

**Product Manual** 

# **ISE SMART CONNECT KNX Panasonic**

1-000C-000



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# **Legal Information**

ISE SMART CONNECT KNX Panasonic Product Manual Status: 15.11.2019

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# Feedback and information about products



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



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# 1 About this Documentation

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

All descriptions in this documentation relating to configuration 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.

# 1.1 Target group

This documentation is aimed at qualified electricians and KNX processors.



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

ISE SMART CONNECT KNX Panasonic may be configured by anyone. We recommend that configuration is done by a system integrator with sound specialist knowledge of KNX and using the ETS.

# 1.2 Symbols and typographical conventions

Symbol / Label	Meaning
i	Warning of possible material damage
	General warning
<u>A</u>	Warning of electrical voltage

Table 1: Symbols and safety notes

Symbol / Label	Meaning
F1	PC button
< <inscription>&gt;</inscription>	Text on software interface
$\diamond$	Troubleshooting tip
$\stackrel{\circ}{[}$	Important additional information

Table 2: Special symbols and typographical conventions

# 2 About ISE SMART CONNECT KNX Panasonic

# 2.1 Proper use

Via the ISE SMART CONNECT KNX Panasonic, up to four compatible Panasonic TV devices can be integrated into the KNX system.

ISE SMART CONNECT KNX Panasonic is a device of the KNX system and complies with the KNX guide-lines.



# Compatible with Panasonic TV devices

All 2019 Panasonic 4K HDR TVs from the GXW804 series are supported. Models from the manufacturing years 2017/2018 can be used with a reduced range of functions.

# **Configuration: Compatible ETS versions**

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

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

# 2.2 System

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

Within the KNX installation, the TV devices can be controlled via buttons or sensors (as per configuration).





# 2.3 Functions

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

#### Features

#### Separate control of up to four Panasonic 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.
- Mute the TV device.
- Increase/Lower the volume:
  - In stages or directly.
  - To absolute or relative value.

#### **Program control**

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

#### Call up camera links

• Transfer camera images, e.g. from an external camera.

#### Showing notices on the TV device

- Use up to ten 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 message as text.

#### Source selection

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

#### Scenarios

Below you will find possible scenarios into which you can integrate the ISE SMART CONNECT KNX Panasonic. Alternative devices such as logic modules may be required depending on the specific use case scenario.

#### Convenient wake-up



A smart day is dawning. The blinds slowly open, allowing daylight to flood the room. Your Panasonic TV device greets you with your favourite news channel.

#### Leaving the house

After catching up on the latest news, you leave the house. It's not only the lighting that switches off – your Panasonic TV device will turn to standby or become part of the occupied-home simulation for burglary prevention.



#### Save on standby costs



Do you want to save energy? If your Panasonic TV device is switched to standby, the device socket outlet will be switched off after a defined period, and will only switch on again through a TV scene or motion detector.

#### An evening of cinema

You've had a busy day – it's time to relax and enjoy the evening! Your customised cinema experience starts as soon as you switch on your Panasonic TV device. Blinds darken the room, light and sound create the perfect ambience. Fetch the popcorn and some friends and get ready for an authentic cinema sensation.



#### Someone's at the door



Just one glance at your Panasonic TV device will tell you whether your guests have arrived at the door. See what's happening on the external camera conveniently from the sofa.

#### Your messages on the TV

Is your smart washing machine finished? Movement detected in the garden? Through self-defined screen texts, you can also choose to display such messages on your TV. Convenient customisation.



# 2.3.1 Functional enhancements from updates

Functional enhancements for ISE SMART CONNECT KNX Panasonic 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.

See Updating the firmware via the device website, p. 35.

# 2.3.2 KNX Secure Ready



#### ISE SMART CONNECT KNX Panasonic is prepared for KNX Secure.

Functional enhancements will be provided in a future firmware version.

- The required FDSK (Factory Default Setup Key) can be found on a sticker on the side of the device and is also enclosed with the device.
- For maximum security, we recommend removing the sticker from the device.
- Keep the FDSK in a safe place.
- You cannot restore the FDSK yourself.
- Please contact our Support Department if you lose the FDSK despite utmost care.

# 3 Important notes

# 3.1 General safety instructions



# 3.2 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.

# 3.3 Cleaning and maintenance

ISE SMART CONNECT KNX Panasonic is maintenance-free.

If necessary, clean the device with a dry cloth.



# 4 Technical data

Power supply and connections		
Rated voltage:	DC 24 to 30 V Supply via external DC	
Power consumption:	2 W	
Connections:	<ul> <li>KNX: Bus connection terminal (black / red)</li> <li>External power supply: Power supply terminal (white / yellow)</li> <li>IP: 2x RJ45 (integrated switch)</li> </ul>	
Ambient conditions		
Installation environment temperature	0°C to +45°C	
Desta d'accestere		

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

KNX SPECIALIST	
Communication:	<ul><li>KNX: KNX/TP</li><li>IP: Ethernet 10/100 BaseT (10/100 Mbit/s)</li></ul>
Installation method:	S-mode

Approva	ls and	protect	ion type
		P. 01001	

Approvals / Certifications:	CE, KNX
Protection type:	IP20 (compliant with EN 60529)
Protection class:	III (compliant with IEC 61140)

# Supported web browsers

The latest versions of Mozilla Firefox, Microsoft Edge, Apple Safari and Google Chrome

# 5 Device design

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

# 5.1 Front



No.		Description
1	Button:	Programming button
2	Connection:	KNX/TP
3	Connection:	External power supply
4	LED:	"Programming" (red)
5	LED:	"APP": Operation indication (green)
6	LED:	"COM": Communication KNX/TP (yellow)
7	Holding device:	Release lever for top-hat rail termi- nal
8	Connection:	microSD card slot (No function)

Figure 1: Front



# 5.2 Data on device sticker



Figure 2: Device sticker

# 5.3 Тор

The openings for securing the cover cap are located on the top of the device.



# 5.4 Underside



# 5.5 Device side



No.	Description
1	Attached cover cap
2	Release lever for top-hat rail terminal
3	RJ45 cable (not included in the scope of supply) con- nected to RJ45 socket.
Figure 5: Device side	

# 6 Installation

# 6.1 Scope of supply



Figure 6: Scope of supply

0

No.	Objects supplied	Explanation
1	Device	ISE SMART CONNECT KNX Panasonic
2	Cover cap	To protect connections from dangerous voltages.
3	Bus connection terminal	To connect the KNX/TP bus lines.
4	Power connection terminal	To connect the external power supply.
5	Installation instructions	This product manual also provides you with the infor- mation from the installation instructions but with addi- tional details, application examples and project planning notes.
6	Sticker set	Additional set of stickers with data for KNX Secure. The same stickers are attached to the side of the device.

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

# 6.2 Checking the installation conditions

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



- Do the not mount the ISE SMART CONNECT KNX Panasonic above heat-emitting devices.
- Ensure that there is sufficient ventilation/cooling.

Pay attention to the device depth (see figure 7, item 1): DRA Plus, 74 mm.



Figure 7: Device depth

# 6.3 Mounting the device

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





# 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 leads without sheathing (SELV) reliably disconnected from all non-safety lowvoltage cables (SELV/PELV).
- Maintain the specified clearance.
- Attach the cover cap supplied.
- For more information, see also 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).
- Connect the KNX/TP bus line (referred to below as the bus line) to the KNX connection of the device (see figure 8 item 1) by means of the supplied bus connection terminal (see figure 8 item 2). Polarity: left/red: "+", right/black "-":
  - a. Attach the bus connection terminal (see figure 8, item 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.



Figure 8: Connect the bus line

- Connect the external power supply to the power supply terminal (see figure 9 item 1) by means of the supplied power connection terminal (see figure 9 item 2). Polarity: left/yellow: "+", right/white: "-".
  - a. Attach the power connection terminal (see figure 9, item 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.



Figure 9: Connect the power supply

# **Functional Functional devices due to incorrectly dimensioned power supply** The following applies if you use the non-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. Attach the cover cap supplied:
  - a. Route all cables to the back. The openings for fastening the cover cap (see figure 10, item 1) must be clear. All cables must be between the openings.







Figure 10: Cable routing

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



Figure 11: Attaching the cover cap

- 5. Connect the network:
  - a. Make sure that your network infrastructure (router, DNS server) is in operation.
  - b. The network connections are on the underside of the device.
  - c. Connect the IP network cable (RJ45 cable) to the device's network connection (RJ45 socket).



Figure 12: Connect the IP network cable



# 7 Device website

You can access ISE SMART CONNECT KNX Panasonic via the "Device website" application".

The device website offers a range of functions, including:

- Check device status ► see Troubleshooting, p. 55.
- Configure network settings ► see Network settings via the device website, p. 33.
- Update firmware ► see Updating the firmware via the device website, p. 35.
- Reset to factory settings ► see Resetting the device to the factory settings via the device website, p. 35.
- Generate log files ► see Generating log files, p. 59.

The device website is run 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 potential future password protection. The initial password can be found on a product sticker on the side of the device.

# 7.1 Calling up the start screen

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 << 0ther devices>> (see figure 13, item 1): Double click on the device icon (see figure 13, item 2).



Figure 13: Calling up the device network via the network environment



(4) 🚱 English

# 7.2 Getting to know the interface of the device website

ise KNX Panasonic		ise
Device status System		
		-
System information (2)	Application information	3
Date: Fri, 12 Jul 2019 11:47:28 GMT Startup time: Thu, 11 Jul 2019 14:39:20 GMT	State of PanasonicApp is running!	
SD card status: not present	First TV device: PanasonicTV1.lan On/off status: on	
Hostname: PA01KX03-a41163a012bf Software version: 1.0.80.0	Error indication: inactive Last error: 11:TvComm	
MAC: XX:XX:XX:XX:XX DHCP active: ON	Second TV device: Panasonic TV2.lan On/off status: off	
IP address: 192.168.137.113	Error indication: active	
Subnet mask: 255.255.255.0 Default gateway: 192.168.137.1	Last error: 11:TvComm Third TV device: PanasonicTV3.lan	
Name server: 192.168.137.1 NTP active: ON	On/off status: on Error indication: inactive	
NTP server: pool.ntp.org NTP update interval: 15 minutes	Last error: 11:TvComm Fourth TV device: PanasonicTV4.lan	
	On/off status: off	
KNX serial: 007C136000BA KNX individual address: 1.1.50	Error indication: active Last error: 11:TvComm	
KNX device PanasonicApp is projected		
Programming mode is: OFF Enable programming mode KNX bus voltage is: ON		
System configuration		

Warning: Any changes of the system configuration will result in a restart of the system software.

Logging mode: normal Adivate extended logging

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#### Figure 14: Device website start page

Item	Element	Function
1	Menu bar	Call up other pages or run functions.
2	Page	The < <device status="">&gt; page is shown.</device>
3	Information	Display of specific information.
4	Status bar	Change language.



Menu	Description
Device status	Information:
	System information
	Application information
	System configuration
	Functions:
	<ul> <li>Changing logging mode, p. 59</li> </ul>
	Switch device to programming mode
System	Functions:
	<ul> <li>Network settings via the device website, p. 33</li> </ul>
	Restart device
	<ul> <li>Resetting to factory settings, p. 33</li> </ul>
	<ul> <li>Generating log files, p. 59</li> </ul>
	<ul> <li>Updating firmware, p. 35</li> </ul>
	Information:
	Disclaimer
	• Licenses
Table 3: Overview	

Table 3: Overview

# 8 Commissioning and configuration

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

# 8.1 Reading off the device status using the LEDs

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



Figure 15: Status indicators (LEDs) on the front of the device

No.	Element	Description
1	"Programming" LED (red)	Programming mode active/inactive display
2	LED "APP" (green)	Serves as a status indicator for the application
3	LED "COM" (yellow)	KNX/TP communication traffic display

Table 4: Status indicators

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



Colour	Description
• (red, continuously on)	<ul><li>Programming mode is active.</li><li>▶ See Assigning a physical address, p. 32.</li></ul>
⊖ (off)	Programming mode is deactivated.

Table 5: Device status – programming mode

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



Figure 16: Network LEDs

No.	Element	Description
1	"Connection speed" LED	<ul> <li>LED lights up green: 100 Mbit/s</li> <li>LED is off: 10 Mbit/s (There is no connection if LED 2 also off. Check whether the cable is correctly connected.)</li> </ul>
2	"Communication" LED	<ul> <li>LED lights up yellow-orange: Connected but currently no telegram traffic</li> <li>LED flashes yellow-orange: Telegram traffic</li> </ul>
3	IP connection	2x RJ45 (integrated switch)

Table 6: Status of the device network

# 8.1.1 LEDs during device start-up

The "APP" and "COM" LEDs have different meanings depending on the phase in the operating mode. After the power supply is switched on or after power returns, the device indicates its status using the following LED combinations:

APP	СОМ	Description
Correct operation		
○ (off)	<mark>○</mark> (yel- low)	Device starting up.
● (green)	<mark>○</mark> (yel- low)	Device booted up and ready for operation.
Error		
○ (off)	⊖ (off)	<ul><li>No power supply.</li><li>Check the connections and the power supply.</li></ul>
○ ● ○● (off)(green)(off)(green) Slow flashing (about 1 Hz)	<mark>○</mark> (yel- low)	<ul><li>The device is fully started up but is not yet configured. The system is configured S mode.</li><li>Configure the device in the ETS.</li></ul>
○…●…○…●… (off)(green)(off)(green) Slow flashing (about 1 Hz)	⊖ (off)	<ul> <li>The device is fully started up but is not yet configured. The system is configured S-mode.</li> <li>Configure the device in the ETS.</li> <li>Connection to KNX is interrupted.</li> <li>Check whether the KNX and voltage connections are mixed up.</li> <li>Check the bus connection.</li> <li>Check whether the power supply is correctly connected.</li> </ul>
○.●.○.●.○.● (off).(green).(off).(green).(off).(green) Rapid flashing	○ (off)	<ul><li>The firmware cannot be started.</li><li>Please contact support.</li></ul>
<ul> <li>○ ● ○●</li> <li>○ ○ ○ ○</li> <li>(off)(green) (off)(green)</li> <li>(yellow)(off)(yellow)(off)</li> <li>Slow flashing (about 1 Hz) in an alternation</li> </ul>	ng pattern	<ul><li>The newly loaded firmware cannot be started.</li><li>The system is trying to activate the previous firmware (invalid firmware).</li><li>Please contact support.</li></ul>

Table 7: Device status – Device starting up

# 8.1.2 LEDs in operation

LED status after successful device start-up:

APP	Description
● (green)	The device is working perfectly (normal opera- tion).
⊖ (off)	The device is currently starting up or is out of operation.
	<ul> <li>Wait until the device start-up process is complete.</li> </ul>
	• If the device is still out of operation, check the connections and the power supply.
Table 8: "APP" LED in operation	

СОМ	Description
<mark>○</mark> (yellow)	The KNX connection has been established. No KNX telegram traffic. The LED is also deemed to be continuously on if brief irregular interruptions occur.
<ul> <li>○. ○. ○. ○. ○.</li> <li>(off).(yellow).(off).(yellow).</li> <li>Rapid flashing</li> </ul>	KNX connection has been established. KNX telegram traffic.
Error	
◯ (off)	Connection to KNX is interrupted.
	<ul> <li>Check whether the KNX and voltage connections are mixed up.</li> </ul>
	Check the bus connection.
	Check whether the power supply is correctly connected.
Table 9: "COM" LED in operation	

Table 9: "COM" LED in operation



# 8.2 Configuration

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

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



Help on the ETS is available in the integrated ETS Online Help.

• Press the [F1] button.

# Work steps

- 1. Create ISE SMART CONNECT KNX Panasonic as device in the ETS ► see Creating the device in the ETS, p. 29.
- 2. In the ETS, assign the device and its physical address corresponding to the KNX topology.
- Select the option <<Receive IP address automatically>> or select <<Use a permanent IP address>> and complete the following fields: IP address, IP subnet mask and standard gateway address,
   Second standard gateway address and standard gateway address
  - see Setting the IP address, IP subnet mask and standard gateway address, p. 31.
- 4. Set the general parameters, ► see Configuring Parameters, p. 38.
- 5. Link the group addresses to the communication objects.
- 6. ISE SMART CONNECT KNX Panasonic is now ready for commissioning via << Program ETS>> and for testing the functions.

# 8.2.1 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
Update product database. During an update, the old product database entry is replaced by the new one.	<ul> <li>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.</li> <li>See Importing a new product database entry, p. 29.</li> </ul>
Device in existing proj	ect should be updated?
Yes	No
<ul> <li>You must update the device properly so that the existing links to group addresses are maintained.</li> <li>▶ See Updating a product in the existing project, p. 30.</li> </ul>	Add the device to your topology in the usual way.
Table 10: Work steps – creating the device in the ETS	

# Importing a new product database entry

Requirement: You have downloaded the product database entry (product file) from our website at 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 press the <<Open>> button to confirm your selection.
- 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

Requirement: 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 in your project.
- Select the old version of the device in your topology. 3.
- 4. Under << Properties >>, select the << Information >>  $\rightarrow$  << Application program >> tab.
- 5. Select the <<Update>> button under the item <<Update application program version>> (see figure 17, item. 2)



O If you change the value under << Change application program>> (see figure 17, item. 1), user-defined settings such as links to group addresses will be lost.

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

Properties	IP	Comments	(1) Information		
Catalog App	lication				
Manufacturer     ise GmbH       Product     ise KNX template       Application     ise smart connect KNX       Device Type     \$0012       Program Version     1.1					
Certification Fingerprint	Registe 20C3	red			
Change Applic ise smart conn Update Applic	ect KNX		1		

Figure 17: Updating the application program

# 8.2.2 IP settings

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

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

- 1. In the ETS, select the device in your topology.
- 2. Under << Properties>> select the << IP>> tab.
- 3. You will find the available selection options in figure 18 and table 11, Settings for manual IP address entry or for receiving automatically, p. 31.

Propertie	s		>	
Settings	IP	Comments	() Information	
Obtain an IP address automatically				
Use a static IP address     IP Address				
255.255.255.255				
Subnet Mask				
255.255.255.255				
Default Gateway				
255.255.255.255				
MAC Address				
Unknown				
Multicast Add	ress			
224.0.23.12				

Figure 18: IP settings

Setting	Description	
Receive IP address automatically	The address data are automatically obtained from a DHCP server on the data network. The DHCP server must assign a valid IP address to ISE SMART CON- NECT KNX Panasonic. If you wish to contact a TV device via a host name, the DHCP server must report a DNS server that can resolve this host name. If there is no DHCP server available, the device starts up after a waiting time with an automatic IP 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 automati- cally assigned a new IP address.	
Use a permanent IP address	Enter the data manually You can obtain the permitted IP address range and the subnet mask and standard gateway from the router configuration interface.	

Table 11: Settings for manual IP address entry or for receiving automatically

# 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 settings. ► See Resetting to factory settings, p. 33. If problems should persist, contact Support.

# 8.2.3 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 a physical address

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

- 1. Briefly press the programming button (see figure 19, item 1). The programming LED (see figure 19, item 2) lights up red.
- 2. In the ETS, assign the physical address to the device in accordance with the KNX topology and execute programming in the ETS.
- 3. On the device, enter the assigned physical address with a permanent marker in the field <<Phy.Addr.>>.



#### 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 on the device website instead of pressing the programming button on the device itself.

# 8.2.4 Network settings via the device website

Requirement: The device website is open.

- 1. Select <<System>>  $\rightarrow$  <<Network settings>> in the menu bar. The network settings page will appear.
- 2. In the input field <<DNS server (optional)>>, for instance, enter the IP address of your DNS server.
- 3. Click on <<Save>> below the input field. The system accepts the configuration.

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U	

If you program the device from the ETS or select <<Reset device>> for the device, the DNS server will be reset to the standard gateway. You will then need to re-configure the DNS server on the device website.

# 8.2.5 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:

- The device remains in the existing projects.
- The device keeps the version of the application program in the ETS.
- The entire parametrisation is rejected.
- The IP settings are reset.
- 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.

See table 7, Device status – Device starting up, p. 26.

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.



# 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 leads without sheathing (SELV) reliably disconnected from all nonsafety low-voltage cables (SELV/PELV).
- Maintain the specified clearance.
- Attach the cover cap supplied.
- For more information, see also the VDE regulations governing SELV (DIN VDE 0100-410/"Safe separation", KNX installation regulation).

#### Manually resetting the device to the factory settings

Requirement: the device must be switched off without voltage.

- 1. Press the programming button (see figure 19, item 1) and keep it pressed while you attach the power connection terminal.
- 2. Do not release the programming button until the following LEDs are all flashing slowly at the same time:
  - Programming LED (see figure 15, item 1)
  - APP LED (see figure 15, item 2)
  - COM LED (see figure 15, item 3)

Usual duration: approx. 30 seconds.

- 3. Release the programming button briefly.
- 4. Press the programming button again and keep it pressed until following LEDs are all flashing rapidly at the same time:
  - Programming LED (see figure 15, item 1)
  - APP LED (see figure 15, item 2)
  - COM LED (see figure 15, item 3)
- 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 the device website

- 1. Open the device website ► see Calling up the start screen, p. 21.
- 2. Select <<System>>  $\rightarrow$  <<Factory reset>> in the 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.

# 8.3 Updating firmware

Functional enhancements for ISE SMART CONNECT KNX Panasonic are available via a newer version of the firmware. The current firmware and corresponding product manual are available on our website at 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.

# 8.3.1 Updating the firmware via the device website

You can only import a firmware version that is newer than the current version on the device. Previous versions cannot be imported.

There are two ways to update:

- Online: Import firmware automatically online.
- Offline: Import firmware offline. For devices without Internet connection in the installation environment.

# No compatibility check

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.

See Compatibility between product database entry and firmware version, p. 36.

# Import firmware automatically online

- 1. Download the current firmware version from www.ise.de
- 2. Open the device website.
- 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.
- 4. Select the <<Update firmware>> button.

#### Import firmware offline

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

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

# 8.3.2 Compatibility between product database entry and firmware version

So that you can 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>> on the tab <<Information>>  $\rightarrow$  <<Application program>> under <<Program version>>.

#### Compatibility at a glance

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: Full compatibility with same main version numbers

- Firmware version: 2.3
- Application program version: 2.0



In order to use all new functions, it may be necessary to update the application program,  $\blacktriangleright$  see Updating a product in the existing project, p. 30.
#### Incompatibility at a glance

If the new firmware has a higher main version number than that of the application program, the versions are incompatible.

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

- Firmware version: 2.3
- Application program version: 1.3

#### **Establishing compatibility**

In case of incompatibility, you will need to uninstall the application program.

- The device remains in the existing projects.
- The device keeps the version of the application program in the ETS.
- The entire parametrisation is rejected.
- User data in the ETS is preserved.

Requirement: 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 your project. ► See Importing a new product database entry, p. 29.
- 3. Select the old version of the device in the topology for your project.
- 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. Then start configuration as usual. ► See Configuration, p. 28.

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

# 9 Configuring Parameters

Below is a description of the tabs in the << Parameter>> view. Please refer to the specific sections for more detailed information.

1.1.1 ise KNX Panasonic > General setting		
+ General setting	Select the number of Panasonic TV devices you wish to connect.	
+ Panasonic TV device 1	Number of Panasonic TV devices 1 •	
Devices Parameter Ft	Inctions /	

Figure 20: Parameters in the ETS

ltem	Description	
1	Settings that are valid for all connected TV devices.	
2	Settings that are valid only for the respective TV device.	
3	Configuration of parameters for the selected tab.	

# 9.1 General settings

Parameter	Description
< <number devices="" of="" panasonic="" tv="">&gt;</number>	Select number of devices.
< <screen texts="">&gt;</screen>	Texts to be used as a message.
< <camera links="">&gt;</camera>	Address (URL) that is opened in the browser of the TV device.

Table 12: Parameters under <<General settings>> tab

# 9.1.1 Number of Panasonic TV devices

Select the number of connected Panasonic TV devices. Up to four TV devices can be connected ► See figure 20, Parameters in the ETS.

### 9.1.2 Screen texts

You can have texts from different sources displayed as messages:

- Texts that are sent from other devices ► see Text display, p. 53.
- Pre-defined screen texts ► see Text selection, p. 53.

All connected Panasonic TV devices can access the pre-defined texts. Save up to ten texts in the <<Screen texts>> section. You define which of the texts is to be used via communication objects 30 | 130 | 230 | 330.

ieneral setting	The following texts can be show	n as notification texts on a Panasonic TV device.	
Screen texts	Screen text 0		
Camera links	Screen text 1		
	Screen text 2		
anasonic TV device 1	Screen text 3		
Settings	Screen text 4		
	Screen text 5		
	Screen text 6		
	Screen text 7		
	Screen text 8		
	Screen text 9		

# 9.1.3 Camera links

If the TV device is connected to the Internet, you can call up the pre-defined links.

Save up to ten camera URLs in the <<Camera links>> section.

You define which of the links is to be used via communication objects 18 | 118 | 218 | 318 ► see Link selection, p. 54.

1.1.1 ise KNX Panasonic > General setting > Camera links		
<ul> <li>General setting</li> </ul>	The following links can be created on a Panasonic TV device.	
Screen texts	Link 0	
Camera links	Link 2	
- Panasonic TV device 1	Link 3	
Settings	Link 4	
	Link 5	
	Link 7	
	Link 8	
	Link 9	
Devices Parameter Function	is /	

Figure 22: Camera links

# 9.2 Add Panasonic TV devices

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

- O Set the TV device IP address as follows:
  - Press the <<MENU>> button on the TV device remote control.
  - For a WLAN connection, select <<Network>> → <<Network connection>> →</Network connection>> →<<Manual>> → <<Radio connection>> → <<Yes>> and confirm with the <<OK>> button.
  - For a cable connection, select <<Network>>  $\rightarrow$  <<Network connection>>  $\rightarrow$  <<Manual>>  $\rightarrow$  <<Cable connection>> and confirm with the <<OK>> button.
  - The IP/DNS settings are displayed and the settings for IP address, subnet mask, standard gateway and DNS address can be configured.
  - The aforementioned steps may vary depending on TV model.



# Important

In order to guarantee communication between the ISE SMART CONNECT KNX Panasonic and the TV device, switch the TV device on manually before initial commissioning. Configure the following settings under <<Menu/Network/TV Remote Settings>>:

- TV Remote = on
- Networked Standby = on

Parameter	Description
< <panasonic device="" identified="" tv="" using="">&gt;</panasonic>	Selects whether the TV device is addressed via the fixed IP address or the host name.
< <ip address="">&gt;</ip>	Enter the TV device's fixed IP address. ▶ See figure 23, IP address under < <settings>&gt; tab.</settings>
< <panasonic device's="" host<br="" tv="">name&gt;&gt;</panasonic>	<ul> <li>Enter the Panasonic TV device's host name.</li> <li>Do not use any special characters in the host name.</li> <li>Use a different host name for each TV device. Using the same host name leads to undefined behaviour.</li> <li>If the host name is changed, please disconnect the TV device from the network or restart the ISE SMART CONNECT KNX Panasonic.</li> <li>See figure 24, Host name under &lt;<settings>&gt; tab.</settings></li> </ul>

Table 13: Parameters under << Panasonic TV device <n>>> tab

1.1.1 ise KNX Panasonic > Panasonic TV device 1 > Settings		
- General setting	Select whether the IP address or host name should be used to identify the Panasonic TV device.	
Screen texts Camera links	Panasonic TV device identified using IP address	IP address     Host name
- Panasonic TV device 1		
Settings		
Devices Parameter Function	s	



1.1.1 ise KNX Panasonic > Panasonic TV device 1 > Settings		
- General setting	Select whether the IP address or host name should be used to identify the Panasonic TV device.	
Screen texts Camera links	Panasonic TV device identified using Panasonic TV device's host name	IP address 🔘 Host name
- Panasonic TV device 1		
Settings	1	
Devices Parameter Function	ns	



# 10 Communication Objects

You can control up to four TV devices with the ISE SMART CONNECT KNX Panasonic. 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: Offset of the communication objects

TV device 1 communication object  $1 \rightarrow$  communication object number 1 + Offset 100 = TV device 2 communication object 101.

ñ

Use the <<Channels>> tab in the ETS to display the communication objects per TV device.

# 10.1 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. However, an error such as a non-existent screen text will only be saved temporarily. After a few seconds, the error status will be reset as "No error exists".

- The error display communication object (1 | 101 | 201 | 301) tells you whether an error has occurred at all.
- You can find out the cause of the error via the error code for the Last error communication object (2 | 102 | 202 | 302).
- The error codes appear in the format <number>:<error code>.
   Meaning of error code ► see table Error codes, p. 44.

1   101   201   301		
Name	Error indication	
Function	Indicates whether an error currently exists.	
Communication object no.	TV 1=1 TV 2=101 TV 3=201 TV 4=301	
Possible values	<ul><li>False: no error exists.</li><li>True: error exists.</li></ul>	
Data width	1 bit	
Data point type/data type	1.002/Boolean	
Flags (CRWTUI)	CR-T	
Table 14: Error indication		

#### 2 | 102 | 202 | 302 Name Last error Function Provides information on the last error. Communication object no. TV 1=2 TV 2=102 TV 3=202 TV 4=302 Possible values Text that contains the number of the error code and an abbreviated error description. Data width 14 bytes Data point type/data type 16.001 characters Flags (CRWTUI) CR-T--Table 15: Last error

No.	Error code	Description	Possible cause / correction
11	TvComm	Unable to establish communi- cation with the TV device.	<ul> <li>The TV device is not connected to the network.</li> <li>The TV device is in standby mode.</li> </ul>
			• The TV device is in standby mode.
13	TvlpConfig	No IP address or host name is configured.	Configure the IP address or host name for the corresponding TV device in the ETS
14	TxOutOfRng	The received value does not exist.	Check the values entered in commu- nication object 30   130   230   330. Permissible: 0 to 9.
15	ExecuteCmd	Control commands are not received.	The ISE SMART CONNECT KNX Panasonic cannot be contacted.
16	GetState	The ISE SMART CONNECT KNX Panasonic does not receive an answer to the sta- tus query.	The TV device is not contactable.
17	SrcOutOfRng	The entered source is not assigned.	The value sent for source selection is not permissible. ► See table Supported sources, p. 48.
23	LnkOutOfRng	The received value does not exist.	Check the values entered in commu- nication object 32   132   232   332. Permissible: 0 to 9.
24	NoMAC	The TV device MAC address could not be determined.	The TV device was not switched on manually for initial commissioning.
Tabla	16: Error codes		

Table 16: Error codes

# 10.2 Display

10   110   210   310	
Name	Switch on/off
Function	Switches the TV device on or off.
Communication object no.	TV 1=10 TV 2=110 TV 3=210 TV 4=310
Details	If the TV device is in standby mode, it may take up to 30 seconds before the TV device is switched on.
Possible values	<ul><li> 0: Switch off TV device.</li><li> 1: Switch on TV device.</li></ul>
Data width	1 bit
Data point type/data type	1.001/switch
Flags (CRWTUI)	C-W
Table 17: Switch on/off	

11   111   211   311		
Name	On/off status	
Function	Indicates whether the TV device is currently on or off.	
Communication object no.	TV 1=11 TV 2=111 TV 3=211 TV 4=311	
Possible values	<ul><li>0: TV device is switched off.</li><li>1: TV device is switched on.</li></ul>	
Data width	1 bit	
Data point type/data type	1.001/switch	
Flags (CRWTUI)	CR-T	
Table 18: On/off status		

12   112   212   312	
Name	Station selection
Function	Switches program to the transferred value.
Communication object no.	TV 1=12 TV 2=112 TV 3=212 TV 4=312
Possible values	1  999
Data width	2 bytes
Data point type/data type	7.001/pulse
Flags (CRWTUI)	C-W
Table 19: Station selection	

13   113   213   313	
Name	Station status
Function	Indicates the number of the current program.
Communication object no.	TV 1=13 TV 2=113 TV 3=213 TV 4=313
Details	<ul> <li>This communication object is only supported by TV models from manufacturing year 2019 onwards.</li> <li>Station status is 0 if</li> <li>no programs are stored or</li> <li>another source, e.g. HDMI is currently selected</li> </ul>
Possible values	Program channel as a number: 1  999
Data width	2 bytes
Data point type/data type	7.001
Flags (CRWTUI) Table 20: Station status	CR-T

14   114   214   314	
Name	Previous/Next station
Function	Switches the program to the previous or next program.
Communication object no.	TV 1=14 TV 2=114 TV 3=214 TV 4=314
Possible values	<ul><li>0: Reduce: switch to the previous program channel.</li><li>1: Increase: switch to the next program channel.</li></ul>
Data width	1 bit
Data point type/data type	1.007/step
Flags (CRWTUI)	C-W
Table 21: Previous/Next station	

# 10.3 Sources

All supported sources have a permanently assigned number. You can control the respective source with this number.

15   115   215   315	
Name	Select source
Function	Changes the source to the defined value. More information ► see table Supported sources, p. 48.
Communication object no.	TV 1=15 TV 2=115 TV 3=215 TV 4=315
Possible values	0  16 or 255 Number of supported source
Data width	1 byte
Data point type/data type	5.010/meter pulse
Flags (CRWTUI) Table 22: Select source	C-W

Table 22: Select source

16   116   216   316	
Name	Source status
Function	Indicates the number of the currently used source. The value 255 is used for an unknown source. The screen will be black if no device is connected to the selected source.
Communication object no.	TV 1=16 TV 2=116 TV 3=216 TV 4=316
Possible values	0  16 or 255 Number of the current source or unknown source
Data width	1 byte
Data point type/data type	5.010/meter pulse
Flags (CRWTUI)	CR-T
Table 23: Source status	

No.	Source	No.	Source
0	Switch off	9	Video2
1	TV mode	10	Component1
2	Analogue TV	11	HDMI1
3	DVB-T	12	HDMI2
4	DVB-S	13	HDMI3
5	Freesat	14	HDMI4
6	DVB-C	15	DisplayPort
7	SAT_IP	16	SD-USB
8	Video1	255	Unknown
Table 24: Sup	ported sources		

Table 24: Supported sources

# 10.4 Sound and volume

20   120   220   320	
Name	Loudspeaker on/off
Function	Switches the sound on or off.
Communication object no.	TV 1=20 TV 2=120 TV 3=220 TV 4=320
Possible values	<ul><li>0: Sound is switched off.</li><li>1: Sound is switched on.</li></ul>
Data width	1 bit
Data point type/data type	1.001/switch
Flags (CRWTUI)	C-W

Table 25: Loudspeaker on/off

21   121   221   321	
Name	Loudspeaker status
Function	Indicates whether the TV device's sound is on or off. The sound is considered as off if the TV device has been actively muted or the volume has been set to 0%.
Communication object no.	TV 1=21 TV 2=121 TV 3=221 TV 4=321
Possible values	<ul><li>0: Sound is switched off.</li><li>1: Sound is switched on.</li></ul>
Data width	1 bit
Data point type/data type	1.001/switch
Flags (CRWTUI)	CR-T
Table 26: Loudspeaker status	

Table 26: Loudspeaker status

22   122   222   322		
Name	Mute on/off	
Function	Switches the muting function on or off.	
Communication object no.	TV 1=22 TV 2=122 TV 3=222 TV 4=322	
Possible values	<ul><li>0: Mute is off.</li><li>1: Mute is on.</li></ul>	
Data width	1 bit	
Data point type/data type	1.001/switch	
Flags (CRWTUI)	CR-T	
Table 27: Mute on/off		

23   123   223   323	
Name	Mute status
Function	Indicates whether the mute function is currently on or off.
Communication object no.	TV 1=23 TV 2=123 TV 3=223 TV 4=323
Possible values	<ul><li>0: Mute is off.</li><li>1: Mute is on.</li></ul>
Data width	1 bit
Data point type/data type	1.001/switch
Flags (CRWTUI)	CR-T
Table 28: Mute status	

24   124   224   324	
Name	Volume setting
Function	Sets the volume to the transferred value.
Communication object no.	TV 1=24 TV 2=124 TV 3=224 TV 4=324
Possible values	<ul> <li>Percentage as a number: 0 1 2 3  100</li> <li>0: No volume.</li> <li>100: Maximum volume.</li> </ul>
Data width	1 byte
Data point type/data type	5.001/percent
Flags (CRWTUI)	C-W
Table 29: Volume setting	

25   125   225   325	
Name	Volume state
Function	Indicates the currently set volume value.
Communication object no.	TV 1=25 TV 2=125 TV 3=225 TV 4=325
Possible values	Volume value as a number (1 to 100).
Data width	1 byte
Data point type/data type	5.001/percent
Flags (CRWTUI)	CR-T
Table 30: Volume state	

26   126   226   326	
Name	Volume up/down
Function	Increases or lowers the volume.
Communication object no.	TV 1=26 TV 2=126 TV 3=226 TV 4=326
Possible values	<ul> <li>Volume (dimmer step): 1  100</li> <li>100: Corresponds to the maximum volume of the TV device.</li> <li>The behaviour of the object conforms to dimming in accordance with the KNX standard.</li> </ul>
Data width	4 bits
Data point type/data type	3.007/dimmer step
Flags (CRWTUI) Table 31: Volume up/down	C-W

27   127   227   327	
Name	Stepwise volume up/down
Function	Increases or lowers the volume in steps of 5%, starting from the current value.
Communication object no.	TV 1=27 TV 2=127 TV 3=227 TV 4=327
Details	100% corresponds to the maximum volume of the TV device. If the sound is switched off (muted), increasing or lowering the volume will initially turn the sound on. Only by re-sending the com- mand will the volume be increased or lowered.
Possible values	Louder/quieter: 0 1 <ul> <li>0: Reduce volume.</li> <li>1: Increase volume.</li> </ul>
Data width	1 bit
Data point type/data type	1.007/step
Flags (CRWTUI)	C-W
Table 32: Stepwise volume up/down	

# 10.5 Special functions

30   130   230   330	
Name	Text selection
Function	Displays a predefined text that has been defined in the < <screen texts="">&gt; area.</screen>
Communication object no.	TV 1=30 TV 2=130 TV 3=230 TV 4=330
Required parameters	< <screen texts="">&gt; → &lt;<screen <n="" text=""> &gt;&gt; ► See Screen texts, p. 39.</screen></screen>
Possible values	0  9 <no.>: Number of text from the &lt;<screen text="">&gt; area. Example: Enter 1 for &lt;<text 1="">&gt;.</text></screen></no.>
Data width	1 byte
Data point type/data type	5.010/meter pulse
Flags (CRWTUI) Table 33: Text selection	C-W

31   131   231   331	
Name	Text
Function	Displays a 14-byte text that was sent from another device.
Communication object no.	TV 1=31 TV 2=131 TV 3=231 TV 4=331
Details	If more than a 14-byte text is sent to this communication object, the texts are linked and shown as one text. If no further value is received within 500 milliseconds, the linked text is displayed.
Possible values	Text to be output.
Data width	14 bytes
Data point type/data type	16.001 characters
Flags (CRWTUI) Table 34: Text display	C-W

32   132   232   332	
Link selection	
Assigns a predefined URL from the < <camera links="">&gt; area. The URL is opened in the integrated browser of the TV device.</camera>	
TV 1=32 TV 2=132 TV 3=232 TV 4=332	
0  9 Number of the predefined URL. Example: Enter 1 for < <link 1=""/> >.	
1 byte	
5.010/meter pulse	
C-W	

Table 35: Link selection

Î

For all communication objects listed under 10.5 Special functions, the following applies:

The HbbTV feature on your TV device is used to display screen texts and camera links.

The ISE SMART CONNECT KNX Panasonic switches to the last HbbTV-capable source used (DVB-T/S/C, SAT\_IP).

Communication objects cannot be used with the analogue TV source. When using the TV device video text, press the <<Text>> button on your TV remote control to terminate the video text.



# 11 Troubleshooting

Error codes are displayed on the device website under << Device status>>.

If the error display has the value <<Inactive>>, no errors have occurred.

• The device website is not always updated automatically.

Use your browser's function to perform an update.

LEDs on the device provide you with further information:

- ► LEDs during device start-up, p. 25.
- ► LEDs in operation, p. 27.

The following table shows solutions for displayed error codes and possible configuration errors.

Problem	Troubleshooting
Camera image does not open	Cause: The transferred URL does not exist.
	Solution: Check the defined URL in the parameter < <camera links="">&gt;.</camera>
URL is not opened	Cause: A link with the configured number does not exist (only numbers 0-9 are valid).
	Solution:
	<ul> <li>Check the available numbers (ETS tab &lt;<camera links&gt;&gt;).</camera </li> </ul>
	<ul> <li>Enter the number of the desired link as the value of the communication object 32   132   232   332.</li> <li>▶ See Select source, p. 47.</li> </ul>
Table 36: Image transmission	

Table 36: Image transmission

Problem	Troubleshooting
Switching on takes a long time	The Wake on LAN function is not available for up to 30 sec- onds after switching off the TV device.
Device is not switched on	<ul> <li>Cause: Incomplete configuration of TV device</li> <li>Solution: <ul> <li>Switch the TV on using the remote control.</li> </ul> </li> <li>Configure the following settings under &lt;<menu network="" remote="" settings="" tv="">&gt;:</menu></li> </ul>
	<ul> <li>TV Remote = on</li> <li>Networked Standby = on</li> </ul>

Table 37: Switching on

Problem	Troubleshooting
Text is not displayed	Cause: A link with the configured number does not exist (only numbers 0-9 are valid).
	Solution:
	Check the available numbers (ETS tab < <screen texts="">&gt;).</screen>
	<ul> <li>Enter the number of the desired text as the value of the communication object 30   130   230   330.</li> <li>▶ See Text selection, p. 53.</li> </ul>
	You will not receive an error message if you have not entered any text under < <screen texts="">&gt;.</screen>
Table 38: Screen texts	

Problem	Troubleshooting
Status does not return a value	Error code: GetState
	Cause: The TV device not contactable.
	Solution: Wait 10 seconds and then check whether the TvComm error code is present. If the status value is still not sent, switch the TV device off for ten seconds.

Table 39: Status

Problem	Troubleshooting
Volume is changed, but you still can't hear anything	<ul> <li>Cause: You are using communication object 27   127   227   327</li> <li>► See Stepwise volume up/down, p. 52.</li> <li>If the sound is switched off (muted), increasing the volume will initially turn the sound on.</li> <li>Solution: Increase the volume further.</li> </ul>
Table 40: Sound volume	

Table 40: Sound, volume

Problem	Troubleshooting
TV device not contactable	Error code: TvComm
	Cause:
	The TV device is not connected to the network.
	• The wrong IP address has been entered in the ETS.
	The TV device is in standby mode.
	Solution:
	<ul> <li>Check the network connection between the TV device and ISE SMART CONNECT KNX Panasonic.</li> </ul>
	<ul> <li>If you have entered an IP address in the ETS, check that it is correct.</li> </ul>
	<ul> <li>If you have entered a host name in the ETS, check that it matches the host name of the connected router.</li> </ul>
	Switch the TV on using the remote control.
	<ul> <li>Configure the following settings under &lt;<menu network="" tv<br="">remote settings&gt;&gt;:</menu></li> </ul>
	<ul> <li>TV Remote = on</li> <li>Networked Standby = on</li> </ul>
TV device not contactable	Error code: TvIpConfig
	Cause: IP address or host name is not configured.
	Solution: Configure the IP address or host name for the TV device in the ETS < <panasonic <n="" device="" tv=""> &gt;&gt; → &lt;<ip address="">&gt; or &lt;<host name="">&gt;, ► Add Panasonic TV devices, p. 41.</host></ip></panasonic>
	If you have entered the wrong IP address, the error code TvComm will be displayed instead of TvIPConfig.

Problem	Troubleshooting
TV device not contactable	Cause: The TV device cannot be switched on via Wake on LAN during initial commissioning.
	<ul><li>Solution:</li><li>Switch on the TV device.</li><li>If the device is still not contactable, check the network connection.</li></ul>

Table 41: Communication and commands

Problem	Troubleshooting
Selecting the source has no effect	Cause: No device is connected to the source.
	Solution: Check whether a device is connected.
Source not contactable	Cause: <ul> <li>Selected sources are not connected.</li> <li>Cables are loose.</li> </ul> Solution: Check whether connected devices and network cables are correctly connected.
Source not contactable	Error code: SrcOutOfRng Cause: The value sent for the source is not supported. Solution: Correct the value according to the desired source. You will find te ID for the respective source under ► Supported sources, p. 48.
Table 42: Sources	

Table 42: Sources

Problem	Troubleshooting
The TV device does not switch on during initial commissioning	Error code: NoMAC Cause: The TV device's MAC address could not be determined since the TV device was not switched on manually for initial com- missioning. Solution: Switch on the TV device manually. The MAC address will be automatically transmitted.
Table 42: Missing MAC address	

Table 43: Missing MAC address

# **11.1 Generating log files**

Support uses log files to obtain information to help analyse your problem. You generate these log files via the device website and download them as a ZIP file.

You configure the scope of the information contained in the log files using the logging mode.

#### Changing logging mode

Requirement: The device website is open  $\blacktriangleright$  Calling up the start screen, p. 21.

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

< <simple>&gt;</simple>	Basic information is collected.
< <extended>&gt;</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

Requirement: The device website is open  $\blacktriangleright$  Calling up the start screen, p. 21. Our support may ask you to configure the logging mode.

- 1. Select <<System>>  $\rightarrow$  <<Download log file>> in the menu bar.
- 2. The log files are compiled and downloaded as a ZIP file.

# **11.2 Contacting Support**

If you have a problem with your ISE SMART CONNECT KNX Panasonic 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 of <<Device Status>> on the device website

### 11.3 FAQs - Frequently asked questions

#### Why is the screen text not displayed in full?

The window for the screen text offers limited space. In order to be able to read the text in full, use the cursor button  $\langle \langle \Psi \rangle \rangle$  on the TV device remote control.

#### How do I stop displaying the screen text or a camera link?

Press the Exit << X>> button on the TV device remote control.

#### Why do I have to reconfirm the screen text display every time?

TV models manufactured in 2018 or before are not equipped with a function to automatically interrupt the current image.

From manufacturing year 2019, you can confirm the setting <<Always>> in the TV context menu in order to prevent the query from being repeated.

#### Why is no screen text or camera image displayed?

- Are you only using the <Analogue TV> source? Activate the DVB-T input on your TV device.
- Are you in video text? Terminate the video text by pressing the <Text> button on your TV remote control.

# 12 Disassembly and Disposal

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

#### Removing the cover cap





- 1. Gently press in the cover cap at the side (see figure 25, item 1).
- 2. Pull off the cover cap upwards (see figure 25, item 2).



Figure 25: Removing the cover cap

### Detaching the device from the top-hat rail

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

- 1. Insert a screwdriver (see figure 26, item 1) into the release lever (see figure 26, item 2) and push the release lever down (see figure 26, item 3).
- 2. Take the device off the top-hat rail.



Figure 26: Detaching 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.



# Device



Old devices must not be disposed of with domestic refuse!

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

#### DP type, data point type

The data point type is the standard coding for data transmitted via group telegrams.

#### ETS (Engineering Tool Software)

The device is configured in the ETS software. The ETS is available with various ranges of functions from the KNX Association (www.knx.org).

#### FDSK (Factory Default Setup Key)

The FDSK is used for secure communication between category "KNX IP Secure Device" devices. The combination of FDSK and serial number enables each device to be unambiguously identified. Together, they 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.

The FDSK is printed on a sticker on the side of the device. A second sticker is enclosed with the product.

#### Firmware update tool

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

#### Flags (CRTWUI)

Every communication object has so-called flags with which the communication object obtains methods: C=Communication, R=Read, T=Transfer, W=Write, U=Update, I=Initialise.

#### **Device website**

Applications used to check device status, update loading and the display of device information.

#### HbbTV (Hybrid Broadcast Broadband TV)

Transmission standard in order to use external applications (such as screen texts via KNX) on the TV device.

#### Catalogue

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



#### Product database entry (also catalogue 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 in the form of a file by the device manufacturer. The latest version of product data entries from 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".

#### **Updates**

You will find information on new versions of the firmware in this documentation under the search term "Update".

#### 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.

#### Website

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

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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 Panasonic software or putting the ISE SMART CONNECT KNX Panasonic 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 Panasonic software.

Firmware: Software which is embedded on the ISE SMART CONNECT KNX Panasonic hardware and enables the ISE SMART CONNECT KNX Panasonic to operate.

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

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# 14.7.1 Software and documentation

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

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

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# 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 and 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 sending an e-mail to support@ise.de.

This offer is valid for 3 years after the service for this product has been discontinued.



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