

APRIL 2020

Busch-ControlTouch® - Sonos Integration

Online Learning Session – Competence Center Europe – Smart Buildings

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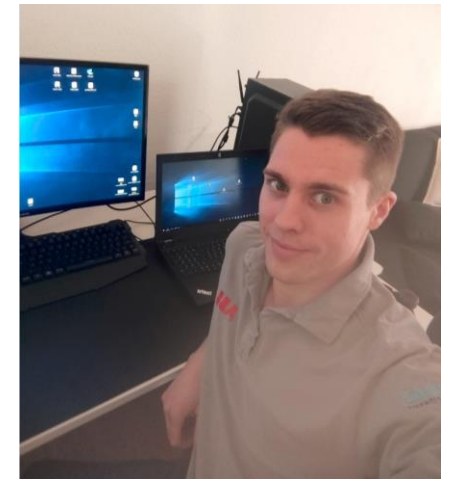
Online Learning Session – Competence Center Europe - Smart Buildings

NEW !!!

From home office to home office



ABB STOTZ-KONTAKT GmbH
Heidelberg / Germany



Agenda

Busch-ControlTouch® - Sonos Integration

Introduction and use cases

Linking – basic functions

Volume

Playlists and favorites

Audio clips and other functions

Devices:

- Sonos Play:1
- Sonos One
- 6136/APP-500 Busch-ControlTouch®
- 6127/02 solo® control element, 4/8gang

Busch-ControlTouch® - Sonos Integration

Introduction and use cases

Busch-ControlTouch® - Sonos Integration

Online Learning Session

Busch-ControlTouch® - 6136/APP(-500)

- Simple KNX visualization for smartphones, tablets and Windows computers
- Easy control using intuitive navigation concept
- Representation of individual operating pages with list view
- Display of individual control pages with room images with small controls
- Fully web-based commissioning with wizard function
- Home automation, switching, dimming, blind control, RTC control, scene/sequences, Sonos control element, timing, Philips Hue
- Entertainment: Sonos - KNX bridging, multimedia integration via UPnP
- Infotainment: Monitoring of usage data for up to 3 years
- ...



Busch-ControlTouch® - Sonos Integration

6136/APP-500 Busch-ControlTouch® - Sonos

Sonos

- The Sonos-API is now implemented into the Busch-ControlTouch®
- This gives it the certificate “Works with Sonos”
- For some devices a new Sonos speaker is required

Example functions:

- Control Sonos with KNX devices (Sonos linking)
- Creating groups
- Text-to speech



Busch-ControlTouch® - Sonos Integration

6136/APP-500 Busch-ControlTouch® - Sonos

Typical use-cases

The new functionality can be used in several applications:

- Acoustic feedback of arming/disarming the alarm system
- Speech notifications in case of a water damage in the basement
- Artificial dog barking in case of movement outside
- Shop: volume of music stops and a gong is played as soon as a customer enters
- Integration into KNX scenes: In the break of a KNX training the light goes on, the blinds drive up and the music starts to play

...



Busch-ControlTouch® - Sonos Integration

6136/APP-500 Busch-ControlTouch® - Linking

Sonos Linking

KNX group addresses can be used to control a Sonos speakers now.

Example:

Device volume DPT 3.007 dimming control

3.007 dimming control

Default Value: 1 %
Possible Values:
\$00 = Decrease, Break
\$01 = Decrease, 100 %
\$02 = Decrease, 50 %
\$03 = Decrease, 25 %
\$04 = Decrease, 12 %
\$05 = Decrease, 6 %
\$06 = Decrease, 3 %
\$07 = Decrease, 1 %
\$08 = Increase, Break
\$09 = Increase, 100 %
\$0A = Increase, 50 %
\$0B = Increase, 25 %
\$0C = Increase, 12 %
\$0D = Increase, 6 %
\$0E = Increase, 3 %
\$0F = Increase, 1 %

Wohnzimmer	Sending GA	Status GA	
Group volume	<input type="text"/>	<input type="text"/>	DPT 5.001
Device volume	<input type="text"/>	<input type="text"/>	DPT 5.001
Group volume		<input type="text"/>	DPT 3.007
Device volume		<input type="text"/>	DPT 3.007
Device mute	<input type="text"/>	<input type="text"/>	DPT 1.001
Play	<input type="text"/>	<input type="text"/>	DPT 1.001
Next		<input type="text"/>	DPT 1.001
Previous		<input type="text"/>	DPT 1.001
Shuffle	<input type="text"/>	<input type="text"/>	DPT 1.001
Repeat	<input type="text"/>	<input type="text"/>	DPT 1.001
Meta information	<input type="text"/>		DPT 16.000
Info to send	<input type="text"/>		See below
Select favorite		<input type="text"/>	DPT 5.010
Select next favorite		<input type="text"/>	DPT 1.001
Select playlist		<input type="text"/>	DPT 5.010
Join to next playing group		<input type="text"/>	DPT 1.001
Play audio clip (standard)		<input type="text"/>	DPT 5.010
Play audio clip (own)		<input type="text"/>	DPT 5.010

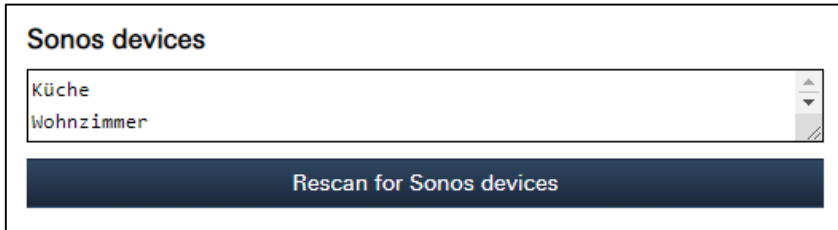
cn] = container name, [tn] = track name, [ta] = track artist, [an] = album name, [aa] = album artist, [sn] = show name, [si] = stream info

Busch-ControlTouch® - Sonos Integration

6136/APP-500 Busch-ControlTouch® - Linking

Sonos Linking - Preparation

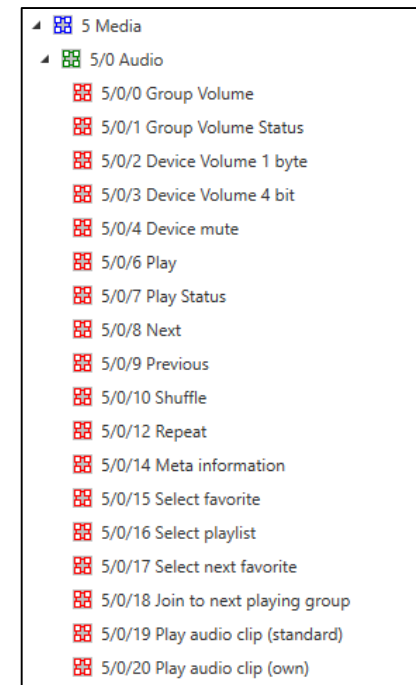
1. Sonos devices must be visible in the network and displayed in the local settings of the Busch-ControlTouch®:



2. After that, they will be also displayed in the menu “Sonos KNX Linking on MyBuildings:



3. Group addresses in the ETS are prepared:



Busch-ControlTouch® - Sonos Integration

6136/APP-500 Busch-ControlTouch® - Linking

Sonos Linking – Configuration

- Easy configuration via Drag&Drop
- No manual entering of GAs needed

The screenshot shows the configuration interface for Sonos integration. At the top, there is a dialog box titled 'Import KNXproj file' with a list of categories: 0 - Logic, 1 - Light, 2 - Blinds, 3 - Heating, 4 - Alarm, and 5 - Media. Under '5 - Media', the '5/0 - Audio' category is expanded, showing a list of audio-related groups: 5/0/0 - Group Volume, 5/0/1 - Group Volume Status, 5/0/2 - Device Volume, 5/0/3 - Device Volume Status, 5/0/4 - Device mute, 5/0/5 - Device mute Status, 5/0/6 - Play, 5/0/7 - Play Status, 5/0/8 - Next, 5/0/9 - Previous, 5/0/10 - Shuffle, and 5/0/11 - Shuffle Status. The '5/0/6 - Play' group is highlighted with a blue box. Below the dialog, there is a 'Group addresses' section with a 'Buildings' dropdown. The main part of the interface is titled 'Sonos KNX linking' and shows a table for the 'Küche' building. The table has columns for 'Sending GA', 'Status GA', and 'DPT'. The 'Play' row is highlighted in green, and a blue box with '5/0/6' is positioned next to its 'Sending GA' field. An arrow points from the '5/0/6 - Play' group in the dialog to the '5/0/6' box in the table.

	Sending GA	Status GA	DPT
Group volume			DPT 5.001
Device volume			DPT 5.001
Group volume			DPT 3.007
Device volume			DPT 3.007
Device mute	5/0/6		DPT 1.001
Play			DPT 1.001
Next			DPT 1.001
Previous			DPT 1.001

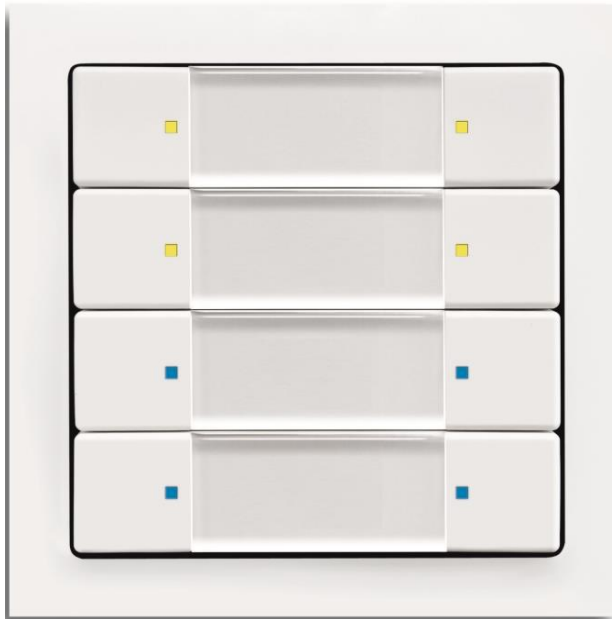
Busch-ControlTouch® - Sonos Integration

Linking – basic functions

Busch-ControlTouch® - Sonos Integration

Configuration

Play / Pause



ControlTouch® & KNX Linking

Play	5/0/7	5/0/6	DPT 1.001
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S1.1: Switching	Input / output	Play	5/0/6	1 bit
LED1.1: LED status	Input	Play Status	5/0/7	1 bit
LED1.2: LED status	Input	Play Status	5/0/7	1 bit

Bus Monitor

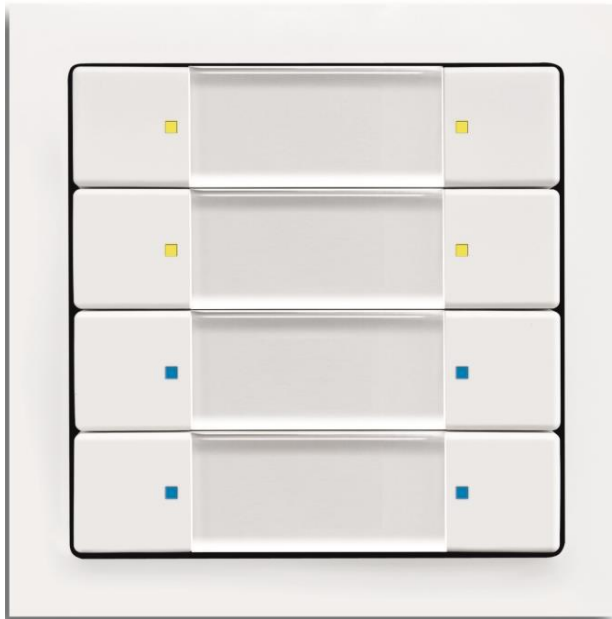
1.1.10	solo® conf. 4gang - RIGHT	5/0/6	Play	6	GroupValue...	\$00 Off	➔ Press ,pause' on solo
1.1.255	-	5/0/7	Play Status	6	GroupValue...	\$00 Off	➔ Answer from CT
1.1.10	solo® conf. 4gang - RIGHT	5/0/6	Play	6	GroupValue...	\$01 On	➔ Press ,play' on solo
1.1.255	-	5/0/7	Play Status	6	GroupValue...	\$01 On	➔ Answer from CT
1.1.255	-	5/0/7	Play Status	6	GroupValue...	\$00 Off	➔ Operation on CT
1.1.255	-	5/0/7	Play Status	6	GroupValue...	\$01 On	➔ App. Status sent
1.1.255	-	5/0/7	Play Status	6	GroupValue...	\$00 Off	➔ and displayed

Play and pause via 1 bit object (1 = play, 0 = pause)

Busch-ControlTouch® - Sonos Integration

Configuration

Mute On / Off + Shuffle On /Off



ControlTouch® & KNX Linking

Device mute	5/0/4	5/0/4	DPT 1.001
Shuffle	5/0/10	5/0/10	DPT 1.001

S3.1: Switching	Input / output	Shuffle	5/0/10	1 bit
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Bus Monitor

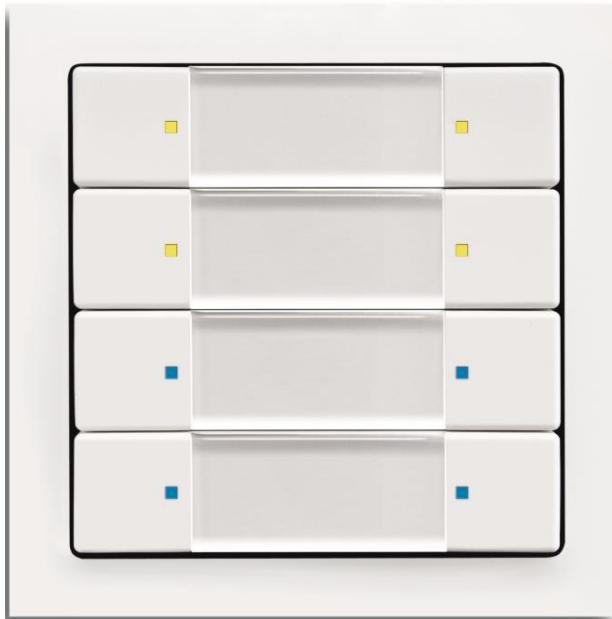
1.1.60	solo® conf. 4gang - RIGHT	5/0/10	Shuffle	6	GroupValue...	\$00 Off
1.1.255	-	5/0/10	Shuffle	6	GroupValue...	\$00 Off
1.1.60	solo® conf. 4gang - RIGHT	5/0/10	Shuffle	6	GroupValue...	\$01 On
1.1.255	-	5/0/10	Shuffle	6	GroupValue...	\$01 On

It's working also with the same GA for sending and status. Both must be connected! Without sending GA, the status would not be sent to KNX. Without status GA an operation via KNX would not be possible!

Busch-ControlTouch® - Sonos Integration

Configuration

Repeat On /Off



ControlTouch® & KNX Linking

Repeat	5/0/12	5/0/12	DPT 1.001	
S4.1: Switching	Input / output	Repeat	5/0/12	1 bit
LED4.1: LED status	Input	Repeat	5/0/12	1 bit
LED4.2: LED status	Input	Repeat	5/0/12	1 bit

Bus Monitor

1.1.10	solo® conf. 4gang - RIGHT	5/0/12	Repeat	6	GroupValue...	\$00 Off	➔ Press ,Repeat off' on solo and answer from CT
1.1.255	-	5/0/12	Repeat	6	GroupValue...	\$00 Off	
1.1.10	solo® conf. 4gang - RIGHT	5/0/12	Repeat	6	GroupValue...	\$01 On	➔ Press ,Repeat on' on solo and answer from CT
1.1.255	-	5/0/12	Repeat	6	GroupValue...	\$01 On	
1.1.255	-	5/0/12	Repeat	6	GroupValue...	\$01 On	➔ Operation on CT App. Status sent and displayed.
1.1.255	-	5/0/12	Repeat	6	GroupValue...	\$00 Off	
1.1.255	-	5/0/12	Repeat	6	GroupValue...	\$01 On	
1.1.255	-	5/0/12	Repeat	6	GroupValue...	\$01 On	
1.1.255	-	5/0/12	Repeat	6	GroupValue...	\$01 On	
1.1.255	-	5/0/12	Repeat	6	GroupValue...	\$00 Off	

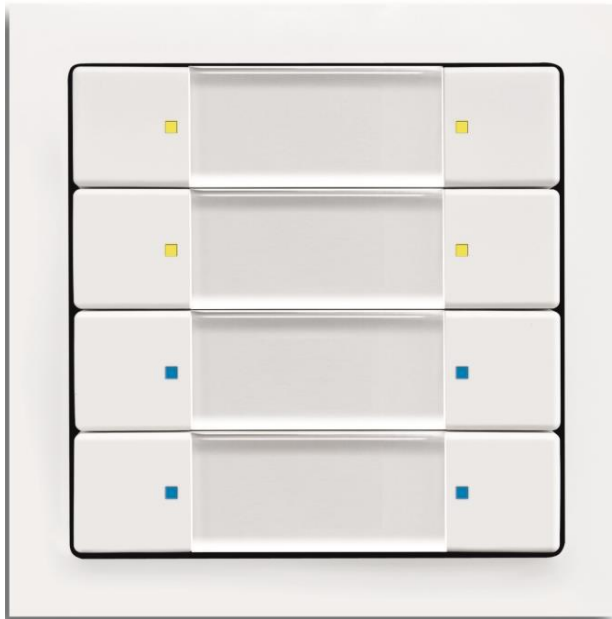
Operation via ControlTouch:

First "On" = Repeat on | Second "On" = Repeat one time | Third press = Repeat off

Busch-ControlTouch® - Sonos Integration

Configuration

Next / Previous



ControlTouch® & KNX Linking

Next	5/0/8	DPT 1.001
Previous	5/0/9	DPT 1.001

S4.1: Switching	Input / output	Next	5/0/8	1 bit
S4.2: Switching	Input / output	Previous	5/0/9	1 bit

Bus Monitor

solo® conf. 4gang - RIGHT	5/0/8	Next	6	GroupValue...	\$01 On
solo® conf. 4gang - RIGHT	5/0/9	Previous	6	GroupValue...	\$01 On
solo® conf. 4gang - RIGHT	5/0/8	Next	6	GroupValue...	\$01 On
solo® conf. 4gang - RIGHT	5/0/8	Next	6	GroupValue...	\$01 On
solo® conf. 4gang - RIGHT	5/0/9	Previous	6	GroupValue...	\$01 On
solo® conf. 4gang - RIGHT	5/0/9	Previous	6	GroupValue...	\$01 On

Next / Previous via 1 bit object (1 button switching → only “On”)



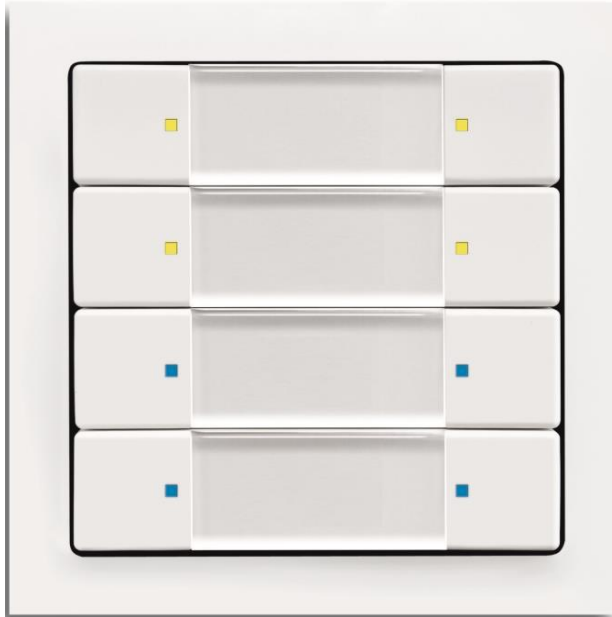
Busch-ControlTouch® - Sonos Integration

Volume Control

Busch-ControlTouch® - Sonos Integration

Configuration

Volume (Option 1) – 4 bit rel. dimming



ControlTouch® & KNX Linking

Device volume	5/0/3	DPT 3.007				
Play	5/0/7	5/0/6	DPT 1.001			
S3.1: Switching	Input / output	Play	5/0/6	1 bit	C - W T U	switch
S3.1: Relative dimming	Output	Device Volume St...	5/0/3	4 bit	C - - T -	dimming control

Bus Monitor

1.1.10	solo® conf. 4gang - RIGHT	5/0/3	Device Volume Status	6	GroupValue...	\$09 On
1.1.255	-	5/0/2	Device Volume	6	GroupValue...	\$0F 6 %
1.1.255	-	5/0/2	Device Volume	6	GroupValue...	\$1A 10 %
1.1.255	-	5/0/2	Device Volume	6	GroupValue...	\$24 14 %
1.1.255	-	5/0/2	Device Volume	6	GroupValue...	\$2E 18 %
1.1.10	solo® conf. 4gang - RIGHT	5/0/3	Device Volume Status	6	GroupValue...	\$08 Off

Short press = Play/Pause

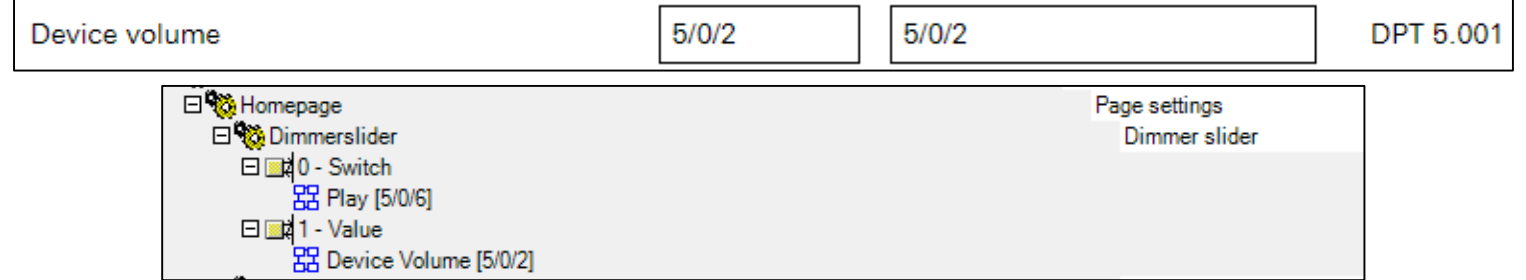
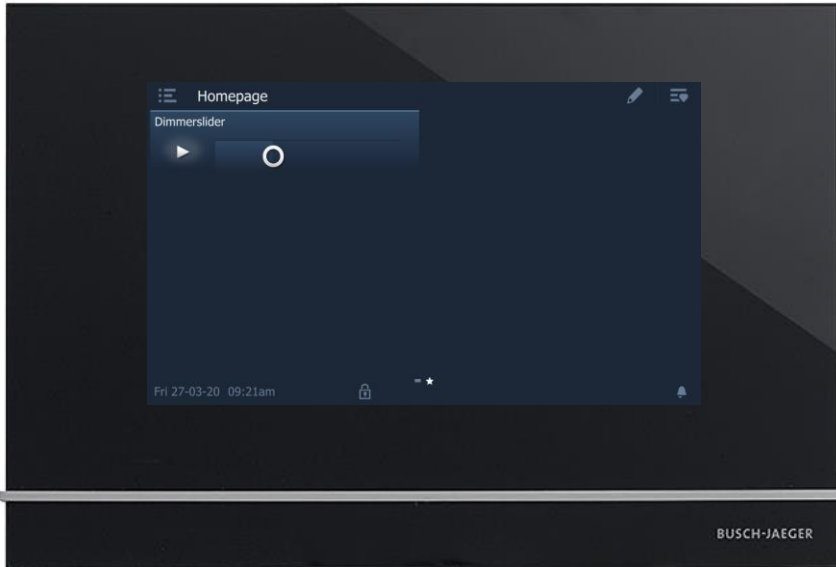
Long press = dim up (increase volume) / dim down (decrease volume)

Busch-ControlTouch® - Sonos Integration

Configuration

Volume (Option 2) – 1 byte

ControlTouch® & KNX Linking



Products

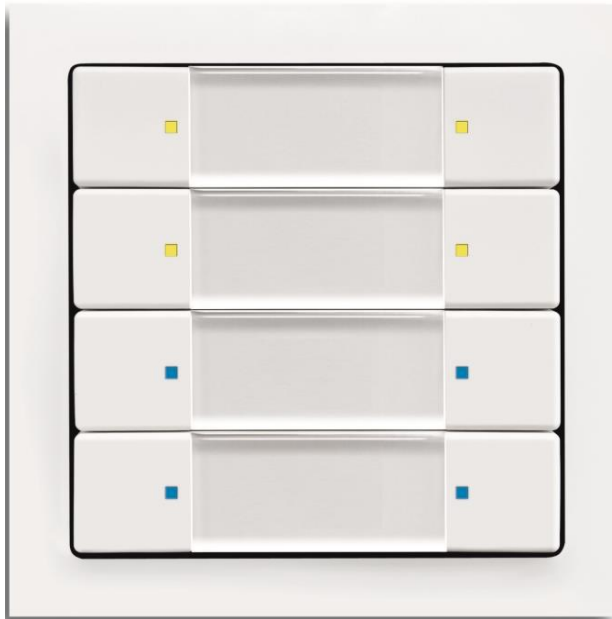


For Panels (dimmer slider) or rotary control elements (PriOn)

Busch-ControlTouch® - Sonos Integration

Configuration

Group Volume



ControlTouch® & KNX Linking

Group volume	5/0/1	DPT 3.007		
S2.1: Switching	Input / output	Play	5/0/6	1 bit
S2.1: Relative dimming	Output	Group Volume St...	5/0/1	4 bit

Bus Monitor

1.1.10	solo® conf. 4gang - RIGHT	5/0/1	Group Volume Status	6	GroupValue...	\$01 On	→ Start "Dim down" (long press) → Increase group volume
1.1.255	-	5/0/2	Device Volume 1 byte	6	GroupValue...	\$54 33 %	
1.1.255	-	5/0/0	Group Volume	6	GroupValue...	\$54 33 %	
1.1.255	-	5/0/0	Group Volume	6	GroupValue...	\$4A 29 %	→ CT is rising the group volume in 4% steps
1.1.255	-	5/0/2	Device Volume 1 byte	6	GroupValue...	\$4A 29 %	
1.1.255	-	5/0/0	Group Volume	6	GroupValue...	\$40 25 %	
1.1.10	solo® conf. 4gang - RIGHT	5/0/1	Group Volume Status	6	GroupValue...	\$00 Off	→ Stop "Dim down" → Stop increasing group volume

For applications, where more than one Sonos speaker is to be controlled in one area

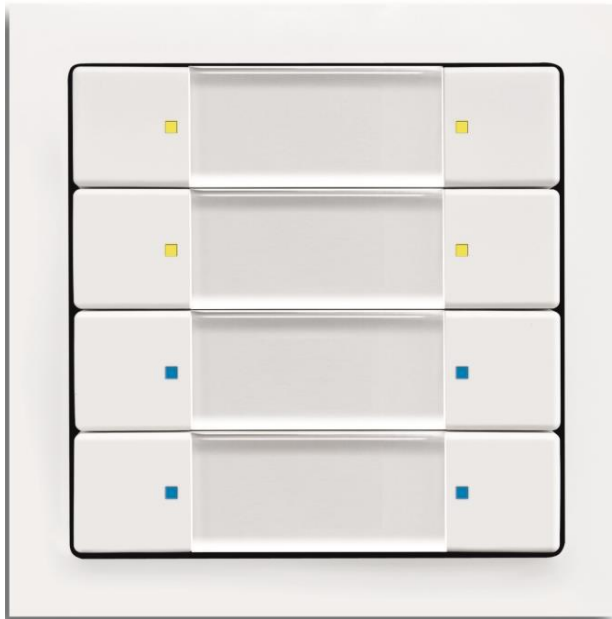
Busch-ControlTouch® - Sonos Integration

Playlists and favorites

Busch-ControlTouch® - Sonos Integration

Configuration

Select favorite



ControlTouch® & KNX Linking

Select favorite	5/0/15	DPT 5.010				
S4.1: Value switching	Input / output	Select favorite	5/0/15	1 byte	C - W T U	counter pulses (0..255)
- Rocker 4	Application	2-button value transmitter				
Common parameter						
+ LED rocker 4 left	Object type	1-byte 0..255				
+ LED rocker 4 right	Working mode of the buttons	1st button value 1, 2nd button value 2				
+ Common functions	Value 1	0				
	Value 2	2				

Bus Monitor

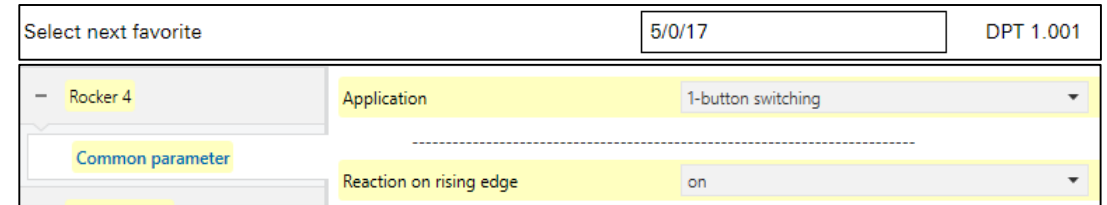
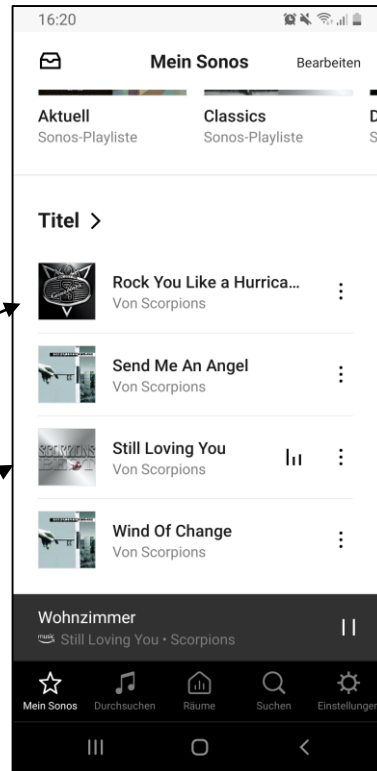
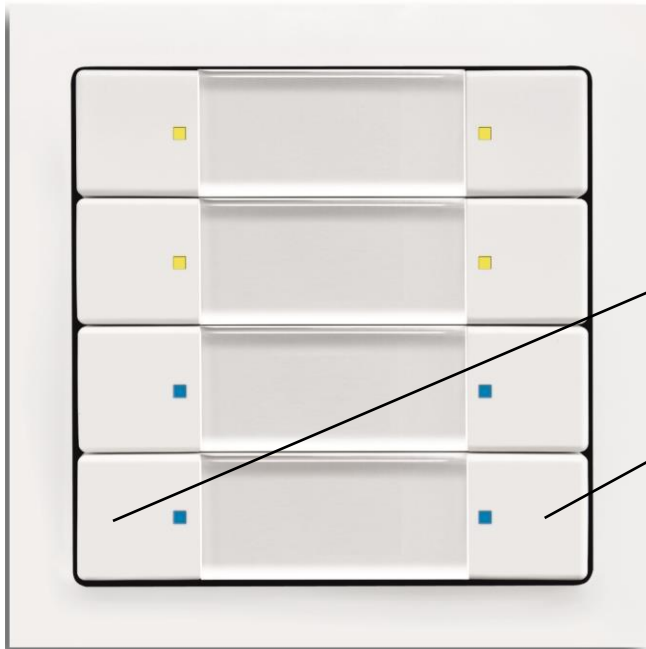
1.1.10	solo® conf. 4gang - RIGHT	5/0/15	Select favorite	6	GroupValue...	\$00
1.1.10	solo® conf. 4gang - RIGHT	5/0/15	Select favorite	6	GroupValue...	\$02

To play an specific favorite song from Sonos

Busch-ControlTouch® - Sonos Integration

Configuration

Select favorite + Select next favorite



- 1. Title = \$00
- 2. Title = \$01
- 3. Title = \$02
- 4. Title = \$03

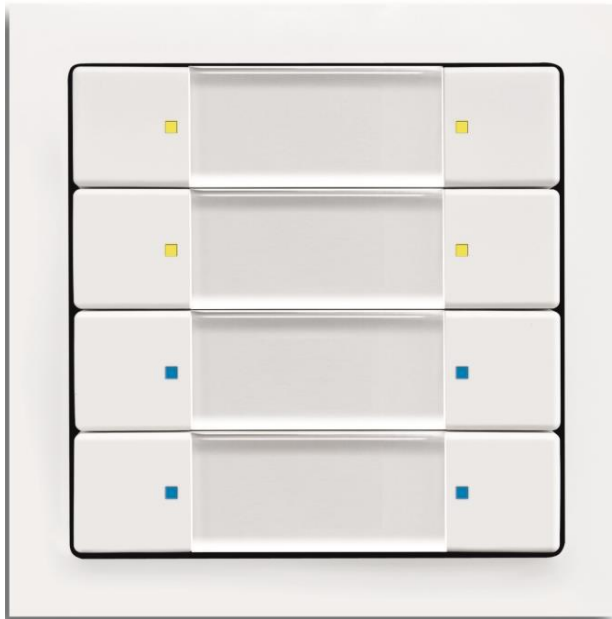


Same configuration and operation like Next / Previous

Busch-ControlTouch® - Sonos Integration

Configuration

Select playlist



ControlTouch® & KNX Linking

Select playlist	5/0/16	DPT 5.010
S4.1: Value switching Input / output Select playlist 5/0/16 1 byte C - W T U counter pulses (0..255)		
- Rocker 4	Application	2-button value transmitter
Common parameter		
+ LED rocker 4 left	Object type	1-byte 0..255
+ LED rocker 4 right	Working mode of the buttons	1st button value 1, 2nd button value 2
+ Common functions	Value 1	0
	Value 2	2

solo® conf. 4gang - RIGHT	5/0/16	Select playlist	6	GroupValue...	\$00
solo® conf. 4gang - RIGHT	5/0/16	Select playlist	6	GroupValue...	\$02

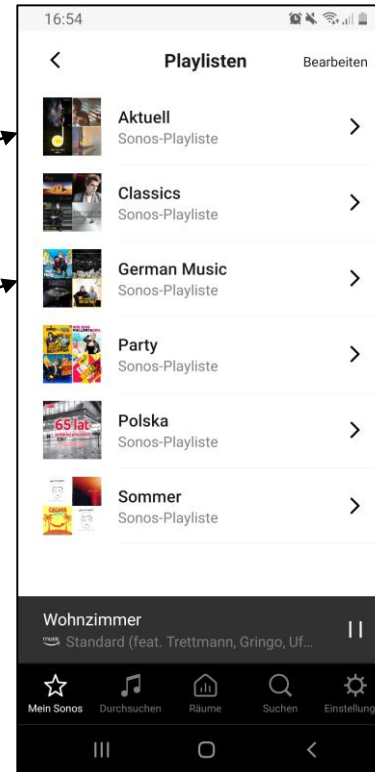
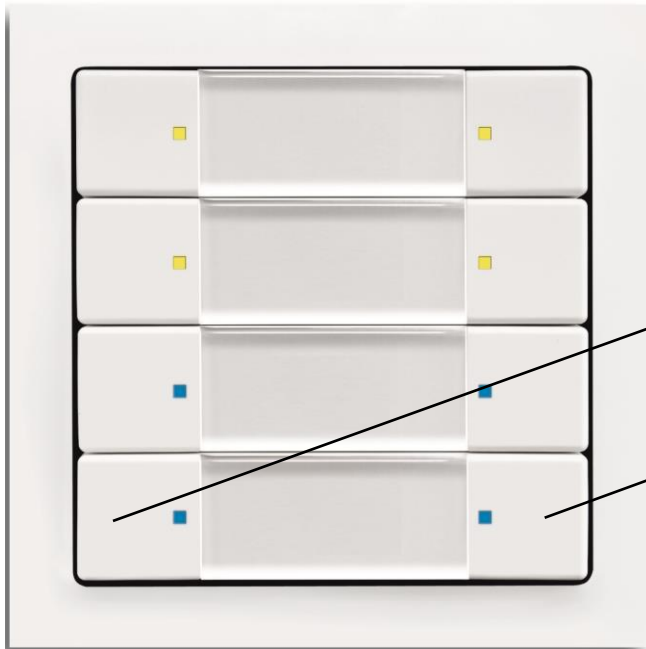
Bus Monitor

To play an specific playlist from Sonos

Busch-ControlTouch® - Sonos Integration

Configuration

Select playlist



1. Playlist = \$00
2. Playlist = \$01
3. Playlist = \$02
4. Playlist = \$03
5. Playlist = \$04
6. Playlist = \$05

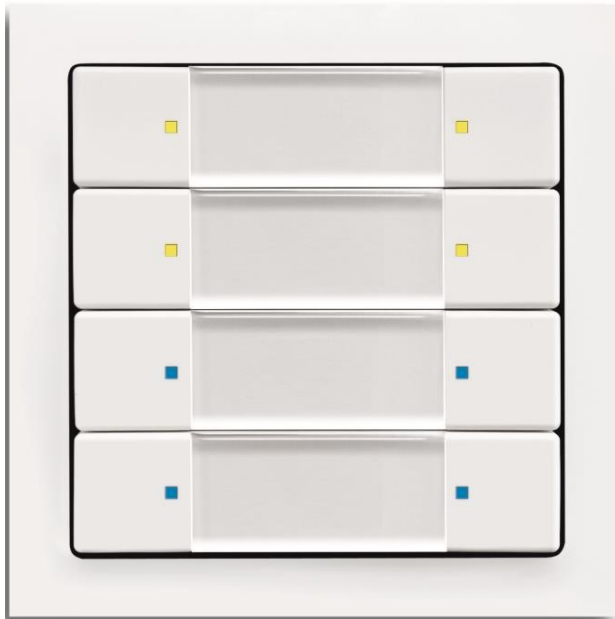
Busch-ControlTouch® - Sonos Integration

Audio clips and other functions

Busch-ControlTouch® - Sonos Integration

Configuration

Join to next playing group



ControlTouch® & KNX Linking

Join to next playing group	5/0/18	DPT 1.001	
S4.1: Switching	Input / output	Join to next playi... 5/0/18	1 bit
Rocker 4	Application	2-button switching	
Common parameter	Working mode of the buttons for switching	1st button on, 2nd button off	

Bus Monitor

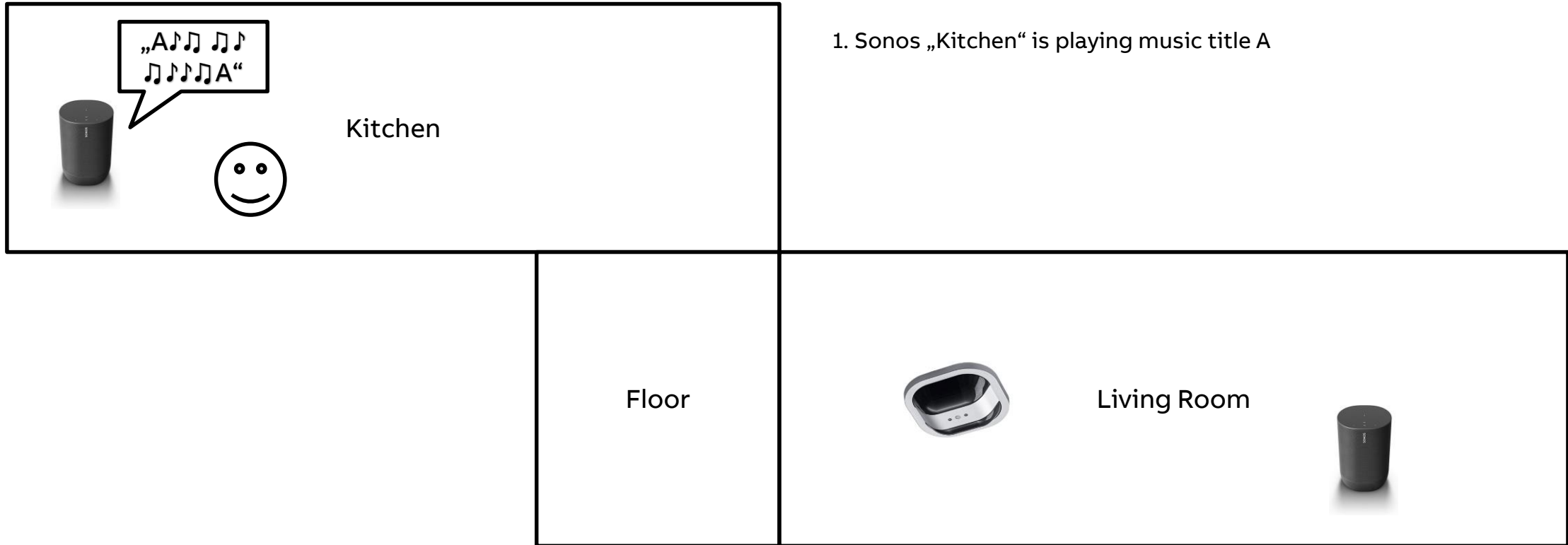
1.1.10	solo® conf. 4gang - RIGHT	5/0/18	Join to next playing group	6	GroupValue...	\$01 On
1.1.10	solo® conf. 4gang - RIGHT	5/0/18	Join to next playing group	6	GroupValue...	\$00 Off

Sonos is searching the next playing group and adds the speaker to it.
1 = "Join group" | 0 = "Leave group"

Busch-ControlTouch® - Sonos Integration

Configuration

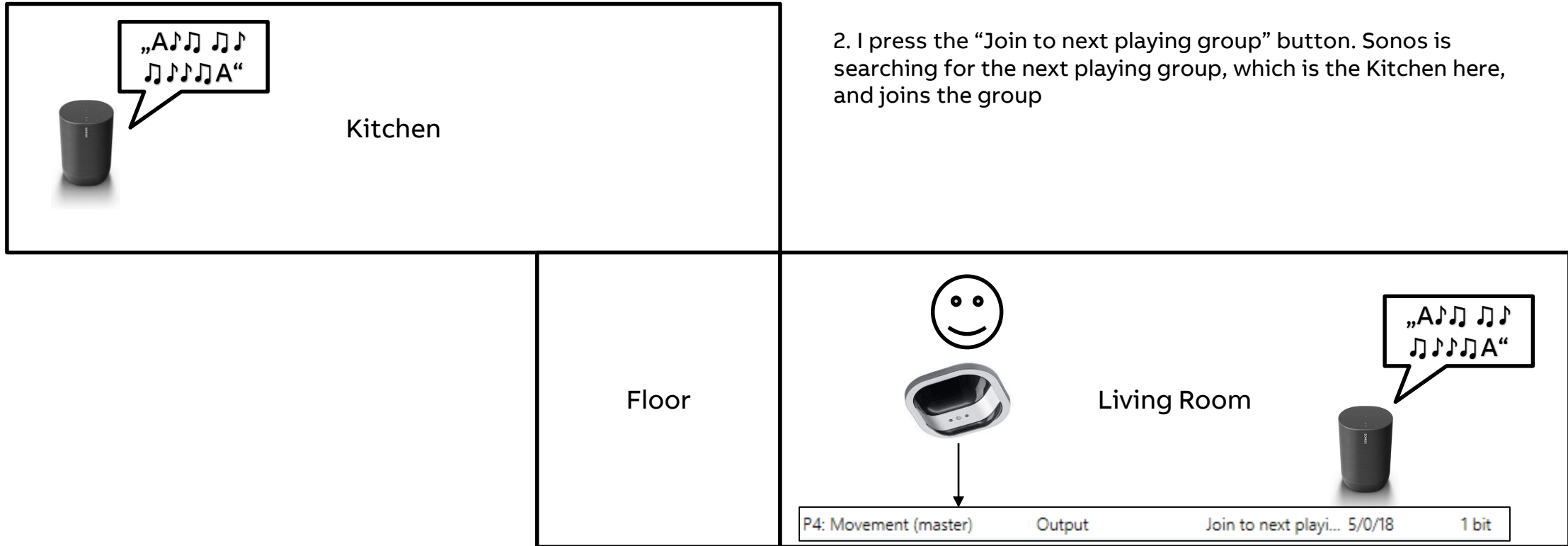
Join to next playing group



Busch-ControlTouch® - Sonos Integration

Configuration

Join to next playing group



Busch-ControlTouch® - Sonos Integration

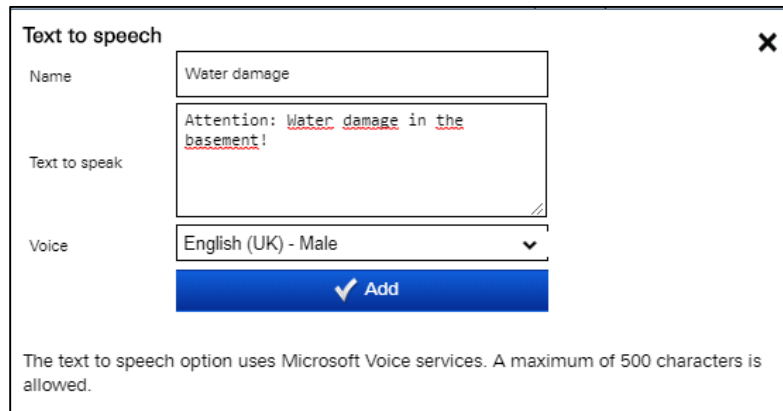
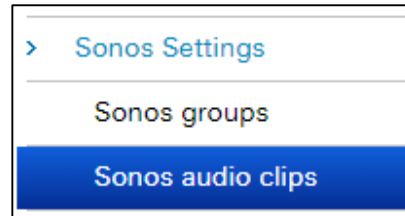
Configuration

Sonos settings – Audio clips

For “Text-to-Speech” functionality a new Sonos device is needed. Compatible devices:

- Sonos One
- Sonos One SL
- Sonos Play:5
- Sonos Beam
- Sonos Move
- Sonos Symfonisk (IKEA)

10 predefined audio clips + 30 own audio clips (mp3 or T2S)

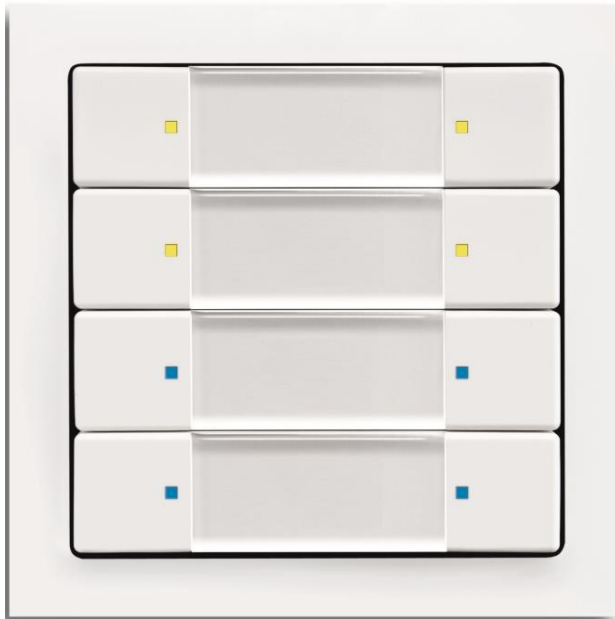
A screenshot of a 'Text to speech' configuration dialog. It has a title bar with a close button (X). The dialog contains three input fields: 'Name' with the text 'Water damage', 'Text to speak' with the text 'Attention: Water damage in the basement!', and 'Voice' with a dropdown menu showing 'English (UK) - Male'. Below these fields is a blue button with a white checkmark and the text 'Add'. At the bottom, there is a small note: 'The text to speech option uses Microsoft Voice services. A maximum of 500 characters is allowed.'

Sonos audio clips		Volume
Sonos standard - 1	Chime	20
ControlTouch standard - 1	Ding dong	20 ▶
ControlTouch standard - 2	Gong	20 ▶
ControlTouch standard - 3	Gong 2	20 ▶
ControlTouch standard - 4	Logo	20 ▶
ControlTouch standard - 5	Tinkerbelle	20 ▶
ControlTouch standard - 6	Up the stairs	20 ▶
ControlTouch standard - 7	Xylophone	20 ▶
ControlTouch standard - 8	Ding dong (long)	20 ▶
ControlTouch standard - 9	Melody 1 (long)	20 ▶
ControlTouch standard - 10	Melody 2 (long)	20 ▶
Own - 1	Good Morning	20 ▶ 🗑️
Own - 2	Welcome home	20 ▶ 🗑️

Busch-ControlTouch® - Sonos Integration

Configuration

Play audio clip (standard and own)



ControlTouch® & KNX Linking

Play audio clip (standard)	5/0/19	DPT 5.010
Play audio clip (own)	5/0/20	DPT 5.010

S4.1: Value switching Input / output Play audio clip (st... 5/0/19 1 byte C - W T U counter pulses (0..255)

Bus Monitor

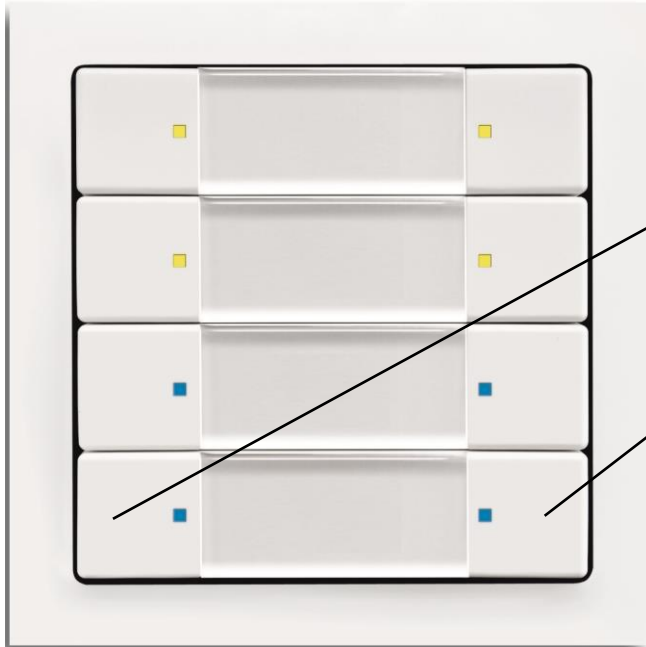
solo® comf. 4gang - RIGHT	5/0/19	Play audio clip (standard)	6	GroupValue...	\$00
solo® comf. 4gang - RIGHT	5/0/19	Play audio clip (standard)	6	GroupValue...	\$02

To play an specific audio clip, which is set up in MyBuildings

Busch-ControlTouch® - Sonos Integration

Configuration

Play audio clip (standard)



Sonos audio clips		Volume
Sonos standard - 1	Chime	<input type="text" value="20"/>
ControlTouch standard - 1	Ding dong	<input type="text" value="20"/> ▶
ControlTouch standard - 2	Gong	<input type="text" value="20"/> ▶
ControlTouch standard - 3	Gong 2	<input type="text" value="20"/> ▶
ControlTouch standard - 4	Logo	<input type="text" value="20"/> ▶
ControlTouch standard - 5	Tinkerbell	<input type="text" value="20"/> ▶
ControlTouch standard - 6	Up the stairs	<input type="text" value="20"/> ▶
ControlTouch standard - 7	Xylophone	<input type="text" value="20"/> ▶
ControlTouch standard - 8	Ding dong (long)	<input type="text" value="20"/> ▶
ControlTouch standard - 9	Melody 1 (long)	<input type="text" value="20"/> ▶
ControlTouch standard - 10	Melody 2 (long)	<input type="text" value="20"/> ▶

Sonos standard = \$00

ControlTouch standard - 1 = \$01

ControlTouch standard - 2 = \$02

ControlTouch standard - 3 = \$03

...

...

...

...

...

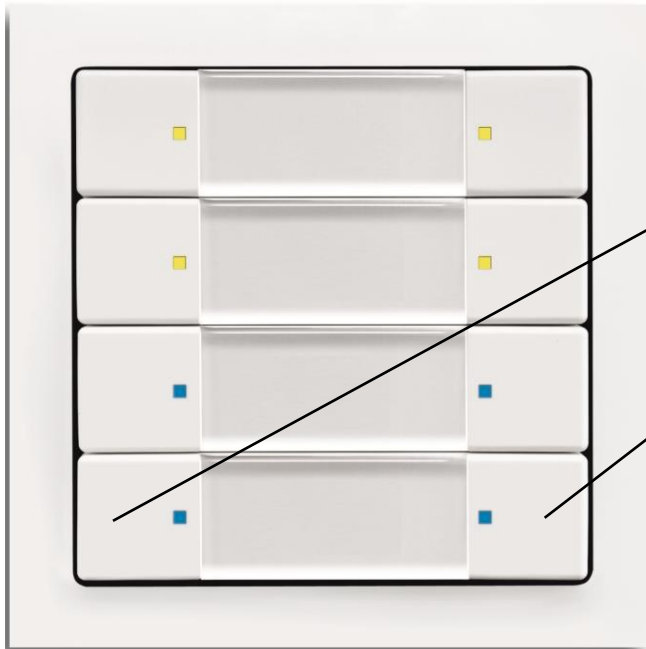
...

ControlTouch standard - 10 = \$10

Busch-ControlTouch® - Sonos Integration

Configuration

Play audio clip (own)



Attention! → Internal numbering start with \$01 here!!

Own - 1	Imagine Dragons	20	▶	🗑️	Own - 1 = \$01
Own - 2	Welcome home	20	▶	🗑️	Own - 2 = \$02
Own - 3	Window open	20	▶	🗑️	Own - 3 = \$03
Own - 4			📄	🔗	...
Own - 5			📄	🔗	...
Own - 6			📄	🔗	...
Own - 7			📄	🔗	...
Own - 8			📄	🔗	...
Own - 9			📄	🔗	...
Own - 10			📄	🔗	...
Own - 11			📄	🔗	Own - 11 = \$11

Busch-ControlTouch® - Sonos Integration

Configuration

Sonos settings – Audio clips

Integration via Triggers:

Trigger

Enabled: Yes

Name: Welcome home

Conditions

Group address = Light 3 1

Actions

Command

Sonos command Wohnzimmer Play audio clip Welcome home

Done

Busch-ControlTouch® - Sonos Integration

Configuration

Sonos settings – Audio clips

Application:



Window closed
GA BI = 0



Window opened
GA BI = 1



Sonos play audio clip with trigger function

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Configuration

Sonos settings – Audio clips

Application:



Video outdoor station
GA Call started = 0



Someone bells
GA Call started = 1



Sonos play audio clip with trigger function

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Configuration

Final solution



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Questions

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Online Learning Session

Homepage

www.abb.com/KNX

→ Products and Downloads
→ Lighting Control
→ Search Options DG/S

- Product Manual
- CAD Drawing
- Installation and Operating Instructions
- Specification Text
- ETS Application
- Selection Table
- CE & RoHS Declaration of Conformity
- ...

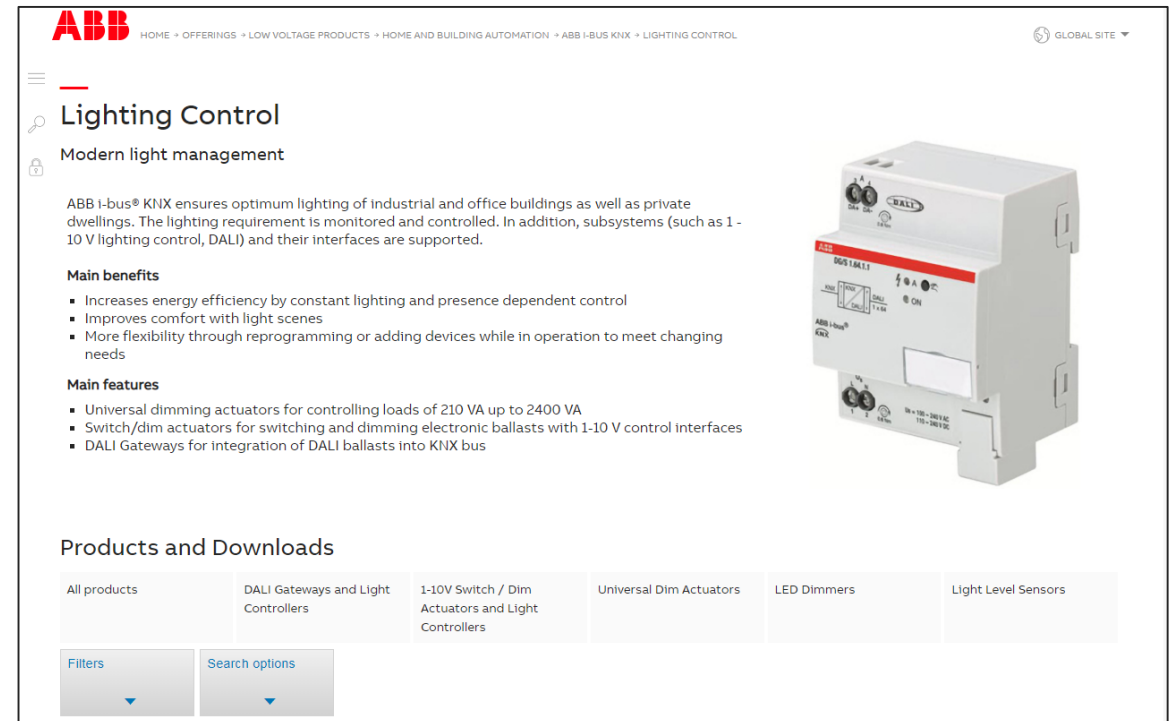


ABB HOME • OFFERINGS • LOW VOLTAGE PRODUCTS • HOME AND BUILDING AUTOMATION • ABB I-BUS KNX • LIGHTING CONTROL GLOBAL SITE ▼

Lighting Control

Modern light management


ABB I-bus® KNX ensures optimum lighting of industrial and office buildings as well as private dwellings. The lighting requirement is monitored and controlled. In addition, subsystems (such as 1-10 V lighting control, DALI) and their interfaces are supported.

Main benefits

- Increases energy efficiency by constant lighting and presence dependent control
- Improves comfort with light scenes
- More flexibility through reprogramming or adding devices while in operation to meet changing needs

Main features

- Universal dimming actuators for controlling loads of 210 VA up to 2400 VA
- Switch/dim actuators for switching and dimming electronic ballasts with 1-10 V control interfaces
- DALI Gateways for integration of DALI ballasts into KNX bus



Products and Downloads

All products	DALI Gateways and Light Controllers	1-10V Switch / Dim Actuators and Light Controllers	Universal Dim Actuators	LED Dimmers	Light Level Sensors
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Filters Search options

Busch-ControlTouch® - Sonos Integration

Online Learning Session

Further information

Training & Qualification Database

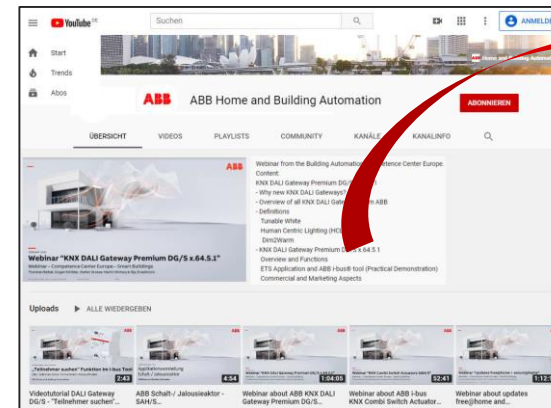
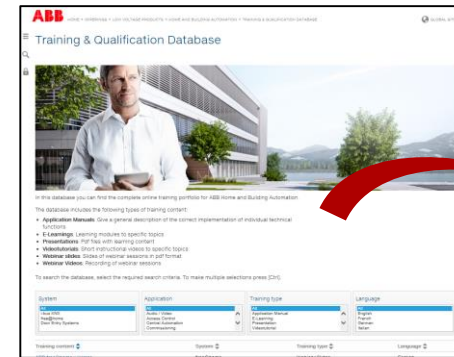
– The database includes the following types of training content:

- Application Manuals
- E-Learnings
- Presentations
- Video tutorials
- Webinar slides and videos
- www.abb.com/knx or <https://go.abb/ba-training>

Youtube

– Channel “ABB Home and Building Automation”

- <https://www.youtube.com/user/ABBibusKNX>



Busch-ControlTouch® - Sonos Integration

Online Learning Session

Training & Qualification Calendar

In addition to the online modules and the traditional training programs offered by your local ABB sales team, we offer a variety of on-site trainings conducted by our specialists at different ABB training facilities

In this Training & Qualification Calendar you can find the educational events that are taking place during 2020

If you are interested in a training please click the training und you will be forwarded to register in “ABB MyLearning”

www.abb.com/knx or <https://go.abb/ba-training>

→ Training and Qualification

→ Training Calendar



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Training & Qualification Calendar

In addition to the online modules and the traditional training programs offered by your local ABB sales team, we offer a variety of webinars and on-site trainings conducted by our specialists at different ABB Competence Centers.

In this Training & Qualification Calendar you can find the educational events that are taking place during 2018.

If you are interested in a training please [REGISTER HERE](#).

To search the Calendar, select the required search criteria. To make multiple selections press [Ctrl].

System	Date	Location
All	All	Webinar
Door Entry Systems	January 2018	Heidelberg, Germany
Free@home	February 2018	Lödenscheid, Germany
Fire Alarm Systems	March 2018	s. Palomba (Rome), Italy
I-bus KNX	April 2018	Vittuone (Milan), Italy

Content	Date	Location	Language
KNX for Commercial Building	05.04.2018 - 06.04.2018	Lödenscheid, Germany	EN
Building Automation Light + Building 2018	10.04.2018	Webinar	EN
KNX in Hotels	19.04.2018 - 20.04.2018	Heidelberg, Germany	EN
HVAC Automation	23.04.2018 - 24.04.2018	Heidelberg, Germany	EN

ABB MyLearning

HOME CATALOG PROFILE ADMINISTER REPORTS MY LEARNING

CERTIFIED KNX BASIC COURSE
Code : 9CSC007151-GLB-EN-20190218_22
Certified KNX Basic Course at ABB in Heidelberg, Germany, 5 days
★★★★★ | Share

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KNX Certified Trainings 2020

Certified KNX Courses in Heidelberg

- Advanced Course: 13th to 17th Jul.
- Tutor Course: 19th to 23rd Oct.
- Basic Course : 16th to 20th Nov.
- Followed by two day application training

Safe the date!!!

And many more training courses in the calendar
“International Training Dates 2020”

www.abb.com/knx or <https://go.abb/ba-training>



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Online Learning Session

Next Webinar

KNX DALI Gateway Premium DG/S x.64.5.1 – Special functions

- Human Centric Lighting (HCL) – Colour temperature curve following daylight
- Dim2Warm – Colour temperature changes proportionally to brightness with the effect like a light bulb
- Standby switch-off – Ballast voltage shutdown via additional switching actuator to save energy
- Scenes – 1 bit recall and 1 byte coded scenes
- ABB i-bus® tool – Search menu for a ballast with unknown address, operating hours, ...

Wednesday 6th May 2020

- Morning 09:00 am Europe Time (Berlin, UTC + 2h)
- Afternoon 03:00 pm Europe Time (Berlin, UTC + 2h)



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Online Learning Session

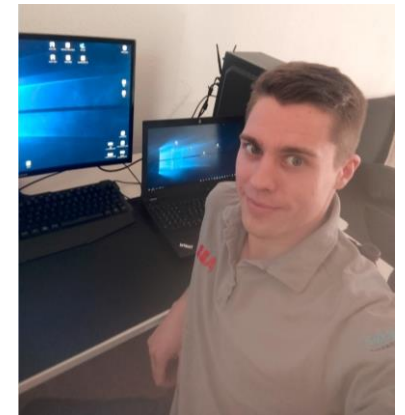
Next online learning sessions

- Tuesday 5th May: ETS: Presence Detector – Zones, Calibration and Constant Light Control
- Thursday 7th May: Presence Detector – Master/Slave Concept

... and more will follow



From home office to home office



Disclaimer

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