



Ness Evolution
Multi-media Touch Screen for Ness SmartLiving systems
INSTALLATION & PROGRAMMING MANUAL



GameOver



Innovative Electronic Solutions



www.nesscorporation.com

National Customer Service Centre
Ph: 1300 551 991
customerservice@ness.com.au

EVOLUTION Installation & Programming Manual

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Table of contents

Warranty	2
Limited warranty	2
Copyright	2
Table of contents	3
About this manual	5
0-1 Terminology	5
0-2 Graphic conventions	5
Chapter 1 General information	6
1-1 Manufacturer's details	6
1-2 Description of the product and various models	6
1-3 Included documents	6
Chapter 2 Device description	7
2-2 Description	8
2-3 CapSense buttons	11
2-4 Outputs	11
2-5 Hard reset button	12
2-6 Package contents	12
Chapter 3 Installation	13
3-1 Environmental Conditions	13
3-2 Wall-mounting	13
3-3 Connecting the switching power supply	13
3-4 Connecting to the LAN	14
3-5 Connecting to the SmartLiving control panel	15
Chapter 4 First power up	16
Chapter 5 Using the Evolution device	17
5-1 Home page	17
5-2 Operating environment data	17
5-3 Widgets	18
5-4 Status banner	18
5-5 Buttons	20
5-6 Events log	22

- 5-7 Graphic maps 24
- Chapter 6 Programming 25
 - 6-1 .NET Framework 25
 - 6-2 The EvoPro software application 26
 - 6-3 The EvoLight software application 29
- Chapter 7 Errors and faults 32
 - 7-1 Fault signalling 32
 - 7-2 Tamper event 32
- Appendix A Recurrent buttons and icons 33
- Appendix B The SmartLiving control panel status 34
 - Notes 37

ABOUT THIS MANUAL

DCMIINE0EVO **MANUAL CODE**2.00 **VERSION**

Terminology 0-1

When not otherwise specified, refers to the Evolution device.	DEVICE
Refers to the intrusion control panel of the SmartLiving system.	CONTROL PANEL
Directions as seen by the operator when directly in front of the mounted device.	LEFT, RIGHT, BEHIND, ABOVE, BELOW
Click-on a specific item on the interface (from a drop-down menu, options box, graphic object, etc.).	SELECT
Press/Click-on a key/button on the touch screen.	PRESS

Graphic conventions 0-2

Following are the graphic conventions used in this manual.

Conventions	Example	Description
Text in italics	Refer to <i>paragraph 0-2 Graphic conventions</i>	Indicates the title of a chapter, section, paragraph, table or figure in this manual or other published reference.
<text>	#<AccountCode>	Editable field
[Uppercase letter]	A	Reference relating to a part of the system or video object.
Button		Touch screen buttons

The "Note" sections contain important information relating to the text.

Note

The "Attention" prompts indicate that total or partial disregard of the procedure could damage the device or its peripherals.

ATTENTION!

Chapter 1

GENERAL INFORMATION

Suppliers details 1-1

Supplier: Ness Corporation
Address: 4/167 Prospect Hwy,
Seven Hills, NSW, 2147, Australia
Tel: +61 2 8825 9222
e-mail: customerservice@ness.com.au
Web: www.nesscorporation.com

Any persons authorized by the manufacturer to repair or replace the parts of this system, hold authorization to work on Ness Corporation only.

Description of the product and various models 1-2

Description: Multimedia device for domotic control
Models: Evolution/G - multimedia device for domotic control in SmartLiving systems with Ethernet interface and WiFi.
Evolution/S: multimedia device for domotic control in SmartLiving systems with Ethernet interface.

Included documents 1-3

- Installation Manual (this manual)
- User's Manual

These manuals are included in the package. If you wish to order extra copies, please contact the offices at Ness Corporation.

Features 1-4

MAIN FEATURES

- 7" touch screen
- 4 programmable CapSense buttons
- Proximity sensor
- Thermometer
- Loudspeaker
- MicroSD card reader (card not included)
- RJ45 Ethernet connection

- WiFi connection (for Evolution/G only)
- 5 activable outputs
- Relay Output
- Protected against forced opening and dislodgement
- Preloaded software for graphic-interface management in Linux EvoSuite environment
- Programming software for EvoPro
- Configuration software for EvoLight
- Flush-mount backbox included
- Optional power-supply @ 14 Volt, 1 A (IPS12015DT)
- Optional backup battery
- Touch pen (included)

- Manages up to 10 SmartLiving control panels
- SmartLiving panel zones: status visualization, unbypassed, bypassed
- SmartLiving panel outputs: status visualization, activation, deactivation
- Evolution device outputs: status visualization, activation, deactivation
- SmartLiving partitions: status visualization, armed, disarmed
- Viewing the SmartLiving events log
- Graphic map management

INTRUSION CONTROL FUNCTIONS

- Activation of SmartLiving system scenarios
- Multiple installation management
- Manages up to 16 IP cameras
- Multimedia management of SmartLiving control panel events with text visualization, fixed images, webcam images, audio file and the possibility to carry out contextual actions.
- Cause/Effect event management on distinct SmartLiving panels

DOMOTIC FUNCTIONS

- Programmable Homepage
- Use of up to 4 widgets
- Use of up to 8 domotic action buttons
- Predefined facebook and twitter buttons
- Analogue clock
- Weather forecast
- Slideshow
- RSS reader
- Audio playback
- Video playback
- Photoframe function
- Web Browser
- Qwerty keyboard

MULTIMEDIA FUNCTIONALITY

Description 1-5

The data label, seen opposite, is positioned on the back of the Evolution device casing.

The following section describes the technical features of the devices and their component parts:

Table 1: Technical features

Models	Evolution/S	Evolution/G
Nominal output voltage	13.8V	
Voltage - operating range	11 - 16 V	
Maximum current draw	0.3A	0.5A
Maximum current for +AUX terminal	400 mA	
Switching power supply	14 V - 1 A	
Backup battery	12V, 800mAh Lead battery	
WiFi	Not available	802.11b/g Integrated antenna
Screen	LCD TFT RGB 7 inch 800X480 pixel	
Evolution device dimensions (W x H x D)	21.8 x 14.2 x 3.5cm	
Flush-mount box dimensions (L x A x P)	21.4 x 12.9 x 5.4cm	
Weight	570 g	

Table 2: Evolution device - description of parts

A	Screen
B	CapSense buttons
C	Touch pen holder
D	Fasteners
E	Anchor screws
F	Screw locations
G	Cable entry
H	PCB
I	Dislodgement tamper switch

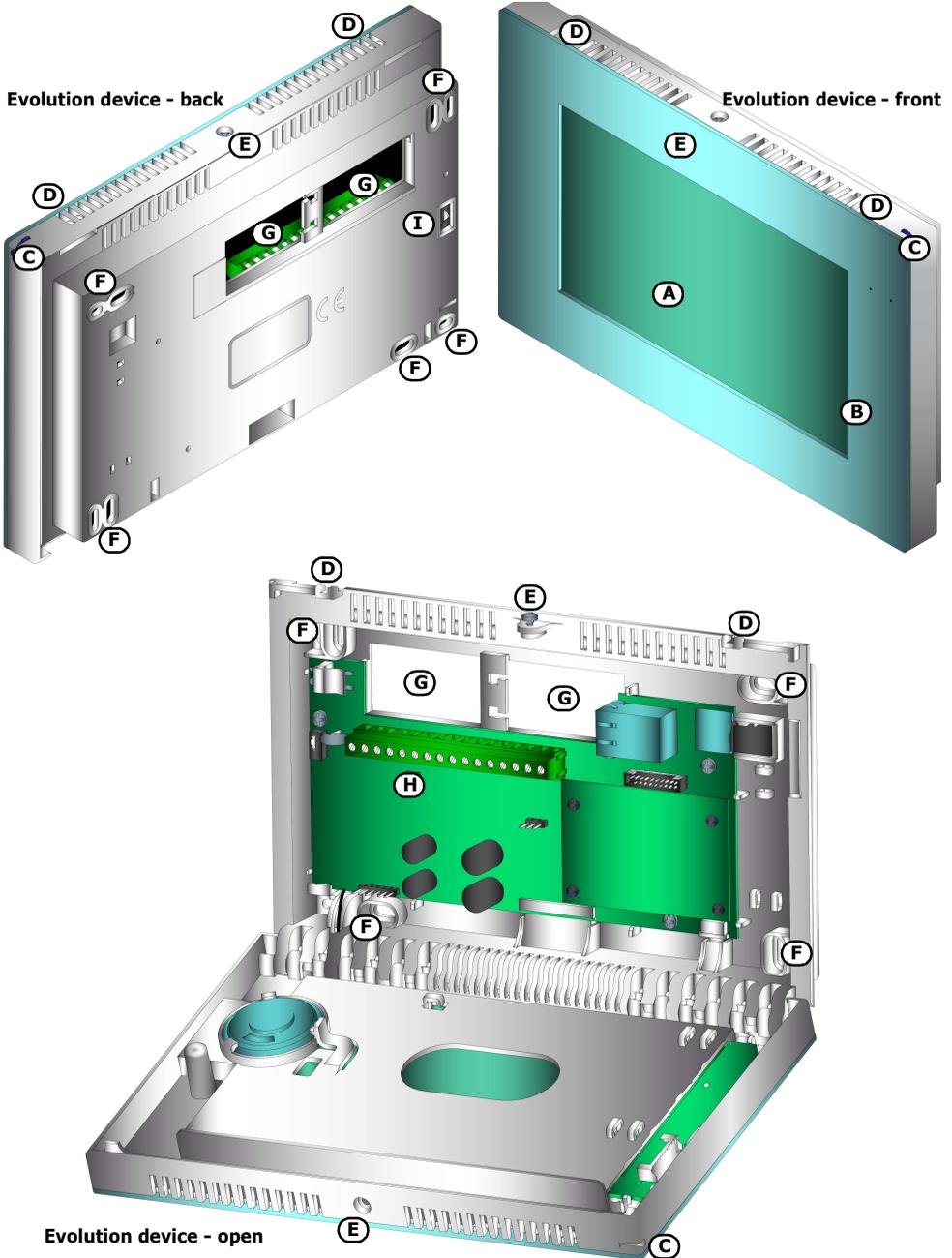


Table 3: PCB - description of parts

A	Terminals
B	Open tamper switch
C	Battery connector
D	Ethernet connector
E	Micro-SD card connector
F	Relay jumper Connectors
G	Blue and yellow activity LEDs
H	Temperature sensor
I	Hard reset button

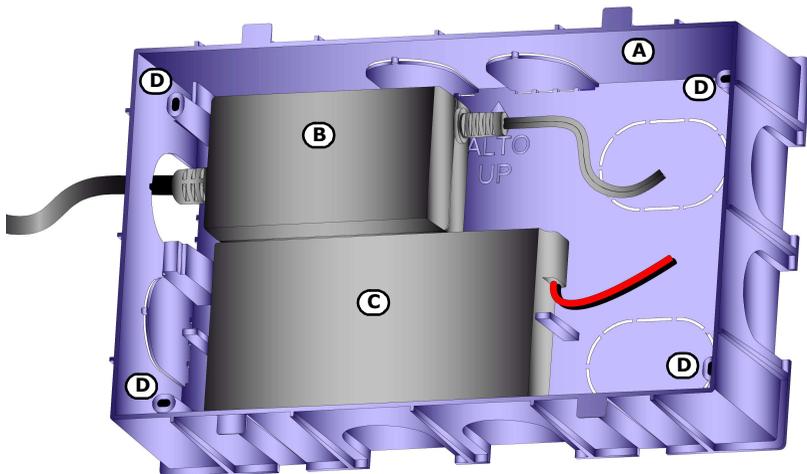
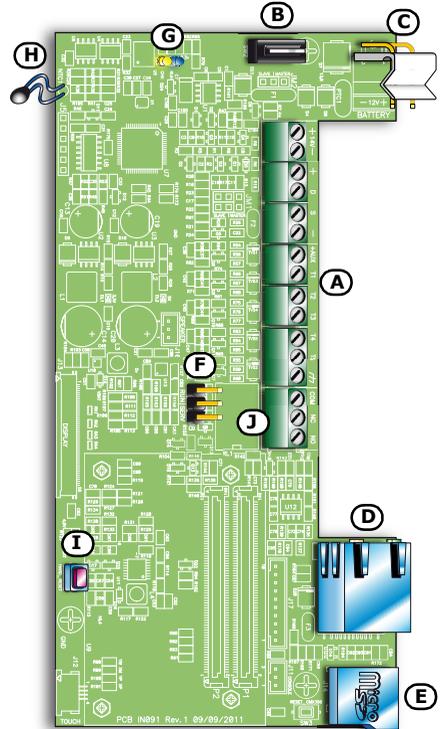
Table 4: Terminal board

+ 14 -	Power input terminals
+ D S -	I-BUS connection terminals
+AUX	12V ancillary power source terminal
T1 T2 T3 T4 T5	Screw terminals T1, T2, T3, T4 and T5
	Negative power terminal (Negative or GND)
COM NC NO	Voltage-free terminals of the relay output

Table 5: Flush-mounting - assembly option

A	Flush-mounting box
B	Switching power supply
C	Backup battery
D	Screw locations

Evolution device - PCB



CapSense buttons 1-6

The Evolution device provides users with 4 CapSense buttons, located on the right side of the touch screen (*table 2, B*).

These buttons have dual-application:

- Normal - activated by a brief touch
- Superkey - activated by a prolonged touch

You (the installer) can associate a function or command to each operating mode (normal and superkey) of each of the 4 CapSense buttons (refer to paragraph *5-2-2 Configuration sections*).

Outputs 1-7

The Evolution device is equipped with electric output points (terminals T1 to T5) and a relay (*table 3, A*) for activation/deactivation of a signalling device or action. The outputs can be activated by pressing a touch screen button or CapSense button (*table 2, B*) or in response to programmed events.

The outputs (refer to paragraph *5-2-2 Configuration sections*) provide the following options:

The outputs are bistable at default and thus, once activated, require an explicit command to deactivate them.

MONOSTABLE OUTPUT

During the programming phase, bistable outputs can be transformed into monostable outputs by defining an activation time (in seconds). If this is done, the output will deactivate when the set time expires. If a further activation occurs while the set time is still running, the "Retrigger" option will refresh and restart the programmed activation time.

When the output activates, it generates a 1Khz signal. This signal can be used to drive a buzzer.

BUZZER (BEEP)

When the output activates, it generates an intermittent signal (0.5 sec ON and 0.5 sec OFF). This signal can be used for the direct control of a visual signalling device (e.g. flasher).

FLASHER

This option defines the status of the output during standby.

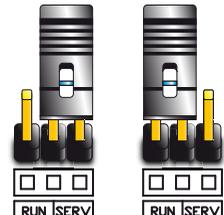
NORMALLY CLOSED

Relay jumper 1-7-1

The Evolution device is equipped with connectors for a jumper which when inserted bypasses the relay output (*table 3, F*). Two positions are possible:

- The "RUN" position (position at default) which unbypasses (includes) the relay output.
- The "SERV" position which bypasses (excludes) the relay output.

The "SERV" position bypasses (excludes) the relay output and inhibits any status changes generated by programmed events.



Hard reset button 1-8

The hard reset button (*table 3, I*) is a dual-function button which operates in accordance with how it is pressed:

- If touched briefly, it restarts the graphic interface and updates the system.
- If pressed and held for 10 seconds, it resets the Evolution device to the factory default settings.

Package contents 1-9

Inside the package you will find:

- The Evolution device
- Touch pen inserted
- Flush-mounting box
- Bag containing:
 - 10 resistors @ 1/4W 5% 3K90hm
 - 10 resistors @ 1/4W 5% 6K80hm
 - 1 zinc cover screw (3X9.5mm)
 - 4 zinc screws (3.5X13mm) to secure the flush-mount box
- User's Manual
- User's CD containing:
 - Configuration software for EvoLight
 - dotnetfx.exe, setup .NET Framework
 - User's Manual in portable document format (PDF)
- Installer's CD containing:
 - Programming software for EvoPro
 - dotnetfx.exe, setup .NET Framework
 - User's Manual in portable document format (PDF)
 - Installer's Manual in portable document format (PDF)

The following items are not included in the package and must be purchased separately.

- Backup battery
- Switching power supply

Chapter 2

INSTALLATION

Environmental Conditions 2-1

All models of the Evolution device are for indoor installation only and operate best under the following conditions:

- **Temperature:** from -10° to $+40^{\circ}\text{C}$
- **Maximum humidity:** 75% (without condensation)
- **Environmental class:** II

Wall-mounting 2-2

The Evolution device should be installed in a place which best suits the user's needs and conforms to the requirements of the relative standards and regulations.

1. Prepare the wall for flush-mounting. Take care not to damage gas or water pipes, electrical ducts, etc., during this phase.
2. Insert the flush-mount box (*table 5, A*) into the wall and fix it firmly in place.
3. Pull the cables through the wire entry which is most appropriate for the installation needs.
4. Locate the backup battery and switching power supply in the most suitable positions with regard to the cables inside the box.
5. Connect the device to the mains.
6. Remove the screws (*table 2, G*) and open the device casing by pressing on the casing fasteners (*table 2, F*).
7. Pull the cables through the wire entry on the back of the device (*table 2, I*).
8. Using the screw locations (*table 2, H* and *table 5, D*) and the screws provided, attach the device to the flush-mount box.
9. Once attached, ensure that the dislodgement tamper switch (*table 2, I*) is closed.
10. Complete all connections.
11. Close the device casing.

Connecting the switching power supply 2-3

The Evolution device can be powered by three different power sources which can be used and connected singly or together.

If you intend to use mains power, you must acquire a switching power supply (*table 5, B*) whereby provide a separate line coming from the mains power panel. The line must be protected by a safety-standards compliant circuit breaker (trip switch).

**MAINS POWER 230V
A.C. 50HZ).**

Evolution

The protective earthing system must be compliant with all safety standards and laws in force.

Ensure that the Mains is switched Off during the mains connection phase. Danger of electric shock.

Connect the switching power-supply module (already connected to the mains supply) to terminals "+ 14 -" of the PCB terminals (*table 3, A*). Take care not to invert the wiring polarity. This module feeds the Evolution device and its output devices and also recharges the backup battery.

ATTENTION!

The I-BUS line (for direct connection to the SmartLiving panel) also supplies a 12V current through the I-BUS connection terminals "+ " and "- " on the PCB (*table 3, A*). This current provides power to the Evolution device and its output devices and also recharges the backup battery.

I-BUS

The backup-battery (*table 5, C*) must be connected to the connector on the PCB (*table 3, C*) by means of the battery wire and faston tabs (included).

BACKUP BATTERY

Ensure that battery polarity is correct:
- black wire = negative
- red wire = positive

ATTENTION!

The lead battery is a secondary power source which powers the Evolution device and its connected output devices when the primary power source (switching power supply, I-BUS or both) is not present.

Connecting to the LAN 2-4

The Evolution device interfaces with the outside (SmartLiving panels, internet and computers) by means of its LAN, Ethernet and WiFi network capacities.

Therefore, during the configuration phase of the LAN, it is essential to specify the following parameters of the Evolution device:

- IP Address
- Gateway
- Netmask
- DNS

In order to connect to an Ethernet, it is necessary to insert a UTP cable with RJ45 connectors into the respective connector on the PCB (*table 3, D*).

ETHERNET

At default the Evolution device is configured for Ethernet access. Therefore, the first connection must be done exclusively through this type of LAN.

Only the Evolution/G model is capable of connecting to a LAN WiFi network . This is done by means of a router or WiFi access point. In order to guarantee proper access, the following options must be set up during the configuration phase:

WIFI

- SSID
- Cryptography type
- Password

Connecting to the SmartLiving control panel **2-5**

If the Evolution device is used as an enhancement of a SmartLiving system, it must be connected to the control panel through the LAN.

In order to make use of a LAN (Ethernet or WiFi), SmartLiving control panels must be equipped with a LAN interface board (SmartLAN/G or SmartLAN/SI). **THE LAN**

Successively, during the configuration phase, it is necessary to determine the "local" SmartLiving control panel.

For the full instructions regarding these connections, refer to the SmartLiving control panel and SmartLAN board Installation Manuals.

Note
If any of the control panels connected to Evolution has changed the programming, it is necessary to restart all the Evolution connected. To restart Evolution see paragraph 1-8 *Hard reset button* and table 9, *Advanced settings*.

Chapter 3

FIRST POWER UP

On first power up, the Evolution device initializes the parameters at default (factory settings).

The default parameters set the Evolution device as a stand-alone device without any connections to control panels or peripherals. Therefore, it is appropriate to programme the system configuration on first startup after installation, in accordance with the following procedure.

1. Attach the Evolution device to the wall.
2. Connect all the system devices (control panels and devices to the BUS or Ethernet network).
3. Connect the wires to the Evolution device (BUS, LAN).
4. Connect the Evolution device outputs.
5. Connect the switching power supply, if necessary.
6. Connect the backup battery, if necessary.
7. The device will switch on and initialize the touch screen calibration phase and show the following message:

Evolution device touchscreen calibration Touch crosshair to calibrate

The crosshair icon will appear in the viewfinder . Touch the icon 5 times with the touch pen (included in the device package) to complete the calibration phase.

Be careful not to touch any other part of the touch screen during this operation, as this will put the entire calibration phase in jeopardy.

ATTENTION!

Once this phase is complete, a series of "wait" screens will appear to indicate that data is loading. When finished, the Evolution multimedia application will start on the home page.

8. Set all the Evolution device parameters.
9. Set all the parameters and configure all the system devices.

At default, the Evolution device is setup for connection via Ethernet. Therefore, the first configuration must be done using this type of connection only.

Note

Chapter 4

USING THE EVOLUTION DEVICE

The fruition of the Evolution device is done through the RGB touch screen and the CapSense buttons (to the right of the touch screen).

The user can navigate inside the "Evolution system" by means of the pages, signalling icons and all the connected devices and "click-on" buttons which allow you to navigate and activate commands.

The appendix provides a list of icons and buttons which may appear on several pages with the same properties (refer to *Appendix A, Recurrent buttons and icons*).

Home page 4-1

The home page, which appears on first startup of the Evolution device, provides users with all the necessary information. The home page is divided into four sections:

Table 6: Home page

A	Operating environment data	
B	Widgets	
C	Status banner	
D	Buttons	Evolution device management
E		Application

Operating environment data 4-2

In this section (*table 6, A*), located on the top right, you can view the:

- Time/Hour
- Date
- Temperature

Evolution

The temperature value is indicated in °C but can be hidden during the programming phase.

At default, the data refers to the Evolution device. However, the data can also be downloaded from a connected SmartLiving control panel (the control panel must be equipped with a Joy/MAX keypad in order to provide temperature values) which, during the configuration phase, must be configured as "local".

To view or change the Evolution device clock and/or the temperature sensed by its on-board sensor (*table 2, H*), use the respective buttons (refer to paragraph *4-5 Buttons*).

Widgets 4-3

The section on the bottom left (*table 6, B*) is dedicated the Evolution device widgets which can be setup via EvoPro software application:

- Presentation of images
- Weather forecast
- Analogue clock
- SmartLiving control panel status
- RSS News

These widgets allow users to view data and information immediately on the home page, but can also function as buttons for the activation of services (refer to paragraph *5-2-2 Configuration sections*).

In order to use the image widget, you must first insert a micro-SD card into PCB (*table 3, E*) which contains the pictures.

Note

Status banner 4-4

The section on the top left (*table 6, C*) shows the status of the Evolution device and the SmartLiving control panels in the configuration, by means of side scrolling templates (one for each device). This scrolling is automatic but can also be guided by the scroll arrows on the right.



Each box is a button which, when pressed, takes you to the status viewing page.

The  button on the left opens a window showing the Evolution device and the control panels in the configuration, arranged in list form. Pressing the  button on this page allows you to view the status of the selected Evolution device or control panel.

The Evolution device status indicates the following:

- Description - the identification string of the Evolution device
- Firmware Revision
- Type of power
- Voltage status:

EVOLUTION DEVICE STATUS

Table 7: Evolution device banner

Signalling	Icon	Cause	Note
Backup-battery power		The backup battery is capable of supplying sufficient voltage current to the Evolution device.	The icon will not be shown if, as well as the battery, another power source is connected.
Mains power		The switching power supply provides power to the Evolution device.	If the switching power supply and the BUS are connected, both signals will appear simultaneously.
Power from I-BUS		The power to the Evolution device is supplied through terminals "+" and "-" of the BUS.	
Normal current		The current supplied to the Evolution device is sufficient (approx. 12V).	

If you press this template, you will have access to two sections:

-  a section where you can view and change the status of the Evolution device outputs;
-  a section where you can view the voltage current supplied by the switching power supply and the BUS, and also the current used by the board and fed to the terminals.

The status banner of SmartLiving control panels which are shown on the home page, indicate the following:

- Description - the identification string of the control panel
- Control panel model and firmware revision
- Away arming mode status
- Alarm and fault status

CONTROL PANEL STATUS

Table 8: Control panel banner

Signalling	Icon	Cause
Away armed		At least one of the partitions belonging the SmartLiving control panel is armed.
Disarmed		All the partitions of the SmartLiving control panel are disarmed.
Standby		All the partitions of the SmartLiving control panel are in standby.

Table 8: Control panel banner

Alarm		At least one of the partitions of the SmartLiving control panel is in alarm status.
Fault/Tamper		At least one SmartLiving system partition has detected fault or tamper status..

If you press this box, a page will appear which contains the control panel description and four buttons that allow you to access the viewing and management sections of the control panel status.

For a more detailed description of these sections, refer to the SmartLiving control panel manual or to *Appendix B, The SmartLiving control panel status*.

Buttons 4-5

The section on the bottom left shows the command activation and programming buttons relating to the management of the Evolution device (*table 6, D*) and other applications (*table 6, E*).

There can be as many as 16 buttons, distributed as follows:

- 4 buttons for Evolution device management, fixed and unprogrammable
 - Settings
 - Events log
 - Screen cleaning
 - Graphic maps
- 4 application buttons, fixed and unprogrammable
 - Presentation of images
 - Media player
 - Browser internet
 - Videocameras
- 8 programmable buttons for commands to the Evolution device or to the control panels (refer to paragraph 5-2-2 *Configuration sections*).



The  button allows you to access the programming sections of the Evolution device parameters.

Changes will become operative only after pressing the "Save" button.

SETTING THE EVOLUTION DEVICE PARAMETERS

Table 9: **Settings buttons**

Section	Icon	Function	Note
Evolution device parameters		This section allow you to select the: <ul style="list-style-type: none"> • loudspeaker volume • touch screen brightness • compensation of the temperature sensed by the on-board sensor 	The temperature compensation setting will not appear, if the temperature shown on the home page is that sensed by the local control panel.
View network parameters		This section allows you to view all the data relating to the connected LAN and the available WiFi networks. To start the search, press the  button. If any WiFi networks are available, they will be listed in the section on the bottom left. The SSID and signal power (%) of each WiFi network will be indicated.	The LAN connection type is indicated by the icon on the top right: <ul style="list-style-type: none"> •  Ethernet connection •  WiFi connection
Advanced settings		This section provides three additional configuration buttons: <ul style="list-style-type: none"> •  a reset button which restarts the graphic interface and system update •  a hard reset button which resets the factory default settings •  a button which starts the firmware upgrade procedure. 	All these operations require confirmation before being executed.
Date / Time		This section allows you to change the date and time on the Evolution device.	This section will not appear if the data shown on the home page refer to the local control panel.



The  button allows you to access and view the events log of the Evolution device.

EVENTS LOG

For further details about the events log refer to paragraph 4-6 *Events log*.



The  button allows you to bypass (exclude) the functions of the touch screen, in order to allow the user to clean the Evolution device without the risk of activating undesired commands.

SCREEN CLEANING

If you wish to restore the touch screen functions and return to the



home page, you must press and hold the  button for at least 4 seconds.



The **GRAPHIC MAPS** button allows you to access and view the configured graphic maps.

Refer to paragraph 4-7 *Graphic maps* for a full description of the graphic maps and their functions.

Following is a table containing the buttons inserted at default in the homepage and the relative applications: **APPLICATION**

Table 10: **Application buttons**

Section	Icon	Function	Note
Presentation of images		Photo-frame application for JPG and PNG file viewing on touch screen.	In order to use this application, you must first insert a micro-SD card into PCB (table 3, E) which contains the files.
Media player		Multimedia reader for audio and video file reproduction	
Internet browser		Application for Internet navigation via web pages/ cellphone	
Videocameras		This section allows you to view the video footage of the configured cameras.	You can select the camera by means of the buttons on the left. The button allows you to scroll through the cameras in groups of 4. To view in streaming mode press .

Events log 4-6

The events log is a selection of events related to the functioning and the use of the Evolution. The events stored in the log are selected by the programming software EvoPro and they can be configured in every parameter (see paragraph 5-2-2 *Configuration sections*).

The Evolution device, as well as saving events to the events log, can be programmed to signal the occurrence of events in various ways in accordance with their programming:

- Automatic opening of the events log
- Audible signalling by means of sound files
- Visualization of the button on the homepage which, when pressed, opens the events log.

Pressing the button on the homepage opens the events log:

Table 11: **Events log**

A	Events list	
B	Description of the selected event	
C	Control button	
D	Image attached to the selected event	
E	Videocamera attached to the selected event	

The section on the bottom left shows the list of events recorded in the memory; each event indicates the following:

- Time and date
- Description of the control panel
- Event icon
- Device description
- Event description
- Image attached to the event; this image can be configured as a graphic map link
- Videocamera in streaming mode attached to the event

Additionally, the following control buttons are available:

Table 12: **Events log control buttons**

Button	Icon	Function	Note
Command		Button for the activation of the command associated with the selected event	
Clear log		Button to delete all events from the log	This operation cannot be undone
Automatic events log page opening		Indicates that the events log page opens automatically at the occurrence of an event.	This button switches the ongoing function to the ongoing function to the alternative function.
		Indicates that the occurrence of an event will change the icon of the button for accessing to the events log page; the button becomes	

Graphic maps 4-7

The Evolution device provides supervisory functions based on graphic maps which are connected in a tree structure.

A map is a graphic representation of a portion of the space in which the security systems are, identified by an image file.

Each map may contain an arbitrary number of icons represented by icons. An object can be:

- Partition status
- Partition arming-mode status
- Zone status
- Zone activation status
- Link to a map
- IP camera

The status icons used are those described in appendices *A* and *B*.

The configuration of the maps (maximum 20) and the objects located on them (maximum 400) is possible via EvoPro software only, as described in paragraph *5-2-2 Configuration sections*.

Chapter 5

PROGRAMMING

The programming process of the Evolution device includes:

- setting the operational and functional parameters of the Evolution device
- selecting the widgets and applications
- configuring the SmartLiving control panels
- configuring the devices connected to the Evolution device (videocameras or the devices connected to the outputs)

The Evolution device has been designed to accept programming via the touch screen and from a computer. Programming via the touch screen has its limitations, as described in paragraph *4-5 Buttons*.

Both the installer and the user can programme the Evolution device from a computer. The EvoPro application (for the installer) provides access to all the programming functions of the system, whereas, the EvoLight application (for the user) is limited to the configuration of the Evolution device only.

Programming from a computer requires:

- An Evolution device connected to a LAN
- A computer connected to the same network as the Evolution device
- Windows operative system
- EvoPro or EvoLight software programme

.NET Framework 5-1

dotnetfx.exe - small file on CD (supplied to the installer and user) and a setup file to add .NET Framework 2.0 Platform to the operative system of the computer using Ness's programming and management software.

To operate correctly, EvoPro and EvoLight software applications require .NET Framework 2.0 Platform.

If the computer has Windows Vista or Windows Seven, this platform is already included. If the computer has another operative system, the .NET Framework 2.0 may not be included.. Therefore, if you wish the software application to perform as intended, you must install it.

The EvoPro software application 5-2

The EvoPro software application allows the installer to prepare the majority of the parameters/settings without actually being connected to the Evolution device.

Connection is necessary for upload (to the Evolution device) and download (from the Evolution device) and is performed through a LAN (Ethernet or WiFi).

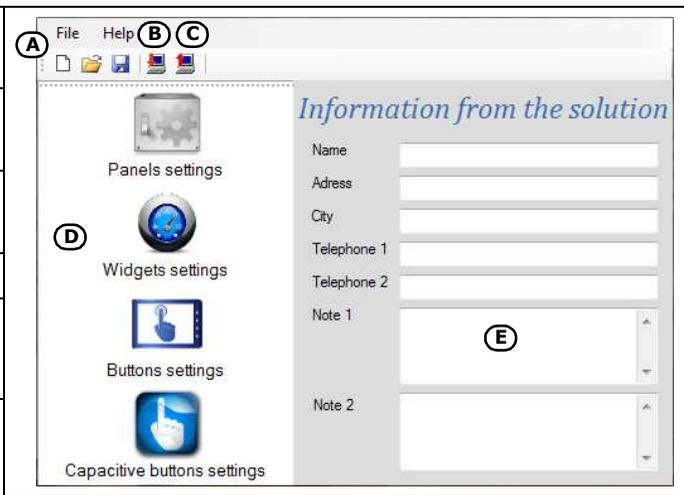
For initial programming (after first startup), the connection can be made through an Ethernet cable.

Note

The programming process forms a solution that contains the programming parameters of the Evolution device and the configuration of its connected devices. The solutions can be saved to the EvoPro database and, successively uploaded to an Evolution device, or used for maintenance purposes.

Using the software application 5-2-1

Table 13: EvoPro interface

A	The menu bar, application icons and programming accessories.	
B	Button to download the configuration of the connected Evolution device.	
C	Button to upload the configuration of the connected Evolution device.	
D	Configuration sections menu	
E	Section for the settings of the parameters required by the configuration selected on the left.	

The menu bar allows you to open new solutions or modify existing solutions.

A solution consists of the parameters programmed for each configuration section. To change the parameters, first select (click-on) the section from the menu on the left, then enter the required values in the sub-sections which appear in the box on the right.

A solution can be created or changed even without being connected to the apparatus. For example, you can configure the Evolution device or set the device parameters at your office and download the settings and test the apparatus at a later time.

The EvoPro software application provides data transfer buttons  to download the connected Evolution device configuration or  upload the ongoing configuration). In order to do this, you must setup the connection type with the computer, as indicated in the "Communication channel" sub-section in the "General settings" section, which you can reach by pressing the  button (refer to paragraph 5-2-2 *Configuration sections*).

During the data transfer phase, the Evolution device continues to operate regularly. However, at the end of the upload process, the Evolution device will restart with the new configuration.

Upload operations can be cancelled by pressing the  button on the Evolution device, which restores factory default data.

Note

Configuration sections 5-2-2

This paragraph describes the sections relating to the configuration of the Evolution device, as they are listed in the selected menu (*table 13, D*).

The  button allows you to access the configuration section of the SmartLiving control panels connected to the Evolution device.

CONTROL PANELS

A box containing the configured control panels appears on the right. The sub-section at the top will allow you to include new control panels and delete old ones. For each selected operation, a wizard opens to guide you (the installer) through the necessary parameter settings.

If you select an already configured control panel, its details will be shown below the template, in order to allow you to view or change them.

The  button allows you to access the configuration section of the widgets you intend to insert in the appropriate section on the home page (*table 6, B*).

WIDGETS

A representation of this section will appear on the right of the home page where one of the widgets (available on the list) can be dragged and dropped. Once selected, the details of each inserted widget will be shown at the bottom, in order to allow you to view or change them.

To delete the widget, simply right click-on the widget you wish to delete.

The  button allows you to access the configuration section of the applications you intend to insert in the appropriate section on the home page (*table 6, E*).

APPLICATION BUTTONS

A representation of this section will appear on the right of the home page where one of the applications (available on the list) can be dragged and dropped. Once selected, the details of each inserted

Evolution

application will be shown below the template, in order to allow you to view or change them.

To delete the application, simply right click-on the application you wish to delete.



The  button allows you to access the configuration section of the CapSense buttons on the frame on the right side of the touch screen (paragraph 1-6 *CapSense buttons*).

CAPACITIVE BUTTONS

A representation of the Evolution device will appear on the right, where you can select one of the four buttons. Once selected, you can select the related action and the action related to the superkey function (activated by prolonged pressing). The details of each associated application will be shown below the template, in order to allow you to view or change them.



The  button allows you to access the videocamera configuration section which can be viewed by pressing the

VIDEOCAMERAS

 button on the home page (paragraph 4-5 *Buttons*).

The window on the right shows the videocameras. To activate one of the 16 cameras in the window, you must first select a group of 4 cameras on the left, then drag the icon on the top right into the section relating to the individual camera. Once selected, the details of each inserted videocamera will be shown below the template, in order to allow you to view or change them.

To delete the videocamera, simply right click-on the videocamera you wish to delete.



The  button allows you to access the configuration section of the outputs relating to terminals T1 to T5 and to the output relay of the Evolution device (*table 3, A*).

OUTPUTS

A list showing the outputs you can select and configure will be shown on the right. Once selected, the details of the output will be shown, in order to allow you to view or change them.

To delete the output, simply right click-on the output you wish to delete.



The  button allows you to access the configuration section of the general parameters of the Evolution device:

GENERAL SETTINGS

- touch screen brightness
- loudspeaker volume
- standby activation
- temperature sensor
- tamper detection
- communication channel

This section allows you to configure the image presentation and media player applications which relate to the buttons (at default) on the home page (*table 6, E*).



The  button allows you to access the configuration section of the events generated by the Evolution device and their related actions.

EVENTS

A list will appear on the right where you can add new events, or change or delete existing events. The details of each associated event will be shown below the template, in order to allow you to view or change them.



The  button accesses the configuration window of the graphic maps.

MAP CONFIGURATION

The current map images are shown in a section in the centre. Above this is a buttonbar which allows you to open a new map or edit an existing one.

The buttonbar provides the  button which allows you to view the tree structure of the graphic maps complete with their inserted objects, on the left, or the list of objects to be inserted, on the right. The selected objects can be inserted by dragging the respective icons and dropping them onto the graphic map concerned.

The buttonbar also provides buttons for the alignment and redimensioning of the icons placed on the map.

It is possible to change the settings of the inserted objects or delete them from the map by simply right-clicking on the icons concerned.



The  button allows you to access a section where you can view and change specific information relating to the open solution.

SOLUTION INFORMATION



The  button allows you to access a section where you can select the language of the EvoPro software application.

LANGUAGE



The  button accesses a section which allows you to view information relating to the software application and manufacturer.

ABOUT THE APPLICATION

The EvoLight software application 5-3

The EvoLight software application resides on the user's computer and, on startup, requires direct connection with the Evolution device through the LAN (Ethernet or WiFi).

Once the computer is properly connected to the Evolution device, you can access specific configuration parameters which can be viewed (downloaded from the Evolution device) and changed (uploaded to Evolution device). It is unnecessary to save the data or solution to the computer memory when closing the application after completing the operation.

Using the software application 5-3-1

Table 14: EvoLight interface

A	Menu bar and function icons relating to the application (closure and info) and access to the Ness website.	
B	Button to download the configuration of the connected Evolution device.	
C	Button to upload the configuration of the connected Evolution device.	
D	Application Menu	
E	Section for the settings of the parameters required by the application selected on the left.	

The EvoLight software application provides data transfer buttons ( to download the configuration of the connected Evolution device and  upload the ongoing configuration.

During the data transfer phase, the Evolution device continues to operate regularly. However, at the end of the upload process, the Evolution device will restart with the new configuration.

Application 5-3-2

This paragraph describes the EvoLight applications available on the respective menu (*table 14, D*).



The  button opens a wizard which guides you through the connection procedure between the computer and the Evolution device and, later, allows you to view and configure the parameters.

CONNECTION WIZARD

This operation requires:

- IP address of the Evolution device
- Connection password

It is the installer's responsibility to setup the connection network and provide the user with all the relative information.

Note



The  button allows you to access the configuration section of the widgets you intend to insert in the appropriate section of the home page (*table 6, B*).

WIDGETS

A representation of this section will appear on the right of the home page where one of the widgets (available on the list) can be dragged and dropped. Once selected, the details of each inserted widget will be shown at the bottom, in order to allow you to view or change them.

To delete the widget, simply right click-on the widget you wish to delete.



The  button allows you to access the configuration section of the applications you intend to insert in the appropriate section on the home page (*table 6, E*).

APPLICATION BUTTONS

A representation of this section will appear on the right of the home page where one of the applications (available on the list) can be dragged and dropped. Once selected, the details of each inserted application will be shown below the template, in order to allow you to view or change them.

To delete the application, simply right click-on the application you wish to delete.



The  button allows you to access the configuration section of the CapSense buttons on the frame on the right side of the touch screen (paragraph 1-6 *CapSense buttons*).

CAPACITIVE BUTTONS

A representation of the Evolution device will appear on the right, where you can select one of the four buttons. Once selected, you can select the related action and the action related to the superkey function (activated by prolonged pressing). The details of each associated application will be shown below the template, in order to allow you to view or change them.



The  button allows you to access the configuration section of the general parameters of the Evolution device:

- touch screen brightness
- loudspeaker volume
- standby activation
- communication channel

GENERAL SETTINGS

This section allows you to configure the image presentation and media player applications which relate to the buttons (at default) on the home page (*table 6, E*).



The  button accesses a section which allows you to select the language of the EvoLight software application.

LANGUAGE



The  button accesses a section which allows you to view information relating to the software application and manufacturer.

ABOUT THE APPLICATION

Chapter 6

ERRORS AND FAULTS

Fault signalling 6-1

The following table shows the Evolution device faults signalled on the rotating banner on the top left of the home page touch screen:

Fault	Icon	Cause	Note
Low battery		The backup battery is inefficient (voltage below 10.4V) or is not functioning properly.	The fault will end when the voltage restores to above 11.4V.
Low Voltage		The Evolution device is operating at a voltage lower than normal (below 11.2V).	
High Voltage		The Evolution device is operating at a voltage higher than normal (above 14V).	
Tamper active		A tamper attack is occurring on the Evolution device (forced opening of the casing/touch screen or dislodgement from its mounting location).	This signal will cease when the tamper event restores.
Control panel loss		The relative control panel is not longer available on the LAN net (ethernet or WiFi).	This signal will cease when the control panel loss event restores.

Tamper event 6-2

Tamper on the Evolution device (forced opening of the casing/touch screen or dislodgement of the device from its mounting location) may generate a fault event.

This event may be associated with an action (generated by the control panel or Evolution device).

At default, the Evolution device is programmed to activate the relay output in the event of tamper (as indicated in the "Events" section of the EvoPro software application). It is the responsibility of the person programming the device to enable tamper detection in the respective section, under "General settings" (EvoPro).

Appendix A

RECURRENT BUTTONS AND ICONS

The following table shows the buttons and icons which appear on various touch screen pages:

Table 15: **Button icons**

Button	Icon	Effect
Scroll		Clicking-on or prolonged pressing of this button allows you to scroll lists or a series of images or templates.
Ok		Confirms the ongoing operation. Confirms the selection.
Cancel		Cancels the ongoing operation.
Save		Saves the ongoing operation.
Home		Closes the open page and steps back to the home-page

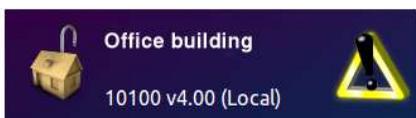
Table 16: **Status icon**

Signalling	Icon	Cause
Standby		The element the icon refers to (control panel/partition/zone) has not detected alarm or fault events.
Alarm		The element the icon refers to (control panel/partition/zone) has detected and signalled an alarm condition.
Fault/Tamper		The element the icon refers to (control panel/partition/zone) has detected and signalled a fault or tamper condition.
Alarm memory		The element the icon refers to (control panel/partition/zone) detected, signalled and restored an alarm condition.

Appendix B

THE SMARTLIVING CONTROL PANEL STATUS

The banner on the top right of the home page (*table 6, C*) allows you to access and view the status of the Evolution device or of the SmartLiving control panel in configuration.



If you are using a SmartLiving control panel, 4 sections are available:

- Arming scenarios
- Partitions / Zones
- Outputs
- Events log

The  button allows you to access the arming scenarios **ARMING SCENARIOS** section.

All the scenarios are listed and provide the following details:

- Description string
- Activation status icon

You can activate a scenario by first selecting it and then pressing the

 button (on the left). In response the scenario icon will change in accordance with the result of the activation:

Table 17: Arm/Disarm operations

Icon	Signalling
	Scenario deactivated
	Scenario activated successfully
	Scenario not activated

The  button allows you to access authorized partitions. The partitions are listed and show the following details:

- Description string
- Arming mode icon
- Partition status icon
- Alarm memory

The arming status of each selected partition can be changed by pressing the buttons on the left. In response the partition icon will change:

PARTITIONS

Table 18: Arming mode icons

Icon	Button
	Arms the selected partition in Away mode
	Arms the selected partition in Stay mode
	Arms the selected partition in Instant mode
	Disarms the selected partition

The  button deletes the alarm memory of the selected partition.

The partitions section provides a button  which allows access to the zones of the selected partition. **ZONES**

The page that appears shows the description of the partition the zones belong to and a list containing the following details:

- Description string
- Partition status icon
- Activation status icon
- Alarm memory

You can change the activation status of each of the selected zones by pressing the buttons on the left. In response the zone icon will change:

Table 19: Arming mode icons

Icon	Button
	Bypass (deactivate) the selected zone
	Unbypass (activate) the selected zone



The  button allows you to access the control panel outputs **OUTPUTS** section and change the status of each output.

In order to do this, you must first select the output and then press the buttons on the right. In response the output icon will change:

Table 20: **Arming mode icons**

Icon	Button	Signalling
	Activate the selected output	Output activated
	Deactivate the selected output	Output deactivated



The  button allows you to view the events log of the selected **EVENTS LOG** control panel.

The buttons on the left allow you to choose the number of new events you wish to view. In order to allow this, press the button on the right .

