ezicontrol

Rako Controls Module

USER MANUAL

DOCUMENT REVISION

1. Revision 1.0 – Initial Release – September 2018

LEGAL NOTICE

CONTENTS

1. INTRODUCTION

Rako Controls is a wired, wireless and hybrid lighting and energy control system focussed in the residential and light commercial sectors. This module allows seamless 2-way integration of a Rako Controls System into a Universal Remote Control (URC) Total Control 2.0 automation and control system.

2. FEATURES

- Seamlessly integrate your Rako Controls Lighting system into URC
- Full-feedback is supported, view the status and level of all circuits in the system.
- Operate the Rako system from any TC2.0 URC TKP device, or the iOS and Android Mobile 2.0 App.
- An intuitive and customizable user interface is automatically generated.
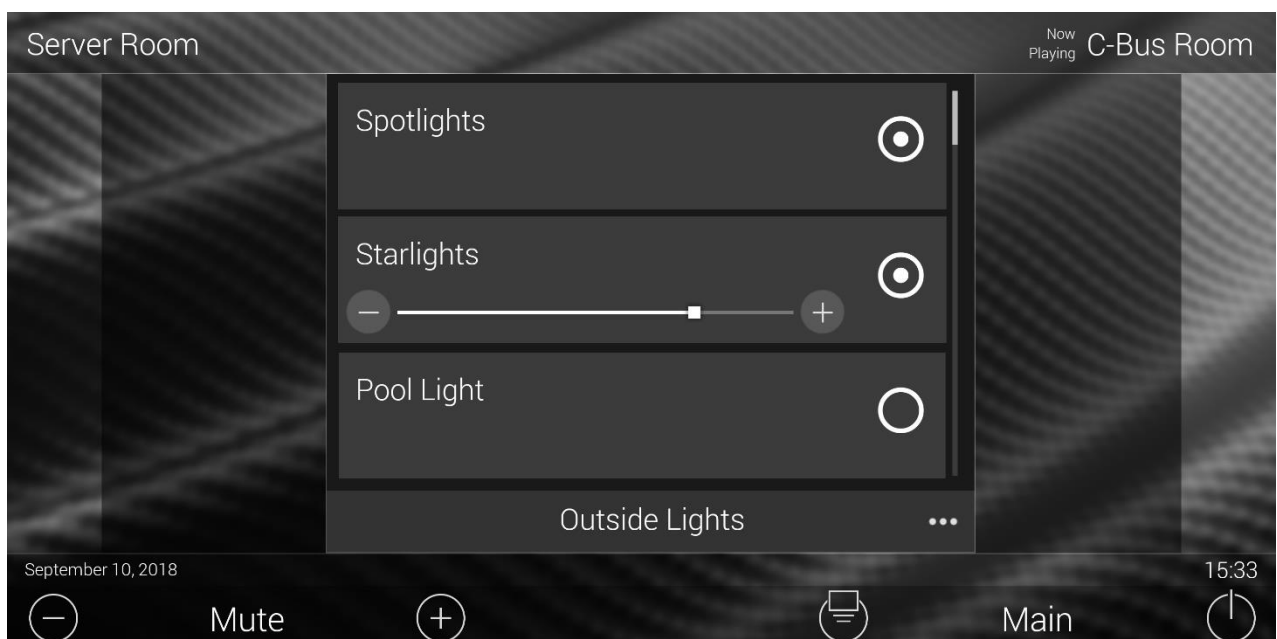
3. REQUIREMENTS

To integrate this 2-way module into a URC Total Control 2.0 system, the following are required:

- A URC Total Control System installed and programmed by a certified URC TC2.0 specialist.
- A PC with the latest version of URC Accelerator 2 with the *.tc2* project file for the site
- A Rako Controls system with a network bridge such as the RA/RTC/WA/WTC or equivalent module.
- A reference from the Rako system of the Rako room and channel numbers.
- The eZi-Controls URC/Rako 2-way module *.tcm2* file
- For operation beyond the demo/trial period, a license key is required.

4. CORE & INTERFACE DEVICES

It is important to note that this module makes use of the Core and Interface module architecture. This architecture improves performance and reliability of the module and overall system. The module, when installed, provides two module files for installation:

- Core Module:
    - The main part of the module.
    - Does all the "heavy-lifting"
    - Maintains the connection and feedback database to the system.
    - Contains no user interfaces/graphics etc.
    - **IMPORTANT:** Only **ONE** instance must be installed in the project!!!
- Interface Module:
    - The user interface part of the module.
    - Contains all graphics and menus.
    - One instance must be installed in each room in the Accelerator project file that will be using the interface control page.
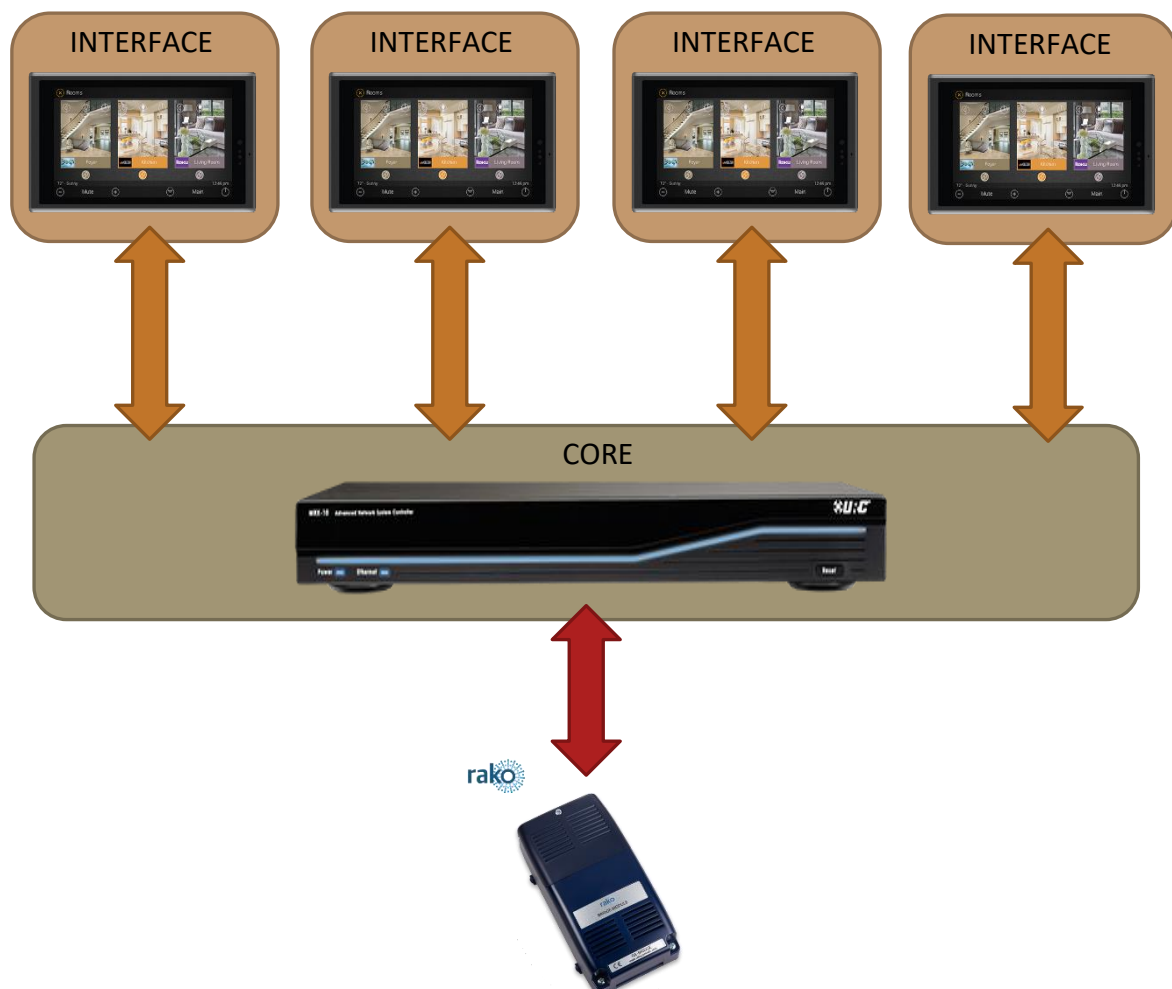
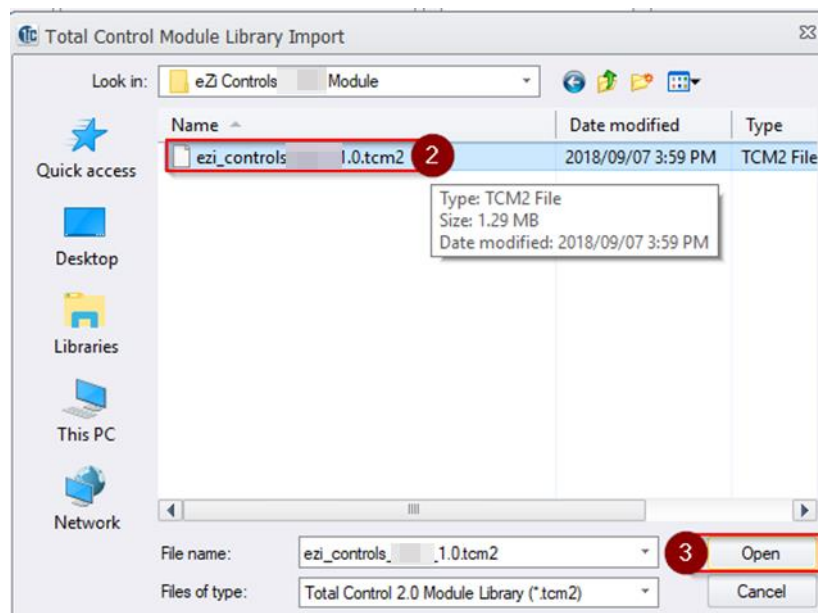# 5. INSTALLATION

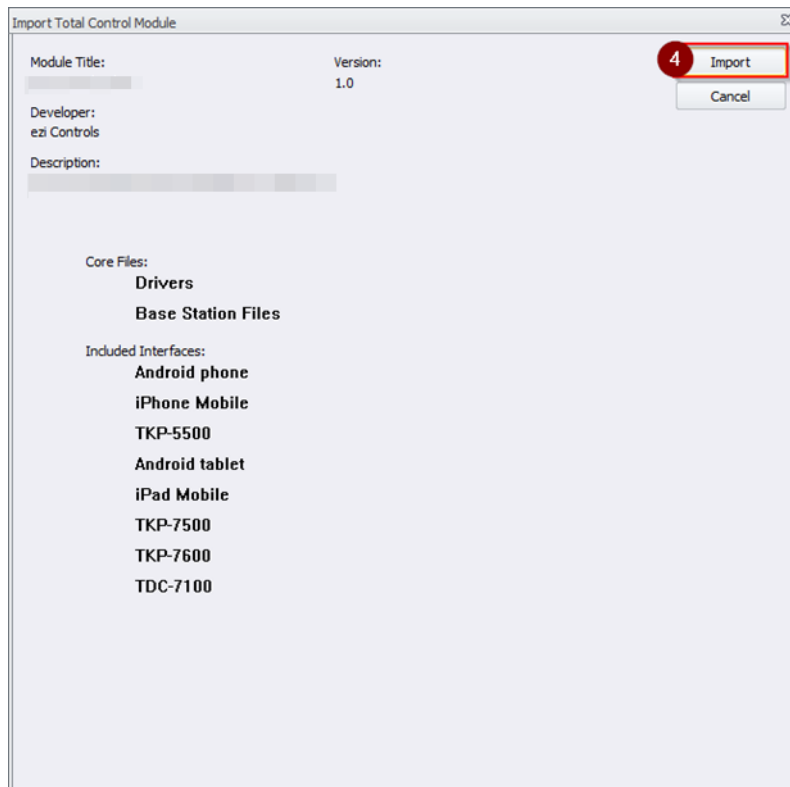## a. Importing the module into URC Accelerator 2.0

The first step is to import the module's *.tcm2* archive file into URC Accelerator 2.0. To do this, launch URC Accelerator 2.0.
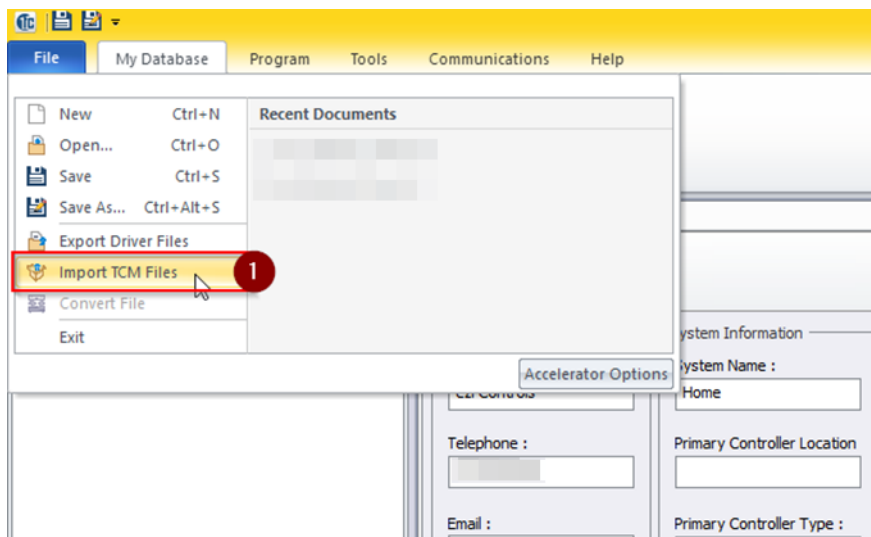
Select the *ezi_controls_rako_x.x.tcm2* file and click *Open*

In the proceeding window, click the *Import* button.

NOTE: You will now need to close and re-open URC Accelerator 2.0 for the module to be added to the Device Library.

b. Installing the system core

Open your URC Accelerator 2 Project file, or if one does not yet exist, create a new one.

In the *URC Accelerator 2.0* Toolbar, select **4. Add Other Devices**.
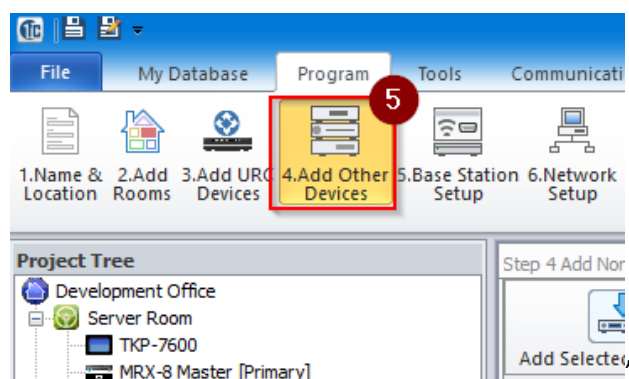
In the main window:

In the *Select Database* field, select **My Database.**

In the *Select Module Type* field choose **IP Database.**

In the *Select Category* field select **LIGHT.**

In the *Select Brand* window, choose **RAKO**.
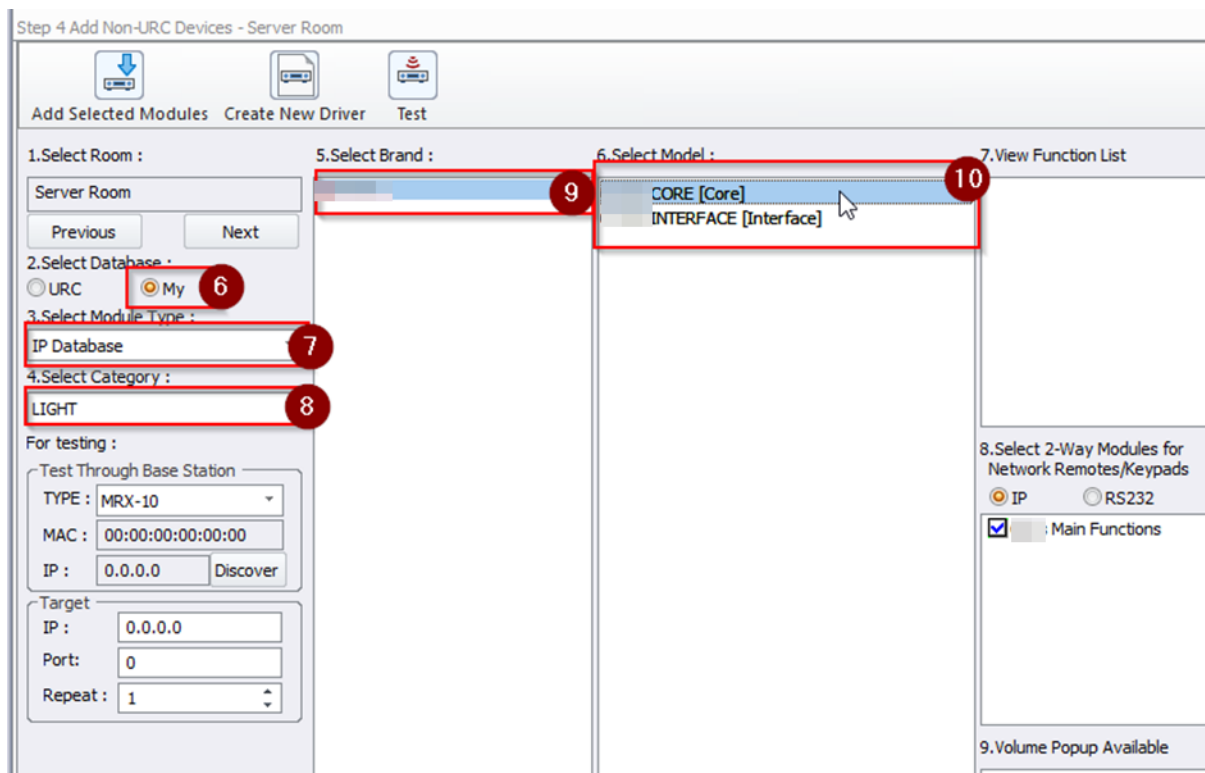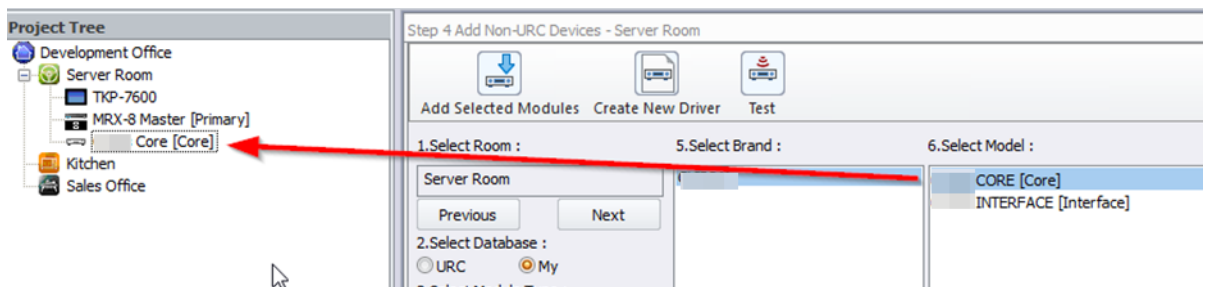
In the *Select Module* window, you should see the **Core** and **Interface** modules.

Select the Rako **Core** module and add it to the project (usually the room where the equipment is.

c. Installing the client/user interfaces

In the same manner as with the core module, select each room that you wish to add a Rako control interface to, and add the **Interface** module to those rooms.
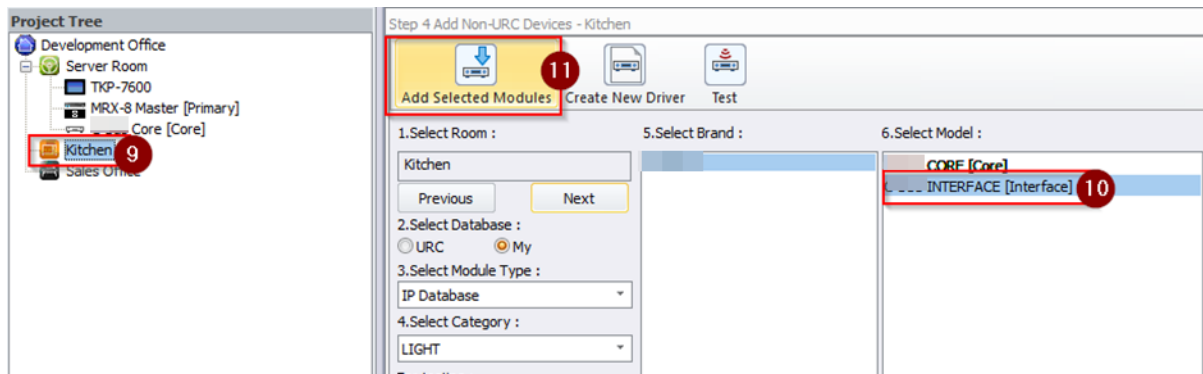
You will need to confirm that the **Interface** module refers to the correct **Core** module, then click **OK**.
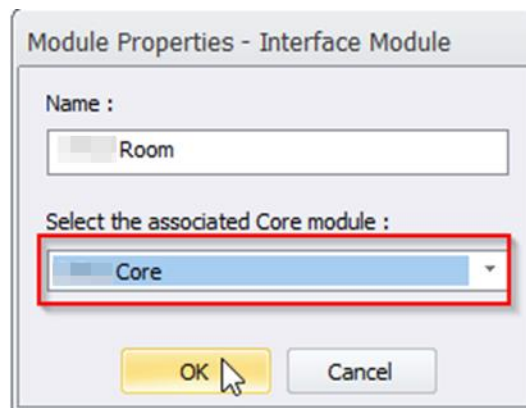
The Rako control interface will only appear in the rooms that contain the **Interface** module.
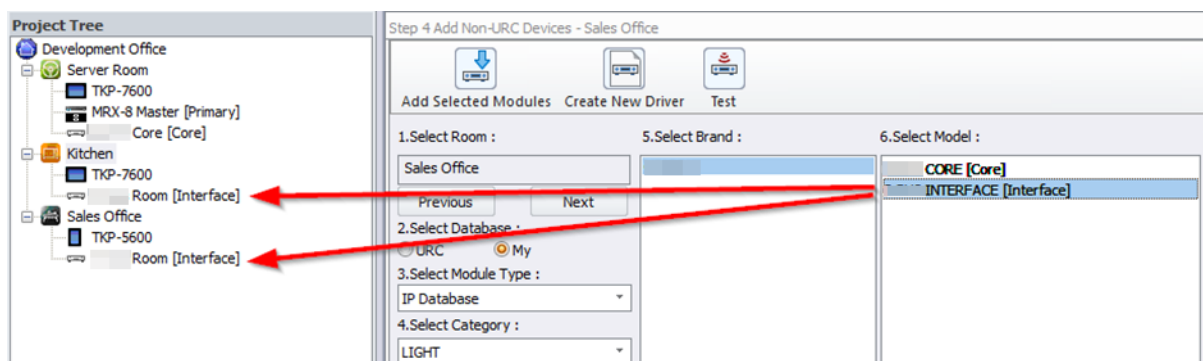
d. Configuring the Network Parameters

In the URC Accelerator 2.0 Toolbar, open Step *6. Network Setup*.

Select the *Non URC Device* tab.

Complete the entry for the Rako **Core** module with the IP address and port of your Rako bridge. Default port is **9761**.

e. Configuring the system Core module

To configure the **Core** module:

1. In the URC Accelerator 2.0 Toolbar, select *3rd Party 2-Way Settings*
2. Select *Two-Way Module Settings*
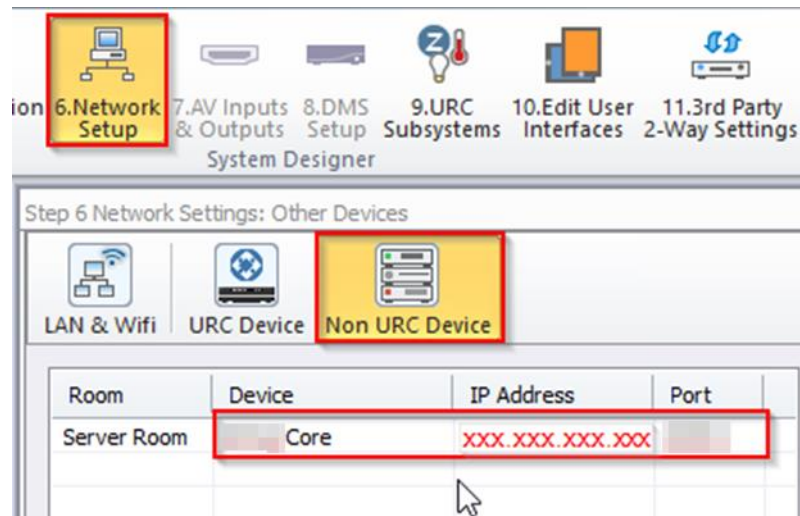3. Select the room that contains the **Rako Core** module, and select the **Rako Core** device.
4. Confirm that the IP address and port number are correct (as set previously in Network Settings).
5. Set the *System Parameter Information.* Details on the following page.
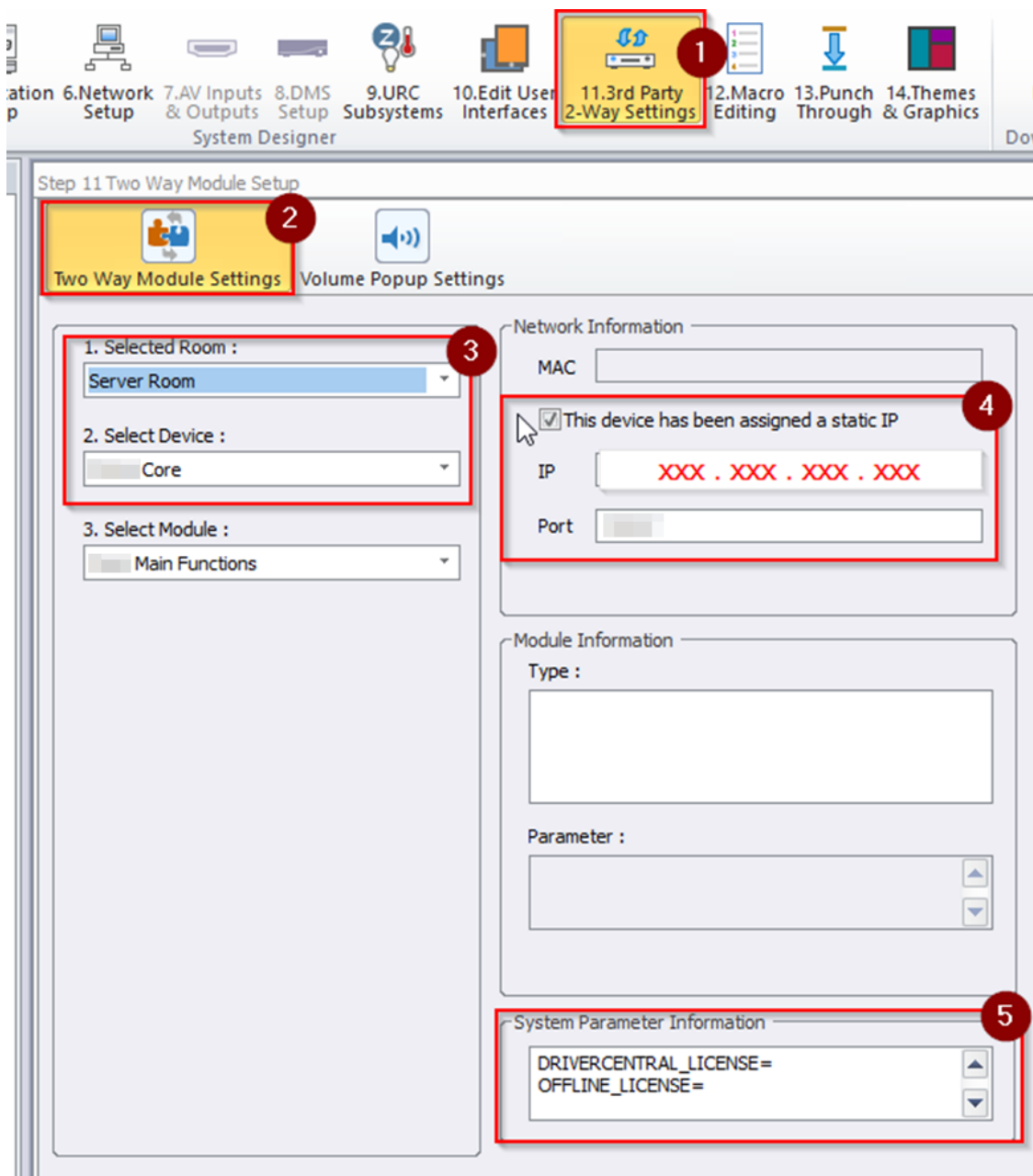
The *System Parameter Information* field allows you to change settings in the **Core** module. Settings are in the following format:

Possible settings for the **Rako Core** and their purpose as follows:

1. DRIVERCENTRAL_LICENSE: Enter the license key purchased from www.drivercentral.io
2. OFFLINE_LICENSE: Alternatively enter an offline activation key
3. DEBUG: Enable debug mode in the module.
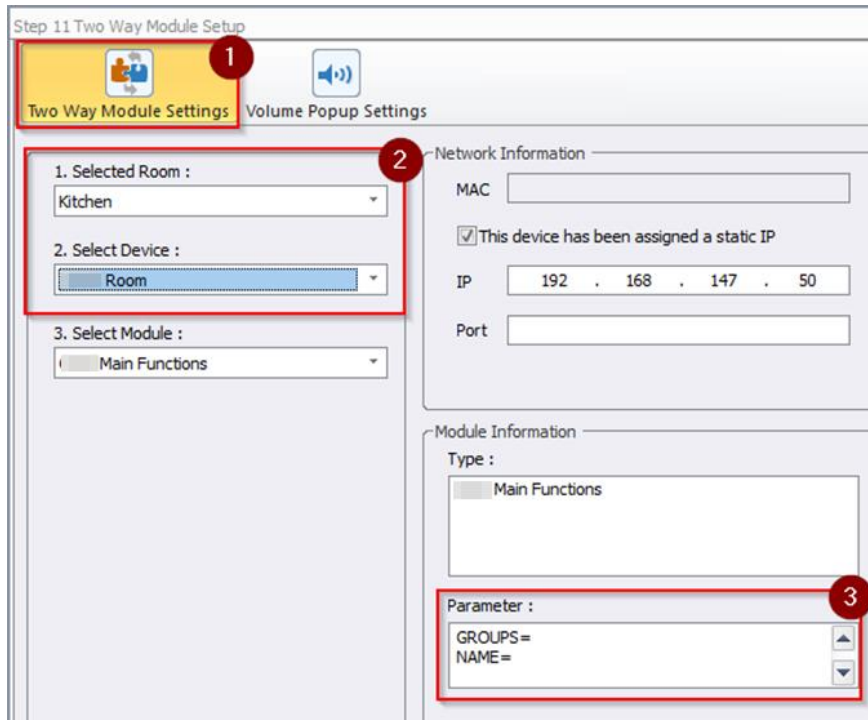   - Possible Values:
     - ON
     - OFF

Examples of valid entries for the System Parameter Settings are as follows:

```
DRIVERCENTRAL_LICENSE=123abc456
OFFLINE_LICENSE=
DEBUG=OFF
```

Licensed via DriverCentral.io with license key "123abc456".
No debugging.

```
DRIVERCENTRAL_LICENSE=
OFFLINE_LICENSE=
DEBUG=ON
```

Unlicensed/demo mode

Use debug mode

f. Configuring the user Interface modules

Each instance of the **Interface** module will need to be configured.

1. In the *Two-Way Module* Setup screen, select the *Two Way Module* Settings tab.

2. Select the room containing the instance of the **Rako Interface** module and select the relevant device.

3. Configure the *Parameter* field for the Interface, Details follow below.

The *Parameter* field allows you to change settings in the **Interface** module. Settings are in the following format:

SETTING=VALUE

Possible settings for the **Rako Interface** and their purpose are as follows:

1. **CONFIG:** The Rako circuits to be displayed/controlled by this instance of the Interface module.

This value is made up of a comma separated list of entries as follows:

<ROOM_NUMBER>**/**<CHANNEL_NUMBER>**/**<CHANNEL_MODE>**/**<CHANNEL_NAME>

Where:

- The **ROOM_NUMBER** is the Rako Room number to be monitored/controlled. Values 1 to 255.
- The **CHANNEL_NUMBER** is the Rako Channel number to be monitored/controlled. Values 0 to 255.
- **CHANNEL_MODE** tells this module how to display the channel. Possible values:
    - D - Dimmed
    - S – Switched
- **CHANNEL_NAME** is the name you wish to have displayed for this channel on the user interface. If left blank then this channel will not be displayed.
2. **NAME:** The title displayed at the bottom of the **Rako Interface** page. Can be blank.

Examples of valid settings for the Interface Parameters as follows:

```
CONFIG=1/1/D/Chandelier,2/S/Rope Lights,3/D/Down Lights,4/0/S/Garden Lights
NAME=
```
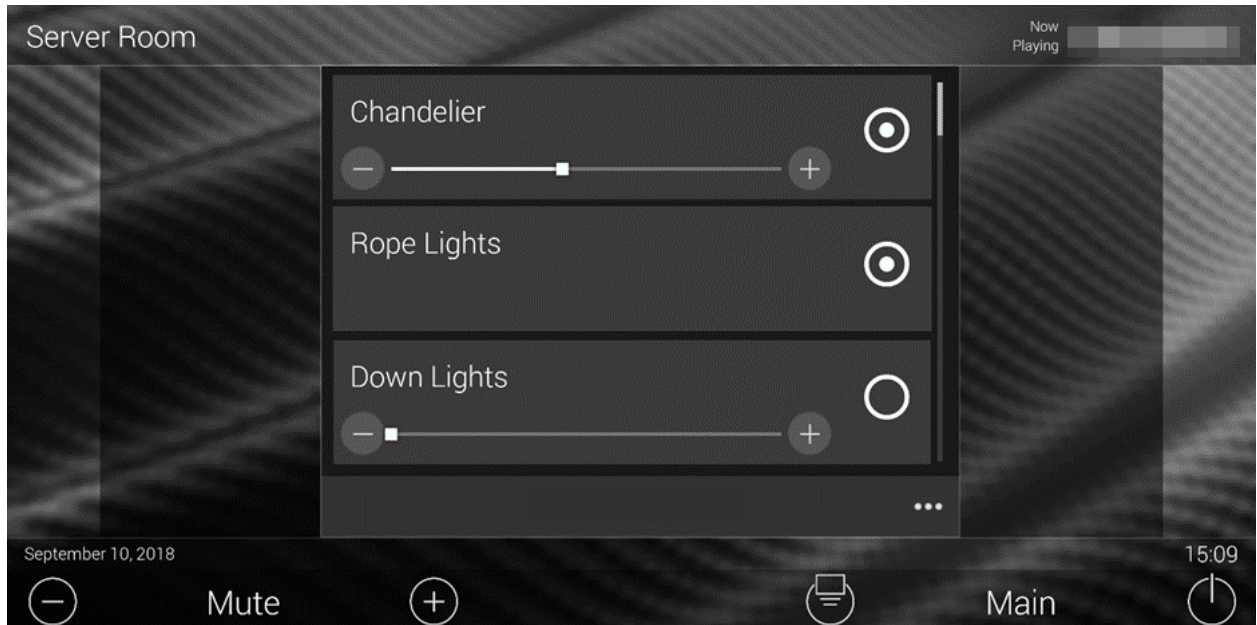


```
CONFIG=6/3/S/Spotlights,54/2/D/Starlights,67/2/S/Pool Light
NAME=Outside Lights
```
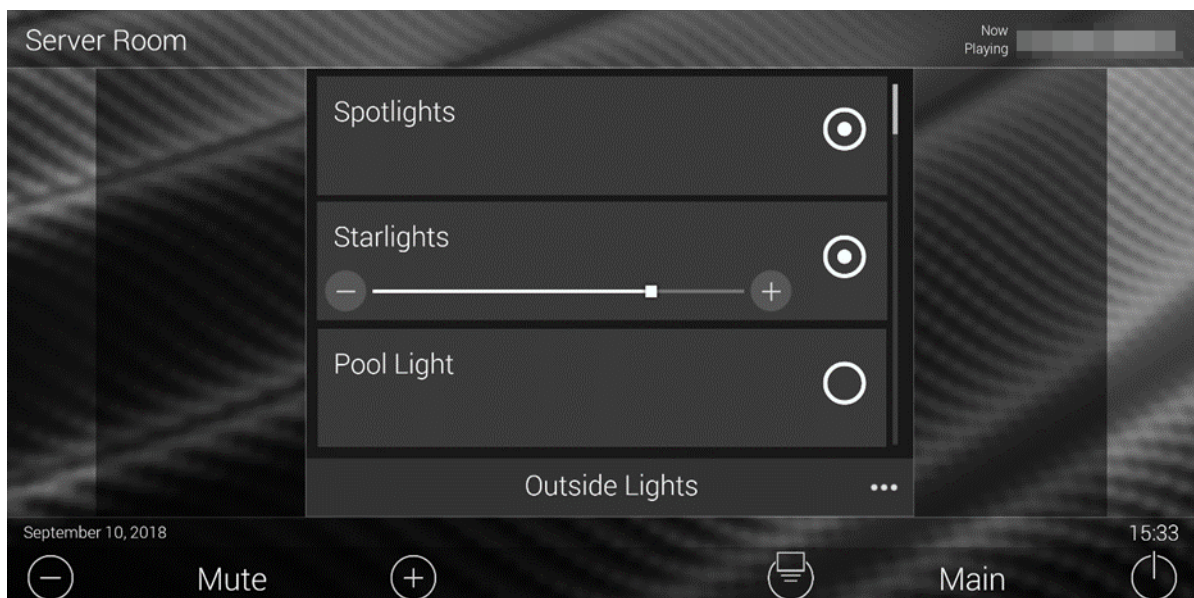
g. Licensing and Demo Mode

This module is available for purchase from www.drivercentral.io from where you will be issued a license key. This license key once activated for the first time will be bound to the MAC address of the MRX controller that it was installed on.

The licensing process is fully automated and happens on the MRX controller in the background. The licensing status can be confirmed via the options menu in the Interface module,

Activation only requires internet connectivity for the initial licensing process. Thereafter the module will continue to operate offline. Note that the license files will be deleted during a factory reset.

In the unlikely event that a site has no internet connectivity for licensing to take place, an offline license activation key can be requested.

In either case, enter the relevant license key in the system Core module's settings (Section E above).

```
DRIVERCENTRAL_LICENSE=123abc456
OFFLINE_LICENSE=
DEBUG=OFF
```

This module includes a 1-hour demo mode, where after the module will cease to function. Demo mode can be reset by power cycling the MRX controller.

The current licensing status can be found by opening the module's options page

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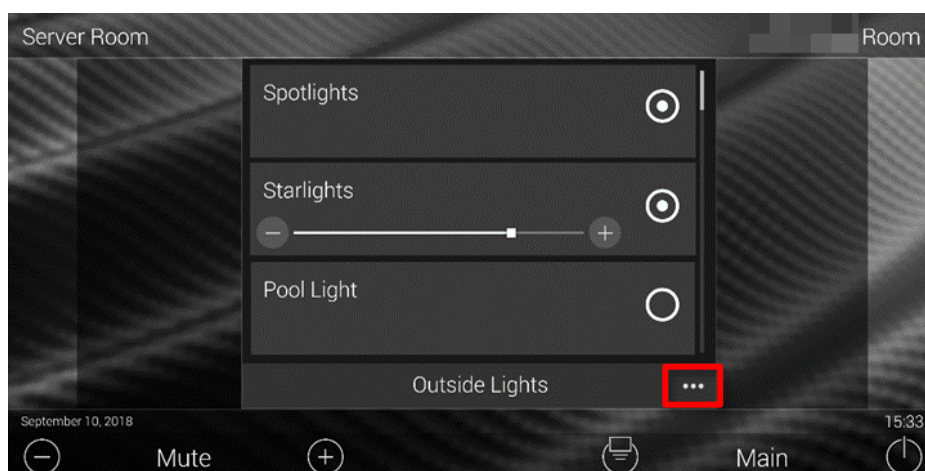
6. USAGE INSTRUCTIONS

Usage if the interface is designed to be as intuitive as possible.

Switched groups only present as the circular icon to the right of the row. Dimmable groups present with an additional slider and fade buttons.

Press the circle icons to the right of the row to toggle a group on and off.
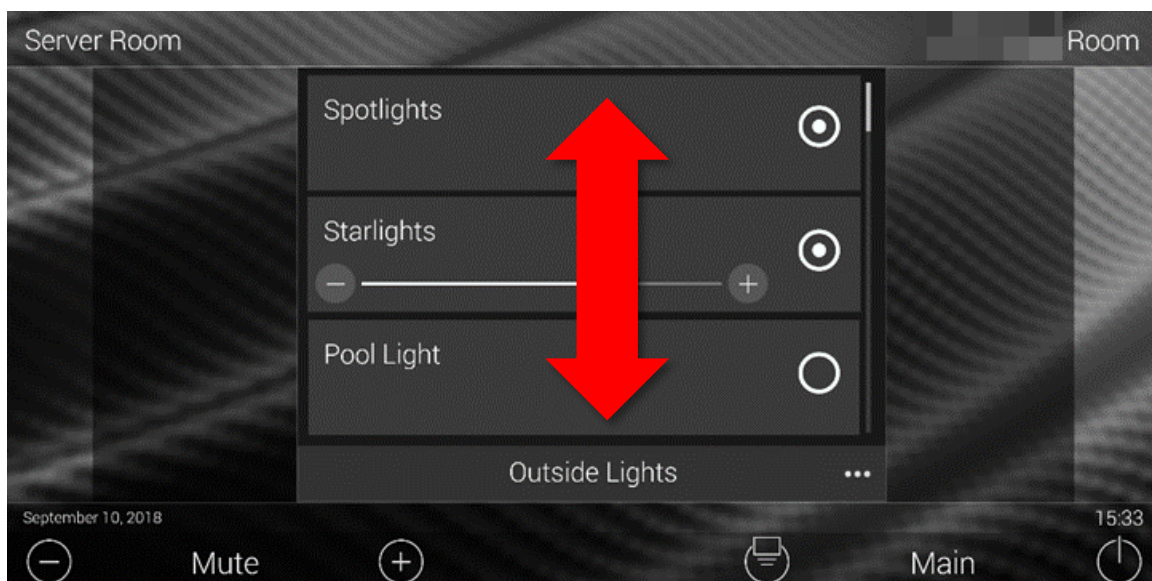

Press the + and – icons to increase or decrease the current lighting level by 10%.

Drag the slider to control the light level in real-time.

To scroll through the list of groups, swipe up or down on the screen.

7. MODULE CHANGELOG

- V1.0 – Initial Release

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