# Installation manual Cloud Mode ES4

entrya®

The ES4 Cloud is an online platform where one or more ES4 controllers can be linked to a central user management system.
The portal (https://portal.entrya.cloud) provides a clear overview for managing different installations, controllers, users and schedules.

Each ES4 controller is a groupable controller with two relay outputs – to operate two doors – and two programmable inputs. The controller offers three connection options.
Multiple controllers can be added to a single installation. Each installation can have multiple users, whose access to a door can be managed.
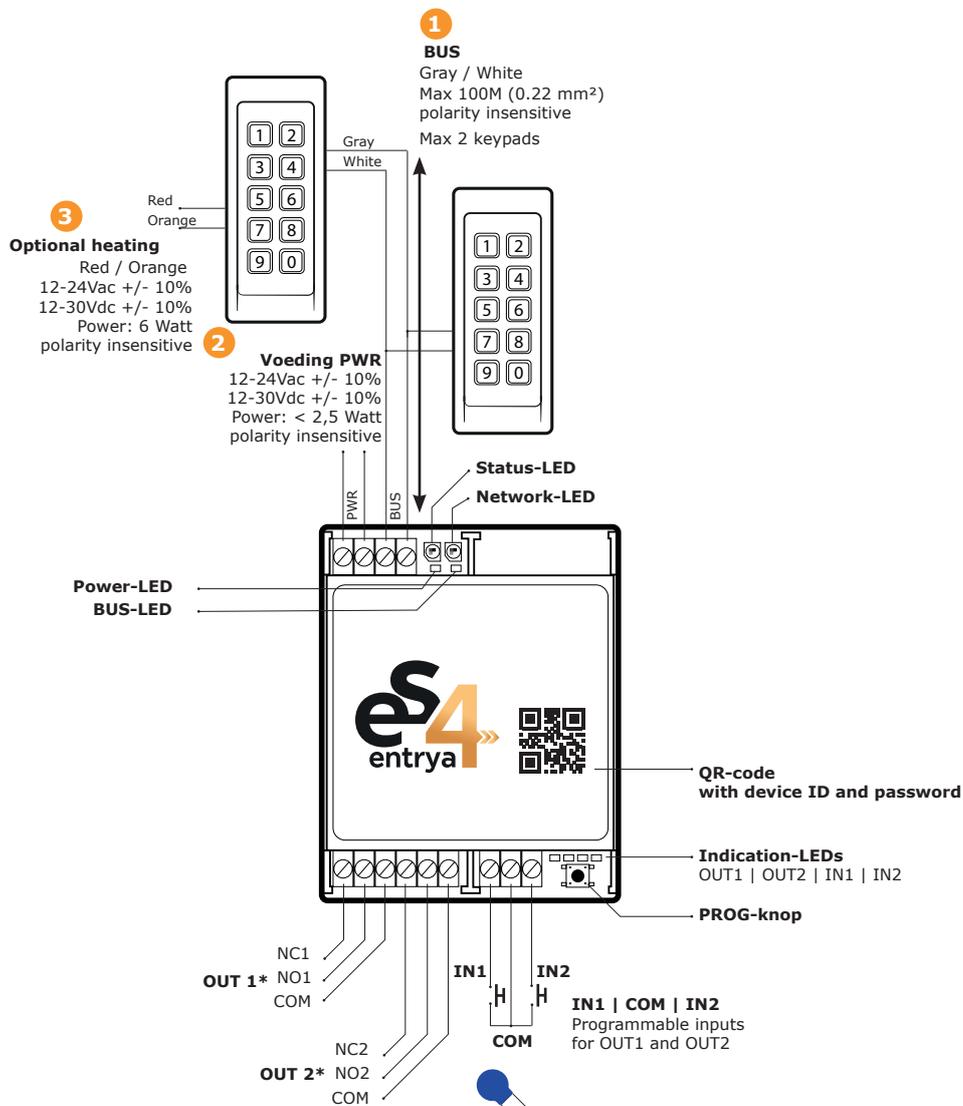
https://portal.entrya.cloud
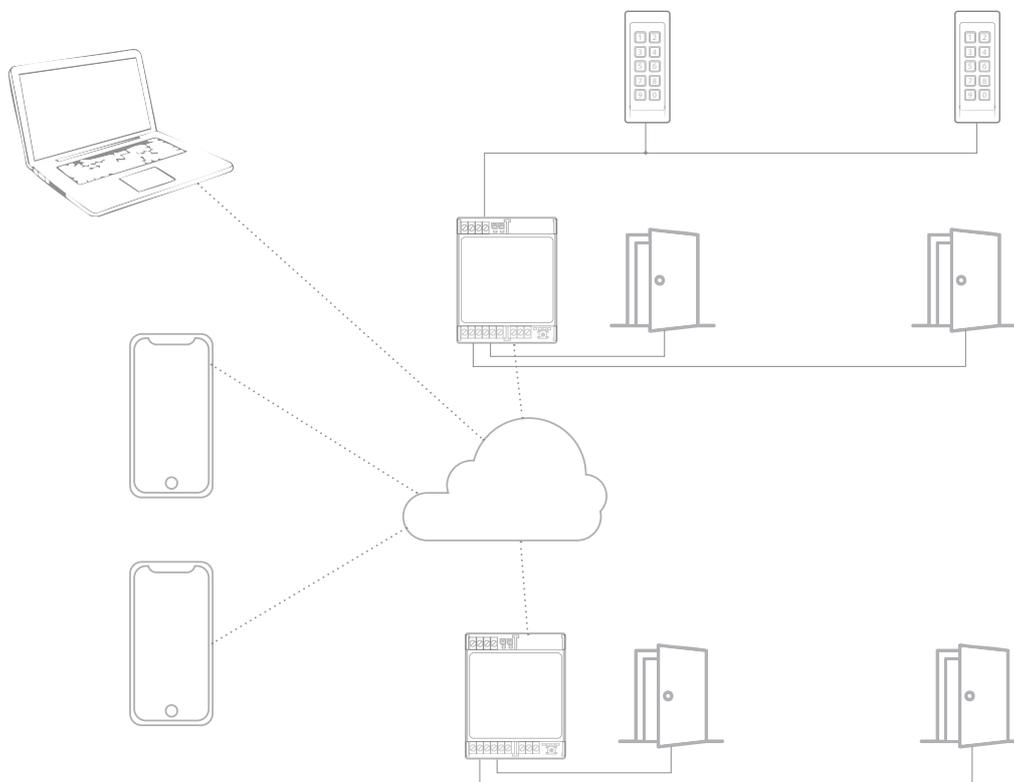
Safety regulations

- These installation and operating instructions must be read, understood and observed by the person carrying out the installation, using or maintaining the equipment.
- Only use original spare parts and accessories.
- The user must be informed that if installations that pose a risk of accidents are operated remotely, this may only be done if the installation is kept in direct view.
- The outputs of the controller may only be activated if the movement of the door can be seen and there are no persons or objects in the radius of movement.
- A code keypad must not be placed within the door's radius of movement.
- Install a code keypad in such a way that the remotely operated device remains in direct view.
- Never clean a code keypad or controller with water under high pressure. Water may penetrate and cause irreparable damage.

Overview of ES4 controller connections

1 BUS
Gray / White
Max 100M (0.22 mm²)
polarity insensitive
Max 2 keypads

3 Optional heating
Red / Orange
12-24Vac +/- 10%
12-30Vdc +/- 10%
Power: 6 Watt
polarity insensitive

2 Voeding PWR
12-24Vac +/- 10%
12-30Vdc +/- 10%
Power: < 2,5 Watt
polarity insensitive

Status-LED
Network-LED
Power-LED
BUS-LED

QR-code
with device ID and password

Indication-LEDs
OUT1 | OUT2 | IN1 | IN2

PROG-knop

OUT 1* NC1 / NO1 / COM

OUT 2* NC2 / NO2 / COM

IN1 | IN2

COM

IN1 | COM | IN2
Programmable inputs
for OUT1 and OUT2

*Max. 24Vdc 1A / 24Vac 0.5A
! When connecting an inductive load (lock, magnet), install a free-wheeling diode or varistor in parallel across the relay output !

The system uses a two-wire BUS for the code keypads. Optionally, two code keypads can be connected to one ES4 controller.

1 Optionally, connect a code keypad to the ES4 controller. Connect the grey and white wires to the BUS connection on the controller. The polarity is not important.

2 Connect a power supply to the PWR connection on the controller. The polarity is not important.

3 Optionally, connect a power supply for heating the code keypad to the orange and red wires of the code keypad. The polarity is not important.

Assembly

Mount the controller and code keypad(s) on a flat, vibration-free surface using suitable mounting materials. The controller is suitable for mounting on a 35 mm DIN rail. Mount the controller in a closed enclosure and in a dry, enclosed space. Ensure that it is not accessible to unauthorised persons or children.

If the connection cable of a code keypad is extended, the bus (white and grey wire) must not be routed via a cable that also contains wires for other applications. Always use a separate cable for the code keypad bus and avoid laying it parallel to other cables over long distances.

Connectivity options

Controllers can connect to the internet via WiFi as standard. Two optional expansion modules offer the option of connecting to the internet via Ethernet or LTE.

The LTE module requires a mobile data connection via a microSIM card. This module also requires a compatible antenna connection. The Ethernet module requires a connection to an RJ45 connector to a LAN network.

SIM card
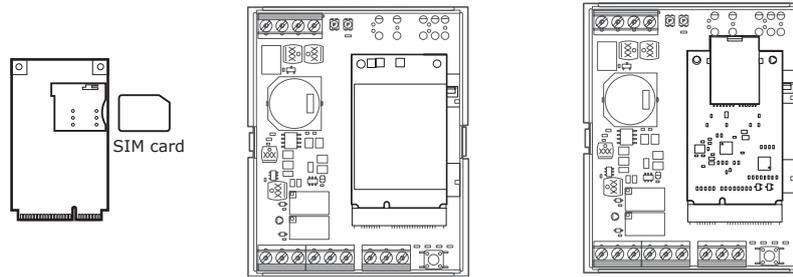
Creating an installation

During programming, a smart device establishes a direct Wi-Fi connection with the ES4 controller. To do this, the smart device requires an internet connection and a registered ES4 account. Register your ES4 account at https://portal.entrya.cloud.

Method

Install the Entrya ES4 App via the Google Play Store or Apple App Store.
If you do not yet have an ES4 account, please register. If you already have an account, please log in.

Select Cloud and then press "Create Site". Enter a name for the new site and press "Save".

In the main menu of your site, select System - Controllers - Add Controller to add a new controller.

First Use

Start-up

Switch on the power supply to the ES4 controller. The Power LED lights up green and the Status LED lights up white during start-up. The digits display a waiting animation. Start-up takes approximately 20 seconds. The Status LED then flashes green.
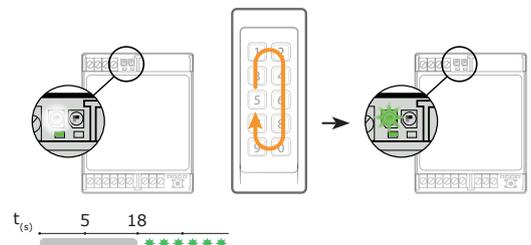
Addressing multiple code keyboards

Multiple code keypads must be addressed when first put into use. This allows the controller to distinguish between the two code keypads. Code keypads that do not have an address automatically enter addressing mode. Keys 1 and 2 flash.
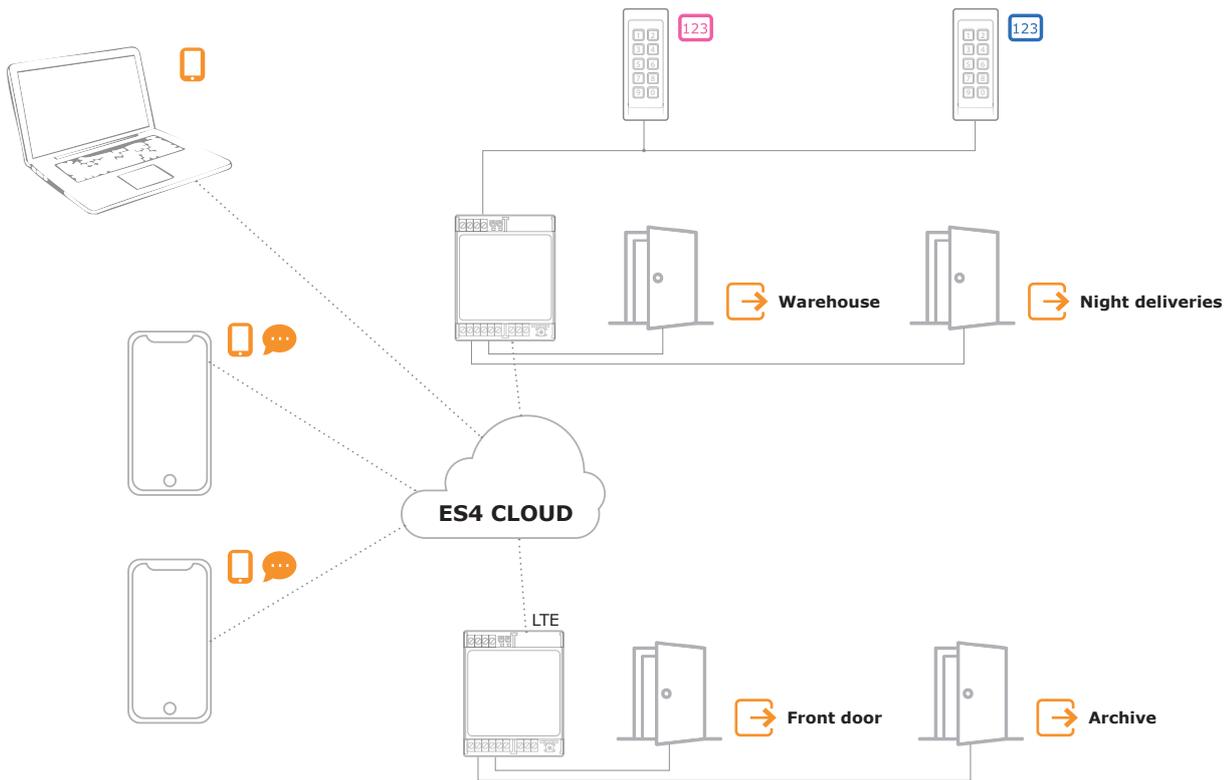
Press 1 or 2 to assign an address to the code keypad. Both code keypads must have different addresses.

After addressing, the ES4 system is ready for programming.

$t_{(s)}$ 5   18
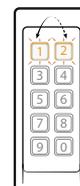
Sample installation

Installation with two controllers, one of which is equipped with two code keypads. Both controllers can be operated via an app. Users can operate up to four doors via the app or up to two doors via code keypads.

ES4 CLOUD

LTE

Warehouse — Night deliveries — Front door — Archive

Groups	Users	Exits	Controls	Timetables
Management	Jan Els	Front door Archive Warehouse Night deliveries	📱 💬 📱 [123] [123] [123]	24/7

Jan and Els have access everywhere and can operate via app, text message and both code keypads 24/7.

Groups	Users	Exits	Controls	Timetables
Suppliers	DHL FedEx	Front door Archive Warehouse Night deliveries	 [123]	24/7

Suppliers have access to night deliveries via a single keypad, 24/7.

Groups	Users	Exits	Controls	Timetables
Accounting	Peter Sofia	Front door Archive Warehouse Night deliveries	📱 💬 📱 [123] [123]	8 - 17 / Mo - Fr 25/12

Peter and Sofia have access to the Front door via app and/or SMS, the Archive via app and Night deliveries via both keypads.
They only have access from Monday to Friday between 8 a.m. and 5 p.m., except on Christmas Day (25/12).

* Operations via text message are only possible if the ES4 controller is equipped with an LTE module and a microSIM card with a telephone number.

✔ <u>Synchronisation</u>

Changes made in the portal must always be forwarded to the controller(s). If the controller(s) have not received the latest changes, "Not in Sync" will be displayed. If the controller(s) are up to date, "Synchronised" will be displayed. Start a synchronisation after making the desired changes.

Synchronisation Status ✕

Global Synchronisation Status
⚠ Not in Sync

Dinsdag 04 november 2025 - 14:56:50

↻ Refresh

✔ Devices In Sync: 0
⚠ Devices Not In Sync: 2
↻ Devices Syncing: 0

Start Synchronisation

Advanced

🔴**2** Not in Sync ⌄

✔ In Sync ⌄

⚙ <u>System - Settings</u>

Set the time zone and select the desired parameters for use with code keypad(s).

Time Zone **Keypad Settings**

Set the PIN length and the behavior of the keypad when entering the PIN.

PIN settings

PIN length

| 4 | ⌃⌄ |

Choose a number between 4 and 8. Changing this setting will erase all existing PIN codes.

Max. allowed keystrokes per attempt

| 4 | ⌃⌄ |

By default, this parameter is set equal to the PIN length (4). Choose a number up to 12, equal or greater than the PIN length.

Max. time between keystrokes (seconds)

| 2 | ⌃⌄ | seconds |

If it takes longer than the specified time to enter the next digit, the input will be discarded.

▣ <u>System - Controllers: Adding an ES4 controller</u>

Select the desired installation in the Cloud tab of your app. Select "Controllers" - "Add controller". Follow the steps indicated in the app to add a controller.

A controller is always assigned to a Standard Group with a Standard Schedule (24/7). After the controller has been added to the installation, the settings can be changed via the Portal (https://portal.entrya.cloud).

▣ <u>System - Controllers: Setting up an ES4 controller</u>

Controllers are added to the default group with default settings by default. After adding them, you can change the settings in the portal via the System - Controllers menu. On this page, you will find the added controller; each row shows an adjustable output.

Controller ↕	Output ↕	Type ↕	Inputs ↕	Schedule ↕	Control Options	
▣ tggg	— h *Output 1*	⊟			🔢₁ 🔢₂ 📱 💬	✏ ⌄
▣ tggg	📱 v *Output 2*	⊟			🔢₁ 🔢₂ 📱 💬	✏ ⌄

Controller name   Output name   Output type   Input type   Time schedules   Control options   Settings

▣ <u>System - Controllers: General settings for the Output</u>

Give the desired output a name and an icon for recognisability.

General Configuration Control Options Input Configuration Open by Schedule

General

<u>Description</u>
A name for the selected output.

Description

| h |

<u>Icon</u>
Make the output easy recognisable with an icon.

Icon

| Select an icon ⌄ |

* Operations via text message are only possible if the ES4 controller is equipped with an LTE module and a microSIM card with a telephone number.

▨ System - Controllers: Set the output type

Configure the output type and the associated options such as switching duration, delay, etc.

Type
Unlock: the output switches during (automatic) operation.
Alarm: the output switches when an alarm is triggered.
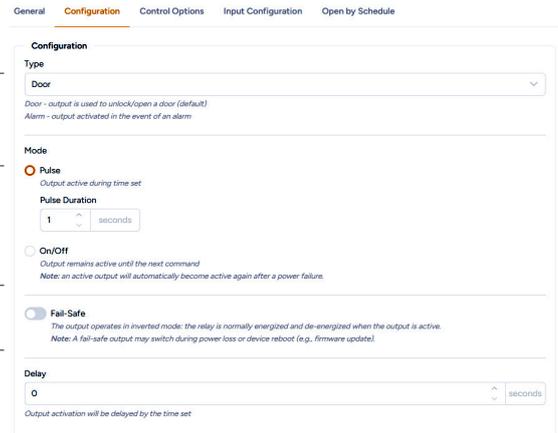
Mode
Pulse: the output switches for n number of seconds.
On/Off: the output switches on or off during operation.

Safety contact
The output is closed at rest.
Please note! The output switches during a power failure!

Delay
The output switches after n seconds.

| General | Configuration | Control Options | Input Configuration | Open by Schedule |

Configuration

Type
Door

Door - output is used to unlock/open a door (default)
Alarm - output activated in the event of an alarm

Mode
○ Pulse
Output active during time set
Pulse Duration
1   seconds

○ On/Off
Output remains active until the next command
Note: an active output will automatically become active again after a power failure.

○ Fail-Safe
The output operates in inverted mode: the relay is normally energized and de-energized when the output is active.
Note: A fail-safe output may switch during power loss or device reboot (e.g., firmware update).

Delay
0   seconds
Output activation will be delayed by the time set
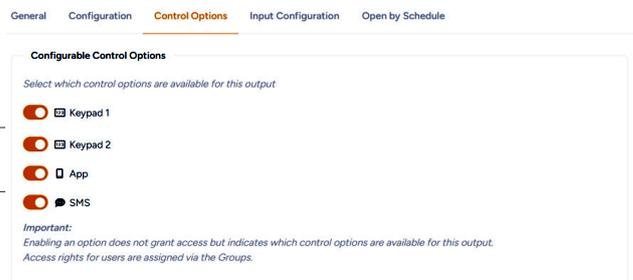
▨ System - Controllers: Set the control options

Select the available control options for the controller, number of keypads, via App and whether you can control via SMS*.

Keypad 1 / Keypad 2
Code keypad 1 and/or 2 can be used for controls.

APP / SMS
Switching via APP and/or SMS is permitted.

| General | Configuration | Control Options | Input Configuration | Open by Schedule |

Configurable Control Options

Select which control options are available for this output

🔘 ▦ Keypad 1
🔘 ▦ Keypad 2
🔘 ▯ App
🔘 💬 SMS

Important:
Enabling an option does not grant access but indicates which control options are available for this output.
Access rights for users are assigned via the Groups.

▨ System - Controllers: General settings for the Input

If necessary, configure an input for the selected output, choosing between a push button input or a door status input.

| General | Configuration | Control Options | Input Configuration | Open by Schedule |

Inputs can be configured to act as exit button or to monitor the door status.
Note: Inputs cannot be assigned to outputs configured as 'Alarm' type.

Input 1
The selected input is linked to the current output.

Mode
The input functions as an exit push button or as a door status contact.
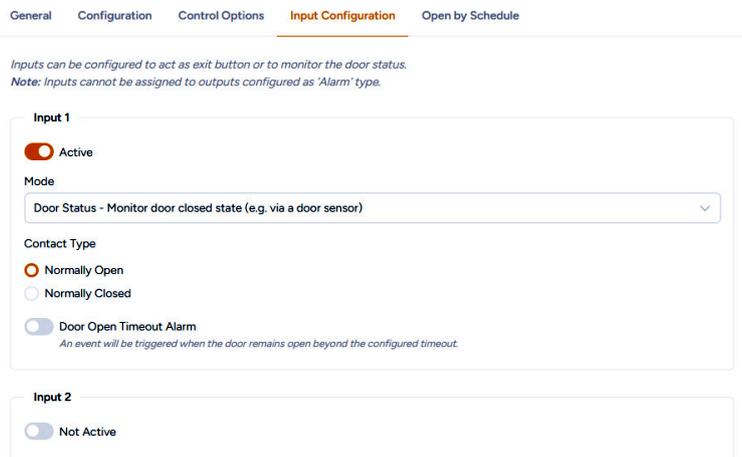
Contact Type
The input is a Normally Open or Normally Closed contact.

Door Open Alarm
An alarm is generated if the input does not return to rest position in time.

Input 2
An input can be linked to another output.

Input 1
🔘 Active

Mode
Door Status - Monitor door closed state (e.g. via a door sensor)

Contact Type
○ Normally Open
○ Normally Closed

○ Door Open Timeout Alarm
An event will be triggered when the door remains open beyond the configured timeout.

Input 2
○ Not Active

▨ Controllers: Link timetables and exceptions

Link timetables to an output to switch it automatically, except for specified exceptions.

| General | Configuration | Control Options | Input Configuration | Open by Schedule |

Select one or more schedules to open the door for a set period, such as during office hours.
Note: Only administrators can close a door that is opened by a schedule.
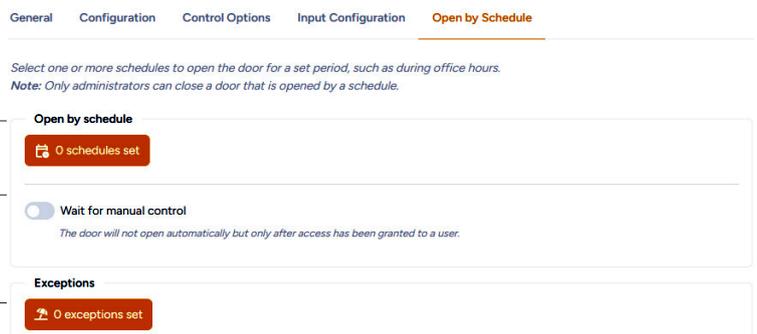
Timetables
Select timetables when the controller should switch automatically.
The output is active during the time specified in the timetable.

Wait for manual operation
The output does not switch automatically. The output switches and remains active during the time specified in the schedule after the first operation.

Exceptions
On these periods, the output does not switch automatically.

Open by schedule
📅 0 schedules set

○ Wait for manual control
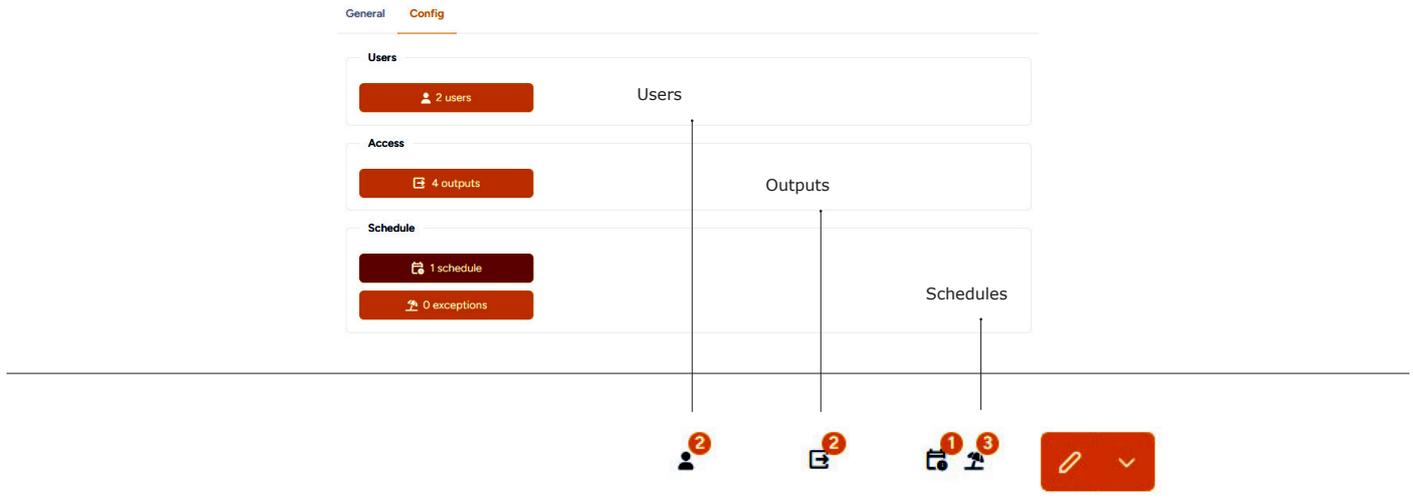*The door will not open automatically but only after access has been granted to a user.*

Exceptions
⬆ 0 exceptions set

👥 Access - Groups: Create group

Users, outputs and schedules can be combined in a new group.

Groups are at the heart of every ES4 installation. They determine which outputs can be controlled by which users and at what times.

👥 Access - Groups: Add output(s)

An ES4 controller must be added to a Group in order to be operated. Select the desired output and the desired operating options.

👥 Access - Groups: Add user(s)

Select the desired users for the group.

👥 Access - Groups: Add timetable(s)

Select the desired timetables for the group.

👤 Access - Users: Create user

When creating a new user, a PIN code, app registration and validity can be assigned.
Link rights and a group to the user.

Active
The user is active and can operate the system.

Username
The name of the user.

Telephone number
The telephone number of the user.
The number is used for SMS.

Group
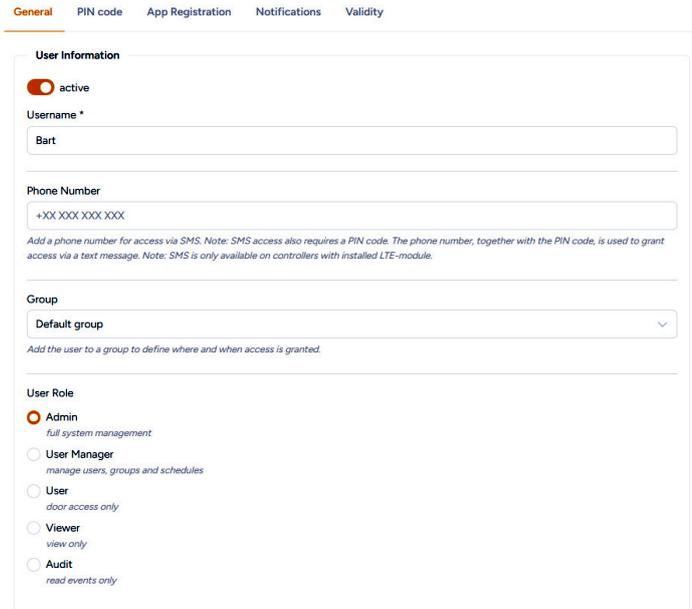The group of which the user is a member.

User role
The user's rights within the installation.

Admin:	the user has all rights.
User Manager:	the user can manage users but not controllers.
User:	the user can only read events and - in a group - operate certain outputs.
Viewer:	the user can only read.
Audit:	the user can only read events.

General   PIN code   App Registration   Notifications   Validity

User Information

🔘 active

Username *

Bart

Phone Number

+XX XXX XXX XXX

Add a phone number for access via SMS. Note: SMS access also requires a PIN code. The phone number, together with the PIN code, is used to grant access via a text message. Note: SMS is only available on controllers with installed LTE-module.

Group

Default group ⌄

Add the user to a group to define where and when access is granted.

User Role

🔘 **Admin**
    full system management

⚪ **User Manager**
    manage users, groups and schedules

⚪ **User**
    door access only

⚪ **Viewer**
    view only

⚪ **Audit**
    read events only

👤 Access - Users: Set PIN code

Activate and generate a PIN code for the user. PIN codes are used for operation via a code keypad and/or via SMS.

PIN code active
The user can use a PIN code.

PIN code
The selected PIN code.

PIN code

🔘 PIN code PIN - Assigned

Add a PIN code to grant access via keypad or SMS.

Set PIN code

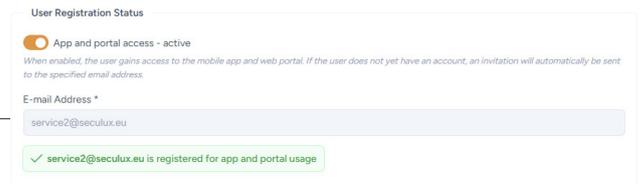| 4 | 4 | 8 | 4 | ❌ | ↻ Generate |

ℹ️ The PIN length is currently set to 4
You can adjust this in the **General Configuration**

👤 Access - Users: App registration

Register the user to allow access via the App and Portal.

E-mail address
The user's email address.
This address is required for use with the APP.

User Registration Status

🔘 App and portal access - active

When enabled, the user gains access to the mobile app and web portal. If the user does not yet have an account, an invitation will automatically be sent to the specified email address.

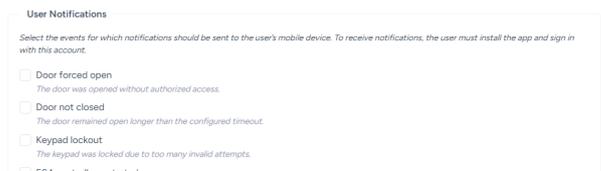E-mail Address *

service2@seculux.eu

✓ service2@seculux.eu is registered for app and portal usage

👤 Access - Users: Notifications (*only for Admin users)

Select which notifications the user wishes to receive via PUSH. These are only available for users with the Admin role.

Notifications
Select the desired notifications for which a PUSH message should be sent.

User Notifications

Select the events for which notifications should be sent to the user's mobile device. To receive notifications, the user must install the app and sign in with this account.

☐ Door forced open
    The door was opened without authorized access.

☐ Door not closed
    The door remained open longer than the configured timeout.

☐ Keypad lockout
    The keypad was locked due to too many invalid attempts.

☐ ES4 controller restarted

👤 Access - Users: Validity

Select a validity period for the user. The user can only gain access within this validity period.

Validity period
Select a period during which the user can operate.

Validity Period

🔘 Validity period - active

Restrict access for this user to a specific period.

Valid From - Start Date & Time

[   ] 📅

Valid Until - End Date & Time

[   ] 📅

📅 **Access - Time schedules: Create time schedule**

Create a time schedule that you link to a group or controller.

Description
Name of the time schedule

Repetition type
Select a schedule that is active once, weekly, monthly or annually.

All day
The schedule is active throughout the day or between a specific time period.

Schedule Information

Description
`24/7`

Schedule Configuration

Recurrence
`Weekly ▾`

Specific days, every week (such as every Monday and Wednesday)

Select the active days

| Monday |
| Tuesday |
| Wednesday |
| Thursday |
| Friday |
| Saturday |
| Sunday |

When should this be active during the day
☑ All day

Schedule Summary
You have configured a Schedule.
Schedule spans the entire day (24 hours) starting from 00:00.
It will repeat weekly on Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday.

Overview
The list view of the time schedules shows the available schedules and their settings.

Description ⇅		Recurrence	Time	Settings	
Wekelijks		Yearly	14:16 - 14:18	**Month:** October **Day of Month:** 29	✏
Eenmalig		One-Time	13:25 - 13:27	**Start date** 29-10-2025 **End date:** 30-10-2025	✏

🏖 **Access - Exceptions: Create exception**

Description
Name of the exception.

Repetition type
Select a schedule that is active once, weekly, monthly or annually.

All day
The schedule is active throughout the day or between a specific time period.

Exception Details

Exception Information

Description
`Kerstmis`

Exception Configuration

Recurrence
`One-Time ▾`

No repetition

Date Range (Start - End)
`25-12-2025 - 25-12-2025 📅`

Select the start and end date for this one-time event - Exception.

When should this be active during the day
☑ All day

Exception Summary
You have configured a Exception.
Exception spans the entire day (24 hours) starting from 00:00.
It will occur once from 2025-12-25 until 2025-12-25.

Overview
The list view of the exception shows the available schedules and their settings.

Description ⇅	Recurrence	Time	Settings	
Kerstmis	One-Time	All day	25-12-2025	✏

Technical specifications

Code keypad KP(F)-ES4

Dimensions KP	W51 x H130 x D28 mm
Dimensions KPF	W52 x H120 x D22 mm (+ cable gland 25 mm)
IP rating	IP55 (KPF-ES4: IP65)
Optional heating power	6 W

ES4 controller

Dimensions	W70 x H90 x D32 mm
IP rating	IP20
Temperature range	-25°C to 50°C
Relative humidity	0 to 95%
Power consumption	< 2,5 watts
Number of codes (Basic Mode)	100
Code length	4 - 8 digits
Wi-Fi radio frequency	2.4 GHz
Supply voltage	12–24 Vac; 12–30 Vdc ±10%
Network Port	HTTPS (443), MQTT (8883)

Service
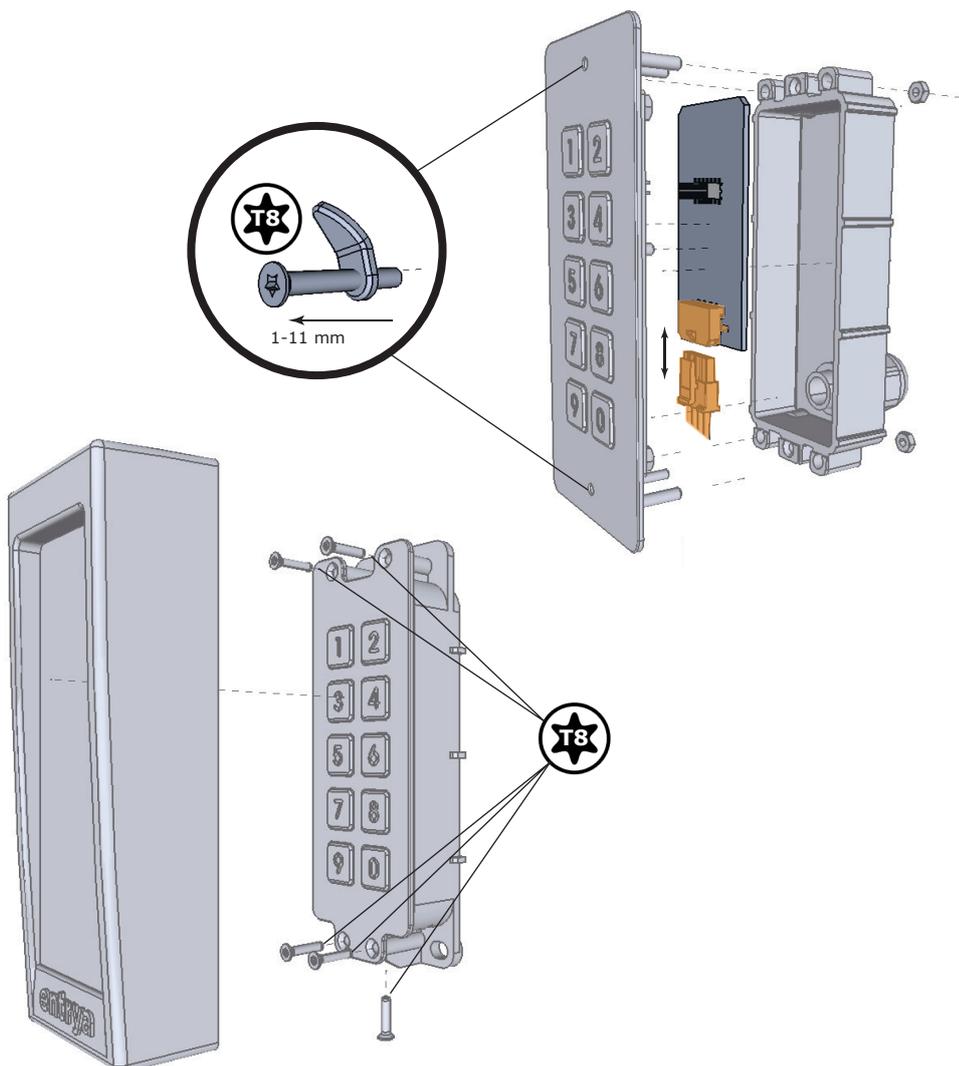
Notifications during normal use

Key 1 flashes		OUT 1 is activated.
Key 2 flashes		OUT 2 is activated.
Keys 1 and 2 lit		The code entered gives access to both outputs. Select an output.
Keys 1 and 2 flashing		The code entered gives access to both outputs, but no output has been selected.
Key 3 flashes		The code entered is too short or you waited too long before pressing a key.
Key 4 flashes		The code entered is correct, but does not grant access.
All keys flash four times simultaneously at one-second intervals.		Incorrect code
All keys flash simultaneously at 6-second intervals.		The code keypad is temporarily locked due to too many incorrect attempts.

Notifications during configuration

Key 3 flashes		The code entered is too short or there was too long a delay between entering digits.
Key 6 flashes		Master code is too short (minimum 4 digits)
Key 7 flashes		Master code is too long (maximum 8 digits)
Key 8 flashing		Duplicate code, use a unique code
Key 9 flashing		Maximum number of codes (100) reached
Key 0 flashing		ES4 controller is connected via Wi-Fi Direct
Waiting animation		ES4 controller is starting up
Waiting animation		Code keypad is receiving a firmware update Do not interrupt the power supply!
Waiting animation		Code keypad is blocked by another process on another code keypad

Warranty

Entrya code keyboards and controllers are covered by a five-year warranty against manufacturing defects. Normal wear and tear, such as discolouration caused by sunlight, is not covered by the warranty. The warranty is fully in accordance with legal provisions. For any warranty claims, please contact your distributor. Warranty claims only apply to the country in which the code keypad and/or controller was sold.

If you require customer service, spare parts or accessories, please contact your distributor.

CE Certificate of Conformity

Entrya Technologies BV hereby declares that the ES4 radio equipment type complies with Directive 2014/53/EU.
https://www.entrya.com/ce

Waste disposal

This product consists of various components that may contain pollutants. Do not dispose of them in the environment! Find out about recycling or waste disposal systems for this product and comply with the legal provisions in force at the place of use.

LED Indicators

STATUS

●   Normal operating mode

✳✳✳✳✳✳✳✳✳   To be configured / factory settings

✳✳✳✳✳✳✳✳✳   Factory settings are being loaded

NETWORK   ✳ Wi-Fi   ✳ LTE   ✳ Ethernet

✳   ✳   ✳   ✳   No local network connection (WLAN, LAN,..)

✳✳   ✳✳   ✳✳   ✳✳   No Internet connection (WAN)

✳✳✳   ✳✳✳   ✳✳✳   ✳✳✳   No Cloud-server connection

▬▬▬▬▬▬▬▬▬▬▬   Good stable connection

▬▬ ● ▬▬ ● ▬▬   Mediocre connection

▬▬ ▬▬ ▬▬ ◖   Poor connection