



JABLOTRON JA-100 introduction

November 2011



Today's goals

- ▶ First introduction of the brand new JA-100 alarm system
 - ▶ Visions
 - ▶ Basic architecture
 - ▶ System components
 - ▶ Setting
- ▶ Help us with final validations
 - ▶ You are the FIRST ones outside CZ
 - ▶ We are keen to get your reports
 - ▶ Helps us to finalise it
 - ▶ Testing set for free

Sales launch – Spring 2012 and your market localisation will be ready.





Introduction



Why a new alarm system?

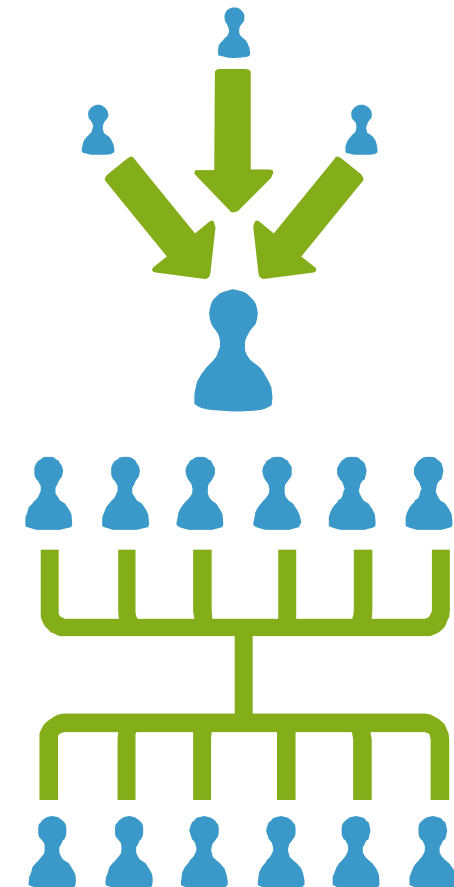
- ▶ Perfect tool for installers
 - ▶ Security, access systems, home automation
 - ▶ High-tech level product, like never before
- ▶ For the user: “a lot more than he expects”
 - ▶ Friendly and smart control
 - ▶ New design of products – branded
- ▶ Ahead of our competition
- ▶ Investment in the future





Who invented it ??

- ▶ Assignment by Mr. Dalibor Dědek – JABLOTRON GM
 - ▶ Inputs from installers
 - ▶ Feedback from users
 - ▶ **Own vision**
 - ▶ Flexibility
 - ▶ Intelligibility
 - ▶ Functionality





3 inspirational sources

- ▶ Male Protection
- ▶ Traffic lights
- ▶ Lego





Introduction

Lego

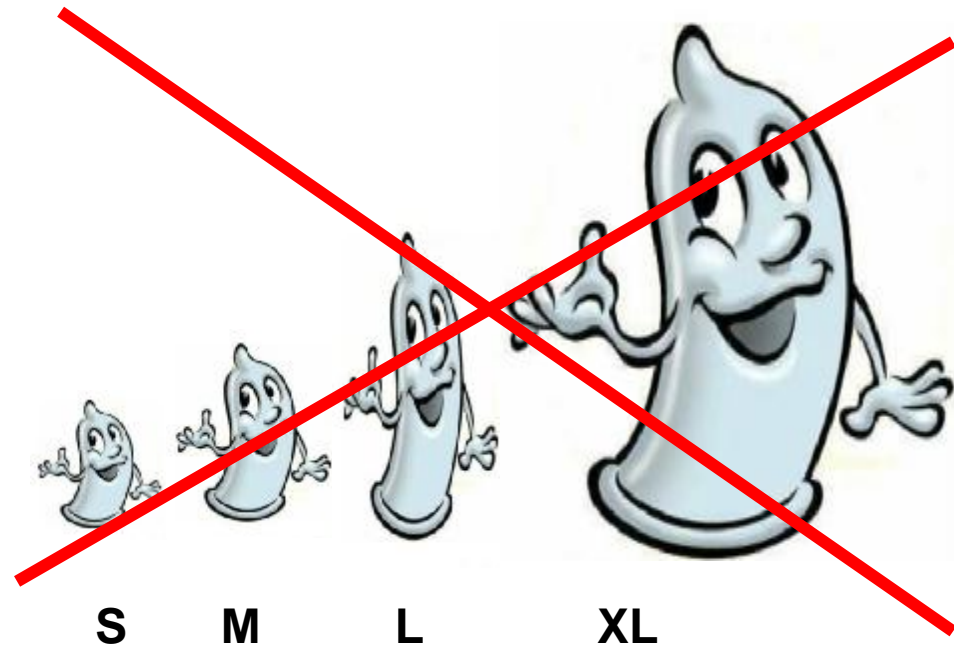
- ▶ You can design it according to customers' wishes





Male Protection

- ▶ Protection must be flexible !!!





Traffic lights

- ▶ Protection must be intelligible !!!

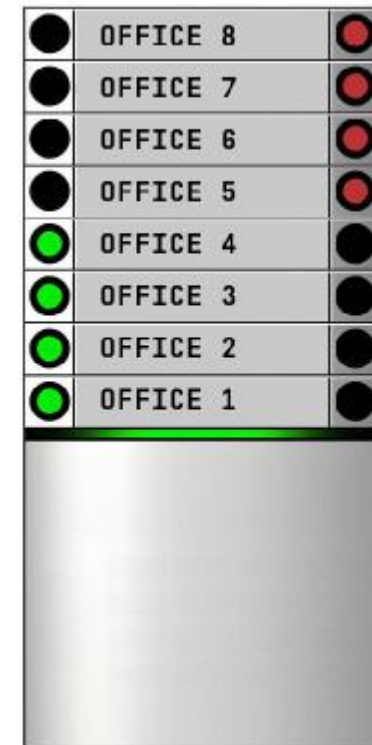




Introduction

Patented human interface - ESF keypad

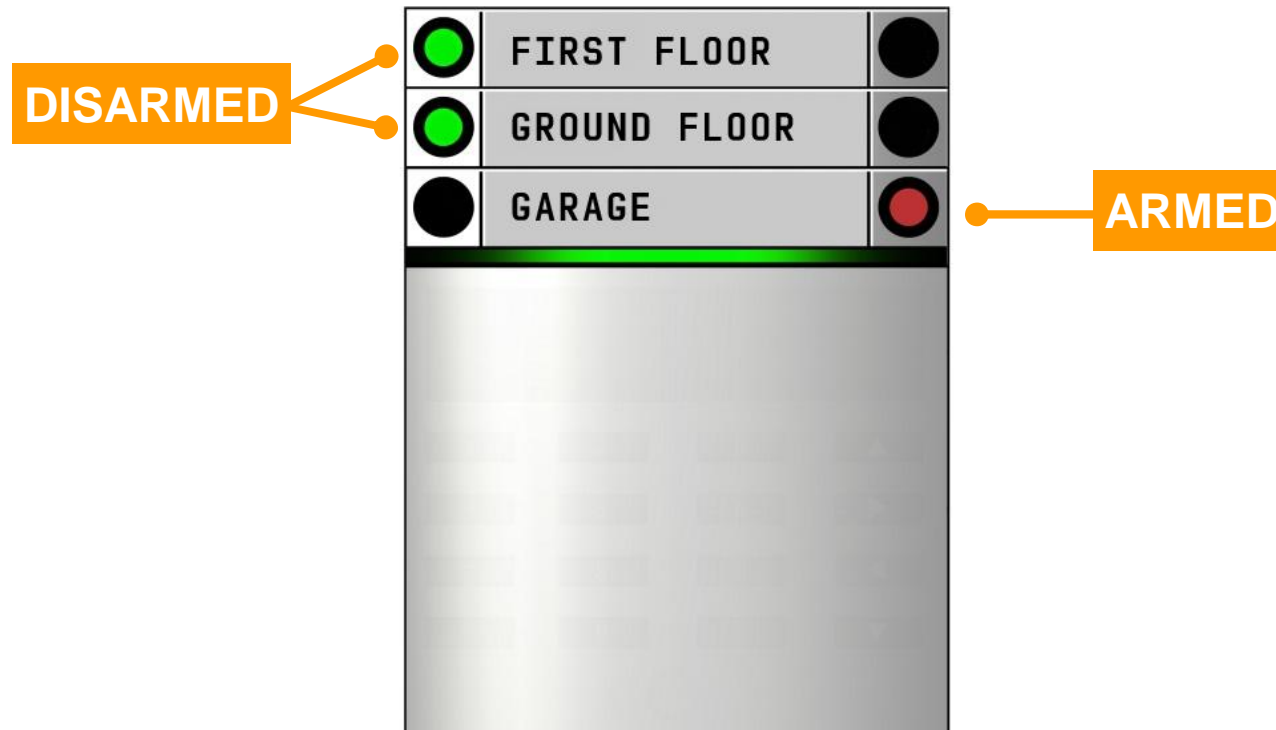
- ▶ Tailor-made keypad





Patented human interface - keypad

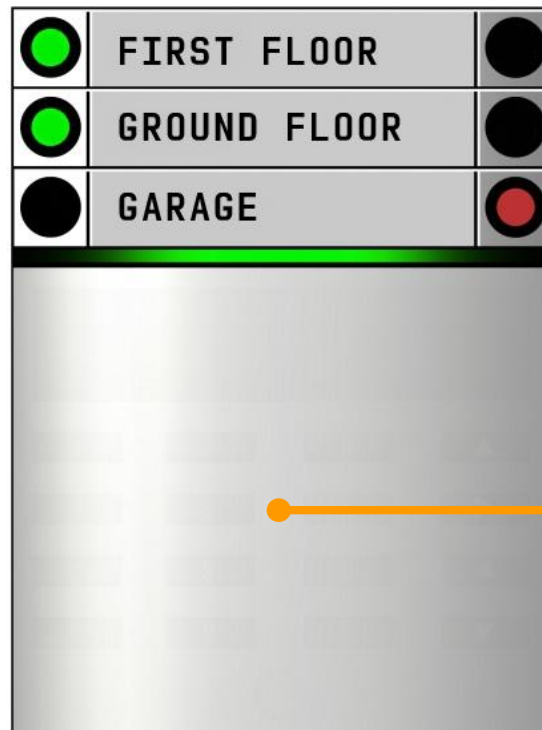
- ▶ The EASIEST to understand





Patented human interface - keypad

- ▶ Intuitive control



1. Press
ARMING

2. Apply tag
(or enter code)



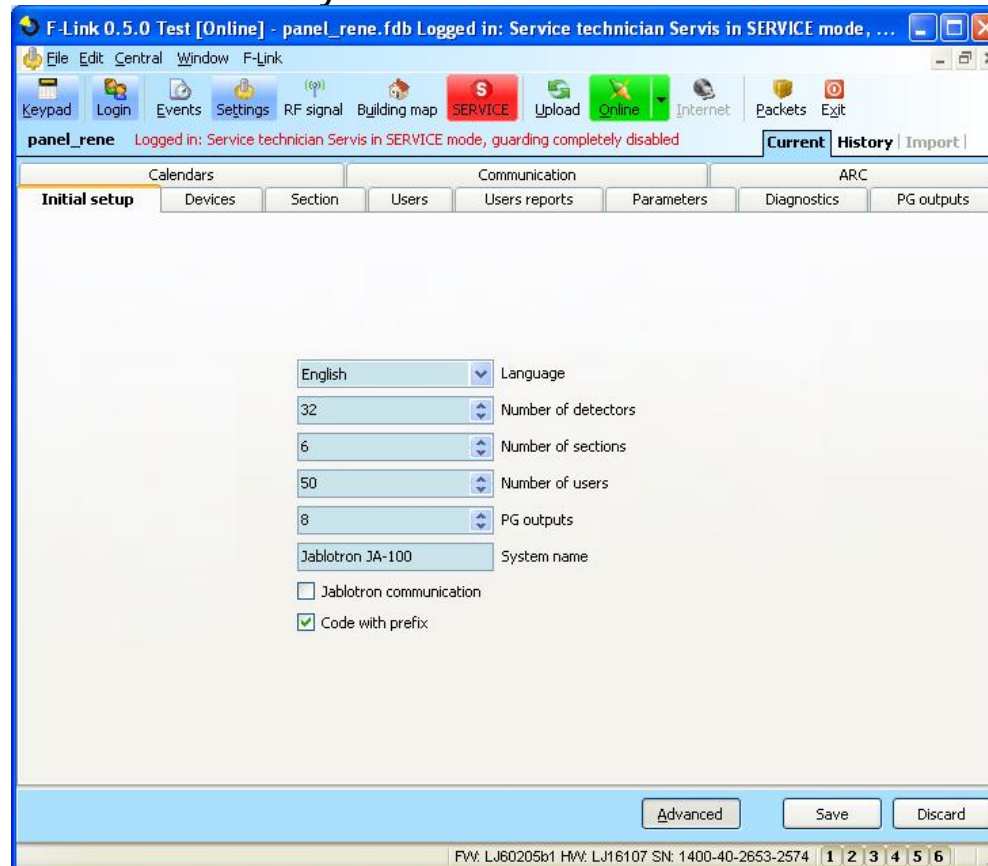


Introduction



Flexible inside

- ▶ Your selection of desired system size





Introduction

Selectable levels of functions

- ▶ First learn the basics, after that let's continue to the "goodies"

The screenshot shows the 'F-Link 0.5.0 Test [Online]' software interface. The main window displays a table of device settings. The table has columns for 'Pos...', 'Name', 'Type', 'Section', 'Reaction', 'PG activation', 'Internal settings', 'Sup...', 'Alarm memory...', 'Disabled', 'Status', and 'Not'. The table lists various devices such as 'control panel', 'House keypad', 'Garage keypad', 'Radio', 'Internal siren', 'External siren', 'Exit door', 'Window porch', 'Living room glassb...', 'Hall motion', 'Garage door', 'JA-110M IN2 note...', 'Workroom motion', 'Hall 1st floor motion', 'Remote control Mary', 'Remote control M...', 'Fire', 'Basement flood', 'Garage door', 'Garage window', 'Periphery 20', 'Periphery 21', 'Periphery 22', and 'Periphery 23'. Each row has a 'Type' column with a dropdown menu. An orange callout box with the text 'Basic / Advanced' points to the 'Advanced' button at the bottom of the table.

Pos...	Name	Type	Section	Reaction	PG activation	Internal settings	Sup...	Alarm memory...	Disabled	Status	Not
0	control panel	JA-101K	1: Full set			Enter				OK	
1	House keypad	JA-114E	2: House		No	Enter				OK	
2	Garage keypad	JA-114E	3: Garage		No	Enter				OK	
3	Radio	JA-110R	1: Full set		No	Enter				OK	
4	Internal siren	JA-110A	1: Full set	Panic alarm	No	Enter				OK	
5	External siren	JA-111A	1: Full set		No	Enter				OK	
6	Exit door	JA-110M	2: House	Delayed zone A alarm	No	Enter				OK	
7	Window porch	JA-110M	2: House	Instant zone alarm	No	Enter				OK	
8	Living room glassb...	JA-110B	2: House	Instant zone alarm	No	Enter				OK	
9	Hall motion	JA-110P	2: House	Next delay zone alarm	No	Enter				ACT	
10	Garage door	JA-110M	3: Garage	Delayed zone A alarm	3: Garoz. wroto ...	Enter				OK	
11	JA-110M IN2 note...	JA-110M	No	Delayed zone A alarm	No	Enter				OK	
12	Workroom motion	JA-110W	2: House	Delayed zone A alarm	No					OK	
13	Hall 1st floor motion	JA-110P	2: House	Delayed zone A alarm	No					OK	
14	Remote control Mary	JA-110C	1: Full set	Sel.	1: Garden lighting	Enter				OK	
15	Remote control M...	JA-110C	No	None	2: Garage door	Enter				OK	
16	Fire	JA-110S1	1: Full set	Fire alarm	No	Enter				OK	
17	Basement flood	JA-111M	4: Basem...	24 hours	No	Enter				OK	
18	Garage door	Assign	3: Garage	-	No					OK	
19	Garage window	Assign	3: Garage	-	No					OK	
20	Periphery 20	Assign	1: Full set	-	No					OK	
21	Periphery 21	Assign	1: Full set	-	No					OK	
22	Periphery 22	Assign	1: Full set	-	No					OK	
23	Periphery 23	Assign	1: Full set	-	No					OK	



JA-100 structure

JABLOTRON
CREATING ALARMS

Let's discover the possibilities of the new alarm system

- ▶ How big can it be ?
- ▶ How many system devices ?
- ▶ How can we split it ?
- ▶ How many calendars are there ?
- ▶ How can we reduce false alarms ?
- ▶ How many users ?
- ▶ How we can communicate with the outside world?
- ▶ What about home automation?
- ▶ How can you operate it from keypads ?



Just let your imagination fly and try it out with the brand-new Jablotron JA-100



JA-100 structure

So... how big can it be?

- ▶ How many zones ?
- ▶ How many sections ?
- ▶ How many users ?
- ▶ How many programmable outputs ?





JA-100 structure

It will all fit perfectly, as you wish

- ▶ From 1 to 120 system devices/detectors
- ▶ From 1 to 15 independent sections
- ▶ From 1 to 300 users
- ▶ From 0 to 23 programmable PG outputs





JA-100 structure

And much much more ...

- ▶ From 0 to 20 automated calendar events
- ▶ From 0 to 4 ARC settings (CID, SMS or IP protocols)
- ▶ From 0 to 30 users who can receive reports
- ▶ Selectable number of independent masters
- ▶ Selectable number of independent installers





JA-100 structure

Hybrid system = Digital BUS and wireless devices

- ▶ Digital BUS
 - ▶ 4 wires
 - ▶ Communication and power
 - ▶ Non-JA detectors connected by a module (w/o guarantee)
- ▶ Wireless devices
 - ▶ 868 MHz radio frequency
 - ▶ Up to 3 radio modules
 - ▶ Coverage of many hundreds of meters

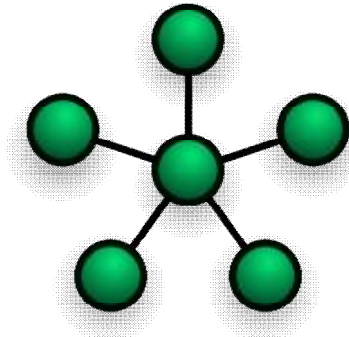


Digital BUS = we use a unique protocol to communicate, no balancing needed

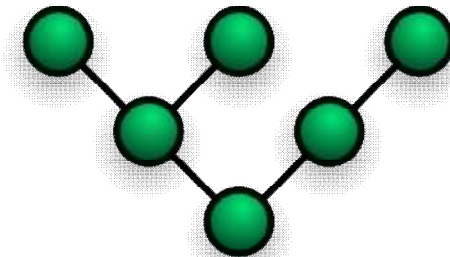


Digital BUS principles

- ▶ A mini-internet for data between control panel and devices
- ▶ Signals are like a wireless alarm system, but using wires instead of radio thru the air
- ▶ 4 wires
 - ▶ 2 for power supply
 - ▶ 2 for two-way data channel communication
- ▶ Simply connect detectors to the bus wires
 - ▶ no resistor balancing
- ▶ Much simpler than conventional wired connections



Star network
(Oasis, Profi)



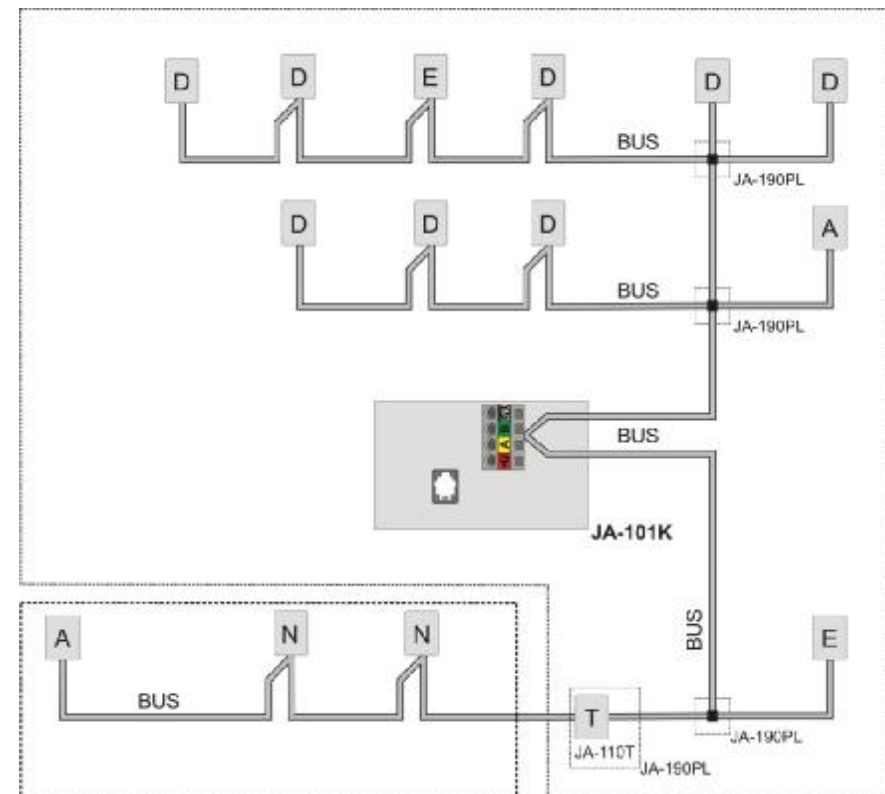
Tree network (JA-100)



Installing the BUS system

- ▶ **Total cable length max. 500 m**
 - ▶ Larger control panel 2 x 500 m
- ▶ Tree structure
- ▶ **NO closed loop (GND)**
- ▶ Outside the guarded area must be isolated
 - ▶ JA-110T – Digital BUS isolator

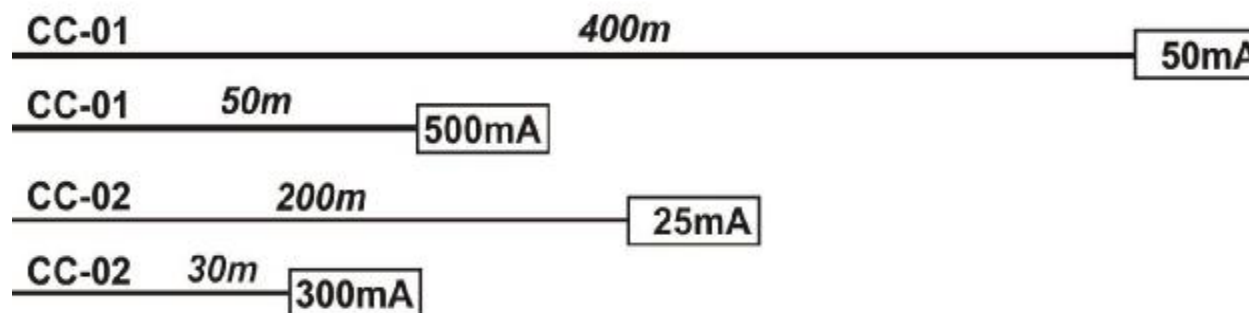
D – detector
E – keypad
T – isolator
A – siren
N – PG output





Installing the BUS system

- ▶ Watch out for the voltage drop at the end of the line
 - ▶ Device current consumptions in one branch sum up
 - ▶ CC-01 and CC-02 Jablotron cables = functionality guaranteed
 - ▶ System diagnostics provided by Flink



CC-01, CC-02 colour-coded for the connectors plus indicated length



Installing the BUS system

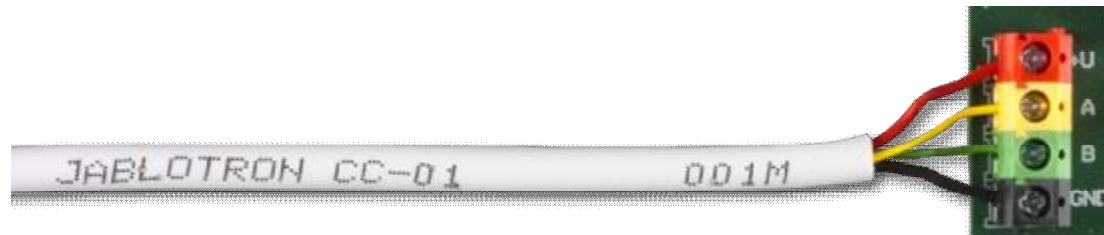
- ▶ How many bus-powered devices can be connected?
 - ▶ EN norm – systems MUST remain functional for at least 12 hours
 - ▶ The total standby current consumption must not exceed the maximum continuous-current output capability of the control panel

<i>Device</i>	<i>Description</i>	<i>pcs</i>	<i>Standby consumption</i>
JA-114E	control panel + 3 segments	1	18 mA
JA-110M	magnetic sensor module	2	10 mA
JA-110P	PIR motion detector	6	30 mA
JA-110ST	fire detector	2	10 mA
JA-110A	internal siren	1	5 mA
JA-111A	backed-up external siren	1	5 mA
TOTAL			78 mA



Installing the BUS system

- ▶ The offer must be complete
 - ▶ Wire
 - ▶ Isolator and terminal modules
- ▶ Jablotron wires and terminals have colour coordination through the whole system
- ▶ Each device has a calculated power consumption



Standard cables (SYKFY etc.) can be used as well





Wireless devices

- ▶ Coded radio protocol 868 MHz (different from JA-8x series systems)
- ▶ Range: hundreds of meters (open area)
- ▶ The system must have a radio module
 - ▶ Up to 3 radio modules
 - ▶ Optimum coverage of protected premises
- ▶ Alkaline battery power supply
 - ▶ 2 year lifetime, monitored
- ▶ One-way communicating devices
- ▶ Bi-directional communicating devices

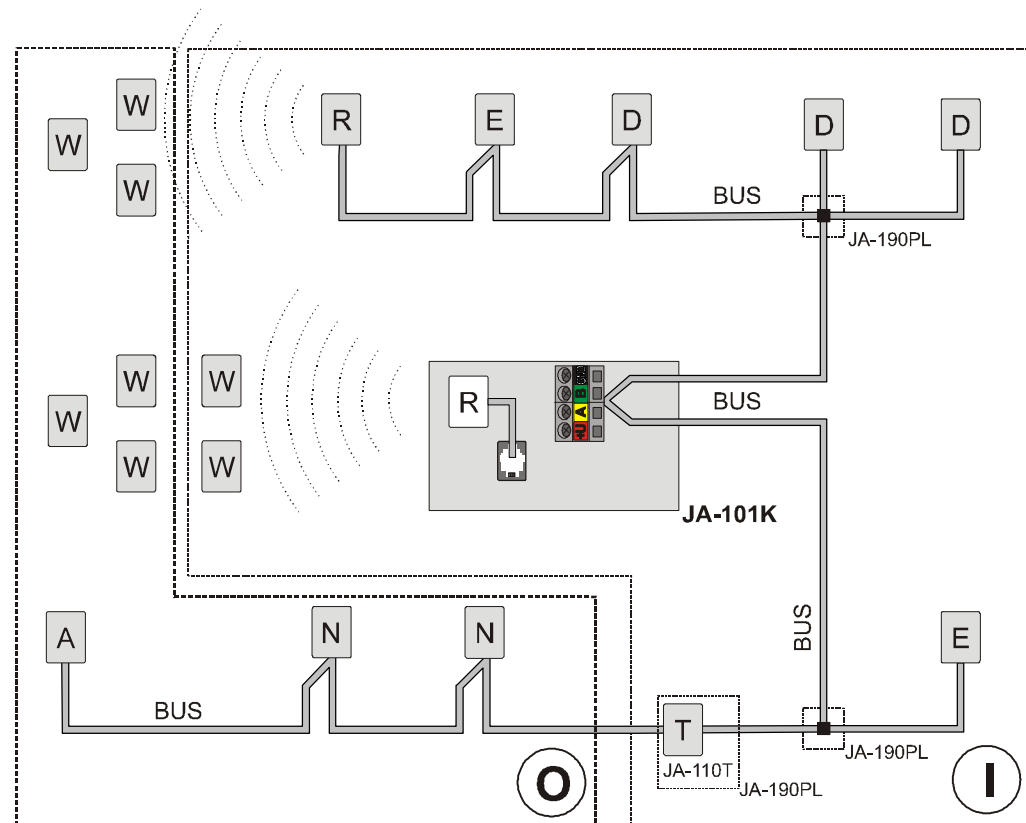




Architecture - radio

Up to 3 radio modules in the system

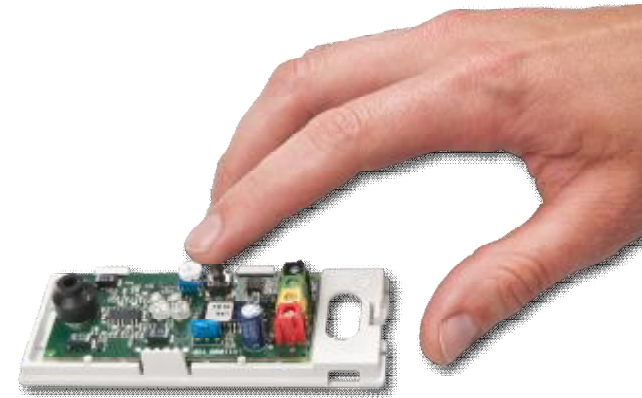
- D* – detector
- E* – keypad
- T* – isolator
- A* – siren
- N* – PG output
- R* – radio module
- W* – wireless device
- I* – inside of protected area
- O* – outside of guarded area





Devices

- ▶ **ADDRESSABLE devices**
 - ▶ Detectors, keypads, sirens, key fobs ...
 - ▶ Unassigned = yellow blinking
 - ▶ Enrolling or entering the production number
-
- ▶ **Without ADDRESSES in the system**
 - ▶ Output relays, isolators
 - ▶ Function selection by switch





Device design

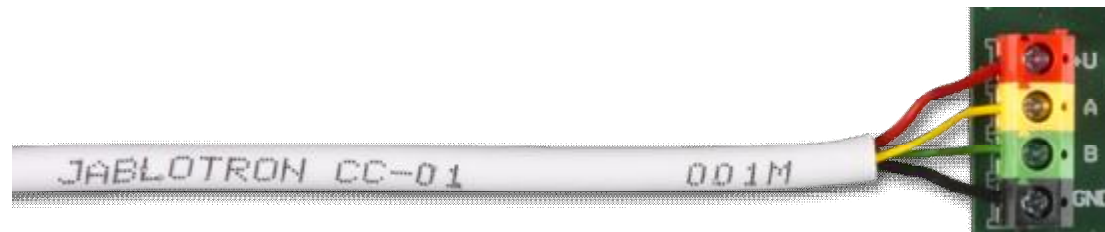
- ▶ New way of branding Jablotron devices
- ▶ 3 main groups of devices
 - ▶ JA-11x bus
 - ▶ Wireless JA-15x new housings
 - ▶ Wireless JA-18x using Oasis housings





JA-11x BUS devices

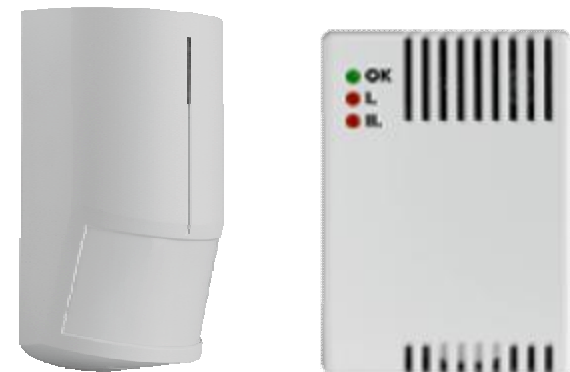
- ▶ New design for housings
- ▶ Jablotron branding on the housing
- ▶ Detectors, keypads, sirens
- ▶ Enrolling by pressing TMP or by entering production code in Flink SW
- ▶ Powered by BUS
- ▶ Connected by 4 wires – coloured wires for easy installation





Wireless devices

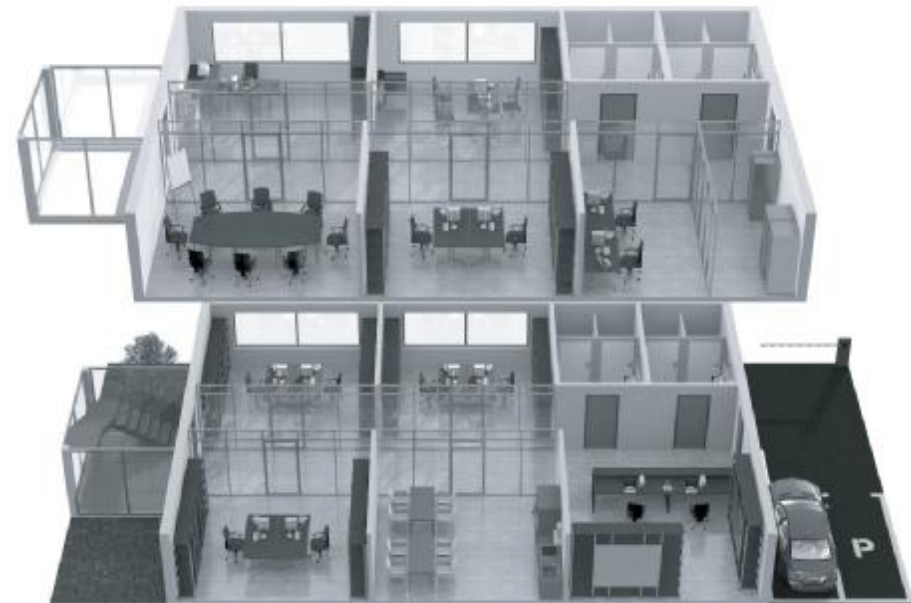
- ▶ JA-15x devices
 - ▶ New designs
 - ▶ Powered by alkaline batteries
- ▶ JA-18x devices
 - ▶ Design of products from JA-8x series systems
 - ▶ Temporarily in the JA-100 product range
- ▶ Enrolled by inserting batteries





System splitting

- ▶ Up to 15 sections
- ▶ Access limitation
 - ▶ Weekly calendar (2 intervals/day)
 - ▶ User with/without limit
- ▶ Partial setting (arming)
 - ▶ Optional for selected detectors
- ▶ Common section
- ▶ Option to report the unset status



Acoustic warnings and reports according to section.



System splitting – LARGE installations

- ▶ Large keypad controls ALL
 - ▶ “HQ”
 - ▶ Segments for all sections and functions
 - ▶ Small keypads for smaller sections
- ▶ Can be used in
 - ▶ Company – departments – offices
 - ▶ House – home office – garage





System splitting – many independent systems

- ▶ Many independent systems (sections)
 - ▶ Up to 15 independent systems with their own control
 - ▶ Many independent common sections
 - ▶ Each keypad has its own sections and functions
- ▶ Can be used in
 - ▶ Apartment buildings
 - ▶ Offices in office buildings
 - ▶ Shops in a shopping mall
 - ▶ ...





New timing possibilities - calendars

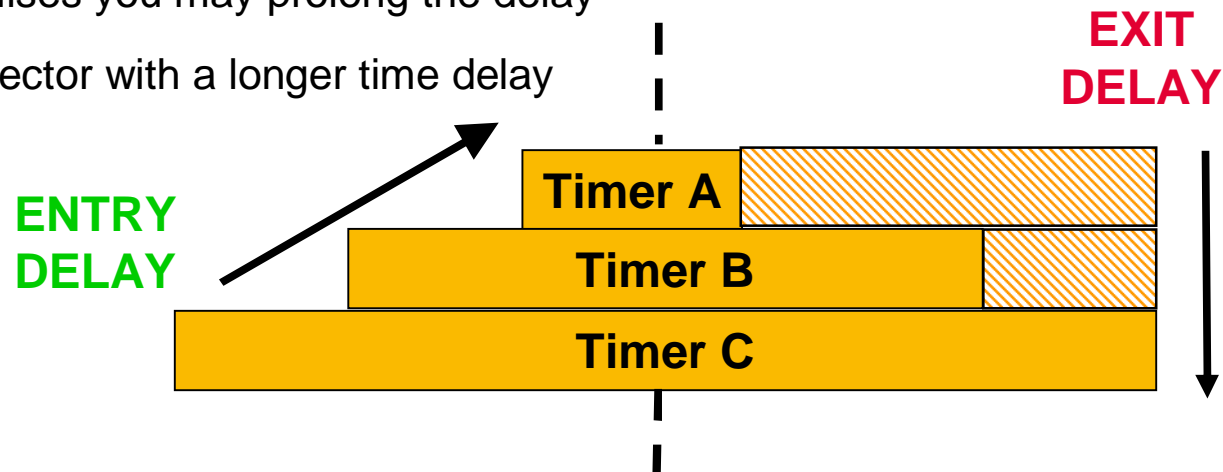
- ▶ Up to 20 independent calendars
- ▶ Calendar of automatic events
 - ▶ Weekly mode – selectable days and times
 - ▶ Switches on/off guarding – selectable sections
 - ▶ Switches PG outputs on/off – selectable PG

Event	Days of the week	Time	Guarding	Section	PG Control	PG num...	Blocked	Note
1	Mon, Tue, Wed, Thu, Fri	22:00	Set partially	1, 2	Activate PG	1		
2	Sat, Sun	00:00	Set partially	1, 2	Activate PG	1		
3	Mon, Tue, Wed, Thu, Fri	06:00	Unset	1, 2	Disable PG	1		
4	Sat, Sun	06:00	Unset	1, 2	Disable PG	1		
5	Mon, Tue, Wed, Thu, Fri, Sat, Sun	00:00	No	No	No	No		
6	Mon, Tue, Wed, Thu, Fri, Sat, Sun	00:00	No	No	No	No		
7	Mon, Tue, Wed, Thu, Fri, Sat, Sun	00:00	No	No	No	No		



New timing possibilities – exit / entry delays

- ▶ 3 timers for entrance/exit delays A, B, & C
 - ▶ They are used individually in each section
 - ▶ Garage door function for timer C (with a time extension limit)
- ▶ When entering the premises you may shorten the delay
 - ▶ By triggering a detector with a shorter time delay
- ▶ When leaving the premises you may prolong the delay
 - ▶ By triggering a detector with a longer time delay





Timing = new reaction types in the JA-100

► Confirmation by another detector

► Intrusion alarm

► Fire alarm

► The system reaction

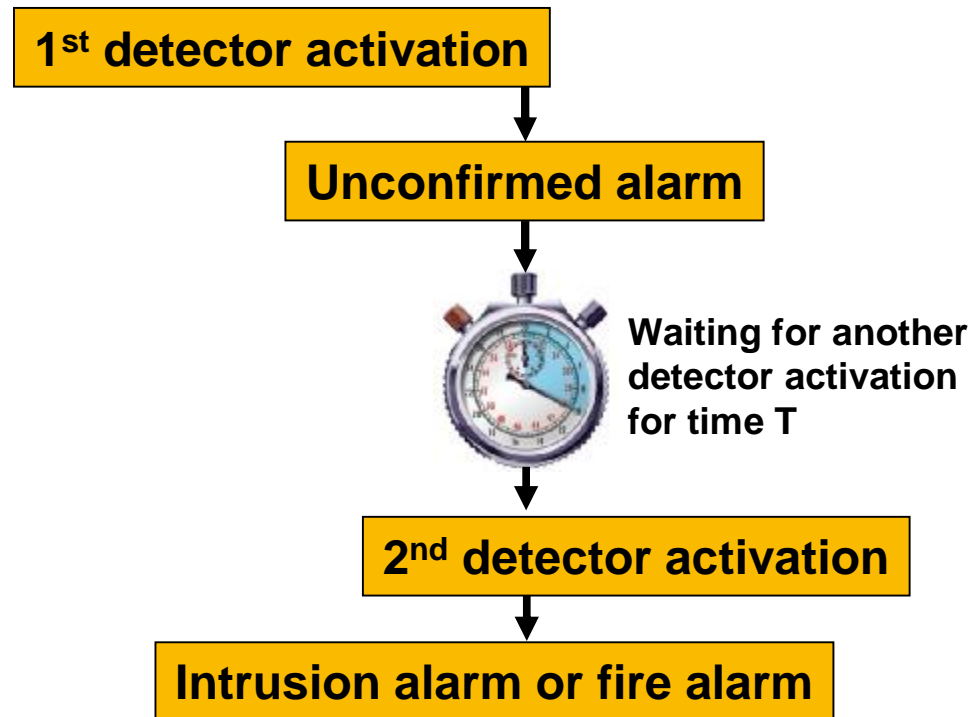
► Instant confirmed

► Delayed A confirmed

► Adjustable timing T

► For intrusion T (0min – 60min)

► For fire T (0min – 60min)



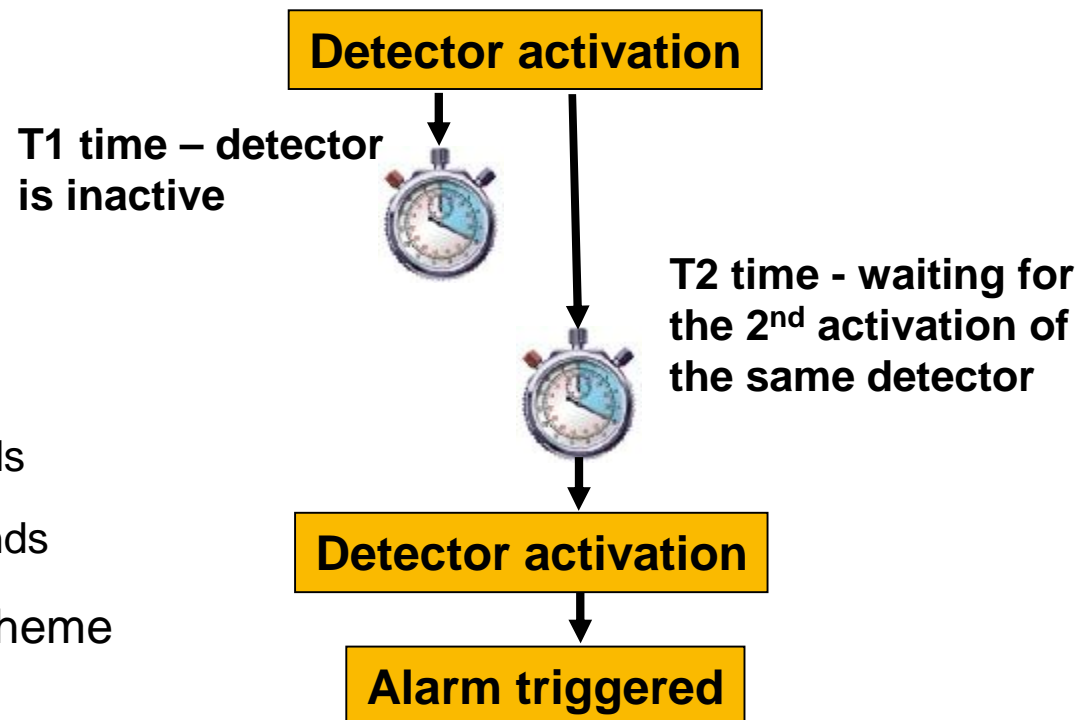
Can be confirmed by the same detector section or from any other section.



Timing = new reaction types in the JA-100

► Confirmation of alarm by the same detector

- Intrusion alarms only
- System reaction
 - Repeated instant
 - Repeated delayed A
- Adjustable timing
 - T1 – maximum 60 seconds
 - T2 – maximum 120 seconds
- $T1 < T2$ visible from the scheme





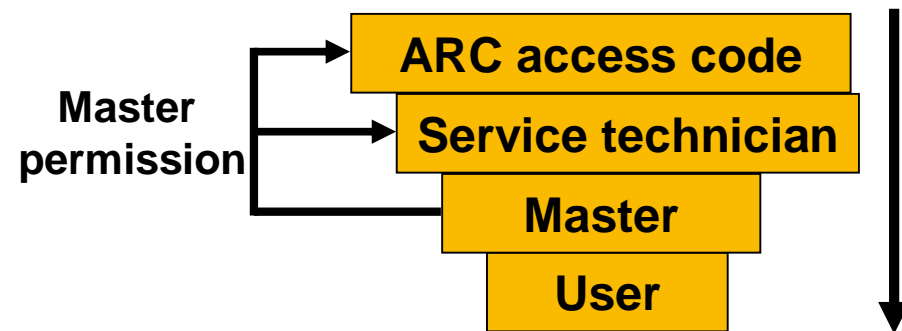
Timing - HOW to set it up

- ▶ **In Flink SW**
- ▶ System Parameter window
- ▶ Valid timing through the whole system



Access permissions

- ▶ User access = User codes
- ▶ Master access = Master codes
- ▶ Service access = Service code
- ▶ ARC access = ARC code
- ▶ Panic, set, PG only
- ▶ **System with many Master and Service codes**
- ▶ 2 main system modes
 - ▶ Service – not protecting, can be modified
 - ▶ Normal mode – ready to ARM



*Main service technician – position 0 (0*1010); main master - position 1 (1*1234).*



User authorization

- ▶ To operate the JA-100 system authorization is need
 - ▶ RFID chip/card – up to 2 per user
 - ▶ Codes **From 0*nnnn to 300*nnnn**
 - ▶ 0 to 300 are user positions
 - ▶ nnnn is a 4 digit code
 - ▶ A user can change the code himself
 - ▶ Phone number
- ▶ User authorization for
 - ▶ SET / UNSET
 - ▶ PG operation
 - ▶ Call out actions



A chip/card can only be assigned by entering a serial number in F-Link or by a JA-190T reader.



GSM communicator

- ▶ GSM communicator on the board
 - ▶ It is already part of the control panel main board
 - ▶ Voice, SMS, data
- ▶ Reporting
 - ▶ ARC – IP protocol, SMS and voice CID
 - ▶ SMS to users
 - ▶ Voice messages
- ▶ Controlling and programming
 - ▶ By Internet
 - ▶ By SMS and voice



If more communicators are in the system, main and back-up can be set up.



GSM settings

- ▶ Programmed through Flink SW
- ▶ Voice messages and voice menu
 - ▶ Invitation message + alarm messages
 - ▶ Option to record own messages
- ▶ Selectable call limits and SMS limits
- ▶ Selectable priorities

The screenshot shows a 'GSM settings' dialog box with the following fields and options:

Enabled	Enabled	Users	Remote control via telephone
87	GSM signal	Users	Remote control by sending an SMS
	PIN	0	Credit - limit
internet	APN	*101#	SIM credit sequence
internet	APN of user	0	Credit - position in the text
internet	APN password	0	Credit - period
20	Call limit in min/day		Tel. no. to maintain SIM card validity
50	SMS limit per day		
<input type="checkbox"/>	diacritics allowed		

OK



Other ways of communication with the outside world

- ▶ LAN communicator
 - ▶ It is part of the control panel (JA-106K version only)
 - ▶ Can be a backup for GSM or a main channel
- ▶ Phone communicator
 - ▶ Additional module for use within control panels JA-101K and JA-106K
 - ▶ Back-up channel for GSM or LAN Ethernet



If there are several communicators in the system, main and backup levels can be set up.



User reports

- ▶ SMS reports are sent to up to 30 users
 - ▶ Alarm photos
 - ▶ Set / Unset
 - ▶ PG On / Off
 - ▶ Faults
- ▶ Voice messages sent to max. 5 users
- ▶ 4 special reports adjustable for detector activation A,B,C,D
- ▶ Selection of reported sections

Set/unset actions are not notified to the user who performs the action.





Remote control by phone

- ▶ Each user can have authorization
 - ▶ up to 300 users can control the system
- ▶ Set / unset section – voice menu
 - ▶ Sections can be named
- ▶ PG outputs – SMS commands
- ▶ PG activation by DIALING IN from authorized numbers



Voice menu – with/without code.



Remote access by Internet

- ▶ Available for Installer
 - ▶ Remote access by Flink SW
- ▶ **Available for end user**
 - ▶ New tool designed for end user
 - ▶ Supports JA-100 but also other systems





Installer - remote access by Internet

- ▶ Installer is working with the same database
 - ▶ Locally or remotely
- ▶ Available for Installers
 - ▶ Registration code – unique code
 - ▶ Telephone number of control panel
- ▶ **SIM card needs data communication**
 - ▶ Fast way for remote programming

Internet communication settings

Registration code	HXWV4-EAS1P-CBGN
Telephone number	+420608117136

OK Cancel



End User - remote access by Internet

- ▶ After registration of the control panel with Jablotron
- ▶ **Web – MY JABLOTRON self-service**
 - ▶ Customer controls and operates the alarm
 - ▶ We are working on new functions
 - ▶ Will support SMART phones





Architecture - communication

JABLOTRON
CREATING ALARMS

Logging into MY JABLOTRON

JABLOTRON
Control your world.

E-mail

Password

Login [Forgot your Login?](#)

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Architecture - communication

JABLOTRON
CREATING ALARMS

MY JABLOTRON example I You can see your alarm system's status and much more

The screenshot displays the 'My JABLOTRON' web interface. At the top, the user is logged in as 'Frank Jak Noveho' with 'News (1 new)' and 'Credits (948)' shown. The main section is titled 'My active devices' and contains four panels:

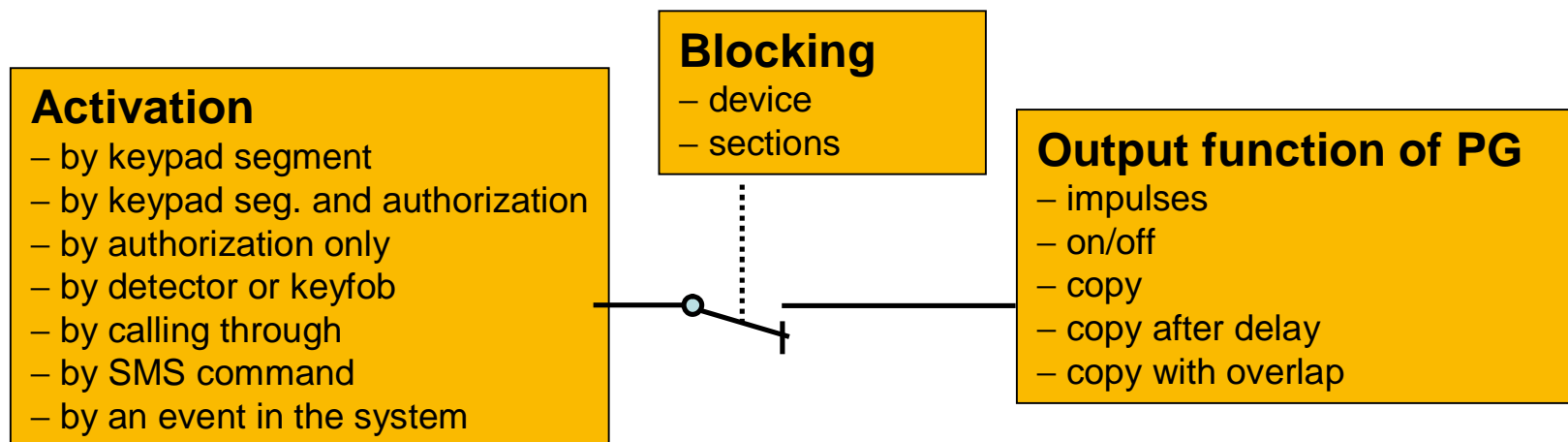
- Flat Prague:** Last Control: Before 20 min. Includes 'Garage' (green lock icon) and 'Main Entrance' (red lock icon).
- Cottage Sázava:** Last Control: Yesterday at 12:34. Includes 'Arm' (red lock icon).
- Company car:** Reference number: Pod Skalkou 33, 400 31 Jablonec nad Nisou. Includes 'Disarm' (green lock icon).
- Log book:** 3 vehicles.

Below the device panels is a promotional banner for 'Secure your Flat Prague better.' It features a man holding a yellow camera and a security camera icon. A yellow button says 'More about camera EYH4'. The footer includes the JABLOTRON logo, 'jablotron.cz', 'sign up a new alarm', and 'English'.



32 PG outputs

- ▶ Appliance operation, electric lock operation
- ▶ Status indication (garage door open longer than 30 min. etc.)
- ▶ Bus and wireless modules for PG outputs



Not just a security system, it can do so much more...



32 PG outputs – setting by Flink SW

Map of PG output activation links 1

1 Position Name: Garden lighting

Authorized users	By dialling in from users' tel. numbers	Detectors	Internal status PG control	Keypad segments
0: Servis 1: master 2: User 2 3: User 3	1: master 2: User 2 3: User 3	6: Exit door 14: Remote control Mary 18: Garage door	Partially set From section <input type="checkbox"/> 1: Full set <input checked="" type="checkbox"/> 2: House <input checked="" type="checkbox"/> 3: Garage <input type="checkbox"/> 4: Basement flood <input type="checkbox"/> 5: Sekce 7 <input type="checkbox"/> 6: Sekce 6	<input checked="" type="checkbox"/> 1: House keypad <input type="checkbox"/> 2: Garage keypad

Settings

SMS commands
SMS command for activati...
PG1 ON
SMS command for deactiv...
PG1 OFF

Output activation by an authorized user by authorization using a keypad

1: House keypad

and keypad

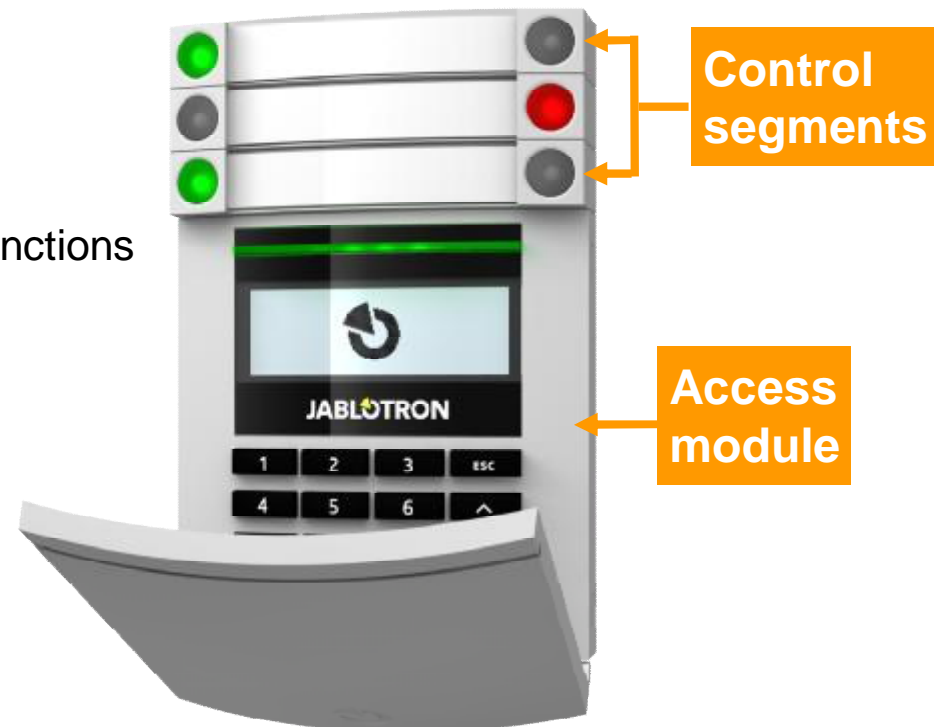
2: Garage keypad

OK



Keypad with a patented control system

- ▶ Easy
 - ▶ Easy and well arranged
 - ▶ Like traffic lights
- ▶ Smart
 - ▶ Control segments with variable functions
- ▶ Flexible
 - ▶ Fits exactly to a specific building
 - ▶ Size and functions





Access module

- ▶ Serves to verify user identity
 - ▶ RFID + keypad + display
 - ▶ RFID + keypad
 - ▶ RFID

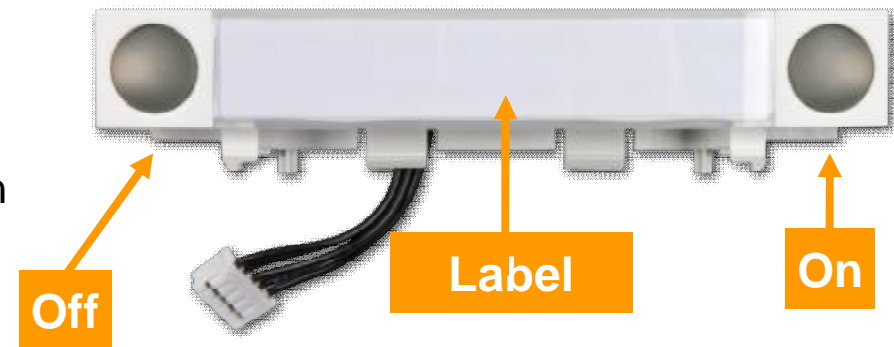


The golden middle way...



Operating segment

- ▶ Flexible function
 - ▶ Set/unset a section
 - ▶ Set partly/Set totally/Unset a section
 - ▶ PG on/off without authorization
 - ▶ PG on/off with authorization
 - ▶ Emergency (health, fire, attack) without authorization
 - ▶ Emergency with authorization
 - ▶ Section status indication
 - ▶ PG indication



Turn around 360° and click. Undo with a screw driver from the side. Do label printing using F-Link.



Customized keypad

- ▶ Access module
 - ▶ According to the needs of customers
 - ▶ Chip (Card) / Code / Display
 - ▶ Always 1 control segment
- ▶ Control segments
 - ▶ Guarding, appliances, emergency, indication
 - ▶ Max. 20
- ▶ Set up in F-Link program
 - ▶ Graphical display
 - ▶ Label printing for the segment





Control panels

2 control panel sizes

- ▶ JA-106K
 - ▶ Large housing (power supply, space for backup battery)
 - ▶ Large BUS systems
 - ▶ Large wireless systems
- ▶ JA-101K
 - ▶ Smaller housing
 - ▶ Small BUS systems
 - ▶ Medium-sized wireless systems.





Control panels

JA-101K control panel

- ▶ Security level 2
- ▶ Contains GSM communicator
- ▶ 1GB memory card
- ▶ 2.6 Ah backup battery
- ▶ Continuous consumption 125 mA

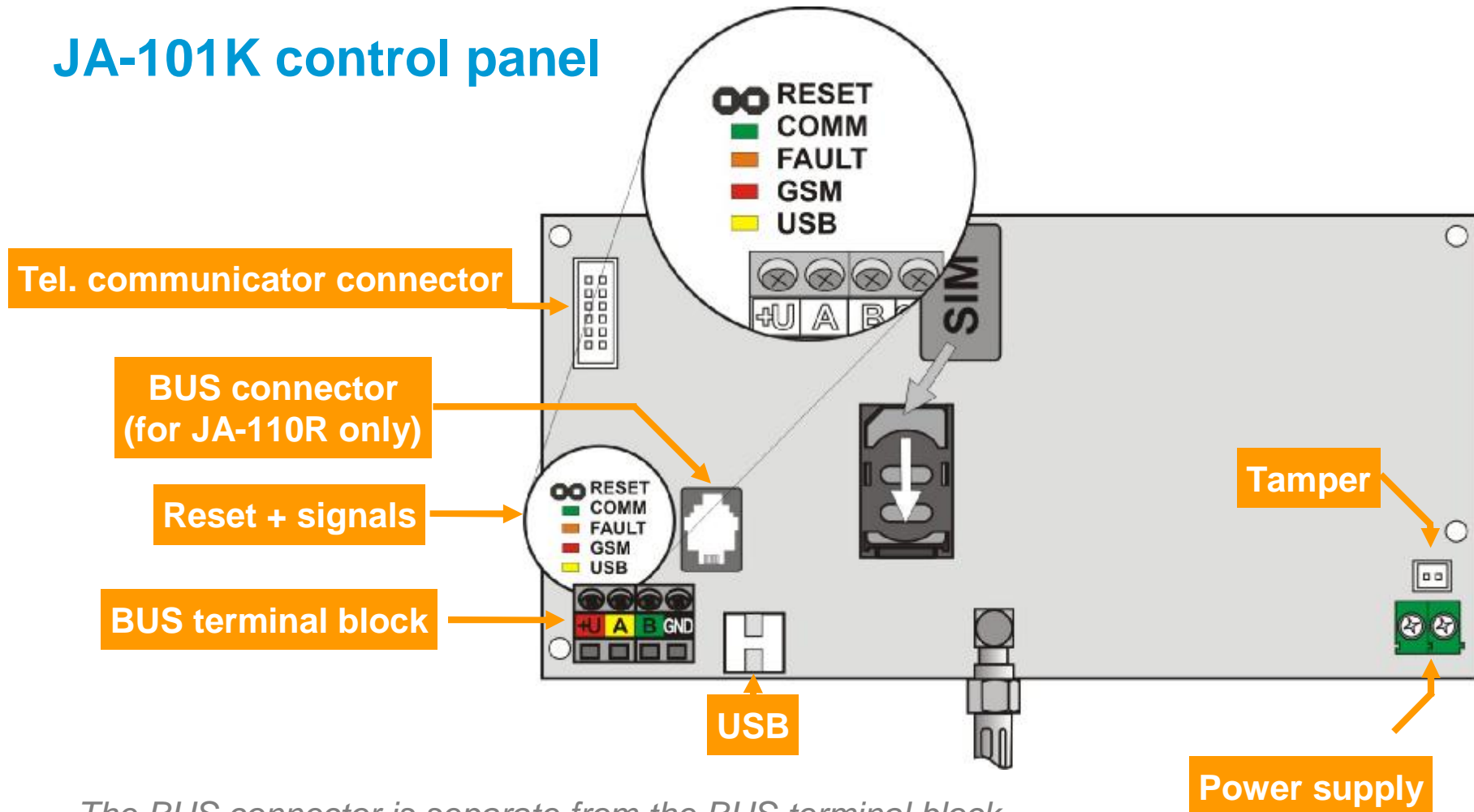


Extension – larger Oasis. Does not include LAN.



Control panels

JA-101K control panel



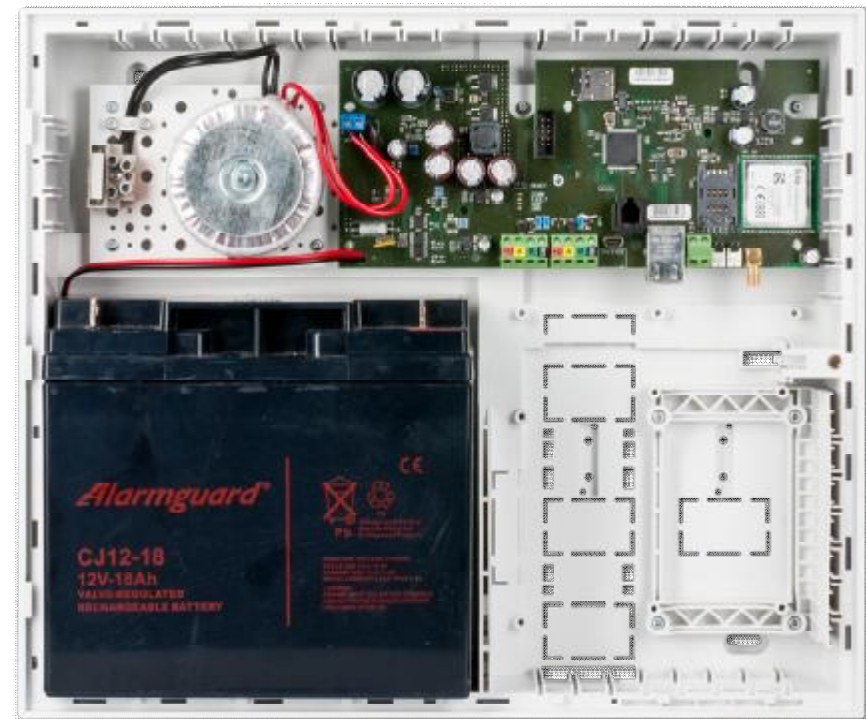
The BUS connector is separate from the BUS terminal block.



Control panels

JA-106K control panel

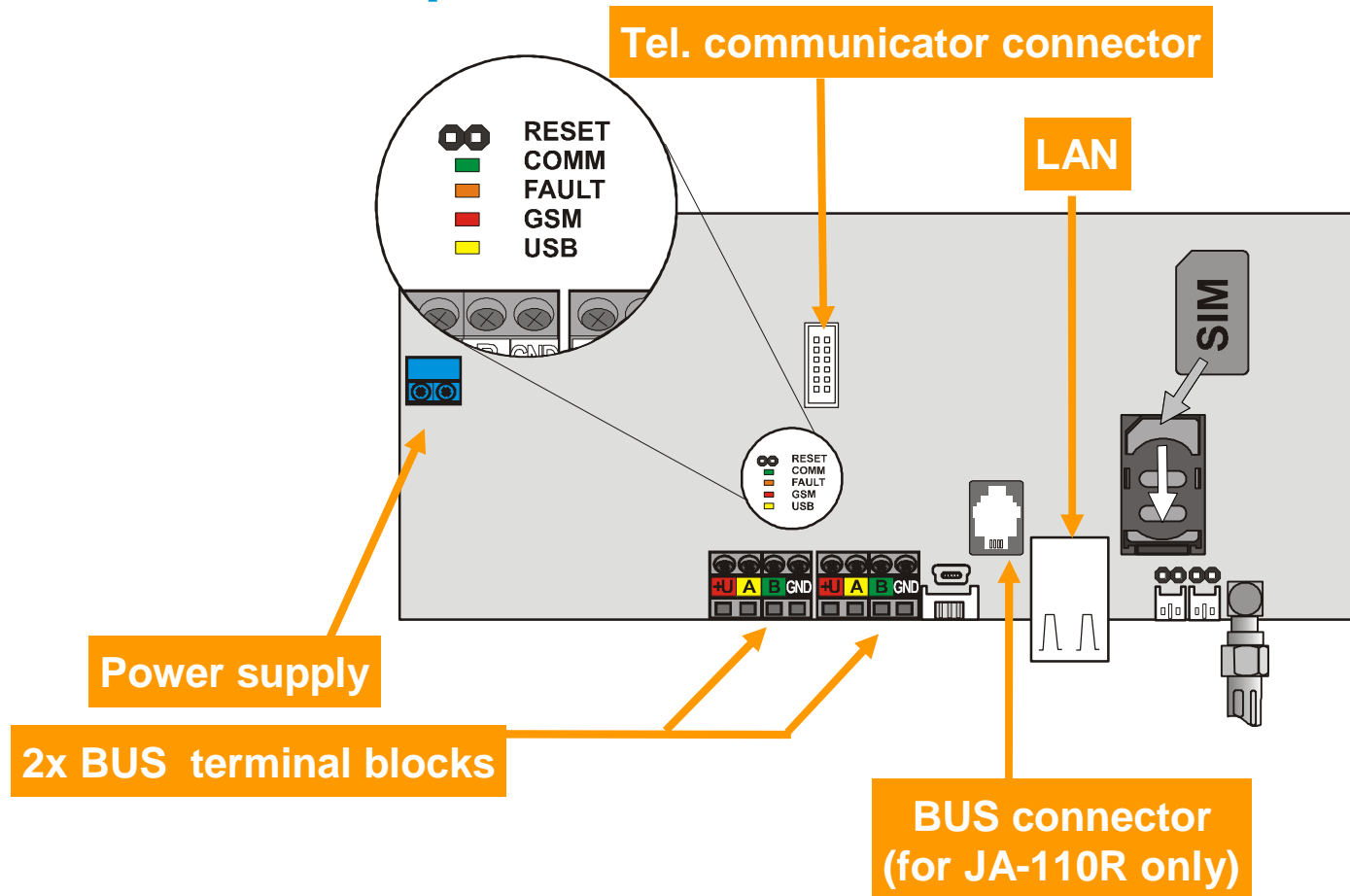
- ▶ Based on the JA-101K
- ▶ Full system capabilities
 - ▶ GSM and LAN communicator
- ▶ 2 BUS connectors
 - ▶ 2 x 500 m cables
- ▶ 18 Ah backup battery
 - ▶ Continuous consumption 1 A





Control panels

JA-106K control panel





Control panels

2 control panel sizes

Features	JA-101K	JA-106K
max number of zones	50	120
max number of users	50	300
max number of independent sections	6	15
max number of programmable outputs	8	32
GSM/GPRS communicator	YES	YES
IP LAN (Ethernet) communicator	NO	YES
SMS reports and remote control by mobile phone	up to 8 users	up to 30 users
recommended backup battery 12V	2.6 Ah	18 Ah
maximum continuous output load	125mA	1.2A
max intermittent output load	1A	2A

The units have a defined current consumption for backup purposes.



JA-110R radio module

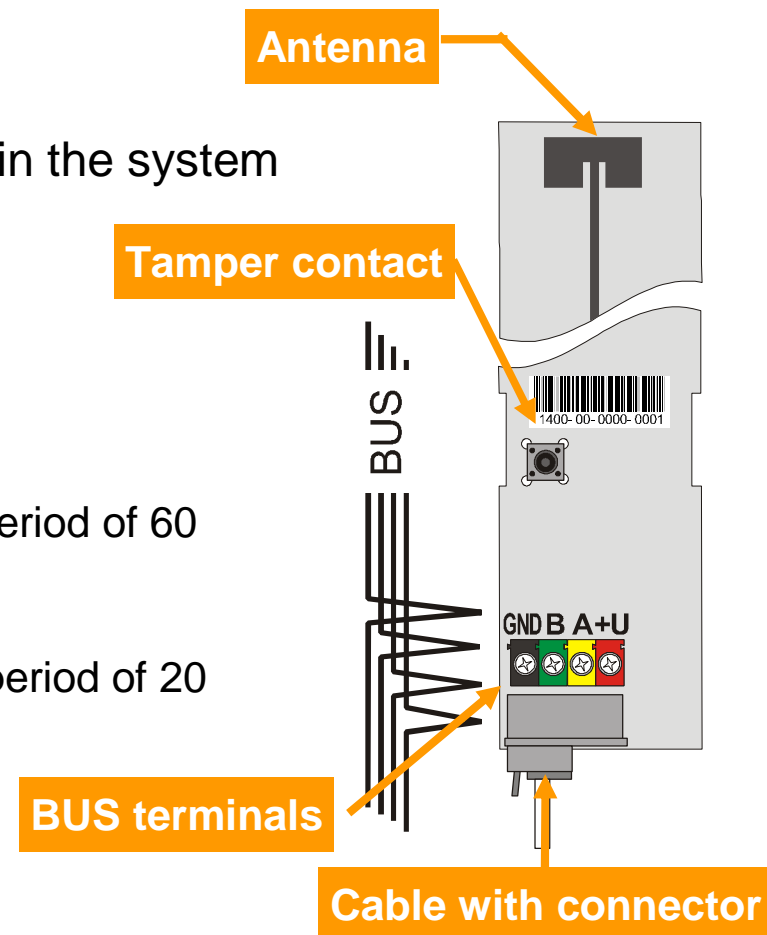
- ▶ Two main ways to install it
 - ▶ Direct installation into the control panel
 - ▶ RJ connector in the control panel
 - ▶ Installation on the BUS
 - ▶ Standard bus terminals





JA-110R radio module – inside

- ▶ It is addressable – occupies one position in the system
- ▶ Powered by BUS
- ▶ Enrolled by pressing TMP
- ▶ Monitors the radio interference level
 - ▶ LOW – interference longer than 30s in a period of 60 seconds
 - ▶ HIGH – interference longer than 10s in a period of 20 seconds



Devices are enrolled to the system, not to separate radio modules

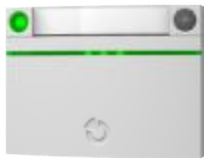


System control

JABLOTRON
CREATING ALARMS

Operating options

JA-112E



JA-113E



JA-114E



JA-190J



JA-191J



JA-110I



For keypads 3 pairs of wires – if voice module is installed



System control

JABLOTRON
CREATING ALARMS

Control options - continuity

- ▶ In Oasis housings

JA-186JW



JA-185J



JA-187J



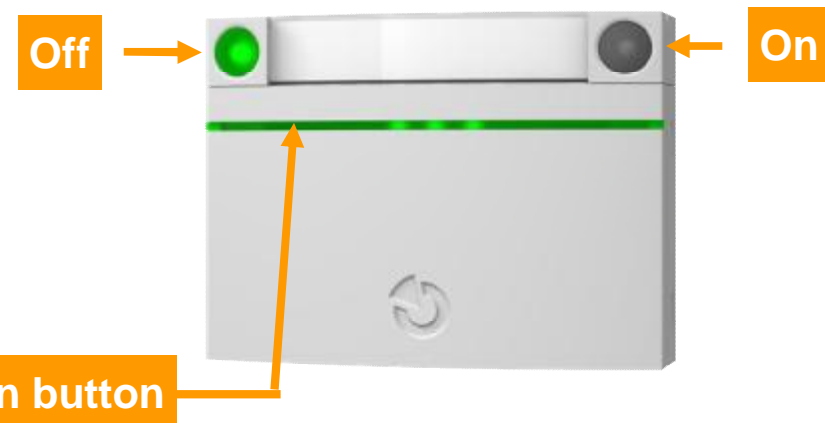
- ▶ Coming soon

- ▶ A remote control in a new housing and with new features (2 and 4 buttons)



JA-112E BUS access module

- ▶ RFID reader only
 - ▶ Special RFID chips and cards
- ▶ Backlit button aggregates information
 - ▶ Control segments – specified info
 - ▶ SMS details
- ▶ For small buildings
 - ▶ Control by chip only
 - ▶ Lock control



Backlit button = general system situation (OK, Alarm, failure etc.). Enrolled by button pushing



System control



JA-113E BUS access module

- ▶ RFID reader, keypad
 - ▶ Operated by code or chip
- ▶ Modular architecture
- ▶ Suitable for most buildings
 - ▶ Segments show system status
 - ▶ Setting/unsetting control, PG, emergency etc



The golden middle way. Enrolls by pressing the backlit button.



JA-114E BUS access module

- ▶ RFID reader, keypad, graphical display
 - ▶ Operated by code or chip + menu
- ▶ Graphical display
 - ▶ Details
 - ▶ Keypad menu
 - ▶ i Information button
- ▶ System Menu
 - ▶ Complete setting
 - ▶ More information

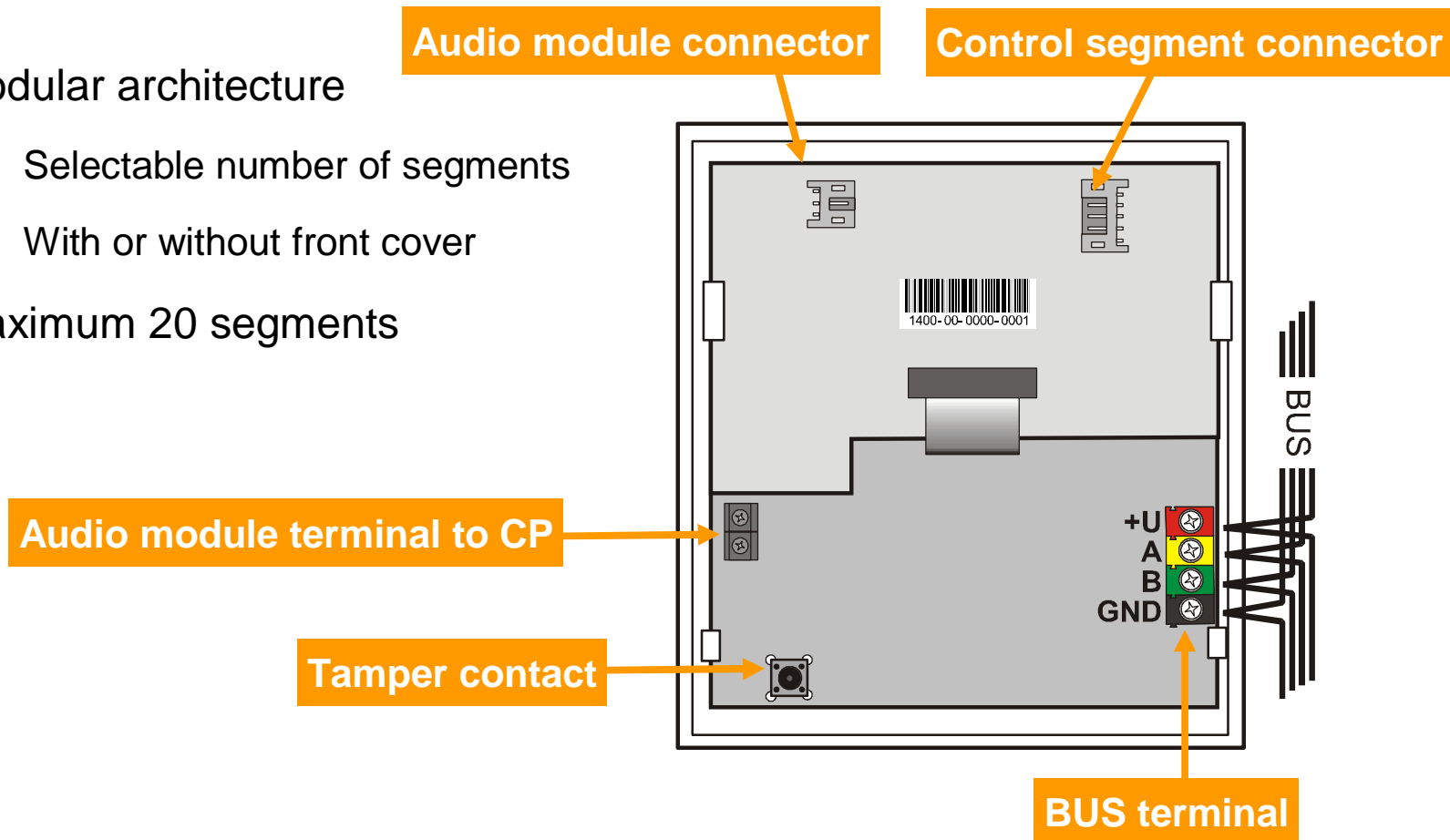
We also plan a voice module.





JA-114E BUS access module

- ▶ Modular architecture
 - ▶ Selectable number of segments
 - ▶ With or without front cover
- ▶ Maximum 20 segments





JA-110I BUS section indicator or PG output

- ▶ Optical signaling
 - ▶ Set/unset section status
 - ▶ PG output
- ▶ Device without an address
 - ▶ Does not fill up a position in the control panel

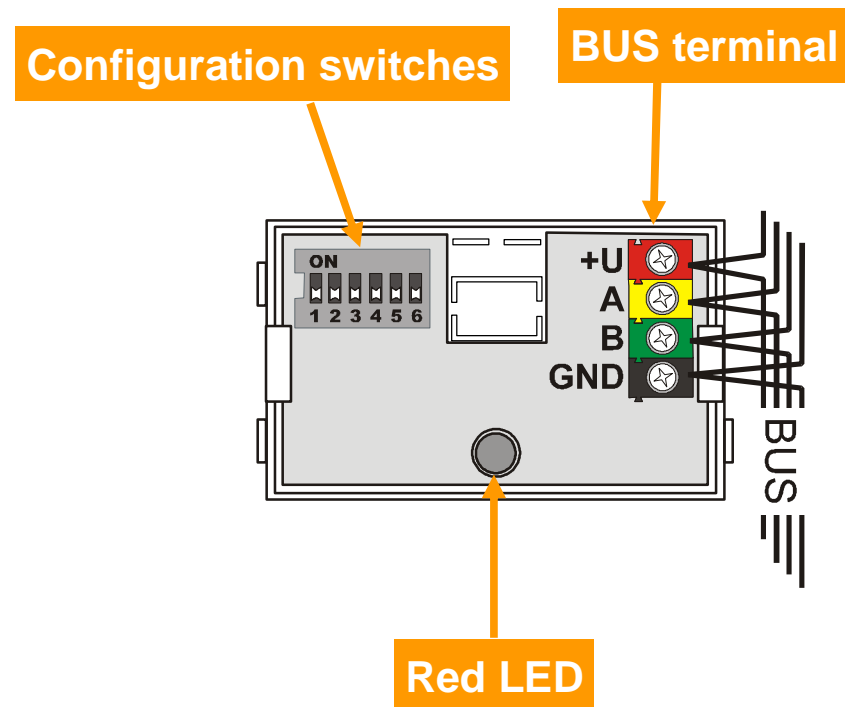


Several indicators can be set to signal the same section (several doors in a specific section).



JA-110I BUS section indicator or PG output

- ▶ The number of switches used is limited only by power consumption on the bus
- ▶ Same module settings will indicate identically
- ▶ Indicates EW or IW in the section





Detectors



BUS detectors – JA-11x series

JA-110P



JA-110M



JA-110B



JA-110ST



JA-111H





Detectors reactions – All

- ▶ Instant zone alarm
- ▶ Delayed zone A alarm
- ▶ Delayed zone B alarm
- ▶ Delayed zone C alarm
- ▶ Next delayed zone alarm
- ▶ Internal
- ▶ Internal delayed A
- ▶ Instant confirmed
- ▶ Delayed A confirmed
- ▶ Repeating instant alarm
- ▶ Repeating delayed alarm A
- ▶ Tamper alarm
- ▶ 24 hours
- ▶ Panic alarm
- ▶ Audible panic alarm
- ▶ Fire alarm
- ▶ Fire instant
- ▶ Fire confirmation
- ▶ Health problems
- ▶ Report A
- ▶ Report B
- ▶ Report C
- ▶ Report D



JA-110P BUS PIR motion detector

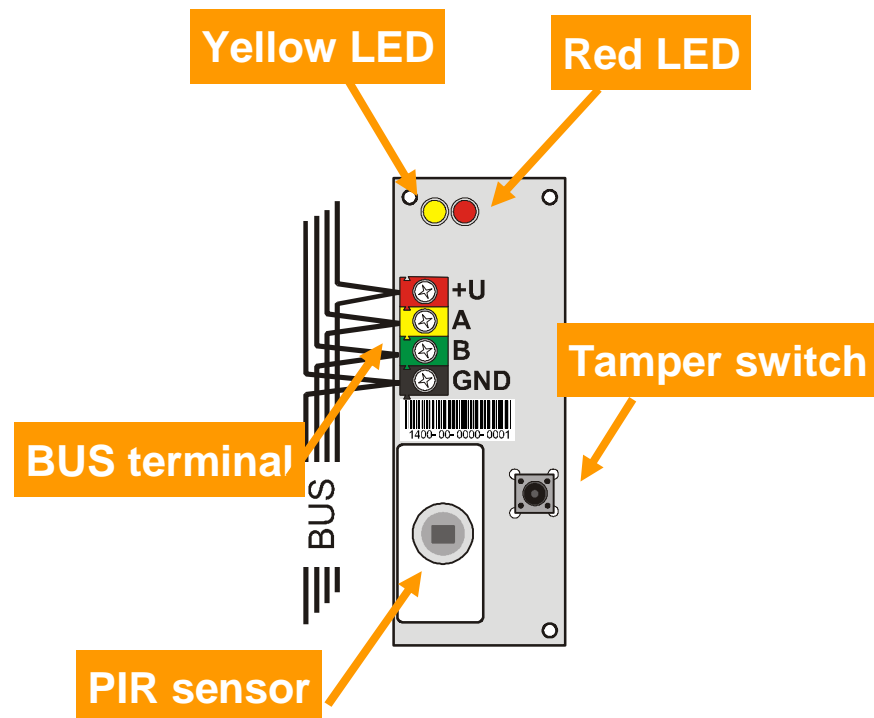
- ▶ Viewing angle 110°/12m
- ▶ 2 immunity levels against false alarms
 - ▶ Standard
 - ▶ Increased
- ▶ Optional signaling function
 - ▶ Yellow blinking = detector is not assigned
 - ▶ LED lights = failure
 - ▶ Red = activation, alarm memory





JA-110P BUS PIR motion detector

- ▶ Pulse reaction
- ▶ Detector internal setting – Flink SW
- ▶ Enrolled to the system by
 - ▶ pressing tamper
 - ▶ Entering production code



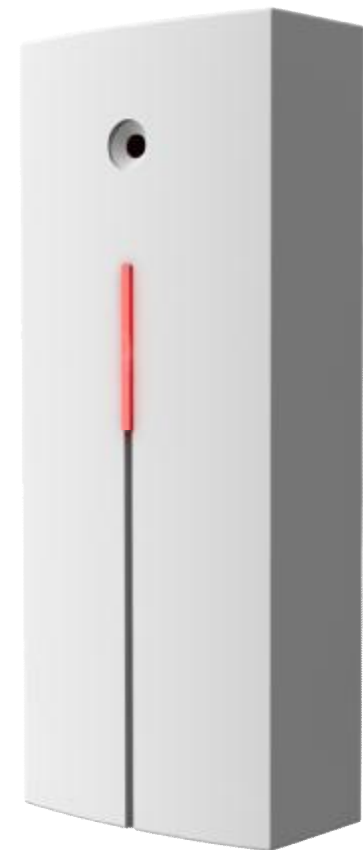
Alternative lenses –PET JS-7906, vertical curtain JS-7901 and long corridor JS-7904.



JA-110M magnetic door detector

- ▶ Occupies 2 positions
- ▶ Status reactions
- ▶ 2 alarm inputs
- ▶ Enrolling to the system
 - ▶ Pressing tamper
 - ▶ Entering production code

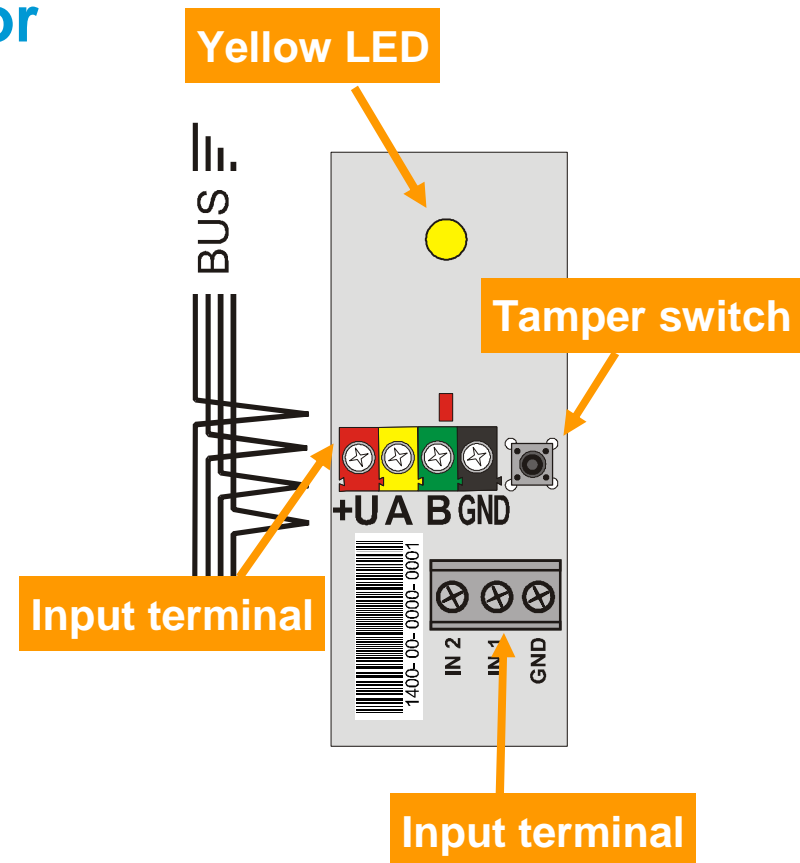
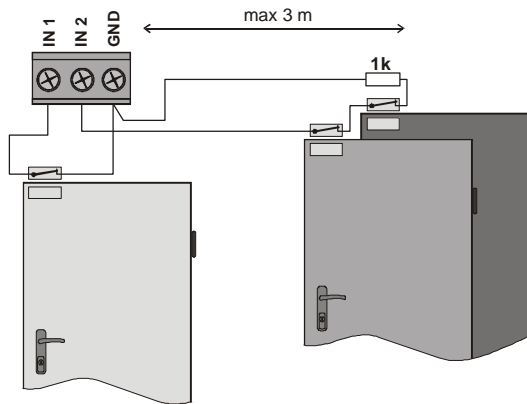
Max. length of input cable 3 m. Balanced 1k.





JA-110M magnetic door detector

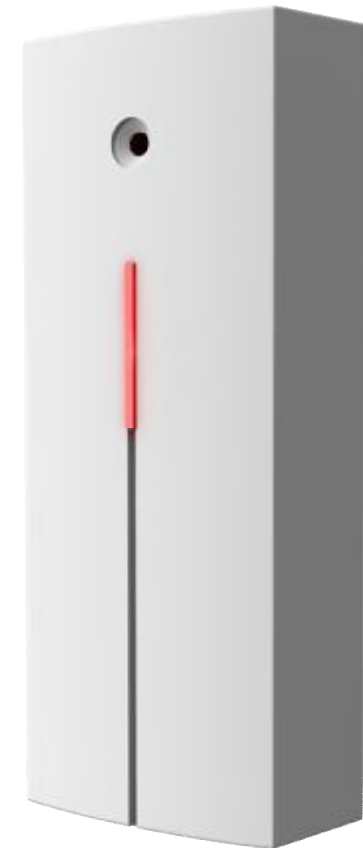
- ▶ Internal setting – Flink SW
 - ▶ Input reaction (Balanced yes/no, OFF)
 - ▶ Input reaction delay (0.1s to 300s)
 - ▶ Inverted input reaction (NC / NO)
 - ▶ LED indication enabled





JA-110B BUS glass-break detector

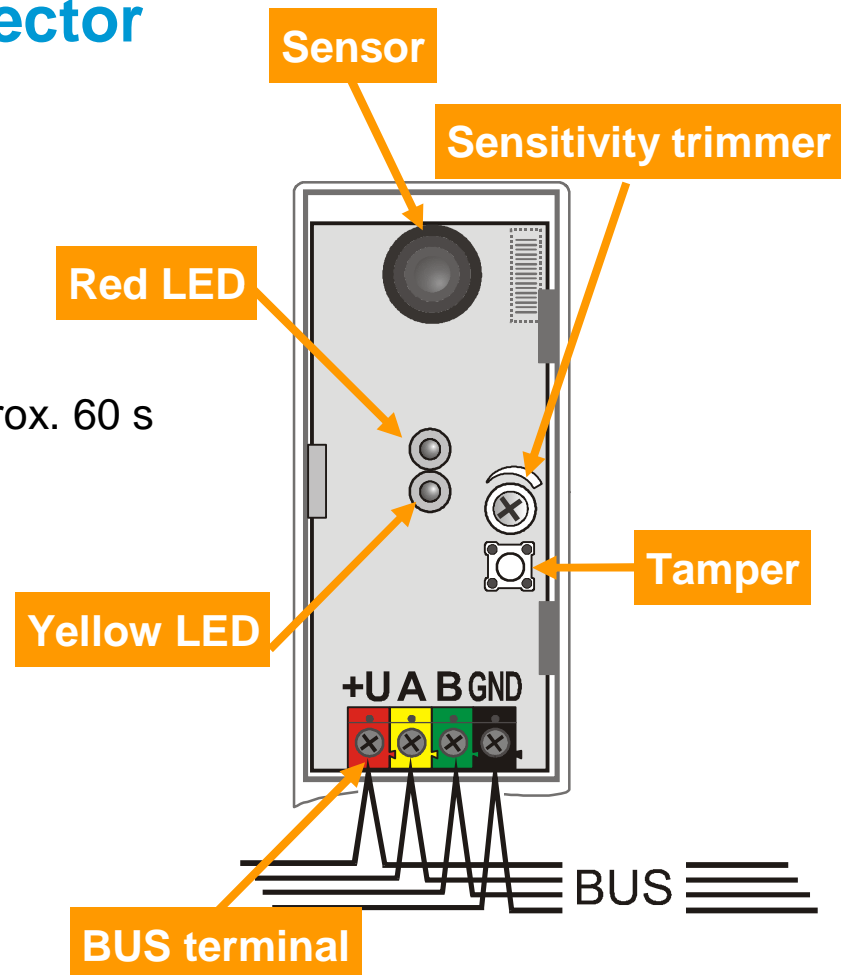
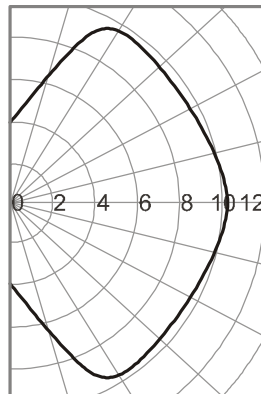
- ▶ Dual method for detection
 - ▶ Air pressure changes
 - ▶ Sound of breaking glass
- ▶ Pulse reaction
- ▶ Enrolling by
 - ▶ Pressing tamper
 - ▶ Entering production code





JA-110B BUS glass-break detector

- ▶ Detecting distance up to 9 m
 - ▶ Min. glass area size 0.6 x 0.6 m
- ▶ Setting the sensitivity – by a trimmer
 - ▶ GBT-212 tester, stabilization time approx. 60 s
- ▶ LED indication of activation





JA-110ST BUS combined smoke and temper. detector

- ▶ Logic of alarm indication
 - ▶ Smoke
 - ▶ Temperature
 - ▶ Smoke or temperature
 - ▶ Smoke and temperature
- ▶ Testing 1x in 30 days
 - ▶ By test spray
 - ▶ **Never by fire**
- ▶ A fault is signaled by a yellow light

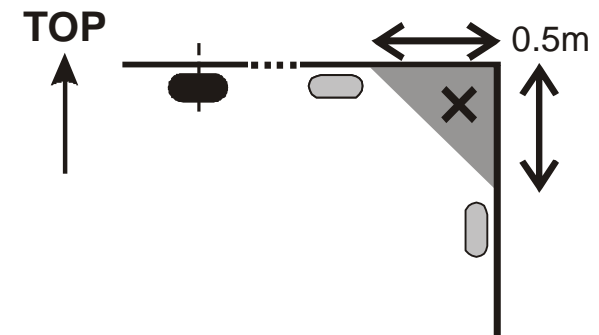
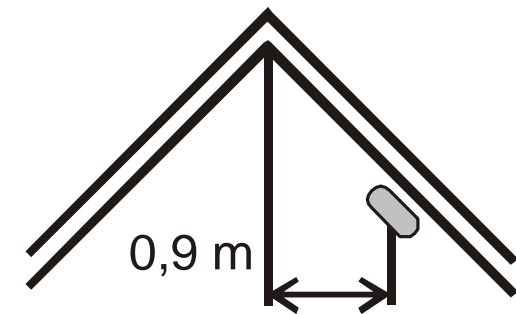
Enrolls to the system by covering the housing.





JA-110ST BUS combined smoke and temper. detector

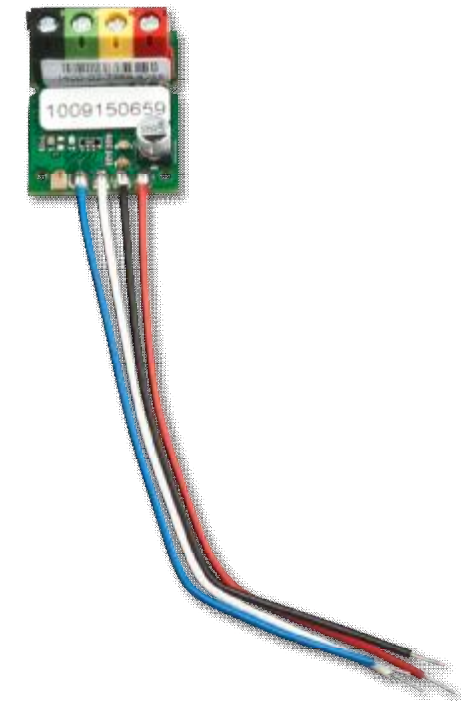
- ▶ Fire certification
 - ▶ EN 54-5 smoke
 - ▶ EN 54-7 heat
 - ▶ EN 54-25 radio smoke detectors
- ▶ Important for installation
 - ▶ Max. coverage 150 sq. meters (one detector)
 - ▶ The best position
 - ▶ Sloping ceilings
 - ▶ Center of the room





BUS module for JA-11H connecting detector

- ▶ For non-BUS detector connection
- ▶ Activation and tamper inputs
- ▶ Selectable reactions in the system
- ▶ Detector power supply - max. 50mA
 - ▶ Take into account when calculating backup time
- ▶ Activation input
 - ▶ Time filter
 - ▶ Input logic (NO/NC)
- ▶ We cannot guarantee the functions of connected detector



The detector power supply isn't protected against overcurrent. The syst. wires don't extend to the detect. !



More detectors – what we are preparing

- ▶ Magnetic
 - ▶ Mini design (including reed relay contact)
- ▶ PIR
 - ▶ **Sets of designs** (Eco and Design)
 - ▶ Combined (glass-break, microwave, anti-pet, antimasking, photos, ...)





Wireless detectors

- ▶ JA-15x series
 - ▶ New housing in JABLOTRON JA-100 design
 - ▶ Powered by alkaline batteries
 - ▶ Lifetime min. 2 years
- ▶ JA-18x series
 - ▶ In Oasis housings
 - ▶ We will gradually convert to new housings
 - ▶ Some devices will remain

JA-150P



JA-151M



JA-180W



JA-188P





JA-150P wireless motion PIR detector

- ▶ 2 working modes for the detector
 - ▶ **Smartwatch – for real time detection**
 - ▶ Typically residential areas (large motion in unset mode)
 - ▶ Motion sent to the control panel in 3 x 20 s mode, after 1x 2 min
 - ▶ If no motion for 10 min, restores mode 3 x 20 s
 - ▶ Default setting
 - ▶ 1 min sleep mode

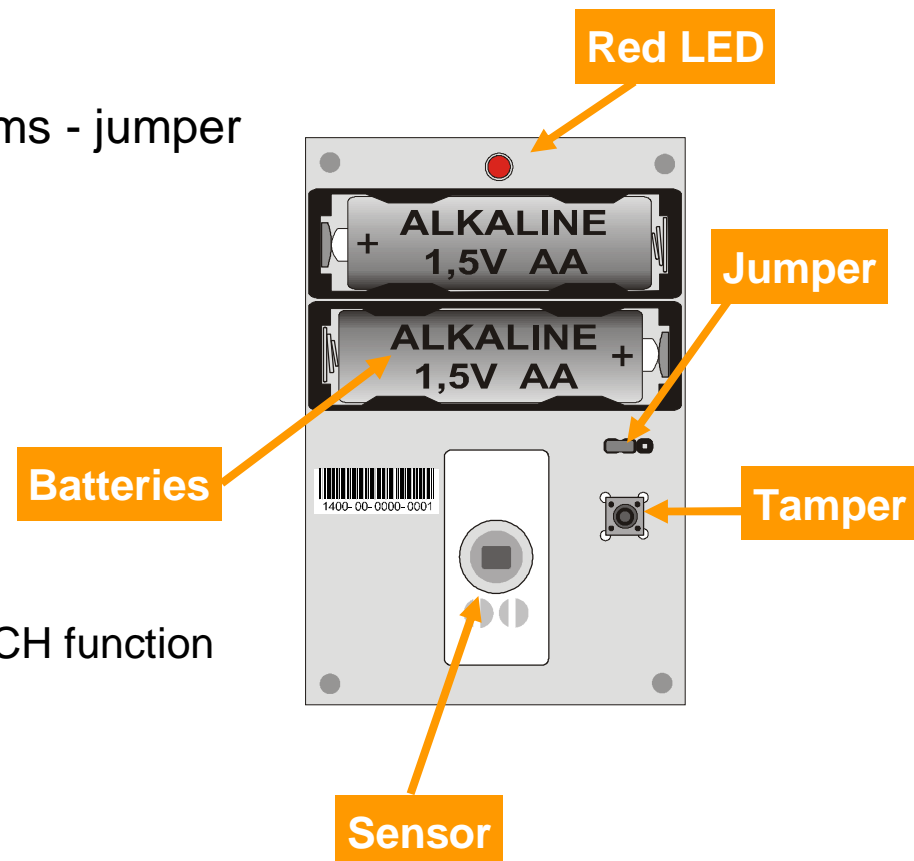


Pushed/unpushed TAMPER when inserting the battery selects working mode.



JA-150P wireless motion PIR detector

- ▶ Detection range 110°/12m
- ▶ 2 immune levels against false alarms - jumper
 - ▶ Normal
 - ▶ High
- ▶ Red light
 - ▶ 15 min testing mode
- ▶ Battery lifetime – 2years
 - ▶ Longest lifetime with SMARTWATCH function

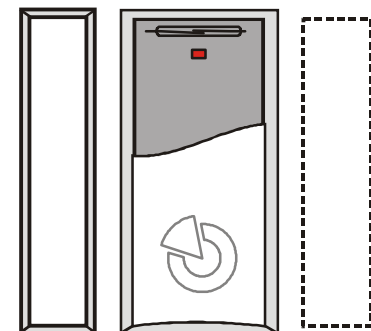


Alternative lenses.



JA-151M mini wireless magnetic detector

- ▶ Compact dimensions (55 x 26 x 16 mm)
- ▶ One magnetic sensor
 - ▶ Both-sided installation is possible
- ▶ Status and pulse reactions
- ▶ Radio range up to 200m (open area)
- ▶ Enrolling by inserting batteries
- ▶ CR-2032 battery
- ▶ Typical lifetime 2 years (20 activations/day)



*Pushed/unpushed TAMPER
when inserting the battery selects reaction – status/pulse.*



JA-18x Wireless detectors

- ▶ Motion PIR and combination detectors
 - ▶ JA-185P – mini-size wireless motion detector
 - ▶ JA-180W – PIR/MW motion detector
 - ▶ JA-180PB – PIR/Glass break detector
 - ▶ JA-186P - dual-zone (PET immune) PIR motion detector
 - ▶ JA-188P – dual-zone outdoor PIR detector
- ▶ Magnetic detectors
 - ▶ JA-181M – magnetic door detector & universal transmitter
 - ▶ JA-182M – magnetic door detector
 - ▶ JA-183M – magnetic compact door detector



JA-18x Wireless detectors and devices

- ▶ Environmental detectors
 - ▶ JA-180G - gas detector
- ▶ Control
 - ▶ JA-186JW – remote keyfob white
 - ▶ JA-186JB – remote keyfob black
 - ▶ JA-185J – remote control (suitable for cars)
 - ▶ JA-187J – wrist button
 - ▶ JA-188J – wall button
 - ▶ JA-189J – doorbell button



Output equipment

Output equipment

- ▶ Sirens, PG outputs
- ▶ Bus and wireless versions (only bus at the moment)
- ▶ Communicators – part of the control panel

JA-110A



JA-111A



JA-111N



JA-110N



The outside siren only has the old housing temporarily.



Output equipment

JA-110A Bus internal siren

- ▶ Alarm siren (with section assignment)
- ▶ Accoustic PG signaling
- ▶ Set and unset status change signaling
- ▶ Entrance and exit delay signaling
- ▶ Button – optional functions
 - ▶ Alarm muting, not cancelling alarms + intruder confirmation sent to ARC
 - ▶ Silent panic alarm

Enrolls to the system by pressing the button.

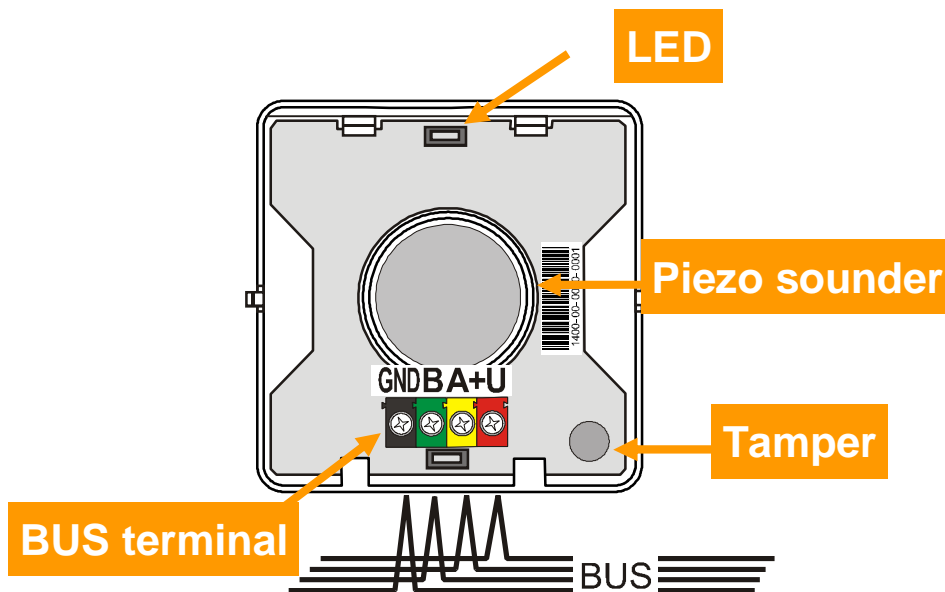




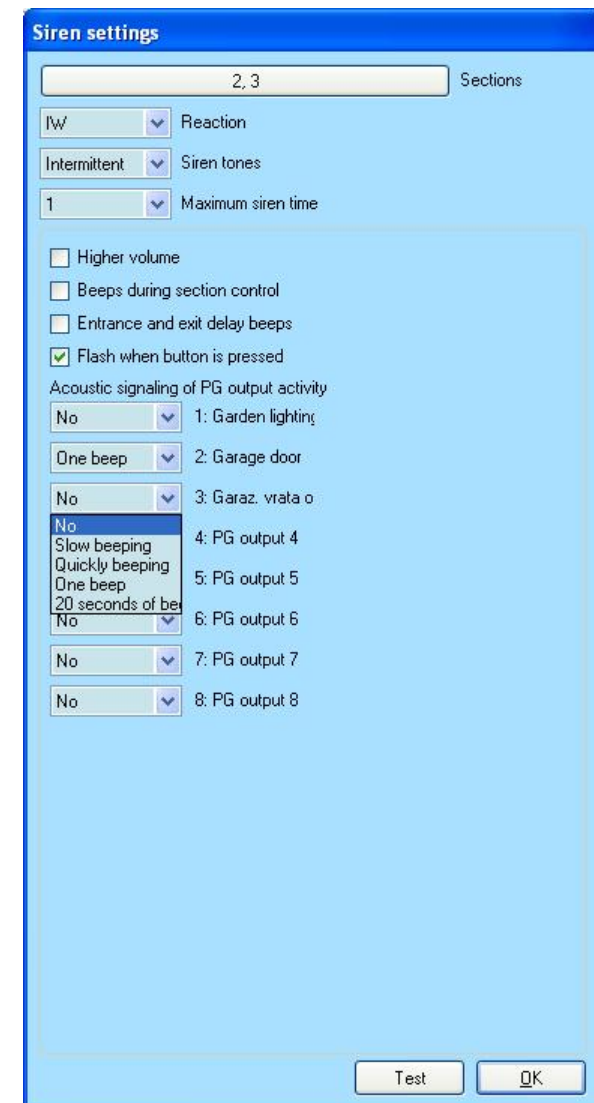
Output equipment

JA-110A Bus internal siren

- ▶ Internal settings programmed by Flink SW



Enrolls to the system by pressing the button.





Output equipment

JA-111A BUS external siren

- ▶ Back-up siren (with section assignment)
- ▶ Acoustic PG signaling possible
- ▶ Set and Unset status signaling possible (chirp)
- ▶ Backup battery
 - ▶ If power supply lost, sounds for 3 minutes
 - ▶ Not when system is in service mode

If power supply is lost due to empty backup battery in the control panel, it does not sound.

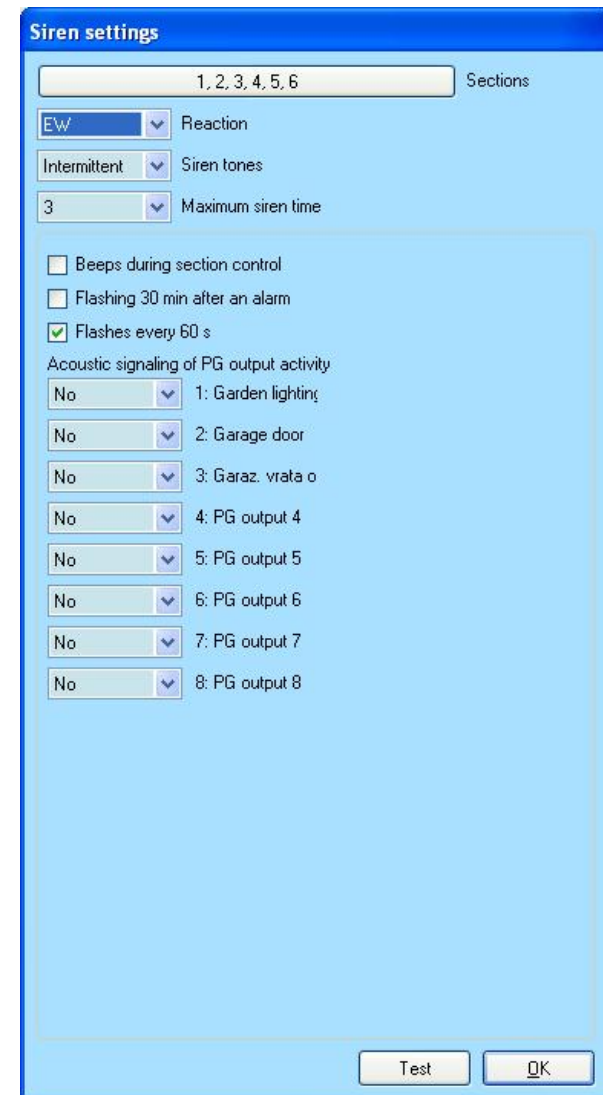
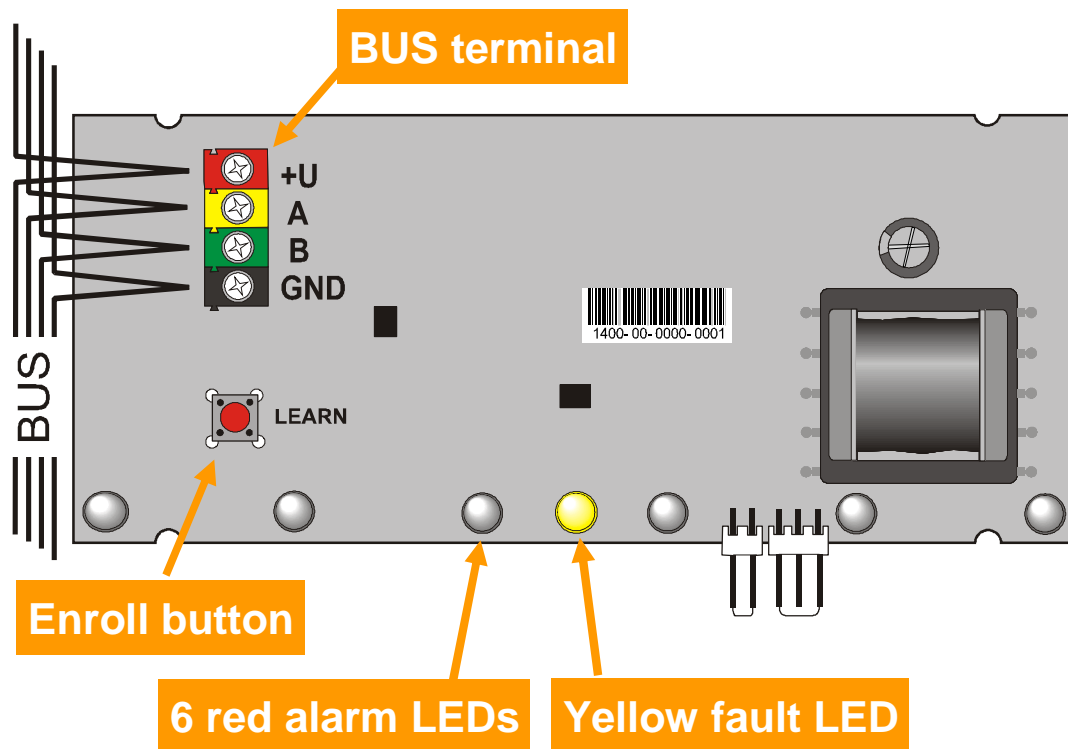




Output equipment

JA-111A BUS external siren

- ▶ Internal setting programmed by Flink SW





JA-110N/JA-111N BUS PG relay module

- ▶ JA-110N - 16A/250V – power switching relay
- ▶ JA-111N – 2A/120V – low power switching relay
- ▶ Switch contact
- ▶ Has no address
 - ▶ DIP switch selects which PG o/p





BUS components



BUS creation

CC-01



CC-02



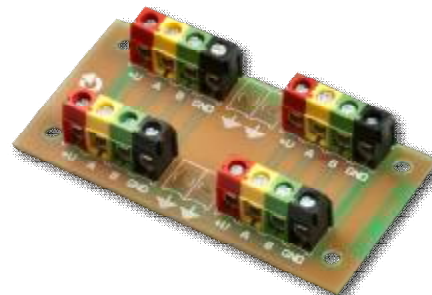
JA-190PL



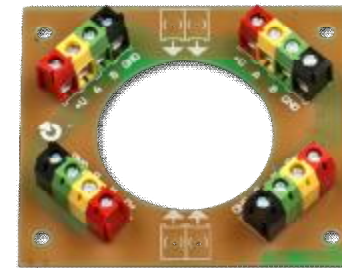
JA-110T



JA-110Z-A



JA-110Z-B





CC-01, CC-02 cables

- ▶ 2 twisted pairs without screening
- ▶ CC-01 (data wires 0.5 mm and 0.8 mm supply)
 - ▶ Main wiring or devices with large current consumptions
- ▶ CC-02 (data and power supply leads 0.5 mm)
 - ▶ For devices or in smaller premises
- ▶ Cable length indicated
- ▶ A table for used cable length is on the box



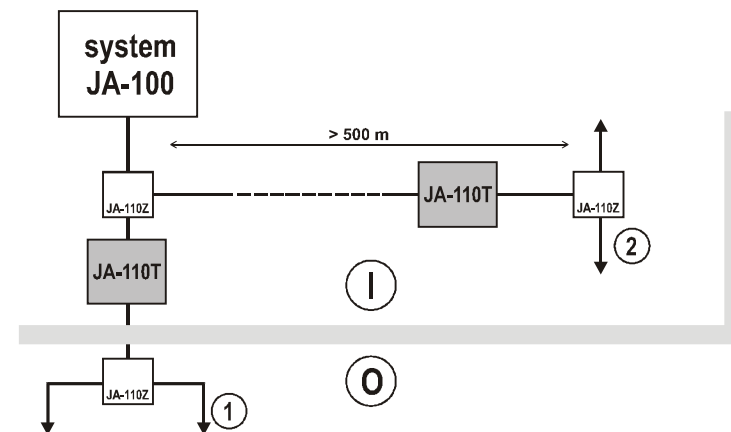


JA-110T BUS short circuit isolator module

- ▶ Protecting the digital BUS in outside areas
- ▶ Isolates two parts of the bus (NOT electrically)
- ▶ Should be installed in the inside guarded area
 - ▶ into JA-190PL
 - ▶ Into a control panel
 - ▶ Into a standard mounting box
- ▶ **Do not connect multiple isolators in series**



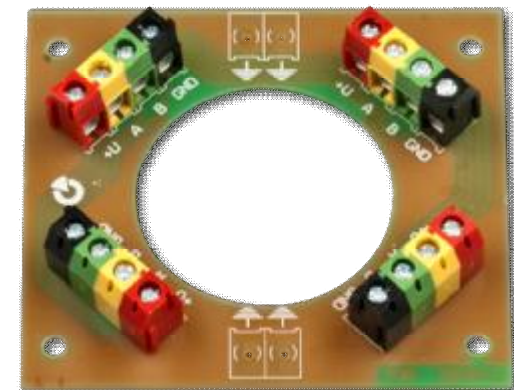
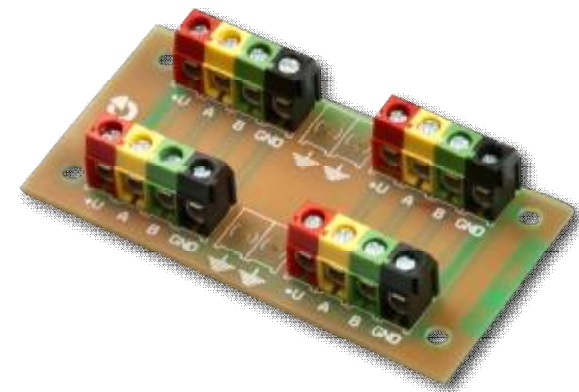
I – inner (guarded) area
O – outer (unguarded) area
1 – separation of the outer bus branch
2 – bus length extension over 500m





JA-110Z and JA-111A BUS splitting module

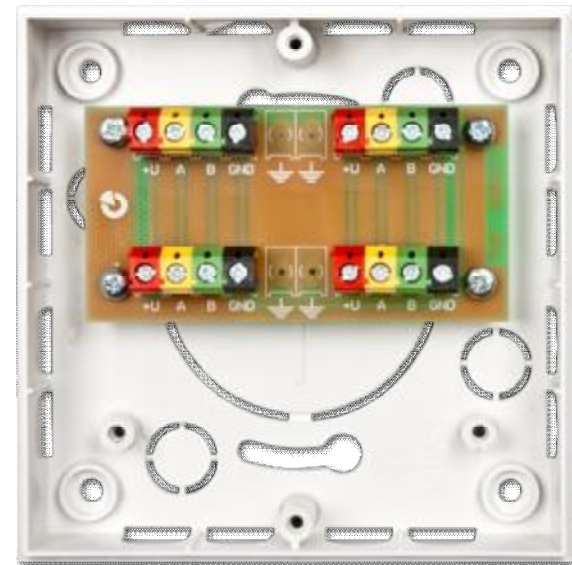
- ▶ Installed
 - ▶ into JA-190PL installation box
 - ▶ into control panel
 - ▶ into a standard mounting box
- ▶ For terminal blocks
- ▶ PG modules etc.
- ▶ Certification for installation on a flammable surface





BUS splitting

- ▶ JA-190PL installation box
 - ▶ For terminal blocks
 - ▶ Isolators modules
 - ▶ PG modules etc.
 - ▶ Certification for installation on a flammable surface





The bus components



JA-100 JABLOTRON system installation

- ▶ Connect USB cable
 - ▶ A driver does not need to be installed
- ▶ Activate F-Link
 - ▶ Download
 - ▶ Install the SW
- ▶ Set up parameters and functions
 - ▶ Bubble help

Let's see a window. A practical part will be held during tomorrow's workshop





Settings by PC



F-Link

F-Link 0.5.0 Test [Online] - panel_rene.fda Logged in: Service technician Servis in SERVICE mode, guarding completely disabled - [System settings]

panel_rene Logged in: Service technician Servis in SERVICE mode, guarding completely disabled

Initial setup | **Devices** | Section | Users | Users reports | Parameters | Diagnostics | PG outputs | Calendars | Communication | ARC

Post...	Name	Type	Section	Reaction	PG activation	Internal settings	Sup...	Alarm memory l...	Disabled	Status	Note
0	control panel	JA-101K	1: Full set		No	Enter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	OK	
1	House keypad	JA-114E	2: House		No	Enter	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	OK	
2	Garage keypad	JA-114C	3: Garage		No	Enter	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	OK	
3	Radio	JA-110R	1: Full set		No	Enter	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	OK	
4	Internal siren	JA-110A	1: Full set	Panic alarm	No	Enter	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	OK	
5	External siren	JA-111A	1: Full set		No	Enter	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	OK	
6	Exit door	JA-110M	2: House	Delayed zone A alarm	No	Enter	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	OK	
7	Window porch	JA-110M	2: House	Instant zone alarm	No	Enter	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	OK	
8	Living room glassb...	JA-110B	2: House	Instant zone alarm	No	Enter	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	OK	
9	Hall motion	JA-110P	2: House	Novit delay zone alarm	No	Enter	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ACT	
10	Garage door	JA-110M	3: Garage	Delayed zone A alarm	3: Garage vtrab...	Enter	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	OK	
11	JA-110M IN2 notc...	JA-110M	No	Delayed zone A alarm	No	Enter	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	OK	
12	Workroom motion	JA-110W	2: House	Delayed zone A alarm	No		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
13	Hall 1st floor motion	JA-110P	2: House	Delayed zone A alarm	No		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
14	Remote control Mary	JA-105J	1: Full set	Set	1: Garden lighting	Enter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
15	Remote control M...	JA-105J	No	None	2: Garage door	Enter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
16	Fire	JA-110ST	1: Full set	Fire alarm	No	Enter	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	OK	
17	Basement flood	JA-111H	4: Basem...	24 hours	No	Enter	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	OK	
18	Garage door	Assign	3: Garage	-	No		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
19	Garage window	Assign	3: Garage	-	No		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
20	Periphery 20	Assign	1: Full set	-	No		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
21	Periphery 21	Assign	1: Full set	-	No		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
22	Periphery 22	Assign	1: Full set	-	No		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
23	Periphery 23	Assign	1: Full set	-	No		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
24	Periphery 24	Assign	1: Full set	-	No		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
25	Periphery 25	Assign	1: Full set	-	No		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
26	Periphery 26	Assign	1: Full set	-	No		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
27	Periphery 27	Assign	1: Full set	-	No		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
28	Periphery 28	Assign	1: Full set	-	No		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
29	Periphery 29	Assign	1: Full set	-	No		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
30	Periphery 30	Assign	1: Full set	-	No		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
31	Periphery 31	Assign	1: Full set	-	No		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
32	Periphery 32	Assign	1: Full set	-	No		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

Advanced Save Discard

FW: LAR209r1 HW: LAR102 SN: 1400-40-2663-2574 1 | 2 | 3 | 4 | 5 | 6



And little help and gift 4Y

JABLOTRON
CREATING ALARMS

A small present for each of you

- ▶ **JA-190T USB RFID-reader for PC**
- ▶ Enrolling chips/cards to the system
- ▶ Setting up the F-Link SW
 - ▶ User folder -> Card





Try it out for all of US

JABLOTRON
CREATING ALARMS

We would be happy to hear your opinions

- ▶ Install in your home
- ▶ Or just test it on a table
- ▶ We are interested in:
 - ▶ Installation
 - ▶ General functions, system bugs
 - ▶ Customer experience





Try it out for all of US

JABLOTRON
CREATING ALARMS

JK-100-TEST starter kit

- ▶ Includes BUS devices
- ▶ Contents:
 - ▶ JA-101K control panel + backup battery
 - ▶ 3 x BUS keypads, 9 x segments and 4x chips
 - ▶ 2 x PIR, 2 x magnets, 2 x input modules, 1x GBS, 1x fire
 - ▶ 2 x sirens (internal & external), 4x PG outputs (2 x signals, 2x force)
 - ▶ Radio module and few JA-18x devices
 - ▶ Cables (20 m CC-01, 50 m CC-02)
 - ▶ Other (4 x installation boxes, 2 x hubs, section indicators)
- ▶ FOC





JA-100 Testing



Please write us your comments / experiences

- ▶ Enter comments in the online self-service store
- ▶ Technical questions:
 - ▶ Mr. Pavel Cerny and Mr. Jiri Kreisel
 - ▶ email: cerny@jablotron.cz, kreisel@jablotron.cz
 - ▶ Pavel's phone: +420 483 559 940
 - ▶ Jirka's phone: +420 483 559 997





JA-100 Testing



Please use our FORUM for testing

- ▶ www.ja100forum.jablotron.cz
- ▶ Ask questions ...
- ▶ Point to some suggestions, improvements and ideas
- ▶ It is designed to:
 - ▶ understand the system better
 - ▶ share your experiences
 - ▶ tune the system and prepare it for your markets




JA-100 Testing



Please use our FORUM for testing

JA-100 distributors forum

JA-100 I Distributors forum



Index | [User list](#) | [Search](#) | [Profile](#) | [Administration](#) | [Logout](#)

Logged in as **Cerny Pavel** [Show new posts since last visit](#)
Last visit: Today 09:36:23 [Mark all topics as read](#)

Announcement

Welcome in our forum Please enter your comments regarding JA-100 system

Test category

Forum	Topics	Posts	Last post
<input checked="" type="checkbox"/> Testing line For your testing of the forum	1	1	Today 11:29:55 by Cerny Pavel
<input type="checkbox"/> Bulletin board	0	0	
<input type="checkbox"/> Austria - HI-Systems	0	0	
<input type="checkbox"/> Austria - I-Alarmssysteme	0	0	
<input type="checkbox"/> Austria - R&S Services	0	0	
<input type="checkbox"/> Belgium - Wilcon	0	0	
<input type="checkbox"/> Cyprus - Handy 's Security	0	0	
<input type="checkbox"/> Denmark - Pro-Sec	0	0	
<input type="checkbox"/> Finland - Novosec Oy	0	0	
<input type="checkbox"/> France - Activalarm	0	0	
<input type="checkbox"/> Germany - EPS Vertriebs GmbH	0	0	
<input type="checkbox"/> Germany - Indexa	0	0	
<input type="checkbox"/> Germany - REWO GmbH	0	0	
<input type="checkbox"/> Hong Kong - Jablotron Pacific Asia Ltd	0	0	
<input type="checkbox"/> Hungary - Jablotron Alarms Hungaria Kft.	0	0	
<input type="checkbox"/> Great Britain - Enterprise Security	0	0	
<input type="checkbox"/> Italy - ASCANI ELETROCOMM SRL	0	0	



JA-100 Testing



Please use our **FORUM** for testing

The screenshot shows a web browser window displaying the JA-100 Distributors forum. The browser's address bar shows the URL <http://www.jablotron.cz/forums.php?m=38>. The forum header includes the JA-100 logo and the text "Distributors forum" and "JABLOTRON CREATING ALARMS". A navigation menu includes "Index", "User list", "Search", "Profile", and "Logout". A user is logged in as "cerry" with the last visit on "Yesterday 13:19:54". An announcement reads: "Welcome in our forum! Please enter your comments regarding JA-100 system". The main content area shows a post from "Cerry Pavel Administrator" dated "Yesterday 13:24:55". The post text says: "Dear Partners, Jablotron will be extremely grateful for all your feedbacks and mutual cooperation mainly regarding the new upcoming system JA-100. Thank you very much. Cerry Pavel". Below the post is a large empty text input field for a reply, with "Post reply" and "Post" buttons. The footer of the forum page includes "Powered by phpBB" and "© Copyright 2007-2011 Jablotron".



JABLOTRON JA-100

JABLOTRON
CREATING ALARMS

Questions?





Thank you for your attention