Product Manual

ISE SMART CONNECT KNX LOEWE

1-000B-009

Documentation valid for:

Product database entry:	v1.0
Firmware:	v1.0
Documentation status	12/07/2018

Legal information

ISE SMART CONNECT KNX LOEWE Product Manual
Status: 12/07/2018

ise Individuelle Software und Elektronik GmbH
Osterstr. 15
26122 Oldenburg, Germany

Trademark

KNX is a registered trademark of the KNX Association.

Feedback and information about products

If you have any questions regarding our products, contact us via e-mail sales@ise.de.
We would be pleased to receive your ideas, suggestions for improvements and criticism by e-mail via support@ise.de.

Table of contents

1 About this documentation

This documentation will accompany you through all phases of the product life cycle of ISE SMART CONNECT KNX LOEWE. You will learn for example how to assemble, install, commission and configure the device.

All descriptions in this documentation relating to project planning in the ETS refer to the variant "ETS Professional" in the version 5.

Explanations for the concepts of KNX do not form part of this documentation. Specialist knowledge of KNX is a prerequisite.

1.1 Target group

This documentation is aimed at qualified electricians and KNX processors.

ISE SMART CONNECT KNX LOEWE may only be assembled and installed by qualified electricians. Specialist knowledge of KNX is a prerequisite.

ISE SMART CONNECT KNX LOEWE may be configured by anyone.
We recommend having the project planning done by a system integrator with firm specialist knowledge of KNX and using ETS.

1.2 Symbols and other typographical conventions

Table 1: Safety notes symbols

Symbol / label	Meaning
	Warning of possible material damage
	General warning
	Warning of electrical voltage

Table 2: Special symbols and typographical conventions

Symbol / label	Meaning
F1	PC button
<<Inscription>>	Text on software interface
	Tip
	Important additional information
	Troubleshooting and tips relating to causes.
	End device: TV device

2 About ISE SMART CONNECT KNX LOEWE

2.1 Proper use

The ISE SMART CONNECT KNX LOEWE can be used to easily integrate compatible Loewe TV devices into KNX.

ISE SMART CONNECT KNX LOEWE is a device of the KNX system and complies with the KNX guidelines.

Compatible with Loewe TV devices of the following chassis generations

- SL3xx
- SL4xx

KNX Secure Ready
ISE SMART CONNECT KNX LOEWE is prepared for KNX Secure. The required FDSK (factory default setup keys) can be found on stickers on the side of the device and are also supplied with the device. You get the function extension by importing a future firmware version onto the device.

ise Individuelle Software und Elektronik GmbH shall not be liable for damages arising due to improper or unsuitable use.

Configuration: Compatible ETS versions

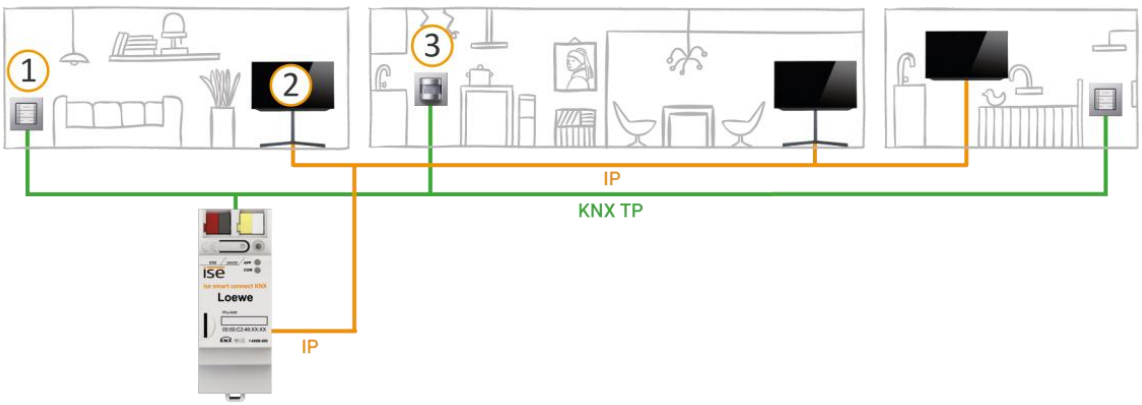
Simple integration into KNX (can be completely configured via ETS)

- ETS4 from v4.2, ETS5 or higher.
- Product database entry: Download the product database entry free of charge from our website at www.ise.de or from the online catalogue of the ETS software.

2.2 System

ISE SMART CONNECT KNX LOEWE is connected to the KNX installation via KNX/TP. The device is integrated via the IP into the network in which the TV devices (2) are already located.

Within the KNX installation, the TV devices can then be controlled via the button (1) or sensors (3) (as per the configuration).



Note: You can control up to two Loewe TV devices with one ISE SMART CONNECT KNX LOEWE.

2.3 Functions

Below you will find the most important functions at a glance.

Features

Separate control of up to two Loewe TV devices

- Perhaps one resident wants to watch the morning news while another prefers music videos? Simply control the TV devices separately.

TV devices on/off

- Switch the TV device on and off
- "Wake up" the TV device via Wake on LAN and then switch it on

Volume control

- Switch the sound on and off
- Increase / reduce the volume:
    - In stages or directly
    - To an absolute or a relative value

Program control

- Change to the next or the previous program channel
- Change to a particular program channel

Call browser

- Transfer camera images, e.g. from an external camera
- Call up websites

Parental control

- Activate / deactivate child protection.
- Block all stations irrespective of age. Suitable e.g. for using the TV device purely as a screen just to look at images or to surf the Internet.
- Protect children from age-inappropriate programs across all stations based on the approved age for the program in question (starting with level "from age 3").

Showing notices on the TV device

- Use up to 5 self-defined texts or dynamically display texts from other devices on the TV device, e.g. "movement detected in garden" from an outside camera.
- Display notice as an OSD text.

Picture in Picture (PIP)

- PIP mode on/off

Source selection

- Flexibility of choice between the sources of the TV device, e.g. switch conveniently between HDMI input and receivers.

Call up Home menu

- The resident can now continue navigating from the Home menu.

Integrating between scenarios

Below we will present you with a few possible scenarios into which you can integrate the Loewe TV device. Alternative devices such as logic modules maybe required depending on the specific use case scenario.

Burglary prevention

When you leave your house, the Smart Home switches into Absence mode. Individual lights are now on in the house and the TV device flickers discreetly through the blinds: Together with the sound of voices coming from the TV device, this gives the impression that someone is at home.

Want to protect the environment by not having Absence mode permanently activated? Then create the impression that someone is at home when your motion detector outside detects movement.

Convenient wake-up

The motion detector detects you getting up, the blinds are opened and the TV device is switched-on. One resident watches the news on the TV device in the kitchen while the other one reads an internet news blog on the second device in the dining room.

Saving energy

When you leave your house, the Smart Home switches into Absence mode. This not only switches the lighting off, but also puts the TV device into standby mode. Want to save even more energy? The power at the socket can then be disconnected by KNX. The TV device is then automatically back in standby mode after the socket is switched on.

A stranger at the door

Late in the evening the doorbell rings announcing an unexpected visitor. It's not very convenient having to leave your comfortable spot on the sofa to look through the door spy hole in the hall to see who's outside. That's why you can simply observe on your TV device's browser the image from an outdoor camera focussed on your entrance area. The volume from the TV device is lowered or the sound is muted so as not to interfere with a possible discussion. You can now start the discussion in the usual way.

A cosy movie night

Start your movie night by switching on the TV device. The blinds darken the room automatically and a matching lighting mood brings a suitable atmosphere into the room.

Start any scene you want when you switch on the TV device.

Strange noises from the garden

Perhaps it was just an animal passing through your garden, however you never know. The motion detector has reliably picked up the intruder. The outdoor camera then swivels round and focuses on what's disturbing the peace. The TV device's browser is opened and the image is transferred from the outdoor camera. This lets you either continue with your movie night with peace of mind, or if so required take other measures.

Kids can only watch TV with their parents

If a "parents not home" scenario arises, you can ensure that your children's physical safety is protected by disconnecting the power supply at the sockets of potentially hazardous electrical devices. You can also activate the parental control of the TV device so that they can't watch age-inappropriate programs.

2.3.1 Functional enhancements from updates

Functional enhancements for ISE SMART CONNECT KNX LOEWE are available via a newer version of the firmware. Simply download the latest firmware and the relevant product manual from our website www.ise.de.

►Extending the scope of functions (updating firmware), p. 31

2.3.2 KNX Secure Ready

ISE SMART CONNECT KNX LOEWE is prepared for KNX Secure. The required FDSK (factory default setup keys) can be found on stickers on the side of the device and are also supplied with the device. You get the function extension by importing a future firmware version onto the device.

For maximum security, we recommend removing the stickers from the device.

You cannot restore the FDSK yourself.

- ➢ Keep the FDSK in a safe place.
- ➢ If you lose the FDSK, please contact our Help Support department.

2.4 General safety instructions

WARNING

Danger from incorrect use

Incorrect use can result in damage to the device, fire or other dangers.

- ➢ Only qualified electricians may install and mount electrical devices.
- ➢ Follow the instructions in this product manual.
- ➢ This product manual is part of the product and must remain with the customer.

IMPORTANT:

Damage to the device due to incorrect opening

- ➢ Never open the housing.
- ➢ If you suspect that the device is damaged, contact our Support.
- ➢ We provide a warranty in accordance with statutory requirements. Please send the device back to us postage free with a detailed error description.

2.5 Storage and transport

Store the device in its original packing. The original packing provides optimum protection during transport.

Store the device in a temperature range of -25 °C to +70 °C.

3 Technical data

Power supply and connections	
Rated voltage:	DC 24 V to 30 V Supply via external DC.
Power consumption:	2 W
Connections:	• KNX: Bus connection terminal (black / red) (included in the scope of supply) • External power supply: Power supply terminal (white / yellow) (included in the scope of supply) • IP: 2x RJ45 (integrated switch)
microSD card slot:	No function Intended for future use of microSD cards up to 32 GB (SDHC) (not included in the scope of supply)

Ambient conditions	
Storage temperature:	-25 °C to +70 °C
Ambient temperature of installation environment:	0 °C to +45 °C

Device dimensions	
Installation width:	34 mm (2 HP)
Installation height:	90 mm
Installation depth:	74 mm (REG Plus)

KNX SPECIALIST	
Communication:	• KNX: KNX/TP • IP: Ethernet 10/100 BaseT (10/100 Mbit/s)
Installation method:	S-mode
ETS version:	• ETS4 from v4.2 • ETS5 or higher

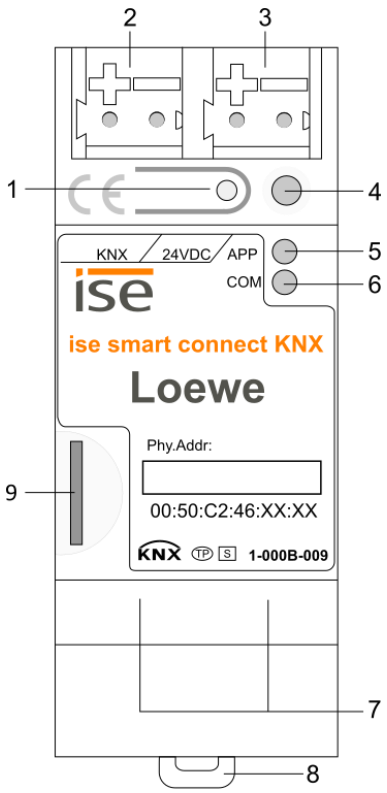
Approvals and protection type	
Approvals / certifications:	CE, KNX
Protection type:	IP30 (compliant with EN 60529)
Protection class:	III (compliant with IEC 61140)

4 Device design

Stated directions always relate to the device in its installed position. In the installation position:

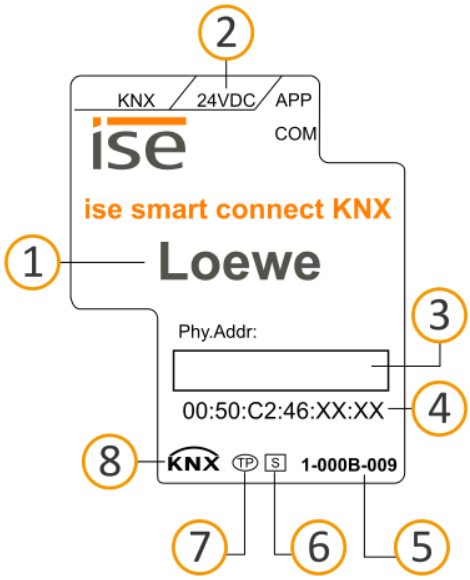
- Connections, external power supply, KNX and openings for connection (top)
- Network connections (bottom)
- Device sticker with product name and other information (front)
- Top-hat rail terminal (back)

4.1 Front (in the installation position)



No.	Description	
1	Button:	Programming button
2	Connection:	KNX/TP
3	Connection:	External power supply
4	LED:	"Programming" LED (red)
5	LED:	"APP" LED: Operation indication (green)
6	LED:	"COM" LED: Communication KNX/TP (yellow)
7	Connection:	IP: 2x RJ45 (integrated switch) On underside of device! (► see section "Underside (network connections)", p. 14)
8	Slider:	Release lever for top-hat rail terminal Used for disassembly (► see section "Disassembly and disposal", p. 68).
9	Connection:	microSD card slot No function Intended for future use of microSD cards up to 32 GB (SDHC) (not included in the scope of supply)

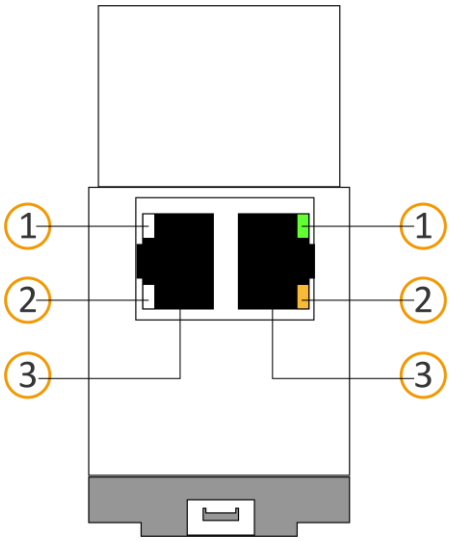
4.2 Data on the device sticker (front)



No.	Description
1	Product name
2	Rated voltage
3	Physical address: Enter the assigned physical address in the field with a permanent marker.
4	MAC address
5	Order number
6	Installation method, here "S mode"
7	Transfer medium, here "TP"
8	KNX certification

4.3 Underside (network connections)

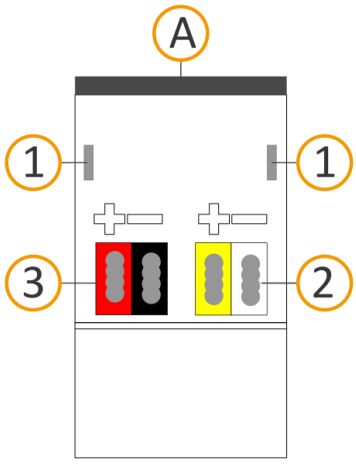
The network connections are located on the underside of your device.



No.	Description
1	"Connection speed" LED • LED lights up green 100 Mbit/s • LED is off: 10 Mbit/s (If the LED 2 is also off, there is no connection. Then check whether the cable is correctly connected.)
2	"Communication" LED • LED lights up yellow-orange Connected but currently no telegram traffic • LED flashes yellow-orange Telegram traffic
3	IP: 2x RJ45 (integrated switch)

4.4 Top

The openings for securing the cover cap are located on the top of the device. Stated directions always relate to the device in its installed position. For orientation: (A) = back (back of the device).



No.	Description
1	Openings for securing the cover cap
2	Attached bus connection terminal
3	Attached power connection terminal

4.5 Side of device

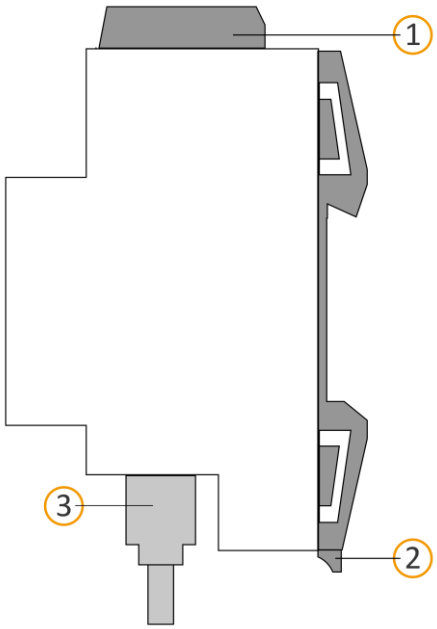


Figure 1: Side of device, including cover cap and connected RJ45 cable

No.	Description
1	Device with attached cover cap
2	Release lever for top-hat rail terminal
3	RJ45 cable (not included in the scope of supply) connected to RJ45 socket

5 Device website

You can access ISE SMART CONNECT KNX LOEWE via the “Device website” application.

The device website offers the following functions (extract):

- Check device status, p. 66
- Update firmware, p. 31
- Reset to factory settings, p. 30
- Generate log files, p. 67

The device website runs on your installed browser. You do not require any additional software.

As soon as the device is available, you can access the device website via the IP.

The device website is not password-protected. However, the device is already prepared for future potential password protection. The initial password can be found on one of the product stickers.

Device website: Calling up the start screen

1. Call up the device website by actioning one of the following:
   - Enter the device’s IP address in the address bar of your browser.
   - Alternatively, select the device in the network environment category <<Other devices>> (p.
   - Figure 2 (1)): Double click on the device icon (2).

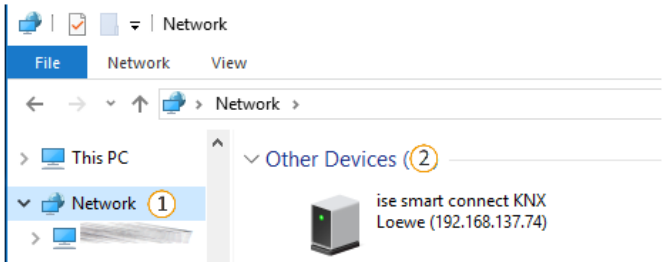


Figure 2: Calling up the device network via the network environment

The device website start page is displayed.

5.1 Getting to know the interface of the device website

After logging in, you will see the start screen of the device website.

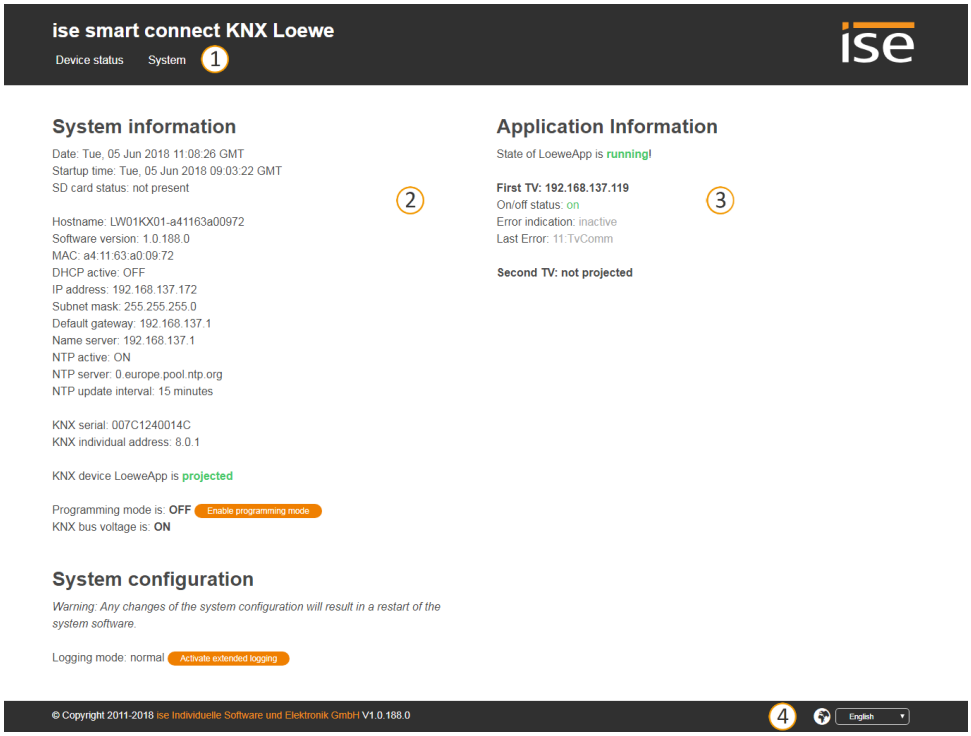


Figure 3: Elements of the device website interface from the start screen

1) Menu bar: Call up other pages or run functions.

2) Page: The <<Device status>> page is shown.

3) Specific information for all connected TV devices.

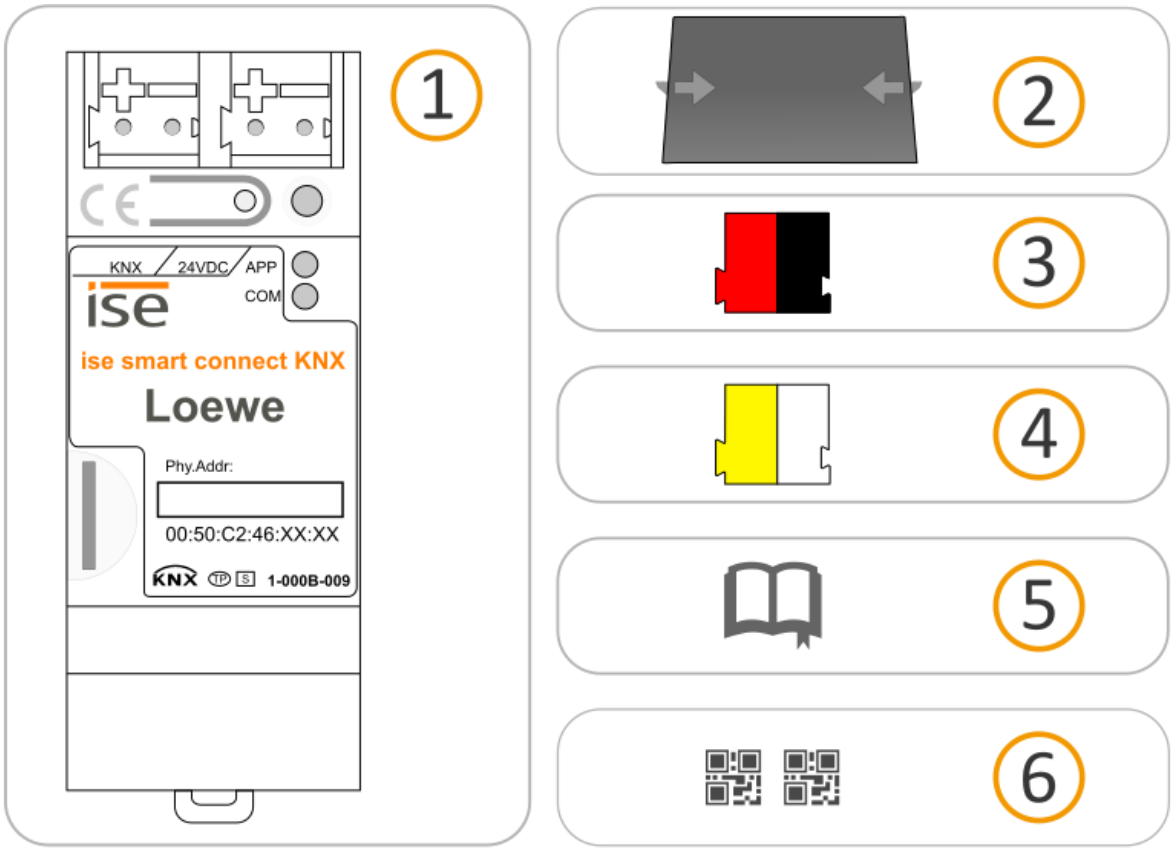
4) Status bar: You can choose the language in the status bar.

Table 3: Functions overview

Menu	Description
Device status	Information: • General system information • Device status Functions: • Change logging mode, p. 67 • Switch device to programming mode
System	Information: • Liability notice and licenses Functions: • Reset to factory settings, p. 30 • Generate log files, p. 67 • Update firmware, p. 31 • Restart device

6 Installation

6.1 Unpacking (scope of supply)



1) Device: ISE SMART CONNECT KNX LOEWE

2) Cover cap: A cover cap can be mounted for secure isolation to protect the bus connection / power supply connection from dangerous voltage, particularly in the connection area.

3) Bus connection terminal

4) Power connection terminal

5) Installation instructions: The documentation in front of you also provides you with the information from the installation instructions but with additional details, application examples, project planning notes and much more.

> The installation instructions are part of the product.
> ➢ Give these instructions to your customer.

6) Additional set of stickers with data for KNX Secure. These stickers are also affixed to the device.

PACKAGING AND BOX	
	Dispose of the packaging material appropriately, in a card, paper or plastic recycling bins.

6.2 Checking the installation conditions

Before starting with the mounting process, check that the requirements for the planned installation environment have been met.

Installation environment - Requirements

- Pay attention to the ambient temperature of the installation environment: Min. 0 °C, max. + 45 °C.
- Do not mount the ISE SMART CONNECT KNX LOEWE above heat-emitting devices.
- Ensure that there is sufficient ventilation / cooling.
- Pay attention to the device depth: REG-Plus. Device depth ► see Figure 4 (1)

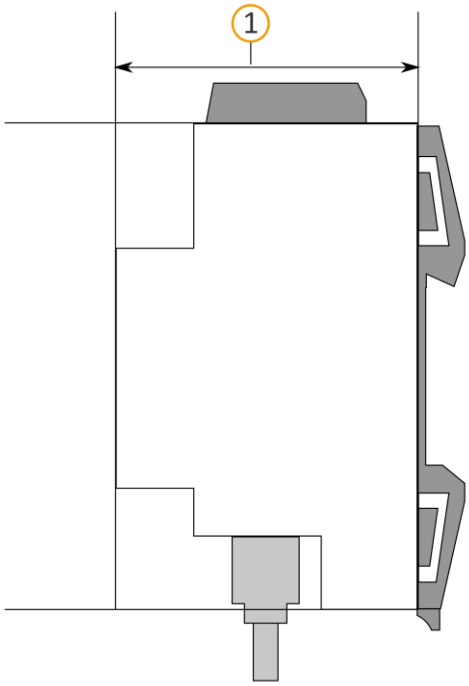


Figure 4: Side of device

Material:

You do not need a data rail because the device is connected directly to KNX/TP via the bus connection terminal.

6.3 Mounting the device

ISE SMART CONNECT KNX LOEWE may only be assembled and installed by qualified electricians. Specialist knowledge of the installation regulations is a prerequisite.

	WARNING
	Danger from incorrect use Incorrect use can result in damage to the device, fire or other dangers. ➢ Only qualified electricians may install and mount electrical devices. ➢ Follow the instructions in this product manual. ➢ This product manual is part of the product and must remain with the customer.

INSTALLATION ENVIRONMENT

Device functional fault due to incorrect ambient temperature in the installation environment

- ➢ Pay attention to the ambient temperature of the installation environment: Min. 0 °C to max. 45 °C
- ➢ Do not mount the ISE SMART CONNECT KNX LOEWE above heat-emitting devices.
- ➢ Ensure that there is sufficient ventilation / cooling.

WARNING

Danger of electric shock

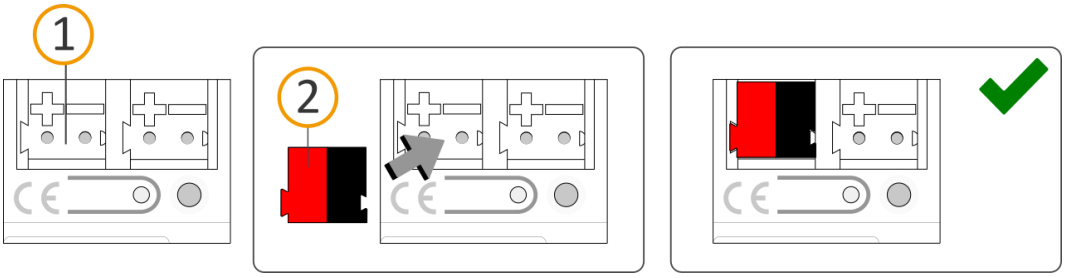
An electric shock can result from touching live parts in the installation environment. Electric shock can cause death.

Pay attention to the installation regulations:

- ➢ Route the bus line with the sheathing intact until it is close to the bus connection terminal.
- ➢ Firmly press the bus line into the bus connection terminal as far as possible.
- ➢ Install bus line conductors without sheathing (SELV) reliably separated from all non safety low-voltage cables (SELV/PELV):
- ➢ Maintain the specified clearance.
- ➢ Use the supplies cover cap if necessary.
- ➢ For additional information, also see the VDE regulations governing SELV (DIN VDE 0100- 410 / "Safe separation", KNX installation regulation).

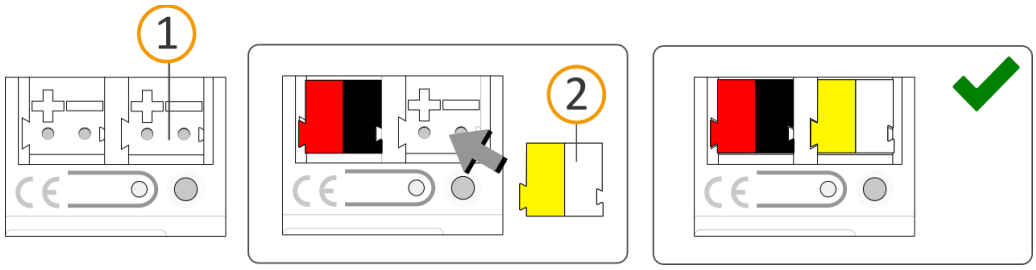
Mounting and connecting the device

1. Snap the device vertically onto the top-hat rail (installation position: network connections at bottom.)
2. Connect the KNX/TP bus line (referred to below as the bus line) to the KNX connection of the device (1) by means of the supplied bus connection terminal (2). Polarity: left/red: (+), right/black: (-).
    a. Attach the bus connection terminal (2).
    b. Route the bus line with the sheathing intact until it is close to the bus connection terminal.
    c. Firmly press the bus line into the bus connection terminal as far as possible.
    d. Route the bus line to the back.



3. Connect the external power supply to the power supply terminal (1) by means of the supplied power connection terminal (2). Polarity: left/yellow: (+), right/white: (-).
    a. Attach the power connection terminal (2).
    b. Route the power line with the sheathing intact until it is close to the power connection terminal.
    c. Firmly press the power line into the power connection terminal as far as possible.

d. Route the power supply line to the back.



POWER SUPPLY DIMENSIONING

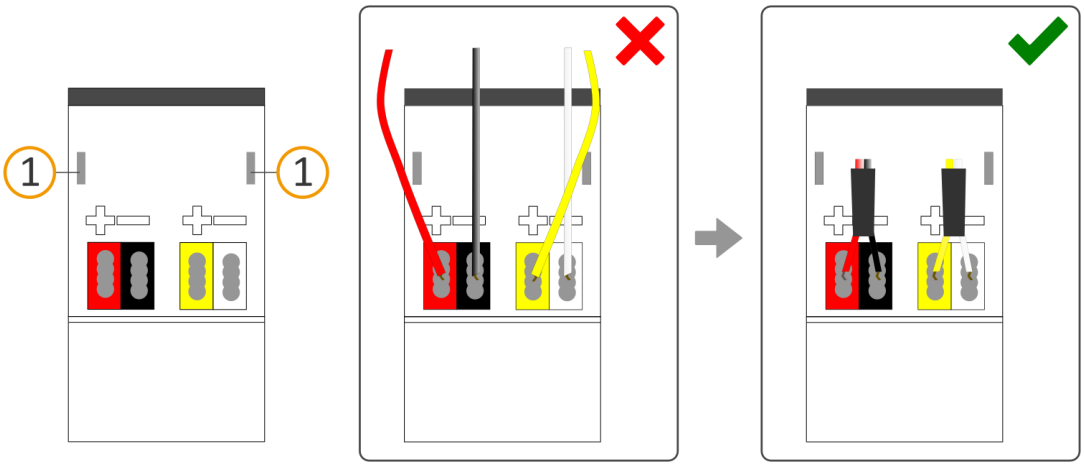
Functional fault in all devices due to incorrectly dimensioned power supply

The following applies if you use the "un-choked" auxiliary supply output of a KNX power supply as an additional power supply:

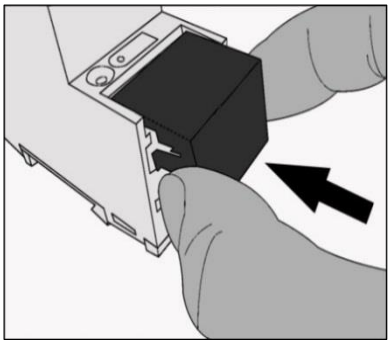
➢ The operating currents of all KNX/TP devices on the line section must not exceed the rated current of the power supply.

4. If it is a regulatory requirement for the site, fit the cover cap:

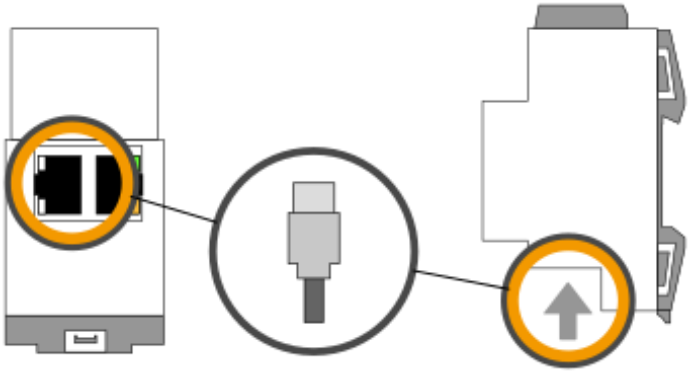
a. Route all cables to the rear if you have not already done so. The openings for fastening (1) the cover cap must be clear. All cables must be between the openings:



b. Attach the cover cap over the connection terminals. Press the cover cap together gently. Route the cover cap's fastening claws into the openings until the cover cap noticeably engages.



5. Connect the network: The network connections are located on the underside of the device. Connect the IP network cable (RJ45 cable) to the device's network connection (RJ45 pin jack).



7 Commissioning and configuration

After installing the device and connecting the bus, power supply and network, the device can be commissioned.

The device is configured in the ETS (Engineering Tool Software). The ETS is available with various ranges of functions via the KNX Association (www.knx.org).

All descriptions in this documentation relating to commissioning in the ETS refer to the variant "ETS Professional" in the version 5.

7.1 Reading off the device status using the LEDs

The following status indicators (LEDs) can be found on the front panel.

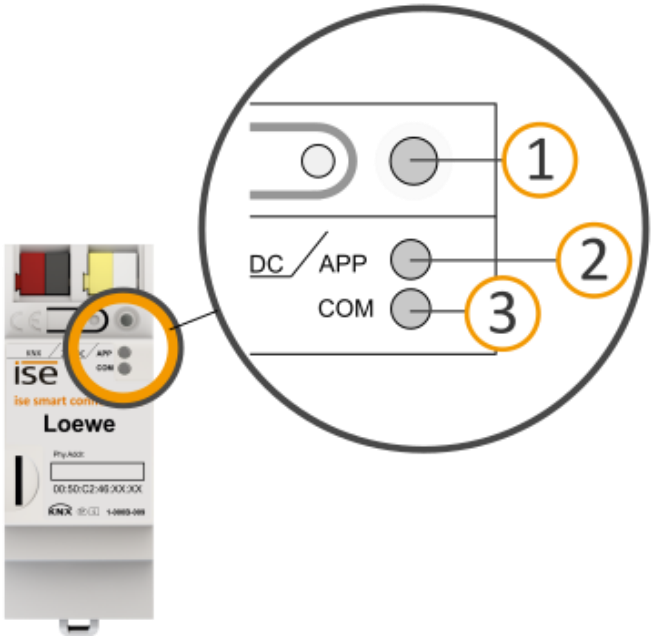


Figure 5: Status indicators (LEDs) on the front of the device

No.	Description
1	"Programming" LED Shows whether the programming mode is active.
2	"APP" LED: Operation indication (green) Serves as a status indicator for the application.
3	"COM" LED: Communication KNX/TP (yellow) Shows the communication traffic of KNX/TP.

The "APP" and "COM" LEDs have different meanings depending on the phase in the operating mode:

- Device start
  ► Table 6: Status of the device – Device starting up, p. 25
- Running operation
  ►Table 7: "APP" LED in operation, p. 25
  ►Table 8: "COM" LED in operation, p. 26

The "Programming" LED shows independently of the operating mode whether the device is in programming mode or not.

Table 4: Status of the device – Programming mode

Colour	Description
● (red continuously on)	Programming mode is active. ► Assigning the physical address, p. 30
○ (off)	Programming mode is deactivated.

The status indicators for the network are on the underside of the device.

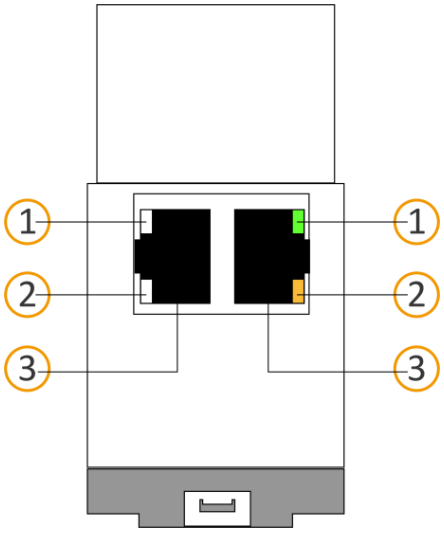


Table 5: Status of the device – Network

No.	Description
1	"Connection speed" LED • LED lights up green 100 Mbit/s • LED is off: 10 Mbit/s (If the LED 2 is also off, there is no connection. Then check whether the cable is correctly connected.)
2	"Communication" LED • LED lights up yellow-orange Connected but currently no telegram traffic • LED flashes yellow-orange Telegram traffic
3	IP: 2x RJ45 (integrated switch)

7.1.1 LEDs when the device starts up

After the power supply (DC 24 V on the yellow-white power connection terminal) is switched on or after the voltage returns, the device indicates its status through the following LED combinations:

Table 6: Status of the device – Device starting up

APP	COM	Description
○ (off)	● (yellow)	Device starting up.
○ …..● …..○ …..● ….. (off)…..(green)…..(off)…..(green)….. Flashes slowly (approx. 1 Hz)	● (yellow)	The device is fully started up but is not yet configured. The system is configured S mode. Configure the device in the ETS.
Error		
○ (off)	○ (off)	No power supply. ➢ Check the connections and the power supply.
○.●.○.●. (off) (green). (off).(green). Flashes rapidly	○ (off)	The firmware cannot be started. ➢ Please contact support. ►Contacting Support, p. 67
○ …..● …..○ …..● ….. ○ …..● …..○ …..● ….. (off)…..(green)…..(off)…..(green)….. (off)…..(yellow)…..(off)…..(yellow)….. Flashes slowly (approx. 1 Hz) in an alternating fashion		The newly loaded firmware cannot be started. The system is trying to activate the previous firmware (invalid firmware). ➢ Please contact support. ►Contacting Support, p. 67

7.1.2 LEDs in operation

Once device start-up is complete, the meaning of the LEDs is as follows:

Table 7: "APP" LED in operation

APP	Beschreibung
●	The device is working perfectly (normal operation).
○ …..● (off) (green) Flashes 3x slowly (1 Hz, followed by a 2 s pause)	The device is fully started up but is not yet fully configured. The system is configured S mode. ➢ Configure the device in the ETS.
○ (off)	Device currently starting up or is out of operation. ➢ Wait until the device start-up process is complete. ➢ If the device is still out of operation, check the connections and the power supply.

Table 8: "COM" LED in operation

COM	✉	Description
●	✖	• KNX connection has been made. • No KNX telegram traffic. The LED is also deemed to be continuously on if brief irregular interruptions occur.
○.●.○.●.○.● (off).(yellow). Rapid flashing	✔	• KNX connection has been made. • KNX telegram traffic.
Error		
○ (off)		Connection to KNX is interrupted. ➢ Check whether the KNX and voltage connections are mixed up. ➢ Check the bus connection ➢ Check whether the power supply is correctly connected.

7.2 Configuration

The device is configured in the ETS (Engineering Tool Software). The ETS is available with various ranges of functions via the KNX Association (www.knx.org).

All descriptions in this documentation relating to commissioning in the ETS refer to the variant "ETS Professional" in the version 5.

"ETS" software help is available in the integrated ETS Online Help.

➢ Press the [F1] button.

7.2.1 Configuration overview in the ETS

Work step	Details in the section
1. Creating ISE SMART CONNECT KNX LOEWE as the device in the ETS.	►Creating the device in the ETS, p. 27
2. In the ETS, assign the physical address of the device so as it corresponds to the KNX topology.	
3. Enter the following settings manually or select the option <<Get IP address (of a DHCP server) automatically>>: IP address, IP subnet mask and standard gateway address of ISE SMART CONNECT KNX LOEWE.	►Setting the IP address, IP subnet mask and standard gateway address, p. 28
4. Set the general parameters.	► Configuring parameters, p. 34
5. Link the group addresses to the communication objects.	
6. ISE SMART CONNECT KNX LOEWE is now ready for commissioning via <<Program ETS>> and for testing the functions.	

7.2.2 Creating the device in the ETS

Depending on whether the product database entry already exists in the ETS catalogue or whether the device is already being used in your existing project, different work steps are required in order to use the current version.

Work steps:	
Device already exists in the ETS catalogue?	
YES	NO
Updating product database entry. During an update, the old product database entry is replaced by the new one.	Importing product database entry ►There are numerous possibilities for importing a new product database entry. Below we will assume that you have downloaded the product database entry yourself. Importing a new product database entry, p. 27
Device in existing project should be updated?	
YES	NO
You must update the device properly so that the existing links to group addresses are maintained. ► Updating a product in the existing project, p. 28	Add the device to your topology in the usual way.

There are numerous possibilities for importing a new product database entry. Below we will assume that you have downloaded the product database entry yourself.

Importing a new product database entry

Prerequisites: You have downloaded the product database entry (product file) from our website under www.ise.de.

1. Start the ETS and select the <<Catalogue>> tab on the start page.
2. Select the <<Import>> button in the toolbar.
3. In the <<Open product file>> window, open the product file and confirm the selection with the <<Open>> button.

   ETS analyses the file.
4. Follow the further instructions in the ETS. If necessary, call up the Online Help with the [F1] button.

Updating a product in the existing project

Prerequisites: New product database entry exists in the catalogue.

1. In the ETS, open the project for which the device is to be updated.
2. Search for the new product database entry in the catalogue and add the new version of the device to the devices of your project.
3. Select the old version of the device in your topology.
4. Under <<Properties>> select the <<Information>> → <Application program>> tab.
5. Select the <<Update>> button under the <<Update application program version>> text.

> If you have accidentally changed the value in the <<Change application program>> drop-down list, undo this action or you will lose the links to the group addresses.

6. Select the newly added device and delete it again from your topology.

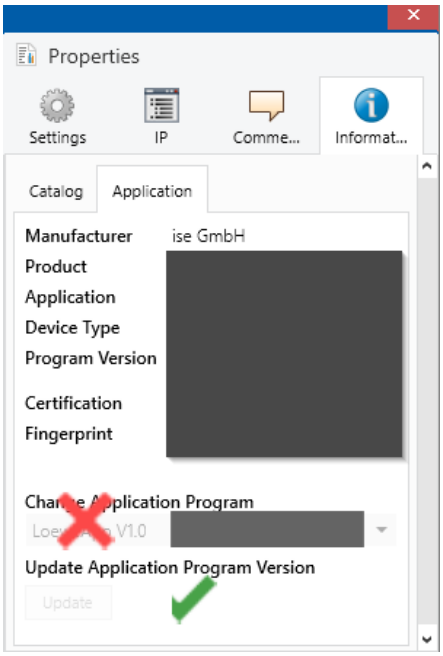


Figure 6: Updating the application program

7.2.3 Setting the IP address, IP subnet mask and standard gateway address

Besides the physical address in the KNX network, an address, the subnet mask and the address of the standard gateway in the IP data network must be assigned to ISE SMART CONNECT KNX LOEWE.

You can enter the settings manually in the ETS or receive them automatically (obtain the data from a DHCP server, (e.g. integrated in the router of the data network).

Setting the IP address, IP subnet mask and standard gateway address

To make it easier to navigate, there is a supplementary screen-shot as Figure 7, p. 29.

1. Select the device in the ETS and select <<Properties>> in the context menu.

   The <<Properties>> section of the device is displayed in the side bar of the ETS.
2. Select the <<IP>> tab.
3. Select one of the option fields: ► Settings, see Table 9: Settings for manual IP address entry or for receiving automatically, p. 29
4. If you have selected the setting <<Use permanent IP address>>, then enter the respective addresses in the fields.

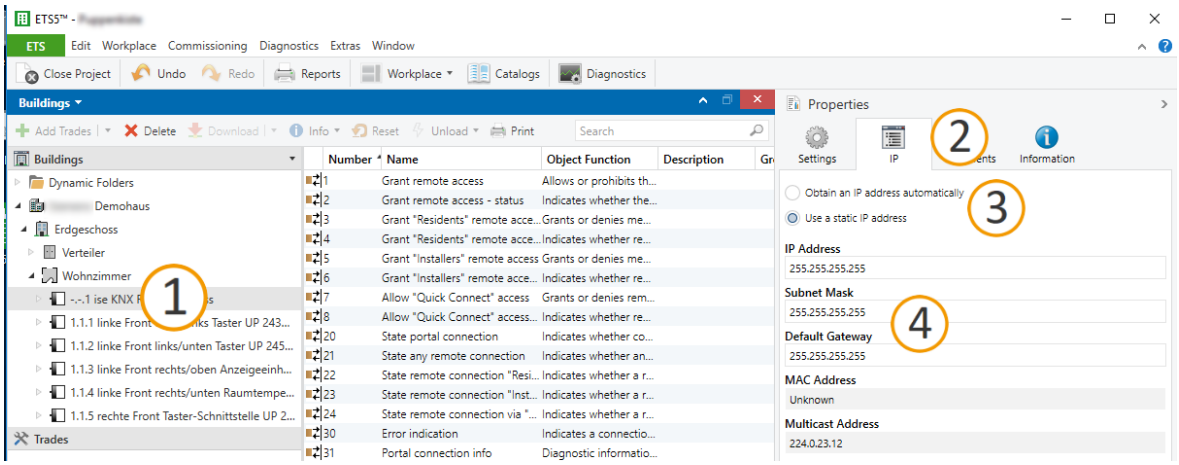


Figure 7: IP addresses and other settings in the properties of a device

Table 9: Settings for manual IP address entry or for receiving automatically

Setting	Description
Receive IP address automatically	The address data is automatically received from a DHCP server located on the data network. The DHCP server must assign a valid IP address to ISE SMART CONNECT KNX LOEWE. If a DHCP server is not available, the device starts up after a waiting time with an AutoIP address in the address range of 169.254.1.0 to 169.254.254.255. As soon as a DHCP server is available, the device is automatically assigned a new IP address.
Use a permanent IP address	Enter the data manually You can usually obtain the permissible IP address range and the subnet mask and standard gateway from the router configuration interface. **SERIOUS MISCONFIGURATION** Default values are set if you select the setting <<Use permanent IP address>> but then forget to fill in the appropriate fields. This will result in the device not starting up properly. Reset the device to its factory setting. ► Resetting to factory settings, p. 30 If the problem persists, contact support.

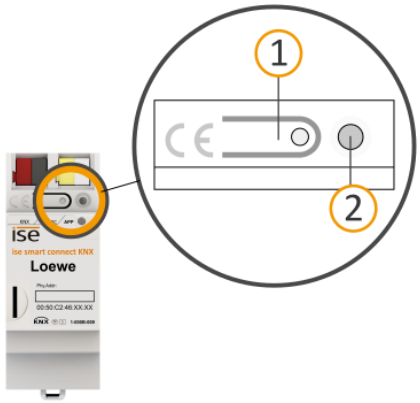
7.2.4 Programming a physical address

The physical address that you issued in the ETS must be assigned to the device. We refer here to "programming". To do this you must put the device into programming mode.

Assigning the physical address

Prerequisites: Device and bus voltage switched on. Programming LED is off.

1. Press the programming button (1) briefly.
   The programming LED (2) lights up red.
2. In the ETS, assign the device and its physical address corresponding to the KNX topology.
3. On the device, enter in the <<Phy. Addr.>> field and the assigned physical address with a permanent marker.



Recognising successful assignment of the physical address:

- Device: The programming LED on the device is off.
- ETS. The completed transfer is indicated on the <<History>> tab by a green marking. Programming flag <<Adr>> is set and <<Cfg>> is not set. More information about this and other flags is available from the ETS documentation.

After the IP address is assigned, you can also conveniently set the device to programming mode via the device website instead of pressing the programming button on the device itself.

7.2.5 Resetting to factory settings

When you reset the device to the factory settings, it behaves as if it were in the state of delivery. The device is then unconfigured:

- However, it remains in the existing projects.
- The device keeps the version of the application program in the ETS.
- The entire parametrisation is rejected.
- The device now once again has this as the physical address: 15.15.255.

An unconfigured device is identifiable by the green APP LED flashing slowly when the device starts up.

► Table 6: Status of the device – Device starting up, p. 25

You have the following possibilities for resetting the device to the factory settings:

- Manual: Press the programming button on the device in a particular sequence.
- Automated: You select the <<Factory reset>> function on the device website.

Manually resetting the device to the factory settings

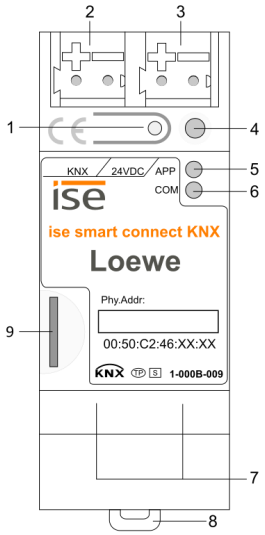
Prerequisites: The device is switched off.

1. Press the programming button (1) and keep it pressed while you switch on the device. Keep the programming button pressed.

2. Do not release the programming button until the following LEDs are all flashing slowly at the same time:
   - Programming LED (4)
   - APP LED (5)
   - COM-LED (6) Usual duration: approx. 30 seconds.
3. Release the programming button only for a short time.
4. Press the programming button again and keep it pressed until following LEDs are all flashing rapidly at the same time:
   - Programming LED (4)
   - APP LED (5)
   - COM-LED (6)
5. Release the programming button.

   The factory settings are being reset.

   You do not have to restart the device.



Resetting the device to the factory settings via a function on the device website

1. Log in to the device website.

   ► *section "Device website: Calling up the start screen", p. 16*
2. Select <<Factory reset>> in the <<System>> → menu bar.
3. Confirm the confirmation prompt.

   The start page is displayed as soon as the factory settings have been fully reset.

   The device does not have to be restarted.

7.3 Extending the scope of functions (updating firmware)

Functional enhancements for ISE SMART CONNECT KNX LOEWE are available via a newer version of the firmware. Simply download the latest firmware and the relevant product manual from our website www.ise.de.

So that you can use the new functions, it is necessary for the versions of the firmware being used and the product database entry are compatible.

7.3.1 Updating the firmware via the device website

You can only import a new firmware version that is newer than the current version on the device.

No downgrade!
Previous versions cannot be imported.

Depending on whether the device has an Internet connection, there is another variant to update.

- Online Import firmware automatically online. Recommendation: Always use this variant when possible, because the system checks automatically whether the current configuration is compatible with the new firmware.

- Off-line Import firmware offline. Use this variant for devices which do not have an Internet connection at their installation site and are only accessible via the local network.

NO COMPATIBILITY CHECK
When you import the firmware offline, the system does not check whether the current configuration is compatible with the new firmware. You must check yourself whether the firmware is compatible with the product database entry. ►Determining compatibility between the product database entry and firmware version, p. 32.

Import firmware automatically online

1. Log in to the device website.
2. Select <<Update firmware>> in the <<System>> → menu bar.

   The system determines which firmware version is currently installed. If a new firmware version is available for the device it will be indicated to you. You will be informed about incompatibilities. ►Determining compatibility between the product database entry and firmware version, p. 32
3. Select the <<Update firmware>> button.

Importing firmware offline

NO COMPATIBILITY CHECK
When you import the firmware offline, the system does not check whether the current configuration is compatible with the new firmware. You must check yourself whether the firmware is compatible with the product database entry. ►Determining compatibility between the product database entry and firmware version, p. 32.

Prerequisite: You have downloaded the current firmware version from the www.ise.de website.

1. Log in to the device website.
2. Select <<Update firmware>> in the <<System>> → menu bar.
3. Select the <<Select file>> button.
4. In the File Explorer, select the desired firmware file and confirm your selection with the <<Open>> button.
5. Select the <<Update firmware>> button.

7.3.2 Determining compatibility between the product database entry and firmware version

To use the device's new functions, the version of the firmware used must be compatible with the version of the device's application program in the project. The application program is part of the product database entry.

The application program version can be found in the ETS under <<Properties>> under the tab <<Information>> → <<Application program>> under <<Program version>>.

Determining compatibility at a glance - fully compatible

The versions are fully compatible if the main version of the application program and firmware are identical.

The version numbers are structured according to the following scheme: <Main version no.>.<Sub-version no.>

Example 1: Full compatibility with same main version numbers

- Firmware version: 2.3
- Application program version: 2.0

> However, you might still have to update the application program in order to be able to use all new functions.
> ►
> Updating a product in the existing project, p. 28

Incompatible: Main version number of the firmware is higher than that of the application program number

If the new firmware has a higher main version number than that of the application program, the versions are incompatible. In this case you must uninstall the current firmware. After uninstalling, the device behaves as in the state of delivery. The device is then unconfigured:

- However, it remains in the existing projects.
- The device keeps the version of the application program in the ETS.
- The entire parametrisation is rejected.
- The device now once again has this as the physical address: 15.15.255.
- User data in the ETS is preserved.

Example 2: Incompatibility if the main version number of the firmware is higher

- Firmware version: 2.3
- Application program version: 1.3

Establishing compatibility

Prerequisite: New product database entry exists in the catalogue.

1. In the ETS, open the project for which the device is to be updated.
2. Search for the new product database entry in the catalogue and add the new version to your project.
3. Select the old version of the device in the topology of your project.
4. In the <<Topology>> window in the menu bar, select the <<Uninstall>> → <<Application program>> button.

   > After uninstalling, the device behaves as in the state of delivery. The device is then unconfigured. Start the configuration as usual. ► Configuration overview in the ETS, p. 26

5. Under <<Properties>> select the <<Information>> → <Application program>> tab.
6. Select the <<Update>> button under the <<Update application program version>> text.
7. Select the newly added device and delete it again from your topology.

8 Configuring parameters

The tabs of the view <<Parameter>> are briefly described below. Refer to the specific sections for details.

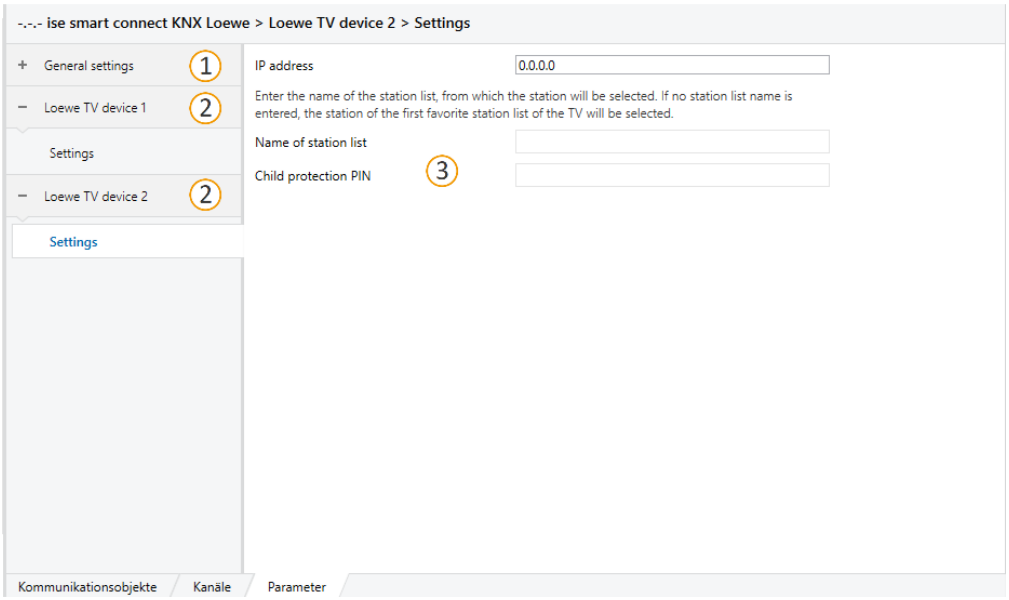


Figure 8: Parameters in ETS

1) Settings that are valid for all connected TV- devices.

2) Settings that are valid only for the respective TV device.

3) Configuration area: The parameters of the selected tab are configured here.

8.1 Parameters – Overview for quick starters

All parameters are briefly described below. Refer to the specific sections for details.

Table 10: Parameters under <<General settings>> tab

Parameters	Description
<<OSD texts>>	Texts to be used as a message. ►Defining OSD texts for messages, p. 37
<<Browser links>>	Address (URL) that is opened in the browser of the TV device. ►Start browser, p. 38

Table 11: Parameters under <<Loewe TV device<s>>> → Settings tab

Parameters	Description
<<IP address>>	Permanent IP address of the TV device. Names cannot currently be used as an IP address. ►Add TV devices ; p. 35
<<Name of station list>>	Name of station list. • Enter the exact name: • Pay attention to upper-case and lower-case characters (case

Parameters	Description
	sensitive). • Also enter spaces. ►Assigning a station list, p. 35
<<Child protection PIN>>	Current child protection PIN on the TV device. ►Saving the child protection PIN, p. 36

8.2 Add TV devices

Each TV device in the network requires a permanent IP address so that it can be identified. It is essential to assign the IP address.

Refer to the TV device manufacturer's documentation for details of how to set the IP address of the TV device.

Table 12: Parameter area <<Loewe TV device 1>> → <<IP address>>

Parameters	Value
<<IP address>>	Permanent IP address of the TV device. Names cannot currently be used as an IP address.

8.3 Assigning a station list

Stations are selected via their program channel. A station's program channel can differ between various station lists.

During configuration in the ETS, we strongly advise you to assign a station list otherwise the TV device's fallback station list will be used. However, this fallback station can change over time, with the result that the configured program control will then change to the wrong station because the station's program channel in the new fallback station list differs.

The station lists themselves are compiled on the TV device.

Refer to the TV device manufacturer's documentation for details of how to create a station list.

Table 13: Parameter area <<Loewe TV device 1>> → <<Name of station list>>

Parameters	Value
<<Name of station list>>	Name of station list. Enter the exact name: • Pay attention to upper-case and lower-case characters (case sensitive). • Also enter spaces.

What happens if the station list has been deleted?

If the station list has been deleted, the program control no longer works as configured. The system now automatically selects as the station list the TV device's first station list as a fallback.

The first station list is often the one with the oldest creation date.

Refer to the TV device manufacturer's documentation for details of how the station lists are actually sorted.

What happens if the station list has been renamed in the TV device?

If the station list has been renamed, the program control continues to work as configured.

The name of the station list was initially matched to the TV device when you saved the name of the station list as a parameter in the ETS. The station list is then referenced via an internal ID.

Why do I see a different program channel number on the TV device to the one I expect for a station?

The TV device does not show the station's program channel number according to the configured station list, rather the program channel number of the fallback station list.

Let us assume that there are two station lists, each with the program channels. "List 1" is the fallback station list. In the ETS you have assigned the station list "My List 2".

Program channel no.	List 1	My List 2
1	BBC	ABC
2	CNN	BBC
3	ABC	CNN

You change the station to program channel "3". The TV device switches to CNN as expected because you are using "My List 2".

However, on the TV device "2" not "3" is displayed as the program channel number because the station "CNN" has the program channel number "2" in the fallback list.

8.4 Saving the child protection PIN

The child protection control function blocks the station with a PIN. Only devices that transfer this PIN can access the blocked stations or programs.

Table 14: Parameter area <<Loewe TV device <n>>> → << Child protection PIN>>

Parameters	Value
<< Child protection PIN>>	Current child protection PIN on the TV device.

Defining and transferring the PIN

The Child protection PIN is defined on the TV device.

Refer to the TV device manufacturer's documentation for details on how to define the PIN.

In the << Child protection PIN>> parameter, enter the PIN that is defined on the TV device. The function scan only be used if the correct PIN is entered:

- Switch over to blocked stations or programs.
- Configure parental control. (Communication object 30 | 130 ► section Setting child protection , p. 56)

If the parameter is not configured but all stations are blocked for the TV device (age-related), you will not be able to change the station with KNX.

Types of blocking

Basically we distinguish between age-dependent and age-independent blocking. ISE SMART CONNECT KNX LOEWE supports the following blocks:

Table 15: Child protection control – supported block types

Type of block	Range of functions
Age-dependent	Block programs depending on their age classification for the current program (BBFC). Basically, all programs are activated. The age from which a program may be viewed is transferred in the communication object. The TV device does not support the "from age 0" rating. The lowest age that can be blocked is age 3. The age ratings that can generally be evaluated depend on the TV device.
Age-independent	Block all stations completely. The age rating of the programs will be irrelevant. If the child protection PIN is not configured in the ETS but all stations are blocked for the TV device (age-independent), you will not be able to change the station with KNX.

8.5 Defining OSD texts for messages

You can have texts from different sources displayed as messages:

- Texts that are sent from other devices.
- Predefined texts. You are able to define these predefined texts in the parameter <<OSD texts>>.

Table 16: Parameter area <<OSD texts>>

Parameters	Value
<<Text <n>>>	Text to be used as a message. All connected Loewe TV devices are able to access the defined texts.

Save up to 5 texts in the <<OSD texts>> area. You can access these texts through all TV devices. The parameters are numbered consecutively. The count starts at 0. The parameter <<Text 0>> is assigned to the value 0.

Via the communication objects No. 15 | 115 you define which of the defined texts are used based on the number of the text ► section Message display – Displaying a predefined text , p. 50

Example 3: Accessing predefined texts from the <<OSD texts>> area

<<OSD texts>>	Value
Text 0	Washing machine cycle has finished
Text 1	Movement detected in the garden
Text 5	Meal is ready

TV device no.	Assigned value	Message
TV device 1	5	Meal is ready
TV device 2	1	Movement detected in the garden

8.6 Start browser

If the TV device is connected to the Internet, you can call up any desired website. You can also access other devices with a suitable connection, e.g. to transfer the image from an outside camera.

You can also use the function to call up the "home screen" of the TV device.

Table 17: Parameter area <<Browser links>>

Parameters	Value
<<Link <n>>>	Address (URL) that is opened in the browser of the TV device. All connected Loewe TV devices access the defined URLs. • Maximum length of the URL: The URL must not exceed 128 bytes. • Source: If you determine the source via the communication object 26 | 126, the value 15 is displayed as long as the browser is open.

Table 18: <<Link <n>>> – Possible values

Entry	Range of functions
Any URL	A website is called up or the image of a camera is displayed, e.g. from an outside camera. If access to the camera is protected, you must also provide the authentication data within the URL in the usual way. For details of this, refer to the respective manufacturer's documentation.
<empty>	The TV device's "home screen" is called up.

Browser is not opened?

If the browser is not opened and the first program channel of the configured station list is called up instead, the transferred URL does not exist. You will not receive information on this via error codes.

➢ Check the defined URL in the parameter <<Link>>.

9 Communication objects

You can control two TV devices with the ISE SMART CONNECT KNX LOEWE. There is an identical set of communication objects for each TV device. The functionally identical communication objects of the TV devices each have an offset of 100.

Example 4: Offset of the communication objects
TV device 1 Communication object 1 → Communication object number 1 + Offset 100 = TV device 2 Communication object 101

Use the <<Channels>> tab to display the communication objects for each TV device.

9.1 Communication objects – Overview for quick starters

Below you will find all communication objects numerically sorted with a brief description. If you require more detailed information, simply select the corresponding link for the section or skip this overview.

Table 19: Communication objects overview

No. TV device 1	Function and link
1	Switches the TV device on or off. ► Switch TV device on or off (No. 1), p. 41
2	Indicates whether the TV device is currently on or off ►Switch TV device on or off - Determine status (No. 2), p. 42
3	Switches the TV device's sound on or off. ►Switching the sound on or off (No. 3), p. 43
4	Changes the volume from the TV device's current volume. The volume is set directly to the new level without a gentle transition. ►Changing the volume immediately to an absolute value (No. 4), p. 44
5	Changes the volume from the TV device's current volume. The volume is set to the new level in stages, giving the listener a gentle transition. ► Changing the volume in stages in selectable % increments (No. 5), p. 45
6	Changes the volume from the TV device's current volume. The volume is set to the new level in stages, giving the listener a gentle transition. ► Changing the volume in 5 % increments (No. 6), p. 46
7	Shows the value to which the volume is currently set. ► Volume – Determining the current volume (No. 7), p. 44
8	Indicates whether the TV device's sound is on or off. ►Switching volume on or off - Determine status (No. 8), p. 43
10	Changes the station to the program channel that was transferred as the value. ► Changing stations - Changing to a particular program channel (No. 10), p. 47

No. TV device 1	Function and link
11	Changes the station starting from the program channel of the current station. This function starts the "zapping". ► Change stations one by one - to the next or the previous program channel (No. 11), p. 47
12	Shows the program channel of the current station that the station has in the configured station list. ►Station - Determining the program channel of the current station (No. 12), p. 48
15	Assigns a predefined text that has been defined in the <<OSD texts>> area. ►Message display – Displaying a predefined text (No. 15), p. 50
16	Displays a message that was sent from another device. ►Displaying a message – Displaying a text from another device (No. 16), p. 50
18	Assigns a predefined URL from the <<Browser Links>> area. The URL is opened in the integrated browser of the TV device. ►Calling up the browser (No. 18), p. 51
20	Activates / deactivates PIP on the screen. ►Activating / deactivating PIP (No. 20), p. 49
25	Defines the source of the signal. ► Select source (No. 25)
26	Shows which source is currently being used. ► Source – Determining the used source (No. 26), p. 55
30	Activates / deactivates child protection ► Setting child protection (No. 30), p. 56
90	Indicates whether an error currently exists. ► Error diagnosis – Determine status (No. 90), p. 57
91	Contains the error code of the last error. ► Error diagnosis – Determining the cause of the last error (No. 91), p. 57

9.2 Basic function

9.2.1 Switch TV device on or off (No. 1)

1 | 101	
Function	Switches the TV device on or off.
Communication object no.	1 101
Name:	Switch on/off
Details	Switch off: You define on the TV device whether it is to be completely

1 | 101	
	switched off or should enter standby mode. Switch on: The following conditions must be fulfilled in order to be able to switch on the TV device via KNX: • The TV device must be in standby mode and Wake on LAN must be activated. • Alternatively, the quick-start mode on the TV device must be activated. **Special case of initial start-up** In case of start-up the TV device for the first time, it cannot be switched on via the Wake on-LAN. The special standby mode "System standby", which switches off all connected devices, is deactivated by ISE SMART CONNECT KNX LOEWE, otherwise the TV device would not be controllable in this mode.
Possible values	• 0: Switch off TV device. • 1: Switch on TV device. If the TV device is already switched on and you send "Switch on" again, the last selected station is displayed. Menus or other applications such as the browser are closed.
Data width	1 bit
Data point type	1.001
Flags (CRWTU)	K-S- -

Switching on takes a long time or communication error is thrown?

➢ Check whether quick-start mode is activated on the TV device.

9.2.2 Switch TV device on or off - Determine status (No. 2)

2 | 102	
Function	Indicates whether the TV device is currently on or off
Communication object no.	2 102
Name:	On/off status
Possible values	• 0: TV device is switched off. • 1: TV device is switched on.
Data width	1 bit
Data point type	1.001
Flags (CRWTU)	KL-Ü-

9.3 Everything about sound and volume

If the sound is switched off, the TV device behaves as follows.

Table 20: Effect of changes in volume with the sound muted

Initial situation	Change	Result
Sound is muted	Volume is reduced	Sound remains muted.
Sound is muted	Volume is increased	Sound is switched on: The volume corresponds to the new value.

9.3.1 Switching the sound on or off (No. 3)

3 | 103	
Function	Switches the TV device's sound on or off.
Communication object no.	3 103
Name:	Loudspeaker on/off
Possible values	• 0: Mute. • 1: Switch on sound.
Data width	1 bit
Data point type	1.003
Flags (CRWTU)	K-S- -

Can't hear anything even though sound is switched on?

The TV device might be set to a barely audible volume.

➢ Check the volume to which the TV device is set with communication object 7 | 107. ►Volume – Determining the current volume (No. 7), p. 44

➢ Check if loudspeaker which are not controlled by ISE SMART CONNECT KNX LOEWE are set to mute.

9.3.2 Switching volume on or off - Determine status (No. 8)

8 | 108	
Function:	Indicates whether the TV device's sound is on or off.
Communication object no.	8 108
Name:	Loudspeaker status
Details	To determine the volume, use communication object 7 | 107 (p. 44).
Possible values	• 0: Sound is switched off.

8 | 108	
	• 1: Sound is switched on.
Data width	1 bit
Data point type	1.003
Flags (CRWTU)	KL-Ü-

9.3.3 Volume – Determining the current volume (No. 7)

7 | 107	
Function	Shows the value to which the volume is currently set.
Communication object no.	7 107
Name:	Volume state
Details	To determine whether the sound is switched on or off, use communication object 8 | 108 (p. 43).
Possible values	Volume level as a number.
Data width	1 byte
Data point type	5.004
Flags (CRWTU)	KL-Ü-

9.3.4 Changing the volume immediately to an absolute value (No. 4)

4 | 104	
Function	Changes the volume directly to the new level without a gentle transition.
Communication object no.	4 104
Name:	Sets volume
Details	You transfer the volume as a percentage value. 100 % corresponds to the maximum volume of the TV device. If the volume calculation results in a number with a decimal point, then this is rounded down to the whole number. ►Volume calculation, p. 46
Possible values	Percentage as a number: 0|1|2|3|...|100 • 0: No volume, but the sound remains switched on. • 100: Maximum volume.
Data width	1 byte

4 | 104	
Data point type	5.004
Flags (CRWTU)	K-S- -

Volume changed, but you still can't hear anything?

If the sound is switched off (muted), it is only switched back on when the volume is increased.

If the transferred percentage results in the volume remaining unchanged or being reduced, the sound remains off.

9.3.5 Changing the volume in stages in selectable % increments (No. 5)

5 | 105	
Function	The volume is set to the new level in stages commencing from the current volume (dim step), providing the listener with a gentle transition. Relative volume adjustment (relative dimming): Every time it is triggered, the volume is increased or reduced by the transferred percentage value, based on the maximum volume of the TV device.
Communication object no.	5 105
Name:	Volume up/down
Details	100 % corresponds to the maximum volume of the TV device. If the volume calculation results in a number with a decimal point, then this is rounded down to the whole number. ►Volume calculation, p. 46
Possible values	Louder / Quieter: 0 | 1 • 0: Reduce volume. • 1: Increase volume. Volume (dim step): 1|...|100 • 100: Corresponds to the maximum volume of the TV device. • The behaviour of the object conforms to dimming in accordance with the KNX standard.
Data width	4 bit
Data point type	3.007
Flags (CRWTU)	K-S- -

Volume changed, but you still can't hear anything?

If the sound is switched off (muted), it is only switched back on when the volume is increased.

If the transferred percentage results in the volume remaining unchanged or being reduced, the sound remains off.

Volume changed but still not increased?

	You have probably reached the maximum volume. ➢ Check the current volume with communication objects 7 | 107 (p. 44)

Example 5: Volume calculation (communication object 5 | 105)

The maximum volume of the TV device is 100, for example. This 100 corresponds to 100 % volume. For example if a particular button is pressed in the house, the volume of the TV device should change until the button is released. The change depends on how long the button is pressed for. For example, the configuration is that the volume of the TV device increases by 3 % every 500 milliseconds. Accordingly, the volume of the TV device will increase by the value of 3 every 500 milliseconds.

Let us assume that the current volume of the TV device has the value of 50. The button is pressed for 1000 milliseconds.

- The volume changes to 53 after 500 milliseconds.
- The volume changes from 53 to 56 after 1000 milliseconds.

9.3.6 Changing the volume in 5 % increments (No. 6)

6 | 106	
Function	The volume is set to the new level in stages commencing from the current volume (dim step), providing the listener with a gentle transition. Every time it is triggered, the volume is increased or reduced by 5 %, based on the maximum volume of the TV device.
Communication object no.	6 106
Name:	Stepwise volume up/down
Details	100 % corresponds to the maximum volume of the TV device.
Possible values	Louder / Quieter: 0 | 1 • 0: Reduce volume. • 1: Increase volume.
Data width	1 bit
Data point type	1.007
Flags (CRWTU)	K-S- -

Example 6: Volume calculation (communication object 6 | 106)

The maximum volume of the TV device is 100, for example. This 100 corresponds to 100 % volume. For example if a particular button is pressed in the house, the volume of the TV device should increase by 3 %. Accordingly, the volume of the TV device will increase by the value of 3 every time the button is pressed.

Let us assume that the current volume of the TV device has the value of 50.

- The volume changes to 53 after the first time the button is pressed.
- The volume changes 56 after the next time the button is pressed.

9.4 Controlling stations

9.4.1 Changing stations - Changing to a particular program channel (No. 10)

10 | 110	
Function	Changes the station to the program channel that was transferred as the value.
Communication object no.	10 110
Name:	Station selection
Details	The station list is defined in the parameter <<Name of station list>>. Ascertain the program channel of the desired station in the TV device from the station list that you have configured as a parameter.
Required parameters	<<Name of station list>> ►Assigning a station list, p. 35
Possible values	1|2|…|<Last program channel of the station list Program channel of the station as a number
Data width	2 bytes
Data point type	7.001
Flags (CRWTU)	K-S- -

Switched over to the wrong station?

- ➢ Check whether the configured station list still exists on the TV device.
- ➢ Check whether the station is configured on the stated program channel on the TV device.

Not switching over?

The program might be blocked by the child protection.

- ➢ Check whether parental control is activated on the TV device.
- ➢ If the parental control is activated, check in the ETS to establish whether the parameter <<Child protection PIN>> is properly configured.
- ➢ If the configuration is correct, check on the TV device to ascertain which type of child protection is active.
- ➢ ►Table 15: Child protection control – supported block types, p. 37

9.4.2 Change stations one by one - to the next or the previous program channel (No. 11)

11 | 111	
Function	Changes the station starting from the program channel of the current station. This function starts the "zapping".
Communication object no.	11 111

11 | 111	
Name:	Previous/next station
Details	The station list is defined in the parameter <<Name of station list>>. You define the direction: Change to the previous or next program channel. ►Example 7: Changing programs one by one, p. 48 If the parental control is activated, check in the ETS to establish whether the parameter <<Child protection PIN>> is properly configured.
Required parameters	<<Name of station list>> ►Assigning a station list, p. 35
Possible values	• 0: Reduce: Switch to the previous program channel. • 1: Increase: Switch to the next program channel.
Data width	1 bit
Data point type	1.007
Flags (CRWTU)	K-S- -

Example 7: Changing programs one by one

The configured station list has 100 program channels.

- Program channel 100 is currently tuned to. You change to program channel 1 when you switch to the next program channel.
- Program channel 80 is currently tuned to. You change to program channel 79 when you switch to the previous program channel.

Switched over to the wrong station?

➢ Check whether the configured station list still exists on the TV device.

➢ Check whether the station is configured on the stated program channel on the TV device.

Not switching over?

The program might be blocked by the child protection.

➢ Check whether parental control is activated on the TV device.

➢ If the parental control is activated, check in the ETS to establish whether the parameter <<Child protection PIN>> is properly configured.

➢ If the configuration is correct, check on the TV device to ascertain which type of child protection is active.

➢ ►Table 15: Child protection control – supported block types, p. 37

9.4.3 Station - Determining the program channel of the current station (No. 12)

12 | 112	
Function	Shows the program channel of the current station that the station has in the configured station list.
Communication object no.	12

12 | 112	
	112
Name:	Station status
Details	The station list is defined in the parameter <<Name of station list>>.
Required parameters	<<Name of station list>> ►Assigning a station list, p. 35
Possible values	Program channel as a number:
Data width	2 bytes
Data point type	7.001
Flags (CRWTU)	KL- -Ü

9.5 Displaying messages

Messages can be texts or image transmissions.

- Texts: Technically an OSD text. The OSD text was either defined by ISE SMART CONNECT KNX LOEWE in the <<OSD texts>> area or is a text that was sent to another device. The device must be connected accordingly.
- Image transmissions: The image of a camera is transmitted, e.g. from an outside camera. These image transmissions are displayed in the browser.

The way in which messages are displayed on the TV device depends on your configuration.

- Texts are displayed as OSD texts.
- Image transmissions are displayed in the browser. The browser cannot be used in PIP mode. The browser has a higher priority than the image currently being displayed. The browser covers the program currently being displayed.

Note: Difference between OSD text or PIP

In the case of an OSD text display, the current program is still shown as a full screen. The text is simply superimposed over the image.

The text has its own area. This "own area" is also referred to as the small screen. The small screen is superimposed over the full screen.

Which functions are run when PIP mode is activated are configured by the user in the TV-device. The position, size and type of small screen display are set directly on the TV device depending on the configuration possibilities of the TV-device.

9.5.1 Message display – Displaying a predefined text (No. 15)

You can have texts from different sources displayed as a message:

- Predefined texts: Define the predefined texts in the <<OSD-texts>> area. The communication object for this (15 | 115) is described below.
- Texts that are sent from other devices. ►Displaying a message – Displaying a text from another device , p. 50

15 | 115	
Function	Assigns a predefined text that has been defined in the <<OSD texts>> area.
Communication object no.	15 115
Name:	Text selection
Required parameters	<<OSD texts>> → <<Text <n>>> • You define the texts via the parameter <<Text <n>>>. ►Defining OSD texts for messages, p.35
Possible values	0|1|2|3|4 <No.>: Number of the OSD text from the <<OSD texts>> area. Example: Enter 1 for <<Text 1>>.
Data width	1 byte
Data point type	5.010
Flags (CRWTU)	K-S- -

9.5.2 Displaying a message – Displaying a text from another device (No. 16)

You can have texts from different sources displayed as a message:

- Predefined texts. Define the predefined texts in the parameter <<OSD-texts>>. ►Message display – Displaying a predefined text , p. 50
- Texts that are sent from other devices. The devices must be connected accordingly. The communication object (16 | 116) is described below.

16 | 116	
Function	Displays a message that was sent from another device.
Communication object no.	16 116
Name:	Text
Details	The message must not exceed 14 bytes in length. For texts: If the received text is longer, you can link the texts so that they are displayed as a coherent message.

16 | 116	
	►Linking texts, p. 51
Possible values	Text to be output.
Data width	14 bytes
Data point type	16.001
Flags (CRWTU)	K-S- -

Linking texts

It may be that the texts received from other devices exceed the maximum length of 14 bytes. However, the text can still be displayed on the TV device as a coherent message. All texts received from the connected devices within 500 milliseconds are combined into one message. To do this, texts that are too long are separated into several objects and then displayed together.

In rare instances this automation can result in texts also being unintentionally linked, simply because they are received within 500 milliseconds.

9.6 Activating / deactivating PIP (No. 20)

20 | 120	
Function	Activates / deactivates PIP on the screen.
Communication object no.	20 120
Name:	PIP mode
Details	Even if PIP is activated on the TV device, it must also be activated with the communication object 20 or 120.  PIP cannot be used if one of the sources is HDMI or HEVC. ►Incompatible sources, 51
Possible values	0 |1: Toggles between "PIP on" and "PIP off". If PIP is currently activated and you send a 0, it is then deactivated. If you now send a 0 again, PIP is reactivated. It behaves in exactly the same way for the value 1.
Data width	1 bit
Data point type	1.017
Flags (CRWTU)	K-S- -

Incompatible sources

 PIP cannot be used if one of the sources is HDMI or HEVC.

Example of incompatibility: A DVB-T2 antenna is connected at the source "HEVC". The TV programs are watched via this input. An outside camera is connected at the source "HDMI 1". The camera image should

now be displayed as a small screen. This configuration is not possible on certain TV devices from previous chassis generations. More detailed information is available from Loewe Support.

Since changes are possible on some newer chassis generations, referring to the TV device manufacturer's documentation will detail the information in this regard.

Error messages of the current chassis generation in the case of incompatible sources for PIP

PIP Error on the TV device "The desired display is not possible because one of the two components is HEVC"

➢ You have used the HEVC connection as a source for PIP. This is not possible on certain TV devices from previous chassis generations.

PIP Error on the TV device: "Changeover to this station not possible at present"

➢ You have used the HDMI connection as a source for PIP. This is not possible on certain TV devices from previous chassis generations.

Solution: Permissible combinations of sources

➢ If you use more than one source for PIP, you can combine all sources with each other as long as neither HEVC nor HDMI is one of the sources.

9.7 Calling up the browser (No. 18)

18 | 118	
Function	Assigns a predefined URL from the <<Browser Links>> area. The URL is opened in the integrated browser of the TV device.
Communication object no.	18 118
Name:	Link selection
Details	The "Browser" source is automatically determined when you call up the browser. You do not need to specify a value for this source.
Required parameters	<<Browser Links>> → <<Link <n>>> You define the URLs via the parameter <<Browser Links>>. ►Start browser, p. 38
Possible values	0|1|2|3|4 <No.>: Number of the link from the range of the browser links. • Example: Enter 1 for <<Link 1>>.
Data width	1 byte
Data point type	5.010
Flags (CRWTU)	K-S- -

Browser is not opened?

If the browser is not opened and the first program channel of the configured station list is called up instead, the transferred URL will not exist. You will not receive information on this based on error codes.

➢ Check the defined URL in the parameter <<Link>>.

9.8 Sources

All supported sources have a permanently assigned number. You can control the respective source with this number. Which sources are available depends on the specific TV device.

USB not recognised?

The TV device itself shows USB as a possible source after a USB stick is connected.

However, controlling the USB connection as a source via KNX is not supported by the TV device.

Table 21: Supported sources, modes and their values

Source / mode	Value	Details
Switch off	0	Switch off the TV device. Alternatively you can use the communication object 1 | 101.
TV mode	1	If the TV device is in Radio mode, change back to control TV programs.
Radio mode	2	Radio mode is not supported. With ISE SMART CONNECT KNX LOEWE you can control TV stations but not radio stations.
/AV1	3	
AV2	4	
AV3	5	
AVs	6	
VGA	7	
HDMI1	8	
Comp	9	
HDMI2	10	
HDMI3	11	
HDMI4	12	
Video	13	
SPDIF_IN	14	
Browser	15	Pure status value: • The source is determined automatically when you call up the browser. • If you determine the source via the communication object 26 |126, the value 15 is displayed as long as the browser is open.
Undefined	16	Error: • If <<Undefined>> is frequently displayed as the source, please contact Support.
unknown	255	Error: • Source not recognised. • Cause: A source was controlled that is not supported by ISE

Source / mode	Value	Details
		SMART CONNECT KNX LOEWE. You can only use sources that are listed in this table.

9.8.1 Select source (No. 25)

25 | 125	
Function	Defines the source of the signal.
Communication object no.	25 125
Name:	Select source
Details	Which sources are available depends on the specific TV device.
Possible values	Source number: ►Table 21: Supported sources, modes and their values, p. 53
Data width	1 byte
Data point type	5.010
Flags (CRWTU)	K-S- -

Selecting the source has no effect?

No device is connected to the source.

If you try to switch over to a source to which no device is connected, switch over still occurs in the case of some sources and you do not receive an error message.

➢ Determine which source the device is controlling. Communication object 26 | 126: ►Source – Determining the used source, p. 55

9.8.2 Source – Determining the used source (No. 26)

26 | 126	
Function	Shows which source is currently being used.
Communication object no.	26 126
Name:	Source status
Details	Overview of the assignment of values to the sources: ►Table 21: Supported sources, modes and their values, p. 53
Possible values	Source number:
Data width	1 byte
Data point type	5.010
Flags (CRWTU)	KL-Ü-

Status does not return a value?

➢ Check whether a device is connected.

If no device is connected at the selected source, the status cannot be determined. In this case you do not receive back any value at all, not even "ZERO" or other similar indicators.

9.8.3 Setting child protection (No. 30)

30 | 130	
Function	Activates / deactivates child protection.
Communication object no.	30 130
Name:	Set child protection
Details	• Activated: The block definition can be either age-dependent or age-independent. Enter the age as a numerical value. • Disabled: There are no blocked programs. • Block individual stations: This function of the TV device is not supported. The list of generally blocked stations is not evaluated. ► see Table 15: Child protection control – supported block types, p. 37
Required parameters	Child protection PIN ►Saving the child protection PIN, p. 36  If the parameter is not configured but all stations are blocked for the TV device (age-related), you will not be able to change the station with KNX.
Possible values	• 0: Block all stations. • 1|2: Unblock all stations, but activate age-dependent child protection. Only programs approved as suitable for age 3 or over can be watched.  The TV device does not support the "0 years" rating. The lowest age that can be blocked is 3 years The age ratings that can generally be evaluated depend on the TV device. • 3|…|18: Unblock all stations, but activate age-dependent control. Only programs approved as suitable for a particular age or over can be watched. • >18: Deactivate child protection. All stations and programs are freely accessible. You transfer the desired age as a value. Example: 16 = approved for age 16 and over
Data width	1 byte
Data point type	5.010
Flags (CRWTU)	K-S- -

9.9 Error diagnosis

The information about the last error that occurred is saved. Each time a new error occurs, it overwrites the information of the last error.

Depending on the effects of an error, it is saved either permanently or only temporarily. For example, a communication error is saved permanently because it influences every one of your further work steps. An error like a non-existent OSD text on the other hand is saved only temporarily and the error status is reset again after a few seconds back to "no error exists".

- The status (communication object 90 | 190) tells you whether an error has occurred at all.
- You determine cause of the error via the error code (communication object 91 | 191).

9.9.1 Error diagnosis – Determine status (No. 90)

90 | 190	
Function	Indicates whether an error currently exists.
Communication object no.	90 190
Name:	Error indication
Details	You can determine cause of the error via the error code. The error codes are sent to the communication object 91 | 191. ►Meaning of the error codes (values of communication object 91 | 191), p. 58
Possible values	• False No error exists. • True Error exists.
Data width	1 bit
Data point type	1.002
Flags (CRWTU)	KL-Ü-

9.9.2 Error diagnosis – Determining the cause of the last error (No. 91)

91 | 191	
Function	Contains the error code of the last error.
Communication object no.	91 191
Name:	Last error
Details	Whether an error exists can be determined via the communication object 90 | 190. Errors are transferred as a numerical code. ►Meaning of the error codes (values of communication object 91 | 191), p. 58
Possible values	Text that contains the number of the error code and an abbreviated error description.
Data width	14 bytes

91 | 191	
Data point type	16.001
Flags (CRWTU)	KL-Ü-

Table 22: Meaning of the error codes (values of communication object 91 | 191) and troubleshooting

Code	Description	Troubleshooting
0	No error exists	–
10	Software version of the TV device incompatible	Solution: Update the software of the TV device.
11	No communication possible with the TV device	TV device was not found in the network. Cause 01: • The TV device has no connection to the network. Solution 01: • Check whether you have properly configured the TV device's IP address (ETS: Tab <<Loewe TV device<n> >> → Setting <<IP address>>). If the configuration is correct, try again to run the desired command. Check the error status again. If error code 11 occurs again, check the network. Cause 02: • The TV device is in standby mode and is now starting up. Solution 02: • Wait until the TV device has started up from standby mode and try again. Cause 03: • The TV device is in standby mode but Wake on LAN is deactivated. Solution 03: • Activate the "Wake on LAN" function on the TV device to wake the TV device.
12	IP address of the television could not be determined by the App Host	Cause: The IP address could not be determined due to an internal error. Solution: 1. Wait for a moment and check the error code again. 2. If error code 12 continues, restart the TV device via the device website (<<System>> → <<Restart>> menu). Then run the desired command again. 3. If error code 12 continues, update the device's firmware. ►Extending the scope of functions (updating firmware), p. 31
13	IP address is not configured	Solution: Configure the IP address for the TV device ETS: Tab <<Loewe TV device<s> >> → Setting <<IP address>> ►Parameter description on p. 35

Code	Description	Troubleshooting
		If you have configured an incorrect IP address, code 11 is shown and not code 13.
14	Number of the OSD text is invalid	Cause: An OSD text with the configured number does not exist. The only valid numbers are 0-4. Solution: 1. Check the available numbers (ETS tab <<OSD texts>>). 2. Enter the number of the desired text as a value of the communication object. If you have not entered any text in the "OSD Text" setting, you will not receive an error message.
15	Command could not be run	The TV device might not be contactable. Solution: 3. Wait for a moment and check the error code again. 4. Run the desired command again. 5. If error code 15 continues to be flagged, check your configuration and restart the TV device.
16	Status could not be determined	The TV device might not be contactable. Solution: 1. Wait for a moment and check the error code again. 2. Run the desired command again. 3. If error code 16 continues to be flagged, check your configuration and restart the TV device.
17	Source invalid	Cause: The value sent for the source is not supported. Solution: Correct the value according to the desired sources. ID for the respective source: ►Supported sources, p. 53
19	Program could not be selected	The stated program number was not found in the station list. Cause: The station list does not contain the stated program number. Solution: 1. In the ETS, check in the setting <<Name of station list>> (p. 35) whether you have assigned the correct station list. 2. On the TV device, check whether the stated program number is defined for the assigned station list.
20	Wake on LAN property on the TV device is deactivated	Cause: The TV device is in standby mode. When the TV device is in quick-start mode, Wake on LAN must not be activated. Solution: Activate Wake on LAN on the TV device. It can take a few moments for the TV device to start up. Refer to the TV device manufacturer's documentation for details on how to activate the Wake on LAN setting.

Code	Description	Troubleshooting
21	Child protection	Cause: The child protection PIN entered in the ETS is invalid. Solution: Check the PIN set in the TV device and adapt the entry in the ETS.  Refer to the TV device manufacturer's documentation for details of how to change the PIN.
22	Properties of the TV device cannot be read	Cause: Internal TV device error. Solution: Switch off the TV device completely for at least five minutes (disconnect from the power supply).
23	Number of the link is invalid	Cause: A link with the configured number does not exist. The only valid numbers are 0-4. Solution: 1. Check the available numbers (ETS tab <<Browser links>>). 2. Enter the number of the desired link as the value of the communication object.  If you have not entered a URL in the <<Link>> setting, you will not receive an error message. In this case, the "Home Screen" of the TV set is called up.

10 Cleaning and maintenance

ISE SMART CONNECT KNX LOEWE is maintenance-free.

If necessary, clean the device with a dry cloth.

IMPORTANT:

Damage to the device due to incorrect opening

- Never open the housing.
- If you suspect that the device is damaged, contact our Support.
- We provide a warranty in accordance with statutory requirements. Please send the device back to us postage free with a detailed error description.

11 Troubleshooting

In order to be able to easily remedy a fault, you must establish the root cause. Solutions to displayed error codes and to typical configuration errors are described below.

Error codes are output for some error types.

- Check the status of the device on the devices website which is detailed on the <<Device status>> page. ►Checking the device status, p. 66
- If an error code is output, you will find it on the device website which is detailed on the <<Device status>> page. If the error display has the value <<inactive>>, no errors have occurred.
- However, you do not receive an error code for some configuration errors.
- Solutions to displayed error codes and to typical configuration errors: ►Table 23: Troubleshooting , p. 62.

Table 23: Troubleshooting

Issue	Troubleshooting
Browser, image transfers	
Browser is not opened	Cause: The transferred URL does not exist. Solution: Check the defined URL in the parameter <<Link>>.
URL is not opened	Error code 23 Cause: A link with the configured number does not exist. The only valid numbers are 0-4. Solution: 1. Check the available numbers (ETS tab <<Browser links>>). 2. Enter the number of the desired link as the value of the communication object. If you have not entered a URL in the <<Link>> setting, you will not receive an error message. In this case, the "Home Screen" of the TV set is called up.
Browser is closed suddenly	Cause: The TV device is already switched on and you have sent "Switch on" again via communication object 1 | 101. The browser is then closed and the last station selected is displayed.
Switching on	
Switching on takes a long time	Check whether quick-start mode is activated on the TV device.
Device is not switched on	Error code 20 Cause: The TV device is in standby mode. When the TV device is in quick-start mode, Wake on LAN must not be activated. Solution: Activate Wake on LAN on the TV device. It can take a few moments for the TV device to start up.
Child protection / Parental control	

Issue	Troubleshooting
Child protection does not work	Error code 21 Cause: The child protection PIN entered in the ETS is invalid. Solution: Check the PIN set in the TV device and adapt the entry in the ETS.  Refer to the TV device manufacturer's documentation for details of how to change the PIN.
Child protection does not work	Check on the TV device which type of child protection is active. Types supported by ISE SMART CONNECT KNX LOEWE: ►Table 15: Child protection control – supported block types, p. 37
OSD text, messages	
Text is not displayed.	Error code 14 Cause: An OSD text with the configured number does not exist. The only valid numbers are 0-4. Solution: 1. Check the available numbers (ETS tab <<OSD texts>>). 2. Enter the number of the desired text as a value of the communication object.  If you have not entered any text in the "OSD Text" setting, you will not receive an error message.
PIP Error on the TV device "The desired display is not possible because one of the two components is HEVC"	Error messages of the current chassis generation in the case of incompatible sources for PIP You have used the HEVC connection as a source for PIP. This is not possible on certain TV devices from previous chassis generations. More detailed information is available from Loewe Support.
PIP Error on the TV device: "Changeover to this station not possible at present"	Error messages of the current chassis generation in the case of incompatible sources for PIP You have used the HDMI connection as a source for PIP. This is not possible on certain TV devices from previous chassis generations. More detailed information is available from Loewe Support. If you use more than one source for PIP, you can combine all sources with each other as long as neither HEVC nor HDMI is one of the sources.
PIP does not work	Check whether PIP is activated. Even if PIP is activated on the TV device, it must also be activated with the communication object 20 | 120. The position, size and type of small screen display are set directly on the TV device depending on the configuration possibilities of the TV-device.
Program control, change station	
Device switches over to the wrong station	Check whether the configured station list still exists on the TV device. Check whether the station is configured on the stated program channel on the TV device.

Issue	Troubleshooting
Program is not switched over.	Error code 19 The stated program number was not found in the station list. Cause: The station list does not contain the stated program number. Solution: 1. In the ETS, check in the setting <<Name of station list>> (p. 35) whether you have assigned the correct station list. 2. On the TV device, check whether the stated program number is defined for the assigned station list.
Program is not switched over.	The program might be blocked by the child protection. 1. Check on the TV device whether child protection is activated. 2. If the child protection is activated, check in the ETS to establish whether the parameter <<Child protection PIN>> is properly configured. 3. If the configuration is correct, check on the TV device to ascertain which type of child protection is active. Types supported by ISE SMART CONNECT KNX LOEWE: ►Table 15: Child protection control – supported block types, p. 37
Status	
Status does not return a value	If no device is connected at the selected source, the status cannot be determined. You do not receive a value back. Check whether error code 16 or 17 is present (p. 16).
Status does not return a value	The TV device might not be contactable. In this table, go to the section "Communication and communications“.
Sound, volume	
Volume is changed, but you still can't hear anything	If the sound is switched off (muted), it is only switched back on when the volume is increased. If the volume remains unchanged or is reduced, the sound remains off.
Can't hear anything even though the sound is switched on	The TV device might be set to a barely audible volume. ➢ Check the volume to which the TV device is set with communication object 7 | 107. ►Volume – Determining the current volume (No. 7), p. 44 ➢ Check if loudspeaker which are not controlled by ISE SMART CONNECT KNX LOEWE are set to mute.
Communication and commands	
TV device not contactable	Error code 12 Cause: The IP address could not be determined due to an internal error. Solution: 1. Wait for a moment and check the error code again. 2. If error code 12 continues, restart the TV device via the device

Issue	Troubleshooting
	website (<<System>> → <<Restart>> menu). Then run the desired command again. 3. If error code 12 continues, update the device's firmware. ►Extending the scope of functions (updating firmware), p. 31
TV device not contactable	Error code 13 Cause: IP address is not configured Solution: Configure the IP address for the TV device ETS: Tab <<Loewe TV device<s> >> → Setting <<IP address>> ►Parameter description on p. 35 If you have configured an incorrect IP address, code 11 is shown and not code 13.
TV device not contactable	Cause: Sources might not be connected or cables have come loose. Solution: Check whether everything is correctly connected.
TV device not contactable	Cause: Initial start-up In case of start-up the TV device for the first time, it cannot be switched on via the Wake on-LAN. Solution: ➢ Switch on the TV device. ➢ If the device is still unavailable, check if it is on the network.
TV device was not found in the network	Error code 11 TV device was not found in the network. Cause 01: • The TV device has no connection to the network. Solution 01: • Check whether you have properly configured the TV device's IP address (ETS: Tab <<Loewe TV device<n> >> → Setting <<IP address>>). If the configuration is correct, try again to run the desired command. Check the error status again. If error code 11 occurs again, check the network. Cause 02: • The TV device is in standby mode and is now starting up. Solution 02: • Wait until the TV device has started up from standby mode and try again. • Cause 03: The TV device is in standby mode but Wake on LAN is deactivated. • Solution 03: • Activate the "Wake on LAN"
TV device does not react to command	Error code 15 The TV device might not be contactable. Solution:

Issue	Troubleshooting
	Wait for a moment and check the error code again. Run the desired command again. If error code 15 continues to be flagged, check your configuration and restart the TV device.
TV device does not react to command	Error code 10 Software version of the TV device incompatible Solution: Update the software of the TV device.
TV device does not react to command	Error code 22 Cause: Internal TV device error. Solution: Switch off the TV device completely for at least five minutes (disconnect from the power supply).
TV device does not react to program control commands	In this table, go to the section "Program control, change station", p. 63.
TV device does not react to some commands	Cause: A dialog that requires user interaction is open on the TV device. Commands related to the dialog will not work as long as the dialog is open. For example, if the user has to make a decision in the "Source" context, you cannot change the source via KNX. Solution: Close the dialog in the TV device, e.g. with the remote control. Dialogues of the TV device cannot be closed with KNX.
Sources	
Selecting the source has no effect	Cause: No device is connected to the source.  If you try to switch over to a source to which no device is connected, switch over still occurs in the case of some sources and you do not receive an error message. Solution: Check whether a device is connected.
Source not contactable	Error code 17 Cause: The value sent for the source is not supported. Solution: Correct the value according to the desired sources. ID for the respective source: ►Supported sources, p. 53
USB not recognised	Cause: Controlling the USB port as a source via KNX, is not supported by the TV device. Solution: None. The source is not supported.

11.1 Checking the device status

You can check the device status on the device website at any time on the <<Device status>> page.

The device website is not always updated automatically.

➢ Use your browser's function to reload (often button [F5]).

LEDs on the device also provide you with further information. The LEDs indicate problems via flashing combinations:

► LEDs when the device starts up, p. 24

► LEDs in operation, p. 25

11.2 Generating log files

With the aid of log files, Support obtains information to help analyse your problem. You generate these log files via the device website and download them as a ZIP file.

The log files can contain information that varies in the amount of detail. You can configure this amount using the logging mode.

Changing the logging mode

Prerequisite: The device website is open.

1. On the <<Device status>> page in the <<System configuration>> area, select the corresponding button for <<Logging mode>>

<<Simple>>	Basic information is collected.
<<Extended>>	Detailed information is collected.
	<<Extended>> logging mode has a negative influence on performance. Only activate this mode if Support requests the extended log files. Deactivate this mode again as soon as you have generated the log files.

2. Confirm the confirmation prompt.

Generating log files

Prerequisites: You are logged into the device website.
Logging mode is configured.

1. Select <<System>> → <<Download log file>> in the menu bar. The log files are compiled and downloaded as a ZIP file.

11.3 Contacting Support

If you have a problem with your ISE SMART CONNECT KNX LOEWE and require support, contact us:

- E-mail to support@ise.de
- Call us on tel.: +49 441 680 06 12
- Fax us: +49 441 680 06 15

We will need the following data in order to help you:

- ☐ To identify the device: Product name or order number
- ☐ MAC address (optional)
- ☐ Version of the firmware
- ☐ ETS version
- ☐ A meaningful error description including the error code (if there is one)

Gladly also:

- ☐ Log files
- ☐ Screenshot from the <<Device status>> page on the device website

12 Disassembly and disposal

If you want to disassemble the device, e.g. due to a defect, proceed in reverse order to assembly.

Removing the cover cap

WARNING

Danger from incorrect use

Incorrect use can result in damage to the device, fire or other dangers.

- ➢ Only qualified electricians may install and mount electrical devices.
- ➢ Follow the instructions in this product manual.
- ➢ This product manual is part of the product and must remain with the customer.

WARNING

Danger of electric shock

An electric shock can result from touching live parts in the installation environment. Electric shock can cause death.

- ➢ Enable the device.
- ➢ Cover up live parts in the vicinity.

1. Gently press in the cover cap at the side (1).
2. Pull off the cover cap upwards (2).

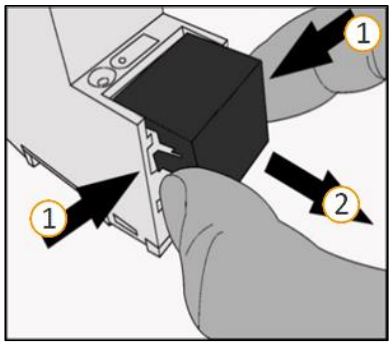


Figure 9: Removing the cover cap

Detach the device from the top-hat rail

Prerequisites: Power supply, bus line and network connection are disconnected.

1. Insert a screwdriver (1) into the release lever (2) and push the release lever down (3).
2. Take the device off the top-hat rail.

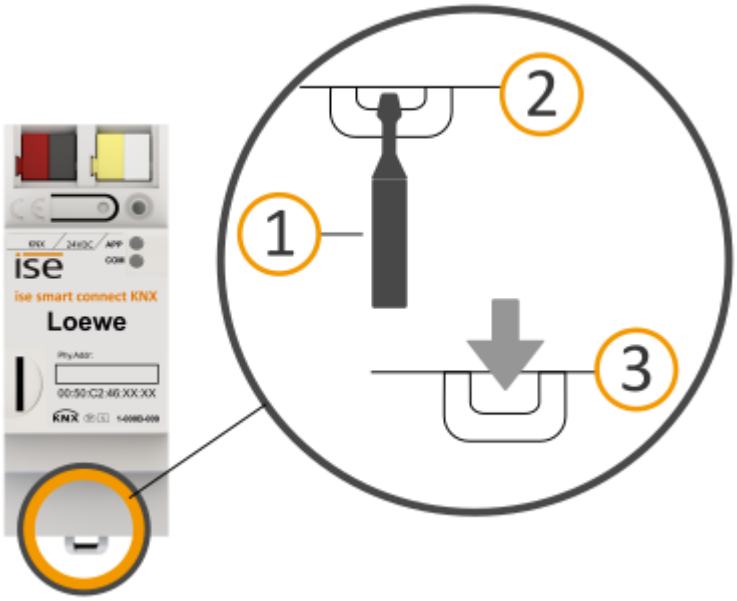


Figure 10: Detach the device from the top-hat rail

Disposal

Make an active contribution to protecting the environment by disposing of all materials in an environmentally-responsible way.

PACKAGING AND BOX	
	Dispose of the packaging material appropriately, in a card, paper or plastic recycling bins.

DEVICE	
	**Old devices must not be disposed of with municipal waste!** You can dispose of your old device free of charge at designated collection facilities or, if necessary, you can hand it in to your specialist dealer. Contact your local authority for recycling details.

13 Glossary

BBFC

British Board of Film Classification. The BBFC checks age rating of media.

Catalogue

Short for "Online KNX Product Catalogue". The catalogue is a product database. The catalogue contains all KNX-certified devices. The data is saved as a product database entry. The product database entry is often also called the "catalogue entry".

Device website

Application for the device, with functions that make use more convenient. For example, updates can simply be imported or the status of the device can be checked.

DP type

Data point type

FDSK (Factory Default Setup Key)

The FDSK is used for secure communication between category "KNX IP Secure Device" devices. Each device has an individual FDSK. Each device has a serial number (hardware ID). The combination of FDSK and serial number enables each device to be unambiguously identified. Together with the FDSK and serial number form the device certificate.

Depending on the use case, the FDSK is required for initial authentication in the ETS or for the encryption of communication.

Firmware update tool

Software which is embedded on the device hardware and enables operation of the device. Function extensions for the device are available via a new firmware version.

Flags (CRWTU)

Every communication object has flags with which the communication object obtains methods: C: Communication, R: Read, W: Write, T: Transmit, U: Update. Refer to your KNX documents for the meaning of the flags.

Internet site

Information on the device's application can be found in this documentation under the search term “Device website”.

OSD text (On-Screen Display text)

Text that is displayed over the current image. For example, the volume indicator on TV devices is an OSD text.

PIP

Picture in Picture; a function that displays two images on one screen.

Two programs can thus be shown simultaneously on TV devices with PIP. Instead of a station, the second program can also be a message such as an OSD text. Depending on the device, the screen can be split into two areas of equal size (split screen) or the second area (thumbnail) is shown reduced in size over the first image (full image). The range of functions depends on the TV device.

Product database entry

Data relating to a device in the "Online KNX Product Catalogue" of the ETS. The product database entry contains all data to allow the device to be configured in the ETS. The product database entry is provided by the devices' manufacturer in the form of a file. The latest version of product data entries of ise Individuelle Software und Elektronik GmbH can be downloaded free of charge from our website www.ise.de.

The product database entry is often also called the "catalogue entry".

Quick-start mode

In this mode, the TV device switches itself on without a waiting time

Thumbnail image

If two images are shown on a screen (PIP), one image can be shown in full size in the background and one image reduced in size in the foreground. The image in the foreground is referred to as the thumbnail.

Wake on LAN (WoL)

The "Wake on LAN" function ensures that a device can be switched on from standby mode by another device in the network. Here, switching on can also mean booting up.

14 ISE SMART CONNECT KNX LOEWE software licence agreement

Hereinafter are the contract terms for your use of the software as the "Licensee".

On accepting this agreement and installing the ISE SMART CONNECT KNX LOEWE software or putting the ISE SMART CONNECT KNX LOEWE into use, you conclude an agreement with ise Individuelle Software und Elektronik GmbH and agree to abide by the terms in this agreement.

14.1 Definitions

Licensor: ise Individuelle Software und Elektronik GmbH, Oldenburg (Oldb), Osterstraße 15, Germany

Licensee: The legal recipient of the ISE SMART CONNECT KNX LOEWE software.

Firmware: Software which is embedded on the ISE SMART CONNECT KNX LOEWE hardware and enables operation of the ISE SMART CONNECT KNX LOEWE.

ISE SMART CONNECT KNX LOEWE: The ISE SMART CONNECT KNX LOEWE software designates all of the software provided for the ISE SMART CONNECT KNX LOEWE product, including the operating data. This includes, in particular, the firmware and the product database.

14.2 Object of the agreement

The object of this agreement is the ISE SMART CONNECT KNX LOEWE software provided on data media or through downloads, as well as the corresponding documentation in written and electronic form.

14.3 Rights of use of the ISE SMART CONNECT KNX LOEWE software

The Licensor grants the Licensee the non-exclusive, non-transferable right to use the ISE SMART CONNECT KNX LOEWE software for an unlimited time in accordance with the following conditions for the purposes and applications specified in the valid version of the documentation (which shall be provided in printed form or also as online help or online documentation).

The Licensee is obliged to ensure that each person who uses the program only does so as part of this license agreement and observes this license agreement.

14.4 Restriction of rights of use

14.4.1 Copying, modification and transmission

The Licensee is not authorised to use, copy, modify or transfer the ISE SMART CONNECT KNX LOEWE software in whole or in part in any way other than as described herein. Excluded from this is one (1) copy produced by the Licensee exclusively for archiving and backup purposes.

14.4.2 Reverse engineering and conversion technologies

The licensee is not authorised to apply reverse-engineering techniques to the ISE SMART CONNECT KNX LOEWE software or to convert the ISE SMART CONNECT KNX LOEWE software to another form. Such techniques include, in particular, disassembly (conversion of the binary-coded computer instructions of an executable program into an assembler language which can be read by humans) or decompilation (conversion of

binary-coded computer instructions or assembler instructions into source code in the form of high-level language instructions).

14.4.3 Firmware and hardware

The firmware may only be installed and used on the hardware (ISE SMART CONNECT KNX LOEWE) approved by the Licensor.

14.4.4 Transfer to a third party

The ISE SMART CONNECT KNX LOEWE software may not be passed on to third parties, nor may it be made accessible to third parties.

14.4.5 Renting out, leasing out and sub-licensing

The Licensee is not authorised to rent or lease the ISE SMART CONNECT KNX LOEWE software or grant sub-licenses to the program.

14.4.6 Software creation

The Licensee requires written approval from the Licensor to create and distribute software which is derived from the ISE SMART CONNECT KNX LOEWE software.

14.4.7 The mechanisms of license management and copy protection

The mechanisms of the license management and copying protection of the ISE SMART CONNECT KNX LOEWE software may not be analysed, published, circumvented or disabled.

14.5 Ownership, confidentiality

14.5.1 Documentation

The ISE SMART CONNECT KNX LOEWE software and the documentation (which shall be provided in printed form or also as online help or online documentation) are business secrets of the Licensor and/or the object of copyright and/or other rights and shall continue to belong to the Licensor. The Licensee shall observe these rights.

14.5.2 Transfer to a third party

Neither the software nor the data backup copy nor the documentation (which shall be provided in printed form or also as online help or online documentation) may be passed on to third parties at any point in time, in whole or in part, for a charge or free of charge.

14.6 Changes, additional deliveries

The ISE SMART CONNECT KNX LOEWE software and the documentation (which shall be provided in printed form or additionally as online help or online documentation) shall be subject to possible changes by the licensor.

14.7 Warranty

The ISE SMART CONNECT KNX LOEWE software shall be delivered together with software from third parties as listed in Chapter "Open Source Software", p. 76. No warranty is provided for software from third parties.

14.7.1 Software and documentation

The ISE SMART CONNECT KNX LOEWE software and the documentation (which shall be provided in printed form or additionally as online help or online documentation) shall be provided to the licensee in the respective valid version. The warranty period for the ISE SMART CONNECT KNX LOEWE software is twenty-four (24) months. During this time, the Licensor shall provide the following warranty:

- The software shall be free of material and manufacturing defects when turned over to the customer.
- The software shall function in accordance with the documentation included with it in the respective valid version.
- The software shall be executable on the computer stations specified by the Licensor.

The warranty shall be fulfilled with the supply of spare parts.

14.7.2 Limitation of warranty

Otherwise, no warranty shall be provided for the freedom from faults of the ISE SMART CONNECT KNX LOEWE software and its data structures from defects. Nor does the warranty cover defects due to improper use or other causes outside the influence of the Licensor. Any additional warranty claims shall be excluded.

14.8 Liability

The Licensor shall not be liable for damages due to loss of profit, data loss or any other financial loss resulting as part of the use of the ISE SMART CONNECT KNX LOEWE software, even if the Licensor is aware of the possibility of damage of that type.

This limitation of liability is valid for all the Licensee's damage claims, regardless of the legal basis. In any case, liability is limited to the purchase price of the product.

The exclusion of liability does not apply to damage caused by premeditation or gross negligence on the part of the Licensor. Furthermore, claims based on the statutory regulations for product liability shall remain intact.

14.9 Applicable law

This agreement is subject to the laws of the Federal Republic of Germany.

The place of jurisdiction is Oldenburg (Oldb).

14.10 Termination

This agreement and the rights granted herein shall end if the Licensee fails to fulfil one or more provisions of this agreement or terminates this agreement in writing. The ISE SMART CONNECT KNX LOEWE software and the documentation turned over (which is provided in printed form or also as online help or online documentation) including all copies shall in this case be returned immediately and without being requested to do so. No claim to reimbursement of the price paid shall be accepted in such a case.

The license to use the ISE SMART CONNECT KNX LOEWE software shall expire upon termination of the agreement. The ISE SMART CONNECT KNX LOEWE product must be taken out of operation in such a case. Further use of the ISE SMART CONNECT KNX LOEWE without a license is precluded.

The commissioning software and visualisation software must be uninstalled and all copies must be destroyed or returned to the Licensor.

14.11 Subsidiary agreements and changes to the agreement

Subsidiary agreements and changes to the agreement shall only be valid in writing.

14.12 Exception

All rights not expressly mentioned in this agreement are reserved.

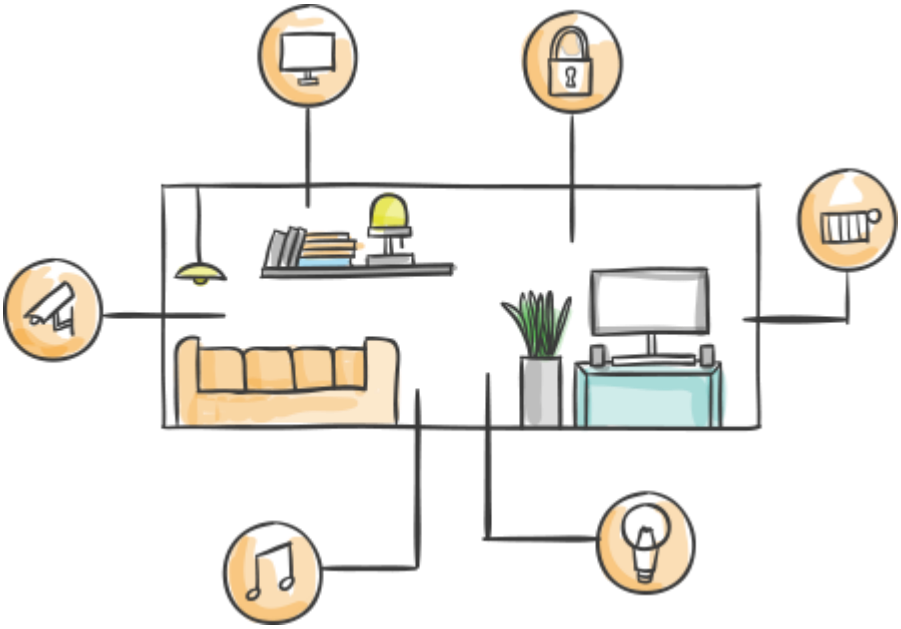
15 Open Source Software

This product uses software from third-party sources which are published within the framework of various Open Source licenses.

The individual software packages used, along with their licenses, are listed and described on the device website for this product under System / Licenses.

The source code for the Open Source software used in this product can be obtained by e-mailing support@ise.de.

This offer is valid for 3 years after the discontinuation of the service for this product.



ise Individuelle Software und Elektronik GmbH
Osterstr. 15
26122 Oldenburg, Germany

Phone +49 441 680 06 11
Fax +49 441 680 06 15
E-mail sales@ise.de