
















HBTD8200S	HBTD8200T/HBTD8200T2	HBTD8200V	HBTD8200D
Relay Control	Trailing Edge	0/1-10V	DALI

## Product Description

HBTD8200 series are designed to fit into a junction box or electrical box to make Push switch (retractive switch) to achieve on/off control, dimming control, colour tuning and even scene recall. Whether used for new build or retro-fit projects to add intelligent control to standard lighting fixtures, HBTD8200 series does it all. Simple device setup and commissioning can be done via **Koolmesh™** app.

## App Features

-  Grouping luminaires via mesh network
  - Two levels: room & group
  - Synchronization control
-  7 types of scene options to set up\*
  - Generic Scenes
  - Lux ON/OFF Scenes
  - Daylight Harvest (Open loop)
  - Daylight Harvest (Closed loop)
  - Simple circadian rhythm without daylight sensor
  - Advanced circadian rhythm with daylight sensor
  - Time-based Scene
-  Push switch configuration
-  Schedule to run scenes based on time and date
-  Astro timer (sunrise and sunset)
-  Floorplan feature to simplify project planning
-  Status after re-powered on (memory against power loss)
-  Offline commissioning
-  Different permission levels via authority management
-  Network sharing via QR code or keycode
-  Remote control via gateway support HBGW01
-  Interoperability with Hytronik Bluetooth product portfolio
-  Compatible with EnOcean range of wireless switches
-  Device firmware update over-the-air (OTA)
-  Continuous development in progress...

\* Certain scenes which require external photocell can be achieved by using together with Hytronik Bluetooth sensors. Such as HBIR29, HCDO38/BT + sensor head ect.



On-off Version  
Trailing Edge (150VA)



DALI / 1-10V Version  
Trailing Edge (2 x 100VA)

## Hardware Features

-  HBTD8200S - ON/OFF relay switch:
  - 400VA (capacitive)
  - 800W (resistive)
-  HBTD8200T - Trailing edge output: 150VA (capacitive)
-  HBTD8200T2 - Trailing edge output: 2 x 100VA (capacitive)
-  HBTD8200V - 1-10V output with relay control: 400VA (capacitive) and 800W (resistive)
-  HBTD8200D - 100mA DALI broadcast output for up to 50 LED drivers
-  2 Push inputs for flexible manual control
-  Zero crossing detection circuit to reduce in-rush current and prolong relay lifetime (HBTD8200S & HBTD8200V)
-  Short-circuit protection
-  Overload protection
-  5-year warranty

## Bluetooth 5.0 SIG mesh



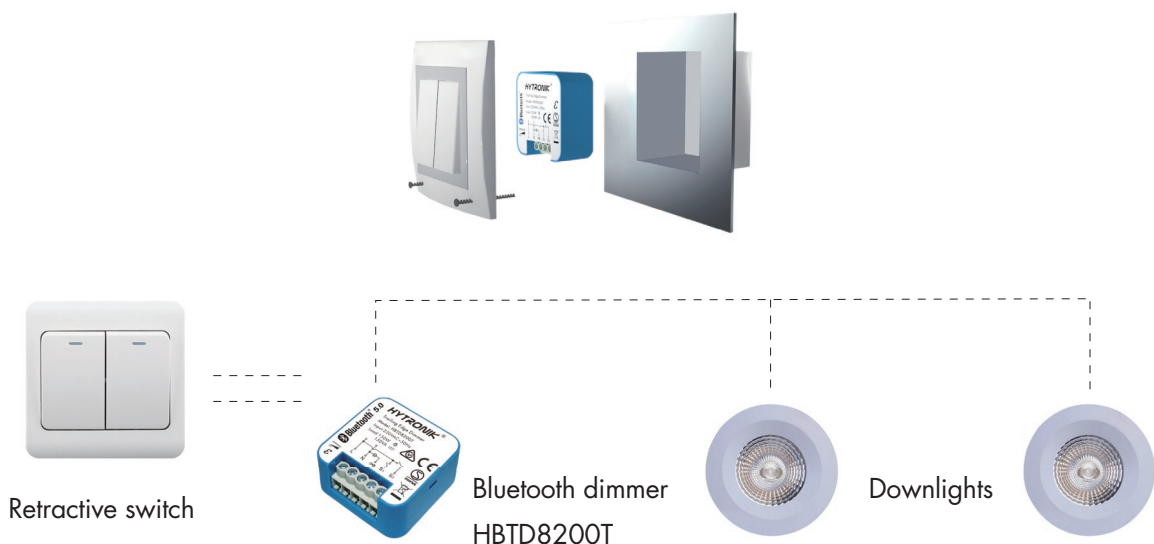
 iOS 10.0 or later

 Android 5.0 or later



**EnOcean**  
Self-powered IoT

Fully support  
EnOcean switch



## Technical Specifications

Bluetooth Transceiver	
Operation frequency	2.4 GHz - 2.483 GHz
Transmission power	7 dBm
Range (Typical indoor)	10~30m
Protocol	Bluetooth® 5.0 SIG Mesh

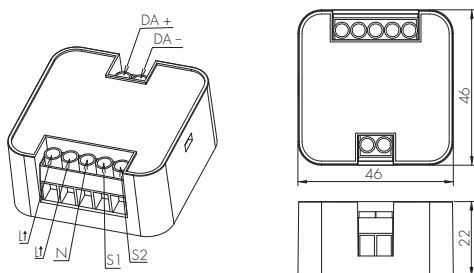
Environment	
Operation temperature	Ta: -20°C ~ +45°C
Case temperature (Max.)	
HBTD8200S/F	Tc: +75°C
HBTD8200T/F	Tc: +80°C
HBTD8200V/F	Tc: +75°C
HBTD8200D/F	Tc: +75°C
HBTD8200DT2	Tc: +80°C
Storage temperature	-20°C ~ 60°C
Relative humidity	20 ~ 90%
IP rating	IP20
Insulation	Class II

Input & Output Characteristics	
Operating voltage:	
HBTD8200S/F	220~240VAC 50Hz
HBTD8200T/F	230VAC 50Hz
HBTD8200V/F	220~240VAC 50Hz
HBTD8200D/F	220~240VAC 50/60Hz
HBTD8200T2	230VAC 50Hz
Stand-by power	<0.5W
Load ratings:	
HBTD8200V	400VA(Capacitive), 800W(Resistive)
HBTD8200D	100mA, 16VDC (max. 50 devices)
HBTD8200T	150VA(Capacitive), 150W(Resistive)
HBTD8200T2	2x100VA(Capacitive), 2x150W(Resistive)
HBTD8200S	400VA(Capacitive), 800W(Resistive)

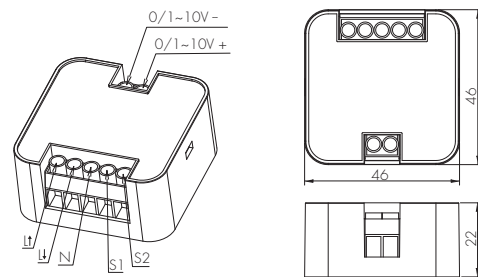
Safety & EMC	
EMC standard (EMC)	EN55015, EN61547 EN62479, EN61000
Safety standard (LVD)	IEC/EN 61058, AS/NZS 61058
Radio Equipment (RED)	EN300 328, EN301489-1/-17, EN62479
Certification	Semko, CB, CE, EMC, RED, RCM

## Mechanical Structure & Dimensions

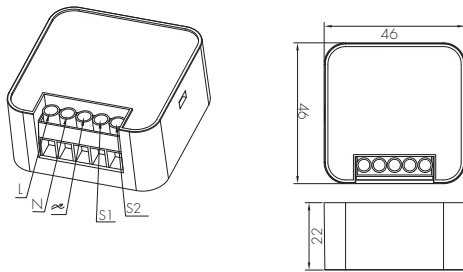
HBTD8200D - DALI Version



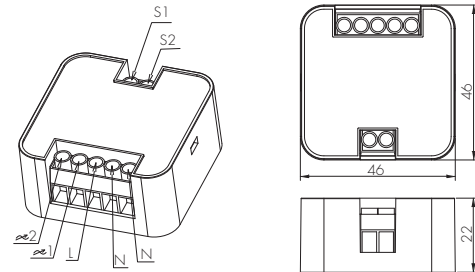
HBTD8200V - 1-10V Version



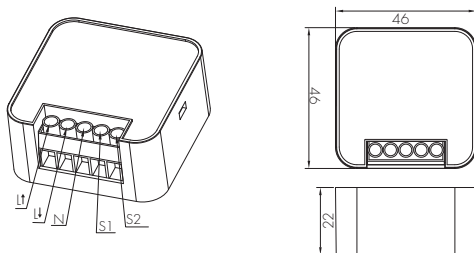
HBTD8200T - Trailing Edge Version (150VA)



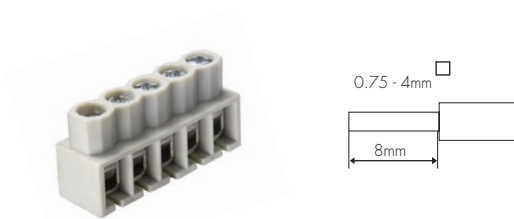
HBTD8200T2 - Trailing Edge Version (2 x 100VA)



HBTD8200S - On/off Version

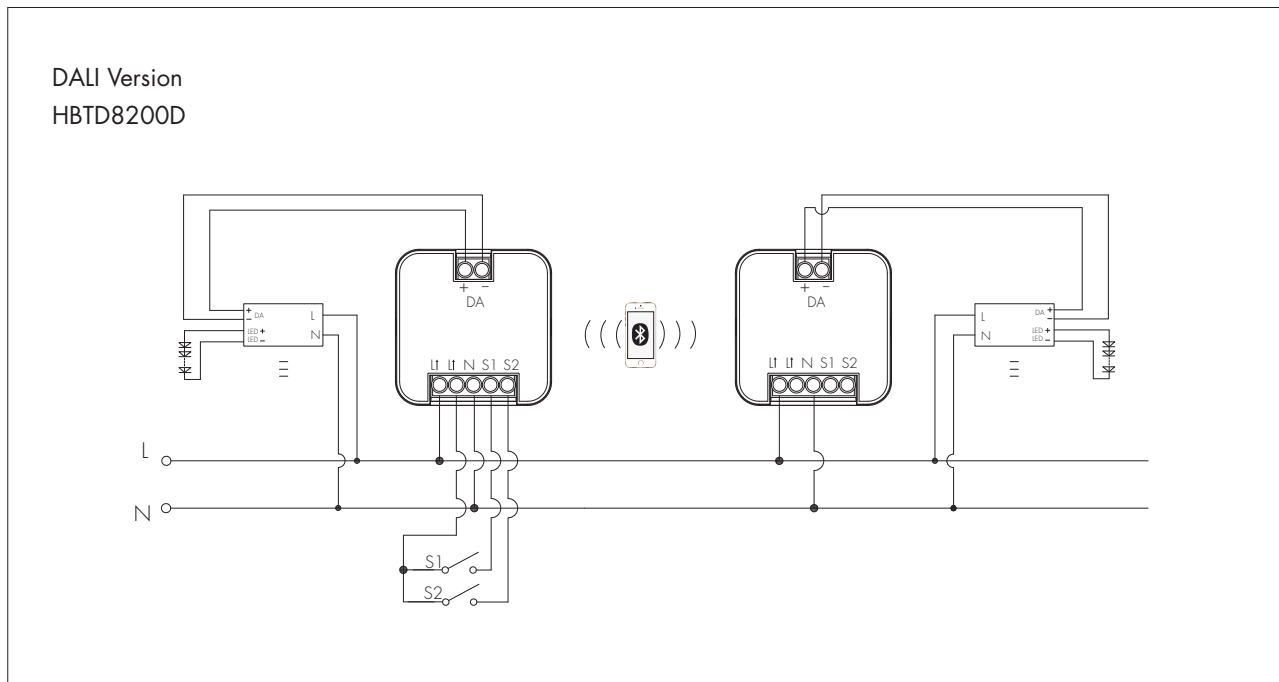


### Wire Preparation

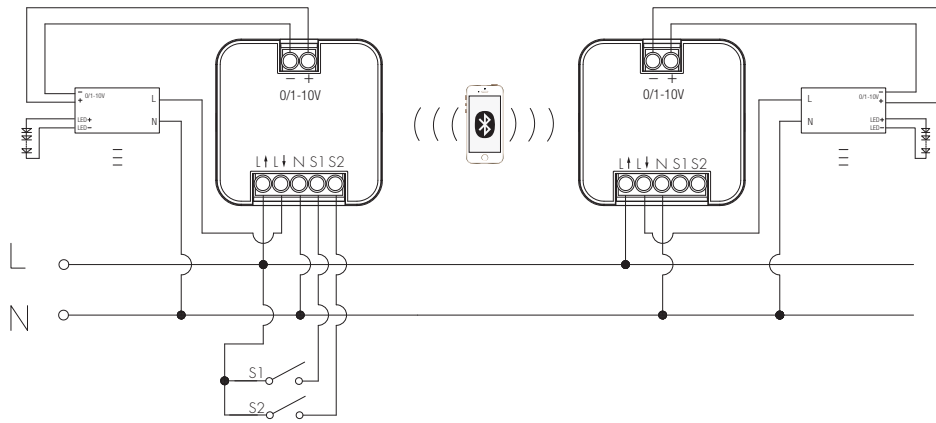


To make or release the wire from the terminal, use a screwdriver to push down the button.

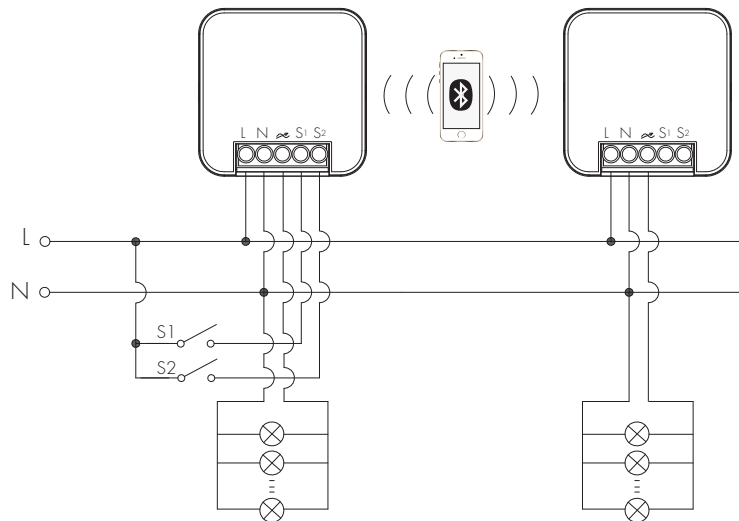
### Wiring Diagram



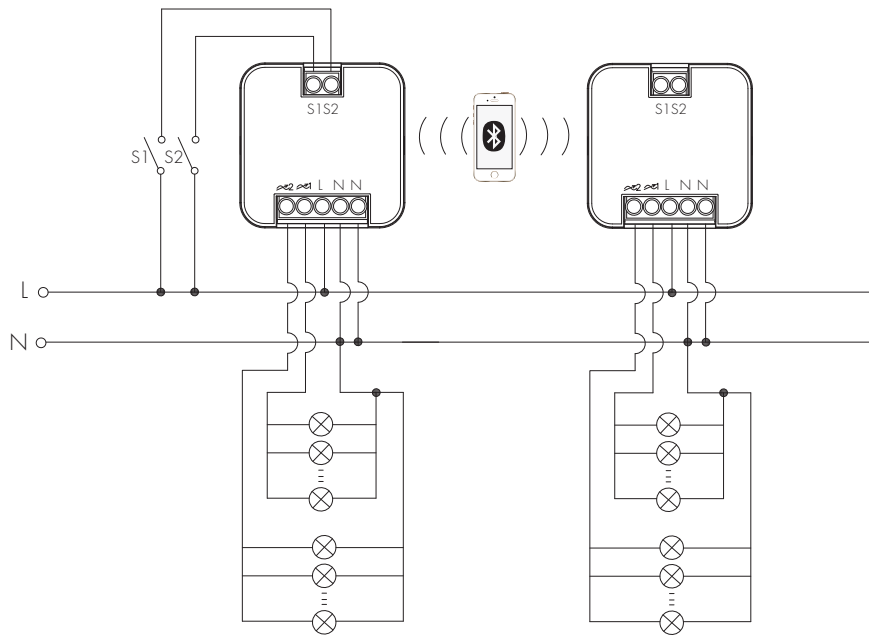
1-10V Version  
HBTD8200V



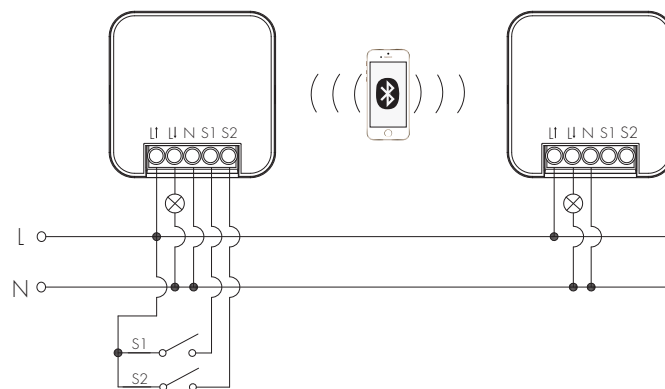
Trailing Edge Version (150VA)  
HBTD8200T



Trailing Edge Version (2 x 100VA)  
 HBTD8200T2



On/off Version  
 HBTD8200S



## Dimming Interface Operation Notes

### Switch-Dim

The provided Switch-Dim interface allows for a simple dimming method using commercially available non-latching (momentary) wall switches. Detailed Push switch configurations can be set on Koolmesh app.

Switch Function	Action	Descriptions
Push switch	Short press (<0.4 second) * Short press has to be longer than 0.1s, or it will be invalid.	- Turn on/off - Turn on only - Turn off only - Recall a scene - Exit manual mode - Do nothing
	Double push	- Turn on only - Turn off only - Recall a scene - Exit manual mode - Do nothing
	Long press (>0.4 second)	- Dimming - Colour tuning - Do nothing
Simulate sensor	/	- Upgrade a normal on/off motion sensor to a Bluetooth controlled motion sensor

### Additional Information / Documents

1. Regarding precautions for Bluetooth product installation and operation, please kindly refer to [www.hytronik.com/download/knowledge](http://www.hytronik.com/download/knowledge) ->Bluetooth Products - Precautions for Product Installation and Operation
2. Data sheet is subject to change without notice. Please always refer to the most recent release on [www.hytronik.com/products/bluetooth technology](http://www.hytronik.com/products/bluetooth%20technology) ->Bluetooth Dimmers
3. Regarding Hytronik standard guarantee policy, please refer to [www.hytronik.com/download/knowledge](http://www.hytronik.com/download/knowledge) ->Hytronik Standard Guarantee Policy