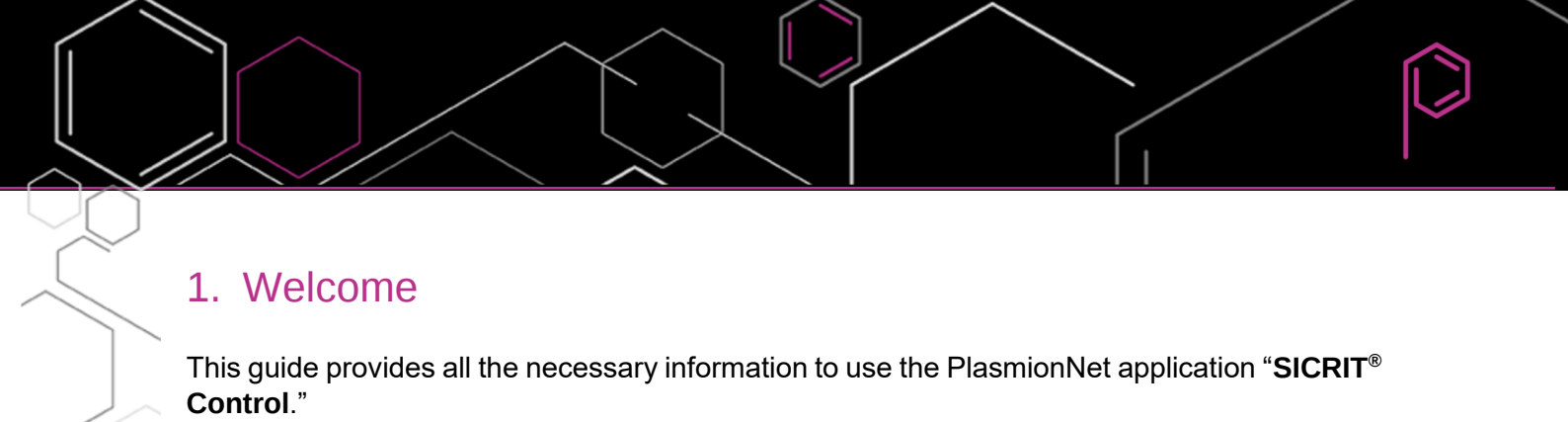




Manual Application SICRIT® Control

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1. Welcome

This guide provides all the necessary information to use the PlasmionNet application “**SICRIT® Control.**”

It begins by explaining all system requirements. Then, it covers the application's features, interaction options, device workflow, and configuration settings. At the end of the document, you'll find a section dedicated to common errors and troubleshooting.

This manual includes instructions for both user types in our application: “**Administrator**” and “**Operator.**” If you are logged in as an **Operator**, you can skip the [Configuration](#) chapter.

If you still have any questions or issues, feel free to contact your designated Plasmion representative or use the general contact options.

2. Getting Started

Before starting the PlasmionNet application, ensure that you meet the following requirements:

- You have successfully installed and licensed the PlasmionNet application.
- You have configured the application (if not, please refer to the chapter [Configuration](#)).
- You have access to the required devices for this app.

Required devices:

- SICRIT® Control Unit

Note:

If any item on the list is missing, please refer to the relevant specialized manuals for guidance on the missing points. They will provide step-by-step instructions.

3. Application Overview

After starting the application, you encounter the starting page of the application (see *Figure 1 - Start page*)

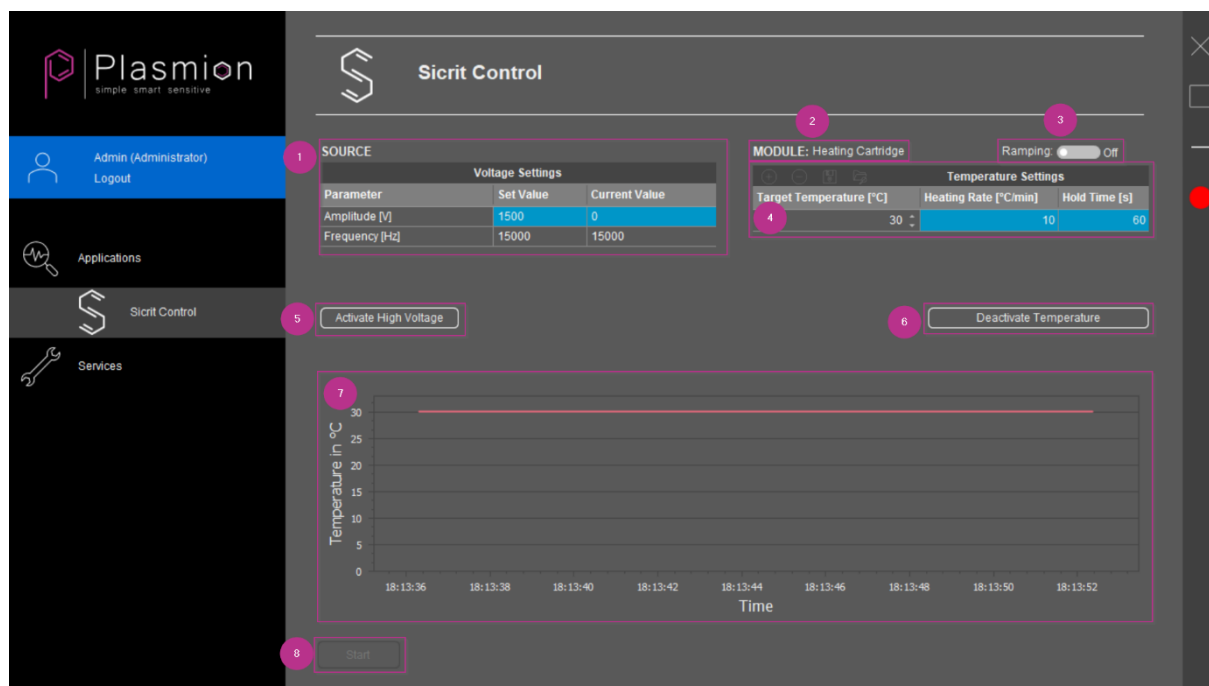


Figure 1 - Start page

On the start page, you can see the current status of the **SICRIT® control unit**. The **"High Voltage"** status is shown in the area marked as **Number 1**, the **temperature of the add-on** is displayed in the area marked as **Number 7**, and the **connected add-on** is shown in the area marked as **Number 2**.

In the middle and bottom sections of the view, you'll find the **buttons** for the application's functionalities (marked as **Numbers 3, 5, 6, and 8**). All of these functions are explained in the following chapters.

3.1. Control Unit Functions

This application includes multiple functions for managing the **SICRIT® control unit**. It allows you to control the individual functions for **"High Voltage"** and **"Temperature"**. Additionally, you can run a configured **temperature ramp**.

In the following chapters, each function will be explained in detail, along with helpful advice where applicable.

3.1.1. High Voltage

The **button** (marked as **Number 5**) allows you to toggle the **"High Voltage"** state. It either activates or deactivates the high voltage function. This action is only permitted when no



temperature ramp is currently configured or running. The “**High Voltage**” setting remains unchanged during the configuration or execution of a temperature ramp.

Remarks:

Depending on the “**Amplitude**” and “**Frequency**” settings, it may take varying amounts of time to reach the configured values. Please also keep in mind the limitations associated with these settings, which are explained in the manual for the “**SICRIT® Control Unit**”. All manuals can be found on our website (<http://www.plasmion.com/manuals>)

3.1.2. Temperature

After starting the application, the connected add-on is automatically set to the temperature defined in the first row of the temperature grid (marked as **Number 4**). This input field is also used to change the temperature value of the add-on. The value entered here will be applied to the add-on when you press the “**Activate Temperature**” button (marked as **Number 6**). If the button shows the label “**Deactivate Temperature**”, it means the heating for the add-on is currently active and can be turned off by pressing the button.

Note: This function is only available when an add-on is connected **and** no temperature ramp is currently active.

Remarks:

If you want to change the temperature while the add-on is already active, you must first **briefly deactivate** it, then enter the new temperature value, and finally **reactivate** the add-on.

3.2. Temperature Ramp Settings

When a **Heating Cartridge** module is connected to the **SICRIT® Control Unit**, it is possible to configure a **temperature ramp**. To initiate the ramping process, switch the “**Ramping**” control (marked as **Number 3** in *Figure 1 - Start page*). After enabling this option, the ramping menu will become available (see *Figure 2 - Active ramping option*).



Figure 2 - Active ramping option

The **temperature grid** contains three fields:

1. **Target Temperature** – the temperature you want to reach.
2. **Heating Rate** – the rate of temperature change, in °C per minute.
3. **Hold Time** – the duration for which the target temperature is maintained.

Remarks:

The heating rate (**integral**) cannot be validated against your specific environment. If you configure values that are physically unattainable (e.g., attempting to cool down or heat up at extreme rates), the add-on will still attempt to reach those values. This can lead to unintended side effects, such as inaccurate hold times or incorrect execution of subsequent ramp steps.

3.2.1. Add

The “+” (**Plus**) icon (marked as **Number 1**) adds a new temperature ramp entry to the end of the list in the table.

3.2.2. Delete

The “-” (**Minus**) icon (marked as **Number 2**) initiates the deletion process for the currently selected ramp entry in the table. You will be prompted to confirm the deletion (see [Figure 3 - Delete request](#)).

- If you confirm the request, the selected entry will be removed from the list.
- If you cancel, the entry will remain unchanged.

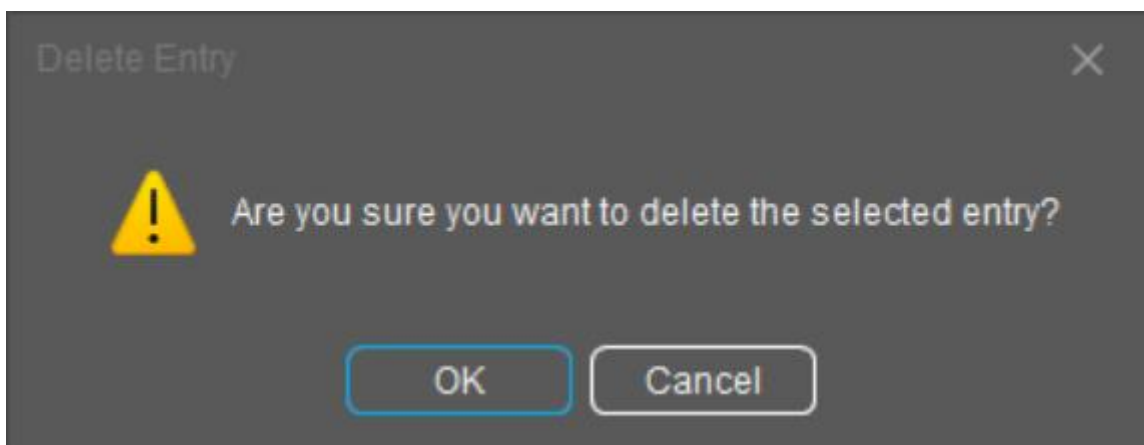


Figure 3 - Delete request

3.2.3. Save

By clicking the **Save** icon (marked as **Number 3**), you can store your currently configured temperature ramp settings. After clicking the icon, a **save file dialog** will appear (see [Figure 4 - Save ramping profile dialog](#)) allowing you to choose the file location and name.

- If you confirm the dialog, the file will be saved at the selected location.
- If you cancel, the settings will **not** be saved.

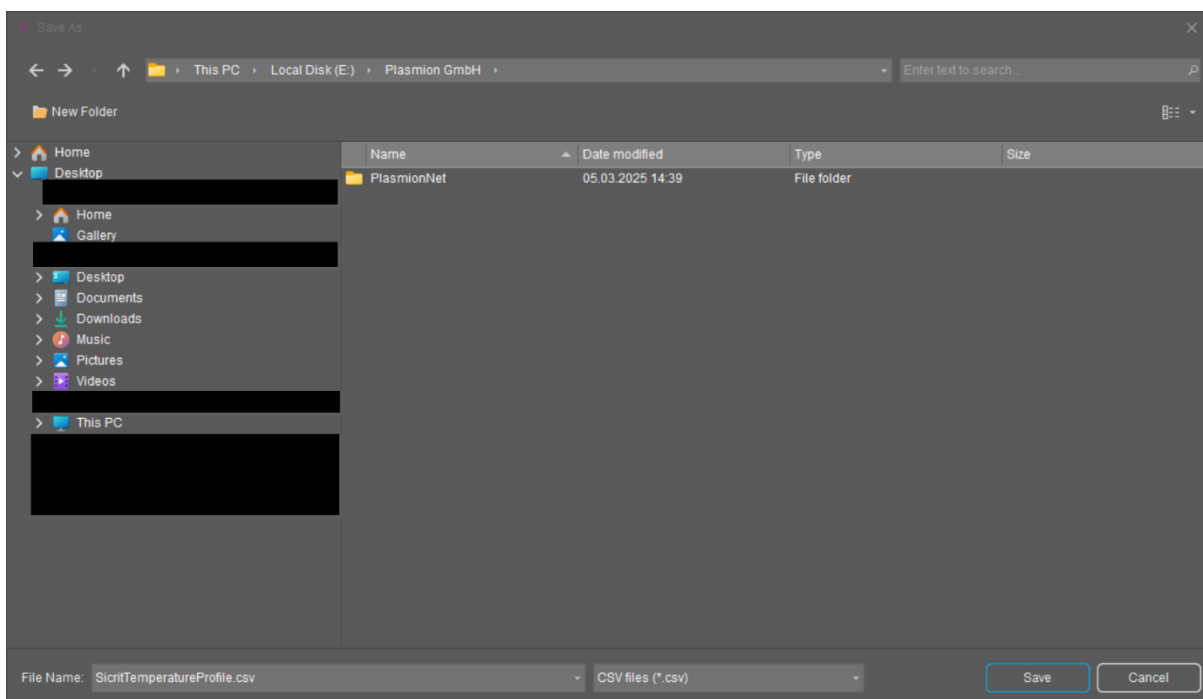


Figure 4 - Save ramping profile dialog

3.2.4. Load

To load a previously defined temperature ramp, use the **Load** icon (marked as *Number 4*) in the menu. Clicking the icon opens a dialog window (see [Figure 5 - Open saved ramping profile dialog](#)) where you can select the desired temperature profile file. Once confirmed, the selected file will be loaded, and its entries will appear in the **temperature grid**.

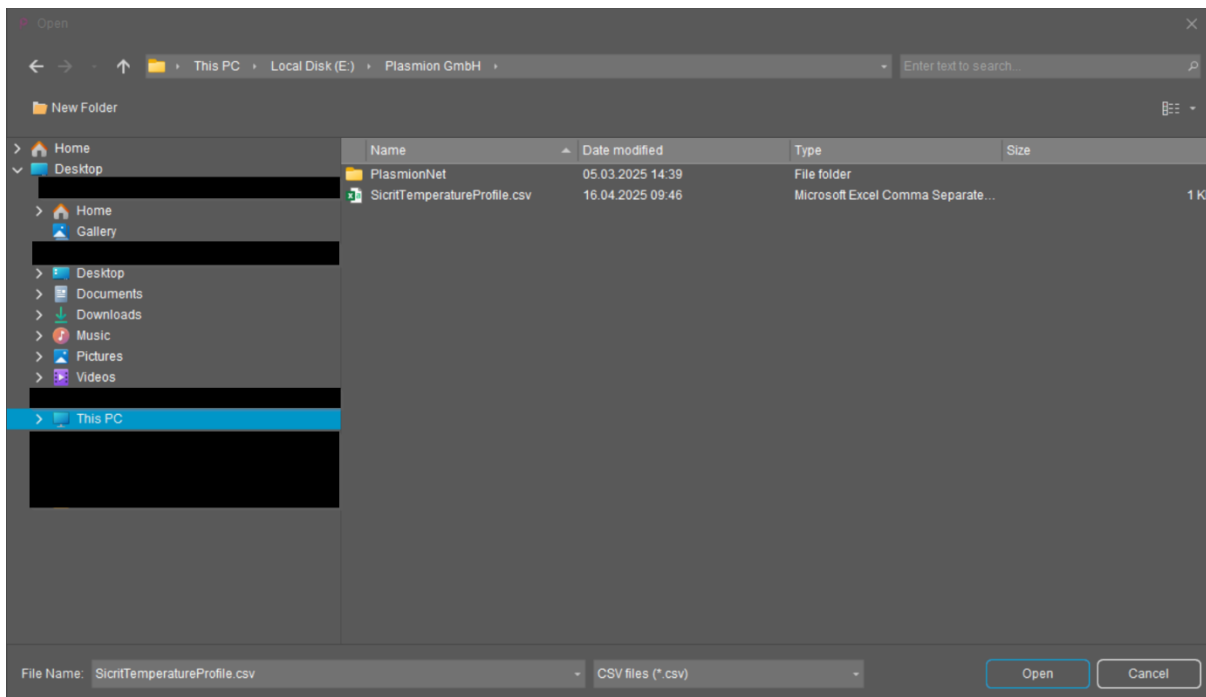


Figure 5 - Open saved ramping profile dialog

3.3. Running Temperature Ramp

The workflow for this application involves running a **temperature ramp**. This process is only possible with a connected module of the type “**Heating Cartridge**”. Once the module is connected, you can configure the temperature ramp (see Chapter [Temperature Ramp Settings](#)). When you are satisfied with the ramp configuration, the process can be started by pressing the “**Start**” button (marked as **Number 8** on [Figure 1 - Start page](#)).

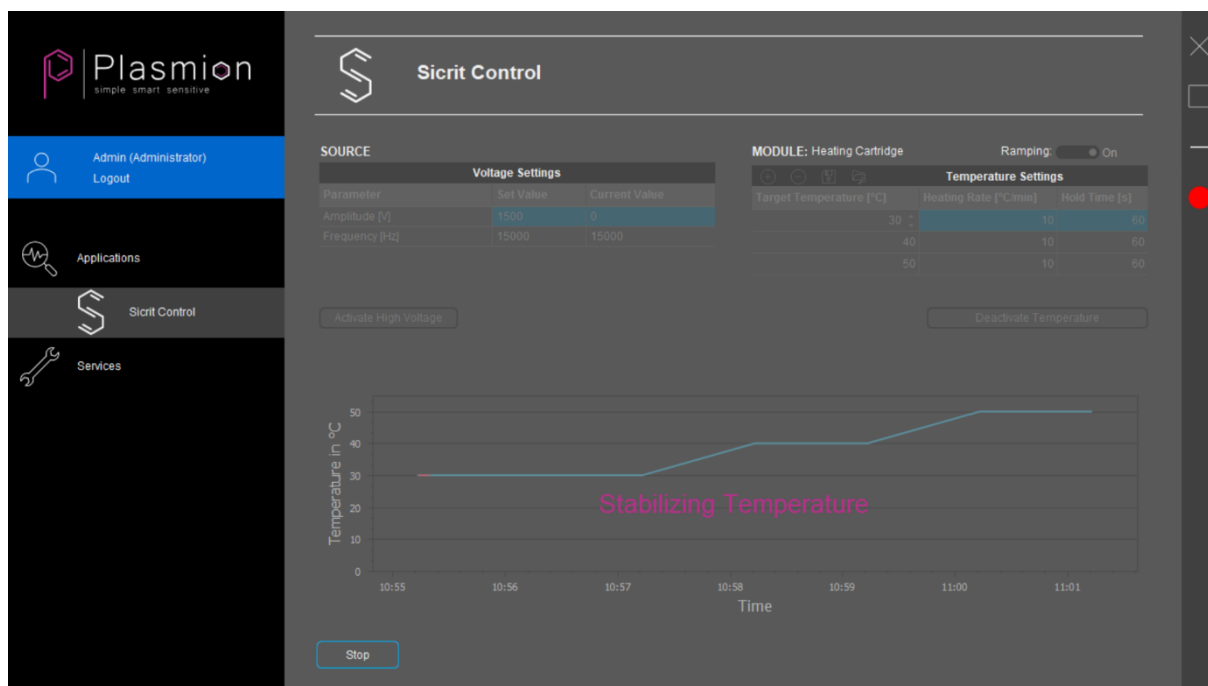


Figure 6 - Stabilizing in front of running ramp

After starting the process, the application will wait until the SICRIT® device reaches the operating settings for the ramp start. Once the operating settings are reached, the **“Temperature”** will be stabilized (see [Figure 6 - Stabilizing in front of running ramp](#)) for a constant time frame. After this stabilization period, the temperature is held for the configured **“Hold Time”**.

During the ramp’s runtime, all configured ramp entries will be processed in the same way. First, the **“Target Temperature”** will be achieved at the configured **“Heating Rate”**. After the heating time frame ends, the temperature settings will be held for the configured **“Hold Time”**. When the hold time is over, the next entry will begin.

Throughout the process, you will be able to view both the **configured ramp** and the **actual ramp** (see [Figure 7 - Active running ramp](#)) in the temperature area (marked as **Number 7** on [Figure 1 - Start page](#)).

If you wish to cancel the currently running temperature ramp, press the **“Stop”** button. Upon pressing this button, the ramp process will be aborted, and the add-on will be reset to the first temperature entry, preparing it for a new possible run.

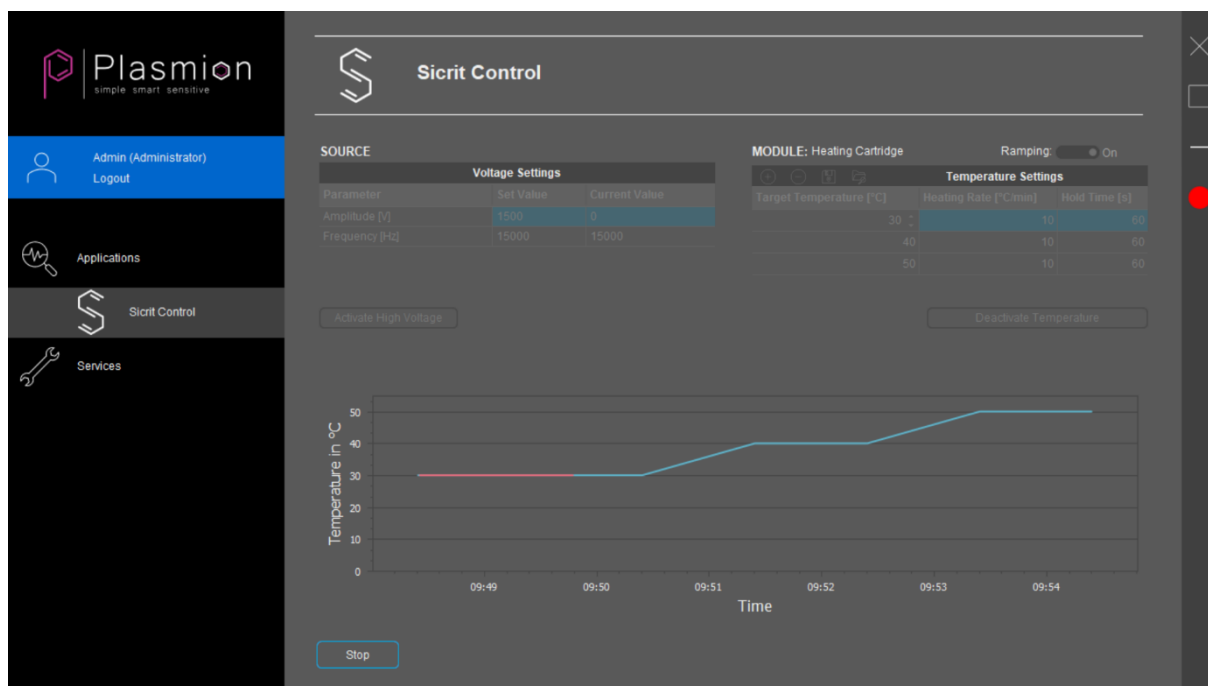
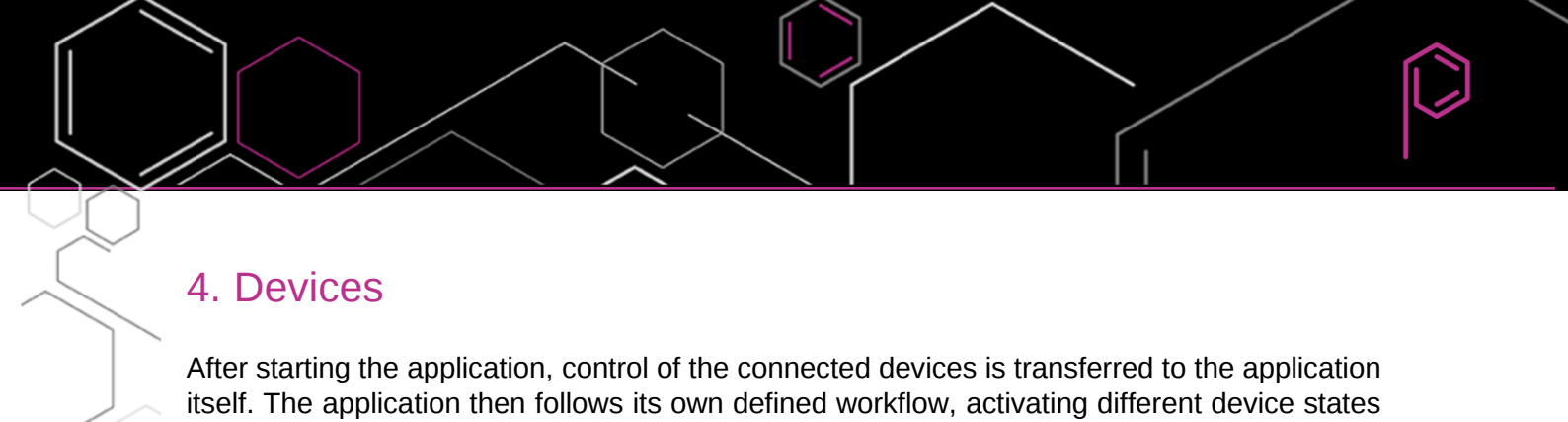


Figure 7 - Active running ramp



4. Devices

After starting the application, control of the connected devices is transferred to the application itself. The application then follows its own defined workflow, activating different device states at specific points. The detailed explanation of each device state can be found in the manual for “**PlasmionNet**”.

4.1. Workflow

At these points in the application, the devices will remain in a specific state. The devices will be adjusted at these workflow points to the following states. Since the application only uses the **SICRIT® control unit**, the states for all other devices will not be considered.

4.1.1. Start of the Application

After starting the application, the **High Voltage** output is set to "disabled." The temperature of the add-on is set to the value in the first row of the temperature grid.

4.1.2. Activate / Deactivate High Voltage

The state of the **High Voltage** is set according to the selection you make. The temperature is unaffected by the change in the state of the High Voltage.

4.1.3. Activate / Deactivate Temperature

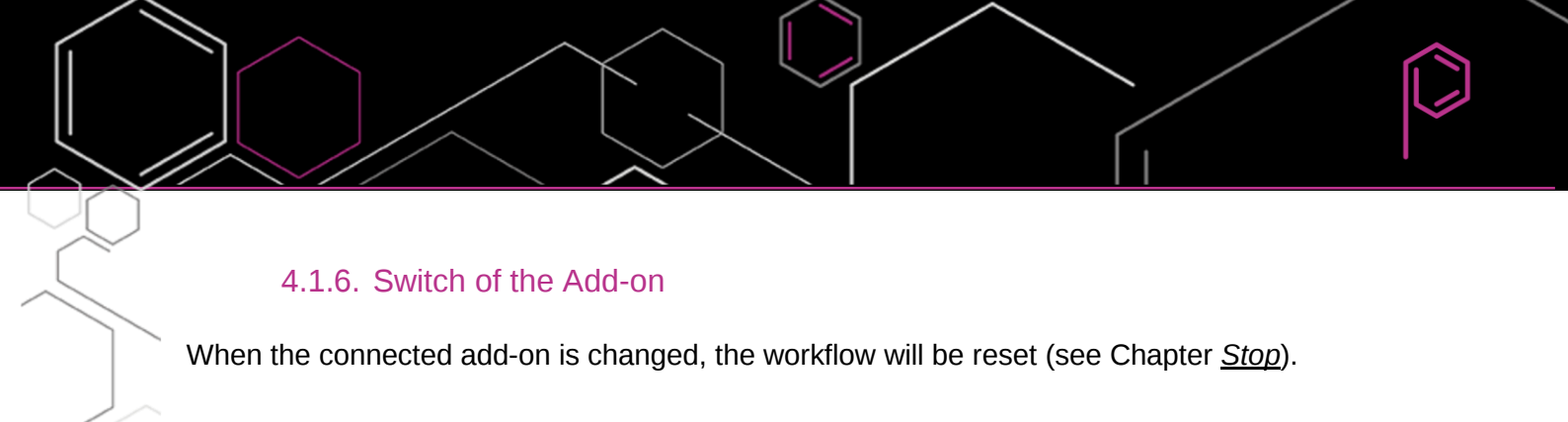
The state of the connected add-on is set to the selected state. If you activate the add-on, its temperature is set to the value in the first row of the temperature grid.

4.1.4. Start

When the application workflow starts, the **High Voltage** setting remains unchanged. The add-on temperature is set to the value in the first row of the temperature grid. Afterward, the configured temperature ramp will be executed.

4.1.5. Stop

At the end of the application workflow, or if you cancel the workflow, the temperature will be reset to the value in the first row. The **High Voltage** setting will remain unchanged.

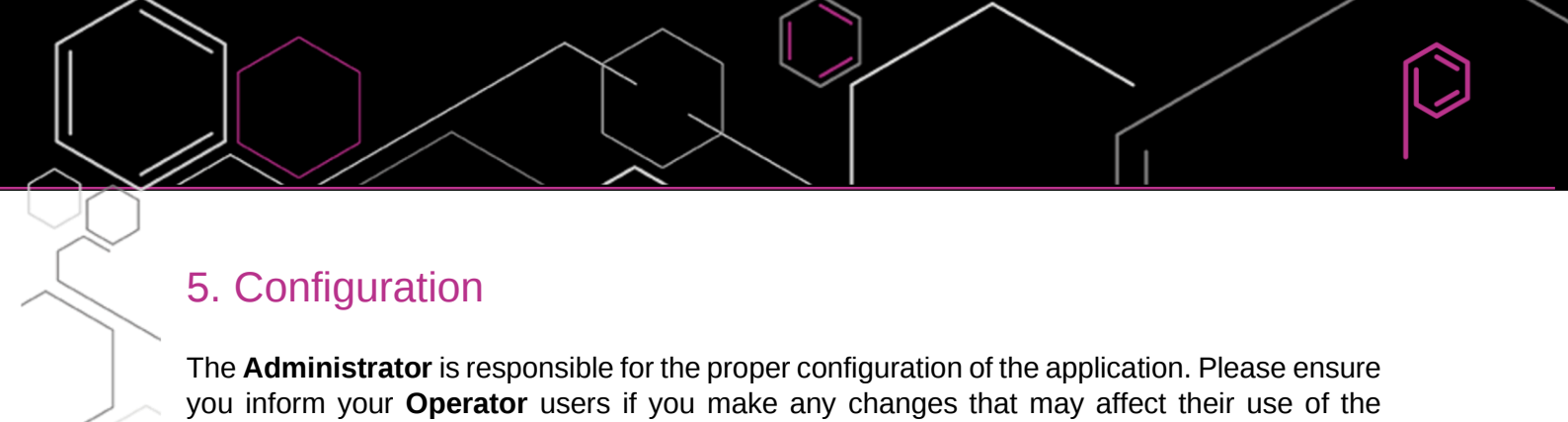


4.1.6. Switch of the Add-on

When the connected add-on is changed, the workflow will be reset (see Chapter Stop).

4.1.7. End of the Application

Before the application is closed, the background state of the **SICRIT® control unit** will be activated.



5. Configuration

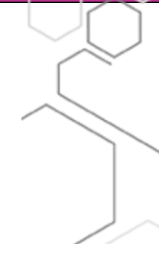
The **Administrator** is responsible for the proper configuration of the application. Please ensure you inform your **Operator** users if you make any changes that may affect their use of the application.

The following section explains all functions and configurable settings, and how they impact the application.

For this application, no special configuration is required.



6. Troubleshooting



Problem:

Solution: