

C4-KNX-USB

USB Interface

User Guide



Control⁴

This manual describes the function and configuration of the *USB Interface*.

USB Interface User Guide, SKU: C4-KNX-USB.

Subject to change.

Exclusion of liability:

Although the contents of this document have been checked to ensure that they are consistent with the hardware and software, deviations cannot be completely excluded.

We therefore cannot accept liability. Any necessary corrections will be incorporated in new versions of the manual.

Please inform us of any suggested improvements.

200-00599-B C4-KNX-USB 06142019 LW

Control4® KNX

1. General

The Control4® KNX USB Interface (C4-KNX-USB) is a KNX modular installation device (MDRC) in Pro M design for installation in the distribution board on a 35 mm mounting rail.

The USB Interface enables communication between ETS and a KNX system (programming, bus monitoring, group monitoring). Visual display systems (or other clients) can also use the USB to access KNX.

The device is connected to the computer via a type B USB cable and is ready for use as soon as the USB is connected. The necessary driver is automatically installed under Windows the first time it is connected.

Operating status and telegram traffic are displayed via three LEDs. The KNX and USB components are electrically isolated from each other.

1.1. USB suspend

As soon as the computer goes into sleep mode or the USB Interface is not being used, the C4-KNX-USB can be put into sleep mode. In this case, the LEDs will turn off.

1.2. Bus monitoring mode and group monitoring mode

The USB Interface supports the bus monitoring mode. The C4-KNX-USB cannot be used for further operations, such as the download function, when switched to the bus monitoring mode.

In group monitoring mode, further operations can be performed in parallel.

1.3. KNX long frames

Standard KNX telegrams are restricted to a length of 15 bytes of payload data. This is referred to as APDU = 15. For certain operations it can be advantageous to increase the load capacity. This is referred to as "long frames." Long frames can enable faster downloads for certain devices and are required to program KNX Secure devices.

It is necessary for the device that is supposed to be programmed (and all couplers that are connected between it and the USB Interface) to support long frames. The ETS (from version ETS5) recognizes this automatically and adjusts the length of the telegrams accordingly.

The C4-KNX-USB supports a maximum APDU length of 55.

Note: For the shortest possible download time, the USB Interface should be installed in the same line as the target device.

1.4. Commissioning

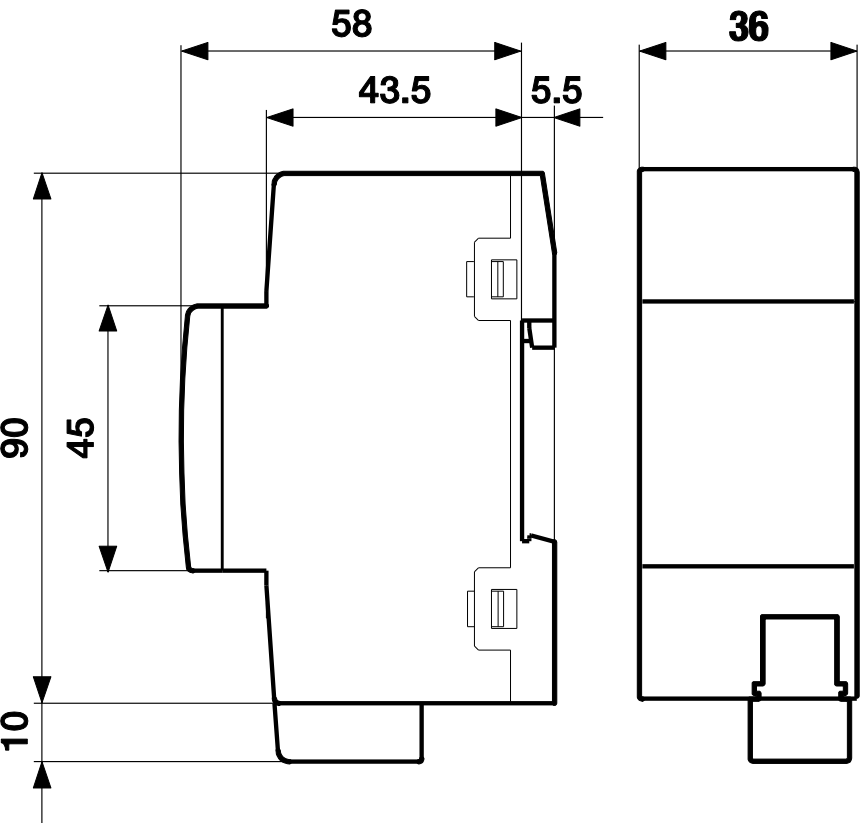
As soon as the USB and KNX are connected, the USB Interface appears in the ETS under "Discovered Interfaces." Then all you have to do is change the physical address via the connection settings. No further settings are required. The USB Interface is supplied with the physical address 15.15.255.

No application program is required, and the programming button/LED are without a function.

The USB Interface is supported as of version ETS3.0f.

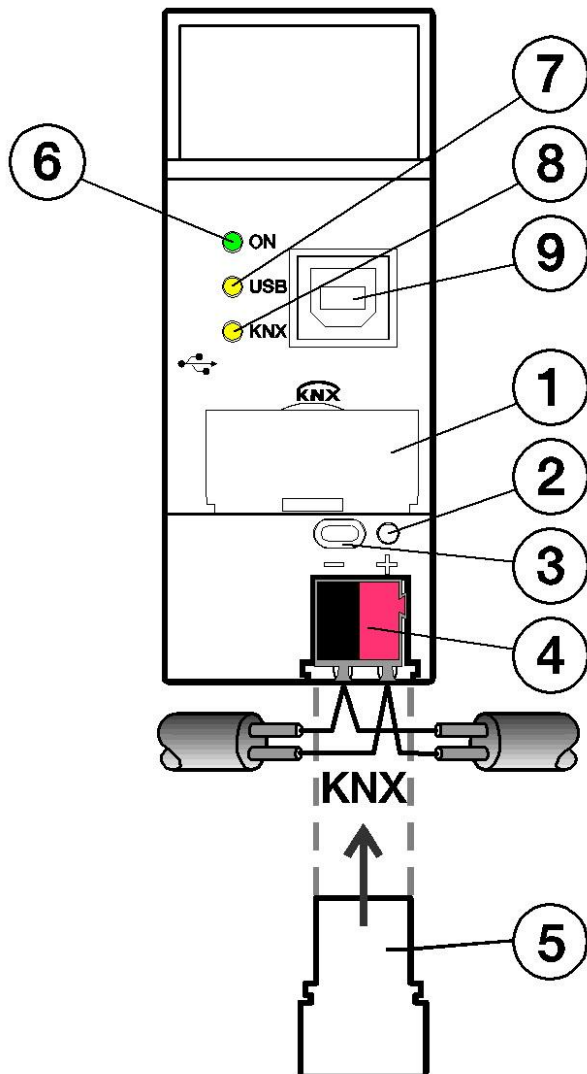
Control4® KNX

1.5. Dimension drawing



Control4® KNX

1.6. Connection



LEGEND

- 1 Label carrier
- 2 KNX programming LED (red) (no function)
- 3 KNX programming button (no function)
- 4 Bus connection terminal
- 5 Cover cap
- 6 ON LED (green)
- 7 USB LED (yellow)
- 8 KNX LED (yellow)
- 9 Type B USB connector

1.7. Technical data

Technical data		
Supply	Supply voltage	
	KNX	Via KNX bus (21...30 V DC)
	USB	5 V DC
	Current consumption	
	KNX	Max. 3 mA
	USB	Max. 15 mA
	Power loss	
	KNX	Max. 100 mW
	USB	Max. 75 mW
	Total power dissipation	Max. 200 mW
Connections	KNX	KNX connection terminal, 0.8 mm Ø, solid wire
	USB	USB standard 1.1, type B connector Max. cable length of 5 m
Operating and display elements	LED green	Ready indicator
	LED yellow	USB ready indicator
	LED yellow	KNX bus connected indicator
	KNX programming LED and button	Without function
Degree of protection	IP 20	To EN 60 529
Protection class	II	To EN 61 140
Isolation category	Overvoltage category	III to EN 60 664-1
	Pollution degree	II to EN 60 664-1
KNX safety extra low voltage	SELV 24 V DC	SELV 24 V DC
Temperature range	Operation	- 5...+45 °C
	Transport	-25...+70 °C
	Storage	-25...+55 °C
Ambient conditions	Maximum air humidity	95%, no condensation allowed
	Atmospheric pressure	Atmosphere up to 2,000 m
Design	Modular DIN rail component (MDRC)	Modular installation device
	Design	pro M
	Housing/color	Plastic housing, gray, halogen-free
Dimensions	Dimensions	90 x 36 x 63.5 mm (H x W x D)
	Mounting width in space units	2x 18 mm modules
Mounting	On 35 mm mounting rail	To EN 60 715
Mounting position	Any	
Weight		0.07 kg
Fire classification		Flammability V-0 as per UL94
Approvals	KNX certification	To EN 50491 and EN 60 669-2-5
CE marking	In accordance with the EMC and Low Voltage Directives	

Control4® KNX

Software						
Device type	Application	Max. number of group objects	Max. number of group addresses	Max. number of assignments	Max. number of logic elements	Web UI inputs and outputs
An ETS application is not necessary.						

Ordering details			
Device type	Product name	Weight 1 pc. [kg]	Packaging [pcs.]
C4-KNX-USB	USB Interface	0.07	1



Control4.com | 888.400.4070

©2019, Control4 Corporation. All rights reserved. Control4, the Control4 logo, and the 4-ball logo, are registered trademarks or trademarks of Control4 Corporation in the United States and/or other countries. All other names and brands may be claimed as the property of their respective companies. All specifications subject to change without notice.