

# User Manual

KNX/EIB<--->HDL Buspro Converter



SB-DN-EIB



www.hdlautomation.com



## INDEX

1. Overview
1.1 General Information1
1.1.1 Description1
1.1.2 Dimension1
1.2 Functions1
1.3 Device Description2
2. Safety precautions2
3. Technical Data
4.1 Wiring
4.2 KNX/EIB Description4
5. Software Configuration4
5.1 Basic Information4
5.2 Configuration5
5.2.1 Channel Output Control6
5.2.2 Scene Control9
5.2.3 Sequence Control13
5.2.4 Curtain Control16
6. Note



## 1. Overview

### 1.1 General Information

#### 1.1.1 Description

SB-DN-EIB is a gateway between HDL Buspro system and KNX/EIB system, it can realize the function that control HDL Buspro system from KNX/EIB and vice versa. It supports 254 commands totally, which is mainly for lighting control, curtain control, temperature report, etc.

#### 1.1.2 Dimension







- Standard 35mm Din Rail Installation
- Inside Distribution Box (DB)

## 1.2 Functions

- Two-way communication for HDL Buspro and KNX/EIB
- Control up to 254 targets
- Support various Data Point:

Scene switch (1byte), Scene dimming (4bits), Sequence switch (1byte), Universal Switch (1bit), Single



Channel switch (1bit), Single Channel dimming (4bits), Broadcast Scene (1byte), Broadcast Channel switch (1bit), Broadcast Channel dimming (4bits), Curtain on/off (1bit), Curtain stop(1bit), Absolute dimming (1byte), Actual temperature (2bytes), Channel status report (1bit), Channel level report(1byte), Message:1byte (not ready for use), String:14 bytes (not ready for use).

### 1.3 Device Description



(a) HDL Buspro

(b) KNX/EIB Bus

## 2. Safety precautions

- Screw down strength is less than 0.4Nm
- Installation Position: Distribution Box (DB)
- Do not make wrong connection on Bus interface, it will damage the Bus interface of this module
- Never let liquids get into the module, it will damage this device
- Do connect the module to AC power as this will irreversibly damage all devices in the system.
- Avoid contact with liquids and aggressive gas



## 3. Technical Data

Electrical Parameters	
HDL Buspro input voltage	DC15~30V
HDL Buspro input current	5mA/DC24V
KNX/EIB input voltage	DC21~30V
KND/EIB input current	<6mA
Communication	HDL Buspro, KNX/EIB
Software programming	HDL Buspro Setup Tool
Environmental Conditions	
Working temperature	0℃~45℃
Working relative humidity	Up to 90%
Storage temperature	-20°C~+60°C
Storage relative humidity	Up to 93%
Approved	
CE	
RoHS	
Product Information	
Dimensions	72×90×66 (mm)
Weight	174(g)
Housing material	Nylon, PC
Installation	35mm DIN rail installation
Installation Position	Distribution box (DB)
Protection degree	IP20



## 4. Installation

4.1 Wiring



## 4.2 KNX/EIB Description

#### **Connector Information**

KNX/EIB BUS							
DC24V	Red						
СОМ	Black						

## 5. Software Configuration

### 5.1 Basic Information

Subnet/Device ID:

The converter has one Subnet/Device ID. The Device ID should be unique in its subnet, and the Subnet

ID should be kept consistent with the Buspro Gateway (SB-DN-1IP or HDL-MBUS01IP.431).

Physical address:

Its physical address is useless so far, can ignore this setting.



EIB/HDL-BUS con	verter			
Basic information Configura	tion			
Select device			Model picture	
Device	1-240-HDL-DN-EIB ()			
Configuration				
Model	HDL-DN-EIB			
Subnet ID	1 Device ID 240			
Remark				
Remark		Save		
MAC address				
MAC	C2 .C3 .C4 .C5 .C6 .C7 .C8 .C9			
EIB physical address				
Physical Address:	1.3			
		Save		
Modify subnet ID and devi	e ID according to MAC		Upload picture	
Subnet ID	Device ID	Save	Upload K Delete Ext	
Finish			Ф » 1	<b>MA</b>

## 5.2 Configuration

EIE	IB/HDL-BU	S converter							
Bas	c information C	Configuration							
S	elect device								
	Device	1-240-HDL-DN-EIB ()		~	Current configuration table no.	4			
Co	figuration tab	ole no. from(1-254 )	1	To 6	Confirm	Nodify	Exit		
Æ	R/HDL-RUS Co	nfiguration table information							
	Table no.	EIB Group Addr	HDL subnet ID	HDL device ID	HDL control type	Parameter 1	Parameter 2	Parameter 3	Valid
-	1	1/1/10	3	254	Single channel switch(1 bit)	1(Chn no.)	100(Intensity)	0:0	HDL BUS>EIB
-	2	1/1/12	3	254	Absolute Dimming(1 byte)	1(Chn no.)	N/A	N/A	HDL BUS>EIB
	3	1/1/14	3	254	Channel Level Report(1 byte)	1	N/A	N/A	EIB>HDL BUS
	4	1/1/30	3	254	Single channel switch(1 bit)	2(Chn no.)	100(Intensity)	0:0	HDL BUS->EIB
	5	1/1/34	3	254	Absolute Dimming(1 byte)	2(Chn no.)	N/A	N/A	HDL BUS>EIB
	6	1/1/33	3	254	Channel Level Report(1 byte)	2	N/A	N/A	EIB>HDL BUS
_									(m. a.
Finis	า								- ATX - 171/-

#### EIB Group Address

Set the group address of KNX/EIB object which will send out the command to control HDL Buspro device(EIB->HDL BUS direction) or receive the command from HDL Buspro device(HDL BUS->EIB direction)



#### HDL Subent/Device ID

Set the Subnet/Device ID of HDL Buspro device which will send out the command to control KNX/EIB device(HDL BUS->EIB direction) or receive the command from KNX/EIB device(EIB->HDL BUS direction)

#### • HDL Control Type

Supported control type: scene, sequence, UV switch, single channel switch, curtain control, etc.

Table no.	EIB Group Addr	HDL subnet ID	HDL device ID	HDL control type	Parameter 1	Parameter 2	Parameter 3	Valid
1	1 1 10	3	254	Single channel switch(1 bit)	1	100 <	0 🔅 : 0 💭	HDL BUS->EIB
2	1/1/12	3	254	Scene(1 byte)	1(Chn no.)	N/A	N/A	HDL BUS>EIB
3	1/1/14	3	254	Sequence(1 byte)	1	N/A	N/A	EIB>HDL BUS
4	1/1/30	3	254	Universal switch(1 bit) Single channel switch(1 bit)	2(Chn no.)	100(Intensity)	0:0	HDL BUS>EIB
5	1/1/34	3	254	Single channel Dimmer(4 bit)	2(Chn no.)	N/A	N/A	HDL BUS>EIB
6	1/1/33	3	254	Broadcast Channels Switch(1 bit)	2	N/A	N/A	EIB>HDL BUS
				Ibroadcast Channels Jummer(4 bk) Curtain On/Off(1 bk) Gurtain Stop(1 bk) Message(1 byk) String Conversion(14 byke) Absolute Dimmig(1 byke) Current Temperature(2 byke) Channel Status Report(1 bk) Channel Level Report(1 byke)				

#### • Valid

Set the command direction:

EIB->HDL BUS:

The command is transferring from KNX/EIB system to HDL Buspro system

HDL BUS->EIB:

The command is transferring from HDL Buspro system to KNX/EIB system

5.2.1 Channel Output Control

1) HDL iLife control KNX/EIB channel output

iLife editor settings:

Subnet/devices ID is the converter's ID, and the channel no. is same as the parameter1(chn no.) in the converter.



	iLife Editor 4.4.1B { wechat }	- 🗆 🗙
File Language Help	About	
Home DIY S	Access         Voice Control         Sensor         Local Setting	Alarm Wechat
Room List test	Lighting Air Conditioning Scene	Room Device
	light	TV Lighting
		Air Scene Conditioning
	7     8     EIB-1     EIB-2       Lamp     EIB-1     Add     Save     Delete	DVD Curtain
	Scene     Add     Save     Delete     Fetch Light	tings Background Media
Room Information	Add Target         OK         Single         Multi-line         Auto Accumula           No.         Subnet No.         Device No.         Channel No.         Brightness         Typ	ve Music
Name test	1 1 240 1 100 Dimm Converter ID	ing PA Monitoring
Add Delete	<	Security Blue-ray

Converter settings:

EIB group address:

set the group addresses of the dimmer that you want to control

HDL Subent/Device ID:

set the ID which will send out command to control the KNX/EIB dimmer, for iLife(iOS), it has the fixed ID 3/254.

HDL Control Type:

for switch control, use 'single channel switch', the parameter1(chn no.) is same as the channel no. in the iLife editor, *HDL BUS->EIB*;

for dimming control, use 'Absolute dimming', the parameter1(chn no.) is same as the channel no. in the iLife editor, *HDL BUS->EIB*;

for the feedback from KNX/EIB, use 'channel level report(1 byte)', *EIB->HDL BUS*, so that when the channel is controlled by KNX panel, iLife can show the correct state of it.



EIB/HDL-BUS converter							
Basic information Configuration							
Select device							
Device 1-240-HDL-DN-EIB ()		~	Current configuration table no.	4			
Configuration table no. from(1-254)	1	To 6	Confirm	Modify	Exit		
EIB/HDL-BUS Configuration table information							
Table no. EIB Group Addr	HDL subnet ID	HDL device ID	HDL control type	Parameter 1	Parameter 2	Parameter 3	Valid
1 1/1/10	3	254	Single channel switch(1 bit)	1(Chn no.)	100(Intensity)	0:0	HDL BUS>EIB
2 1/1/12	3	254	Absolute Dimming(1 byte)	1(Chn no.)	N/A	N/A	HDL BUS>EIB
3 1/1/14	3	254	Channel Level Report(1 byte)	1	N/A	N/A	EIB>HDL BUS
4 1/1/30	3	254	Single channel switch(1 bit)	2(Chn no.)	100(Intensity)	0.0	HDL BUS>EIB
5 1/1/34	3	254	Absolute Dimming(1 byte)	2(Chn no.)	N/A	N/A	HDL BUS>EIB
6 1/1/33	3	254	Channel Level Report(1 byte)	2	N/A	N/A	EIB>HDL BUS

iLife ID

KNX/EIB dimmer settings:

Enable the absolute dimming function and channel state response(1byte), assign the group addresses for

them, and set these group addresses in the converter.

Topology 🔻						1 ÷ *	5	* ×
🕂 Add Areas 👻 👗 Delete 🛛 🧗	New Dynamic Folder 📑	Split Project				Find		P 7
4 III Topology	Number	* Name	Object Function	Description	Group Addresses	Length	С	R
Dynamic Folders	<b>■</b> ≵  0	General	Send cycles			1 bit	С	R
Backbone area	<b>■</b> ≵ 10	Output A	Channel output		1/1/10	1 bit	С	-
I New area	<b>■</b> ≵ 11	Output A	Relative dimming(4bit)		1/1/11	4 bit	С	7.1
🚂 1.0 Main line	■₹ 12	Output A	Absolute dimming(8bit)		1/1/12	1 Byte	С	2
▲ 🗄 1.1 New line	■₹ 13	Output A	Respone state(1bit)		1/1/13	1 bit	С	R
▶ • 1.1.2 M/DLP04.1	■2 14	Output A	Respone state(1byte)		1/1/14	1 Byte	С	R
1.1.4 M/D02.1	<b>1</b> 23	Output A	Scene(8bit)		1/1/15	1 Byte	С	
N	<b>1</b> 24	Output A	Scene dimming(4bit)			4 bit	С	2
	<b>■</b> ≵ 30	Output B	Channel output		1/1/30	1 bit	С	-
	<b>1</b>	Output B	Relative dimming(4bit)		1/1/31	4 bit	С	-
	<b>■2</b> 32	Output B	Absolute dimming(8bit)		1/1/34	1 Byte	С	7.1
	<b>1</b>	Output B	Respone state(1bit)		1/1/32	1 bit	С	R
	■2 34	Output B	Respone state(1byte)		1/1/33	1 Byte	С	R
	<b>■‡</b> 43	Output B	Scene(8bit)		1/1/15	1 Byte	С	-
	■₹ 44	Output B	Scene dimming(4bit)			4 bit	С	7.
I								

#### 2) KNX/EIB DLP control HDL dimmer

#### KNX DLP settings:

Use rocker C left button and right button to control channel1 and channel2 of HDL Buspro dimmer

respectively. 1/1/60 & 1/1/62 are for switch control, 1/1/61 & 1/1/63 are for dimming control and 1/1/64 &

#### 1/1/65 are for status report.

<ul> <li>Topology</li> </ul>	Number +	Name	Object Function	Description	Group Addresses	Length	С	R
Dynamic Folders	■₹ 40	Rocker A left short	Switching(Toggle)		1/1/10 1/1/13	1 bit	С	-
0 Backbone area	<b>■</b> ‡ 41	Rocker A left long	Dimming		1/1/11	4 bit	С	-
<ul> <li>I New area</li> </ul>	■‡ 42	Rocker A right short	Switching(Toggle)		1/1/30 1/1/32	1 bit	С	-
🚂 1.0 Main line	<b>■‡</b> 43	Rocker A right long	Dimming		1/1/31	4 bit	С	-
🔺 📑 1.1 New line	■‡ 50	Rocker B short	Call scene		1/1/15	1 Byte	С	- 1
▶ 1.1.2 M/DLP04.1	■‡ 60	Rocker C left short	Switching(Toggle)		1/1/60 1/1/64	1 bit	С	-
▶ <b>1</b> .1.4 M/D02.1	61	Rocker C left long	Dimming		1/1/61	4 bit	С	-
	■‡ 62	Rocker C right short	Switching(Toggle)		1/1/62 1/1/65	1 bit	С	-
	<b>■</b> ‡ 63	Rocker C right long	Dimming		1/1/63	4 bit	С	-



Converter settings:

EIB Group address:

set the group addresses of KNX DLP which will control the dimmer

HDL Control Type:

for switch control, use 'single channel switch', parameter1 is the channel no. of dimmer, EIB->HDL BUS;

for dimming control, use 'single channel dimmer' (relative dimming), parameter1 is the channel no. of dimmer, *EIB->HDL BUS;* 

for status report, use 'channel status report(1 bit)', HDL BUS->EIB.

sic information	n Configuration							
elect device								
Device	1-240-HDL-DN-EIB ()		~	Current configuration table no.	1			
nfiguration	n table no. from(1-254 )	1	То б	✓ Confirm	Modify	Exit		
EIB/HDL-BU	5 Configuration table information							
Table no.	EIB Group Addr	HDL subnet ID	HDL device ID	HDL control type	Parameter 1	Parameter 2	Parameter 3	Valid
Table no.	EIB Group Addr	HDL subnet ID	HDL device ID	HDL control type Single channel switch(1 bit)	Parameter 1 1(Chn no.)	Parameter 2 100(Intensity)	Parameter 3	Valid EIB>HDL BUS
Table no. 1 2	EIB Group Addr 1/1/60 1/1/61	HDL subnet ID	HDL device ID 4 4	HDL control type Single channel switch(1 bit) Single channel Dimmer(4 bit)	Parameter 1 1(Chn no.) 1(Chn no.)	Parameter 2 100(Intensity) 100(Intensity)	Parameter 3 0:0 0:0	Valid EIB>HDL.BUS EIB>HDL.BUS
Table no. 1 2 3	EIB Group Addr 1/1/60 1/1/61 1/1/64	HDL subnet ID 1 1 1 1	HDL device ID 4 4 4	HDL control type Single channel switch(1 bit) Single channel Dimme(4 bit) Channel Status Report(1 bit)	Parameter 1 1(Chn no.) 1(Chn no.) 1	Parameter 2 100(Intensity) 100(Intensity) N/A	Parameter 3 0.0 0.0 0.0 0.0	Valid EIB>HDL BUS EIB>HDL BUS HDL BUS>EIB
Table no.           1           2           3           4	EIB Group Addr 1/1/60 1/1/61 1/1/64 1/1/62	HDL subnet ID 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	HDL device ID 4 4 4 4 4	HDL control type Single channel switch(1 bit) Single channel Dimmer(4 bit) Channel Status Report(1 bit) Single channel switch(1 bit)	Parameter 1 1(Chn no.) 1(Chn no.) 1 2(Chn no.)	Parameter 2 100(Intensity) 100(Intensity) N/A 100(Intensity)	Parameter 3 0.0 0:0 0:0 0:0 0:0	Valid EIB>HDL BUS EIB>HDL BUS HDL BUS>EIB EIB>HDL BUS
Table no. 1 2 3 4 5	EIB Group Addr 1/1/60 1/1/61 1/1/64 1/1/62 1/1/63	HDL subnet ID 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	HDL device ID 4 4 4 4 4 4 4 4	HDL control type Single channel switch(1 bit) Single channel Dimmer(4 bit) Channel Status Report(1 bit) Single channel switch(1 bit) Single channel Dimmer(4 bit)	Parameter 1	Parameter 2           100(Intensity)           100(Intensity)           N/A           100(Intensity)           100(Intensity)           100(Intensity)	Parameter 3 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Valid EIB->HDL BUS EIB->HDL BUS HDL BUS->EIB EIB->HDL BUS EIB->HDL BUS

Dimmer ID

#### 5.2.2 Scene Control

1) HDL DLP control KNX/EIB scene

#### HDL DLP settings:

Set the subnet/device ID of converter for the controlled target, parameter1 is area no., parameter2 is

scene no., control mode is single on/combination on.

information K	Key assignation Air conditioning funct	ion Floor Heating Music pa	age basic setting	1								
ect panel												Function Testing
Device	1-8-HDL-MPL8.48-FH ()	~										Test the Switch
nt key	5 Mode Single on		Input functi	on no. from	1	То	1	Confim	1			
r information	1 1		Function co	figuration of c	urrent key							Key modification
Key no.	Remark	Mode	Functio	n no. Sul	onet ID	Device ID	Туре	Parame	ter 1	Parameter 2	Paramet	Remark
1		Single on/off	1	1		240	Scene	1(Area	no.)	1(Scene no.)	N/A	
2		Single on/off										Mode
3		Single on/off		~								
4		Combination on/off		Co	onvert	er ID						Madd Carlor
5		Single on										Function
6		Single on										
7		Single on										Combination way
												combination way



Converter settings:

EIB group address:

set the scene group address that you want to control

HDL Subent/Device ID:

set the DLP ID which will send out command to control the KNX/EIB scene

HDL Control Type:

Scene(1 byte)

Parameter1: it is same area no. which you have set in the DLP

EIB/HDL-BUS	converter							
Basic information Con	figuration							
Select device								
Device	1-240-HDL-DN-EIB ()			Current configuration table no.	1			
	no. from(1-254)	1	To 1	Confirm	Modify	Exit		
Table no.	IB Group Addr	HDL subnet ID	HDL device ID	HDL control type	Parameter 1	Parameter 2	Parameter 3	Valid
1 1	/1/15	1	8	Scene(1 byte)	1(Area no.)	N/A	N/A	HDL BUS>EIB
		DLP	D					

KNX/EIB scene settings:

Channel1:

Set the channel1 brightness for different scenes, e.g. Scene1 is 30%, scene2 is 60%, scene3 is 0%;

Topology 🔻			⊡
🕂 Add Areas 🔻 👗 Delete 🕴 Show Changes Default parameters			Find P
Topology     Topology     Topology     Poynamic Folders     Decet     Show Charges Declar parameters     Decet     Decet	Fade time of scene dimming(2255s) Total 10 scenes,configuration as following: >>Output assigned to(scene 164) Output brightness value Fade time for brighter/darker(0255s) >>Output assigned to(scene 164) Output brightness value Fade time for brighter/darker(0255s) >>Output assigned to(scene 164) Output brightness value Fade time for brighter/darker(0255s)	5 Scene NO.01 30% 3 Scene NO.02 60% 3 Scene NO.03 0%(0) 3	

Channel2:

Set the channel2 brightness for different scenes, e.g. Scene1 is 50%, scene2 is 80%, scene3 is 0%;

HDL®					User Manual SB-DN-EIB
Topology 🔻					⊐ ÷ × <i>⊒</i> x <sup>e</sup>
🕂 Add Areas 🔻 📥 Delete 📑 Show	Changes Default parameters		_	_	Find
4 Topology	Device: 1.1.4 M/D02.1				
<ul> <li>P Dynamic Folders</li> <li>E 0 Backbone area</li> </ul>	General G:sequence 1	Fade time of scene dimming(2255s)	5		
4 🔡 1 New area	Channel A	Total 10 scenes, configuration as following:			
and a line	A>dimming config A:function	>>Output assigned to(scene 164 )	Scene NO.01	•	
► 11.1.2 M/DLP04.1	A:scene Channel B	Output brightness value	50%(128)	•	
	B>dimming config B:function	Fade time for brighter/darker(0255s)	3		
	B:scene	>>Output assigned to(scene 164 )	Scene NO.02	•	
		Output brightness value	80%	•	
		Fade time for brighter/darker(0255s)	3		
		>>Output assigned to(scene 164 )	Scene NO.03	•	
		Output brightness value	0%(0)	•	
		Fade time for brighter/darker(0255s)	3		

Group address:

Assign group address 1/1/15 for channel1 and channel2 scene object, so when it receives command to call scene1, channel 1 will go to 30%, channel 2 will go to 60%; call scene2, channel 1 will go to 50%, channel 2 will go to 80%; call scene3, channel 1 and 2 will go to 0%.

Topology 🔻												<u> </u>
🕂 Add Areas 💌 🌋 Delete 🛛 🧱 New Dyr	namic Folder  🚔	Split Project								Find		P 4
Topology	Number 🔺	Name	Object Function	Description	Group Addresses	Length	С	R	W	T	U	Data Ty
Dynamic Folders	<b>■</b> ‡ 0	General	Send cycles			1 bit	С	R	-	т	1.00	enable
III 0 Backbone area	<b>■</b> ↓ 1	General	Sequence 1		1/1/1	1 bit	С		W	-	U	start/sto
4 🔡 1 New area	<b>1</b> 0	Output A	Channel output		1/1/10	1 bit	С	1	W	2	U	switch
📷 1.0 Main line	<b>■</b> ₽ 11	Output A	Relative dimming(4bit)		1/1/11	4 bit	С	-	W	-	U	dimminç
▲ 🗄 1.1 New line	<b>■‡</b> 12	Output A	Absolute dimming(8bit)		1/1/12	1 Byte	С	-	W	-	U	percenta
1.1.2 M/DLP04.1	📫 13	Output A	Respone state(1bit)		1/1/13	1 bit	С	R	-	Т		switch
▷ 1.1.4 M/D02.1	14	Output A	Respone state(1byte)		1/1/14	1 Byte	С	R	191	Т		percenta
	23	Output A	Scene(8bit)		1/1/15	1 Byte	С	-	W		U	
	■24	Output A	Scene dimming(4bit)			4 bit	С	(-1)	W	-	U	dimminç
	<b>■‡</b> 30	Output B	Channel output		1/1/30	1 bit	С	-	W	-	U	switch
	📫 31	Output B	Relative dimming(4bit)		1/1/31	4 bit	С	-	W	2	U	dimming
	<b>■</b> ₽ 32	Output B	Absolute dimming(8bit)		1/1/34	1 Byte	С	-	W	-	U	percenta
	<b>■</b> ‡ 33	Output B	Respone state(1bit)		1/1/32	1 bit	С	R	-	Т	10-11	switch
	8, 34	Output B	Respone state(1byte)		1/1/33	1 Byte	С	R	-	Т	-	percenta
	<b>1</b>	Output B	Scene(8bit)		1/1/15	1 Byte	С	-	W	-	U	
	■₹ 44	Output B	Scene dimming(4bit)			4 bit	С	-	W	-	U	dimminç

#### 2) KNX/EIB DLP control HDL scene

#### KNX/EIB DLP setting:

Select 'scene controller' for the work mode, and set the scene no. of HDL scene you want to control,

e.g. Rocker D left button will call scene1 and right button will call scene2.



Topology 🔻				
Topology         Add Areas         Delete         Topology         Dynamic Folders         0 Backbone area         11 New area         11 New area         11 New line         11.1.2 M/DLP04.1         11.1.4 M/D02.1	how Changes Default parameters Device: 1.1.2 M/DLP04.1 General 1 General 2 Rocker A Rocker B Rocker C Rocker D Rocker F Rocker F Rocker G Rocker H	Rocker D work mode Call scene number of the left Call scene number of the right Long button operation as Delay operation for left short button (0.255s) Delay operation for right short button (0.256s) Long button time after LED status	Scene controller         Scene NO.01         Scene NO.02         Invalid         0         0         1s         According to object status	

#### Group address:

#### Assign group address for rocker D scene control object, e.g. 1/1/70.

Topology 🔻											v I	<b>9</b> ,
🕂 Add Areas 💌 🌋 Delete 🛛 👫 New I	Dynamic Folder 🚦	Split Project							-	Find		\$
▲ III Topology	Number	A Name	Object Function	Description	Group Addresses	Length	C	R	W	Т	U	Da
Dynamic Folders	■. 40	Rocker A left short	Switching(Toggle)		1/1/10 1/1/13	1 bit	С	-	W	т	U	swi
Backbone area	<b>■</b> ‡ 41	Rocker A left long	Dimming		1/1/11	4 bit	С	-	W	Т	U	din
🔺 🔡 1 New area	■₹ 42	Rocker A right short	Switching(Toggle)		1/1/30 1/1/32	1 bit	С	:53	W	т	U	swi
📷 1.0 Main line	<b>■</b> ‡ 43	Rocker A right long	Dimming		1/1/31	4 bit	С	-	W	Т	U	din
4 🗄 1.1 New line	■2 50	Rocker B short	Call scene		1/1/15	1 Byte	С		W	т	U	
1.1.2 M/DLP04.1	■\$ 60	Rocker C left short	Switching(Toggle)		1/1/60 1/1/64	1 bit	С	-	W	Т	U	swi
1.1.4 M/D02.1	<b>■‡</b> 61	Rocker C left long	Dimming		1/1/61	4 bit	С		W	т	U	din
10	<b>■‡</b> 62	Rocker C right short	Switching(Toggle)		1/1/62 1/1/65	1 bit	С		W	Т	U	swi
	## 63	Rocker Cright long	Dimming		1/1/63	4 hit	c		w	т	Ш	din
	■≵ 70	Rocker D short	Call scene		1/1/70	1 Byte	С		W	Т	U	
	■₹ 80	Rocker E left short	Sequence		1/1/80	1 bit	С	878	W	Т	U	sta
	<b>1</b>	Rocker E right short	Sequence			1 bit	С	-	W	Т	U	sta
	<b>1</b>	Rocker F	Threshold(1byte)			1 Byte	С	-	W	Т	U	

### Converter settings:

E	II EI	B/HDL-BUS	converter							
E	Basic i	nformation Con	figuration							
	Sele	ct device								
		Device	1-240-HDL-DN-EIB ()			Current configuration table no.	2			
91 91 92	Confi	iguration table	e no. from(1-254 ) guration table information	1	To 2	Confirm	Aodify	Exit		
	T	able no.	EIB Group Addr	HDL subnet ID	HDL device ID	HDL control type	Parameter 1	Parameter 2	Parameter 3	Valid
	1		1/1/15	1	8	Scene(1 byte)	1(Area no.)	N/A	N/A	HDL BUS>EIB
	_2		1/1/70	1	4	Scene(1 byte)	1(Area no.)	N/A	N/A	EIB>HDL BUS

#### HDL Buspro scene settings:

Scene1:



The second secon	elligent Dimming Module					
1 Device	Area 3Channel 4Scene 5Sequence					
Select device			Select area			Scene restore
Device	1-4-SB-DN-D0403 ()	<b>~</b>	Area	1-区域1	~	Scene restore
Scene informati	o. from U To 3	Confirm	Current chan	formation of current scene		Area information
Scene no	Bemark	Running time(mm ss)	Chone	Bemark	Intensity	
0	Scene ()	0.5	1	Chp 1	100	
	Scene 1	0.2	-2	Chn 2	50	Scene information
-2	Score 2	0.2	-2	Cho 2	40	Current scene no.
		0.0			40	1
3	Scene 3	0:3	4	Cnn 4	40	0.1

#### Scene2:

4ch 3A Inte	elligent Dimming Module					
1 Device	Area 3Channel 4Scene 5Sequen	ce				
Select device			Select area			Scene restore
Device	1-4-SB-DN-D0403 ()		Area	1-区域1	M	Scene restore
Input scene no	from U To 3	Confirm	Current channel	1-Chn 1		Anna information
Scene momauc		In			[1	
Scene no.	Remark	Running time(mm ss)	Cnn no.	Hemark	Intensity	Total area 1
0	Scene 0	0:5	1			
1	Scene 1	0:2	2	Chn 2	50	Scene information
2	Scene 2	0:3	3	Chn 3	60	Current scene no.
3	Scene 3	0:3	4	Chn 4	60	2
			3			Start scene no.

#### 5.2.3 Sequence Control

1) HDL DLP control KNX/EIB sequence

#### HDL DLP settings:

Set the subnet/device ID of converter for the controlled target, use 'UV Switch' command type to control.

DLP Panel wi	th AC Music Clock Floor Hea	ting								
Basic information Ke	ey assignation Air conditioning function	n   Floor Heating   Music pa	ge basic setting							
Select panel	1-8-HDL-MPL8.48-FH ()	M								Function Testing Test the Switch
Current key	8 Mode Single on/off		Function configuration	from 1	То	1	Confirm			Key modification
Key no.	Remark	Mode	Function no.	Subnet ID	Device ID	Туре	Parameter 1	Parameter 2	Paramel	Remark
1		Single on/off	1	1	240	Universal switch	1(Switch no.)	On(Switch Status)	N/A	
2		Single on/off								Mode
3		Single on/off								
4		Combination on/off								Modify function
5		Single on								Function
6		Single on								
7		Single on								Combination way
8		Single on/off								Pic Upload

#### Converter settings:

Control type is 'UV switch', switch no. is same as the switch no. which has set in the panel



EIB/HDL-I	BUS converter							
lasic information	Configuration							
Select device								
Device	1-240-HDL-DN-EIB ()		M	Current configuration table no.	3			
Configuration EIB/HDL-BUS	table no. from(1-254)	1	То 3	Confirm	Modify	Exit		
Configuration EIB/HDL-BUS	table no. from(1-254) Configuration table information EIB Group Addr	1 HDL subnet ID	To 3	HDL control type	Modfy	Exit Parameter 2	Parameter 3	Valid
Configuration EIB/HDL-BUS Table no.	table no. from(1-254) Configuration table information EIB Group Addr 1/1/15	1 HDL subnet ID 1	To 3 HDL device ID 8	HDL control type Scene(1 byte)	Modify Parameter 1 1(Area no.)	Exit Parameter 2 N/A	Parameter 3 N/A	Valid HDL BUS->EIB
Configuration EIB/HDL-BUS Table no.	table no. from(1-254) Configuration table information EIB Group Addr 1/1/15 1/1/70	1 HDL subnet ID 1	To 3 HDL device ID 8 4	HDL control type Scene(1 byte) Scene(1 byte)	Modify Parameter 1 1(Area no.) 1(Area no.)	Parameter 2 N/A N/A	Parameter 3 N/A N/A	Valid HDL BUS>EIB EIB>HDL BUS

#### KNX/EIB sequence settings:

Topology 🔻				
🕂 Add Areas 🔻 👗 Delete 🛛 🕴 Show Chan	ges Default parameters			
✓ III Topology	Device: 1.1.4 M/D02.1			
V Dynamic Folders     Backbone area	General G:sequence 1	Operaton mode of the sequence 1	Start with "1",Stop with "0"	
▲ 1 New area	Channel A A>dimming config	Control mode of the sequence 1	FWD •	
▲ 🚦 1.1 New line ▷ 📶 1.1.2 M/DLP04.1	A:scene	Runing mode of the sequence 1	0	
▷ 1.1.4 M/D02.1	B>dimming config B:function	Runing time(059 mins,0h&0m-unlimited)	0	
	Biscene	Position after running time out	Invalid 💌	
		Total 24 steps, configuration as following:		
		>>Step 1 configuration	Scene NO.01	
		Time for step 1 (065535s)	3	
		Time for step 1 (0999ms)	0	
		>>Step 2 configuration	Scene NO.03 👻	
		Time for step 2 (065535s)	3	
		Time for step 2 (0999ms)	0	
		>>Step 3 configuration	Invalid	
Find 🔎 0/0 🌣 👻	Group Objects / Parameters / Com	missioning /		

Topology 🔻									6		v	
🕂 Add Areas 👻 🄏 Delete 🛛 限 N	New Dynamic Folder 🛛 🔤	Split Project					-			Find		PY
✓ III Topology	Number	r 🔺 Name	Object Function	Description	Group Addresses	Length	С	R	W	Т	U	Data Typ
Dynamic Folders	<b>*</b> *  0	General	Send cycles			1 bit	ç	P		Ţ		enable
Backbone area	■# 1	General	Sequence 1		1/1/1	1 bit	С	-	W	-	U	start/stop
🔺 🔡 1 New area	<b>■2</b> 10	Output A	Channel output		1/1/10	1 bit	С	-	W	-	U	switch
1.0 Main line	■₹ 11	Output A	Relative dimming(4bit)		1/1/11	4 bit	С	-	W	-	U	dimming
▲ 🗄 1.1 New line	■₹ 12	Output A	Absolute dimming(8bit)		1/1/12	1 Byte	С	376	W	-	U	percenta
1.1.2 M/DLP04.1	<b>■</b> ≵ 13	Output A	Respone state(1bit)		1/1/13	1 bit	С	R	1	Т	<u>_</u>	switch
▷ 1.1.4 M/D02.1	■₹ 14	Output A	Respone state(1byte)		1/1/14	1 Byte	С	R	-	т	-	percenta
	<b>1</b> 23	Output A	Scene(8bit)		1/1/15	1 Byte	С	-	W	-	U	
	<b>1</b> 24	Output A	Scene dimming(4bit)			4 bit	С		W	5	U	dimming

#### 2) KNX/EIB DLP control HDL sequence

#### KNX/EIB DLP settings:

Select '1 byte threshold' as control type, the input threshold value is the sequence no. of HDL sequence,

'0' means stop running the sequence.



Topology 👻			
🕂 Add Areas 👻 👗 Delete 🛛 🕴 Show Changes	Default parameters		
🔺 📊 Topology	Device: 1.1.2 M/DLP04.1		
<ul> <li>Dynamic Folders</li> <li>0 Backbone area</li> <li>1 New area</li> </ul>	General 1 General 2 Rocker A	Rocker G work mode	Threshold controller
iang 1.0 Main line ▲ 븑 1.1 New line ■ □ 1.1.2 M/DIP04.1	Rocker B Rocker C Rocker D	->Threshold on left short button(0255)	1
► - 1.1.4 M/D02.1	Rocker E Rocker F Rocker G	->Threshold on left long button(0255	
	Rocker H	Delay on left long button(0255s)	° (0' means stop
		->Threshold on right short button (0255)	0 means stop
		->Threshold on right long button(025)	
		Delay on right long button(0255s)	
		Long button time after	
		LED status	According to object status
Find 👂 🔿 ٥/٥ 🎄 🗸	Group Objects / Parameters /	Commissioning /	
Topology 👻			o + v B⊀
🕂 Add Areas 👻 👗 Delete 🛛 🧗 New Dynamic Folder	Split Project		Find P
4 III Topology	Numb + Name C	Object Function Description Group	Addresses Length R W T U

Switching(Toggle)

Switching(Toggle)

Switching(Toggle)

Switching(Toggle)

Dimming

Dimming

Call scene

Dimming

Dimming

Call scene

Sequence

Sequence

Percentage

Sequence

Threshold(1byte)

1/1/10 1/1/13

1/1/30 1/1/32

1/1/60 1/1/64

1/1/62 1/1/65

1/1/11

1/1/31

1/1/15

1/1/61

1/1/63

1/1/70

1/1/80

1/1/90

1/1/100

1 bit

4 bit

1 bit C

4 bit

1 Byte

1 bit C

4 bit C

1 bit

4 bit C

1 Byte C

1 bit C

1 bit

1 Byte

1 bit C

1 Byte C

с с -

с -

С -

с -

с

W T U

w

W T U

W T U

W T

W T U

w

W T U

W T U

т

W T U

W T U

W T U

W T U

W T U

т

W T U

U

U

U

Converter settings:	

Dynamic Folders

Backbone area

▲ 1.1 New line

□ 1.1.2 M/DLP04.1 □ 1.1.4 M/D02.1

4 1 New area

EB	EIB/HDL-BU	JS converter							
Bas	sic information	Configuration							
-9	Select device								
	Device	1-240-HDL-DN-EIB ()			Current configuration table no.	4			
Ca	onfiguration ta	ble no. from(1-254)	1	To 4	Confirm	Modify	Exit		
	Table no.	EIB Group Addr	HDL subnet ID	HDL device ID	HDL control type	Parameter 1	Parameter 2	Parameter 3	Valid
	1	1/1/15	1	8	Scene(1 byte)	1(Area no.)	N/A	N/A	HDL BUS>EIB
-	2	1/1/70	1	4	Scene(1 byte)	1(Area no.)	N/A	N/A	EIB>HDL BUS
-	3	1/1/1	1	8	Universal switch(1 bit)	1(Switch no.)	N/A	N/A	HDL BUS>EIB
-	4	1/1/100	1	4	Sequence(1 byte)	1(Area no.)	N/A	N/A	EIB>HDL BUS
-									

■2 40 ■2 41 ■2 42 ■2 43

■‡| 50

∎‡ 60

■‡ 61

■‡ 62

■‡| 63 ■‡| 70 ■‡| 80

**1**2 82

■‡ 90

■Z 100 ■Z 110 Rocker A left short

Rocker A left long

Rocker A right short

Rocker A right long

Rocker C left short

Rocker C left long

Rocker C right short

Rocker C right long

Rocker E left short

Rocker E right short

Rocker D short

Rocker F

Rocker G

Rocker H short

Rocker B short



#### 5.2.4 Curtain Control

1) HDL DLP control KNX/EIB curtain

#### HDL DLP settings:

Single on/off control, parameter2 is on, then can open/stop the curtain channel1(parameter1 is ch no.)

DLP Panel with AC Music Clock Floor Heating		
Basic information Key assignation Air conditioning function Floor Heating Music page	basic setting	
Select panel		Function Testing
Device 1-8-HDL-MPL8.48-FH ()		Test the Switch
Current key 1 Mode Single on/off	Input function no. from 1 To 1 Confirm	
Key information 2 2 2	Function configuration of current key	Key modification
Key no. Remark Mode	Function no. Subnet ID Device ID Type Parameter 1 Parameter 2 Paramet	Remark
1 Single on/off	1 1 240 Curtain switch 1(Switch no.) On(Switch Status) N/A	
2 Single on/off		Mode
3 Single on/off	Converter ID	

#### Single on/off control, parameter2 is off, then can close/stop the curtain channel1(parameter1 is ch no.)

DLP Panel with AC Music Clock Floor Heating		
Basic information Key assignation Air conditioning function Floor Heating Music p	e basic setting	
Select panel		Function Testing
Device 1-8-HDL-MPL8.48-FH ()		Test the Switch
Current key 2 Mode Single on/off	Input function no. from 1 To 1	
Key information 2 2 × < >	Function configuration of europet key	Key modification
Key no. Remark Mode	Function no. Subnet ID Device ID Type Parameter 1 Parameter 2 Paramet	Remark
1 Single on/off	1 1 240 Curtain switch 1(Switch no.) Off(Switch Status) N/A	Mada
2 Single on/off		Imode
3 Single on/off	Converter ID	

#### Converter settings:

EIB/HDL-BU	JS converter							
Basic information	Configuration							
Select device								
Device	1-240-HDL-DN-EIB ()			Current configuration table no.	1			
Configuration tal	ble no. from(1-254 )	1	To 2	✓ Confirm	Modify	Exit		
LID/TIDE-DOJ CO								
Table no.	EIB Group Addr	HDL subnet ID	HDL device ID	HDL control type	Parameter 1	Parameter 2	Parameter 3	Valid
Table no.	EIB Group Addr 1/1/120	HDL subnet ID	HDL device ID	HDL control type Curtain On/Off(1 bit)	Parameter 1 1(Curtain No.)	Parameter 2	Parameter 3	Valid HDL BUS>EIB
Table no.	EIB Group Addr 1/1/120 1/1/121	HDL subnet ID	HDL device ID 8 8	HDL control type Curtain On/OH(1 bit) Curtain Stop(1 bit)	Parameter 1 1(Curtain No.) 1(Curtain No.)	Parameter 2 N/A N/A	Parameter 3 N/A N/A	Valid HDL BUS>EIB HDL BUS>EIB

#### KNX/EIB curtain settings:

T	Fopology 🔻												🖳 * ×	
	📙 Add Devices 🔻 👗 Delete 🛛 🤼 New Dynamic	Folder 🚆 Spli	t Project			_						Find	<u>۶</u>	1
4	Topology	Numb +	Name	Object Function	Description	Group Addresses	Length		R	W	Т	J Dat	а Туре	
D	Dynamic Folders	<b>■</b> ‡  0	General	Send cycles			1 bit	С	R -		т -	enal	ole	$\sim$
Þ	🔡 0 Backbone area	■‡  10	Output A	Move shutter up/down		1/1/120	1 bit	С	- \	N	- L	up/o	lown	
4	🔡 1 New area	■之  11	Output A	Stop moving		1/1/121	1 bit	С	- \	N	- L			
	📷 1.0 Main line	■‡  40	Output B	Move shutter up/down	-	1/1/122	1 bit	С	- \	N	- L	up/c	lown	3
1	∡ 🗄 1.1 New line	■之  41	Output B	Stop moving		1/1/123	1 bit	С	- \	N	- L			2
	1.1.5 M/W02.10.1													



#### 2) KNX/EIB DLP control HDL curtain

## KXN/EIB DLP settings:

	■2 131	Rocker J left long	Adjust for shutter	1/1/131	1 bit	С	- E	W	Т	U	
	■之 130	Rocker J left short	Move for shutter	1/1/130	1 bit	С	14	W	Т	U	up/down
	■之 123	Rocker I right long	Adjust for shutter	1/1/123	1 bit	С	0	W	т	U	
	■之 122	Rocker I right short	Move for shutter	1/1/122	1 bit	С	17	W	Т	U	up/down
	■之 121	Rocker I left long	Adjust for shutter	1/1/121	1 bit	С		W	Т	U	
	■之 120	Rocker I left short	Move for shutter	1/1/120	1 bit	С	-	W	т	U	up/down
	■之  110	Rocker H short	Sequence		1 bit	С	12	W	т	U	start/stop
	■之 100	Rocker G	Threshold(1byte)	1/1/100	1 Byte	С		W	Т	U	
	■之  90	Rocker F	Percentage	1/1/90	1 Byte	С	-	W	т	U	percentage (01(
	■2 82	Rocker E right short	Sequence		1 bit	С	-	W	т	U	start/stop
1.1.4 M/D02.1	■컱  80	Rocker E left short	Sequence	1/1/80	1 bit	С	12	W	т	U	start/stop
1.1.2 M/DLP04.1	■2 70	Rocker D short	Call scene	1/1/70	1 Byte	С	-	W	Т	U	
▶ 1.1.5 M/W02.10.1	■之  63	Rocker C right long	Dimming	1/1/63	4 bit	С	) <del>,</del>	W	т	U	dimming control
I.1 New line	<b>4</b>   62	Rocker C right short	Switching(Toggle)	1/1/62 1/1/65	1 bit	C	-	w		U	switch

### Converter settings:

🗉 EIB/HDL-B	US converter							
Basic information	Configuration							
Select device								
Device	1-240-HDL-DN-EIB ()		~	Current configuration table no.	3			
Configuration ta	able no. from(1-254 )	1	To 4	Confirm	Modify	Exit		
EIB/HDL-BUS C	Configuration table information -							
Table no.	EIB Group Addr	HDL subnet ID	HDL device ID	HDL control type	Parameter 1	Parameter 2	Parameter 3	Valid
1	1/1/120	1	8	Curtain On/Off(1 bit)	1(Curtain No.)	N/A	N/A	HDL BUS>EIB
2	1/1/121	1	8	Curtain Stop(1 bit)	1(Curtain No.)	N/A	N/A	HDL BUS>EIB
3	1/1/130	1	2	Curtain On/Off(1 bit)	1(Curtain No.)	N/A	N/A	EIB>HDL BUS
4	1/1/131	1	2	Curtain Stop(1 bit)	1(Curtain No.)	N/A	N/A	EIB>HDL BUS
1								

Curtain module ID



## 6. Note

Cinco 1005