SLKDUBT - Digital Universal Bus Transceiver

The Universal Bus Transceiver expands the scope of SensaLink Digital by enabling otherwise uncontrolled lighting and non-lighting loads to be brought into the system. SLKDUBTs also allow external devices to provide inputs into the System.

Fixing

The SLKDUBT is supplied in a protective housing which should be mounted where it is accessible for programming purposes. It must not be installed in a position where it would be exposed to infrared pollution, eg in close proximity to fluorescent tubes.

Connection

The SensaLink Bus cable should be 1.5mm^2 twisted pair unscreened. The digital output cable should be 1.5mm^2 2-core flex unscreened. The mains supply terminals are suitable for $1 \times 4 \text{mm}^2$ or $2 \times 2.5 \text{mm}^2$ cable.

For connection options please see overleaf.

This equipment must be installed only by a suitably qualified person and in accordance with the wiring regulations.

Technical Data

RANGE TO SLKIRPRG2: 0.2m (8 inches) OPERATING VOLTAGE: 230V 50Hz (UK & Europe) PRODUCT RATING & RECOMMENDED CIRCUIT PROTECTION: 10 Amps MAXIMUM RECOMMENDED LOAD: 10 Amps DIGITAL DIMMING OUTPUT LOAD: up to 20 BALLASTS WEIGHT: 112g SIZE: 175mm x 125mm x 75mm

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Commissioning a SLKDUBT using the SLKIRPRG2

When commissioning a SLKDUBT, the SLKIRPRG2 should be held at a shorter distance from the unit than for detectors, ie not more than 0.2m away from the infrared transmitter and receiver which are positioned just below the SensaLink bus connections.

- 1. Switch on SLKIRPRG2 by pressing any button.
- 2. Press Next.

or

3. The SLKIRPRG2 needs to be told which product is to be programmed. There are two routes for providing this information:

i) Press Select. The first product in the list will flash. Use Next/Previous to scroll through the list of products until the correct part number is shown. Press Select and the chosen part number will cease to flash.

ii) Press Next/Previous to scroll to REQUEST DOWNLOAD. Point the SLKIRPRG2 at the SLKDUBT and press Send. The SLKIRPRG2 window will briefly confirm the product's identity.

- 4. Use Previous and Next to access and move through the circular menu, selecting options for each parameter shown.
- 5. When options for all parameters have been selected, scroll to PROGRAMME ALL and press Send. The SLKIRPRG2 shows DATA OK to confirm operation.
- 6. After a short period of inactivity the SLKIRPRG2 shuts down but retains the most recent settings.

Note - Options for each parameter are selected by two methods.

i) Where there are only a few options such as ON/OFF, pressing Select scrolls through those options. Move to the next parameter by pressing Next.

ii) Where there are multiple options such as OFF DELAY and GROUPS, pressing Select does not toggle the options but causes the display to flash. Use Previous and Next to scroll through the multiple options shown until the desired option is found. Press Select to choose that option and the display will stop flashing. Move to the next parameter by pressing Next.

Please refer to SLKIRPRG2 instructions for comprehensive commissioning details.

THORN

SLKDUBT Universal Bus Transceiver for use with SensaLink Digital



INSTALLATION AND COMMISSIONING INSTRUCTIONS

Note: SLKIRPRG2 (version 3.15 or higher) required for commissioning

(Please read these instructions fully before installation)

When commis	ssioning, the follo	wing options are available (pre-sets shown in bold):
Function	Options	Description
Power-up	On/Off	Sets the luminaire state at power-up irrespective of
		occupancy.
Response	Auto/	Auto: switches on and off automatically.
	Semi-auto	Semi-auto: requires input commands on inputs 1-3 or the
		SensaLink Bus to switch on but switches off automatically.
Min on-time	No/Yes	If set to Yes, the luminaires stay on for at least 20 minutes
		regardless of the Off delay. Once the Minimum on-time has
		elapsed, the programmed Off delay is reinstated.
Off delay	5-60 min	Off delays are programmable in 5 minute steps with a
	20 min	10 second walk-test option.
Bus connect	Yes/No	Selecting No electronically disconnects the unit from the bus.
Groups	1 to 50	Seven groups are listed which can be programmed at the time
	Pre-set to	of commissioning. Detectors programmed to the same group
	(no group)	switch on or stay on when movement is detected anywhere in
		that group. The 5th, 6th and 7th entries in the list may also be
		programmed as Common Groups or Global Groups (Note 1
		overleaf gives a more detailed explanation of Global Group
		operation).
Input 1-3	Various options	When the switch inputs go active, the programmed command
	Sustain	is transmitted to the groups in the SLKDUBT's list.
Start lamps	Min/Max	Selects the digital dimming output at power-up which then
		adjusts to the required state.
Entry scene	1-6	Choose scene 1-6 which is selected when the area is first
	Scene 1	occupied.
Fade to off	No/Yes	After the Off delay, digital dimming output either switch off or
	0.00	fade to off gradually over a few minutes.
Vacant	Off	Switch off after off delay.
	Min	Go to minimum until next occupancy.
	Min 3hr	Go to minimum for 3 hours then switch off.
	Min bld	Go to minimum until the building is vacated then switch off.
	Scn 6	Go to Exit Scene (Scene 6) until next occupancy.
	Scn 6 3 hr	Go to Exit Scene (Scene 6) for 3 hours then switch off.
	Scn 6 bld	Go to Exit Scene (Scene 6) until building is vacated then
Usor romoto		Simulatos SI KIDUH2 functions
Request		Extracts information regarding product type and current
download		settings from Thorn device
Programme all		Transmits all programme parameters
		Transmitis un programme parameters.

USING THE SLKDUBT AS AN INTERFACE DEVICE (TRANSMITTER MODE)



Input:

230V 50Hz signal on mains sense.Signal on input 1, 2 or 3 from an external switch.These inputs can be programmed to send Global Commands(which will be received by all devices programmed to acceptGlobal Commands) as follows:SUSTAIN- Stay as you areOFF- Switch offSCENE 1-6- Go to specified sceneON- Switch on to your entry scenePARTITION- Causes any group information programmed to the3rd and 4th positions to be disregarded temporarily.

A momentary input will action the command and local presence will take over. A latched input will maintain the command regardless of presence until the input is opened.

Action:

Input:

Action:

SensaLink Bus signal.

The SLKDUBT's internal timer is started or refreshed. Sends signal out on SensaLink Bus, communicating with similarly programmed devices in the same groups.

Closes volt-free output - to operate external device/signal BMS etc.

The SLKDUBT internal timer is started or refreshed.

USING THE SLKDUBT TO RECEIVE SIGNALS FROM THE BUS TO SWITCH AN EXTERNAL NON-SENSALINK DEVICE



TRANSCEIVER MODE



Input:

SensaLink Bus signal.230V 50Hz signal on mains sense.These inputs can be programmed to send Global Commands(which will be received by all devices programmed to acceptGlobal Commands) as follows:SUSTAIN- Stay as you areOFF- Switch offSCENE 1-6- Go to specified sceneON- Switch on to your entry scenePARTITION- Causes any group information programmed to

the 3rd and 4th positions to be disregarded temporarily.

A momentary input will action the command and local presence will take over. A latched input will maintain the command regardless of presence until the input is opened.

Action:

The SLKDUBT's internal timer is started or refreshed. Sends signal out on SensaLink Bus, communicating with similarly programmed devices in the same groups.

Note 1

The 5th, 6th and 7th Groups may be programmed as Global Groups. A Global Group may be used for load shedding or setting a scene for when the building is empty. There are two Global Groups that can either Transmit and Receive (G1 and G2 TxRx) or that can Receive only (G1 and G2 Rx). Global Groups are set by choosing Yes (they are pre-set to No) at the time of commissioning. In this way the SLKDUBT may broadcast information to other system devices (eg presence detectors) that are also programmed to be part of Global Groups.