SELF-POWERED SOUNDER/FLASHER FOR OUTDOOR USE

IVY

inim® ELECTRONICS

INSTALLATION AND PROGRAMMING MANUAL

Table of contents

Chapter 1

OVERVIEW

The IVY series offers a range of self-powered sounder/flashers especially designed to allow maximum outdoor-installation flexibility.

The on-board microprocessor monitors the device parameters and assures high-reliability and first-rate performance. A voltage-free-relay manages tamper signals and allows full-integration with every type of system, while a fault output allows remote-management of fault conditions.

Optimized flexibility allows you to choose the most suitable wiring method (activation and signaling using 2 or 3 wires, etc.), and ready-to-go factory settings (refer to*Tabella 6 "Programming Menu"*) ensure fast and easy installation with few or even no setting adjustments.

INIM Electronics s.r.l. also offers Ivy unit units which can be connected to SmartLiving intrusion control panels via I-BUS (for remote programming and management purposes), thus providing first rate security-system customization capabilities.

Manufacturer's Details 1-1

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ATTENTION!

Any persons authorized by the manufacturer to repair or replace any part of this device hold authorization to work on INIM Electronics devices only.

Manual details 1-2

Issue:	2.10
Month and year:	May 2010
Code:	DCMIINE0IVY

Product description and models 1-3

Description: Self-powered outdoor sounder/flasher
Year of production: 2010

Table 1: **Models**

Name	Description
Ivy	Standard model
Ivy-F	Standard model with foam-tamper protection
Ivy-M	Standard model with chrome-look casing
Ivy-FM	Standard model with chrome-look casing and foam-tamper protection
Ivy-B	BUS connectable model
Ivy-BF	BUS connectable model with foam-tamper protection
Ivy-BM	BUS connectable model with chrome-look casing
Ivy-BFM	BUS potential model with chrome-look casing and foam-tamper protection

Table 2: **Operating features**

Features	Ivy	Ivy-F	Ivy-M	Ivy-FM	Ivy-B	Ivy-BF	Ivy-BM	Ivy-BFM
Power and alarm input	*	*	*	*	*	*	*	*
Programmable input-polarity (**START/STOP**)	*	*	*	*				
Programmable ancillary-signal input (**LED**)	*	*	*	*	*	*	*	*
Signal output with programmable polarity (**FAULT**)	*	*	*	*	*	*	*	*
Tamper signal relay with programmable polarity	*	*	*	*	*	*	*	*
Super bright LED-technology flasher with high-power driver circuit	*	*	*	*	*	*	*	*
Blow torch protection	*	*	*	*	*	*	*	*
Magneto-dynamic horn with automatic function control	*	*	*	*	*	*	*	*
Dislodgement and Open-casing protection	*	*	*	*	*	*	*	*
Metal guard inside	*	*	*	*	*	*	*	*
4 tone sounder	*	*	*	*	*	*	*	*
"Squawk" tone					*	*	*	*
Programmable sound-output time					*	*	*	*
Programmable volume					*	*	*	*
Programmable flasher sequence	*	*	*	*	*	*	*	*
Programmable flasher time					*	*	*	*
Backup battery with test circuit	*	*	*	*	*	*	*	*
Houses 12V, 2.1 Ah backup battery	*	*	*	*	*	*	*	*
IP34 Rated	*	*	*	*	*	*	*	*
CEI 79-2:1998 and 79-2/Ab:2000 Compliant	*	*	*	*	*	*	*	*
Foam protection		*		*		*		*
Chrome-look casing			*	*			*	*

Table 2: **Operating features**

Features	Ivy	Ivy-F	Ivy-M	Ivy-FM	Ivy-B	Ivy-BF	Ivy-BM	Ivy-BFM
Ancillary alarm input (**START**)	*	*	*	*				
Stop alarm and alarm-immunity input (**STOP**)	*	*	*	*				
Inputs **D** and **S** for I-BUS connection					*	*	*	*
Direct control via SmartLiving intrusion-control panel*					*	*	*	*
SmartLiving intrusion-control panel activation of LEDs: **STATUS** and **PRG**					*	*	*	*
SmartLiving intrusion-control panel activation of outputs: **TAMPER** and **FAULT**					*	*	*	*

Signaling 1-4

The Ivy unit provides various signals: audible, visual, activation of the FAULT and TAMPER outputs (connectible to the intrusion-control panel).

Each signal type can be programmed separately, combined with other signals, or deactivated.

VISUAL SIGNALING

The super-bright flasher uses new-generation Light Emitting Diode technology which provides maximum visual-signal clarity with extra-low power consumption. The flasher circuit is divided into two groups, the left group (*Table 4, G*) and the right group (*Table 4, H*). This type of circuitry allows you to select the options on the Programming menus.

STATUS LED - PRG LED

The two ancillary LEDs, reveal the device status and guide you through the programming operations (STATUS LED - *Table 4, Q*; PRG LED - *Table 4, R*).

AUDIBLE SIGNALING

The magneto-dynamic horn provides a choice of 4-tones, which can be programmed with a maximum alarm time and assigned to indicate different alarm types.

Ivy units, connected via I-BUS to the intrusion-control panel, provide a choice of 5 tones with programmable duration and volume options.

FAULT OUTPUT

Open-collector output with 100mA maximum current draw capacity. During the programming phase, it is possible to select the standby status (Normally open or Normally closed) and assign the events.

TAMPER OUTPUT

The voltage-free relay can be used to signal tamper conditions to external devices. During the programming phase, it is possible to select the standby status (Normally open or Normally closed) and assign the events.

Chapter 2

GENERAL DESCRIPTION

Box contents 2-1

Inside the box you will find:

- IVY Sounder/Flasher
- 2 securing screws for the metal guard
- 2 securing screws for the plastic casing
- 5 wall plugs for mounting the backplate and tamper bracket
- Drilling pattern
- Installation and Programming manual
- Programming Table

Technical description 2-2

Table 3: **Technical specifications**

Operating voltage	13.8 V
Minimum current draw	15 mA
Maximum current draw	150 mA
Sounder output (l=3m)	110 dB(A)
Flash rate per minute (programmable)	36 - 46 - 56
Maximum alarm-time (programmable)	3 - 6 - 9 min
Protection class	IP34
Operating temperature	-25 to +55 °C
Backup battery	12V - 2.1Ah
Dimensions (W x H x D)	21 x 29 x 9.5 cm
Weight (without battery)	2.2 Kg

Table 4: **Description of parts**

A	Programming button (PAGE)
B	Programming button (SEL)
C	Magneto-dynamic horn
D	Battery housing
E	Battery wires
F	Terminal board
G	LED flasher - left group
H	LED flasher - right group
I	Foam protection
J	Blow-torch protection
K	Dislodgement/Open tamper protection
L	Wire entry
M	Wall-plug locations
N	Tamper-screw location
O	Metal-guard screw locations
P	External-casing screw locations
Q	STATUS LED - Red LED
R	PRG LED - Green LED
S	Magneto-dynamic horn connector
T	External casing in plastic
U	Casing hinges
V	Metal guard

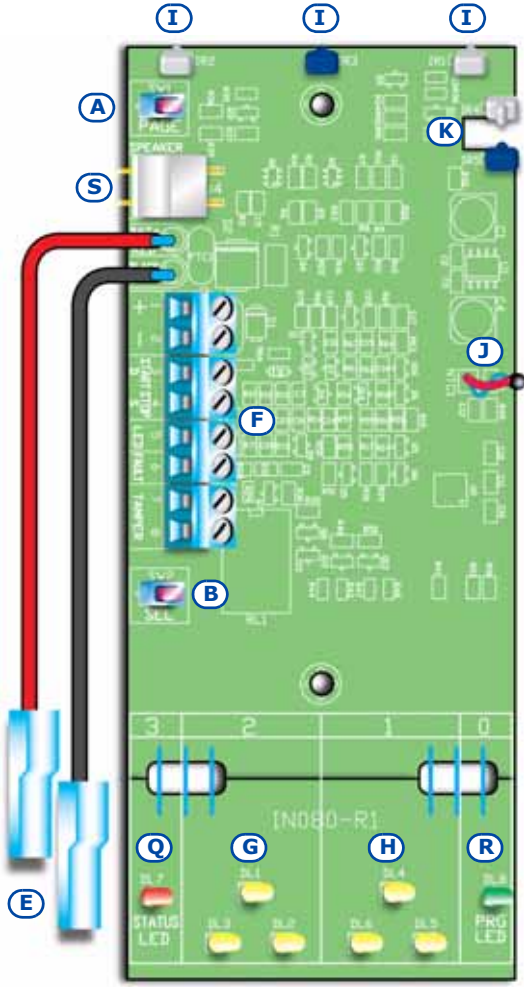
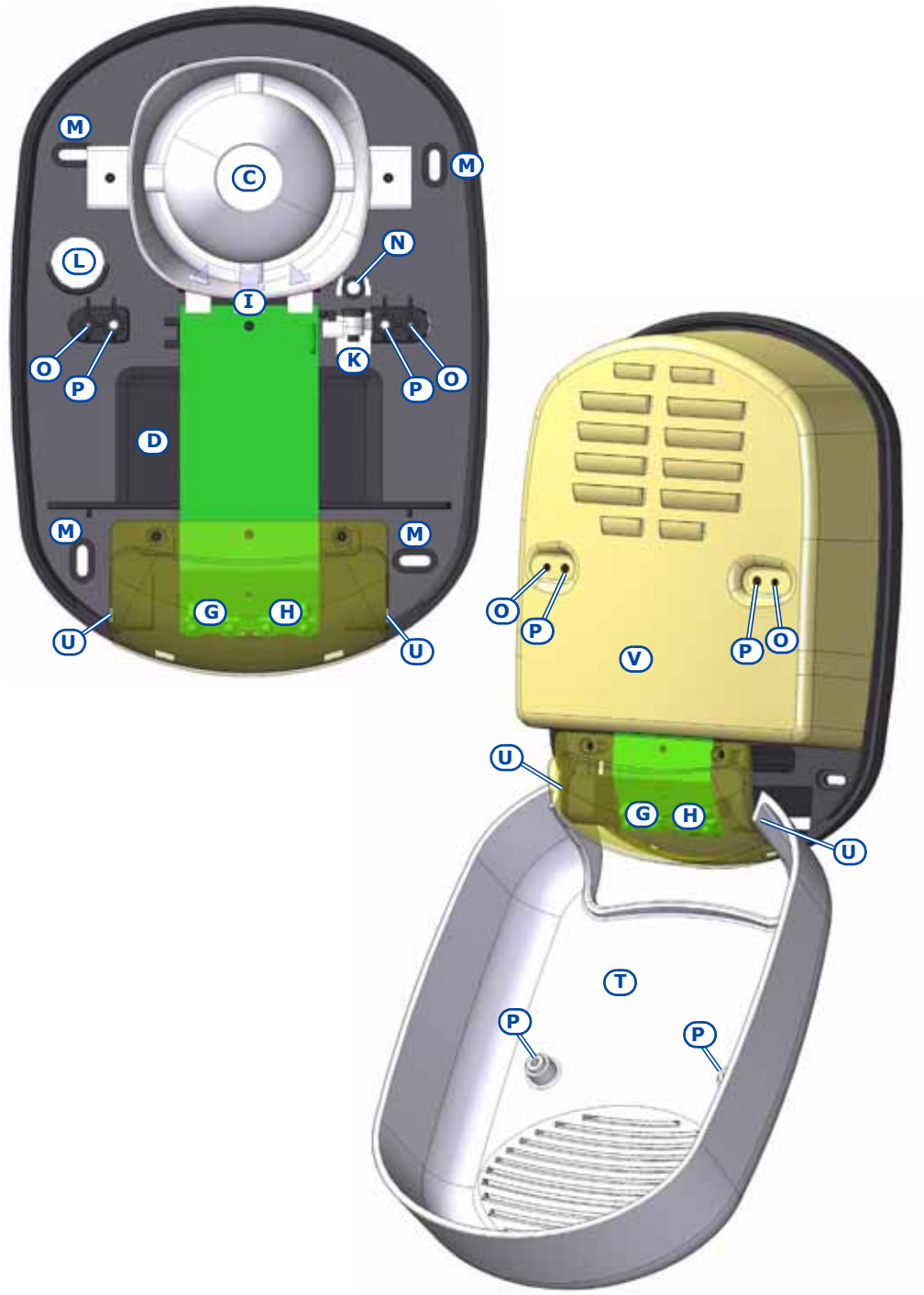


Table 5: **Terminal board**

no.	icon/ name	Description
1	**+**	Positive power terminal supports 13.8V
2	**-**	Negative power terminal
3	**START D**	Ancillary terminal with programmable polarity for alarm activation Input D for I-BUS
4	**STOP S**	"Stop Alarm" terminal, with programmable polarity for alarm deactivation Input S for I-BUS
5	**PRG**	Input for audible/visual signaling activation
6	**Output**	Open-collector output for fault signaling I max = 100 mA
7	**Output**	Voltage-free terminals of the relay
8		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Chapter 3

INSTALLATION

The Ivy unit should be mounted high up on a smooth surface, in such way that it is out of reach but on view and, therefore, may serve as a visible deterrent against break-in.

Installation guidelines 3-1

1. Remove all electrical power.
2. Open the bottom-hinged casing (*Table 4, U*).
3. Remove the metal guard (*Table 4, V*).
4. Pull the connection wires through the cable entry (*Table 4, L*).
5. Using the wall plugs, attach the plastic backplate to the wall (*Table 4, M*). The wall plug locations are clearly marked on the drilling-pattern (included).
6. Insert the tamper-protection screw into its location (*Table 4, N*).
7. Locate the battery in its housing (*Table 4, D*), then connect it by means of the battery wires (*Table 4, E*). Ensure that the battery polarity is correct.
8. Complete the device wiring. During this phase, the STATUS LED will blink at 1 second intervals.
9. Configure the device.

Note

If the factory default settings suit the installation requirements, device configuration will be unnecessary.

10. Replace the metal guard and the plastic casing. The STATUS LED will blink at 0.5 second intervals.
11. Powerup the device. The STATUS LED will go On (solid) for 10 seconds. The LED will go Off when the Ivy unit enters the operating phase (standby). If the Ivy unit is connected via I-BUS, the PRG LED will signal the BUS status for 60 seconds:
    - LED On solid = the BUS is not connected.
    - LED blinking at 1 second intervals = the I-BUS is working but the Ivy unit has not been enrolled on the intrusion control panel.
    - LED blinking at 0.2 second intervals = the I-BUS is working and the Ivy unit has been enrolled on the intrusion control panel.

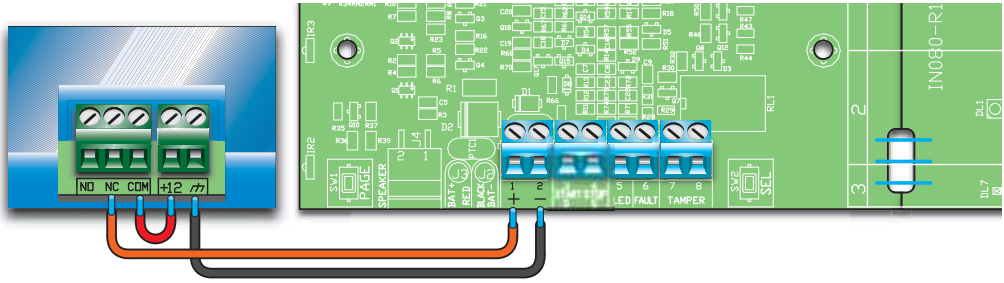
Wiring the device 3-2

The following paragraphs describe the various ways of connecting the Ivy unit to an intrusion control panel (in particular to a SmartLiving intrusion-control panel manufactured by INIM Electronics s.r.l.).

All connections involve the terminals on the motherboard (*Table 4, F*). Each terminal can be configured separately during the programming phase.

2 WIRE CONNECTION

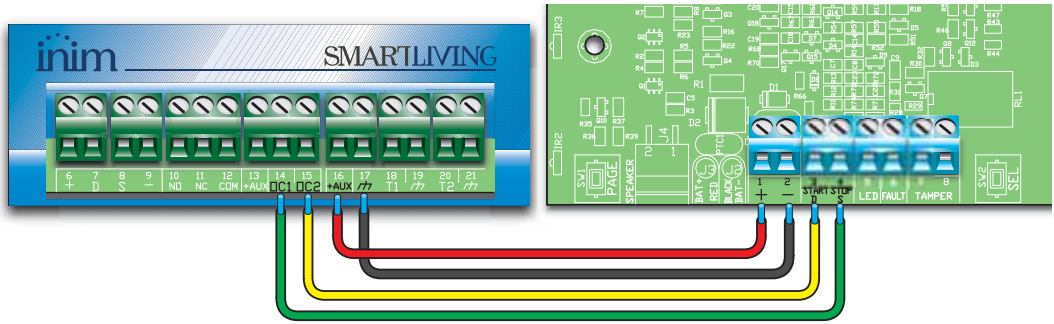
This standard wiring method activates the alarm signal by means of a positive-power-removed signal.



4 WIRE CONNECTION

This wiring method activates signaling via the START terminal and deactivates it via the STOP terminal. The polarity of both inputs is programmable.

The sounder/flasher is activated by an open-collector output (on the intrusion control panel). By means of a second open-collector output, you can deactivate alarm signals and disable (block) the sounder/flasher from the intrusion control panel, for example, during maintenance sessions.

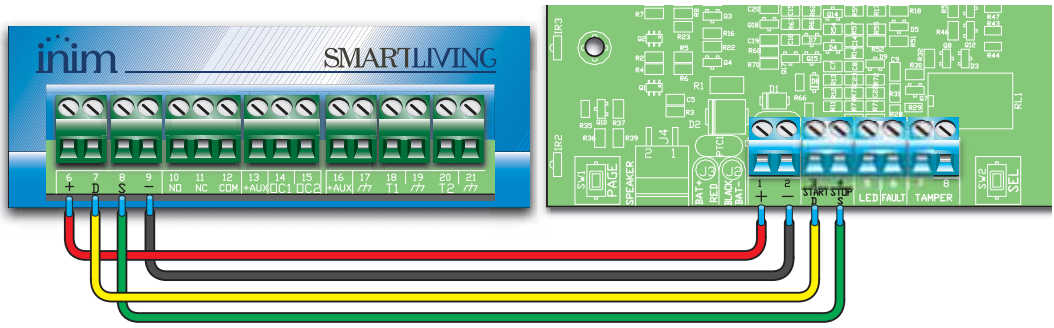


I-BUS CONNECTION

Only the Ivy-B, Ivy-BF, Ivy-BM and Ivy-BFM models can be connected to the I-BUS wire. This connection allows you to program the device and activate alarm-signaling directly from the panel.

In addition, connection of the I-BUS wire to terminal "+", provides a power source which enables the Ivy unit to activate alarm-signaling (in accordance with its programmed parameters) in the event of wire-cutting tamper.

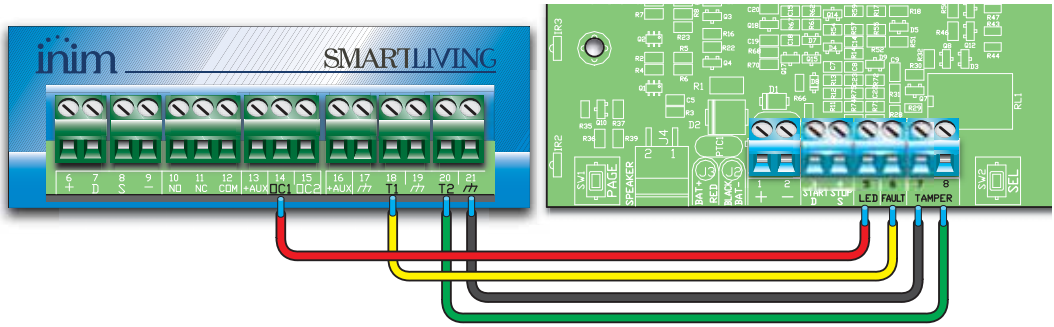
Each time the SmartLiving panel resets the BUS and restarts the connected peripherals, the Ivy unit will run a 60-second status check on the BUS, as described in paragraph *3-1 Installation guidelines*.



EXTRA CONNECTIONS

Connection of the LED terminal to an open-collector output, will allow management of the STATUS and PRG LEDs, flasher and horn directly from the intrusion-control panel (as programmed).

Connection of the FAULT and TAMPER outputs to a terminal on the intrusion control panel allows signaling of the associated events. This function allows fault and tamper signals to be transmitted without activating the visual-signaling components.



Battery connections 3-3

This device requires a 12V, 2.1Ah battery (not included), which must be connected by means of the respective wires (*Table 4, E*) . Take care to respect the battery polarity during the installation phase (red=positive; black=negative).

The battery-efficiency test will run 60 minutes after installation and every 10 minutes thereafter. In the event of an alarm, the battery test will be delayed by 60 minutes.

Failure of the battery-efficiency test will generate the respective signal (*Table 6, Low battery*). If the battery voltage drops below 11V during an alarm event, the horn will deactivate automatically, however, all other signaling will continue until the voltage drops below 10V.

All functions will be re-established when the battery voltage restores to 12V.

Chapter 4

ACTIVATION METHODS

The Ivy unit can be triggered by signals from the panel, depending on the wiring method used and also by events generated by the Ivy unit itself.

Signaling will cease when one of the following conditions occurs:

- the alarm condition clears;
- the maximum alarm time expires (in this case, only the audible signaling will cease);
- the STOP signal activates.

If, during an active alarm, the maximum audible-alarm time expires (*Table 6, Maximum duration of audible signaling*), audible signaling will cease but visual signaling will continue until the trigger condition clears.

Types of signal 4-1

SOUNDER/ FLASHER EVENTS

The Ivy unit processes the signals it picks up and then generates the respective events (which can be associated with one or more signals).

The Ivy unit can generate the following events:

- Power failure
- Low battery
- Open casing
- Device dislodgement
- Foam tamper (or similar) in the horn
- Blow torch tamper
- Horn damage
- I-BUS loss

Note

The audible and visual signaling triggered by "open casing", "foam tamper" and "blow torch tamper" events will clear after 30s, or immediately on receiving the STOP signal.

Note

The event "Open casing" of a Ivy connected by BUS unit does not trigger audible signaling when the connected anti-intrusion control panel is in "Programming" mode.

MAINS FAILURE

This signaling method is widely applied as it ensures intrinsic protection against wire-cutting. This activation method triggers audible and visual signals (sounder and flasher) when the primary mains power fails.

START INPUT

The START ancillary input is completely programmable, therefore, it can activate the sounder/flasher by means of either positive signals (Applied/Removed) or negative signals (Applied/Removed).

STOP INPUT

The STOP signal allows you to force the Ivy unit to standby status thus blocking all signaling. Once this signal is removed, the device will restart the evaluation process and if the alarm conditions are still active, it will trigger the respective signals.

Note

Although the STOP input is fully programmable, the manufacturer strongly recommends an "applied" signal configuration rather than a "removed" signal configuration, in order to avoid the risk of disablement in the event of wire cutting.

LED INPUT

This input (activates when connected to negative) operates as an ancillary channel which the panel can use to activate any type of signal, in accordance with the configuration of the Ivy unit.

I-BUS

All I-BUS related activations must be programmed via the intrusion -control panel. Panel events are capable of generating signaling directly on the sounder/flasher, without activating terminals or outputs.

Additionally, programming the audible/visual signal parameters from the intrusion control panel is more flexible than programming them directly via the Ivy unit.

NON-PROGRAMMABLE EVENTS

The Ivy unit can be also triggered by default activations that are not editable by programming. PRG LED becomes ON solid in case of the following events:

- Open casing
- Device dislodgement
- Foam tamper (or similar) in the horn
- Blow torch tamper

Managing multi-alarm conditions 4-2

There is no priority amongst the various signals. If the Ivy unit detects signals, it will activate the programmed signaling cycle and, in the event of concurrent activations, add on the respective signals.

Restoral of a detected signal annuls the respective alarm cycle automatically, but it does not annul alarm cycles relating to other signals. The Ivy unit will restore to standby status when all alarm conditions cease.

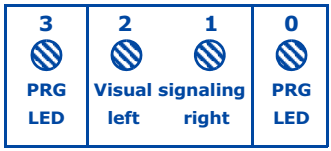
Chapter 5

PROGRAMMING

The programming session cannot begin until after first startup, therefore, it is necessary to ensure that:

- all power sources to the Ivy unit (mains and battery) are disconnected;
- the tamper protection is open;
- the Intrusion control panel will allow you to work on the Ivy unit without generating alarms (for example; put the intrusion-control panel in Programming status).

The Programming menu allows you to program and change the device configuration. Access to programming is indicated by blinking on the LEDs (STATUS LED , left flasher, right flasher and PRG LED). The PAGE button (*Table 4, A*) allows you to access the menus.



The Programming steps 5-1

1. Remove the cover.
2. Powerup the device; the STATUS LED will blink at 1 second intervals. The device will exit the programming phase and step back to this point if no command is received within the allowed time.
3. Press and hold the PAGE button until the STATUS LED goes Off.
4. Use the PAGE button to move to the different options on the menu The LED combination (the LEDs which blink) identifies the option concerned.
5. Press the SEL button (*Table 4, B*), to select the required option. The LED combination (the LEDs which are On solid) indicates the current setting of the option concerned.
6. To change a setting, press the SEL button again until the LED combination indicates the desired setting.
7. The PAGE button will allow you to select the desired menu.
8. To exit the Programming session, wait 20 seconds (do not press any buttons); the LEDs will blink to signal that the session has ended. If you wish to exit without saving, select "0" from the menu.
9. To complete the installation phase, work through the steps indicated in paragraph *3-1 Installation guidelines* from point 10.

Programming Menu 5-2

The following table shows, under the caption "Menu", all the options on the Programming menu and their respective LED combinations:

Table 6: **Programming Menu**

Menu			Options				
Num.	LED combinations 3 2 1 0	Menu options	3 2 1 0 ● ○ ○ ○	3 2 1 0 ○ ● ○ ○	3 2 1 0 ○ ○ ● ○	3 2 1 0 ○ ○ ○ ●	3 2 1 0 ○ ○ ○ ○
0	○ ○ ○ ○	**Exit without saving**	/	/	/	/	Exit
1	○ ○ ○ ▨	**START input**	Negative applied	Positive applied	Negative removed	Positive removed	Deactivated
		I-BUS loss delay *	+ 8 minutes	+ 4 minutes	+ 2 minutes	+ 1 minutes	Deactivated
2	○ ○ ▨ ○	**STOP input**	Negative applied	Positive applied	Negative removed	Positive removed	Deactivated
		I-BUS lost *	TAMPER Output	TAMPER Output	Visual signaling	Sounder	Deactivated
3	○ ○ ▨ ▨	**Audible signaling**	Tone 4	Tone 3	Tone 2	Tone 1	/
4	○ ▨ ○ ○	**Maximum duration of audible signaling**	*	9 minutes	6 minutes	3 minutes	/
5	○ ▨ ○ ▨	**Flashes**	Blinking on the LEDs connected to the LED Input	56 flashes/ minute	46 flashes/ minute	36 flashes/ minute	/
6	○ ▨ ▨ ○	**Outputs: TAMPER and FAULT**	TAMPER normally closed	TAMPER normally open	FAULT normally closed	FAULT normally open	/
7	○ ▨ ▨ ▨	**Activation of the START input**	STATUS LED	PRG LED	Visual signaling	Sounder	Deactivated
		(empty) *	/	/	/	/	/
8	▨ ○ ○ ○	**Activation of the LED input**	STATUS LED	PRG LED	Visual signaling	Sounder	Deactivated
9	▨ ○ ○ ▨	**Power failure**	FAULT Output	TAMPER Output	Visual signaling	Sounder	Deactivated
10	▨ ○ ▨ ○	**Open-casing signal**	FAULT Output	TAMPER Output	Visual signaling	Sounder	Deactivated
11	▨ ○ ▨ ▨	**Foam tamper signal**	FAULT Output	TAMPER Output	Visual signaling	Sounder	Deactivated
12	▨ ▨ ○ ○	**Blow-torch tamper signal**	FAULT Output	TAMPER Output	Visual signaling	Sounder	Deactivated
13	▨ ▨ ○ ▨	**Horn trouble**	FAULT Output	TAMPER Output	STATUS LED	PRG LED	Deactivated
14	▨ ▨ ▨ ○	**Low battery**	FAULT Output	TAMPER Output	STATUS LED	PRG LED	Deactivated
15	▨ ▨ ▨ ▨	**Reset default / Address ***	/	/	/	/	Default
			+ 8	+ 4	+ 2	+ 1	● ● ● ●

*: Options present on I-BUS- connectable Ivy models only

**: When this option is enabled, the LED STATUS becomes ON solid

- **0** - PRG LED
- **1** - Right LED on flasher circuit
- **2** - Left LED on flasher circuit
- **3** - STATUS LED
- ◯ - LED Off
- ● - LED On solid
- ▨ - LED blinking

Instead (under the caption "Options"), the programmable settings for each item, highlighted on a grey background (▭) are the options enabled at default.

The following section describes the menu options.

0 - **Exit without saving**: when you come to this option, wait 20 seconds for the device to exit the programming phase without saving.

1 - **START input**: allows you to select the polarity of the START input.

- **I-BUS Loss delay**: allows you to select the time (15 minutes at default) which must pass before the loss of the I-BUS is signaled.

2 - **STOP input**: allows you to select the polarity of the STOP input.

- **BUS Loss**: allows you to select the type of signaling associated with the loss of the I-BUS.

3 - **Audible signaling**: allows you to select the type of sound emitted by the horn.

4 - **Maximum audible-signal time**: allows you to select the maximum time the horn will sound for, after which only other types of signaling will continue until the Ivy unit restores to standby.

5 - **Visual signals**: the first option allows blinking on the STATUS and PRG LEDs activated by the LED input; the other options allow you to select the visual signal on the flasher.

6 - **TAMPER and FAULT Outputs**: allows you to select the type of contact (normally open or normally closed) of the outputs during standby status.

7/8 - **START/LED Input Activation**: allows you to select the signaling associated with the activation of this input.

9/14 - **Power failure; Open-casing tamper; Foam tamper, Blow-torch tamper; Horn damage; Low battery**: allows you to select the signaling associated with the event.

15 - **Restore Default / Address**: if you select the option with "all LEDs On solid", the current programming will restore to factory default settings. Selection of the BUS Address is achieved by the summing the value corresponding to each LED On solid (max. 10); restoral to default does not change the assigned address.

Programming from a PC 5-3

Only BUS-connectable Ivy units can be programmed via PC.

The SmartLeague software will allow you to program/change the previously mentioned parameters/settings of the Ivy unit.

Additionally, the software application allows you to program the "patterns", that is to say, the type of signaling, duration and volume of the audible signals generated by the SmartLiving intrusion control panel.

The parameters of each pattern are as follows:

- **Description** - 16 character description of the pattern
- **Sounder ON/OFF** - enables/disables activation of the sounder
- **Sounder time** - signalling activation time of the sounder; expressed in seconds (from 1 to 125) or minutes (from 1 to 125)
- **Sounder tone** - sound type selectable from 5 tones
- **Sounder volume** - volume selectable from 17 levels
- **Flasher ON/OFF** - enables/disables activation of the flasher
- **Flasher time** - signalling activation time of the flasher; expressed in seconds or minutes or "continuous". If you select "continuous", the flasher will remain active without limitation or at least until it receives a "shutoff" command. However, if the flasher is triggered in continuous mode by a zone alarm, terminal tamper, partition alarm or partition tamper, the flasher can also be deactivated by a memory reset command.
- **Flasher type** - selectable from the following types:
  - 1=36 flash/min
  - 2=46 flash/min
  - 3=56 flash/min
  - 4=ON solid
- **STATUS LED ON/OFF** - enable/disable activation of the STATUS LED
- **PRG LED ON/OFF** - enable/disable activation of the PRG LED
- **TAMPER output ON/OFF** - enable/disable activation of the TAMPER output
- **FAULT output ON/OFF** - enable/disable activation of the FAULT output

8 types/pattern are available, programmed in the following way at default:

Table 7: **Patterns - default**

n	Description	Sounder ON/OFF	Sounder time (seconds)	Sounder tone	Volume sirena	Flasher ON/OFF	Flasher time (seconds)	Flasher type (flash/min)	LED STATUS LED PRG TAMPER output FAULT output ON/OFF
1	Burglar	ON	180	Tone 1	16	ON	180	56	OFF
2	Burglar low volume	ON	180	Tone 1	6	ON	180	56	OFF
3	Fire	ON	180	Tone 3	16	ON	180	56	OFF
4	Tamper	ON	180	Tone 1	16	ON	180	36	OFF
5	Pre-alarm	ON	30	Tone 1	0	ON	30	36	OFF
6	Tecno	ON	3	Tone 1	6	OFF			OFF
7	Signalling	ON	1	Tone 5	0	ON	3	ON solid	OFF
8	Bell	ON	3	Tone 4	0	ON	3	ON solid	OFF

A shutoff pattern is illustrated below:

Shutoff	OFF	no effect	OFF	no effect	OFF

Appendix A

ORDER CODES

Code	Product
DCMIINE0IVY	Installation and programming guide
Ivy	Self-powered outdoor sounder/flasher
Ivy-B	Self-powered outdoor sounder/flasher connectable to BUS
Ivy-BF	Self-powered outdoor sounder/flasher connectable to BUS with foam tamper protection
Ivy-BFM	Chrome-look self-powered outdoor sounder/flasher connectable to BUS with foam tamper protection
Ivy-BM	Chrome-look self-powered outdoor sounder/flasher connectable to BUS
Ivy-F	Self-powered outdoor sounder/flasher with foam tamper protection
Ivy-FM	Chrome-look self-powered outdoor sounder/flasher with foam tamper protection
Ivy-M	Chrome-look self-powered outdoor sounder/flasher
LINKIBUS	Temporary I-BUS link cable
SmartLeague	Programming and management software for INIM devices
SmartLiving505	Intrusion control panel with 5 terminals, 5 partitions, 1.2 A switching power supply, metal casing for 7Ah battery
SmartLiving515	Intrusion control panel with 5 to 15 terminals, 5 partitions, 1.2 A switching power supply, metal casing for 7Ah battery
SmartLiving1050	Intrusion control panel with 10 to 50 terminals, 10 partitions, 3A switching power supply, metal casing for 7Ah battery
SmartLiving1050L	Intrusion control panel with 10 to 50 terminals, 10 partitions, 3A switching power supply, metal casing for 17Ah battery
SmartLiving10100L	Intrusion control panel with 10 to 100 terminals, 15 partitions, 5A switching power supply, optional TCP/IP connectivity, metal casing for 17Ah battery

Warranty

INIM Electronics s.r.l. (Seller, Our, Us,) warrants the original purchaser that this product shall be free from defects in materials and workmanship under normal use for a period of 24 months. As INIM Electronics s.r.l. does not install this product directly, and due to the possibility that it may be used with other equipment not approved by Us; INIM Electronics s.r.l. does not warrant against loss of quality, degradation of performance of this product or actual damage that results from the use of products, parts or other replaceable items (such as consumables) that are neither made nor recommended by INIM Electronics. Seller obligation and liability under this warranty is expressly limited to repairing or replacing, at Seller's option, any product not meeting the specifications. In no event shall INIM Electronics s.r.l. be liable to the purchaser or any other person for any loss or damage whether direct ot indirect or consequential or incidental, including without limitation, any damages for lost profits, stolen goods, or claims by any other party caused by defective products or otherwise arising from the incorrect or otherwise improper installation or use of this product.

This warranty applies only to defects in parts and workmanship relating to normal use. It does not cover:

- damage arising from improper maintenance or negligence
- damage caused by fire, flood, wind or lightning
- vandalism
- fair wear and tear

INIM Electronics s.r.l. shall, at its option, repair or replace any defective products. Improper use, that is, use for purposes other than those mentioned in this manual will void the warranty. Contact Our authorized dealer, or visit our website for further information regarding this warranty.

Limited warranty

INIM Electronics s.r.l. shall not be liable to the purchaser or any other person for damage arising from improper storage, handling or use of this product.

Installation of this Product must be carried out by qualified persons appointed by INIM Electronics. Installation of this Product must be carried out in accordance with Our instructions in the product manual.

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Directive 2004/108/CE (EMC) compliance

Hereby INIM Electronics s.r.l. declares that IVY sounders are in compliance with the essential requirements and other relevant provisions of Directive 2004/108/CE.

The full declarations of conformity of the above-mentioned devices are available at URL: www.inim.biz

ISO 9001: 2008 registered company

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