Application description

KNX/App interface

36140-00.REG

10.KNX36140-E.1610/161004

by Schneider Electric

CONTENT

1 General

This document explains the individual parameters of the KNX/App interface and is intended as a configuration guide.

KNX/App interface
Application: KNX/App interface V1.0

The KNX/App interface connects KNX lines with a LAN or Wireless Access Point, to allow devices connected to the KNX bus to be operated with the Feller KNX App. This allows Smartphones and tablets to be used for remote operation of devices.

12 rooms with up to 12 functions each (e.g. switching, dimming, blinds, scenes, value, forced position of room thermostat, window, movement etc.) can be parameterised. Up to 5 users with differing access rights can be set up (see also *chapter 2.2*).

The 12–24 V AC, 12–30 V DC voltage is supplied externally or alternatively via Power-over-Ethernet (IEEE 802.3af).

Specifications

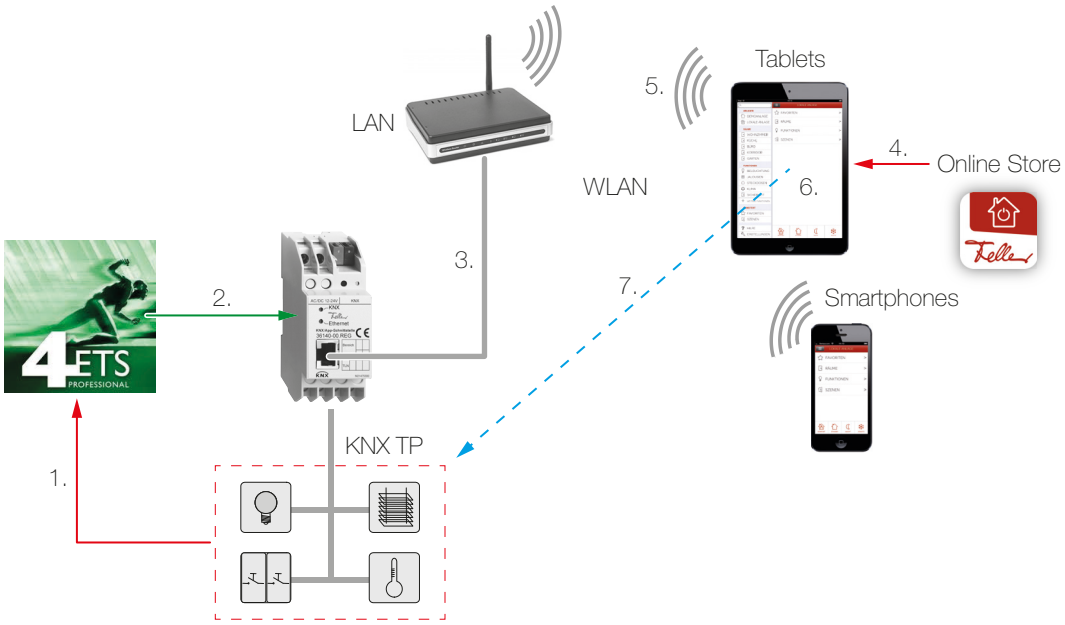
Environmental conditions:	
- Protection class (IEC 60529)	IP20, dry installation
- Ambient temperature	operation: –5 °C to +45 °C storage: –25 °C to +70 °C
KNX supply	
- Voltage	21–30 V DC SELV
- Connection	KNX bus connecting terminal
- Power input	typically 150 mW
External supply	
- Voltage	12–24 V AC / 12–30 V DC alternatively: Power-over-Ethernet
- Connection	screw terminals
- Power input	800 mW max.
Network	
- IP connection	RJ45 socket
- IP communication	Ethernet 10BaseT (10 Mbit)
- Protocols supported	ARP, ICMP, IGMP, DHCP, UDP/IP, KNXnet/IP (Core, Device Management)
Fitting width	36 mm (2 modules)

Note:
Additional installation information can be found in the installation instructions.

2 Functional description

2.1 Operating principle

Configuration and commissioning are simple to perform in ETS without plug-in.



1. ETS allows you to configure up to 12 rooms with up to 12 functions. Always link the feedback signal from the actuators/sensors with the corresponding communications objects (→ *chapter 3.1.1*) of the KNX/App interface. Only in this way can it be guaranteed that the Feller KNX App is updated with the current status of the functions to be operated.
2. Load the ETS application in the KNX/App interface.
3. Connect the KNX/App interface to the Wireless Access Point.
4. Obtain the Feller KNX App from the Online Store.
5. Establish a connection between mobile device and WLAN.
6. Start the KNX App and search in the CONFIGURATION menu item for the system or add it.
   Enter the user name and password that you set up in ETS.
7. Self-configuration now takes place automatically and the functions can be used.

2.2 Rooms - Functions - User - User rights

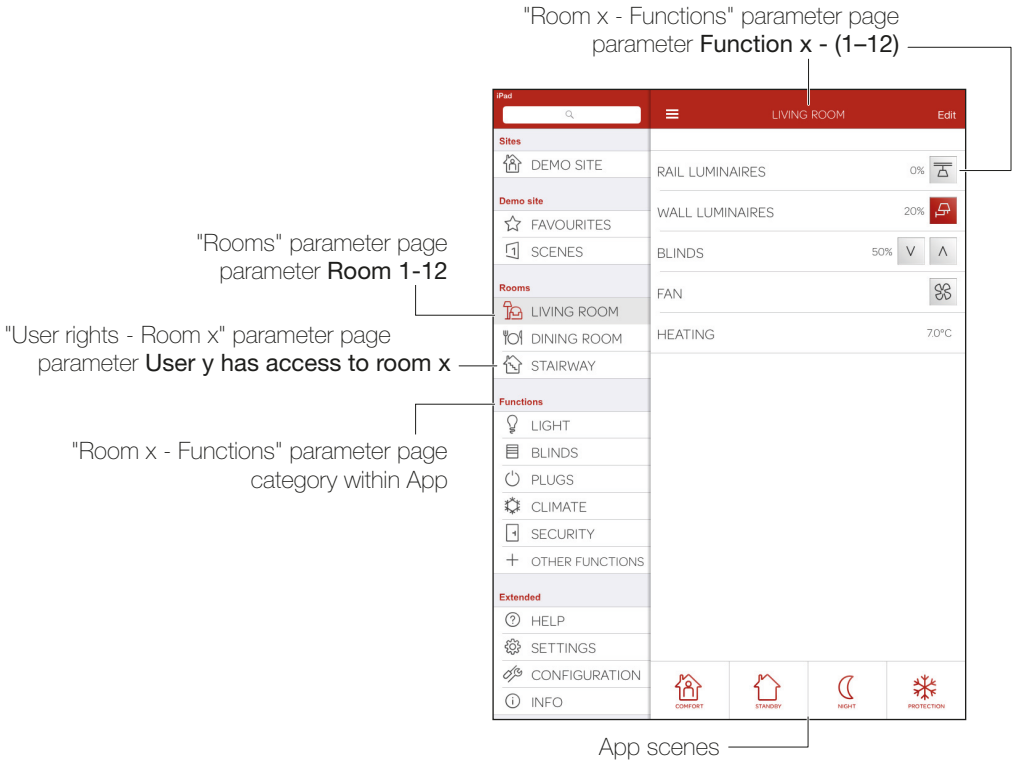
With the ETS application of the KNX/App interface up to 12 rooms with up to 12 functions each (e.g. switching, dimming, blinds, scenes, value, forced position of room thermostat, window, movement etc.) can be configured. Up to 5 users with differing access rights can be set up.

	"User" parameter page				
"Rooms" parameter page	User 1	User 2	User 3	User 4	User 5
Room 1					
Room 2					
Room 3					
…					
Room 11					
Room 12					

At the end of this application description there is a comprehensive table in which the user data for the site can be entered. Make a copy or download a PDF from the Internet at **www.feller.ch**.

KNX App

The Feller KNX App supports the end customer in controlling, displaying and monitoring the KNX system. It features intuitive operation with the user's own settings, rapid access to functions, the flexibility of scenes that can be defined within the App, and much more.



The Feller KNX App allows entry of the user's own settings on any mobile device. This gives the user the option of adding favourites, changing descriptions and/or symbols, and so on. If a user has two mobile devices and wishes to use the same user settings on both, these can be sent and received in the KNX App under SETTINGS.

The Feller KNX App is available from the Online Store.

2.3 Behaviour following ETS download or bus voltage return

Once the ETS application has been downloaded to the unit via ETS, the unit restarts. After a few seconds the device is ready to go.

If all LEDs on the KNX/App interface are flashing, then download may not have completed properly or the ETS application may be incompatible with the hardware.

Procedure:

1. Disconnect the device briefly from the KNX bus voltage
2. Check application compatibility
3. Check the physical address
4. Download the application again

Following a bus voltage failure the unit automatically starts once the voltage returns. The settings made during configuration are taken into account here.

The status of the individual functions is not read out once the voltage returns and may therefore differ from the functions. In order that the KNX App statuses correspond with the functions, these must be switched at least once.

3 The "KNX/App interface V1.0" application

3.1 Overview

Number of communications objects: 1000
Max. number of group addresses: 2000

For KNX system planning, commissioning and diagnostics, programming software is required: KNX Engineering Tool Software ETS Version 3 or higher. This allows the application program and its parameters, as well as the addresses, to be selected or generated and loaded into the unit.

The product database required by the KNX/App interface is available at **www.feller.ch**.
The KNX mark is your guarantee that products from different manufacturers can communicate with each other and that the commands issued by products from various manufacturers will be understood in the same way (command compatibility).

3.1.1 Communications objects

The following objects are visible as a function of the parameterisation.

Note: The default flags should only be modified in exceptional cases.

Important!
In order for the Feller KNX App to be used correctly, the feedback from the actuators/sensors must always be linked to the corresponding feedback objects of the KNX/App interface (marked in the table in the "F-Object" column).

F-object	Object name	Function	Type	DPT	Flags			
					R	W	T	U
	Room x - Function y	ON/OFF, switching	1 bit	1.001			x	
	1 bit object for transmitting switching telegrams (ON, OFF) to switch actuators. The object is visible for the following parameter settings: "Room x - Functions" – **Function x - y** = *Switching - Light* / *Switching - Plugs*							
					R	W	T	U
x	Room x - Function y	ON/OFF feedback, switching	1 bit	1.001		x	x	x
	1 bit object for receiving switching status (ON/OFF) from switch actuator (feedback signal) The object is visible for the following parameter settings: "Room x - Functions" – **Function x - y** = *Switching - Light* / *Switching - Plugs*							
					R	W	T	U
	Room x - Function y	ON/OFF, dimming	1 bit	1.001			x	
	1 bit object for transmitting a switching telegram (ON, OFF) to a dimming actuator. The object is visible for the following parameter settings: "Room x - Functions" – **Function x - y** = *Dimming - Light*							
					R	W	T	U
	Room x - Function y	Brighter/darker, dimming	4 bit	3.007			x	
	4 bit object for transmitting associated dimming telegrams to a dimming actuator. The object is visible for the following parameter settings: "Room x - Functions" – **Function x - y** = *Dimming - Light*							
					R	W	T	U
	Room x - Function y	Value, dimming	8 bit	5.001			x	
	8 bit object for transmitting an absolute dimming value (brightness value 0–100%) to a dimming actuator. The object is visible for the following parameter settings: "Room x - Functions" – **Function x - y** = *Dimming - Light*							

F-object	Object name	Function	Type	DPT	Flags			
					R	W	T	U
x	Room x - Function y	Value feedback, dimming	8 bit	5.001		x	x	x
	8 bit object for receiving a set dimming value (brightness value 0–100 %) from a dimming actuator (feedback signal). The object is visible for the following parameter settings: "Room x - Functions" – **Function x - y** = *Dimming - Light*							
					R	W	T	U
	Room x - Function y	Value, RGB dimming	3 byte				x	
	3 byte object for transmitting RGB telegrams to a DALI-Gateway, a DALI-EVG, or similar. The object is visible for the following parameter settings: "Room x - Functions" – **Function x - y** = *Dimming with RGB color value - Light* and **RGB objects** = *1 common 3 byte object*							
					R	W	T	U
x	Room x - Function y	Value feedback, RGB dimming	3 byte			x	x	x
	3 byte object for receiving the RGB values set from a DALI-Gateway, DALI-EVG or similar (feedback signal). The object is visible for the following parameter settings: "Room x - Functions" – **Function x - y** = *Dimming with RGB color value - Light* and **RGB objects** = *1 common 3 byte object*							
					R	W	T	U
	Room x - Function y	RED value, RGB dimming	8 bit	5.001			x	
	8 bit object for transmitting RED color value to a DALI-Gateway, a DALI-EVG, or similar. The object is visible for the following parameter settings: "Room x - Functions" – **Function x - y** = *Dimming with RGB color value - Light* and **RGB objects** = *3 single 1 byte objects*							
					R	W	T	U
	Room x - Function y	GREEN value, RGB dimming	8 bit	5.001			x	
	8 bit object for transmitting GREEN color value to a DALI-Gateway, a DALI-EVG, or similar. The object is visible for the following parameter settings: "Room x - Functions" – **Function x - y** = *Dimming with RGB color value - Light* and **RGB objects** = *3 single 1 byte objects*							
					R	W	T	U
	Room x - Function y	BLUE value, RGB dimming	8 bit	5.001			x	
	8 bit object for transmitting BLUE color value to a DALI-Gateway, a DALI-EVG, or similar. The object is visible for the following parameter settings: "Room x - Functions" – **Function x - y** = *Dimming with RGB color value - Light* and **RGB objects** = *3 single 1 byte objects*							
					R	W	T	U
x	Room x - Function y	RED feedback, RGB dimming	8 bit	5.001		x	x	x
	8 bit object for receiving the RED color value setting from a DALI-Gateway, DALI-EVG or similar (feedback signal). The object is visible for the following parameter settings: "Room x - Functions" – **Function x - y** = *Dimming with RGB color value - Light* and **RGB objects** = *3 single 1 byte objects*							

F-object	Object name	Function	Type	DPT	Flags			
					R	W	T	U
x	Room x - Function y	GREEN feedback, RGB dimming	8 bit	5.001		x	x	x
	8 bit object for receiving the GREEN color value setting from a DALI-Gateway, DALI-EVG or similar (feedback signal). The object is visible for the following parameter settings: "Room x - Functions" – **Function x - y** = *Dimming with RGB color value - Light* and **RGB objects** = *3 single 1 byte objects*							
					R	W	T	U
x	Room x - Function y	BLUE feedback, RGB dimming	8 bit	5.001		x	x	x
	8 bit object for receiving the BLUE color value setting from a DALI-Gateway, DALI-EVG or similar (feedback signal). The object is visible for the following parameter settings: "Room x - Functions" – **Function x - y** = *Dimming with RGB color value - Light* and **RGB objects** = *3 single 1 byte objects*							
					R	W	T	U
	Room x - Function y	UP/DOWN, blind	1 bit	1.008			x	
	1 bit object for transmitting telegrams, by which the blinds can be moved up or down. The object is visible for the following parameter settings: "Room x - Functions" – **Function x - y** = *Blind - Blinds*							
					R	W	T	U
	Room x - Function y	Step/stop, blind	1 bit	1.008			x	
	1 bit object for transmitting telegrams, by which the blinds can be stopped or slats adjusted. The object is visible for the following parameter settings: "Room x - Functions" – **Function x - y** = *Blind - Blinds*							
					R	W	T	U
	Room x - Function y	Blind position, blind	8 bit	5.001			x	
	8 bit object for transmitting blind position (0–100%) to a blind actuator. The object is visible for the following parameter settings: "Room x - Functions" – **Function x - y** = *Blind - Blinds*							
					R	W	T	U
	Room x - Function y	Slat position, blind	8 bit	5.001			x	
	8 bit object for transmitting slat position (0–100%) to a blind actuator. The object is visible for the following parameter settings: "Room x - Functions" – **Function x - y** = *Blind - Blinds*							
					R	W	T	U
x	Room x - Function y	Blind position feedback, blind	8 bit	5.001		x	x	x
	8 bit object for receiving blind position (0–100%) from a blind actuator (feedback signal). The object is visible for the following parameter settings: "Room x - Functions" – **Function x - y** = *Blind - Blinds*							
					R	W	T	U
x	Room x - Function y	Slat position feedback, blind	8 bit	5.001		x	x	x
	8 bit object for receiving slat position (0–100%) from a blind actuator (feedback signal). The object is visible for the following parameter settings: "Room x - Functions" – **Function x - y** = *Blind - Blinds*							

F-object	Object name	Function	Type	DPT	Flags			
					R	W	T	U
	Room x - Function y	UP/DOWN, shutter	1 bit	1.008			x	
	1 bit object for transmitting telegrams, by which roller shutters can be moved up or down. The object is visible for the following parameter settings: "Room x - Functions" – **Function x - y** = *Shutter - Blinds*							
					R	W	T	U
	Room x - Function y	Stop, shutter	1 bit	1.008			x	
	1 bit object for transmitting telegrams, by which shutters can be stopped. The object is visible for the following parameter settings: "Room x - Functions" – **Function x - y** = *Shutter - Blinds*							
					R	W	T	U
	Room x - Function y	Shutter position, shutter	8 bit	5.001			x	
	8 bit object for transmitting shutter position (0–100%) to a blind actuator. The object is visible for the following parameter settings: "Room x - Functions" – **Function x - y** = *Shutter - Blinds*							
					R	W	T	U
x	Room x - Function y	Shutter position feedback	8 bit	5.001		x	x	x
	8 bit object for receiving shutter position (0–100%) from a blind actuator (feedback signal). The object is visible for the following parameter settings: "Room x - Functions" – **Function x - y** = *Shutter - Blinds*							
					R	W	T	U
	Room x - Function y	Recall/save, scene	8 bit	18.001			x	
	8 bit object for recalling or saving one of a maximum of 64 KNX scenes (not to be confused with the Feller KNX App scenes) in the actuator. The object is visible for the following parameter settings: "Room x - Functions" – **Function x - y** = *Scenes - Light* and **Scene function** = *Recall/save scene*							
					R	W	T	U
	Room x - Function y	Recall, scene	8 bit	18.001			x	
	8 bit object for recalling one of a maximum of 64 KNX scenes (not to be confused with the Feller KNX App scenes) in the actuator. The object is visible for the following parameter settings: "Room x - Functions" – **Function x - y** = *Scenes - Light* and **Scene function** = *Recall scene*							
					R	W	T	U
x	Room x - Function y	"Data type", value				x	x	x
	Object for receiving and displaying values of a freely-selectable data type. This object is not transmitted, serving for display solely within the KNX App. The object is visible for the following parameter settings: "Room x - Functions" – **Function x - y** = *Value - Other functions*							
					R	W	T	U
	Room x - Function y	OFF/AUTO/ON, forced position	2 bit	2.001			x	
	2 bit object for transmitting forcing telegrams. Polarity (Bit 1 / Bit 0): 0x = no forced position (normal operation) ; 10 = switch off forced position ; 11 = switch on forced position The object is visible for the following parameter settings: "Room x - Functions" – **Function x - y** = *Forced position Off/Auto/On - Other functions*							

F-object	Object name	Function	Type	DPT	Flags			
					R	W	T	U
x	Room x - Function y	OFF/AUTO/ON feedback, forced	2 bit	2.001		x	x	x
	2 bit object for receiving forcing telegram feedback signals. Polarity (Bit 1 / Bit 0): 0x = no forced position (normal operation) ; 10 = forced position switched off ; 11 = forced position switched on The object is visible for the following parameter settings: "Room x - Functions" – **Function x - y** = *Forced position Off/Auto/On - Other functions*							
					R	W	T	U
	Room x - Function y	Set point temperature, default	2 byte	9.001			x	
	2 byte object for transmitting the default set value to a room thermostat. The object is visible for the following parameter settings: "Room x - Functions" – **Function x - y** = *Room thermostat - Climate* and **Choose set point temperature** = *Allow*							
					R	W	T	U
x	Room x - Function y	Set point temperature, set	2 byte	9.001		x	x	x
	2 byte object for receiving the basic set value from a room thermostat (feedback signal). The object is visible for the following parameter settings: "Room x - Functions" – **Function x - y** = *Room thermostat - Climate*							
					R	W	T	U
x	Room x - Function y	Actual temp., control value	2 byte	9.001		x	x	x
	2 byte object for receiving the actual temperature measured by a room thermostat or temperature sensor (feedback signal). The object is visible for the following parameter settings: "Room x - Functions" – **Function x - y** = *Room thermostat - Climate*							
					R	W	T	U
	Room x - Function y	Contr. oper. mode, all modes	8 bit	20.102			x	
	8 bit object for switching the operating mode of the room thermostat according to KNX specification Values: 01 = Comfort mode ; 02 = Standby mode ; 03 = Night mode ; 04 = Frost/heat protection. The object is visible for the following parameter settings: "Room x - Functions" – **Function x - y** = *Room thermostat - Climate* and **Choose operating mode** = *Allow*							
					R	W	T	U
x	Room x - Function y	Feedback, operating mode	8 bit			x	x	x
	8 bit object for receiving the current operating mode of the room thermostat according to KNX specification Values: 01 = Comfort mode ; 02 = Standby mode ; 03 = Night mode ; 04 = Frost/heat protection. The object is visible for the following parameter settings: "Room x - Functions" – **Function x - y** = *Room thermostat - Climate*							
					R	W	T	U
x	Room x - Function y	OPEN/CLOSE feedback, window	1 bit			x	x	x
	1 bit object for receiving window contact feedback. Polarity: 1 = Window opened ; 0 = Window closed. The object is visible for the following parameter settings: "Room x - Functions" – **Function x - y** = *Window - Security*							
					R	W	T	U
x	Room x - Function y	OPEN/CLOSE feedback, door	1 bit			x	x	x
	1 bit object for receiving door contact feedback. Polarity: 1 = Door opened ; 0 = Door closed. The object is visible for the following parameter settings: "Room x - Functions" – **Function x - y** = *Door - Security*							

F-object	Object name	Function	Type	DPT	Flags			
					R	W	T	U
x	Room x - Function y	YES/NO feedback, rain	1 bit	1.002		x	x	x
	1 bit object for receiving a rain alarm from a KNX weather station. Polarity: 1 = Rain ; 0 = No rain. The object is visible for the following parameter settings: "Room x - Functions" – **Function x - y** = *Rain - Climate*							
					R	W	T	U
x	Room x - Function y	YES/NO feedback, present	1 bit	1.002		x	x	x
	1 bit object for receiving a presence message from a movement or presence detector Polarity: 1 = Movement ; 0 = No movement. The object is visible for the following parameter settings: "Room x - Functions" – **Function x - y** = *Movement - Security*							
					R	W	T	U
x	Room x - Function y	YES/NO feedback, smoke	1 bit	1.002		x	x	x
	1 bit object for receiving a smoke alarm from a smoke detector. Polarity: 1 = Smoke ; 0 = No smoke. The object is visible for the following parameter settings: "Room x - Functions" – **Function x - y** = *Smoke - Security*							

3.2 KNX/App interface parameters

First, the required parameters must be specified in the ETS application. These parameter settings are saved in the KNX/App interface during the ETS download. Prior to the ETS download, the KNX/App interface must be programmed with a unique physical address by the ETS.

Note: Always configure from top to bottom.

3.2.1 "Common" parameter page

In the "Common" parameter page you can define access to the KNX/App interface.

Parameter **Device name** assigns a chosen name for the KNX/App interface. This should be as meaningful as possible so that when a number of KNX/App interfaces are in use it can be searched for and identified within the WLAN.

Device name	max. 30 characters

Parameter **IP address assignment** defines the type of IP address assignment.

IP address allocation	***DHCP*** *Manual*
DHCP	IP address assignment takes place automatically via DHCP (Dynamic Host Configuration Protocol), e.g. the KNX/App interface obtains its IP address from a DHCP server (which must be on the LAN). Common WLAN routers have an integrated DHCP server.
Manual	The IP address, subnet mask and gateway IP address are entered manually. The "IP Configuration 1" and "IP Configuration 2" parameter pages are visible (→ *chapter 3.2.2*).

Parameter **Max. number of telegrams sent per second** specifies how many telegrams the KNX/App interface can be sent per second. The *Dimming with RGB color value* in particular can generate a high flow of telegrams.

Max. number of telegrams sent per second	*1–20 telegrams* (***10 telegrams***) *Unlimited*
1–20 telegrams	Number of telegrams that can be sent by the KNX/App interface. For large projects this allows excessive loading of the bus to be avoided.
Unlimited	No restriction applies.

If the number of telegrams to be transmitted reaches the setting in **Max. number of telegrams sent per second**, the queued telegrams will be held back. The values themselves are stored in the 1000 objects and sent on the bus as soon as possible. If a new value has been stored for an object in the meantime, the last value is sent.

3.2.2 "IP Configuration 1" and "IP Configuration 2" parameter pages

The "IP Configuration 1" and "IP Configuration 2" parameter pages allow you to configure the IP address of the KNX/App interface.

Manual definition of the IP address calls for sufficient knowledge of IP addressing. If you are unsure or have any queries please talk to your network specialist.

Parameter **IP address** defines the IPv4 address of the KNX/App interface.

Bytes 1–4 *0..255*

Parameter **IP subnet** defines the subnet mask. Together with the IP address, the subnet mask defines which devices belong to the actual local network and which can be reached via a gateway on other networks. Thus the KNX/App interfaces serves to define whether you can send a communication partner telegrams directly (on the local network) or via a gateway (not in the local network).

Bytes 1–4 *0..255*

Parameter **IP gateway** defines the IPv4 address of the gateway. This handles communication with a device in another network.

Bytes 1–4 *0..255*

Note: If the KNX/App interface is used only on the local network then the entry 0.0.0.0 can remain as it is.

3.2.3 "User" parameter page

The "User" parameter page allows you to set up a maximum of 5 users with corresponding user names.

Note:

> The Feller KNX App uses ISO 8859-1 character encoding (Latin-1, Western European). In the event of problems the ETC must be adjusted accordingly.

Parameter **User 1** defines (as a rule) the user with access to all rooms defined (super user). It cannot be deactivated.

User 1	*Active*
Active	The **User name** and **Password** parameters are visible.

Parameter **User 2–5** defines a user with user rights to be specified.

User 2–5	*Not active* *Active*
Not active	The user is not active.
Active	The user is active. The **User name** and **Password** parameters are visible.

Parameter **User name** assigns a meaningful name to the user.

User name	max. 10 characters

Parameter **Password** defines the user password. This must be entered together with the user name in the Feller KNX App, in order to be able to perform the corresponding functions.
Upper/lower case-sensitive.

Password	max. 10 characters

3.2.4 "Rooms" parameter page

The "Rooms" parameter page allows you to define in which rooms functions are to be operated with the Feller KNX App according to the end customer's instructions.

Parameter **Room 1–12** activates the respective room for the Feller KNX App. For each room you can define the functions that can be performed in the corresponding "Room x - Functions" (→ *chapter 3.2.6*) parameter page.

Room 1–12	*Not active* *Active*
Not active	The room is not needed, it does not appear in the Feller KNX App.
Active	For this room up to 12 functions will be defined. The **Name** parameter is visible. The "User rights - Room x" parameter page is visible.

Parameters **Name** assigns a meaningful name to the room (e.g. living room).

Name	max. 24 characters

Note:

> For ease of legibility the KNX App automatically adjusts for upper/lower case text.

3.2.5 "User rights - Room x" parameter pages

The "User rights - Room x" parameter page allows you to define which user has access to which rooms (see also *chapter 2.2*).

Access rights **cannot** be restricted to individual functions in a room.
The only way to do this is to split a physical room (e.g. the bedroom) into several logical rooms (e.g. Room 1 = bedroom light, Room 2 = bedroom blind, Room 3 = living room controller) and assign the rights for Rooms 1–3 accordingly.

Parameter **User (1–5) has access to room x** defines whether the corresponding user may perform the functions defined for this room.

User (1–5) has access to room x	*Yes* *No*

3.2.6 "Room x - functions" parameter pages

The "Room x - Functions" parameter page allows you to define up to 12 functions per room. The functions are shown in the Feller KNX App by room (Rooms) broken down by category (Functions).

Notes:

> The Feller KN App automatically assigns a category to each function. These may be changed within the KNX App by the end customer.

> The Feller KNX App automatically assigns each function a standard symbol. This may be changed within the KNX App by the end customer.
Example, lighting: Change standard symbol to

> During self-configuration the Feller KNX App performs the function definitions in order. Ensure, therefore, that they are in a meaningful sequence. The order can be changed within the KNX App by the end customer, but changes are **not** written back to the ETS application.

> Where possible changes by the end customer are also retained following an ETS download.

> If the end customer would like to reset all of his personal settings, the KNX/App interface can be deleted in menu item CONFIGURATION > "*relevant site*" > "*relevant KNX/App interface*". The KNX/App interface is found again by scrolling downwards. After entering the user name and the password, the default settings that the system integrator defined in the ETS are loaded.

Parameter **Function x - (1–12)** defines which function can be performed in Room x.

Function x - (1–12)	***Not active*** *Switching - Light* *Switching - Plugs* *Dimming - Light* *Dimming with RGB color value - Light* *Blind - Blinds* *Shutter - Blinds* *Scenes - Light* *Value - Other functions* *Forced position Off/Auto/On - Other functions* *Room thermostat - Climate* *Window - Security* *Door - Security* *Rain - Climate* *Movement - Security* *Smoke - Security*
Not active	The corresponding function is not active.
Switching - Light	A light (Functions LIGHT) can be switched on and off. The object < x – ON/OFF, switching> is visible. The object < x – ON/OFF feedback, switching> is visible.
Switching - Plugs	A switched Socket (Functions PLUGS) can be switched on and off. The object < x – ON/OFF, switching> is visible. The object < x – ON/OFF feedback, switching> is visible.

Dimming - Light	A light (Functions LIGHT) can be dimmed. The object < x – ON/OFF, dimming> is visible. The object < x – Brighter/darker, dimming> is visible. The object< x – Value, dimming> is visible. The object < x – Value feedback, dimming> is visible.
Dimming with RGB color value - Light	The brightness and color of an LED lamp can be controlled (Functions LIGHT). The **RGB objects** parameter is visible.
Blind - Blinds	A blind (Functions BLINDS) can be raised and lowered. The object < x – UP/DOWN, blind> is visible. The object < x – Step/stop, blind> is visible. The object < x – Blind position, blind> is visible. The object < x – Slat position, blind> is visible. The object < x – Blind position feedback, blind> is visible. The object < x – Slat position feedback, blind > is visible.
Shutter - Blinds	A shutter (Functions BLINDS) can be raised and lowered. The object < x – UP/DOWN, shutter> is visible. The object < x – Stop, shutter> is visible. The object < x – Shutter position, shutter> is visible. The object < x – Shutter position feedback> is visible.
Scenes - Light	A KNX scene stored in the actuator (Functions OTHER FUNCTIONS) can be called up and saved as required. The **Scene function** and **Scene number** parameters are visible.
Value - Other functions	The notified value is shown under Functions OTHER FUNCTIONS. The **Data type** and **Unit** parameters are visible. Depending on the value for the **Data type** parameter the object < x – "Data type", value> is visible.
Forced position Off/Auto/On - Other functions	A a device can be forced to switch on or off (Functions OTHER FUNCTIONS). The object < x – OFF/AUTO/ON, forced position> is visible. The object < x – OFF/AUTO/ON feedback, forced> is visible.
Room thermostat - Climate	The settings of a room thermostat (Functions CLIMATE) can be displayed and changed where enabled. The **Choose operating mode** and **Choose set point temperature** parameters are visible. The objects < x – Set point temperature, set>, < x – Actual temp., control value> and < x – Feedback, operating mode> are visible.
Window - Security	The status reported by a window contact is displayed under Functions SECURITY. The object < x – OPEN/CLOSE feedback, window> is visible.
Door - Security	The status reported by a door contact is displayed under Functions SECURITY. The object < x – OPEN/CLOSE feedback, door> is visible.
Rain - Climate	The rain alarm issued by a KNX weather station (e.g. Feller 4720.MS) is displayed under Functions CLIMATE. The object < x – YES/NO feedback, rain> is visible.
Movement - Security	The presence reported by a movement or presence detector is displayed under Functions SECURITY. The object < x – YES/NO feedback, present> is visible.
Smoke - Security	The smoke alarm reported by a smoke detector is displayed under Functions SECURITY. The object < x – YES/NO feedback, smoke> is visible.

Parameter **Description** gives the function a meaningful description (e.g. chandelier).

Description	max. 20 characters

Note:

> The description may be changed within the KNX App by the end customer.

Parameter **RGB objects** define the data format with which the numerical portions of the colors red, green and blue are to be sent via the bus.

RGB objects	***1 common 3 byte object*** *3 single 1 byte objects*
1 common 3 byte object	The RGB values are sent and received with 3 byte objects. The objects < x – Value, RGB dimming> and < x – Value feedback, RGB dimming> are visible. **Note:** Not all DALI gateways support DALI-EVGs or other 3 byte objects.
3 single 1 byte objects	The RGB values are sent and received with 3 single 1 byte objects. The objects < x – RED value, RGB dimming>, < x – GREEN value, RGB dimming> and < x – BLUE value, RGB dimming>, as well as < x – RED feedback, RGB dimming>, < x – GREEN feedback, RGB dimming> and < x – BLUE feedback, RGB dimming> are visible.

Parameter **Scene function** defines which commands a KNX scene call up performs

Scene function	*Recall scene* ***Recall / save scene***
Recall scene	If the key is pressed briefly a simple scene recall is generated. Prolonged pressing of the key serves no purpose. The object < x – Recall, scene> is visible.
Recall/save scene	If the key is pressed briefly a simple scene recall is generated. Prolonged pressing of the key sends a save telegram over the bus and the actuators involved save the current value. The object < x – Recall/save, scene> is visible.

The Feller KNX App makes a distinction between App scenes and KNX scenes:

App scenes are defined fully within the KNX App and relate to the current mobile device. The SCENES menu item allows you to add, rename, define and/or delete these.

KNX scenes are configured by the system integrator and can thus be triggered from various control points within the building and also by the KNX App. KNX scenes are stored under Functions OTHER FUNCTIONS.

Parameter **Scene number** defines the corresponding scene number in the actuator.

Scene number	*1..64* **Note:** Not all actuators support the maximum number of 64 scenes.

Parameter **Data type** defines the data type for receiving and displaying a value.

Data type	*1 bit (DPT 1.xxx)* *8 bit unsigned value (DPT 5.001, percentage)* *8 bit unsigned value (DPT 5.xxx)* *8 bit signed value (DPT 6.xxx)* *2 byte unsigned value (DPT 7.xxx)* *2 byte signed value (DPT 8.xxx)* *2 byte float value without fraction (DPT 9.xxx)* *2 byte float value with fraction (DPT 9.xxx)* *4 byte unsigned value (DPT 12.xxx)* *4 byte signed value (DPT 13.xxx)* *4 byte float value without fraction (DPT 14.xxx)* *4 byte float value with fraction (DPT 14.xxx)*

Parameter **Unit** defines the unit (text) to be displayed with the value.

Unit	max. 5 characters

Parameter **Choose operating modes** defines whether the operating mode of the room thermostats can be switched.

Choose operating modes	*Do not allow* ***Allow***
Do not allow	The operating mode is displayed only and cannot be switched.
Allow	The operating mode is switched according to the KNX specification with the 8 bit object < x – Contr. oper. mode, all modes>.

Parameter **Choose set point temperature** defines whether the set point temperature of the current operating mode can be changed.

Choose set point temperature	*Do not allow* ***Allow***
Do not allow	The set point temperature is displayed only and cannot be switched.
Allow	The set point temperature can be specified for the room thermostat with the 2 byte object < x – Set point temperature, default>.

KNX/App interface

Site: .....

KNX/App interface device name: .....

	User 1	User 2	User 3	User 4	User 5
User name:	.....	.....	.....	.....	.....
Password:	.....	.....	.....	.....	.....
Room 1					
Room 2					
Room 3					
Room 4					
Room 5					
Room 6					
Room 7					
Room 8					
Room 9					
Room 10					
Room 11					
Room 12					

The Feller KNX App is available from the Online Store.

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