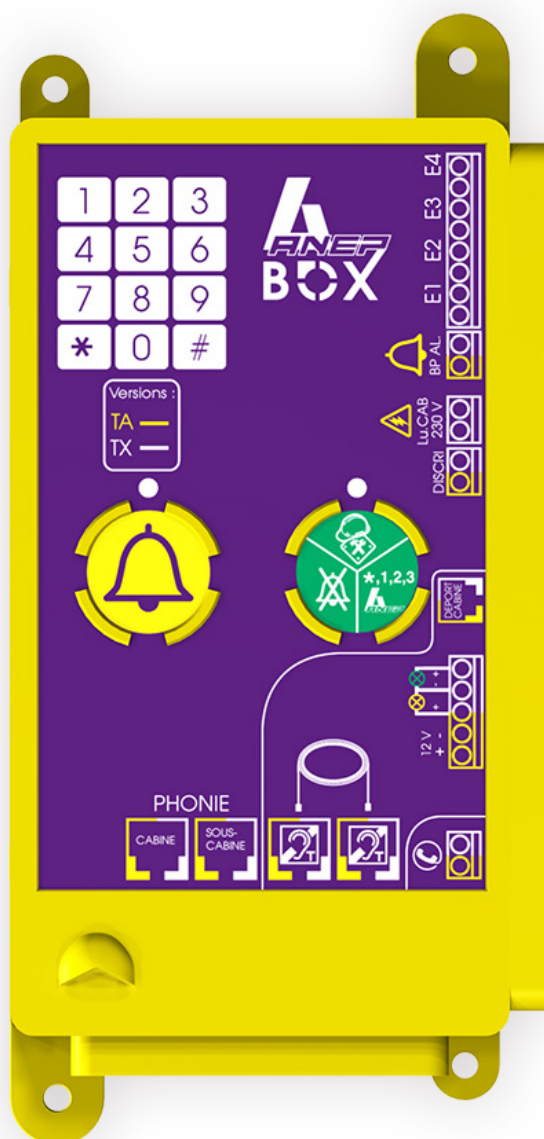


ANEP BOX TX

ELEVATOR EMERGENCY ALARM WITH VOICE ANNOUNCEMENTS

SCALABLE MULTI-ELEVATOR COMMUNICATION AND INTERCOM SYSTEM



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RECOMMENDATIONS

This documentation is intended for professionals who are trained and experienced in the elevator industry.

Installation / Commissioning

Accordingly, when working on an elevator to install **ANEP** equipment, all safety regulations specific to the profession must be strictly observed.

- Use appropriate **Personal Protective Equipment (PPE)**.
- Isolate and lock out the installation before performing any electrical connections.
- **Ensure safe working conditions before intervening in the shaft.**

 **Before handling any ANEP equipment, make sure it has been powered off beforehand.**

This applies to all “ANEP BOX” equipment (TA, TA+, TX, TX+, etc.).

It is essential to connect all peripherals BEFORE connecting the telephone line:

- Car alarm button (NO or NC **dry contact**)
- Car operating panel (MIDIS) or speaker/microphone communication unit (BA-mini-GHP)
- Pit communication unit (BOX-SC)
- 230V / 12V backed-up and monitored power supply of type ANEP **ALIM-CONTROL II** (if equipped with an induction hearing loop and/or Yellow / Green indicators)

Traveling Cable

We recommend equipping the elevator with a shielded traveling cable to ensure excellent audio communication quality and to prevent any interference that could lead to malfunctions.

The proper operation of telephone equipment largely depends on the characteristics of the telephone line.

Particular care must be taken to ensure proper routing of the telephone line so as not to degrade its standardized technical characteristics.

Check the wiring carefully, especially if it connects several elevator machine rooms:

- Type of cable
- Cable routing (low-voltage / high-voltage separation)
- Sources of interference (HVAC systems, generators, etc.)

1 - GENERAL

1.1 - Technical Specifications

STANDARDS

- Compliant with European Standards **EN 81-28** and **EN 81-70** (2018 / 2022)
- Compliant with European Standard **EN 81-70** (2003)
- Compliant with Directive 95/16/EC
- Compliant with ETSI ES 203 021-1 v2.1.1 (2005-06)

INSTALLATION LOCATION

- Mounted on the car roof

ALARM FUNCTIONS

- Integrated or remote communication modules
- Three-way communication function with the addition of **BOX-SC** or **BOX-C** modules
- Car alarm discrimination
- Entrapped passenger alarm acknowledgement

POWER SUPPLY

- Line-powered for voice communication calls
- 12 V power supply for the induction loop and yellow/green indicators

TELEPHONE NETWORK

- Connection to an analog telephone line or GSM gateway (private PBX connection possible)
- Three-way emergency alarm function backed up by the telephone line (line-powered emergency alarm)
- DTMF dialing mode
- Automatic answer
- Volume and acoustic adjustment (local or remote)

FEATURES

- Call location identification
- Programming via **ANEPmobile** or **ANEPprogramming**
- 1 input from the car alarm button (NO or NC)
- 1 green button integrating three functions: entrapped passenger alarm acknowledgement, technician arrival and departure indication, and test call to the **ANEP Voice Server (SVA)**
- 1 yellow button for car roof technician alarm
- 1 input for car light monitoring or remote technician presence detection

TELEPHONE NUMBERS

- 6 telephone number memories
- One backup voice communication number if the primary number cannot be reached
- Double-call management
- Periodic test call (every 1, 2, or 3 days)

REMOTE MONITORING

- Voice announcements for floor indications and voice messages
- Elevator operation monitoring (remote supervision)

EXTENSIONS

- Main landing to cabin voice intercom with **INTER-CAN** system (*Current standard NF P 82-207, 2018*)
- Main landing to cabin voice intercom with **IPH-CAN** module (*Current standard NF P 82-207, 2018*)

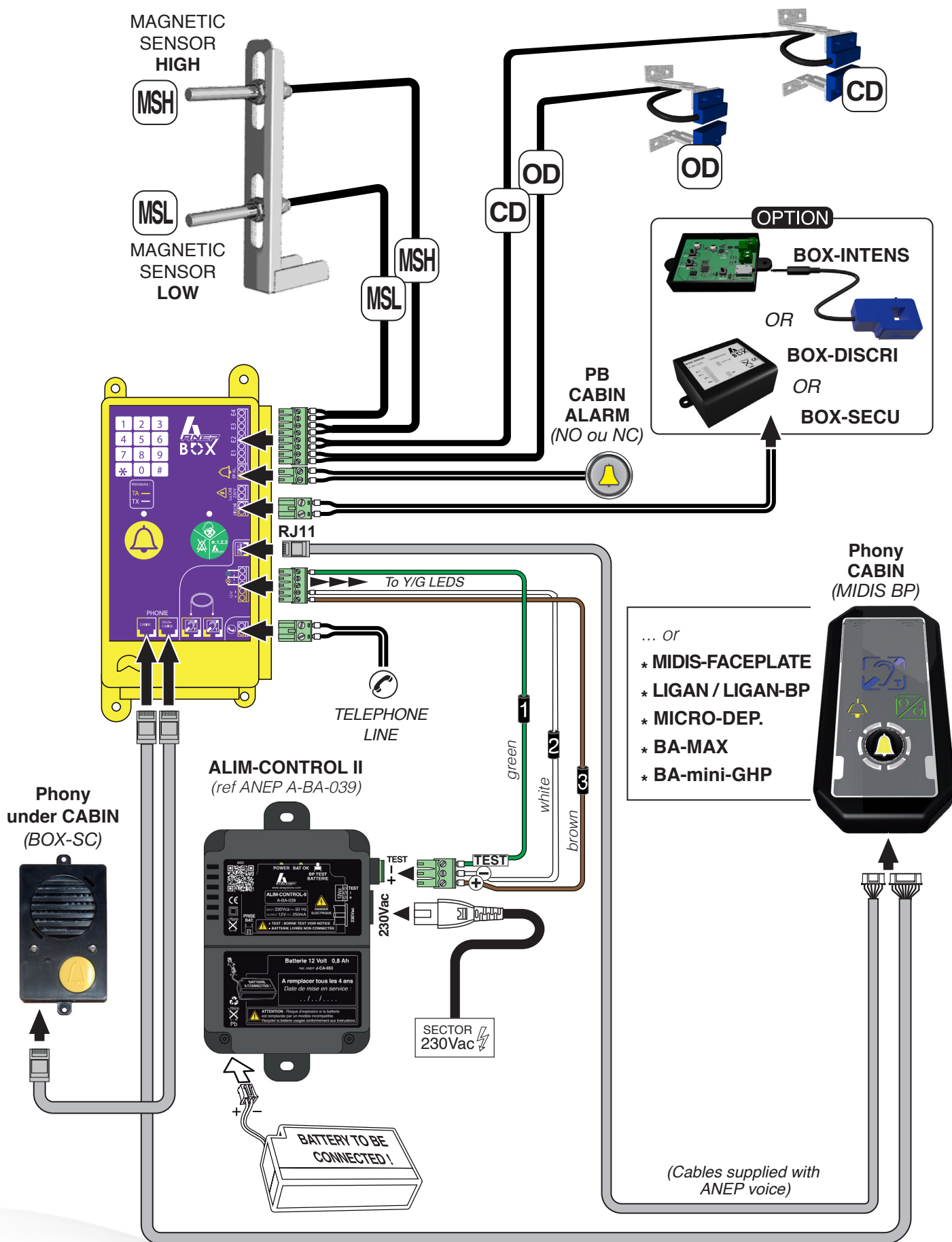
STANDALONE FIREFIGHTER INTERCOM SYSTEM

- Machine room to hoistway intercom with **BOX-M** module (*Old standard NF P 82-207, 1976*)
- Main landing to cabin voice intercom with **CARRÉ POMPIER** module (*Old standard NF P 82-207, 1976*)

Factory Configuration

- | | |
|----------------------------|-----------|
| • Programming code : | *123 |
| • Communication duration : | 3 minutes |
| • Automatic hang-up : | Enabled |
| • Periodic test : | 3 days |

1.2 - BOX TX Connections & Peripherals



It is essential to connect all peripherals first, then connect the telephone line, and finally the +12V power supply, if present.

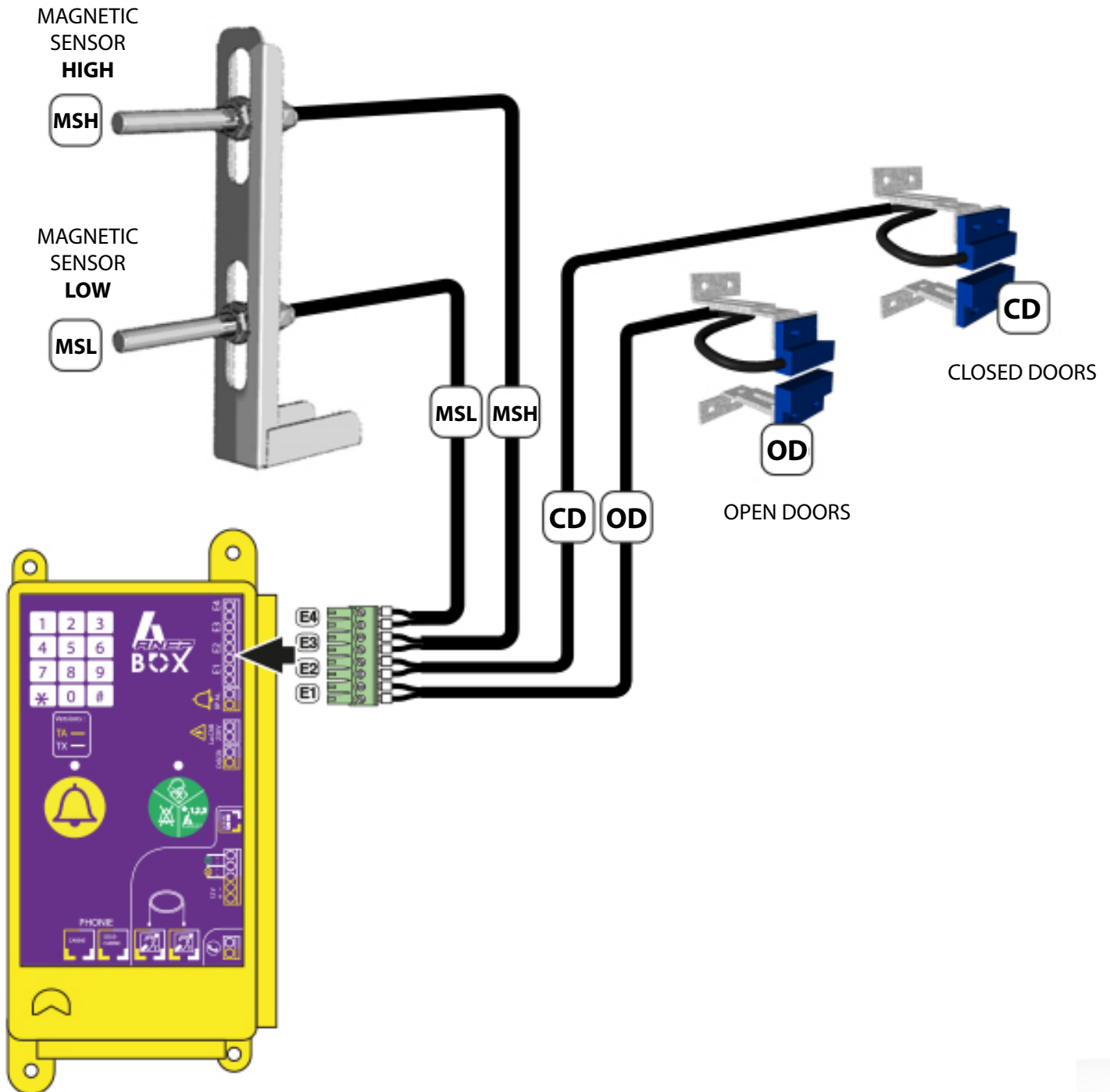
1.3 - Sensor Connections

The car door open/close status signals and elevator movement information must be connected to inputs **E1** to **E4** of the ANEP **BOX TX**.

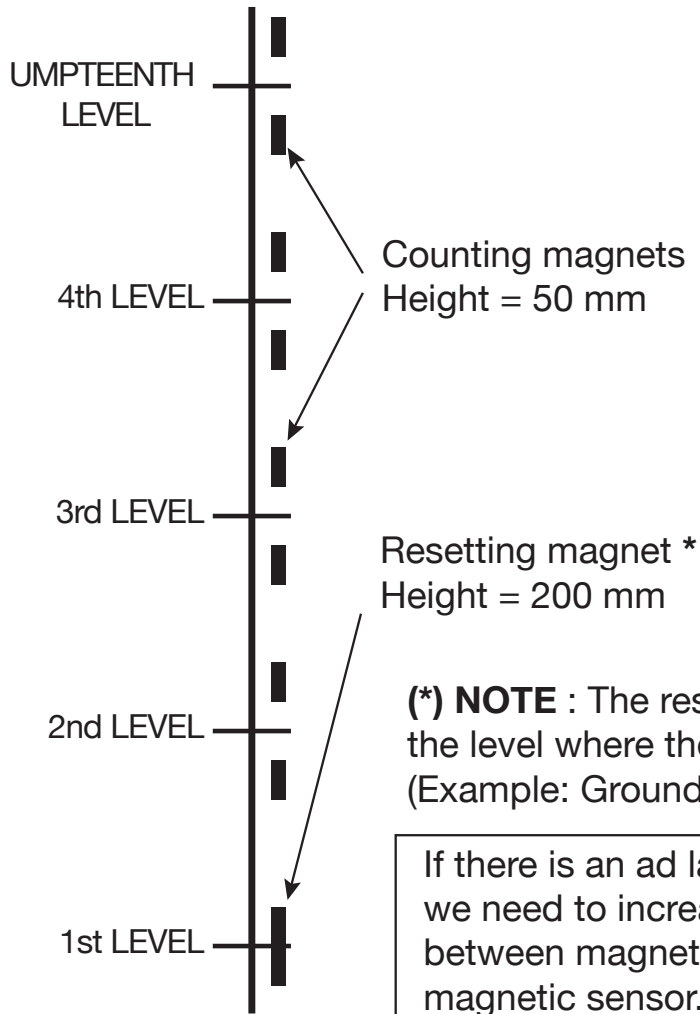
These inputs are designed to receive dry contacts (potential-free contacts) only.

- E1** - Car Door **OPEN**
- E2** - Car Door **CLOSED**
- E3** - **UPPER** Magnetic Sensor
- E4** - **LOWER** Magnetic Sensor

NOTE: These four signals are mandatory for the floor announcement function to operate correctly.

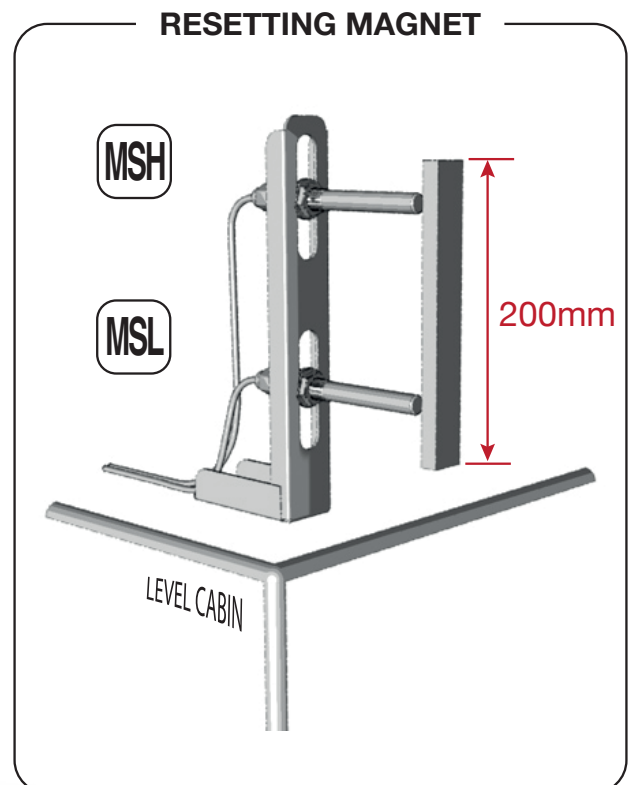
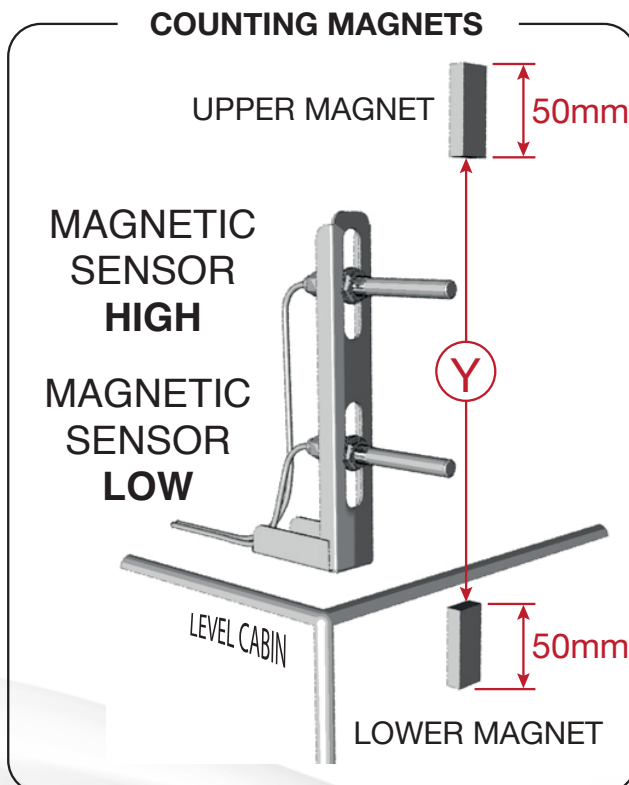
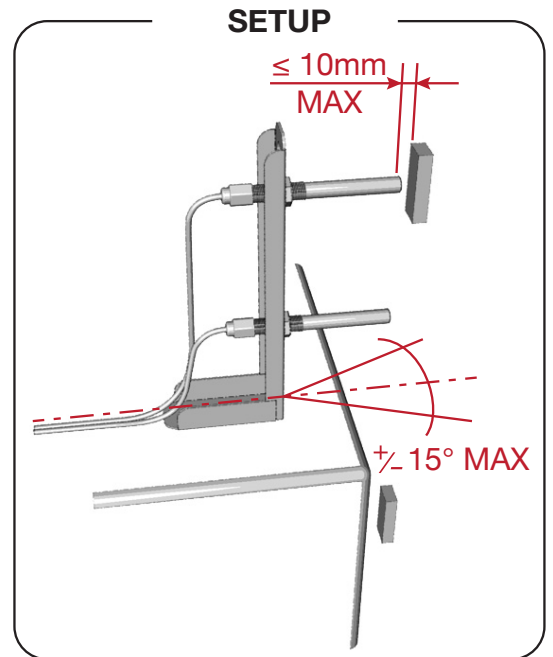


1.4 - Positioning and Re-leveling Sensor Connections



(*) NOTE : The resetting magnet is to be placed at the level where the cab passes most often (Example: Ground floor for an R+4)

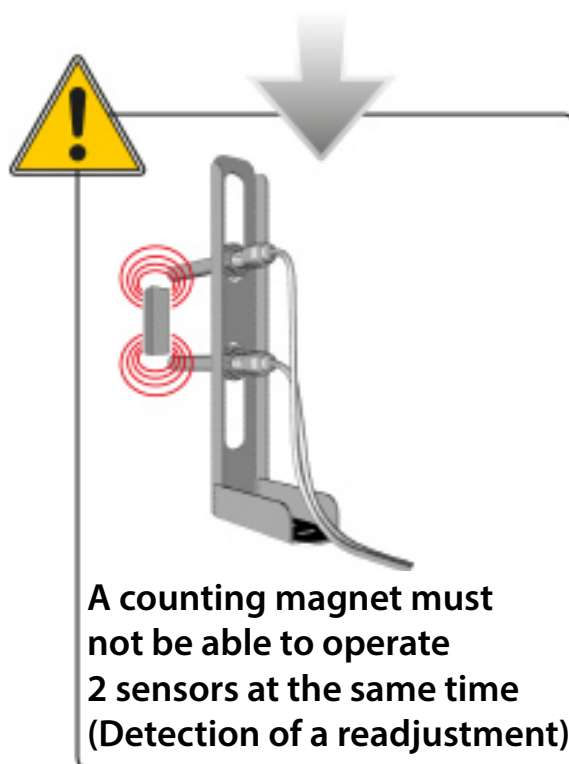
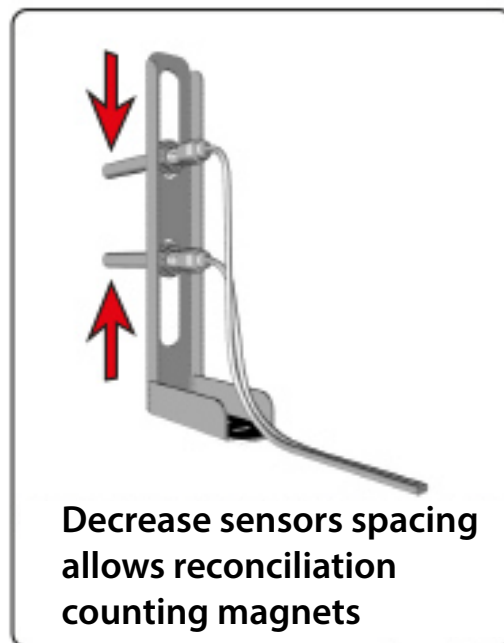
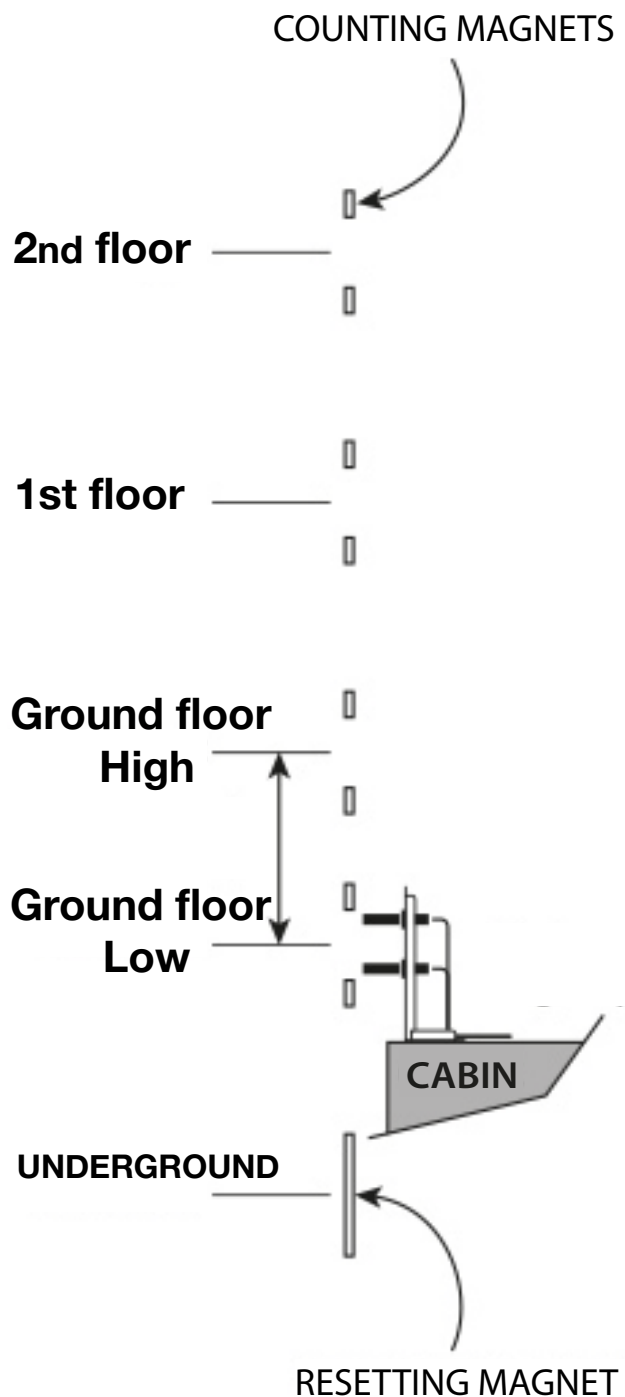
If there is an ad lag in operation, we need to increase the distance between magnets, or increase the distance between magnetic sensor.



1.4.1 - Elevator with Short Floor Heights

The minimum distance required for short-floor detection is **700 mm** between two floor levels (floor position signals).

ELEVATION VIEW OF THE ELEVATOR SHAFT (Example)

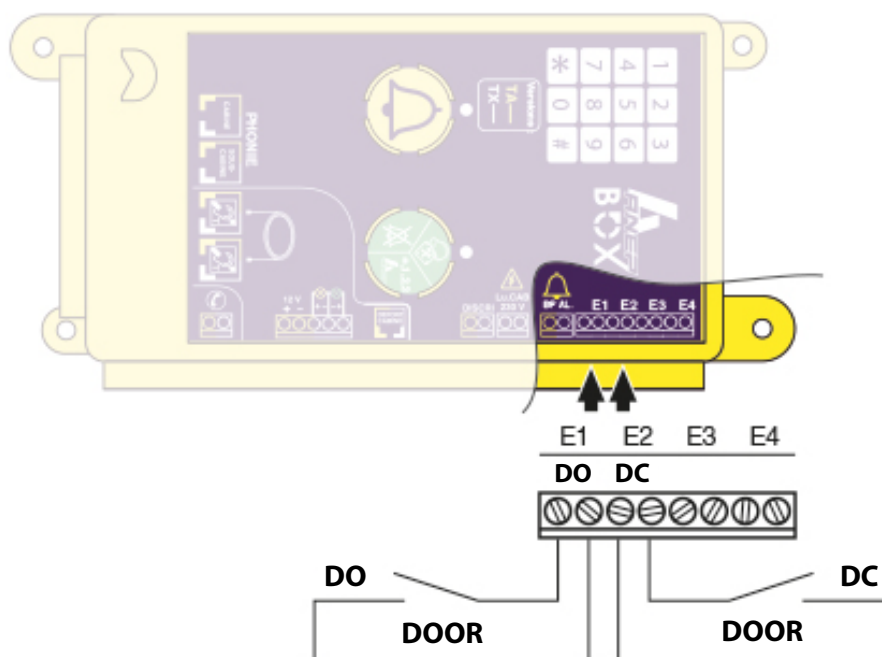


1.5 - Door Open (PO) and Door Closed (PF) Sensor Connections

* *DO = Door Open* ** *DC = Door Closed*

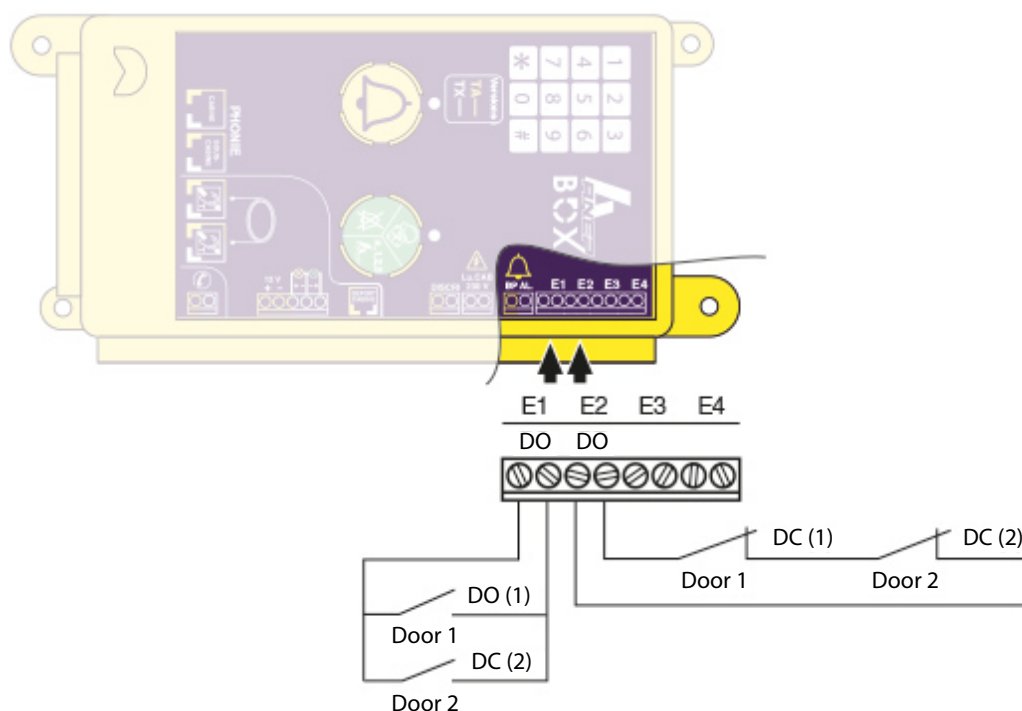
1.5.1 - Single-Entrance Elevator

The Door Open (DO) and Door Closed (DC) signals must be connected to inputs E1 (DO) and E2 (DC), respectively.



1.5.2 - Double-Entrance Elevator

The DO/DC door signals must be duplicated (DO connected in parallel and DC connected in series).



NOTE: The DC signal triggers the gong.
If the voice announcements start when the elevator stops, before the doors open, this indicates that a DC sensor is incorrectly adjusted.

1.6 - Door Status Monitoring

Particular care must be taken when adjusting the DO/DC sensors. Ensure that the contacts remain in the correct state when the doors are fully open and fully closed.

Example: Mechanical resistance or relaxation of the car door when at rest.

1.7 - Checking Voice Announcement Operation

-There must be no floor announcements while the car is moving. If announcements occur, check the adjustment of the DC contact (car door fully closed).

-Verify that the floor announcements correspond to the correct floor when the doors open. (For announcement settings, refer to Section 2.4 «Floor Announcements».)

-When the door is open, the «door closing» announcement must not be played before the door actually starts closing. (Check the adjustment of the DO contact.)

-When the elevator arrives at a floor, the gong must not sound before the door starts opening. (Check the adjustment of the DC contact.)

1.8 - Fault Transfer Verification

Before performing the checks below, ensure that Technician Presence is disabled by pressing the green button on the BOX. The unit must announce «Technician Departure».

Leave the elevator in normal standby for **7 minutes**. No call should be initiated (monitor DATA transmissions).

Fault test: Stop the car between two floors and wait **7 minutes**. The ANEP BOX must place a call and transmit the «Car Stuck Between Floors» fault. Verify that the event is received by the monitoring center. After the elevator completes two trips, the fault clear notification must be transmitted.

WARNING: Fault reporting is limited to 4 fault calls per day.

2 - FEATURES

The ANEP **BOX TX** version includes all the features of the **TA** version and adds the following:

1. Voice announcements when a trapped passenger alarm is activated.
2. An alarm siren function (loudspeaker operating as a buzzer).
3. Floor announcement function.
4. Technician arrival and departure detection.
5. Periodic voice reminders indicating the technician's presence.
6. The ability to play a voice message after a car alarm has been activated until the alarm has been acknowledged by the technician.
7. A Car Light input.
8. Voice identification of the alarm location during the call.

2.1 - Telephone Network Selection

The **BOX TX** module uses a telephone network to transmit alarms to a receiving center. For proper operation, the network type must be selected from the following:

- Public Switched Telephone Network (Analog PSTN)
- GSM Gateway
- PBX Mode

The selected network affects the following functions:

- ANEP GSM gateway battery status reporting
- Loudspeaker and microphone audio monitoring
- Secure data transmission to the receiving center

PBX Mode allows the **BOX TX** module to operate with most PBX systems; however, compatibility with all PBX systems available on the market cannot be guaranteed.

This mode supports:

- Dialing on idle line voltages between 20 V and 28 V.
- Answering incoming calls when the ring signal duration exceeds 400 ms.

The **BOX TX** module is compatible by default with the analog telephone networks used in European countries (PSTN). Only the United Kingdom (UK) requires specific programming of the **BOX TX** module.

2.2 - Car Alarm

2.2.1 - Car Alarm Discrimination

Alarm discrimination is used to prevent unwanted or false car alarms from being transmitted due to improper use or malicious activation.

Applying a voltage from 5 VDC to 230 VAC to the DISCRI input of the **BOX TX** module disables the transmission of all car alarms.

NOTE: The discrimination function is performed only after the alarm has been cleared locally or remotely.

2.2.2 - Discrimination Disabled

This configuration mode permanently enables the car alarm.

In Programming Mode (see page 25):

Press # **307** #.

The ANEP **BOX TX** emits three BEEPs.

2.2.3 - Internal Discrimination

In this mode, the ANEP **BOX TX** processes the status of the car and landing doors, as well as the movement of the elevator.

The alarm is discriminated:

- While the elevator is moving.
- During the first 15 seconds after the elevator arrives at a floor.
- When both the car door and the landing door are open.

Inputs **E1** and **E2** receive the **DO** and **DC** contacts from the car door.

The **DISCRI** input can receive the landing door open/closed status:

A voltage (5 VDC to 230 VAC) applied to the DISCRI input indicates that the landing door is CLOSED.

In this case:

- Regardless of the car door status, the alarm is enabled.

No voltage applied to the **DISCRI** input indicates that the landing door is **OPEN**.

In this case:

- Car door CLOSED: the alarm is enabled.
- Car door OPEN: the alarm is discriminated.

During Technician Presence, discrimination is disabled.

This operating mode requires a **12 V** power supply.

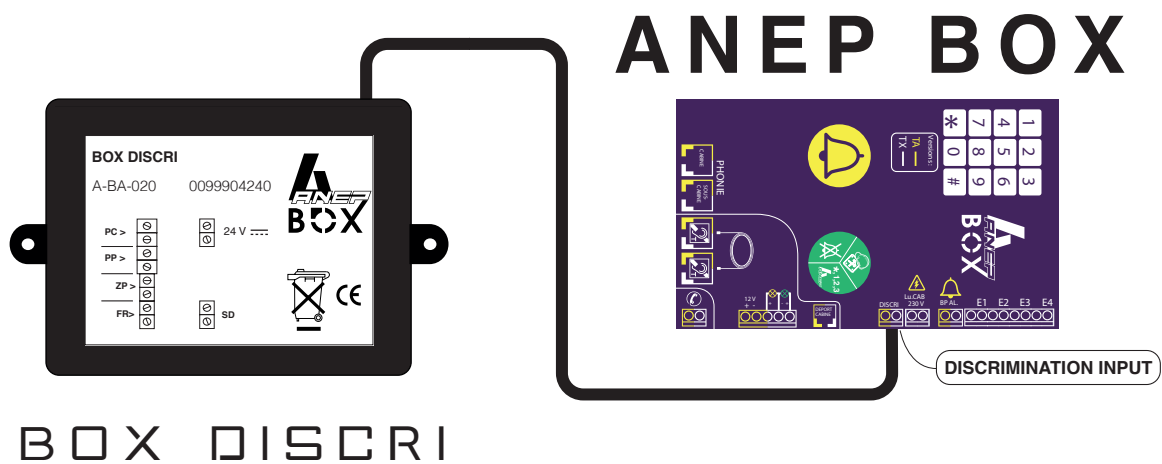
If the **12 V** supply is not present, no discrimination is performed.

In Programming Mode, press # **308** #

The ANEP **BOX TX** emits three BEEPs.

2.2.4 - Discrimination According to EN 81-28 Standard

When the additional BOX DISCRI module is installed in the machine room, alarm discrimination complies with the EN 81-28 standard.

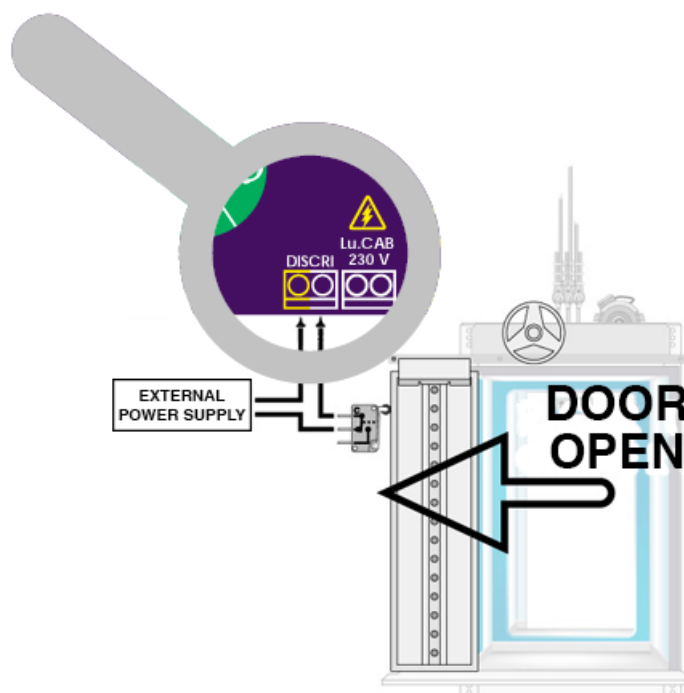


2.2.5 - Simple Discrimination

A simplified discrimination function can be implemented using a dedicated car door fully open signal.

NOTE: Ensure that the car door cannot be opened automatically or manually.

If the car becomes trapped between floors and the passenger forces the car door open manually, the alarm will be discriminated.



2.2.6 - Forced Alarm (Entrapped Passenger Safety) (EN 81-28:2022 Standard)

When no car alarm is active and alarm discrimination is enabled, the car alarm can still be triggered by holding the alarm button for the programmed delay (**see table on page 29**).

By default, the delay is approximately **25 seconds**.

2.2.7 - Voice Announcement for Entrapped Passenger Alarm

To reassure the trapped passenger, the ANEP **BOX TX** plays a synthesized voice message after the Entrapped Passenger alarm has been validated following activation of the elevator alarm button.

2.2.8 - Alarm Siren

The Alarm Siren function integrated into the ANEP **BOX TX** is activated after a car alarm is triggered in the following cases:

1. When the telephone call is unsuccessful after all call attempts have been completed.
2. Immediately after the alarm is triggered if a telephone line voltage drop is detected (line voltage below 28 V), indicating that either the telephone line is faulty or another BOX sharing the same telephone line is already placing a call.

The siren is activated for 6 seconds and is played through the loudspeaker integrated into the ANEP **BOX TX** enclosure (car roof).

This function requires a 12 VDC power supply (such as ALIM-CONTROL II).

The siren can also be configured to sound each time the car alarm button is pressed.

Whether the alarm is discriminated or not, activation of the car alarm can be indicated by sounding the integrated siren for 2 seconds.

Enable the Alarm Siren function:

After entering the Programming Access Code,

☞ press: **#401#**

Disable the Alarm Siren function:

After entering the Programming Access Code,

☞ press: **#402#**

2.2.9 - Communication Duration During Alarm Calls

Following an alarm activation, the communication duration can be adjusted.
The conversation time can be set from **1 to 99 minutes** (factory setting: 3 minutes).



An excessively long voice communication time may affect the call cycle for the programmed telephone numbers, particularly:

- In Double Call mode.
- When a voicemail answers and Operator Acknowledgement is enabled.

2.2.10 - Operator Acknowledgement

When this function is enabled, the operator at the receiving center must acknowledge the alarm by dialing **#1** on the telephone keypad during the voice communication.



If the alarm is not acknowledged, the complete call cycle to all programmed telephone numbers will be executed.

2.2.11 - End of Alarm Call

Local:

A car alarm can only be cleared if it has previously been activated. Pressing the green button on the **BOX TX** module by the technician clears the alarm.

Remote:

The ANEP **BOX TX** supports the Remote End of Entrapped Passenger Alarm function (**EN 81-28**).

The command is sent by the operator at the receiving center via ANEPcenter when an Entrapped Passenger Alarm has not been followed by an End of Alarm performed by the technician on site.

The receiving center calls the **BOX TX** to send the command to clear the passenger alarm. The **BOX TX** then calls the receiving center back to confirm that the command has been successfully executed, ensuring the complete alarm handling process has been verified.

This function is not available if the telephone line connected to the ANEP **BOX TX** is configured for outgoing calls only.

After receiving the command from **ANEPcenter**, the **BOX TX** generates a new call with the following event: «Occurrence: Remote End of Alarm»

The call is transmitted to the Receiving Center (Telephone Memory 104).

2.3 - BOX TX Module Clock Setting

In Programming Mode:

- ☞ Press # **601 83** hh mm
- ☞ The ANEP **BOX TX** emits a gong.
- ☞ Press * twice to exit

(hh and mm represent the hours and minutes.)

Examples: To set the time to 15:48 => # **601 83 15 48**
To set the time to 7h30 => # **601 83 07 30**
To set the time to 9h05 => # **601 83 09 05**

2.3.1 - Local Time Reading

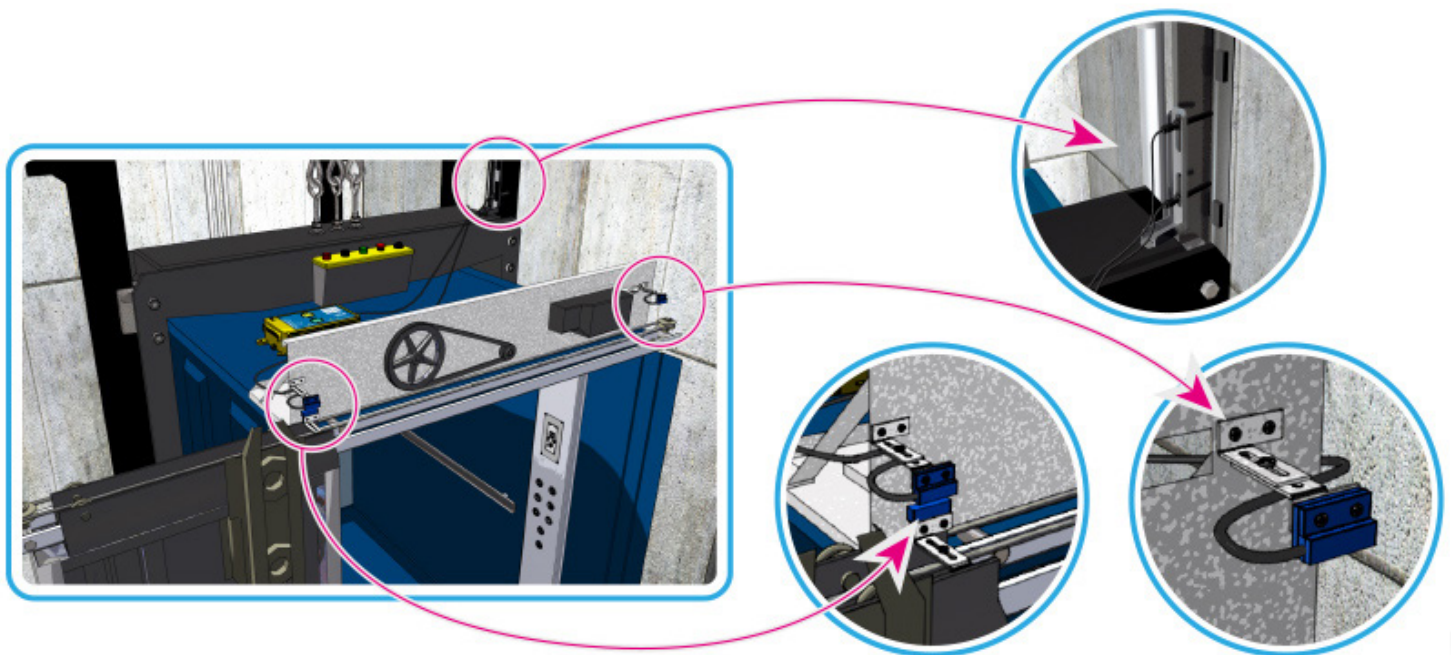
In Programming Mode:

- ☞ Press # **602 83 #**
- ☞ The ANEP **BOX TX** announces the time as **four** individual digits.
- ☞ Press * to exit

Example: : 12:09 is announced as: «UN», «DEUX», «ZERO», «NEUF»

2.4 - Floor Announcements

The ANEP **BOX TX** can announce the current floor when the doors open.
This function requires a 12 VDC power supply (such as **ALIM-CONTROL II**).
Floor announcements can be programmed and verified either locally or remotely using ANEPcenter®.



2.4.1 - Enabling Floor Announcements

In Programming Mode:

☞ Press # **603** #

Floor announcements when the doors open, as well as the «Door Closing» announcement, will be played either from 08:00 to 20:00 or continuously, depending on the selected operating mode.

2.4.2 - Disabling Floor Announcements

In Programming Mode:

☞ Press # **604** #

Floor announcements and the «Door Closing» announcement are disabled.

2.4.3 - Floor Level Programming via Keypad

By default, floor announcements for each level are stored in the **BOX TX**.

For specific applications, the announcement assigned to each floor can be changed to match the elevator configuration.

The installer can assign any predefined announcement (**1 to 39**) to each floor.

Before starting the programming procedure, complete the table on the following page with the announcement reference assigned to each floor.

To program a floor, enter: # **601** «n» # «a» #

Where:

«n» = floor number

«a» = announcement reference

Both values must be between **1 and 39**.

To enable playback from 08:00 to 20:00:

In Programming Mode:

☞ Press # **602 81**

☞ Press # to confirm. The voice synthesizer emits a gong

☞ Press * twice to exit

NOTE: The ANEP BOX TX clock must be set beforehand by the execution of a periodic test call.

2.4.4 - Floor Announcement Timing Indication

When entering Programming Mode, the Green and Yellow LEDs indicate the floor announcement playback mode.

- Green LED ON: Floor announcements are played from 08:00 to 20:00.
- Yellow LED ON: Floor announcements are played 24 hours a day.
- No LEDs ON: Floor announcements are disabled.

Default Announcements	
Floor	Announcement
39	31st Floor
38	30th Floor
37	29th Floor
36	28th Floor
35	27th Floor
34	26th Floor
33	25th Floor
32	24th Floor
31	23rd Floor
30	22nd Floor
29	21st Floor
28	20th Floor
27	19th Floor
26	18th Floor
25	17th Floor
24	16th Floor
23	15th Floor
22	14th Floor
21	13th Floor
20	12th Floor
19	11th Floor
18	10th Floor
17	9th Floor
16	8th Floor
15	7th Floor
14	6th Floor
13	5th Floor
12	4th Floor
11	3rd Floor
10	2nd Floor
9	1st Floor
8	Ground Floor
7	1st Basement
6	2nd Basement
5	3rd Basement
4	4th Basement
3	5th Basement
2	6th Basement
1	7th Basement

Modified Announcements	
Floor «n»	Announcement Reference «a»
39	
38	
37	
36	
35	
34	
33	
32	
31	
30	
29	
28	
27	
26	
25	
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1	

2.5 - Periodic Test Call

In compliance with **EN 81-28**, the **BOX TX** module performs an automatic periodic test call (adjustable from 1 to 3 days) to ensure the proper operation of the emergency alarm system.

2.6 - Data Transfer Monitoring

To allow the technician working on the elevator to identify when the **BOX TX** module is communicating with a receiving center, all data exchanges are audible at a low volume through the **BOX TX** loudspeaker.



IMPORTANT: No keypad operation is possible on the **BOX TX** module while a communication session is in progress (including during programming).

2.7 - Automatic Hang-Up

During an alarm call:

The call is terminated automatically when a busy tone is detected on the telephone line or when the programmed communication time expires.

The **BOX TX** module plays a melody 10 seconds before the end of the communication.

During data transmission:

The call is terminated automatically when the data exchange is complete.

2.8 - 12V Supply & Battery Monitoring

When an **ALIM-CONTROL II** is connected and the 12 V monitoring function is enabled:

- A fault is transmitted if the supply voltage remains below 8 V for 10 minutes.
- The fault is cleared after the supply voltage remains above 8 V for 10 minutes.

When **another 12 V power supply is used** and the 12 V monitoring function is enabled:

- A fault is transmitted after 10 minutes without a 12 V supply.
- The fault is cleared after 10 minutes with the 12 V supply restored.

By default, the 12 V monitoring function is enabled.

Battery monitoring is available when an **ALIM-CONTROL II** is connected.

During each periodic test call, the ANEP **BOX TX** checks the presence of the 12 V supply or the battery status when an **ALIM-CONTROL II** is connected.

If no voltage is detected, a Daily Report with Fault call is transmitted. Otherwise, a standard Periodic Test call is transmitted.

2.9 - ANEP GSM Gateway Battery Monitoring

The P4GU VoLTE and PGA VoIP gateways periodically monitor their battery status. If a fault is detected, the information is transmitted to the connected **BOX TX** module.

When the fault is detected, the **BOX TX** module generates a call with the following event:
Battery GSM Fault Detected

After the battery has been recharged or replaced, the P4GU VoLTE or PGA VoIP gateway informs the **BOX TX** module, which generates a call with the following event: Battery GSM Fault Cleared

NOTE: 2G technologies (PG1, PG2 and PGU) and 3G technology (P3GU) will soon become obsolete and are no longer recommended for new installations.

2.10 - Firefighter Machine Room Intercom System

The **BOX TX** module can be used with the **BOX-M** module to provide intercom communication between the machine room and the elevator car.

The car roof module and the car communication unit then operate as intercom stations without requiring any modification to the equipment installed in the elevator car.

3 - INSTALLATION



Before handling any ANEP equipment, ensure that the power supply has been switched off.

3.1 - Prerequisites Before Commissioning

The performance of telephone equipment largely depends on the characteristics of the telephone line.

Particular care must be taken when routing the telephone line to avoid degrading its standard electrical characteristics.



It is essential to connect all peripheral devices first, THEN connect the telephone line, and FINALLY connect the +12 V supply, if used.

3.2 - Installation Steps

Check all wiring, especially when connections are shared between multiple elevator machine rooms.

1. Cable type
2. Cable routing (low-voltage / high-voltage circuits)
3. Electrical interference (HVAC systems, generators, etc.)
4. Car alarm button
5. Car operating panel
6. Under-car communication unit
7. Telephone line (after approximately 3 seconds, the **BOX TX** module emits one or more initialization BEEPs, depending on the module number)
8. Backup 12 V power supply (required when using the induction hearing loop and the Yellow/Green indicators)

3.3 - Traveling Cable

We recommend using a shielded traveling cable to ensure excellent voice communication quality and to prevent electrical interference that could cause malfunctions.

3.4 - Installation / Electrical Connections

The **BOX TX** module is installed on the car roof (secured with four screws) and must be connected to the required peripheral modules according to the selected options:

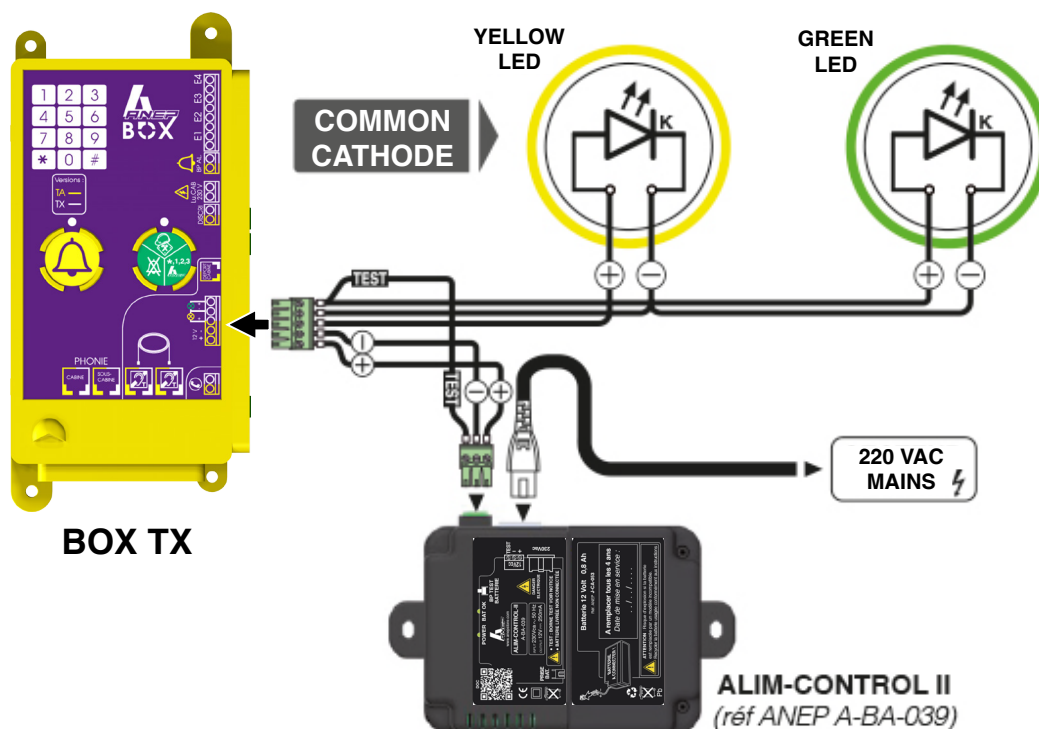
- Car communication unit (car operating panel or remote module)
- Yellow/Green indicators
- Induction hearing loop
- Under-car communication unit
- 12 VDC power supply
- BOX-DISCR1
- Telephone network
- Sensors

4 - YELLOW / GREEN INDICATOR CONNECTIONS (if MIDIS is not installed)

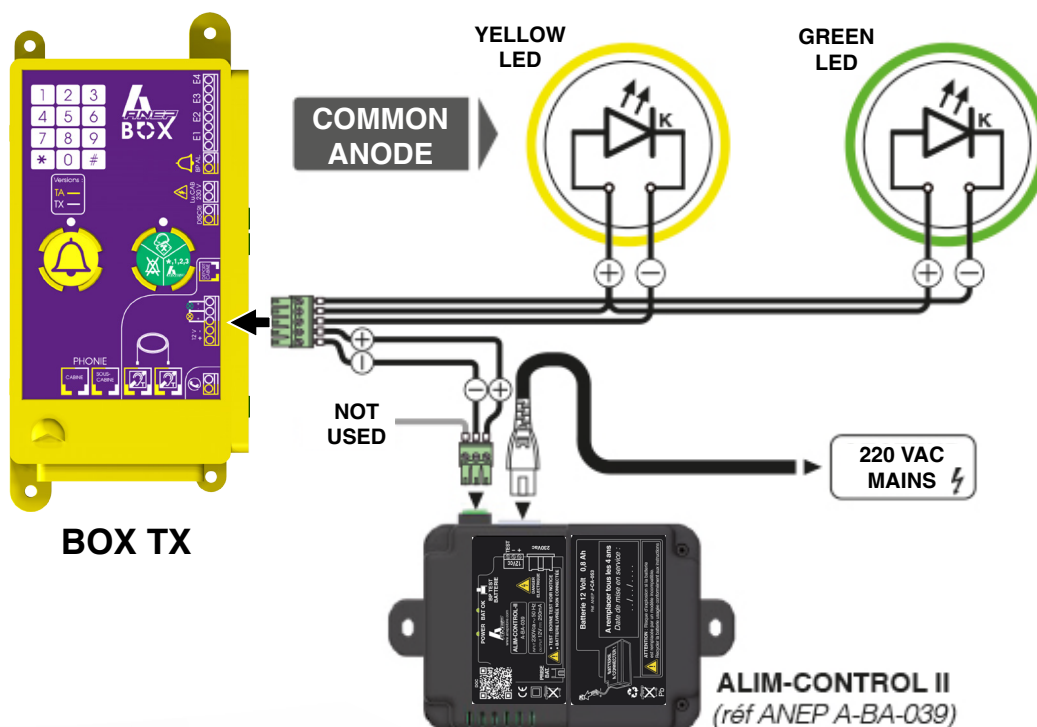
- Connect the indicators installed in the elevator car in accordance with EN 81-28:2003, EN 81-28:2022, and EN 81-70 (12 VDC / 140 mA maximum per indicator).
- Connect a 12 VDC power supply (9 to 15 VDC), such as an **ALIM-CONTROL II**.

No connection of this type is required when a MIDIS communication unit is used.

Common-Cathode Indicators



Common-Anode Indicators



4.1 - Yellow & Green Indicator Programming (EN 81-28:2003 / EN 81-28:2022)

After entering the Programming Access Code:

- ☞ Depending on the required standard for indicator operation, enter one of the following sequences:
417 #, ou # 418 #, ou # 419



STANDARD EN81-70 2003	OFF ●	OFF ●	Device in standby / NORMAL MODE	# 417 #
	ON ✱	OFF ●	Alarm activated, call in progress	
	OFF ●	ON ✱	In communication with a call center operator	
	OFF ●	OFF ●	Communication ended, line released, alarm acknowledged (remotely or on-site)	

STANDARD EN81-28 2022	OFF ●	OFF ●	Device in standby / NORMAL MODE	# 418 #
	ON ✱	OFF ●	Alarm activated, call in progress	
	ON ✱	ON ✱	In communication with a call center operator	
	ON ✱	OFF ●	Communication ended, line released	
	OFF ●	OFF ●	Alarm acknowledged (remotely or on-site)	
	FLASHING ✱✱✱	FLASHING ✱✱✱	Periodic test failure	

STANDARD EN81-28 2022 YELLOW OFF	OFF ●	OFF ●	Device in standby / NORMAL MODE	# 419 #
	ON ✱	OFF ●	Alarm activated, call in progress	
	ON ✱	ON ✱	In communication with a call center operator	
	OFF ●	OFF ●	Communication ended, line released	
	OFF ●	OFF ●	Alarm acknowledged (remotely or on-site)	
	FLASHING ✱✱✱	FLASHING ✱✱✱	Periodic test failure	

Programming via ANEP BOX Keypad

After enabling programming access mode by entering *123 :

# 417 #	Validates Yellow and Green LED behavior according to EN81-70 (2003)
# 418 #	Validates Yellow and Green LED behavior according to EN81-28 (2022)
# 419 #	Validates Yellow and Green LED behavior according to EN81-28 (2022) , with Yellow LED OFF after communication (end of alarm)

5 - PROGRAMMING

All peripheral devices connected to the ANEP **BOX TX** module must be installed before entering Programming Mode.

(This includes the power supply, telephone line, Yellow/Green indicators, induction hearing loop, alarm button, discrimination input, car operating panel, under-car communication unit, etc.)

Shared Telephone Line Configuration.

When multiple ANEP **BOX TX** and ANEP **BOX C** modules share the same telephone line, all modules must be on-hook before Programming Mode can be accessed.

5.1 - Factory Configuration

The ANEP **BOX TX** module is supplied with a predefined set of parameters referred to as the Factory Configuration.

PARAMETER	FACTORY CONFIGURATION
Reset to Factory Settings	#001#
Programming Access Code	*123
Communication Duration	3 minutes
Hang-Up	Automatic
Periodic Test Call Interval	3 days
Transmitter Number	Factory serial number (8 digits, see label on the unit)
Module Number	1
Telephone Numbers	Not programmed (empty memory)
Telephone Network	Analog telephone line (PSTN)
Car Alarm Button Delay	0.5 seconds
Car Alarm Button Delay with BOX-DISCR1	25 seconds
Operator Acknowledgement	Disabled
Yellow/Green Indicator Management	EN 81-28:2003 or EN 81-28:2022

5.2 - Programming Mode

5.2.1 - Programming the Transmitter Number (or Identifier or PROM)

In Data (DTMF) Mode, the **BOX TX** module identifies itself by transmitting an identification code referred to as the Transmitter Number (also called the PROM Number or Identifier, depending on the customer or receiving center).

This number corresponds to the BOX TX module's factory serial number (8 digits printed on the product label).

To ensure compatibility with the various databases used by receiving centers, this identification number can be modified.

NOTE: The Transmitter Number is a numeric value consisting of 8 digits. (Ex : 43 21 15 69)

WARNING: Changing the Transmitter Number does not require prior access to Programming Mode.	
* # 22220 xx xx xx xx # *	xx xx xx xx = 8 digits Transmitter Number

5.3 - Programming the Module Number

After entering the Programming Access Code (*123)	
# 303 xx #	xx = Module Number according to the configuration (see below)

5.4 - Accessing Programming Mode

Using the keypad on the ANEP **BOX TX** module, enter:

***123 : The unit plays a melody.** 

5.4.1 - Exiting Programming Mode

After completing the programming, press the « * » key.

Programming Mode is exited, and the unit plays a melody. 

NOTE: If no key is pressed for 3 minutes, the unit automatically exits Programming Mode and plays a melody.

The unit plays a melody 

5.4.2 - Changing the Programming Access Code

After completing the programming :

#002 nnnnnnn # nnnnnnn #

press thes #002

Enter the new Programming Access Code (1 to 7 digits), then press #.

Confirm the new Programming Access Code (1 to 7 digits), then press #.



IMPORTANT: Record the new Programming Access Code carefully.
If the code is lost, the unit must be returned to the factory to restore access.

5.5 - Telephone Network Selection

5.5.1 - Analog Mode

5.5.1.1 - Analog Mode (PSTN)

By default, the **BOX TX** module is configured for analog (PSTN) operation.

After entering the Programming Access Code (*123)	
#404#	Analog telephone line (PSTN) Idle line voltage = 28 V

5.5.1.2 - Analog Mode (Private PBX)

After entering the Programming Access Code (*123)	
#403#	Analog telephone line (PBX) Idle line voltage = 20 to 28 V

5.5.2 - GSM Mode

After entering the Programming Access Code (*123)	
#405#	Telephone line via GSM Gateway

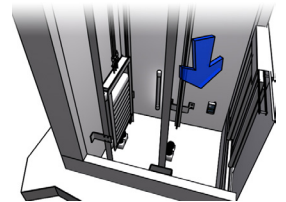
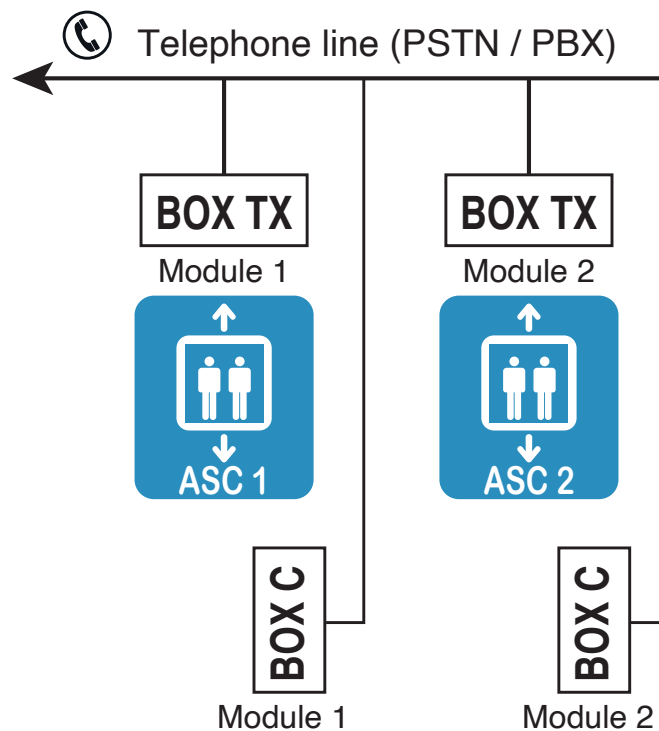
After entering the Programming Access Code (*123)	
#406#	Exit GSM Mode and return to PSTN/PBX operation

5.5.3 - Group Addressing on an Analog Line

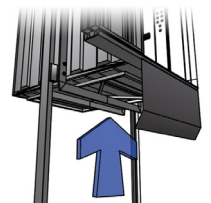
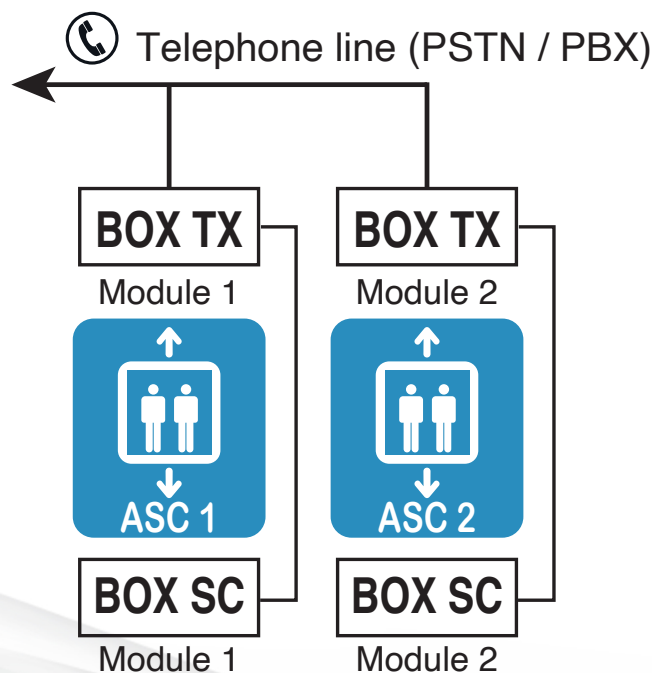
Several ANEP **BOX TX** and **BOX C** modules can be installed on the same telephone line. The maximum configuration* is 4 modules connected to a single telephone line. Each module must be assigned a unique Module Number to allow identification by the Receiving Center. Likewise, the Receiving Center must have a corresponding site record for each elevator, including its assigned Module Number.

***The maximum number of modules depends on the quality of the telephone line and the installation wiring.**

Configuration 1 – Remote Pit Communication Unit with **BOX C**



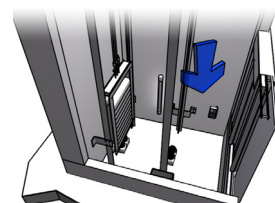
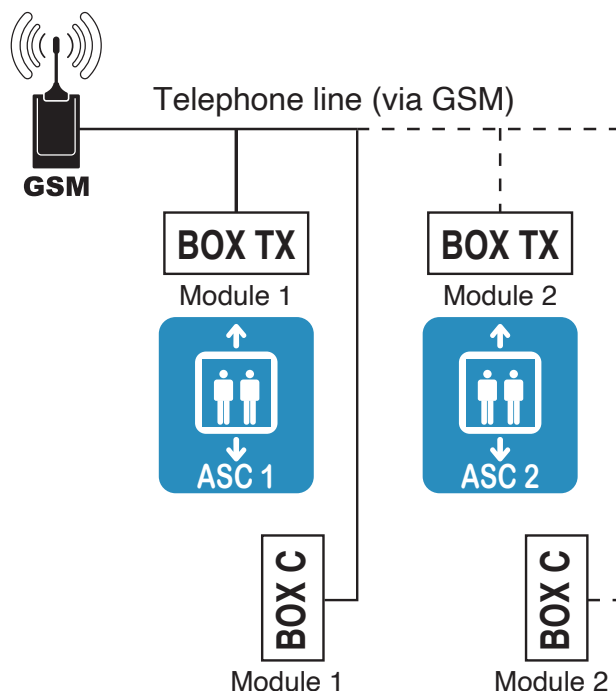
Configuration 2 – Remote Under-Car Communication Unit (**BOX-SC**)



5.5.4 - Addressing via GSM Gateway Telephone Line

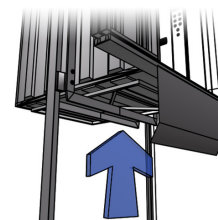
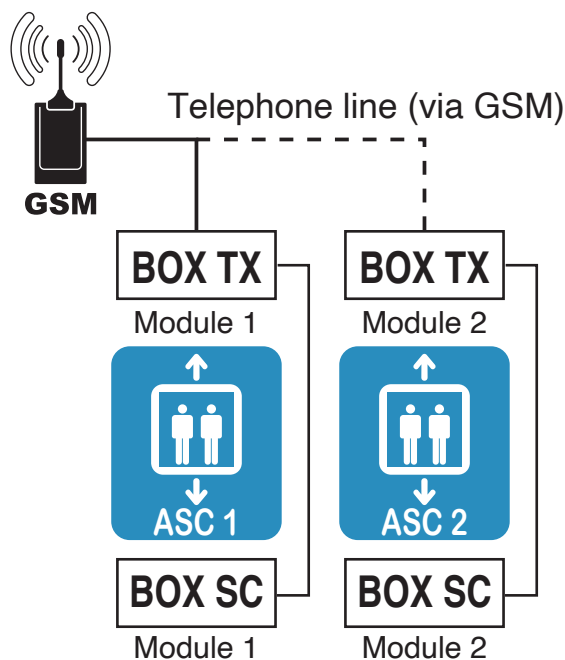
Maximum of 2 modules (when using the BOX-SC)

Configuration 1 – Remote Pit Communication Unit (BOX C)



A second car can be connected in certain configurations, allowing up to four modules. However, ensure that the maximum permissible cable lengths are not exceeded.

Configuration 2 – Remote Under-Car Communication Unit (BOX-SC)



5.6 - Alarm Identification Method

The **BOX TX** module accurately identifies the location of the alarm (elevator location) by transmitting data to the Receiving Center, where the corresponding site record is automatically displayed.

5.7 - Telephone Number Programming

5.7.1 - Telephone Number Table

MEMORY	TYPE OF INFORMATION	NATURE OF THE COMMUNICATION	INCOMING
*123 Programming access code			
#001#	Reset settings		
#101	User and technician alarms	Data & Voice	Modem or telephone
#102	User and technician alarms	Data & Voice	Modem or telephone
#104	Alarm end / GSM battery / 12 V	Data	Modem
#105	Periodic test	Data	Modem
#106	ANEPanywhere (optional)	Data	Modem
#303	Module number		
* Exit programming mode			

NOTE: To activate the microphone immediately when a voice call is established, add a pause (*) in front of the telephone number programmed for memories 101 and 102.

Example : **#101 * 01 45 69 28 00#**

5.7.2 - Programming Telephone Numbers

Example: Programming Memory 101

After entering the Programming Access Code (*123)	
# 101 xxx #	x = telephone number (up to 15 digits).

Repeat the same procedure for the other memory locations.

5.7.3 - Programming a Pause

For installations connected to a PBX, it is often necessary to dial a prefix, followed by a pause, and then the telephone number.

To insert a 2-second pause, press the * key

Example: Pause after prefix 0 (Memory 101) using the ANEP main switchboard number.

After entering the Programming Access Code (*123)	
# 101 0 * 01 45 69 28 00 #	01 45 69 28 00 = ANEP main switchboard number

5.7.4 - Deleting a Telephone Number

The procedure is identical to programming a telephone number, except that no number is entered.

Example: Deleting the telephone number stored in Memory 101.

After entering the Programming Access Code (*123)	
# 101 #	Deletes the telephone number stored in Memory 101

Repeat the same procedure for the other memory locations.

5.8 - Parameter Validation and Settings

5.8.1 - 12V Monitoring Configuration

After entering the Programming Access Code:

208 # Enables the 12 V monitoring function.

209 # Disables the 12 V monitoring function.

By default, the 12 V monitoring function is enabled.

5.8.2 - Car Alarm Button Press Delay

A delay can be programmed so that the Car Alarm Button is recognized as a genuine alarm only after being pressed for the specified duration. This feature helps prevent false alarm activations caused by accidental or unintended button presses.

After entering the Programming Access Code (*123)	
# 302 n #	n = value in tenths of a second (maximum = 63)

Example: To program a delay of 4.5 seconds, enter 45 instead of n.

NOTE: By default, the BOX TX module is configured with a 0.5-second delay.

5.8.3 - Entrapped Passenger Call Acknowledgement (EN 81-28)

When this function is enabled, an alarm call initiated by the ANEP **BOX TX** must be acknowledged by the operator by dialing #1 on the telephone keypad during the voice communication.

If the acknowledgement is not received, the ANEP **BOX TX** redials the Receiving Center up to six times. This function ensures that the alarm has been acknowledged by an operator rather than by a voicemail system.

After entering the Programming Access Code (*123)	
# 202 #	Enables operator acknowledgement for the car alarm call
# 203 #	Disables operator acknowledgement for the car alarm call

5.8.4 - Communication Duration

Adjustable conversation duration from 1 to 99 minutes (**default: 3 minutes**).

After entering the Programming Access Code (*123)	
# 201 nn #	nn = duration in minutes (01 to 99)

5.8.5 - DTMF Code Transmission Level Adjustment

After entering Programming Mode, press **#409**, enter a value N from 0 to 12, then press **#**.

N	0	1	2	3	4	...	9	10	11	12
Output Power	-16 dBm	-15 dBm	-14 dBm	-13 dBm	-12 dBm	...	-7 dBm	-6 dBm	-5 dBm	-4 dBm

5.8.6 - Audio Level Adjustment

Méthod 1

After completing the programming, initiate an alarm call by pressing the Car Alarm Button on the **BOX TX**, or the alarm button. 

The following settings are available to adjust the sound levels and the **BOX TX** microphone/speaker switch according to local conditions :

→ Key **6** = **+** Key **9** = **-**

Adjusts the speaker volume after the microphone/speaker switch.

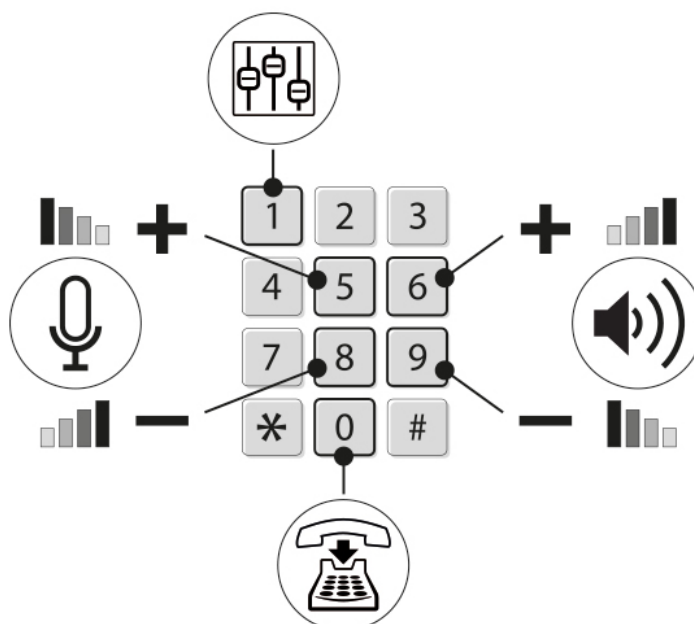
→ Key **5** = **+** Key **8** = **-**

Adjusts the microphone sensitivity.

Key **0** → hangs up the device

Key **1** → restores factory settings

NOTE: Settings configured in manual adjustment mode override those previously configured in automatic adjustment mode.



Méthod 2

The settings can only be adjusted when no call is in progress, in Programming Mode.

Enter the following sequence :

- **#410 1 xx #** xx = value from 1 to 15 to adjust the car loudspeaker volume.
- **#410 2 xx #** xx = value from 1 to 15 to adjust the car roof loudspeaker volume.
- **#410 3 xx #** xx = value from 1 to 15 to adjust the under-car loudspeaker volume.
- **#411 1 xx #** xx = value from 1 to 15 to adjust the car microphone volume.
- **#411 2 xx #** xx = value from 1 to 15 to adjust the car roof microphone volume.
- **#411 3 xx #** xx = value from 1 to 15 to adjust the under-car microphone volume.

5.8.7 - Double Call Mode Configuration

Double Call Mode allows the unit to call a security desk or control room (voice communication only) before forwarding the alarm to the Receiving Center (data and voice communication).

Telephone memories 101 and 102 are used for this function.

After entering the Programming Access Code (*123)	
# 206 #	Enables Double Call Mode
# 207 #	Enables Double Call Mode

The telephone memories must be programmed as follows:

Memory 101: Security desk or control room telephone number.

Memory 102: Receiving Center telephone number.

Alarm sequence:

When an alarm is triggered, the transmitter first calls the telephone number stored in Memory 101 (security desk). It then calls the telephone number stored in Memory 102 (Receiving Center).

If the number stored in Memory 101 (security desk or control room) or Memory 102 (Receiving Center) is busy, the transmitter retries the call up **to six times**.

5.9 - Periodic Test Call

5.9.1 - Enabling the Periodic Test Call

To enable the Periodic Test Call, a telephone number must first be programmed in Memory 105 of the **BOX TX** module (refer to Section 5.6.2 – Programming Telephone Numbers).

NOTE: When exiting Programming Mode, after the Periodic Test Call telephone number has been stored, the BOX TX module automatically initiates its first Periodic Test Call.

To inform the technician that the BOX TX module is currently in communication, the loudspeaker remains active throughout the call.

Programming Mode cannot be accessed while a telephone call is in progress.

5.9.2 - Periodicity of the Periodic Test Call

After entering the Programming Access Code (*123)	
# 301 n #	n = number of days between each Periodic Test Call (1, 2, or 3 days)

NOTE: The factory default setting is 3 days.

5.10 - Intercom Functions

5.10.1 - Gain Adjustment for Machine Room and Firefighter Intercom Modes (BOX M)

The loudspeaker and microphone gains used for the Machine Room Intercom and Firefighter Intercom functions can be adjusted independently.

These settings do not affect the gain settings used for the standard tri-party communication functions.

Microphone Gain Adjustment:

After entering Programming Mode:

Press **#407**, enter a value from 1 to 15, then press **#**. (1 = minimum gain / 15 = maximum gain)

Loudspeaker Gain Adjustment :

After entering Programming Mode:

Press **#408**, enter a value from 1 to 15, then press **#**. (1 = minimum gain / 15 = maximum gain) **#**

5.11 - Car Light Monitoring Delay

The ANEP **BOX TX** monitors the Car Light supply voltage (230 VAC).

Any loss or restoration of this voltage is transmitted to the Receiving Center (telephone Memory 104).

The delay before reporting voltage restoration is fixed at 2 minutes.

The delay before reporting a voltage failure is programmable.

In Programming Mode:

☞ Press **#304**, then enter the desired delay in minutes (0 to 99)

☞ The ANEP BOX TX emits three BEEPS 

☞ Press **#** to confirm

NOTE: When the delay is set to 0, the Car Light fault is not monitored (factory default setting).

5.11.1 - Car Light Input Used as Maintenance Visit Start/End Input

The Car Light input can be used to indicate the start and end of a maintenance visit when the Car Light Delay parameter is set to 0.

Maintenance Visit Start

The presence of a voltage (5 V to 220 V) on the input for 5 seconds activates the Maintenance Visit Start event.

- The voice message «*Technician Arrival*» is played
- Transmission of the «*Technician Presence, Maintenance Visit Started*» event is delayed by 5 minutes.

Maintenance Visit End

The absence of voltage on the input for 5 seconds indicates the end of the Technician Presence.

- The voice message «*Technician Departure*» is played.
- Transmission of the «*Technician Presence Ended*» event is sent without delay.

Car Light Function

The Car Light input retains its Car Light Monitoring function when the Car Light Delay parameter is set to a value other than 0.

6 - OPERATION

6.1 - Car Alarm Test

Press the Car Alarm Button. 

If the Discrimination function is disabled, the **BOX TX** module establishes communication with the Receiving Center operator. The dial tone and dialing sequence are audible in the car.

If no voice communication is established, the unit emits a BEEP every 6 seconds to indicate that it is connected.

To terminate the alarm, press the green End of Alarm button on the **BOX TX** module.

6.2 - Car Roof Technician Alarm

Press the alarm button on the **BOX TX** module.

The **BOX TX** module establishes communication with the Receiving Center operator.

The dial tone and dialing sequence are audible on the car roof. 

If no voice communication is established, the unit emits a BEEP every 6 seconds to indicate that it is connected.

6.3 - Automatic Hang-Up (Voice Communication Mode)

The call is terminated automatically when the telephone line busy tone is detected or when the programmed communication duration expires.

The ANEP **BOX TX** plays a melody 10 seconds before the end of the communication. 

6.4 - Call Number Sequence

6.4.1 - Standard Mode

If the number stored in Memory 101 is busy or does not answer (10 rings), the ANEP **BOX TX** calls the number stored in Memory 102, if programmed. Each programmed voice call number is called up to **six times in succession**.

Memory	Call Order	Cycles
101	1	Up to 6 times
102	2	

6.4.2 - Double Call Mode

NOTE: In Double Call Mode, Memory 103 is not used.

Memory	Call Order	Cycles
101	1	Up to 6 times
102	2	

When an alarm is triggered, the transmitter first calls the number stored in Memory 101 (Security Desk).

It then calls the number stored in Memory 102 (Receiving Center).

If the number stored in Memory 101 (Security Desk) or Memory 102 (Receiving Center) is busy, the corresponding number is redialed up to six times.

6.5 - Green Button Functions

1) Technician Presence Function

The green Technician Presence button is used to notify the Receiving Center that a technician is present at the elevator.

Pressing the button plays the «*Technician Presence*» voice announcement, followed by a call to transmit the event.

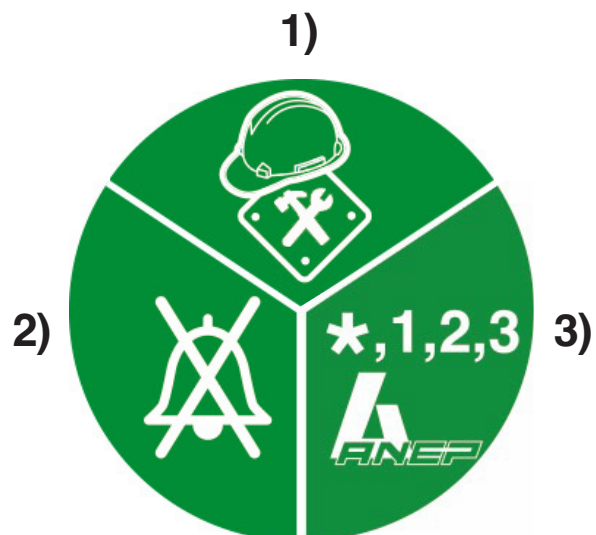
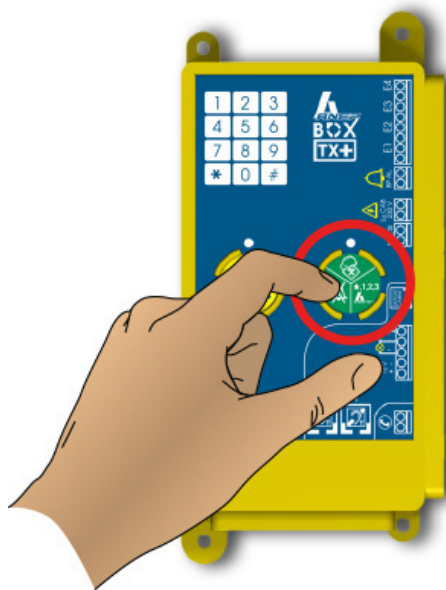
Pressing the button a second time plays the «*Technician Departure*» voice announcement, followed by a call to transmit the event.

2) End of Alarm Function

If a passenger alarm is in progress, pressing the green button terminates the passenger alarm. A voice announcement informs the technician that the alarm has ended (when the Discrimination function is enabled).

3) Voice Server Function

For the Voice Server function, refer to Section 7.



8 - KEYPAD PROGRAMMING TABLE

<u>Entering and exiting parameter-setting mode</u>	
* + <Access Code >	Switch to settings mode
*	Exit programming mode
#0...	<u>Setting</u>
#001#	Reset of settings and Tel number
#002...#	New Access Code
#1...	<u>Tel. number</u>
#101...#	Main Tel number for voice call (or Guard Tel number for double calls)
#102...#	Emergency tel number for phone call (or tel for double phone call)
#104...#	Telephone number of the receiving centre to transmit data after voice transmission
#105...#	Phone number of cyclic test call
#106...#	Internet phone number
#2...	<u>Communication</u>
#201...#	Call duration (1 to 99 in mn)
#202#	Operator call acknowledgement function enabled
#203#	Operator call acknowledgement function not validated
#204#	Enable Full-Duplex Mode for the Car
#205#	Disable Full-Duplex Mode
#206#	Enable Double Call Mode
#207#	Disable Double Call Mode
#208#	Enable 12 V Monitoring
#209#	Disable 12 V Monitoring
#3...	<u>Configuration</u>
#301...#	Periodic Test Call Interval (1, 2, or 3 days)
#302...#	Car Alarm Button Press Delay (10 to 63 × 0.1 s)
#303...#	Module Number (1 to 4)
#308 XX #	Forced Alarm Delay (XX = delay value in 100 ms increments, maximum 25 seconds)
#4...	<u>Configuration</u>
#403#	PBX Mode (Private PBX) Low line voltage (line voltage ≥ 20 V)
#404#	Analog Mode (PSTN) Standard line voltage (line voltage ≥ 28 V)
#405#	Enable GSM Mode
#406#	Disable GSM Mode
#407...#	Adjust the microphone gain for the BOX M intercom (1 to 15)
#408...#	Adjust the loudspeaker gain for the BOX M Machine Room Intercom (1 to 15)
#409...#	Adjust the DTMF transmission level
#410 1 ..#	Adjust the car loudspeaker volume (1 to 15)
#410 2 ..#	Adjust the car roof loudspeaker volume (1 to 15)
#410 3 ..#	Adjust the under-car loudspeaker volume (1 to 15)
#411 1 ..#	Adjust the car microphone volume (1 to 15)
#411 2 ..#	Adjust the car roof microphone volume (1 to 15)
#411 3 ..#	Adjust the under-car microphone volume (1 to 15)
#417#	Enable Yellow/Green Indicator management according to EN 81-28:2003 (default)
#418#	Enable Yellow/Green Indicator management according to EN 81-28:2022
#419#	Enable Yellow/Green Indicator management according to EN 81-28:2022 , with the yellow indicator turning off when the BOX is no longer in communication

8 - KEYPAD PROGRAMMING TABLE (continued)

#6...	<u>Floor Announcements</u>
#601 n# a#	If «n» and «a» are between 1 and 39: Program a floor announcement
#601 83 ...#	Set the time (hours and minutes)
#602 n#	If «n» is between 1 and 39: Play the corresponding floor announcement using the voice synthesizer
#602 81#	Limit floor announcements and voice messages to 8:00 AM–8:00 PM
#602 82#	Enable floor announcements and voice messages 24 hours a day
#602 83#	Play the current time
#602 9n#	Adjust the voice synthesizer volume (n = 1 to 8)
#603#	Enable the Floor Announcement function
#604#	Disable the Floor Announcement function
#605#	Enable the «Alarm in Progress» and «Technician Arrival» voice announcements
#606#	Disable the «Alarm in Progress» and «Technician Arrival» voice announcements

RECYCLING AND WARRANTY



Electrical equipment must be recycled in accordance with Directive 2012/19/EU of 04 July 2012 on Waste Electrical and Electronic Equipment (WEEE).

WARRANTY

This product is covered by a **3-year** warranty from the date of invoice, except for batteries and cells, which are covered by a **6-month** warranty.

However, this warranty does not apply in the following cases:

- Use not in accordance with the instructions provided in this manual.
- Damage caused by external factors (vandalism, fire, flooding, lightning, power surges, etc.).
- Installation carried out by an installer not qualified or approved by ANEP.
- Modifications or repairs performed by entities not approved by ANEP.
- Opening of the product by a person not approved by ANEP.

AFTER-SALES SERVICE IS PROVIDED BY

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