EN 54-2
EN 54-4
EN 54-21

F-COM

F-COM

Telephone communicator

Programming manual

inim

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1. The F-COM communicator

1.1 Manufacturer's details

Manufacturer:Inim Electronics S.r.l.
Production plant:Centobuchi, via Dei Lavoratori 10
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Tel.:+39 0735 705007
Fax:+39 0735 70491
e-mailinfo@inim.it
Web:www.inim.it

The persons authorized by the manufacturer to repair or replace the parts of this system have authorization to work only on devices marketed under the brand name.Inim Electronics.

1.2 Device description

The F-COM is a universal autonomous telephone communicator, certified in accordance with EN 54-21 and EN 54-4 standards. It is to be used with fire detection control panels manufactured both by Inim Electronics and other manufacturers.

It is capable of operating as:

- fire alarm transmission device (device E for EN 54-1)
- fault signal transmission device (device J for EN 54-1)

The communicator operates autonomously:

- It detects control panel alarm and fault events through input terminals, as well as its own internal events.
- Activates programmable outputs.
- Makes voice calls over the PSTN line or GSM mobile network.
- The default voice messages can be replaced by recorded custom messages.
- Sends digital messages using Contact ID protocol (over the PSTN line or GSM mobile network) and SIA-IP (over mobile data network).
- Sends SMS messages over GSM network.
- The default messages can be replaced by custom text messages.
- Provides communication feedback through the ALARM ACK output terminal and LED signals.

WARNING!
Inim Electronics does not ensure full availability of all the GSM functions described in this manual for the various combinations of GSM service provider, SIM type and telephone set used.

1.3 Access levels

The F-COM communicator manages different access levels to the device, distinct from the system usability limitations.

Each user must have an access PIN the first digit of which characterizes the typology and cannot be changed:

***Table 1.1**: Access levels*

Description	Access mode	Access mode
Standard user	Access to the viewing of: • diagnostic information • fault details • events log user PIN	User PIN Default 000000
Advanced user	The same permissions as the standard user, plus the possibility to change some programming options relating to the contacts: • telephone numbers • communication protocol • IP address, port, account code	Advanced user PIN Default 111111
Installer	The same permissions as the standard user, plus the possibility to carry out the battery test. By means of the programming software, change all the programming options.	Installer PIN Default 222222

1.4 Manuals

Manuals which are not supplied with the apparatus can be ordered directly, by indicating their respective codes in the order, or downloaded from www.inim.it.

Installation and User manual

The installation manual contains the technical specifications of all the system components and the instructions for their installation, including instructions and wiring diagrams relating to the various modules.

It also contains the instructions for system commissioning

In order to provide adequate protection, the installer must adhere to all the manufacturer's guidelines relating to the active and passive security devices of this system.

This manual contains instructions relating to the user interface of the F-COM communicator, its functions and use.

Programming manual (this manual)

The Programming manual contains instructions for the configuration and programming of the F-COM communicator, as well as the descriptions of all the parameters and options.

It also contains the F-COM/STUDIO software instructions, its description, method of installation and use.

It is the responsibility of the person who programs the F-COM communicator to adhere to the instructions and to have complete knowledge of the software in order to work swiftly and properly through the configuration and programming procedures.

1.4.1 Manual details

Manual code
DCMPINE0FCOM

Revision
1.10

2. The F-COM/STUDIO software

2.1 Description of the software

F- COM/STUDIO is the software for programming and managing the F- COM telephone communicator manufactured by Inim Electronics.

The software connects with the communicator via the USB port of the PC in use.

Commands

The operator interacts with the system in real time: it is possible to check the communications in progress, the status of inputs and outputs, any faults present, diagnostic information relating to the GSM network and the power supply module.

Solutions

The set of programming parameters constitute a solution.

A solution is dedicated to a device and its installation.

A solution can be created or changed even without being connected to the apparatus. For example, you can plan the layout of an installation or set the options/parameters at your office and write and test the settings on the apparatus at a later time.

Database

F-COM/STUDIO allows you to create and manage a database containing the programming data, maintenance details and events history of all the created installations.

Each new solution can be saved for future maintenance purposes and/or used as a "model" for other installations. The F-COM/STUDIO software uses its own archive/database.

***Table 2.2**: Minimum requirements and technical characteristics*

Hardware	• Pentium 4 Processors (3.2 GHz) • 2 GB Ram • Voice board
Operative system	• Windows Vista, Vista 64 • Windows Seven, Seven 64 • Windows 8, 8 64 • Windows 8.1, 8.1 64 • Windows 10, 10 64
Required hard disk space	500 MB
Minimum video resolution	800 x 600
Connection interface	USB

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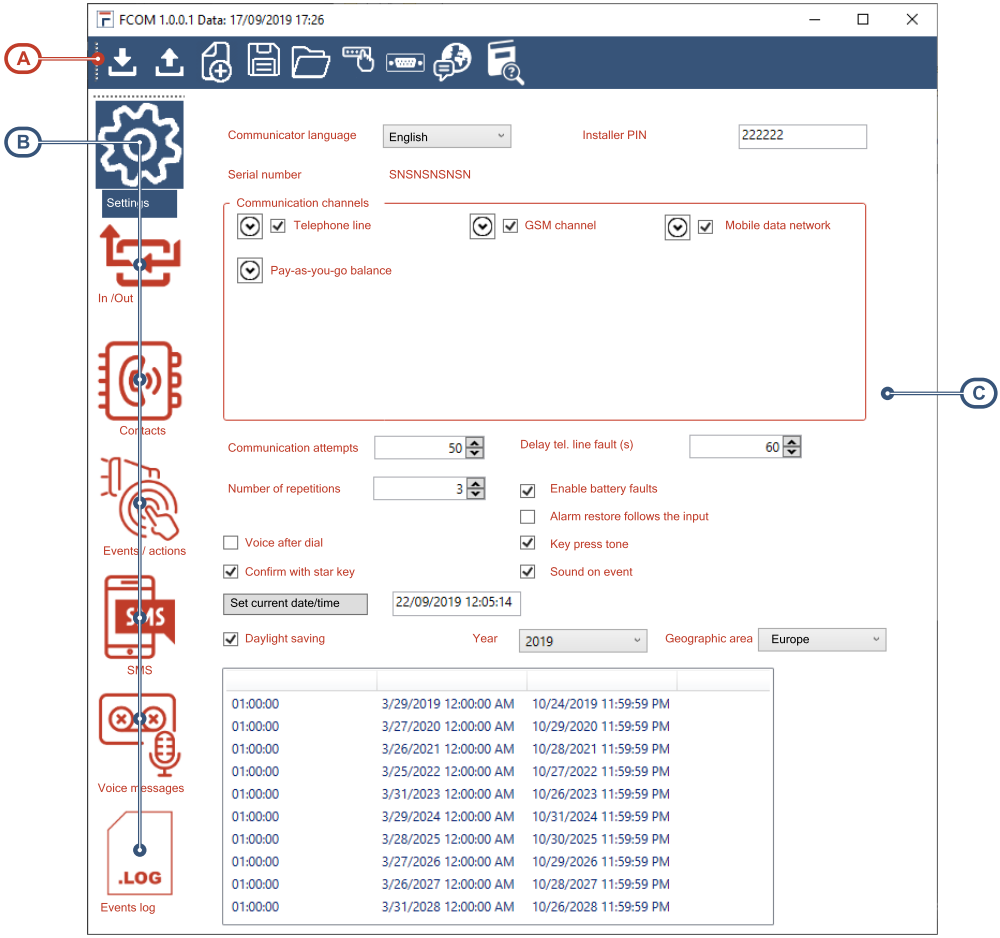
2.2 Initial page

When the software starts the start page will appear.

The initial page of the F-COM/STUDIO software is divided in three sections:

***Table 2.3**: Home page*



[A]	Icon bar for application-related functions ("Application functions" below).
[B]	Programming section icon bar ("Programming" on page 14).
[C]	Main template with parameters and options related to the selected programming section

2.3 Application functions

The section at the top of the F-COM/STUDIO software window is common to all the programming sections and the start page.

It shows buttons for access to sections or to software management functions or to open solutions.

***Table 2.4**: Menu bar*

Button		Function
	**Read**	Once the communicator is connected, this function allows the program to load the programming status to the PC with the exception of the parameters of: ◦ voice messages ◦ events log
	**Write**	Once the communicator is connected, this function allows the program to load the ongoing programming to the communicator with the exception of the parameters of the voice messages:
	**New solution**	F-COM/STUDIO software solution management functions.
	**Open solution**	
	**Save solution**	
	**Installer PIN**	Button to open a window for entry of the installer PIN (Access levels).
	**Set serial port**	Button to open a window for the PC USB port in use for the software to the communicator connection ("Connection of the software to the communicator" below).
	**Select language**	Button to open a window to indicate the software language.
	**Help guide**	Button to access this manual.

2.4 Connection of the software to the communicator

The connection with the communicator is required during all write and read operations (to/from the communicator).
The connection with the PC can be achieved through a USB cable inserted into the appropriate connector on the main board..

Once the F-COM is connected, the driver for the installation of the USB device recognized by the PC is available in the F-COM/STUDIO software installation folder, specifically in the following folder (in the case of a default installation): C:\Program Files\F-COM/STUDIO\drivers\

The **Set serial port** button allows you to indicate the serial port used by the USB connector.

If it has not already been entered (by means of the appropriate **Installer PIN**) button, at the first attempt to contact the communicator (reading or writing of the programming data) the software will request, once and for all, the PIN necessary for programming (Access levels).

2.5 Installing the software

The F-COM/STUDIO software must be installed using the setup.exe file that can be downloaded from the reserved area of the websitewww.inim.it.

It is suggested to check this page of the site periodically in order to have information regarding the most recent revision of the software and therefore to be able to make the appropriate updates.

2.5.1 Software requirements

.NET Framework

The minimum requirements to operate the F-COM/STUDIO software are .NET Framework 3.5 platform installed and activated on the PC.

This component is typically present on PCs with Windows Seven (32 or 64 bit), Windows 8.0 (32 or 64 bit), Windows 8.1 (32 or 64 bit) and Windows 10 (32 or 64 bit) operating systems.

To find out whether Framework 3.5 is installed, simply install and run the F-COM/STUDIO software. If Framework 3.5 is not present, the operating system will generate an error message.

In order to install Framework 3.5, you must connect to the Microsoft website and download and install the file named dotNetFx40_Full_x86_x64.exe. For Windows 10 series operating systems, activation is necessary and is achieved by accessing the "Programs and features - Activating or deactivating Windows functions" section under ".NET Framework".

2.5.2 Installation procedure

1. Access the reserved area of the www.inim.it website
2. Download the **setup.exe** installation file of the F-COM/STUDIO software.
3. Copy the setup.exe file to the desktop and start the execution as an "administrator" of the Windows system "(by right-clicking on the file icon).
4. Work through the installation wizard process.

Note

In the initial installation phase, the guided procedure asks which users of the Windows system the installation is addressed to ("all users" or "current user").
Please note that if you select the current user, the material produced by the software (database, saved solutions) will be available exclusively for the current user and not for other users who have access to the computer or system in use.
If you select "all users" the material will be available to all users.

5. On completion of the installation, the F-COM/STUDIO icon will appear on your desktop:

2.6 Events log

By clicking on the **Events log** button, the related section allows viewing of the communicator events log via a table, in which each row refers to a single event.

Each event shows the date and time of its occurrence and its description.

2.7 Real-time

Clicking on the **Real-time** button accesses a section which, after a direct connection with the communicator, makes it possible to perform real-time monitoring on the entire system and access the values of the following parameters:

- status of input/output terminals (activation, reset, interconnection fault)
- list of any telephone contacts for which supervision has failed
- list of any detected faults
- GSM status (network registration, 2G/3G technology, operator, signal, last credit reading)
- power supply and battery status
- any communications in progress and pending (telephone queue) on the cellular network and telephone line

3. Programming via software

3.1 Programming

Programming the communicator via the F-COM/STUDIO software is possible only when the installation of the system is complete and the relative configuration has been downloaded to the PC in use.

1. Create a new solution (via the **New** button on the menu) or open a previously saved solution (via the **Open** button on the menu).
2. Connect the apparatus to the PC in use.
3. Read the configuration, if necessary, by downloading it to the PC by means of the **Read** button.
4. First select the programming section using the buttons to the left (*Table 2.3: Home page [B]*) and then customize the programming parameters in the respective section that appears on the right.
5. To download the data to the communicator, click-on **Write** .

Note
If an error occurs during the writing phase, it will be necessary to repeat the operation. Any data currently on the communicator will be overwritten.

6. If necessary, save the solution (by means of the **Save** button on the menu).

The installer is allowed to program the communicator completely (Access levels).

3.2 Settings

This programming section allows you to set the general parameters of the F-COM communicator operating options.

***Table 3.5**: Parameter "Settings"*

Parameter/Option	Function	Value/notes
Communicator language	The language selected for the communicator (user menu, installer menu, for predefined SMS texts and voice messages).	• English (by default) • Italian
Installer PIN	Box for the installer PIN (to change the programming options).	In order to simplify entry of this 6 digit PIN at the local keypad, it requires the use only of numbers included between "0" and "3".

Parameter/Option	Function	Value/notes
Serial number	This is the serial number of the communicator, available following a reading operation.	Uneditable
Communication channels	Section to indicate the enabled communication channels. By clicking on the  icon relating to each channel, it is possible to set further parameters of the single communicator channel:	• Telephone line (enabled by default) • GSM Channel (enabled by default) • Mobile data network (disabled by default to prevent unwanted charges).
Telephone line-down fault delay	This parameter can be set by clicking on the  icon relating to the "Telephone line". This parameter allows you to program the delay with which the telephone line fault event will be generated with respect to the moment when it is actually detected.	From 0 to 65534 seconds; if set at 65535 the fault will not be signalled. **EN-54** In order to ensure compliance with EN-54 standards, the default value (50 seconds) must not be changed.
Prefix	Box for the telephone prefix to be placed before the telephone number for voice calls and Contact ID sent over the telephone line (PSTN).	Up to 8 digits
GSM settings	• Volume input (microphone): adjustable from 0 to 99, preset at 40 • Volume output (microphone): adjustable from 0 to 15, preset at 7 • Balancing signal of the microphone that returns to the speaker to indicate to the user that the line is not down: three adjustment levels - low / medium (default) / high • SMS forwarding number: indicates the telephone contact received SMS texts is to be forwarded to. If not set, SMS forwarding will be disabled.	
Mobile data network settings	• APN (Access Point Name) • Username for APN authentication • Password for APN authentication	
Pay-as-you-go balance	Clicking on the respective icon  accesses the remaining credit enquiry parameters ("Pay-as-you-go balance" on the next page).	
Communication attempts	This is the number of call attempts allowed before deleting the number from the call queue.	from 1 to 255
Mains failure delay	This parameter allows you to program the delay between detection of mains failure and the actual signalling of the event itself.	from 50 to 65535 seconds **EN-54** In order to ensure compliance with EN-54 standards this value must not exceed 60 seconds.
Number of repetitions	Number of repetitions of voice messages.	from 1 to 255

Parameter/Option	Function	Value/notes
Enable battery faults	Option which, if enabled, will enable signalling of battery fault/battery restored events.	**EN-54** In order to ensure compliance with EN-54 standards this option must be enabled.
Alarm restore follows the input	Option which, if enabled, when the "ALARM CALL" input is restored, the "Alarm ACK" signalling LED, the "ALARM ACK" output and the alarm buzzer signal will also be restored.	
Voice after dial	Option which, if enabled, enables playback of voice messages after dialing the number.	
Confirm with star key	Option which, if enabled, enables the request to confirm receipt of the communication which must take occur by pressing the "*****" of the telephone.	**EN-54** In order to ensure compliance with EN-54 standards, this option must be activated.
Keys audio feedback	Option which, if enabled, enables the activation of the communicator buzzer to signal the confirmation or rejection of a user operation.	
Sound on event	Option which, if enabled, enables the activation of the communicator buzzer in the event of an alarm or fault.	
Set current date/time	Button that sets the communicator date and time indicated in the box at the side.	
Daylight saving	Option which, if enabled, enables the standard time/daylight saving time switchover. The switchover mode is based on the selection made in the boxes "Year" and "Geographical area" which are visible in the table.	

3.2.1 Pay-as-you-go balance

Clicking on the icon relating to the remaining credit request opens a subsection with which you can access the various parameters that manage the request.

***Table 3.6**: "Remaining credit" Parameters*

Parameter/Option	Function	Value
Disabled **Automatic** **Manual**	Operating mode of the remaining credit request. The choice made enables or not the following options and parameters.	The "automatic" mode functions only for TIM and Wind operators. The "manual" mode must be customized by the installer in accordance with the credit request modes offered by the operator.
Threshold	Threshold value, in currency, for the activation/restoration of the insufficient credit event.	
Period	Time interval, in hours, between two subsequent credit requests.	

Parameter/Option	Function	Value
Call **SMS** **Feature code - USSD**	In case of "manual" request mode, this selection indicates how the credit request will be sent by the communicator.	• Telephone call • SMS text message • Network command (USSD)
Requested number	Telephone number to which the credit request is to be forwarded	
Message request	Text of the credit request message (only if the type of request is SMS text).	
Answer number	Telephone number the answer is expected from. If left empty the communicator will not perform any check on the number from which the answer comes from.	
Answer pattern	String to search for in the answer message. The numeric value that follows this string in the reply message is interpreted as a remaining credit.	

3.3 Input/Output terminals

The "Inputs/Outputs" programming section lists all the input and output terminals available on the F-COM communicator motherboard:

***Table 3.7**: Programmable terminals*

Terminal	Number on PCB	Function
ALARM CALL	14, 15	Input terminal for the activation of alarm communications
FAULT CALL	16, 17	Input terminal for the activation of fault communications
ALARM ACK	6	Output terminal for confirmation of receipt of an alarm communication
OUT1	7	Programmable output terminal (by default it activates in the event of a connection fault)
FAULT	8	Output terminal that activates in the presence of communicator faults
IO1	10	Input/Output terminals
IO2	11	Input/Output terminals
IO3	12	Input/Output terminals

The software provides the parameters and options to be set for each terminal, in accordance with the function of the terminal.

***Table 3.8**: "Input/Output" parameters*

Parameter/Option	Function	Value/notes	Terminals
Direction	Box to select the terminal direction	• Input • Output	IO1, IO2, IO3
Polarity	Box to select the terminal polarity	• Normally open (applied) • Normally closed (removed)	ALARM CALL, FAULT CALL, ALARM ACK, OUT1, FAULT, IO1, IO2, IO3
Reference	Box to select the terminal reference	• Negative (pull-up resistor integrated in the communicator enabled). • Positive (pull-up resistor integrated in the communicator disabled). For the ALARM CALL and FAULT CALL inputs the reference is always negative without the possibility of programming.	ALARM CALL, FAULT CALL, IO1, IO2, IO3
Supervision	Option that enables/disables supervision on the terminal. User programmable for all terminals.	**EN-54** In order to guarantee compliance with the EN-54 standards, this option must be activated for the ALARM CALL and FAULT CALL terminals.	ALARM CALL, FAULT CALL, ALARM ACK, OUT1, FAULT, IO1, IO2, IO3
Bistable/Monostable	Option that establishes the operating mode of the output.	• Bistable (activates when the event activates and deactivates when the event restores) • Monostable (activates when the event activates; in this case a box for the output activation time (in seconds) is enabled.	OUT1, IO1, IO2, IO3

Parameter/Option	Function	Value/notes	Terminals
Thresholds 	Button to open a window for adjustments to the input activation thresholds, in Volts or Ohms. The thresholds can be modified via the number boxes or by using the bar which indicates the levels by means of colours: In this window it is also possible to indicate the polarity and supervision of the input via the respective boxes. By pressing the **Real-time reading** a connection is made to the communicator which provides the reading of the voltage or resistance measured between the selected terminal and ground. The **OK** button saves the changes which will be written during the write phase.	• Volt (voltage between terminal and ground) • Ohm (resistance between terminal and ground) • yellow - connection fault (open or short circuit) • green - standby • red - alarm	ALARM CALL, FAULT CALL, IO1, IO2, IO3
Functions	Boxes to select the functions associated with the inputs. The icon  indicates that at least one feature is associated. The programming of a function for a specific terminal inhibits the implementation of the actions programmed in the section"Events/Actions" on page 23 for the activation/restore event of the terminal.	• Cancel alarm communications • Cancel fault communications • Cancel other communications • Disable alarm communications • Disable fault communications • Disable other communications • Force telephone line • Force cellular channel • Rearm	IO1, IO2, IO3

3.4 Phonebook (Contacts)

The "Phonebook" programming section shows a list of 32 contacts.

The software provides the parameters and options to be set, in accordance with the associated communication type.

At the top of the section are buttons to filter viewing of contacts in accordance with their programming.

***Table 3.9**: "Phonebook" parameters*

Parameter/Option	function	value/notes	communication protocol
Label	Box to edit the label that identifies the contact		all
Type	Box to select the protocol to use for communications with the contact.	• Not defined • Item • Contact-ID • SIA-IP • SMS • IP2RX	all
Number	Box for the telephone number	maximum 20 digits	• Item • Contact-ID • SMS
IP address	Box for the IP address of the digital receiver		• SIA-IP • IP2RX
Port	Field for the port of the digital receiver		• SIA-IP • IP2RX
Supervision	Option that enables/disables the supervision of contacts, which is achieved through a periodic communication which, if unsuccessful, will be repeated a number of times as set by the "Communication attempts" parameter. If activated, the time interval can be entered in the box below, expressed in days, hours and minutes (DD hh: mm), between two successive supervision operations. The  button accesses the supervision parameters.	**EN-54** In order to ensure compliance with EN-54 standards this option must be activated and the time interval must not be less than 24 hours.	• Item • Contact-ID • SIA-IP • IP2RX
Start time **End time**	Boxes for the start and end times of supervision calls (hh: mm).	By default, the start time is 09:00 and the end time is 17:00. If these settings are done through the screen, they are disabled by default (00:00).	• Item
Voice message	Box for the selection of the supervision supervision-operation voice message.	If not programmed, the periodic message in Italian (index "3") or in English (index "6") is used based on the language selected.	• Item
Event code	Boxes for the event code of the supervision call.	If not programmed, the default event code will be used: “602”;.	• Contact-ID

Parameter/Option	function	value/notes	communication protocol
Preferred channel	Box to select the preferred communication channel.	• Telephone line • Cellular channel	• Item • Contact-ID
Backup SMS	Option that enables/disables the sending of an SMS text when all the attempts of a voice call have failed.		• Item
Account code	Box for the account code to be used for digital communications		• Contact-ID • SIA-IP • IP2RX
Encryption	Box for selection of the encryption algorithm. Once selected, it is possible to insert the encryption key in the box next to it.	• None • AES 128 bit • AES 192 bit • AES 256 bit	• SIA-IP • IP2RX
Event label	Option that enables/disables the addition of the event description in the data packet sent to the digital receiver.		• SIA-IP • IP2RX

3.5 Events

The events managed by the communicator are listed in the table below.

The "Events log" column indicates whether the event activation and event restored data is recorded in the events log.

The "Activate Actions" column indicates whether the communicator can be programmed to trigger an action when the event occurs ("Events/Actions" on page 23).

The "Restores..." column is empty for non-resettable events.

***Table 3.10**: Event type*

Event	Type	Activates...	Restores...	Events log	Activate actions
ALARM CALL Input	Alarm	on activation of the ALARM CALL input	on restore of the ALARM CALL input	**Yes**	**Yes**
FAULT CALL Input	Fault	on activation of the FAULT CALL input	on restore of the FAULT CALL input	**Yes**	**Yes**
IO1 Input	Generic	on activation of input IO1	on restore of input IO1	**Yes**	**Yes**
IO2 Input	Generic	on activation of input IO2	on restore of input IO2	**Yes**	**Yes**
IO3 Input	Generic	on activation of input IO3	on restore of input IO3	**Yes**	**Yes**
Output	Generic	on activation of an output terminal	on restore of an output terminal	**Yes**	**No**
Interconnection fault	Fault	when a supervised terminal is shorted or open	when no terminal is in fault status	**Yes**	**Yes**

Event	Type	Activates...	Restores...	Events log	Activate actions
Battery trouble	Fault	when the battery is inefficient, discharged or short-circuited	when the battery has no problems	**Yes**	**Yes**
Missing battery	Fault	when the battery is disconnected	when the battery is connected	**Yes**	**Yes**
Power supply trouble	Fault	when the power supply is absent, overloaded or overheated	when the power supply is free of problems	**Yes**	**Yes**
Mains fault	Fault	when the mains supply fails	when the mains supply restores	**Yes**	**Yes**
Ground fault	Fault	when leakage to ground is detected	when leakage to ground is no longer detected	**Yes**	**Yes**
Data corruption	Fault	when the programming data is corrupted	when the programming data is valid	**Yes**	**Yes**
System restart	Fault	when the communicator is restarted		**Yes**	**Yes**
Rearm	Generic	when the communicator rearms		**Yes**	**Yes**
Factory default	Generic	when programming restores to factory default data		**Yes**	**No**
Programming	Generic	at the start of a programming session	on exiting a programming session	**Yes**	**No**
Changed date/time	Generic	when the communicator date/time is refreshed		**Yes**	**Yes**
PIN entered	Generic	when a user/installer PIN is recognized		**Yes**	**Yes**
Wrong PIN	Generic	when a wrong PIN is entered		**Yes**	**Yes**
Telephone line trouble	Fault	when the presence of the telephone line is no longer detected	when the presence of the telephone line is detected	**Yes**	**Yes**
SIM Error	Fault	when the presence of a GMS SIM is not detected	when the presence of a GMS SIM is detected	**Yes**	**Yes**
Insufficient SIM Credit	Fault	when the remaining credit is less than the programmed threshold	when the remaining credit is more than the programmed threshold	**Yes**	**Yes**
GSM trouble	Fault	when the communicator fails to connect to the GSM network or the signal is weak	when the communicator connects properly to the GSM network	**Yes**	**Yes**

Event	Type	Activates...	Restores...	Events log	Activate actions
Mobile data network trouble	Fault	when the SIM is not enabled for data traffic or the communicator cannot connect to the data network	when the communicator connects to the data network	**Yes**	**Yes**
Communications cancelled	Generic	when communications in progress are cancelled		**Yes**	**No**
Communications enabled/disabled	Generic	when communications are disabled	when communications are enabled	**Yes**	**No**
Communication started	Generic	at the start of a communication		**Yes**	**No**
Communication confirmed	Generic	on confirmation of receipt of a communication		**Yes**	**No**
Failed communication	Generic	when a communication is not confirmed (if the communicator is programmed to request confirmation)		**Yes**	**No**
Contact supervision trouble	Fault	when the periodic test communication is not confirmed by a supervised telephone contact	when all supervised telephone contacts confirm receipt of a communication	**Yes**	**No**
Code 0 diagnostic information	Diagnostics	when the presence of diagnostic information is detected		**Yes**	**No**
Code 1 diagnostic information	Diagnostics	when the presence of diagnostic information is detected	when the presence of diagnostic information is detected	**Yes**	**No**

3.6 Events/Actions

The "Events/Actions" programming section shows a table in which each line indicates, for a selected event, which actions will be performed by the communicator (voice / digital / SMS communications and activation of programmable outputs).

The number of lines (maximum number of events that can be associated with actions) is 32.

The same event can be specified in more than one line of the matrix. When an event occurs, the communicator will perform all the actions specified in the lines that correspond to the event.

There are buttons at the top of the section to filter the contacts in accordance with their programming.

***Table 3.11**: "Event / Actions" parameters*

Parameter/Option	function	value/notes
Event	Box for the selection of the type of event that will trigger the specified actions. The selectable events are a part of the events managed by the communicator, as indicated in the table "Event type" on page 21, in the "Action activation" column.	• ALARM CALL Input • FAULT CALL Input • IO1 Input • IO2 Input • IO3 Input • Interconnection fault • Battery trouble • Missing battery • Power supply trouble • Mains fault • Ground fault • Data corruption • System restart • Rearm • Changed date/time • User-code entry • Wrong user code • Telephone line down • SIM Error • Insufficient SIM Credit • GSM fault • Mobile data network trouble
Type	Box for the selection of the type of occurrence of the event. Indicates whether the specified actions must be performed only when the event is activated, or only when the event is restored or in both cases.	• Not defined • Activation • Reset • Both
Output	Box where you can indicate a programmable output to be activated in response to the indicated event.	• Not defined • OUT1 • IO1 • IO2 • IO3
Contacts	Box where you can select the contacts who will receive forwarded communications. The icon  indicates that at least one contact is selected.	
SMS text	Box where you can select the index or label of the SMS message (present in the SMS "SMS text message library" on page 29which will be sent to the selected contacts in response to the indicated event. Field valid only for "SMS" contacts.	If no SMS message is selected, the communicator will send predefined messages ("Events/Actions default programming" on page 27).
Advanced	The  button gives access to advanced parameters specific to the selected event.	

Parameter/Option	function	value/notes
C.ID Event	Boxes for the event code to be used in digital communications to Contact ID contacts.	If this field is not programmed, the communicator will use the default event code ("Events/Actions default programming" on page 27).
SIA Event activation	Box for the event code to be used in digital communications to SIA-IP or IP2RX contacts in the case of event activation.	If this field is not programmed, the communicator will use the default event code ("Events/Actions default programming" on page 27).
SIA Event reset	Box for the event code to be used in digital communications to SIA-IP or IP2RX contacts in the case of event reset.	If this field is not programmed, the communicator will use the default event code ("Events/Actions default programming" on page 27).
Where	Box for the selection of the identification code of the partition/zone to be specified in digital communications to Contact ID, SIA-IP or IP2RX contacts. This information is to be entered in the "GG" field for Contact ID and in the Partition field for SIA-IP.	If this option is not programmed, the communicator will use the predefined value ("Events/Actions default programming" on page 27).
Who	Box for the selection of the identification code of the point/user to be specified in digital communications to Contact ID, SIA-IP or IP2RX contacts. This information is to be entered in the "CCC" field for Contact ID and in the "Address" field for SIA-IP.	If this option is not programmed, the communicator will use the predefined value ("Events/Actions default programming" on page 27).
Voice messages	Boxes for the selection of the index of the voice message (present in the "Voice message library" on page 29) to be present in the communication to the contacts selected for the indicated event. Field valid only for "Voice" contacts.	It is possible to select a maximum of 4 messages. The selected messages are played in sequence.

Activation actions of a bistable output

- Activated and deactivated respectively on activation and reset of the associated event regardless of the "type" parameter indicated in the events/actions table.
- If the same output is associated with several events, it will be deactivated only when all the events reset ("OR" logic).
- If an output is associated with a non-resettable event (system restart, rearm, date/time change, user code entry, wrong user code), it will reset only on rearming (activation of an IO1 input, ..., 3 which has the "rearm" function enabled or through the user menu via the screen).
- A bistable output must not be associated with the "rearm" event as it will be unable to reset.

Note

The installer must pay particular attention to the programming of the bistable outputs.
If the bistable output is associated with a non-resettable event (system restart, rearm, date/time change, user code entry, wrong user code) or if "activation" or "reset" is indicated as the "Type, the output will reset when the communicator rearms.

Activation actions of a monostable output

- Activation occurs coherently with the setting in the "Type" field in the events/actions table for the programmed duration.
- The output can be reactivated: if the output is active (the programmed duration has not yet expired) and the activation conditions occur again (a new event associated with the output occurs or a new activation of the same event), the expiry of the deactivation timer is refreshed.
- The output will be deactivated immediately when the communicator rearms (activation of an IO1 input, ..., 3 which has the "rearm" function enabled or from the user menu via the screen).

Communication activation actions

The beginning of a programming session and the detection of a fault in the corruption of programming options, block current communications and cancel those waiting.

3.6.1 Events enabled by default

The following table shows which of the available events are enabled by default and which actions are consequent to their occurrence:

***Table 3.12**: Events/Actions enabled by default*

Event		Output	Contacts	Voice calls	SMS text message	Contact ID event	SIA-IP/IP2RX event
ALARM CALL Input	activation	None	Contacts #1 and #2	"Fire alarm"	"Fire alarm"	110	FA
FAULT CALL Input	activation	None	Contacts #1 and #2	"Fire system trouble"	"Fire system fault"	300	FT
Interconnection fault	activation	None	Contacts #1 and #2	"Fire system trouble"	"Interconnection fault"	380	FT
Interconnection fault	activation / restore	OUT1	None	None	Empty	None	None
Battery trouble	activation / restore	None	Contacts #1 and #2	None	"Battery trouble"/"Restore battery trouble"	309	YT / YR
Missing battery	activation / restore	None	Contacts #1 and #2	None	"Missing battery"/"Restore missing battery"	311	YM / YR
Power supply trouble	activation / restore	None	Contacts #1 and #2	None	"Power supply trouble" / "Restore power supply trouble"	300	YP / YQ
Mains fault	activation / restore	None	Contacts #1 and #2	None	"Mains fault" / "Restore mains fault"	301	AT / AR
Ground fault	activation / restore	None	Contacts #1 and #2	None	"Ground fault" / "Restore ground fault"	310	UT / UR

Event		Output	Contacts	Voice calls	SMS text message	Contact ID event	SIA-IP/IP2RX event
Telephone line trouble	activation / restore	None	Contacts #1 and #2	None	"Telephone line trouble" / "Restore telephone line trouble"	350	LT / LR
SIM Error	activation / restore	None	Contacts #1 and #2	None	"SIM error" / "Restore SIM error"	350	YS / YK
Insufficient SIM Credit	activation / restore	None	Contacts #1 and #2	None	"SIM credit low" / "Restore SIM credit low"	350	YS / YK
GSM trouble	activation / restore	None	Contacts #1 and #2	None	"GSM trouble" / "Restore GSM trouble"	350	YS / YK
Mobile data network trouble	activation / restore	None	Contacts #1 and #2	None	"Mobile data network trouble" / "Restore mobile data trouble"	350	YS / YK

With these default settings and by following the steps of the guided programming that starts at the first power up, basic programming is achieved.

For example, by setting contact #1 as a "voice" phone number and contact #2 with an "SMS" or "Contact ID" phone number, you will achieve:

- a voice call for the "ALARM CALL" input activation event
- a voice call for the "FAULT CALL" input activation event
- an SMS (with default text) or a digital communication (with a default event code) for the most common faults.

3.6.2 Events/Actions default parameters

***Table 3.13**: Events/Actions default programming*

Event		SMS text message	Contact ID event	SIA-IP/IP2RX event	Where	Who
ALARM CALL Input	activation	"Fire alarm"	110	FA	0	0
	reset	"Reset fire alarm"		FH		
FAULT CALL Input	activation	"Fire system fault"	300	FT	0	0
	reset	"Reset fire system fault"		FJ		
I01 Input	activation	"Activation input IO1"	750	UX	0	0
	reset	"Reset input IO1"				
I02 Input	activation	"Activation input IO2"	750	UX	0	0
	reset	"Reset input IO2"				
I03 Input	activation	"Activation input IO3"	750	UX	0	0
	reset	"Reset input IO3"				

Event		SMS text message	Contact ID event	SIA-IP/IP2RX event	Where	Who
Interconnection fault	activation	"Interconnection fault"	380	FT	0	• 0 ALARM CALL • 1 FAULT CALL • 2 ALARM AC • 3 OUT1 • 4 FAULT • 5 IO1 • 6 IO2 • 7 IO3
	reset	"Restore interconnection fault"		FJ		
Battery trouble	activation	"Battery fault"	309	YT	0	0
	reset	"Restore battery trouble"		YR		
Battery missing	activation	"Missing battery"	311	YM	0	0
	reset	"Restore missing battery"		YR		
Power supply trouble	activation	"Power supply trouble"	300	YP	0	0
	reset	"Restore power supply trouble"		YQ		
Mains fault	activation	"Mains fault"	301	AT	0	0
	reset	"Restore mains fault"		AR		
Ground fault	activation	"Ground fault"	310	UT	0	0
	reset	"Reset Ground fault"		UR		
System restart	/	"System restart"	305	RR	0	0
Rearm	/	"Rearm"	406	RR	0	0
Changed date/time	/	"Changed date/time"	000	JT	0	0
PIN entered	/	"User-code entry"	462	UX	0	• 0 Standard user • 1 Advanced user • 2 Installer
Wrong PIN	/	"Wrong user code"	461	UX	0	0
Telephone line down	activation	"Telephone line down"	350	LT	0	0
	reset	"Restore telephone line down"		LR		
SIM Error	activation	"SIM Error"	350	YS	0	0
	reset	"Restore SIM error"		YK		
Insufficient SIM Credit	activation	"Insufficient SIM Credit"	350	YS	0	0
	reset	"Reset insufficient SIM Credit"		YK		

Event		SMS text message	Contact ID event	SIA-IP/IP2RX event	Where	Who
GSM fault	activation	”GSM trouble”	350	YS	0	0
	reset	“Restore GSM trouble”		YK		
Mobile data network trouble	activation	”Mobile data network trouble”	350	YS	0	0
	reset	”Reset mobile data network trouble”		YK		

3.7 SMS text message library

The "SMS" programming section provides the list of available SMS messages.

The communicator is capable of managing 32 SMS messages of 140 characters each.

There are buttons at the top of the section to filter the contacts in accordance with their programming.

***Table 3.14**: "SMS" parameters*

Parameter/Option	function	value/notes
Label	Box for the SMS text message label. The software uses this label for the selection of text messages in the matrix "Events/Actions" on page 23 for "SMS" contact communications.	
SMS text	Box where it is possible to edit the message text.	Maximum 140 digits
	Button to delete the SMS message in the corresponding line.	

3.8 Voice message library

The "Voice message" programming section provides the list of the available voice messages.

The communicator is capable of managing 100 voice messages. 94 user programmable plus 6 preset for a total duration of 500 seconds.

The first 6 messages on the list are default messages and are used by default for alarm and fault activations and for the monitoring of contacts:

- Message #1: “Allarme incendio”; (Italiano)
- Message #2: “Fire system trouble”;
- Message #3: “Messaggio periodico”; (Italiano)
- Message #4: “Fire alarm”; (English)

- Message #5: “Fire system trouble”; (English)
- Message #6: “Periodic message”; (English)

The 6 predefined messages cannot be changed by the installer.

The software provides parameters to be set for each message.

The  icon indicates that the message has undergone programming changes.

If the installer resets the factory data, only the 94 programmable messages will be deleted while the 6 predefined messages will remain unchanged.

***Table 3.15**: "Voice message" parameters*

Parameter/Option	function
Label	Box for the voice message label. The software uses this label for the selection of the voice messages in the matrix "Events/Actions" on page 23 for "Voice" type contact communications.
	Button that allows the selection of an audio file in the PC to be used as a voice message. F-COM/STUDIO supports "wave" (.wav) format.
	Button to open the window for the "text to speech" function that converts text messages, edited in the appropriate box, into voice messages.
	Button that starts playback of the selected voice message.
	Button to delete the voice message in the corresponding line.

Inside this section of the software, the **Read** and **Write** buttons on the menu bar at the top allow you to download and load the programming for the voice messages only.

Evolving Protection

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