



## Quick Start Guide SDS KNX plug-in for Q-SYS™ v1.1.1

### Generally

The SDS KNX plug-in can be downloaded for free in the dealer area. All settings can also be made without a license. The plugin uses the KNX over IP standard. The plug-in thus communicates with the KNX gateway via the network. An ABB KNX Gateway IPS / S3.1.1 is to be used as hardware. This can be purchased from SDS as a package with the appropriate license key. The license key is linked to the MAC address of the gateway.

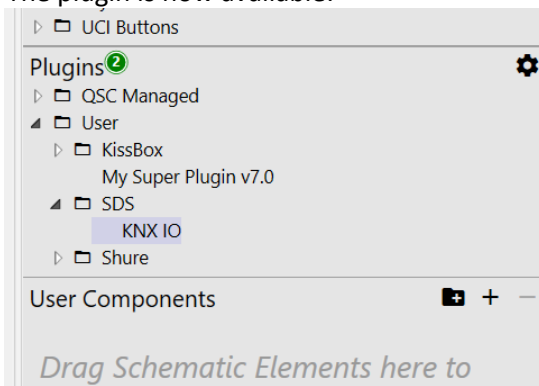
### Features:

- 200 group addresses
- 1 bit commands
  - DPT1.xxx
  - EIS1, EIS7
- 4bit commands
  - DPT3.007
  - EIS2
- 1-byte commands
  - DPT5.xxx, DPT6.xxx, DPT20.xxx
  - EIS6, EIS14
  - The maximum value can be defined between 1 and 255.
- Labeling field per group address
- Labeling and group addresses can be used from Excel using CTRL-C and CTRL-V.
- One readback group address per group address, should this differ.
- The value can be read from the bus for each group address (Read).
- «Read all» for reading all values from the bus.



### **Add plugin**

- 1) Install the plugin file «KNXGateway v1-1-1.qplugx» by double-clicking it
- 2) Restart QSYS Designer
- 3) The plugin is now available:



### **Settings in the plugin (KNX IP Properties)**

KNX IO Properties	
LicenseKey	
Number	6
Slot1	1 Bit
Slot2	1 Byte
Slot2 Limit	255
Slot3	1 Byte
Slot3 Limit	255
Slot4	1 Bit
Slot5	Empty
Slot6	Empty

**LicenseKey:** Enter the license key you received here.

**Number:** Enter the desired number of group addresses here.

**Slotxxx:** Here you can choose between the different data types.

1bit

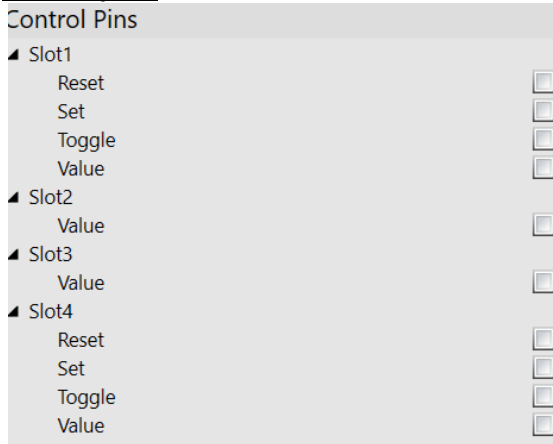
4bit

1byte

**Slotxxx Limit:** Value between 1 and 255. This value defines the upper limit of the control range.



### **Control pins:**



#### **1 bit**

- Reset: Sets / sends the value «0» to the respective group address. (Trigger)
- Set: Sets / sends the value «1» to the respective group address. (Trigger)
- Toggle: Sets / sends the inverse value to the value currently available on the «Value». (Trigger)
- Value: Sets / sends the inverse value of the value currently available on the «Value». (Toggle).  
Serves as feedback / receives values. (true / false)

#### **4 bit**

- Down: Sets / sends a down command with the associated step size to the respective group address.  
(Momentary)
- Up: Sets / sends an Up command with the associated step size to the respective group address.  
(Momentary)
- Step Size: Selection of the step size. The standard size is 100%. (Combo box)

#### **1 byte**

- Value: Sets / sends the value set with the controller. (Integer 0-1 to 0-255).  
Serves as feedback / receives values. (Integer 0-255)



## Settings:

SDS KNX Gateway

KNX Gateway: \_\_\_\_\_

Address / Port

INVALID LICENSE FOR CONFIGURED NUMBER OF SLOTS 4 / 8

Control Slots: \_\_\_\_\_

Slot	GA	(Rx)	Note	Value	Toggle	Set	Reset	Read
#001 (1 Bit)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="button"/>	<input type="button"/>	<input type="button"/>	<input type="button"/>
#002 (4 Bit)	<input type="text"/>	<input type="text"/>	<input type="text"/>	Step Size <input type="text"/>	<input type="button" value="Up"/>	<input type="button" value="Down"/>	<input type="button"/>	<input type="button"/>
#003 (1 Byte)	<input type="text"/>	<input type="text"/>	<input type="text"/>	0 <input type="text"/>	<input type="button"/>	<input type="button"/>	<input type="button"/>	<input type="button"/>
#004 (1 Byte)	<input type="text"/>	<input type="text"/>	<input type="text"/>	0 <input type="text"/>	<input type="button"/>	<input type="button"/>	<input type="button"/>	<input type="button"/>
#005 (Empty)								
#006 (Empty)								

SDS Q-SYS KNX Plugin, Version 1.1.0

## General:

Address: IP address of the gateway

Port: Port of the gateway (default 3671)

Status display: Connection status of the network connection to the gateway

Debug Output: Shows the detailed messages on the connection status and communication with the KNX bus. The debug is indicated if "Show Debug" is set to "Yes" in the properties.  
-> Information on the connection status is also written to the error log.

## Slots:

Read all: The current values for all group addresses are queried from the bus. (Trigger)

### 1 bit

GA: The group address is entered here.

(Rx): An additional readback group address can optionally be entered here.

Note: Field for a free note.

Read: The current value for the respective group address is queried from the bus. (Trigger)

Reset: Sets / sends the value «0» to the respective group address. (Trigger)

Set: Sets / sends the value «1» to the respective group address. (Trigger)

Toggle: Sets / sends the inverse value to the value currently available on the «Value». (Trigger)

Value: Sets / sends the inverse value of the value currently available on the «Value». (Toggle).  
Serves as feedback / receives values. (true / false)



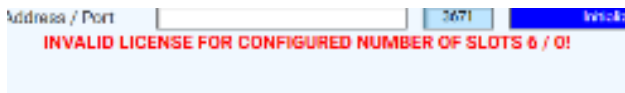
#### **4 bit**

- GA: The group address is entered here.
- (Rx): An additional readback group address can optionally be entered here.
- Note: Field for a free note.
- Read: The current value for the respective group address is queried from the bus. (Trigger)
- Down: Sets / sends a down command with the associated step size to the respective group address. (Momentary)
- Up: Sets / sends an Up command with the associated step size to the respective group address. (Momentary)
- Step Size: Selection of the step size. The standard size is 100%. (Combo box)  
If values below 100% are selected, a command with the one-time value adjustment (Up or Down) is sent each time the button is pressed. With the setting 100%, a dimmer usually dims automatically until the Up or Down button is released again.

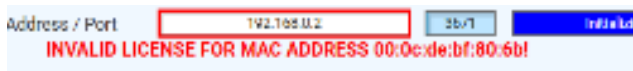
#### **1 byte**

- GA: The group address is entered here.
- (Rx): An additional readback group address can optionally be entered here.
- Note: Field for a free note.
- Value: Sets / sends the value set with the controller. (Integer 0-1 to 0-255).  
Serves as feedback / receives values. (Integer 0-255)
- Empty: Slot for which the data type is not defined in the KNX IP properties.

#### **Messages:**



No license key / license key entered incorrectly



The gateway's MAC address does not match the MAC address in the license key. The MAC address of the gateway is displayed in the error message.

#### **Copy data from Excel:**

The respective group addresses or notes must be in the fields next to each other in Excel.

- 1) Mark fields in Excel and press CTRL + C.
- 2) Mark all GA or all Note fields and press CTRL + V.



### **Information on the KNX / procedure**

The IP address in the gateway must be from the KNX bus side (with the ETS software). The physical address of the gateway must also be set on the KNX bus side. You can either do this yourself with the free version of ETS or it can be done by the KNX programmer.

The KNX programmer needs the following information:

- Network settings (IP, SubnetMask, Gateway)

The AVC programmer (you) needs the following information:

- Group addresses for the required functions and the associated data type

### **Support:**

Our support will be happy to assist you in using the SDS KNX plug-in for Q-SYS™ by email. Please use the following email address: [support@sdspro.ch](mailto:support@sdspro.ch)

### **Release Notes:**

- 1.0.1 Bug fix: Values from other bus participants are not correctly evaluated due to a conflict in the sequence numbers.
- 1.1.0 New 4-bit command (DPT3).
  - One optional readback address per group address
  - Read button per slot
  - Read button for all slots
- 1.1.1 Adjusting the connection structure at plug-in start-up