Unico TSA 3

Emergency Phone System For Analog Telephone Line
(PSTN)

User Guide

SW 2.2

English Ed. 1 dated 09/07/2015

THANKS TO CHOOSE
A **TELEDIF ITALIA** PRODUCT

Please read this manual carefully and keep it handy for any consultation; this will allow to obtain the best performance and to use the features and functions of the uniCo TSA 3 in the best way.

UniCo TSA 3 is a telealarm system specifically designed to help people eventually locked in a cabin lift by raising an alarm to a service center and allowing emergency two way voice communication.

UniCo TSA 3 is compliant to the following rules:
Directive 95/16/EC, EN 81-28, EN 81-70, EN81-72, CTR 21;
EN 50082, EN 627 EN 50081-1:1991, EN55022, IEC EN139-4/A2: 2003, EN61000-4-2, EN61000-4-3, EN61000-4-4, EN61000-4-6,EN61000-4 -8.

Main Functionalities of UniCo TSA 3:
- Bi-directional function (talk/listen);
- Self-diagnostic of the main functionalities with local and remote check;
- Volumes adjustable by trimmer;
- Incoming call identification codes for data exchange with call centers, to be programmed in DTMF mode or Ademco Contact ID;
- Independent call and communication systems: Cabin and Maintainers;
- Intercom system between local telephone and the cabin, between intercom and cabin, between local telephone and the intercom and between the cabin and the call center;
- N.1 Input programmable as: Filter for Main Alarm, Technological Alarm or Gong;
- Real Time Clock with automatic summer/winter time change
- Predefined and user defined alarm and warning messages;
- Programmable "End of Alarm" procedure;
- Programmable warning message;
- Reassurance message through the cabin;
- Location message to the service center;
- Messages clearly identifying the type of alarm or warning and the system alarmed;
- System information messages;
- Automatic and on demand Test Call ; timing is programmable;
- Low battery alarm; threshold level and test duration progammable;
- Programmable alarms to be managed by voice call, or Caller ID (CLI)
- Programmable communication mode with the call center;
- 2 programmable Relays for automatic signalling of "alarm sent" and "alarm received" or for remote control functions;
- Local and remote programming and check, with the support of an in line voice guidance;
- 9 telephone numbers associated with various types of alarm calls.

TECHNICAL SPECIFICATIONS

|	
Power supply:	10 to 16 Vdc
Max power consumption @ 12Vcc (RMS):	240 mA
Min power consumption @ 12Vcc (RMS):	80 mA
Max current relay contacts:	3A @ 120Vac or 3A @ 24Vdc
Size:	168 (L) x 110 (H) x 20 (D) mm
Weight:	About 200 g
Operating temperature:	+ 1°C to + 40°C
Storage temperature:	- 20°C to + 40°C
Operating and storage humidity:	20% to 80%

QUICK START

To quickly install the UNICO TSA 3 and use its services please read and follow these basic steps:

1.   Open the plastic enclosure
2.   Connect the telephone line to the plug CN_TEL1 (two central contacts)
3.   Connect the handset of the telephone (CN6 1-3)
4.   Connect the alarm call button (CN3 1-2)
5.   Connect the elevator cab speakerphone (CN5-1 to CN5-4 contacts)
6.   Feed the power supply to UNICO TSA 3 , 12Vcc/500mA (CN1 1-2), matching the polarity.
7.   Configure the UNICO TSA 3 from a local touch tone phone by programming at least one emergency number (parameter "81" on page 12, or parameter 99 on page 16)
8.   Hang up the phone and wait for the red LED stop flashing. If the red LED start fast flashing (like the green LED) pick up the telephone handset and listen to the error message and refer to section C.4.
9.   The system is ready to run when the green LED flashes fast and the red LED is off.
10.   Break the appropriate notches in the plastic cover to pass the wires through.
11.   Close the plastic enclosure

A MAP OF ADJUSTMENTS AND CONNECTIONS
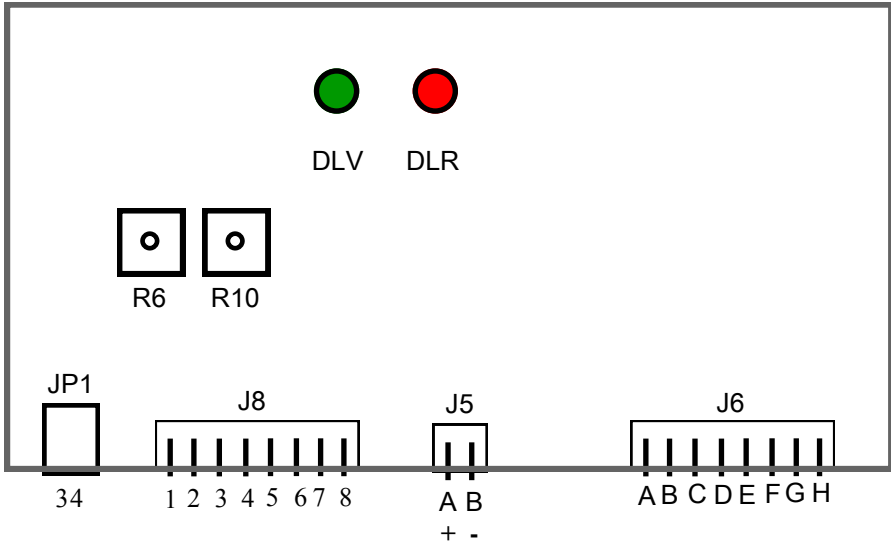
DLV   Green LED "ON"
DLR   Red LED "LINE"
R6   Volume from telephone line through the speakerphone in the cabin (increase clockwise)
R10   Volume from the speakerphone in the cabin to the telephone line (increase clockwise)
JP1   Telephone Line
J5   Power Supply 12 Vcc (attention: observe polarity)

J8		**J6**	
1	GND Speakerphone	A	Local Telephone a
2	Laudspeaker	B	Local Telephone b
3	Microphone	C	Speakerphone Power Supply
4	Input Alarm	D	Technological Input, Filter or
5	N.A. Relay 1		Gong in the cabin
6	Common Relay 1	E	Intercom IN
7	N.A. Rely 2	F	GND
8	Common Relay 2	G	Intercom Out
		H	GND

B CONNECTION SCHEME

**Between uni*Co* TSA 3 and the Amplified Speakerphone URMET 824/500
or TELEDIF ITALIA and Intercom URMET 1133**

Telephonic Line
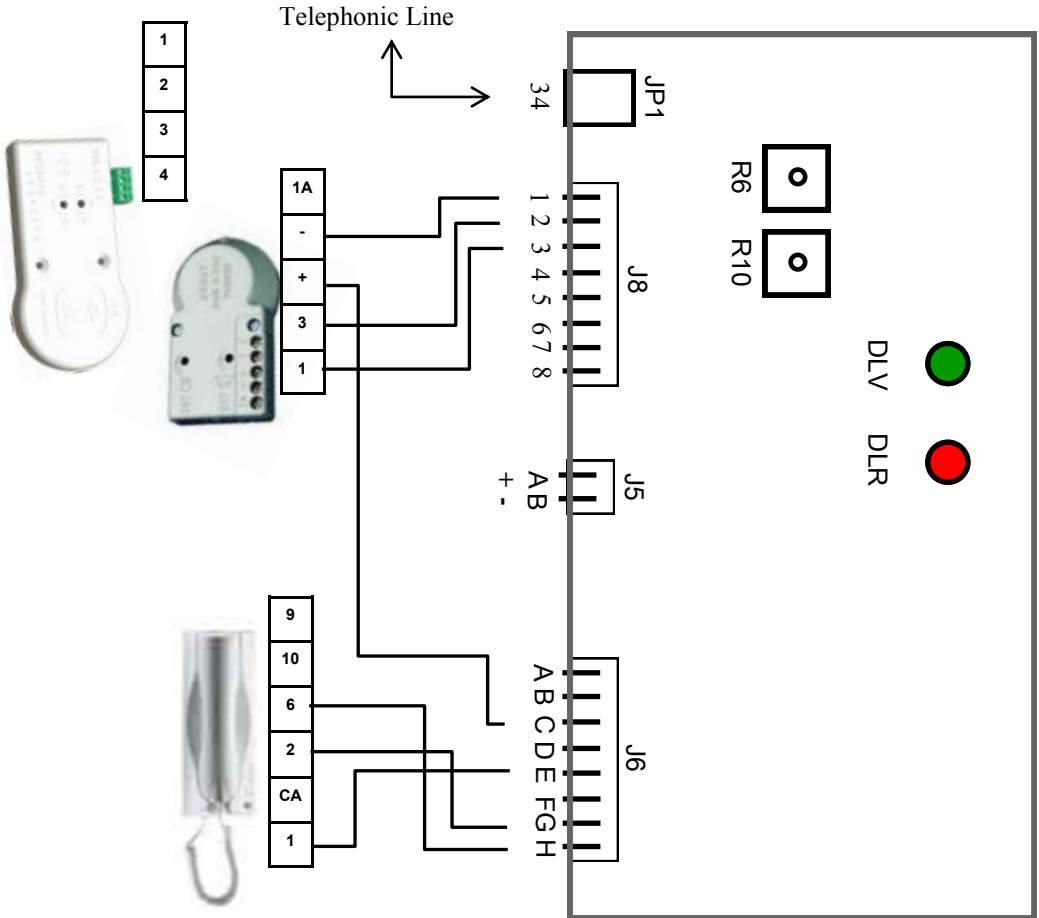
Similar connections can be executed also with other handsfree modules such as ELVOX, TERRANEO, OTHER BRANDS and similar intercoms.

Connections to handsfree modules		
UNICO TSA3	URMET Mod. 824/500	TELEDIF
J8 - 1	-	1
J8 - 2	2	3
J8 - 3	1	2
J6 - C	+	4

ATTENTION

If this device is installed in replacement of an UNICO TSA of previous editions, you need to invert pin **2** and **3** of the connector **J8**

OPERATION

uniCo TSA 3 system has 4 system status:
1.   SELF-TEST
2.   OPERATING
3.   PROGRAMMING
4.   ERROR (WARNING)

C.1) SELF-TEST

The condition of self test is displayed by a slow flashing red LED LINE. When switched on, the uniCo TSA 3 automatically starts the self-test procedure to check the minimum conditions for proper operation, such as:
1.   At least one telephone number programmed
2.   Supply voltage within the range
3.   A telephone line connected

The self-test procedure is performed whenever any of the following conditions happen:
•   Switching on of the system
•   Hanging up the phone after a telephone number for main alarm has been recorded or erased
•   After an automatic or manual system reset

At the end of the self test the red LED off indicates that the system is working correctly, the red LED fast flash indicate an error condition (see section C.4)

Any error is also reported by calling the system from a remote telephone.

C.2) OPERATING

C.2.1) Events and Priorities

The uniCo TSA 3 handles events and alarm signals in order of priority
1.   ACCESS FROM LOCAL TELEPHONE (if the button asterisk has been pressed)
2.   MAIN ALARM (CABIN) and MAINTAINERS ALARM
3.   BATTERY ALARM
4.   TECHNOLOGICAL ALARM
5.   END OF ALARM
6.   TEST CALL
7.   INCOMING CALL

uniCo TSA 3 always manage first higher priority events (Event 1 has higher priority than Event 2, etc.).
If a higher priority event is generated during an existing event, the uniCo TSA 3 freeze the procedure in progress to handle the new event and only at his end it resume the event frozen.

C.2.1.1) Intercom Handset

uniCo TSA 3 can connect multiple receivers in parallel to the intercom system

From the intercom handset it is possible to:
•   Initiate the End of Alarm procedure, if programmed
•   Talk/listen with the hands free of the cabin
•   Listen for any error messages

C.2.2.2) Local Telephone

The local telephone can be used for the following functions:

1. To start the procedure of End of Alarm, if programmed;
2. To give commands to the relays, if correctly programmed;
3. To send the maintainers alarm;
4. To request the ID of the System;
5. Communicate trough the speakerphone in the cabin;
6. To start the procedure of tele-diagnosis on demand;
7. To configure and verify the system programming;
8. To register and listen to the messages.
9. To act, in case of alarm, in conference with the cabin and the call center operator.

With the system at rest, picking up the local telephone and digiting:

$\Rightarrow$ Number 3, maintainers alarm will be sent (with related message);

$\Rightarrow$ Number 5, to enter in communication with the cabin;

$\Rightarrow$ Symbol * , to enter in programming/verify/telecontrol functions of the system.

Operations after the digit of the asterisk have a time out of 60 seconds between the digit of a button and the next one; the expiration of the "Time Out" is signalled with a vocal message.

With the On Going Alarm Procedure, picking up the local telephone:

♦ You don't need to digit any code before the answer of the Call Center (you listen to the brightening message that is given in the cabin, the telephone number selection and the alarm message given to the call center);

♦ Once the Call Center has answered (and the digit of the muber 5 from the Operator), you automatically enter in conversation with the call center and the cabin together;

♦ To start a reserved conversation with the call center, excluding the cabin, digit the asterisk symbol * ;

♦ To take back the conversation with the call center and the cabin together digit the number 5 or close the telephone call and pick up the telephone again.

Important: after every operation be sure to correctly close the telephone call.

C.2.2.3) Main Alarm (cabin)

C.2.2.3.1) Main Alarm Input

The System is provided with an input for connecting the Alarm button of the car operating panel; this input is programmable both as NO and NC and it can be connected to a +12V or ground.

C.2.2.3.2) Car Alarm procedure

The cabin alarm call is generated by pressing the alarm button for the length of time programmed. The system, if programmed, provides a pre-warning message and then starts processing the alarm with the announcement of the reassurance message to the cabin.

The called party (call center) receives the identification message of the cabin (if programmed) and, by pressing the 5 key can immediately enter into communication with the cabin. The keyboard of the telephone receiving the alarm can activate all the functions required by using DTMF tones.

The alarm call is considered successful only when the operator acknowledge it by dialling the "5" key and enter into communication with the cabin. It is possible to program up to 5 different numbers for alarm calls; the system selects them in a loop until it receives a valid response or until completion of the programmed cycle.

At the beginning of each new cycle the system announce a reassurance message in the cabin.

Communication is closed by pressing the number 9.

C.2.3.3) Reports of "Alarm Sent" and "Alarm Received"

To the relays of the system it is possible to connect the signals of "Alarm Sent" and "Alarm Received". The default programming consists of the automatic activation of the "Alarm Sent" from the moment in which the alarm starts until the acceptation of the call, and the digit of the number 5; the "Alarm Received" is activated with the pushing of the number 5 and will be deactivated after 10 seconds. It can be possible to program the relay of the uniCo TSA 3 for a different use of the signals (see section C.3.7).

C.2.3.4) Calls trough the Call Center

This system is programmed by default to manage the calls trough the call center in voice mode and, on request, to transmit the identification code of the elevator system in dtmf mode.

For calls in Ademco Contact ID see section C.2.2.13

C.2.2.4) Maintainer Alarm: pit, roof cabin, engine room

From the local telephone it is possible to send a maintainers alarm call simply picking up the local telephone and pressing the number 3. The system will start the alarm procedure and will play both the reassurance message and the identification and kind of alarm message; the procedure is the same as in the Main Alarm.
In any case the maintainers can stop the alarm procedure by pressing the number 5 and closing the telephone call.

C.2.1.5) Battery Alarm

uniCo TSA 3 generates an alarm call when the battery voltage drops below a programmed threshold, for the programmed amount of time.

The battery alarm generate:
• A call to the pre-programmed telephone number reporting the system and alarm identification message
• A call to the programmed telephone number in CALLER ID (CLI) mode (see section C.3.9)
• A call in Ademco mode (see section C.2.1.14)

The Alarm Call cycles are always completed also when alarm conditions do not exist anymore.
Note: If the Battery Alarm is managed with our DEDALO center, it is recommended to program the calls in CLI mode (see programming tables); this way the management of the call will be with no costs for the calling elevator systems (see section C.2.1.12).

C.2.2.6) Technological Input

The system is provided of a programmable technological input NO and NC and to be connected to a +12V or ground; the input can be used in one of the following modes:
•   Car Alarm Filter
•   Technological Alarm Input
•   Gong in the cabin

C.2.2.6.1) Car Alarm Filter

Programming the input as Filter, it only acts on the Car filter; therefor with activated Filter (see programming table C.3.6) the car alarm is not sent and the reassurance and pre-alarm messages are not played. All other alarms are regularly managed, also the maintainers alarm.

C.2.2.6.2) Technological Alarm

The input can be programmed to send a technological alarm (for example: lift out of order, water in the pit, etc.) with voice call or CLI mode call or, if programmed in the general parameters, in Ademco mode. The management of the alarm can keep in count its persistence (see programming table C.3.6)

C.2.2.6.3) GONG

As an alternative to the Filter and Technological Alarm functions it is possible to use the input for playing, at every activation, a GONG signal through the speakerphone in the cabin.

As a GONG function, for a correct management of priorities, the signal is not played during the management of other Alarm events or system programming.

C.2.1.7) End Alarm

At the end of a Main Alarm the uniCo TSA 3 system can handle an End of Alarm procedure or a Notification of Alarm acceptance in three different ways
1. **From remote:**
After an alarm call, calling the phone number of the uniCo TSA 3 which generated the alarm and dialing * <Password> 0, i.e. * 1234 0
2. **From local:**
- Lift the handset of the local telephone and dialing * <Password> 0, i.e. * 1234 0
- Lifting and hanging up the handset of the intercom.
3. **Automatic:**
The acceptance of a call (key 5) triggers an automatic notification call to the number programmed

The End of Alarm procedure, signalled by a vocal message, performs the following functions:
• Turn off the alarm signal, if it is managed by the uniCo TSA 3 relay
• Start a call to the programmed number with the related voice message in Voice mode, CLI or, if programmed in the general parameters, in Ademco mode.

If an Alarm is on-going (or other priority activities) it will be turned off the signal of "Alarm Sent". When both the relay linked to the Alarm Sent and the telephonic number to be called were not programmed for this function, when dialing the command of End of Alarm the system would answer with the message: "Error Code" and the procedure of "End of Alarm" would not be managed.

C.2.1.7) Test or Remote Diagnosis Call

The system can perform remote diagnosis as follows:
• On demand:, from a local or remote telephone;
• Automatically and periodically, at any programmable interval (number of days).

To activate a procedure of Remote Diagnosis on demand:
α. From local telephone:
    1. Lift the handset;
    2. Dial the asterisk * and the password, if programmed;
    3. Dial the number 6;
    4. Hang up the handset.
    The system will start the Test call in the programmed modality.

β. From remote telephone:
    1. Dial the telephone number assigned to the UniCo TSA3;
    2. When the system answers with the identification message, press the asterisk key, then the password followed by the number 6;
    3. Hang up.
    The system will start the Test call in the programmed modality.

A test call is executed as follows:

- Call to a programmed number with the delivery of the identification messages.
- Call to a programmed number in Caller ID (CLI) mode (see Section C.3.9).
- Call with the sending of codes in Ademco modalities, if expected in the programming of the general parameters (see section C.2.1.14)

Note: If the Test call or the Remote Diagnosis is managed with our DEDALO software, it is recommended to program the calls in CLI mode (see programming tables), this way the management of the call will be with no telephone costs for the lift system that is calling (see section C.2.1.12).

C.2.1.9) Incoming call (from a remote telephone to uniCo TSA 3)

uniCo TSA 3 answers an incoming call after the programmed number of rings, by giving the identification message.
To access to the system, type:
1. Asterisk (*)
2. The system answers with the message "enter password" or "insert code"
3. Type the password or, if not programmed, enter the code for the command or procedure you want to activate
4. The system answers with the message "password correct" or "password incorrect", "correct code" or "wrong code" or with the corresponding function message
5. Enter 5 to open the voice channel with the hands-free of the cabin (the cabin, for privacy reasons is warned by a "beep", at regular intervals)
6. To close the connection enter "9" or hang up.

If you do not enter the key * (asterisk) within the time set with parameter "05", the system warns with a sound signal indicating the timeout and then it releases after 10 seconds.

During an incoming call the Ademco codes are not managed.

In the case of the occurrence of an event with higher priority the incoming call is closed and the system will initiate the procedure to manage the new event.

NOTE: When the uniCo TSA 3 is connected to a GSM gateway and not to an analog phone line or internal control unit, the detection of DTMF tones could be difficult, especially in the presence of a weak signal. In this case the following precautions must be used in sending DTMF tones:
1. Only send DTMF when system messages are ended
2. Wait at least one second between each digit

C.2.1.10) Answer to an alarm call generated by the uniCo TSA 3

C.2.2.10.1 Call in voice mode

When the operator of the call center answers the call, he receives the identification message followed by the type of alarm and the request to accept it and enable the communications with the cabin. The messages are repeated until the operator answers the call pressing the key "5"

The command "5" activate the voice communication with the cabin and start the programmed timeout; it also can switches on the relay 2 (alarm received) for the programmed time . (Section C.3.7 parameter "72").

When approaching the end of timeout (10 seconds from the end) a short message or beeping tones are played. Pressing any key number regenerates the time out.

The communication is ended and the uniCo TSA 3 returns to the idle state in the following cases:
- when receiving the digit "9"
- when receiving a busy signal from the telephone line
- at the end of "communication timeout"

C.2.2.10.2 Call in Ademco mode

When the operator of the call center answers the call and send to the system the handshake tones, the system send to the call center its Ademco code. This code is repeated until it is recognised or until the timeout time.
The operator of the call center, even in Ademco modality, can enter in communication with the system by dialing the programmed dtmf codes.

C.2.2.11 Connection with a GSM Gateway

Some precautions should be taken when a telealarm system is connected to a GSM gateway instead of the public telephone line.

Install the GSM gateway only when it takes high signal; stave off the antenna the more as possible from other electric devices and from cables that bring the audio in the cabin; verify with a mobile phone that the SIM card is enabled to execute and receive calls; disable the PIN code on the SIM card.

After having installed the gateway and having correctly inserted the SIM card, it is good practice to verify with a traditional telephone connected to the line output of the gateway if it is possible to make and receive calls, after that we can connect the telealarm system.

If the telealarm calls a call center it is good practice to verify that also the GSM gateway correctly transmits its own telephone number.

Please note that if the communication with the call center occurs with DTMF tone protocols, a GSM gateway it is not the appropriate communication tool; during a GSM communication often the DTMF tones arrive "distorted" or in a way that are not recognised.

C.2.2.12) Management of the Test and Battery Alarm with DEDALO

Configuring on DEDALO the elevator system on which the uniCo TSA 3 telealarm is installed, trough the personal "user and password", all the reports of the Test and the Battery Alarm will be managed in proper way and compliant to the European regulations.

C.2.2.13) Ademco Contact ID calls

The Ademco procedure, if programmed (parameter 11 of the general programming table), it is valid for all the alarms and the output signals - except for the Main Alarm that is expected to manage the Ademco mode only for calls trough the numbers assigned to the parameters 81 and 82 while it executes normal voice calls trough all other numbers.

In Ademco mode it is anyway possible, for the alarm programmed to do that, to make calls in CLI mode; during an Ademco Alarm it is always possible to use the classic DTMF code expected by the system or to request the "who you are" in voice mode.

The ADEMCO code used is the following:

ACCT MT QXYZ GG CCC S

Where:		
	ACCT	Code of the device: the last 4 numbers
	MT	Kind of message: fixed at 18
	Q	Qualify the event (new or reset): fixed at 1
	XYZ	Code of the event: see table C.3.10
	GG	Group: fixed at 00
	CCC	Zone: see table C.3.10
	S	Checksum

C.2.2) System access and control codes

You can access the system for remote control operations and configurations in two mode:

α.   From local telephone:
        1. Lift the handset of the local telephone
        2. Press the button asterisk *

β.   From remote telephone:
        1. Dial the telephone number of the elevator system
        2. When the system answers with the identification message, press the button asterisk *

In both cases you need to enter the password if it is active (see section C.3.1 parameter 01) then enter the related code. If the password has not been activated you can directly proceed with the codes.

Attention: after every operation from the local telephone be sure to correctly hang up the handset.

CONTROL CODES		
Function	**Code**	**UniCo TSA 3 Action**
End of alarm	0	Starts the END OF ALARM procedure
Relay 1	1	Control the relay 1 if not programmed otherwise (see Section C.3.7parameter 70)
Relay 2	2	Control the relay 2 if not programmed otherwise (see Section C.3.7parameter 71)
ID request (identity code)	4	Send in line with DTMF tones the ID number programmed in sez. C3.1 param. 04, and the code of type of call (sez. C.3.1 param. 11)
a. Enable conversation b. Confirm and accept the call c. Reload the communication timeout	5	a. Connect audio in the cabin b. Consider the call succesfull c. Reload the conversation time
TEST CALL request	6	Start the auto test call back
Listen to the LOCATION MESSAGE	7	Plays the location message for the call in progress.
a. Close the conversation b. Hang up the call	9	Close the communication
Enter/Exit the program mode	#	- Wait for the programming or reading code - Exit the Programming

C.3) PROGRAMMING

uniCo TSA 3 allows to read and write parameters into the system with the following syntax:

To write:
> WRITE CODE (11) + PARAMETER + ASTERISK (*) + VALUE + ASTERISK (*)

To read:
> READ CODE (12) + PARAMETER

PROGRAMMING CODES		
FUNCTION	CODE	UNICO TSA 3 ACTIONS
Enter in program mode	#	Wait write or read code
Exit program mode		Wait control code or hang up
WRITE code	11	Scrive un valore in un parametro
READ code	12	Legge il valore in un parametro

To start programming:
1   From a remote telephone connect to the system (call the uniCo TSA 3 , and after listening to the message digit an asterisk *)
2   Wait for the prompt for any password
3   Enter the password (PW disabled will be skipped here)
4   Wait for the message "correct password"
5   Enter the character # (pound)
6   Wait for the prompt message
7   Enter the programming code with its parameters according to the syntax described above
- For each correct change the system acknowledges with the message: "correct code"
- For each incorrect programming, not recognized or not possible, the system give the message: "wrong code"
1   To exit programming hang up or type the # (pound)
- The system delivers the message: "program output"

Example:

<center>* 1234 # 11 02 * 5 *</center>

Where "*" allows you to access the system, "1234" is the password, "#" allows access to programming, "11" writing code, "02" parameter concerned, "*" beginning of the value of the "5 " is the new value of the parameter to be changed and " * " is the end of the value of the parameter.

Once entered programming mode it is possible to read or write all the parameters in sequence without having to hang up and / or exit programming.

Example:
* 1234 # 11 02 * 5 * 11 20 * 3 * 11 41 * 01 * ... and so on …

Timout of the programming or waiting for digits:
- From local telephone: 60 seconds
- From remote telephone: Paramter 05

When in programming mode the system has a timeout of 60 seconds; after this time it delivers the message: "Timeout expired" and exits the programming mode. Repeat the programming procedure to re-enter programming mode.

C.3.1) SYSTEM SETTINGS

SYSTEM PARAMETERS					
PARAMETER	VALUE	Default	YOUR Values	FUNCTION	NOTES
00	00	-	-	Reset program settings	Reset all parameters to default values (don't delete messages)
01	0000 - 9999	1234		Password	0000 = password disabled
02	1 - 9	1		Rings	N° of rings to answer to incaming calls
04	000000 - 999999	000000		Identity code of the system installed	-
05	01 - 99	02		Timeout of commu-nication	In Minutes. Time of the communica-tion between handsfree and called phone.
06	010 - 999	060		Awaiting confirma-tion	In Seconds. Time waiting between starting of dialing and confirmation digit(5)
07	-	-	-	Software version	Example: 10 is software version 1.0
11	1 - 3	1		How to manage codes identifyng the type of call	1 = DTMF 1 mode TELEDIF 2 = DTMF 2 mode 3 = ADEMCO C.ID see section "C.3.11"
12	-	-	-	Voltage supply	in tenths of VOLT (+/- 0,1V) Example: 125 = 12,5 Vcc
13 (*)	1 - 9	5		Amplitude DTMF tone	1 = Amplitude min 9 = Amplitude max
14 (*)	0 - 9	2 (100ms)		DurationDTMF tone	Step by 20msec: 0 = 60msec 9 = 240msec
15 (*)	0 - 9			Pausa intercifra toni DTMF	
16	1 - 9	2		Time waiting before dialing.	In Seconds
17 (*)	0 - 4	2		Amplitude of the differential frequency of the DTMF tone	in dB
18	1 - 9	5		Sensitivity of reco-gnition of busy tone	1 = Max sensibility: faster in recognizing the busy tone
19	0 or 1	1		Controllo presenza linea telefonica prima di comporre il numero telefonico	0 = No 1 = Si
28	05 - 90	10		Input ring duration setting	In tenths of msec. 10 = 100 msec.

*: You should change the parameter marked only by indications of the Teledif Techincian.

C.3.2) - MAIN ALARM - END OF ALARM

Parameter	Value	Default	Your Value	Function	Notes
MAIN ALARM				
81		-	-	1° tel **main alarm**	Your n°:
82		-	-	2° tel **main alarm**	Your n°:
83	Max 20 digits	-	-	3° tel **main alarm**	Your n°:
84		-	-	4° tel **main alarm**	Your n°:
85		-	-	5° tel **main alarm**	Your n°:
20	0-9	0		N° loops of **main alarm calls**	0 = Endless
21	0 or 2-9	2		Minimum time to press the main alarm	In seconds 0 = start immediately without warning message
23	1 / 2	1		Working mode of the contact of the main alarm	1 = NO (Normally Open) 2 = NC (Normally Closed)
24	0 / 1	1		Playng "warning message"	0 = Disabled 1 = Enabled (Irrilevant with par. 21 = 0)
Fixed		5	-	Time between 2 failed calls	In seconds
		30	-	Time between the end of a loop and the next one	
END OF ALARM				
80	Max 20 digits	-	-	Number tel **end of alarm**	Your n°:
25	0 - 9	2		N° loops for **end of alarm** calls	0 = Endless
26	1 - 3	1		How to manage the end of alarm or alert notifications of acceptance	1 = Start end of alarm only with the intercom handset 2 = Start end of alarm with the intercom handset and by remote phone 3 = Automatic end of alarm by acceptance of alarm with key 5
27	0 / 1	0		Ways of alert	0 = Vocal call 1 = Call in CALLER ID (CLI) mode (see section C.3.9)
Fixed		3	-	Time between 2 failed calls	In Minutes

C.3.3) MESSAGES

The system provides 2 types of messages:
- System messages: predefined massages that cannot be changed by the user.
- User-recordable messages: 6 messages that can be associated to specific functions.

In order to record good quality messages, the duration of the messages must be estimated in advance and programmed before each recording.

To record a message follow the instruction below:
1. Dial the number of uniCo TSA 3 and, at the answer, type * key (asterisk)
2. Digit the password
3. Digit # (pound) to enter programming
4. Digit the code of the message you want to register as follows:
5. 11 30 * 08 * where:
    - 11   write access parameters
    - 30   Code of the message you want to register (for example, "Location")
    - *   Start value
    - 08   estimated duration of the message of 8 seconds
    - *   End of value
6. The system will acknowledge with the message: "Record after the tone ... ...beep"
7. Speak clearly into the microphone of the handset
8. At the end of the time programmed the system will confirm: "Recorded message"
9. To listen to the recorded message type 12 followed by the code of the recorded message. Example 12 30 play message 30 (Location message).
10. If you are not satisfied with the result, repeat the procedure from step 4.

NOTE: In case the recording is noisy and / or not good quality, make sure the uniCo TSA 3 is powered by a battery or a good efficient power supply and the phone used is good quality.
A system reset does not erase the recorded messages.
NOTE: Systems for lift are supplied with pre-recorded alarm messages

PAR.	VALUE	DEFAULT	TYPE OF MESSAGE	NOTE
30	00 or 02 - 20	00 = Parameter not programmed	02 - 20 = **Identityfication message**	Value from 02 to .. = duration of the message in seconds
31	02 - 20	(1)	**Reassurance message in cabin**	
32	02 – 15	(1)	**Tecnological**	
35	02 - 15	(1)	**Main Allarm to the phone line**	

Note (1): Standard messages or pre-registered messages according to the needs of the clients

A chained message can be composed by:

1) **Introduction**: "uniCo TSA 3 System 123456" (Standard Message)
2) **Location**: "Condominio di Strada della Pronda 66, Torino" (Adjustable Message)
3) Additional **informational standard or adjustable messages**:
    - "person trapped in the cabin" (Adjustable Message)
    - "technical alarm" (Adjustable Message)
    - "maintainers alarm" (Standard Message)
    - "72h test" (Standard Message)
    - "battery alarm" (Standard Message)
    - "end of alarm" (Standard Message)
4) **Instructions** for activating the communication or closing the alarm (Standard Message)

C.3.4) TEST CALL

The system as required by rules, make the periodic test (72 hours)

PARA-METER	VALUE	De-fault	Your Value	FUNCTION	NOTE
88	Max 20 digits	-	-	Telephone number for "**Test call**"	Your phone Number
40	0 - 9	2		N° loops	0 = Endless
41	01 - 99	03		Time between 2 calls	In days
42	00 - 23	00		Waiting time for the next call	In Hours
43	00 - 59	10		Waiting time for the next call	In Minutes
44	0 / 1	0		Warning mode	0 = Phone call 1 = Caller ID mode (see Section C.3.9)
Fisso		3	-	Time between two failed calls	In Minutes

72H TEST AND REMOTE DIAGNOSIS

C.3.5) - BATTERY ALARM

PARA-METER	VALUE	Default	Your Value	FUNCTION	NOTE
89	Up to 20 digit	-	-	Telephone Number for "**Battery Alarm**"	Your phone Number
50	0 to 9	2		No of cycles	0 = Endless
51	100 to 150	110		Threshold Low Voltage	In Tenths of Volts (Tolerance is +/- 0.1V) Example: 105 = 10.5 Vcc
52	00 to 99	01		Interval time to check the intervention thre-shold	In Minutes
53	01 to 99	01		Time interval between two calls acknowledged (by digiting "5") with an active alarm, or between two cycles completed and not acknowledged with an active alarm	In Hours Example: By setting the value to "02" if the Battery Alarm has been confirmed it will be repeated every two hours.
54	0 to 1	0		Ways of alert	0 = Phone call 1 = Call in CALLER ID (CLI) mode (see section C.3.9)
Fixed	Fixed	3	-	Time between 2 failed calls	In Minutes

BATTERY ALARM

C.3.6) TECHNOLOGICAL INPUT, FILTER FOR CABIN ALARM, GONG

SYSTEM PARAMETERS					
PARAMETER	VALUE	Default	YOUR Values	FUNCTION	NOTES
64	From 0 to 3	0		0 = Technological call with voice message 1 = Technological call with CLI mode 2 = GONG 3 = Filter for cabin alarm	If 3 is programmed, the 86, 60 and 61 settings do not work
86	Max 20 digits	-		Telephone number	
60	From 0 to 9	2		Number of cycles	0 = Endless
61	From 01 to 99	24		PERSISTENT ALARM: Time between two calls correctly ended (confirmed with the number 5) or cycles completed without a confirmation	In hours
62	From 0001 to 9999	0001		Time of the opening or closing of the contact for the validity of the alarm and the supply of the GONG signal	In seconds
63	From 1 to 4	1		Modality of functioning of the contact	1 = NO 2 = NC The system stops the alarm procedure when tha alarm condition is lost (when the contact opens or closes again) 3 = NO 4 = NC The system does not stop the alarm procedure when the alarm condition is lost (when the contact is opened or closed again).
Valore Fisso	3	-	-	Time between two call not correctly ended	In minutes

C.3.6.1) Cabin Alarm Filter

The technological contact, correctly programmed, can act as a Filter for the Cabin Alarm

C.3.6.2) GONG

The technological contact, correctly programmed, can be used for playing a GONG through the speakerphone of the handsfree in the cabin.

C.3.7) RELAYS

RELAYS					
PARAMETER	VALUE	Default	Yr Values	FUNCTION	NOTES
70	0 to 9	7		Relay 1 (Alarm Sent)	**0** = The relay is activated for the duration of the DTMF tone **1 - 4** = Activated 1 to 4 seconds **5** = Latching mode activation: each pression of key 1 change the state of the relay (open/closed) **6 - 9** used to to report "Alarm sent": **6** = Always active until the completion of "End of Alarm" **7** = Always active until call acknowledgement by key "5" **8** = Flashing until completion of "End of Alarm" **9** = Flashing until call acknowledgement by key "5"
71	0 to 6	6		Relay 2 (Alarm Received)	**0** = The relay is activated for the duration of the DTMF tone **1 - 4** = Activated 1 to 4 seconds **5** = Latching mode activation: each pression of key 1 change the state of the relay (open/closed) **6** = it is used to report a "received alert"; always activated for the programmed duration (parameter 72) starting from the acknowledgement of the 'main alarm' call (key "5")
72	001 to 999	010		Activation time of the relay 2 if parameter 71=6	In Seconds

Note: While reading, after the value of the parameter, it is also played the relays staturs (if on or off).

C.3.7.1) "ALARM SENT" AND "ALARM RECEIVED"

When properly programmed, the two relay of the uniCo TSA 3 system are able to manage the signal of Alarm Received and Alarm Sent that are normally displayed through LED lights or Beeps.

Alarm Sent
When a main alarm procedure is started, the relay 1, if programmed, activates the signal "alarm sent". The signal remains active until the alarm is acknowledged or until the End of Alarm.

Alarm Received
The received alarm signal activate the relay 2, if programmed. Relay 2 remains active starting from the acknowledgement of the alarm call (key 5) to the end of delay time programmed.

C.3.8) TELEPHONE NUMBERS

The uniCo TSA 3 can store up to 8 telephone numbers (parameters from 80 to 91); each phone number can be associated to a specific event or alarm. The main alarm select 5 phone numbers in cyclic mode until it receives a confirmation code (type key 5 by an operator) or until the end of the programmed cycles. On the first two numbers of the main alarm it is possible to send voice or Ademco calls while on the other numbers it is only possible to send voice calls.

Parameter 99 can be used when all the calls should be forwarded to a single number.

To delete a number from the phone book simply set the parameter empty.

To change a programmed number just overwrite it.

To insert a one second pause between digits of the number to be dialled simply insert the character #; this character # inserted after the last digit of the number has another value and speed up the dialing of the number in case of a connection with VOIP lines through ATA interfaces.

PHONE BOOK			
PAR.	VAL.	FUNCTION	YOUR VALUE
80	Up to 20 digit	End of alarm (*)	
81		First phone Nr. main alarm and maintainers(*)	
82		Second phone Nr. main alarm and maintainers	
83		Third phone Nr. main alarm and maintainers	
84		Fourth phone Nr. main alarm and maintainers	
85		Fifth phone Nr. main alarm and maintainers	
86		Technological Alarm (*)	
88		Test call (*)	
89		Battery alarm (*)	
99		With this program you can set or delete the phonebook entries marked with an asterisk (*) in a single programming	

Note: (*) - they can be programmed all together with the parameter 99

C.3.9) CALLER ID (CLI) CALLS

When programmed to send an alarm or alert in CALLER ID (CLI) mode the system performs the following steps:
- call the phone number programmed and, if it is free, after 2 rings (about10 seconds) hangs up, thus allowing to detect the calling number to process your communications are at no cost to the caller;
- if the number is busy, the system retries dialling every 3 minutes until it is free, or for the number of cycles set for the type of alarm.

C.3.10) IDENTIFICATION CODE FOR ALARMS AND SIGNALS

UniCo TSA 3 can handle different ways to communicate to a call center the alarm code and the system code. The codes implemented are listed below.

TYPE OF CALL	CODE DTMF TONE				
	MODE 1		ADEMCO CONTACT ID		
			Event	Group	Zone
MAIN ALARM: CABIN	*01		140	00	001
MAINTAINERS ALARM	*04		140	00	004
BATTERY ALARM	*07		302	00	000
TECHNOLOGICAL ALARM	*12		140	00	011
END OF ALARM	*20		300	00	000
SELF CHECK	*05		602	00	000
INCOMING CALL	*31		-	-	-

C.4) ERROR

In this condition, lifting the handset of the local telephone or entering in communication with uniCo TSA 3 from a remote telephone it is possible to listen to the detected error.

Errors found can be:

ERROR 1: There is no main alarm number (parameters from 81 to 85)
ERROR 2: Input Power supply is less than 10 Vcc
ERROR 3: The telephone line is not connected (public telephone line, switchboard or gateway GSM; the telephone line can be checked after programming)

Also with the error condition it is anyway possible to enter the programming and to verify the system information.

D) TROUBLESHOOTING

PROBLEM	POSSIBILE REASON	POSSIBILE SOLUTION
The system sometimes doesn't answer and/ or frequently reset itself	Close strong electromagnetic pulse caused by power equipment that disturbs the uniCo TSA 3.	For proper operation it is advisable to install the uniCo TSA 3 at least 2 meters from any source of electromagnetic disturbances: switchgear, motors,power relays, inverters, etc.. and use for links, new cables and dedicated.
The system is active but does not handle the alarms. The red LED flashes quickly (like the green led).	The system is in ER-ROR.	See section C.4
Difficulty to properly receive DTMF from remote.	Disturbed or low audio signal	Enter the DTMF tones when system messages are not playing and wait at least one second between each digit. Call the uniCo TSA 3 from a room with low environmental noise. Check for proper power supply. If the uniCo TSA 3 is connected to a GSM gateway and not to an analog line, check that the GSM signal is of good strength or move the GSM device in a location that guarantees a good signal, chack that the antenna and the GSM device are at least 1 meter away from the uniCo TSA 3 .
By opening the hands-free communication between the cabin and the inter-com handset you hear a "whistle".	Handsfree volume too loud	Lower the volume of the speaker and adjust optimal uniCo TSA 3 levels (TR1 and TR2).
The recording quality of the custom messa-ges is not good (you can hear a buzz).	Power supply not suitable or noise from the telephone line .	Use a linear power supply and not a switching one. If you are using a GSM gateway, chack that the uniCo TSA 3 is at least 1 meter from the antenna and GSM device.

DISPOSAL

The device and teh batteries must never be disposed of with household refuse. Please obtain appropriate information about the regulations in your community, and dispose of all refuse in accordance with regulations at separate locations provided.Improper disposal of the equipment or parts thereof may cause harmful effects to human health and to the environment.

ROHS

The electronic circuit of this product is designed and manufactured in accordance with the provisions of legislation 2002/CE (RoHS)

COMPLIANCE

Teledif Italia declares that the device meets the directives by the Councilin respect of EMC Directive 2004/108/EC and electrical safety equipment for low voltage Directive 2006/95/EC and its subsequent changes. The conformity of the product is expressed by the "CE" mark.

PRECAUTIONS FOR USE

Before attempting any cleaning or maintenance, disconnect the unit fromthe mains and any other connection. Do not put in contact with liquid and do not use aerosol sprays or solvents for cleaning. Use and / or store the product under conditions of temperature andhumidity ranges (see page 2). Use only the supply voltages in the ranges listed in this manual.
For any repairs contact your dealer or the service center of Teledif Italia.

WARRANTY

Teledif Italia warrants this product free from manufacturing defects for 2 (two) years from the date of purchase as resulting from the invoice.

During the warranty period the equipment will be replaced or repaired free of charge in the service center of Teledif Italia in Torino.

The cost of transport to and from the service center of Teledif Italia is always charged to the customer.

The equipment to be repaired under warranty must be shipped toTeledif Italia in its original packaging and with the copy of the invoice.

Failure to follow the instructions for use, the use of power supply other than indicated, the assembly of non-original parts, repairs by unauthorized third parties, altering or removing the serial number and any tampering, void the warranty.

Nothing will be due to the buyer for inactivity time due to a failure, nor he may claim damages or compensation of expenses for any direct or indirect problem arising from use of this equipment.

For any problem it is advisable to contact the installer or the store where you purchased the unit.

Any dispute will be brought before the courts of Turin, Italy.

working with love is a bond with our customers

TELEDIF ITALIA S.R.L.