

Manual: QA Jablotron Integration (JA-121T)

Introduction

The **QA Jablotron Integration (JA-121T)** application provides full data integration of the Jablotron security system into the Smart Home and Energy environment. Communication runs via the **JA-121T** communication module and an **RS485/TCP** serial bus converter.

The application allows you to:

- control setting and unsetting of sections directly from the control unit,
- monitor the setting state, alarm states and the current state of the peripherals,
- display and control the programmable outputs (PG outputs) of the control panel.

For each configured section, peripheral and programmable output, the application automatically creates a corresponding tile in the control unit. During an update, the original tile settings (name, room, position in the room) are preserved, so the existing Jablotron sensors and controls can also be used for other scenarios — lighting, heating or blind control, or assignment to downstream QA applications.

The application works with Mervis SCADA for visualisation and with other QA applications of the Energy Management series — for heating, climate and lighting control, occupancy detection and more.

Upstream and downstream applications

Upstream applications

The application is standalone and does not require any upstream QA application. It takes its input data directly from the Jablotron security system via the JA-121T module.

Downstream applications

Optional:

- **QA Presence Detection** — uses the section state (set / unset) and the state of the Jablotron motion peripherals as an input signal for evaluating the presence of persons in the building.

Installation and initial setup of the QA

Hardware requirements

The following conditions must be met before installing the application:

- the **JA-121T communication module** is installed and enrolled in the Jablotron security control panel,
- the JA-121T module is set as **Terminal** in the **F-Link** software and the **Passive mode** parameter is switched off,
- an **authorisation code** for communication with the smart home is assigned in the control panel and the corresponding **permissions** are set,
- an **RS485/TCP serial bus converter** is installed and set up according to the manufacturer's requirements — communication parameters **9600 baud, 8N1** (8 data bits, no parity, 1 stop bit),
- the converter is connected to the same local network as the control unit.

Installation of the QA application

Purchase the application in the Smart Home and Energy e-shop (<https://eshop.smarthomeenergy.cz>). After the purchase you receive an e-mail with a link to the activation form, in which you choose one of the two installation methods:

- **Installation via the SHE Installation Application (recommended)** — the application is installed into the unit automatically and future updates are provided. It requires the “superuser” credentials for the unit. See the separate “Installation Application” manual for details.
- **Standalone installation file** — the activation form provides a link to download an encrypted *.fqax file bound to the entered unit S/N. Install the file manually into the unit according to the unit manufacturer's instructions (logged in as “superuser”). This option does not allow automatic updates.

If you want to verify the integration before purchase, a **trial version (TRIAL)** is available for download on the Smart Home and Energy website — full functionality is unlocked for 2 days.

Control panel credentials

After the QA has been installed into the unit, you must enter the credentials for communication with the Jablotron control panel. Access to the variables:

1. Hover the cursor over the main QA tile (e.g. **Jablotron**).
2. A gear icon appears in the top-left corner of the tile — click it.
3. The QA settings open. Go to the **Variables** tab.

Fill in the two variables whose values are assigned by the Jablotron control panel for communication with the smart home:

- **UserNumber** — user number assigned in the control panel.
- **UserCode** — authorisation code assigned to that user.

Without these credentials, the application cannot establish communication with the control panel. The other variables on the Variables tab are internal and should not be configured by the user.

User settings

Opening the card

To open the application card in a web browser, hover the cursor over a tile (e.g. **Jablotron**, **Sections**, **Peripherals**) — the eye icon appears in the top-right corner of the tile; click it. The card with the tile detail and all controls opens.

Warning: Not all cards and tiles are displayed to all users. Each user selects which cards and tiles are displayed on the Display Settings card (sheViewControl application) – levels **SHORT**, **ADVANCED** and **ADMIN**. If you cannot see a described card, check the settings on this card.

Initial setup procedure

1. "Installation" card

- Set the number of sections, peripherals and programmable outputs.
- Select the specific elements of the control panel that the application is to monitor.
- Configure the communication with the RS485/TCP converter.
- After saving, the tiles for the selected elements are created automatically.

2. **"Sections", "Peripherals", "Outputs" cards** — used for normal operation (setting, monitoring the states, controlling the outputs). No further settings are needed — the application works with the elements selected on the Installation card.

"Jablotron" card

The main card of the application displays the operating state of the QA. Once communication with the control panel is set up correctly, the **Run status** parameter shows the state **Running**.

"Sections" card

The card provides an overview of all sections (zones) of the security system and controls for operating them. It contains:

- **Section Home Status** — current state of the home (partial) setting mode. The sections included in this mode are defined on the Installation card with the **SELECT SECTIONS HOME** option.
- **Section Home Flags** — any active flags of the home (partial) setting mode.
- **Sections Overview** — for each configured section, it displays **Section X Status** (e.g. **READY**, **ARMED**) and **Section X Flags** (any active flags — alarm in progress, fire alarm, entry / exit delay, etc.). For each section, the **UNSET** and **SET** buttons are available for manual control.

The same control is also available in the tile of the individual section (the **Section X Status** tile).

"Peripherals" card

The card displays the **Peripherals Overview** — the current state of all configured peripherals of the Jablotron control panel, including the **Main** tile for the state of the control panel itself. The peripheral state takes the values **Inactive** and **Active**. For motion sensors, the time of the last detection is also shown.

The individual peripherals are also available as separate **Peripheral X** tiles — the tile shows the current value (Detected / Not Detected) and, for motion sensors, the date and time of the last detected motion.

“Outputs” card

The card displays the **Outputs Overview** — the current state of the configured programmable outputs of the Jablotron control panel. Each output is available as a separate **Output X** tile, in which you can control the output state with the **OFF** and **ON** buttons (or the **OFF / ON** switch). The current output state is shown as **Off** or **On**.

“Installation” card

 **Warning:** When saving settings, always wait until **Run status** changes to **Running**. Do not press **SAVE** before that.

The card contains all settings of the integration scope and of the communication with the RS485/TCP converter. The sections of the card are arranged from top to bottom.

Sections Settings

- **Number of sections** — number of zones of the Jablotron security system that the application is to monitor.
- **SECTION SELECTION** — selection of the specific sections (zone numbers) of the control panel that the application will monitor.
- **SECTION CONTROL SELECTION** — selection of the sections that can be set and unset directly from the application.
- **SELECT SECTIONS HOME** — selection of the sections included in the **Section Home** mode (home / partial setting).

Peripherals Settings

- **Number of peripherals** — number of peripherals (sensors, contacts) that the application is to monitor.
- **PERIPHERAL SELECTION** — selection of the specific peripherals of the control panel whose state the application will display.

Outputs Settings

- **Number of outputs** — number of programmable outputs of the control panel that the application is to make available.
- **OUTPUTS SELECTIONS** — selection of the specific PG outputs.
- **OUTPUTS CONTROL SELECTIONS** — selection of the outputs that can be switched directly from the application (**ON / OFF**).

Communication settings

- **IP Address** — current IP address of the RS485/TCP converter the application is connected to. It is filled in automatically after the device is selected.
- **MAC Address** — MAC address of the converter that the application uses to connect.
- **MAC ADDRESS** — selection of the converter from the list of converters available in the local network.
- **SEARCH NETWORK** — the application searches the local network and offers the available RS485/TCP converters. When the search is finished, select your converter in the **MAC ADDRESS** field.
- **SAVE** — saves the configuration to the unit. Press the button only when **Run status** shows **Running**.

If the converter is missing from the list, check that it is connected to the same local network and powered, and click **SEARCH NETWORK** again.

The lower part of the card shows the **version** of the installed QA application for information (e.g. sheJablotronIntruder 1.02.04). This information is used for support and records.

Notes

- The tile configuration (name, room, position in the room) is preserved when the application is updated — sensors and outputs can be used permanently in scenes and downstream QA applications for controlling heating, lighting and other technologies.
- The application works as a **data interface**. Specific automations and links (e.g. heating setback when set, switching on the lights when a sensor is triggered) are implemented in the unit scenes and in downstream QA applications.
- For evaluating long-term statistics, archiving and visualising the states of sections, peripherals and outputs, we recommend linking to **Mervis SCADA** (export of values, charts, history).