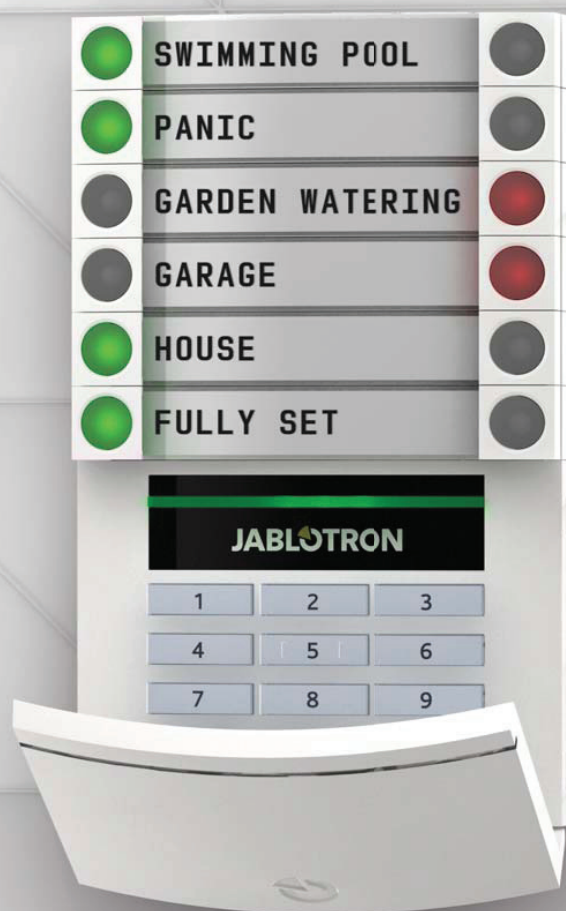


JABLOTRON 100

User manual



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Thank you for choosing the JABLOTRON 100 security system. This system is a unique flexible indoor solution for commercial and home security that offers the use of both wired and wireless devices.

The JABLOTRON 100 is very easy to use. Everything is controlled by pressing individual control segments on a keypad and subsequent authorization. The control segments use a simple traffic light logic which everyone can understand. The number of segments can be flexibly adapted based on the customer's needs. The JABLOTRON 100 offers a wide range of detectors housed in a timeless design and can be operated from anywhere thanks to complete remote control access. The J-Link program, the MyJABLOTRON web interface and the MyJABLOTRON application for smart phones allow you to control, program and monitor the system remotely.

The JABLOTRON 100 is designed for up to 300 users and it can be divided into 15 separate sections. Up to 120 detectors can be connected and the system offers up to 32 multi-purpose programmable outputs (e.g. home automation).



OPERATING THE JABLOTRON 100 SYSTEM

The security system can be controlled in a number of different ways. To set or unset the alarm, authorization in the form of user identification is always required. The system detects the identity of the user and allows them to operate those parts of the system which they have been authorized to control (pre-programmed). The user ID, date, and time are recorded and stored in the system's memory each time the system is accessed. This data history is available indefinitely.

Any authorized user can also cancel an alarm (turning the alarm sound off) in any part of the system regardless of their access rights. However, that does not automatically unset the system (unless the default setting is changed).

Users and Their Access Rights

Access Code Type	Description
Service	Allows the user to program the system and add/define users. This code is given to the installation or security company that is responsible for correct system installation and configuration.
Administrator	Allows the user access to the entire system including adding/defining users. This code allows access to all sections and is given to the owner or building/property manager.
User	Allows the user to operate designated system sections and programmable outputs. This code is given to standard system users (e.g. employees).
Set	Allows the user to set designated system sections and programmable outputs. This code is given, for example, to employees who do not have the right to unset the alarm.
PG only	Allows the user to operate only programmable outputs. This is intended for automated processes like opening doors, for example.
Panic	This code activates a silent panic alarm.

Ways of Operating the JABLOTRON 100

On-site:

- ▶ System keypad
- ▶ System keyfob
- ▶ Computer using a USB cable and J-Link program






Remotely:

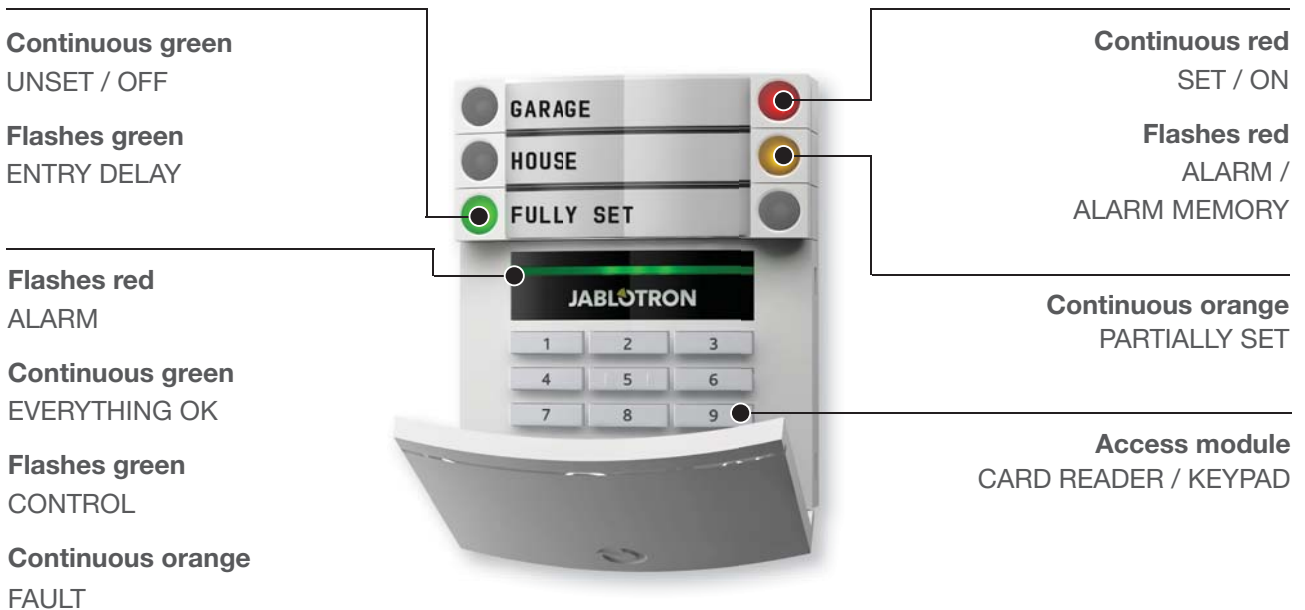
- ▶ Telephone using the voice menu
- ▶ Computer via the MyJABLOTRON web interface
- ▶ Application in a smart phone
- ▶ Mobile - using text messaging
- ▶ Computer via the internet using J-Link
- ▶ Dialling-in from an authorized telephone number (only for operating programmable outputs)



USING THE SYSTEM KEYPAD

The system can be operated directly (setting or unsetting the alarm and automation) using two-button segments on the keypad. The segment buttons are clearly labelled and coloured (using traffic light logic) so that each segment's status is readily evident. The segment can also be used to monitor its status (e.g. garage door open) or to control various automated devices (for example heating or window shutters). A segment can also be set up to call for help in an emergency (as a medical or panic alarm). The maximum number of segments is twenty.

-  **Continuous red**
SET / ON
-  **Flashes red**
ALARM / ALARM MEMORY
-  **Continuous orange**
PARTIALLY SET
-  **Continuous green**
UNSET / OFF
-  **Flashes green**
ENTRY DELAY



The various types of access modules and their combinations



CARD READER

allows control of the system using segments and touchless authorization (RFID card/tag).



KEYPAD WITH CARD READER

the user can control the system by segments and authorization, using either entering a code or the touchless method (RFID card/tag), or a combination of both for higher security.



KEYPAD WITH DISPLAY AND CARD READER

the user can control the system by segments and authorization, using either a code, the touchless method (RFID card/tag), both code and card/tag for higher security, or by authorizing and using the options available on the keypad's LCD display.

When unsetting the alarm using **the segment buttons** user authorization is always required. When setting the alarm and controlling automated processes using the segment buttons, user authorization is optional for each segment.



A user can **be authorized** by entering their assigned code or using their RFID card/tag. Each user can have one code and up to two RFID chips (cards or tags).

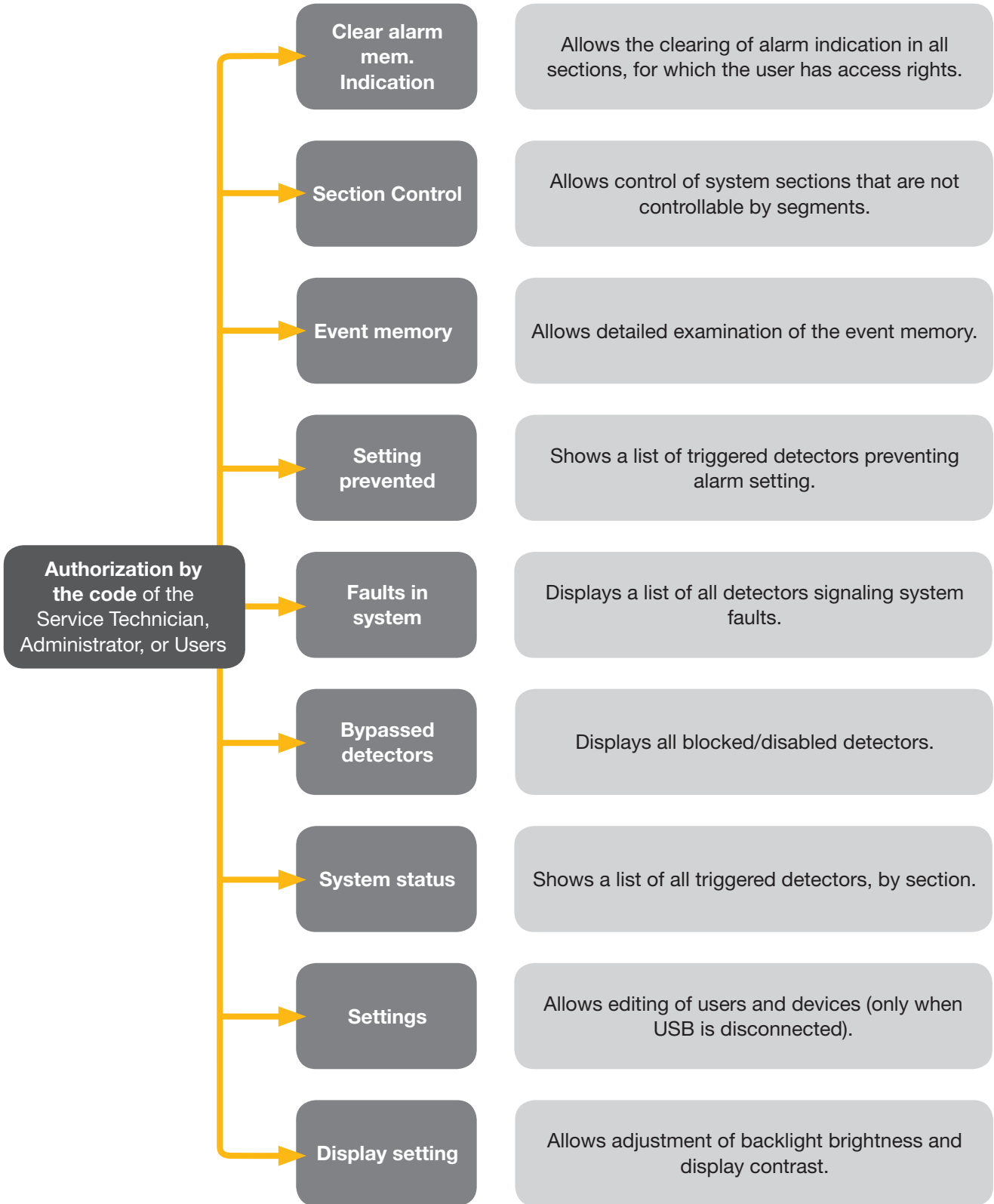
If the user wants to simultaneously control multiple segments, authorization is required only once. For example, the user can at the same time set the house while unsetting the garage.

Recommended Touchless Chips: JABLOTRON 100, Oasis, Azor, or other chips operating at 125 kHz EM. For higher security the alarm system can be set up so that both the RFID chip and user code must be used to authorize.

THE KEYPAD AUTHORIZATION CODE

can consist of up to seven digits: a prefix (one to three digits), an asterisk * (which separates the prefix and main code), and a four digit code. Examples include: 123*1234, or 1*1234. Each user can change the second four-digit code (after the prefix and asterisk) on the LCD keypad. For guarded premises with a smaller number of users the prefix can be omitted. In this case only a four-digit code is required. These types of codes can only be changed by the system administrator.

Structure and description of the internal LCD keypad menu



Alarm Setting



1. PRESS

the segment button of the desired section. The button will start flashing red.

2. CONFIRM

the command by authorization – hold the card or tag up to the reader or input an access code.

3. DONE

The command is executed and the keypad acoustically indicates the exit delay. Once the sound stops the relevant section is set. The segment button turns permanently red.

While setting the alarm, if any detector is active (e.g. an open window) the system will react (based on system configuration) in one of the following ways:

- ▶ The system will be set regardless of the system status.
- ▶ The system will optically indicate the system status for 8 seconds (flashing red) and sets automatically once this period expires. Setting is also possible by repeatedly pressing the segment.
- ▶ The system will optically indicate the system status for 8 seconds (flashing red) and can be set only by repeatedly pressing the segment.
- ▶ The triggered detector will inhibit the system from being set. In the case of an active detector with the delayed reaction type, the system will optically indicate the system status for 8 seconds (flashing red) and it can be set only by repeatedly pressing the segment.

Consult the installation with a technician in order to program the desired reaction for the system.

Alarm Unsetting



1. PRESS

the flashing button. Upon anyone entering the building the entry delay is triggered. This is indicated with a continuous tone and a flashing green button.

2. CONFIRM

the command by authorization – hold a card or tag up to the reader or input an access code.

3. DONE

The command is executed and the segment button turns permanently green to indicate an unset section.

Note: If there is an entry delay in part of, or in the whole system, the alarm can be unset simply by authorizing.

Partial Alarm Setting



1. PRESS

the segment button of the desired section. The button will flash yellow.

2. CONFIRM

the command by authorization – hold a card or tag up to the reader or input an access code.

3. DONE

The command is executed and the segment button turns permanently yellow to indicate a partially set section.

The system can also be partially set which allows only certain detectors to be triggered. For example, at night only doors and windows can be triggered while motion detectors within a home can be disabled.

To set an entire system (all segments) in which partial arming is enabled, the button to set the system has to be pressed twice. After the button is pressed once it flashes yellow, after it is pressed a second time it flashes red.

If the system is already partially set – showing a continuous yellow light – the entire system can be set by pressing the yellow button. Once authorized the entire system is set. Partial setting can be set up in a way that authorization is not required.

Terminating a Triggered Alarm



1. PRESS

the segment button of the triggered section. The button will flash green.

2. CONFIRM

the command by authorization – hold a card or tag up to the reader or input an access code.

3. DONE

The command is executed. The segment button turns permanently green to indicate an unset section. The red segment button continues to flash.

4. PRESS AND CONFIRM

once again to clear the alarm memory indication.

5. DONE

The segment button turns permanently green to indicate an unset section.

If you happen to forget to unset the system and you unwittingly trigger the alarm, the keypad will flash red, indicating an alarm in progress. Authorization will only silence the siren; the alarm is only cancelled by unsetting the system. A rapidly flashing red light of a given segment indicates that the alarm is being, or was, triggered. This continues to flash even after the alarm is unset. The system will similarly signal the occurrence of an alarm triggered during your absence. If this happens, be very careful when entering and checking the premises or wait until the security guard arrives (if your system is connected to an Alarm Receiving Centre). The segment alarm indicator remains on until the system is set once again. Alternatively, it can be cleared by unsetting the system one more time. With a keypad that has an LCD display the alarm indicator can be cleared from the main menu - Clear alarm mem. Indication.

OPERATING THE SYSTEM WITH A KEYFOB

The installer must program the keyfob into the system. The keyfob can be linked to specific users, thus avoiding text message notification to the user who is interacting with the system (if notification parameters are set up in this way). The keyfob can provide either two-way communication, confirming the execution of a command with a coloured indicator light, or one-way without any feedback. Keyfobs control and indicate battery status and are equipped with optical indication, the two-way keyfob also with an acoustic indication.

The button functions are differentiated using the lock icon. The closed lock icon sets the alarm; the open lock icon unsets the alarm. The solid and hollow circle icons serve to control one programmable device (e.g. turn the lights on and off) or two programmable devices (e.g. a garage door and front door lock). The buttons on the keyfob can be locked to prevent accidental pressing (child safety lock). For more detailed information, see the specific keyfob manuals.



OPERATING THE SYSTEM USING A COMPUTER AND A USB CABLE (J-LINK)

The JABLOTRON 100 can be operated locally or remotely using a computer and an installed J-Link program, which can be used to manage users (change codes, card/tags, and phone numbers). For local use, J-Link is available on the security system's disk drive. When a computer is connected via USB to the control panel, the system will automatically prompt you to install J-Link.

If a keypad with at least one controllable segment is used with the system, then it is possible to set/unset the system in J-Link using an on-screen virtual keypad (click on "Keypad" in the main menu).



OPERATING THE SYSTEM USING THE VOICE MENU

The system can be controlled from a mobile or land line through a simple voice menu, which guides the user through a series of options in the preset language. To access the voice menu, you just dial the alarm system's phone number.

Access to the voice menu can be enabled either to accept any incoming call without restriction, or, alternatively, to only accept authorized phone numbers stored in the system. In the first scenario, the caller must enter their user authorization code (using their phone pad); in the second case, further authorization is not required.

Once the authorization process is complete, the voice system will give an update of the current status of all sections assigned to the user. The caller can then control these sections, either individually or collectively, using their phone pad and the available voice menu options.

The system default is set up to answer incoming calls after three rings (approximately 15 seconds).



OPERATING THE SYSTEM USING THE INTERNET AND MyJABLOTRON

The JABLOTRON 100 can easily and conveniently be operated using your computer via the internet and the MyJABLOTRON web interface, which is accessible from www.myjablotron.com. For more information about this web interface please see the chapter *What is the MyJABLOTRON Web Interface?* below.



MyJABLOTRON - PROFI Version

Depending on your country or region, a web account is set up in MyJABLOTRON by an authorized JABLOTRON partner. The login name is the user's e-mail address. The password can be changed at any time in the user settings.

Once logged into the account, the system shows all active devices that can be monitored or controlled. To operate the system, the computer may prompt you to enter an authorization code at the beginning. Subsequent actions will not require repeated authorization.

On the left vertical menu of the home page you can select to view either an on-screen keypad or a complete system overview. The on-screen keypad allows operating the system by clicking on the segment buttons – just as on the real keypad.

The "Overview" is arranged into horizontal tabs: "Sections", "Automation (PG)", and tabs representing the detectors used in your system (for example you may have "Temperatures", "Camera detector", or "Electricity meters").

Tabs:

- ▶ **Sections** - allows to view and operate all the sections in the system.
- ▶ **Automation (PG)** - allows to view all the programmable system outputs. To operate the programmable outputs using MyJABLOTRON the actual outputs must physically be turned on at least once after the MyJABLOTRON account is activated.
- ▶ **Temperatures** - allows to view the current temperature for each thermometer installed. Shows the history as well as graphs of the temperature changes over time.
- ▶ **Camera detector** - allows to take real-time snapshots with any installed motion detector with camera, or look at past photos taken with these detectors (picture gallery).



The bottom of the home page has an overview of the most recent system events.

MyJABLOTRON offers free notifications (via text messaging, e-mail, or push messages) for selected system section events, programmable outputs, thermometers or meters. These notifications can be set up in the "Settings" menu.

Each system can have only one administrator (owner). This user has the right to assign and remove access rights for other users. The system will automatically create a new account for each new user that is set up by the administrator. Notification of system access will be sent, along with the password, to the established user's e-mail address (login name). If a user already has an account within the system, any changes to the access rights will be reflected in that user's MyJABLOTRON dashboard.

MyJABLOTRON - LITE Version

Depending on your country (or region) you may be able to open an account and/or services in the MyJABLOTRON – LITE internet application. The first-time user will be e-mailed a password for the initial login. The password can then be changed at any time in Settings. If a user already has an account within the system, any changes to the access rights will be reflected in that user's MyJABLOTRON dashboard.

Once logged into the account, the system shows all active devices that can be monitored or controlled, depending on the registered MyJABLOTRON version.

The LITE service package is limited in functionality and minimizes demands for data transfer. LITE is based on the PROFI version with the following modifications:

Options	LITE	PROFI
View the current system status.	✓*	✓
Set/unset the entire system or part of it.	✓ *	✓
Control programmable outputs.	✓ *	✓
View the event history.	-	✓
Send notifications to selected users	-	✓
Operate the system through the on-screen keypad	-	✓
Capture images from camera detectors	-	✓
View the photo gallery from detectors with cameras	-	✓
Monitor current and historic detector values such as temperature or energy consumption.	-	✓

* Communication with the secured premises is not continuous, the system's current status comes up only once a connection is established. The connection to the system takes about one minute.

OPERATING THE SYSTEM USING A SMARTPHONE

If a MyJABLOTRON user account is set up (see previous section), the alarm system can be monitored and controlled remotely using MyJABLOTRON for smart phones running either Android (ver. 2.4 or higher), iPhone (ver. 7 or higher) or Windows Mobile. The application can be downloaded free of charge after logging in MyJABLOTRON, or from any Android Market, AppStore, etc. Usernames and logins for MyJABLOTRON smart phone apps are identical to those for the MyJABLOTRON internet account.



OPERATING THE SYSTEM USING TEXT MESSAGING

Individual sections and programmable outputs can be controlled using text messaging. The text message to operate the system is: *CODE COMMAND*. The actual COMMANDS are predefined (SET/UNSET). There may also be an additional numeric parameter that identifies the specific section. The commands to control the outputs can be programmed by the system installer.



For example, you may choose *SHUTTERS DOWN* as your command to close the shutters on your windows. It is also possible to eliminate the need for the CODE before the command. In such a case the command is simply authorized automatically when the system recognizes the user's phone number.

OPERATING THE SYSTEM REMOTELY USING A COMPUTER (J-LINK)

The JABLOTRON 100 system can be operated both remotely and locally on-site by installing the J-Link program on your computer. Users can also be managed in this way (change codes, cards/tags, and phone numbers).

To operate the system remotely, the program must be downloaded from the Downloads section of the www.jablotron.com website. The registration number of the security system (a 14 digit code) and the telephone number of its SIM card is needed to connect to the system. Remote access is initiated by clicking on "Internet" in the main menu.

If the system uses a keypad with at least one controllable segment, then it is possible to set/unset the appropriate sections using the on-screen J-Link keypad (by clicking on "Keypad" in the main menu).



OPERATING A SELECTED PROGRAMMABLE OUTPUT BY DIALLING-IN

Each telephone number stored in the system can control the system just by dialling-in (i.e. without establishing a call). Dialling-in consists of dialling the phone number of the SIM card used in the security system and hanging up before the system answers the call. The system default is to answer the phone after the third ring (approximately 15 seconds).



BLOCKING / DISABLING THE SYSTEM

BLOCKING / DISABLING USERS

Any user can be temporarily blocked (e.g. when a user loses their card/tag). When a user's access is blocked their ID code or card/tag will no longer be accepted by the system. The user will also not be sent any text message alerts or reports to their phone.

Only the system administrator or service technician can block a user. One method of taking away access rights is by choosing *Settings* → *Users* → *User* → *Bypass* and selecting Yes on the LCD keypad. Another option is to locally or remotely block a user through the J-Link program by clicking on the user in the *Settings* → *Users* → *User blocked* column.

A blocked (disabled) user will be marked with a yellow (or red) circle until the user is re-established using the same procedure.

BLOCKING / DISABLING DETECTORS

A detector can be temporarily disabled in a similar way that a user can be blocked. A detector is disabled when its activation is temporarily not desirable (for example a motion detector in a room with a pet or temporarily disabling the alarm siren).

Only the system administrator or service technician can disable a detector. One method of disabling a detector is by choosing *Settings* → *Devices* → *Bypass* and selecting *Yes* on the LCD keypad. Another option is to locally or remotely disable a detector through the J-Link program by clicking on the detector in the *Settings* → *Diagnostics* → *Disabled* column.

A blocked (disabled) detector is marked with a yellow (or red) circle until it is turned back on using the same procedure.

DISABLING SECTIONS

To shut off a part of the system temporarily, individual sections can be disabled. Disabled sections cannot be set (e.g. to disable surveillance in part of a building under construction).

A section can be disabled locally or remotely through the J-Link program by clicking on the section in the *Settings* → *Section* → *Section disabled* column. A disabled section is marked with a red circle until it is turned back on using the same procedure.

DISABLING TIMERS

To temporarily disable automated scheduled events in the system, the timer can be turned off.

Disabling a scheduled event (e.g. unsetting the system from the night guarding at a predetermined time) stops the execution of that event (e.g. while on vacation).

A timer can be turned off locally or remotely through the J-Link program by clicking on the section in the *Settings* → *Calendar* → *Blocked* column. A disabled timer is marked with a red circle until it is turned back on using the same procedure.

CUSTOMIZING THE SYSTEM

CHANGING USER ACCESS CODE

If the system is set up with prefixed codes, the user can change his code from the LCD menu on the keypad. The code can be changed on the LCD keypad after authorization by selecting *Settings* → *Users* → *User* → *Code*. To input a new code you must enter into edit mode (the code will start to flash) by pressing *Enter*, enter the new code and confirm by pressing *Enter* again. After completing the changes they must be confirmed by choosing *Save* when the system prompts *Save Settings?*

If the system is set up without prefixed codes, only the system administrator can change the security codes. The system administrator can make changes from both the LCD keypad menu and J-Link.

CHANGING, DELETING OR ADDING AN RFID CARD/TAG

Each user can add, modify or delete their RFID cards/tags using the LCD keypad menu. These changes are done after authorization by selecting *Settings* → *Users* → *User* → *Access card 1 (or 2)*. To enter a new RFID card/tag, you must enter into edit mode (access card 1 or 2 will start to flash) by pressing *Enter*. Then The RFID card/tag must be placed on to the reader or the serial number must be manually entered. After confirming by pressing *Enter* again, the RFID card/tag is added. To delete an access card enter “0” into the serial number field. After the changes are complete the change must be saved by selecting *Save* when the system prompts *Save Settings?*

The system administrator can add, change and delete RFID cards/tags from both the LCD keypad menu and J-Link.

CHANGING A USERNAME OR PHONE NUMBER

Each user can add, modify or delete his phone number or change his name on the LCD keypad menu. This can be done after authorization by selecting *Settings* → *Users* → *User* → *Phone (or Name)*. To make changes the user must be in edit mode. This is done by pressing *Enter* on a respective row. After making the changes, they are confirmed by pressing *Enter* again. To delete a phone number enter “0” into the phone number field. After the changes are complete the change must be saved by selecting *Save* when the system prompts *Save Settings?*

The system administrator can add, modify or delete user’s phone number or change user’s name from both the LCD keypad menu and J-Link.

ADDING / DELETING A USER

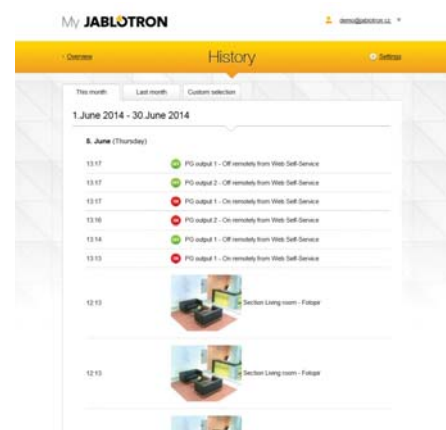
Only the system administrator (or service technician) can add a new user or delete a user in the system. This can be done only through the J-Link program, or the F-Link program in the case of a technician.

When creating a new user, an authorization code must be created or an RFID card/tag must be assigned (or any combination of these). Furthermore access permissions (rights) must be set up: what sections the user may operate, what programmable outputs they can control, and what type of authorization will be required.

EVENT HISTORY

The security system stores all performed operations and events (setting, unsetting, alarms, faults, messages sent to users and ARC) to the micro SD card in the system’s control panel. Each entry includes the date, time (start and end), and source (cause / origin) of the event. Events are not deleted; the entire system history of the guarded premises is archived. The memory has the capacity to store several million records.

The different ways of browsing through the system’s event history are described on the next page.



USING THE LCD KEYPAD

Accessing the event history using the keypad requires user authorization. Once authorized, the available options (based on user permissions) are displayed by choosing *Event Memory*. Records can be viewed from the most recent to the oldest.

USING J-LINK AND A COMPUTER

The system memory can be browsed using the J-Link program. Events can be viewed in small (about 1,200 events) or larger (about 4,000 events) batches. The events can be filtered, colour-coded, or saved into a file. For more information please see the J-Link manual.

LOGGING INTO MyJABLOTRON (WEB / SMARTPHONE)

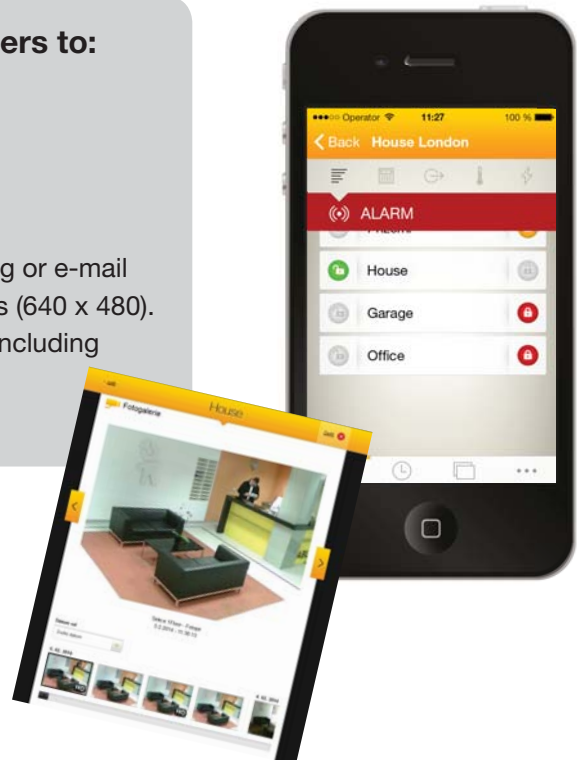
All system events can be viewed using the MyJABLOTRON web interface/smartphone.

WHAT IS THE MyJABLOTRON WEB INTERFACE?

The MyJABLOTRON web interface is a unique service that allows on-line access to JABLOTRON devices. It allows end-users to monitor and control the system.

The MyJABLOTRON web interface allows users to:

- ▶ View the current system status.
- ▶ Set/unset the entire system or part of it.
- ▶ Control programmable outputs.
- ▶ View event history.
- ▶ Send notifications to selected users via text messaging or e-mail
- ▶ Capture high resolution images from camera detectors (640 x 480).
- ▶ Monitor current temperature or energy consumption, including history overview in a graphic chart.
- ▶ Take advantage of many other useful features.



BUS / Wireless Devices

The main hub of the security system is its control panel. This can communicate with all devices in two ways: using a BUS, i.e. using data cables within the guarded premises or part thereof; or wirelessly using radio frequencies. BUS devices are powered from the control panel. Wireless devices require batteries whose longevity depends on intensity of use.

Control Segment

This is the control and signaling part of the access module (keypad). A segment contains a description of its function and has two backlit buttons – a green one on the left and a red or yellow one on the right.

A segment is used to easily and clearly operate a part of the system and simultaneously display its status using the colour indicators (green when unset, red when set, and yellow when partially set). The number of segments and their function are determined by the system installer.

RFID Card / Tag

The RFID card/tag allows the user to operate the system and is used for touchless authorization by simply placing the card/tag on to the keypad reader. It replaces or complements numerical code entries. The RFID card can be carried in a wallet. The RFID tag can be attached to a key ring.

Section

The alarm system can be divided into several smaller, independently functioning parts, called sections. Each section can have its assigned detectors, keypads, as well as sirens, users, and their telephone numbers. There can be up to 15 sections per system.

Programmable Output

The security system can be used to switch on/off or control other electrical devices or appliances. This is done using programmable outputs that can be controlled by the user (via text messages, using the keypad, etc.) or can be automated within the system (following the system status, alarm status, failures, etc.).

Home Automation

In addition to providing an intruder alarm system, the JABLOTRON 100 offers a number of other features. Among the most popular functions are: electrical doors, automated light switches using motion detectors, and the remote control of appliances (electrical heating, garage doors, gates, entry barriers, etc.).

Panic Alarm

When a user is in trouble and in need of urgent assistance, the panic alarm can be triggered. The panic alarm can be set up as a designated segment on the keypad, a special code, a panic button, or as a specific combination of buttons on a keyfob. If connected to a security centre, triggering the panic alarm creates an immediate response (vehicle dispatch) that cannot be cancelled by phone.

Security Centre, ARC

An Alarm Receiving Centre, a continuously manned security agency (24/7), is able to immediately react to information received from the guarded premises and respond with an appropriate action – either with a direct presence at the guarded premises or by acting on the information received.

Notes:

For questions and further information contact your installer.



www.jablotron.com