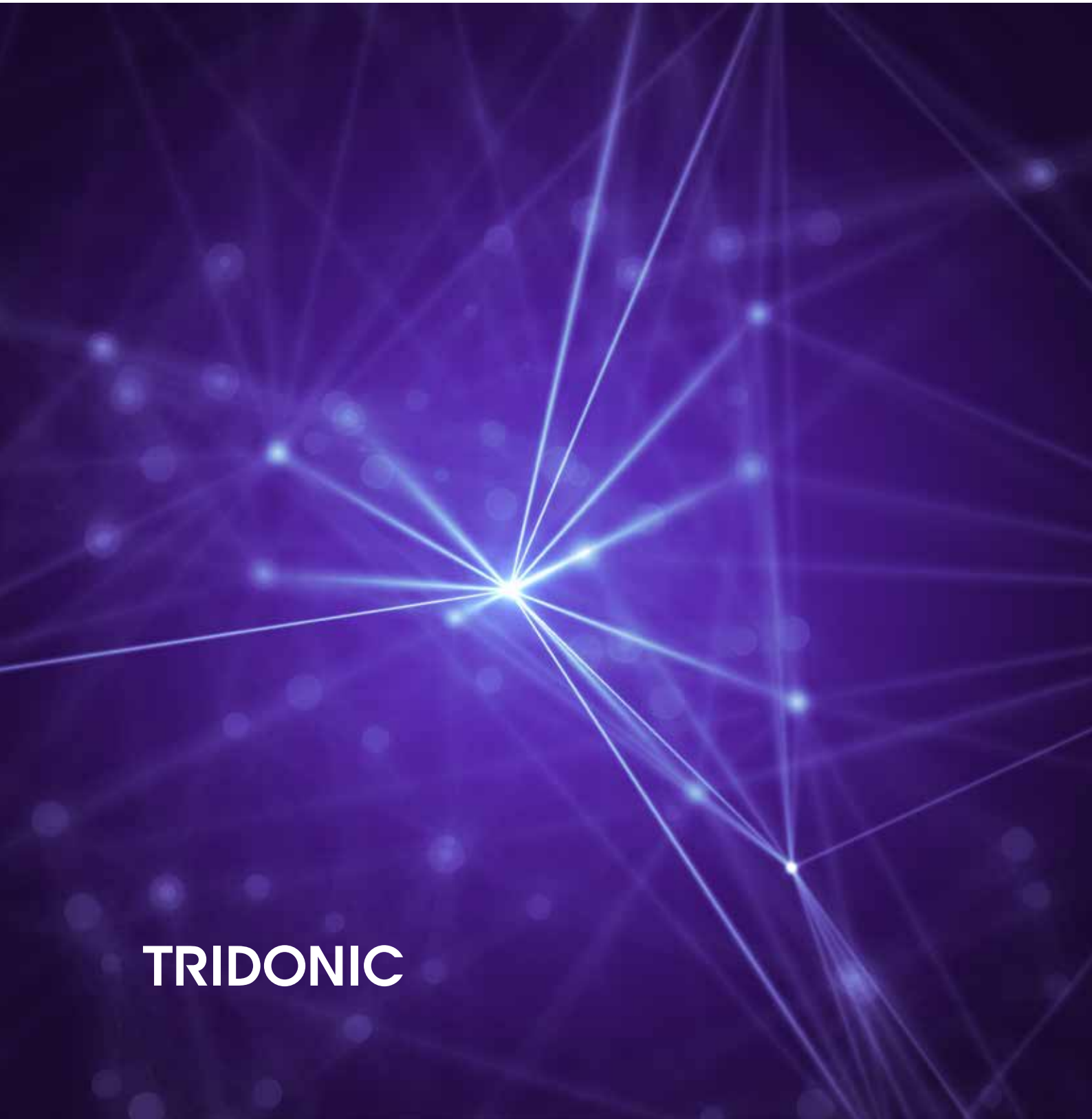
Controls & Connectivity

em-LINK v2 software

Manual



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1 How to use these instructions

We are pleased that you have chosen this *Tridonic GmbH & Co KG* product. So that you can get the most from these instructions, this section provides the following information:

- Signs and icons in these instructions
- Further information
- Target audience of these instructions
- Software version

Signs and icons in these instructions

The following signs and icons are used in these instructions:

Sign/icon	Explanation
1.	Individual steps in the instructions are numbered.
▷	Single-step instructions are indicated by the ▷ icon at the beginning of the line.
➲	After a step has been described, a description of the expected results will follow. These results are indicated by the ➲ icon at the beginning of the line.
—	Requirements which need to be checked before carrying out a step are indicated by —.
i	Notes can be recognised by the **i** icon. In addition, notes are identified by the word **Note** .
[**Bold text**]	Bold text indicates words that are shown on a device display or software user interface.
⚠	Danger and safety instructions are indicated by this icon. Safety and warning information is labelled and classified using the following words: **DANGER** indicates an immediate danger. This could lead to death or severe injury if not avoided. **WARNING** indicates a potentially dangerous situation. This could lead to death or severe injury if not avoided. **CAUTION** indicates a potentially dangerous situation. This could lead to minor injury or damage to property if not avoided. **Attention** indicates a situation involving potential damage. If it is not avoided, the product or something in the vicinity may be damaged.

Table 1: Signs and icons in these instructions

1 How to use these instructions

Further information

More detailed information on the structure and function of your emergency lighting system can be found in the **sceneCOM Self-contained emergency luminaires** manual.

If you should have any further questions, please contact your sales partner.

Target audience of these instructions

These instructions are designed for electricians without special product training who would like to use the *em-LINK v2* software to connect and monitor multiple *sceneCOM evo* control devices.

Software version

These instructions are based on software version *em-LINK v2 1.7.7*.

2 em-LINK v2 software

The *em-LINK v2* software can be used to establish a connection with up to 200 *sceneCOM evo* control devices. The *em-LINK v2* software must be started on the main computer and must be running at all times.

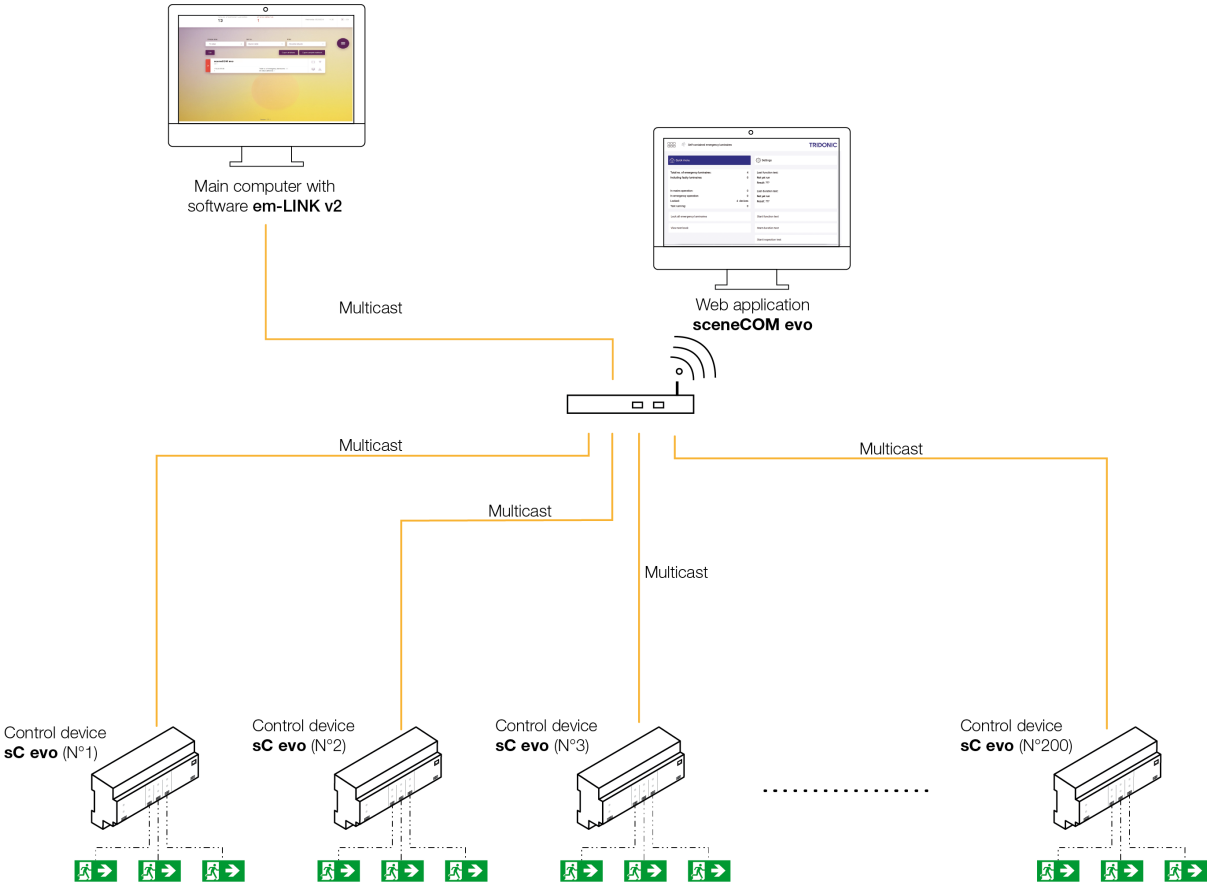
WARNING

The *em-LINK v2* software will not work if the input console is closed!

If the input console is closed on the main computer, no connection can be established with the *em-LINK v2* web interface. The automatic test book export also stops working.

- The input console must always be running on the main computer.
- The main computer must not be shut down.

Once the software has been started on the main computer, the *em-LINK v2* software can be accessed from any computer on the network via the web interface, in order to get an overview of all connected *sceneCOM evo* control devices.



2 em-LINK v2 software

sceneCOM emergency lighting system

The *sceneCOM* emergency lighting system is designed to control and monitor self-contained emergency luminaires.

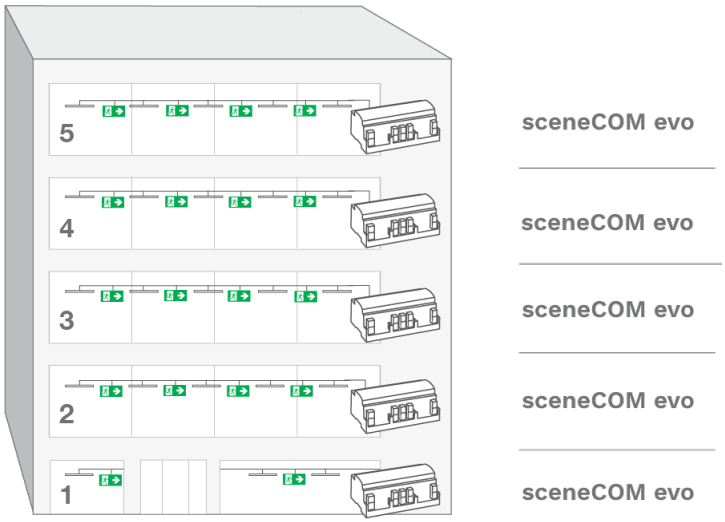


Figure 1: Application example – *sceneCOM evo*

The *sceneCOM* web application provides the option of using just one *sceneCOM evo* control device to automate up to 192 self-contained emergency luminaires. It is therefore suitable for small buildings or individual floors, as shown in the figure on the left.

Note

More information on the *sceneCOM* software can be found in the **sceneCOM Self-contained emergency luminaires** manual

Basic functions of the em-LINK v2 software

- Establish a connection to max. 200 *sceneCOM evo* control devices manually or automatically
- Monitor the connection status of individual *sceneCOM evo* control devices
- Access the web application for individual *sceneCOM evo* control devices
- Monitor the functionality of self-contained emergency luminaires
- Download the test books and faults for individual *sceneCOM evo* control devices manually or automatically

3 Interface description

Navigation principles

Different buttons are available in the *em-LINK v2* software for commissioning, configuration and maintenance.

Button	Meaning
	Expand – Collapse The arrow signifies that further information can be displayed (e. g. error messages). • When the right arrow is clicked, the information is expanded and the arrow points down. • When the arrow pointing down is clicked, the information is collapsed and the arrow points to the right.
	Error status: Permissible limit has not been exceeded The permissible limit of error messages has not been exceeded.
	Error status: Permissible limit has been exceeded The permissible limit of error messages has been exceeded.
	Connection status: No connection to the control device The grey bar signifies that no connection to the control device can currently be established. A check is performed at regular intervals to ascertain whether a connection can be established.

Table 2: Navigation principles

4 Requirements

Before starting the commissioning and configuration process for your *em-LINK v2* software, ensure that the following requirements have been met:

- Operating system: *Linux*, *Apple MacOS*, *Microsoft Windows*
- Software: *Java 8.0*
- Web browser: *Internet Explorer 11 or higher*, *Microsoft Edge*, *Google Chrome*, *macOS Safari*, *Mozilla Firefox*
- Memory space required: at least 200 MB
- Network settings: Multicast must be enabled
- Ports *4444* and *9000* must be open

Optimal viewport width

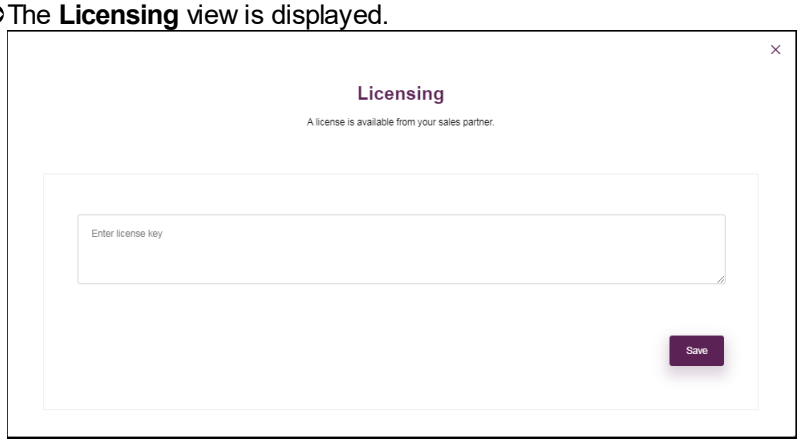
The optimal viewport width is 1,440 px, 1,280 px or 1,024 px.

Note
The *em-LINK v2* software is based on the *Bonjour* service from *Apple*.

5 Licensing

A license is required in order to use all of the functions of the *em-LINK v2* software. For licensing proceed as follows:

1. Open the menu.
2. Select **Licensing**.
   ➲The **Licensing** view is displayed.



3. Enter the license key. The license key can be obtained from your local sales partner.
4. Tap the **Save** button.
   ➲The license is applied.
   ➲The full functionality of the *em-LINK v2* software is now available.

6 Commissioning

This section explains how to commission the *em-LINK v2* software.

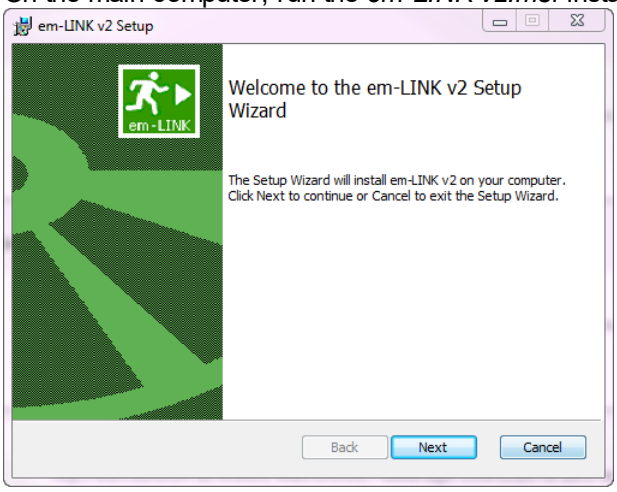
The following steps are required:

- Step 1: Install the *em-LINK v2* software.
  For more information see section Installing the em-LINK v2 software 11
- Step 2: Open the *em-LINK v2* web interface.
  For more information see section Starting the em-LINK v2 web interface 12
- Step 3: Establish a connection to a maximum of 200 *sceneCOM evo* control devices manually or automatically.
  For more information see section Establishing a connection to sceneCOM evo control devices 14
- Step 4: Define exports (manual and automatic).
  For more information see section Defining exports 17

6 Commissioning

6.1 Installing the em-LINK v2 software

1. On the main computer, run the *em-LINK v2.msi* installation file.



2. In the start menu, start *em-LINK v2* em-LINK.
   ➲The input console is launched.

WARNING

The *em-LINK v2* software does not work if the input console is closed.

If the input console is closed on the main computer, no connection can be established with the *em-LINK v2* web interface. The automatic test book export no longer works either.

- The input console must run continuously on the main computer.
- The main computer must not be shut down.

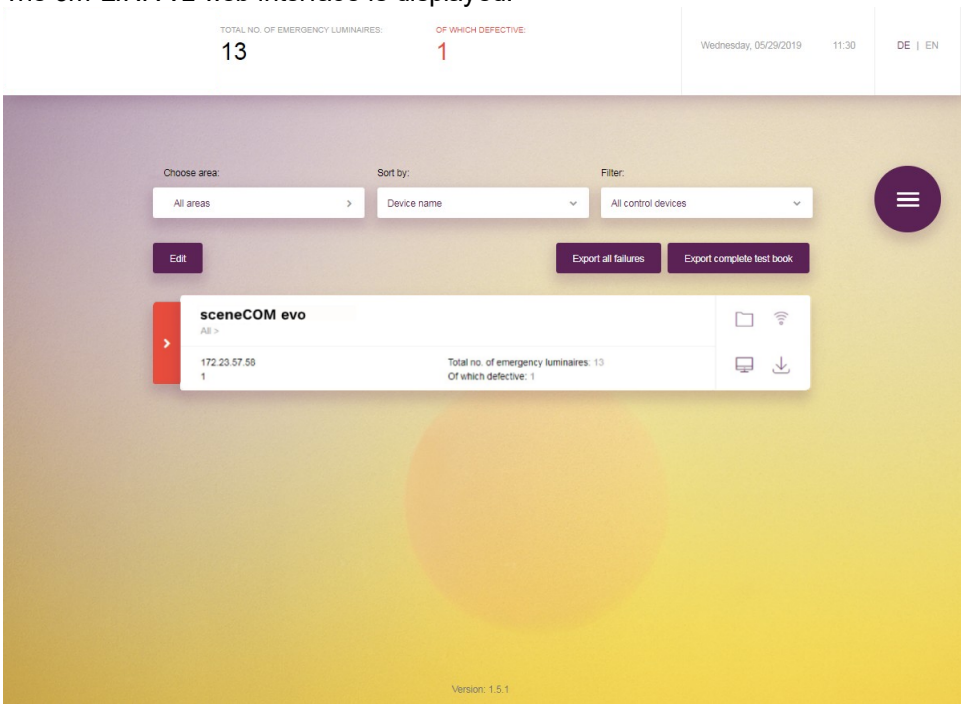
3. Note down the IP address of the main computer.

6 Commissioning

6.2 Starting the em-LINK v2 web interface

Starting em-LINK v2 on the main computer

1. Start the *em-LINK v2* input console.
2. Open a web browser.
3. In the address line, enter the IP address *localhost:9000*.
   ➲The *em-LINK v2* web interface is displayed.



Note

The web interface starts in English the first time a connection is established. You can change the language in which the web interface is displayed using the button at the top right corner of the start page.

6 Commissioning

Starting em-LINK v2 on another computer

Requirements:

— The *em-LINK v2* input console is running on the main computer.

— The main computer and the other computer must be located on the same network.

— The IP address or name of the main computer is known.

1. Open a web browser.
2. In the address line, enter the IP address of the main computer which has the *em-LINK v2* running on it, along with *:9000* at the end, and navigate to this address (e.g. enter “[IP address]*:9000*”).

– or –

2. In the address line, enter the name of the main computer which has the *em-LINK v2* running on it, along with *:9000* at the end, and navigate to this address.

➲ The *em-LINK v2* web interface is displayed.

6 Commissioning

6.3 Establishing a connection to sceneCOM evo control devices

The connection to the *sceneCOM evo* control devices can be established in two ways:

- manually
- automatically

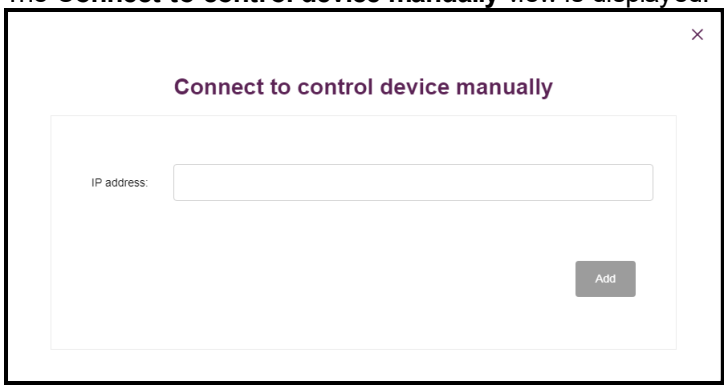
Establishing a connection to a control device manually

Requirement:

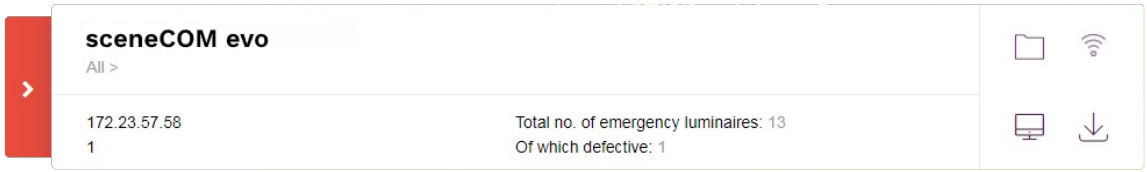
— *sceneCOM evo* control device has been commissioned.

> **Note**
> More information on the *sceneCOM* software can be found in the **sceneCOM Self-contained emergency luminaires** manual

1. Open menu.
2. Select **Connect manually**.
   ➲The **Connect to control device manually** view is displayed.



3. Enter IP address of the *sceneCOM evo* control device.
4. Tap the **Add** button.
   ➲The *sceneCOM evo* control device is added.
   ➲As soon as the connection has been established, the device name, IP address and – if available – the device designation are displayed.
   In addition, the total number of emergency luminaires and the number of defective emergency luminaires are also displayed.



6 Commissioning

Establishing a connection to control devices automatically

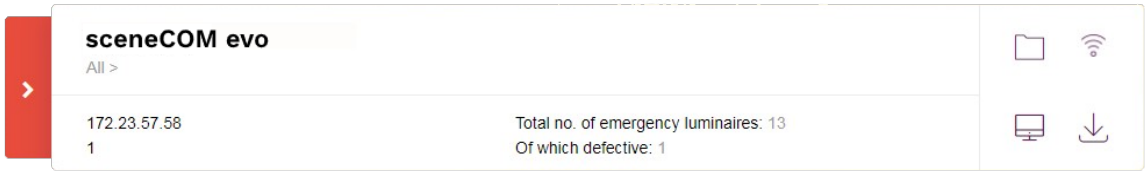
Requirement:

— *sceneCOM evo* control device has been commissioned.

> **Note**
> More information on the *sceneCOM* software can be found in the **sceneCOM Self-contained emergency luminaires** manual

1. Open menu.

2. Select **Connect automatically**.
   ➲The *em-LINK v2* software automatically searches in the network for *sceneCOM evo* control devices.
   ➲The *sceneCOM evo* control devices found are automatically added.
   ➲As soon as the connection has been established, the device name, IP address and – if available – the device designation are displayed.
   In addition, the total number of emergency luminaires and the number of defective emergency luminaires are also displayed.



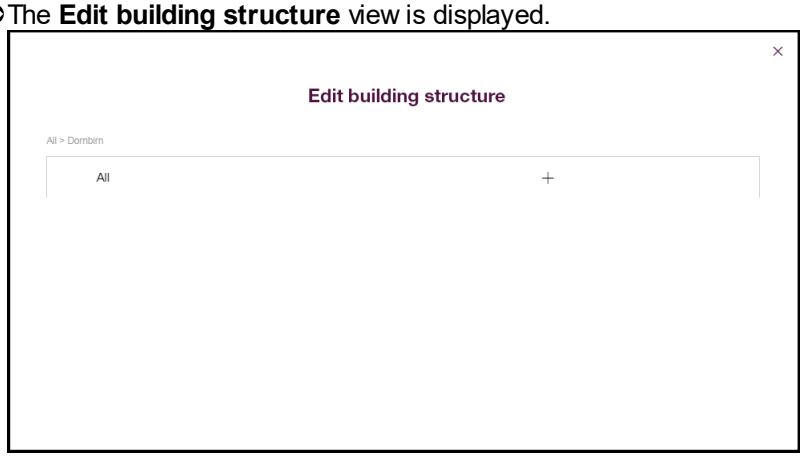
6 Commissioning

6.4 Configuring the building structure

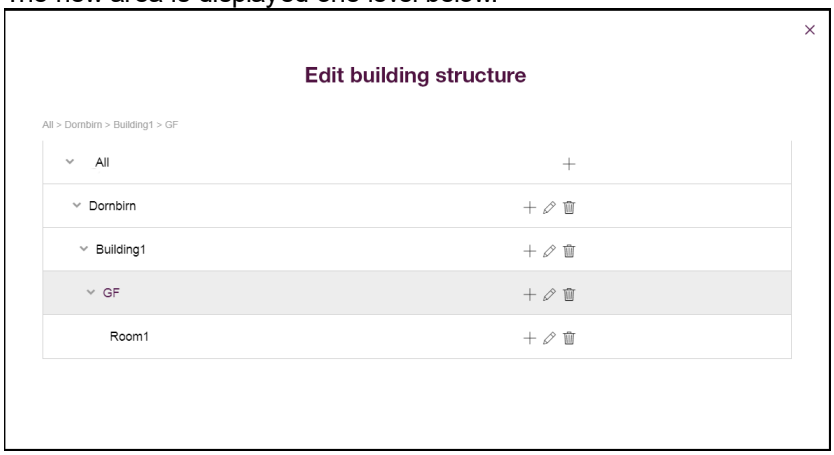
The following section contains an overview of the options for monitoring and configuring self-contained emergency luminaires in a hierarchy layout. You can define the specific structure in which the view is laid out yourself.

Creating and editing the building structure

1. Open the menu.
2. Select **Edit building structure**.
   ➲The **Edit building structure** view is displayed.



3. Tap the icon to add a new area.
   ➲The new area is displayed one level below.



4. Tap the icon to change the name of the area.
5. Tap the icon to delete the area.
6. The drag and drop function can be used to move the individual areas and assign them to new levels in the building structure.

6 Commissioning

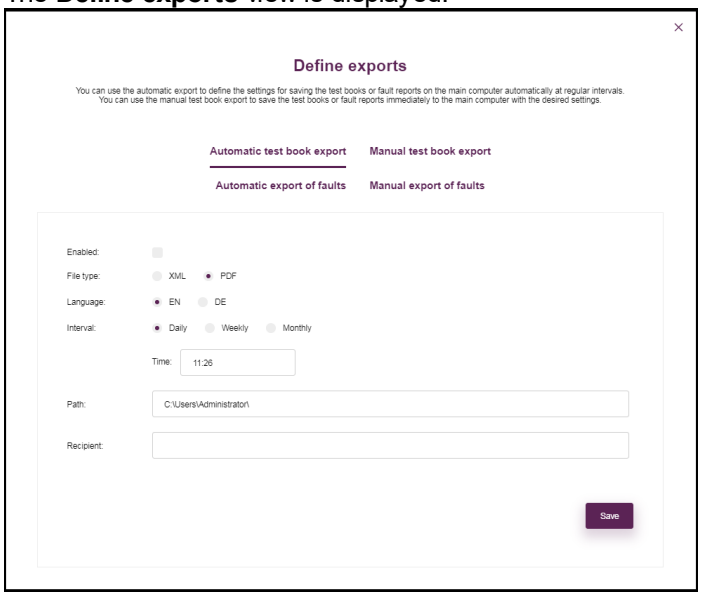
6.5 Defining exports

The faults and test book can be exported as a PDF or XML file. You can also select whether the faults and test book are exported automatically or manually.

Note
When generating test books with over 100 pages, creating the export as a PDF is not recommended because this may cause problems. For test books with a high number of pages an XML export should always be selected.

Defining the test book export

1. Open the menu.
2. Select **Define exports**.
   ➲The **Define exports** view is displayed.



3. Choose the type of export (automatic or manual).
4. Define the options for the automatic test book export (**file type**, **language**, **interval**, **time**, **path** and **recipient**).

– or –

4. Define the options for the manual test book export (**file type**, **language** and **path**).

Note
- The path indicates the desired save location for the exports on the main computer.
- For the recipient, enter the email address to which the exported files are to be sent.

6 Commissioning

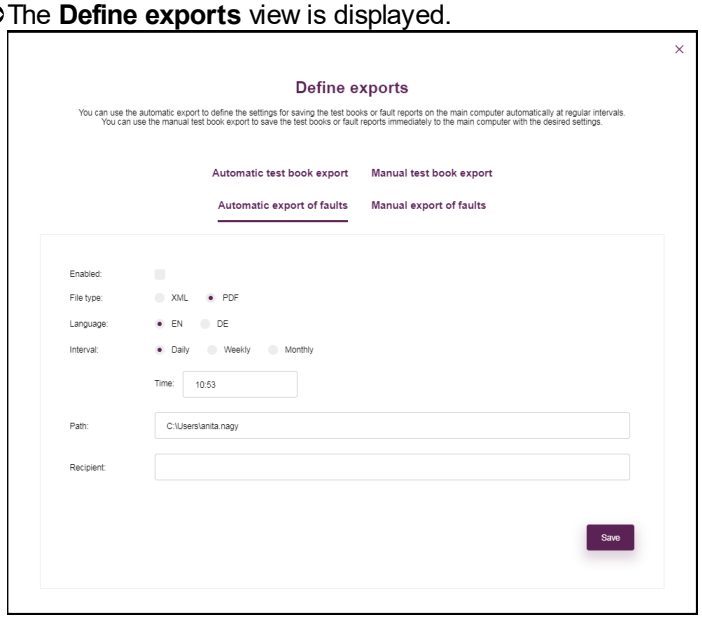
5. Tap the **Save** button.
   ➲If **Automatic test book export** has been enabled, the test book export settings are saved. The test books are saved on the main computer or sent by email according to the settings. A separate file is created for each *sceneCOM evo* control device. Existing files are not overwritten.
   ➲If **Manual test book export** is selected, the test books will immediately be saved on the main computer or sent by email according to the settings. A separate file is created for each *sceneCOM evo* control device. Existing files are not overwritten.

Note

- The button on the *em-LINK v2* web interface can be used to manually export the test books for each control device at any time.
- The **Export entire test book** button on the *em-LINK v2* web interface can be used to manually export the test books for displayed control devices.

Exporting faults

1. Open the menu.
2. Select **Define exports**.
   ➲The **Define exports** view is displayed.



3. Choose the type of export (automatic or manual).
4. Define the options for the automatic or manual export of faults (**file type**, **language**, **interval**, **time**, **path** and **recipient**)

– or –

4. Define the options for the manual export of faults (**file type**, **language** and **path**).

Note

- The path indicates the desired save location for the exports on the main computer.

6 Commissioning

- For the recipient, enter the email address to which the exported files are to be sent.

5. Tap the **Save** button.

➲ If **Automatic export of faults** has been enabled, the export settings are saved. The faults are saved on the main computer or sent by email according to the settings. A separate file is created for each *sceneCOM evo* control device. Existing files are not overwritten.

➲ If **Manual export of faults** is selected, the faults will immediately be saved on the main computer or sent by email according to the settings. A separate file is created for each *sceneCOM evo* control device. Existing files are not overwritten.

Note

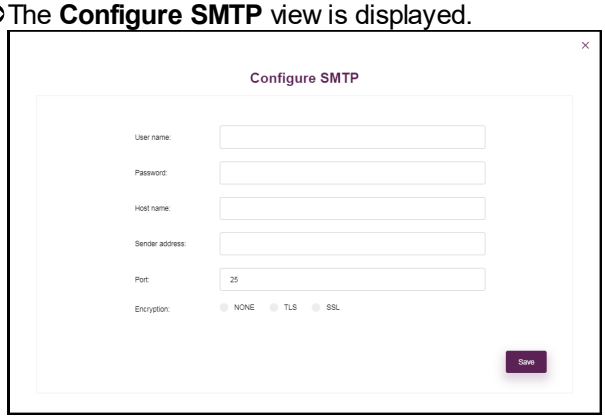
- The button on the *em-LINK v2* web interface can be used to manually export the faults for each control device at any time.
- The **Export all faults** button on the *em-LINK v2* web interface can be used to manually export the faults for all displayed control devices.

6 Commissioning

6.6 Configuring SMTP

To send the exported test book and faults exports via email, you must configure the SMTP server.

1. Open the menu.
2. Select **Configure SMTP**.
   ➲The **Configure SMTP** view is displayed.



3. Enter user name.
4. Enter password.
5. Enter host name.
6. Enter sender address.
7. Enter port. Port 25 is specified by default.
8. Choose encryption type.
9. Tap the **Save** button.
   ➲The settings will be saved.

7 Monitoring

This section explains how to use the *em-LINK v2* software to monitor individual *sceneCOM evo* control devices.

This includes:

- Monitoring the connection status of the individual *sceneCOM evo* control devices
- Opening the web application of the individual *sceneCOM evo* control devices
- Monitoring the functioning of the self-contained emergency luminaires
- Exporting test books of the individual *sceneCOM evo* control devices manually or automatically

7 Monitoring

7.1 Overview of monitoring functions

The following contains an overview of the monitoring functions:

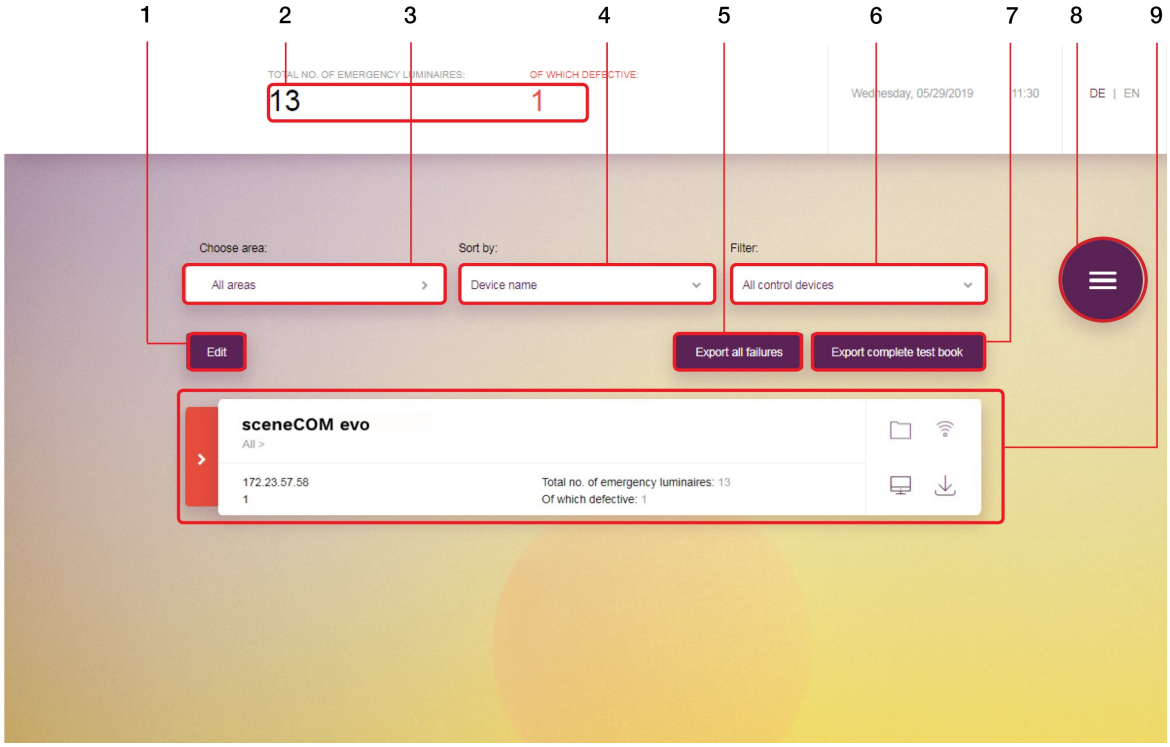


Figure 2: Monitoring the functionality of self-contained emergency luminaires

	Function	Brief description
(1)	Edit connection	The **Edit** button can be used to select individual control devices or all of them. The connection to the control devices can then be terminated.
	Terminate connection	When the connection is terminated via the *em-LINK v2* web interface, the test book for the control device is not deleted on the control device itself. The test book will also still be available via the *sceneCOM evo* web application.
(2)	Status of all connected self-contained emergency luminaires	This shows you the status of the self-contained emergency luminairesinstalled in the system at a glance: • **Total no. of emergency luminaires**: number of self-contained emergency luminairesaddressed in the system. • **Faulty luminaires out of total**: number of self-contained emergency luminaireswith a fault.
(3)	Filter by area	Use this button to select the area containing the control devices you want to be displayed on the web interface.
(4)	Sort	Sorting makes it easier to visualise the status of the control devices and the connected self-contained emergency luminaires and find the desired information more quickly. You can sort the control devices by device name (from A to Z), by the total number of emergency luminaires or by the number of faulty emergency luminaires.
(5)	Export faults	Use this button to export all faults for the control devices displayed on the web interface. The export is carried out based on the settings defined for manual exports of faults.

7 Monitoring

	Function	Brief description
		Note For more information see Section Defining exports 17
(6)	More filter options	It may be beneficial to display only the control devices that meet a certain criterion, e.g. all control devices with luminaire faults. The project window provides an additional filter function for this purpose. The following filters can be selected: • **All control devices**: all control devices are displayed. • **Faulty emergency luminaires**: only control devices to which faulty emergency luminaires are connected are displayed. • **Threshold exceeded**: only control devices for which the threshold has been exceeded are displayed. **Note** In the *sceneCOM* web application, you can set the number of luminaire faults required to trigger a critical fault message. Luminaire faults are lamp failures, address conflicts or ballast failures, for example. Set the threshold to 1 if you wish to view every instance of these faults as critical faults. Increase the threshold if a higher number of luminaire faults is desired before a critical fault is displayed. The default threshold is 1.
(7)	Export test book	Use this button to export a collective test book for all control devices displayed on the web interface. The export is carried out based on the settings defined for manual test book exports. **Note** For more information see Section Defining exports 17
(8)	Open the menu	You can access a selection of further functions via the menu: • Connect to control device manually • Edit building structure • Connect to control device automatically • Define exports • Configure SMTP • Open the manual • Add license
(9)	Monitor the functionality of self-contained emergency luminaires	The type of fault and path of the luminaire are displayed for each faulty emergency luminaire. Faults are displayed no more than 15 min. after they have occurred. **Note** For more information see Section Faults 26

Table 3: Monitoring the functionality of self-contained emergency luminaires

7 Monitoring

7.2 Monitoring the functionality of self-contained emergency luminaires

The following provides detailed information about monitoring the functionality of self-contained emergency luminaires:

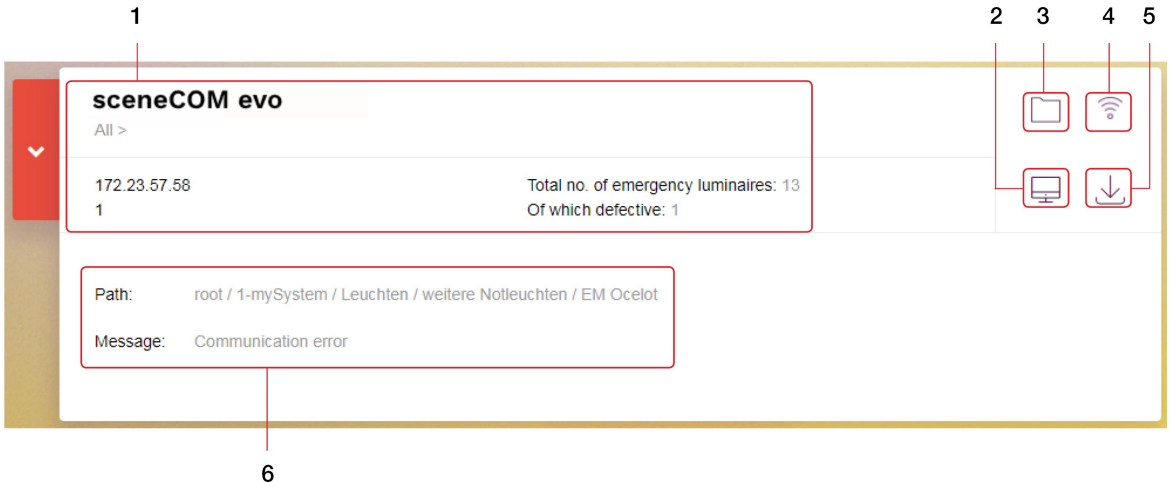


Figure 3: Details about monitoring the functionality of self-contained emergency luminaires

	Function	Brief description
(1)	Device information	This is where you find the device name, an overview of the structure, the IP address and the device designation, if any, of the control device.
	No. of emergency luminaires and no. of luminaire faults	This shows you the status of the self-contained emergency luminairesinstalled in the system at a glance: • **Total no. of emergency luminaires**: number of self-contained emergency luminaires addressed in the system. • **Faulty luminaires out of total**: number of self-contained emergency luminaires with a fault.
(2)	Open the control device web application	Use this button to open the web application for the corresponding control device.
(3)	Assign control device	Use this button to assign the control device directly to an area in the building.
(4)	Check connection status	The icon indicates the connection status for the control device: Connection status: no connection to the control device Connection status: connecting to the control device now Connection status: connection to the control device has been established

7 Monitoring

	Function	Brief description
(5)	Export test book manually	The results of function, duration and inspection tests are documented in the test book. The test book entries are sorted chronologically (the latest test results are always at the top of the list). This button can be used to manually export the test book for an *sceneCOM evo* control device to the local computer. The test book is exported as a PDF file in the language set on the *em-LINK v2* web interface. Exports always include all test results. **Note** A test book export can be defined for all *sceneCOM evo* control devices. For more information see Section Defining exports 17
(6)	Monitor the functionality of self-contained emergency luminaires	The type of fault and path of the luminaire are displayed for each faulty emergency luminaire. Faults are displayed no more than 15 min. after they have occurred. **Note** For more information see Section Faults 26

Table 4: Details about monitoring the functionality of self-contained emergency luminaires

7 Monitoring

7.3 Faults

The following section provides an overview of the individual faults in self-contained emergency luminaires. You will also discover the possible cause behind the message and how the problem can be rectified.

Self-contained emergency luminaire

Message	Possible cause	Rectification
General error	A general error has occurred with an emergency luminaire.	▷ Contact your sales partner.
Battery fault	A fault has occurred with the battery.	▷ Replace the battery.
Duration test is due.	The service interval has been exceeded.	1. Carry out maintenance. 2. Perform a duration test.
Communication error	A luminaire was first connected to a DALI control line, for example, and then to another. There are therefore problems with communication.	▷ Delete luminaire from system image and address again.
Short circuit on DALI line	The DALI control line has a short circuit.	▷ Check the affected line and eliminate the short circuit.
Charging fault	A fault has occurred when the battery was charging.	▷ Check the battery wiring. *– or –* ▷ Replace the battery. *– or –* ▷ Replace the control gear.
Lamp or control gear failure	Lamp is not correctly connected.	▷ Check the lamp wiring.
	Lamp or LED module is faulty.	▷ Replace the faulty lamp or LED module.
	The control gear is faulty.	▷ Replace the defective control gear.
Break on DALI line	The DALI control line has been broken.	▷ Check the affected line and eliminate the break.

Table 5: Possible faults with a self-contained emergency luminaire

8 Maintenance

This section explains how to maintain the *em-LINK v2* software.

8.1 Software update

The software version of the *em-LINK v2* software can be updated. The configuration of the software is retained. Test books that have already been exported are not deleted.

Note
The latest software version is available from your sales partner.

Updating em-LINK v2 software

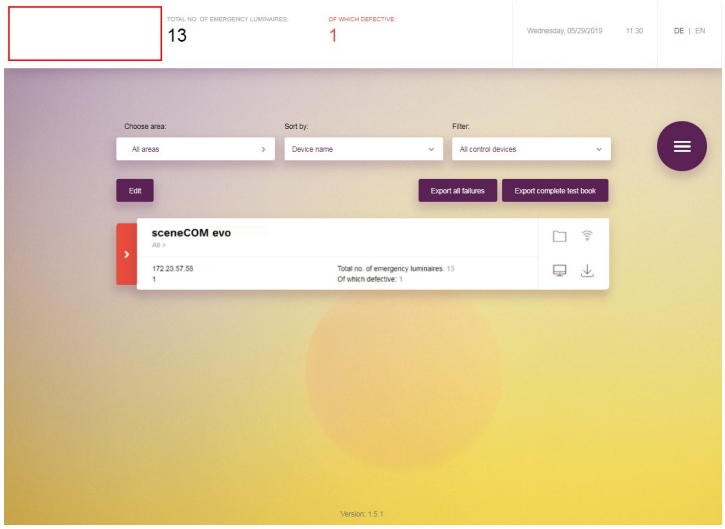
▷ Execute the new installation file *em-LINK v2.msi*.

➲ The *em-LINK v2* software is updated.

8 Maintenance

8.2 Logo

By default, no logo is displayed on the *em-LINK v2* web interface. You can set the logo yourself, so that it appears in the top left corner of the web interface.



Defining and replacing the logo

Requirement:

—The logo is available as a PNG file.

Note

- File name: *logo.png*
- Dimensions: 500 × 250 pixels

1. Open the following folder on the main computer: **C:\Program Files (x86)\em-LINK v2\conf**
2. Copy file *logo.png* to the following folder: **C:\Program Files (x86)\em-LINK v2\conf**
3. Reload the web interface.

➲ The new logo is displayed in the top left corner of the *em-LINK v2* web interface.

9 Appendix

The following information can be found in this section:

- Symbols 29

9.1 Icons

This section provides an overview of all symbols that are displayed in the *em-LINK v2* software.

Symbol	Description
	Choose area
	Open web application
	Export a test book manually
	Connection status: No connection to the control device
	Connection status: Connection to the control device is being established
	Connection status: Connection to the control device has been established
	A selection of further functions can be accessed via the menu: • Connect to control device manually • Connect to control device automatically • Defining exports • Configuring SMTP • Open manual • Activating the license

Table 6: Symbols in the *em-LINK v2* software

This section provides an overview of all menu symbols.

Symbol	Description
	Connect to control device manually
	Configuring the building structure
	Connect to control device automatically
	Defining exports
	Configuring SMTP
	Open manual
	Activating the license

Table 7: Menu symbols in the *em-LINK v2* software