

If connected incorrectly, they may cause damage to the product or property, and may endanger the operator (explosion and fire).

11 INSTALLER WARNINGS

Comply strictly with current standards governing the installation of electrical systems and security systems, and with the manufacturer's directions given in the manuals supplied with the products.

Provide the user with full information on using the system installed and on its limitations, pointing out that there are different levels of security performance that will need to suit the user's requirements within the constraints of the specific applicable standards. See that the user looks through the warnings given herein.

Work involved in the design, installation and maintenance of systems incorporating this product should be performedonly by personnel with suitable skills and knowledge required to work safely so as to prevent any accidents. It is vital that systems be installed in accordance with current legislation. The internal parts of certain equipment are connected to the mains and therefore there is a risk of electrocution when maintenance work is performed inside without first disconnecting the primary and emergency power supplies. Certain products include batteries, rechargeable or otherwise, as an emergency backup power supply.

If connected incorrectly, they may cause damage to the product or property, and may endanger the operator (explosion and fire).

12 USER WARNINGS

Check the system's operation thoroughly at regular intervals, making sure the equipment can be armed and disarmed properly.

Make sure the system receives proper routine maintenance, employing the services of specialist personnel who meet the requirements prescribed by current regulations.

Ask your installer to check that the system suits changing operating conditions (e.g. changes in the extent of the areas to be protected, change in access methods, etc...)

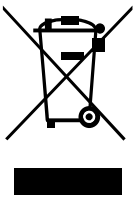
13 MAIN SAFETY RULES

The use of the device is forbidden for children and unassisted disabled individuals.

Do not touch the device when bare footed, or with wet body parts. Do not directly spray or throw water on the device.

Do not pull, remove or twist the electric cables protruding from the device even if the same is disconnected from the power source.

14 DISPOSAL WARNINGS



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In accordance with Directive 2012/19/EU on waste electrical and electronic equipment (WEEE), please be advised that the EEE was placed on the market after 13 August 2005 and must be disposed of separately from normal household waste.

This product needs batteries for correct functioning. Exhausted batteries have to be delivered to dumping grounds authorised for battery collection. The materials used for this product are very harmful and polluting if dispersed in the environment.

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