

Built-in Receiver Nodes with  Bluetooth® 5.0 SIG Mesh

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
















# HYTRONIK®



## Product Description

HBTD8200/F series are designed as Bluetooth built-in receiver node. They can be used alongside our Bluetooth motion sensor range as Bluetooth receiver nodes. Or, they can also be used solely as Bluetooth control unit for each luminaire. Whether for home use, commercial or industrial applications, HBTD8200/F 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.











DALI Version  
1-10V Version



Trailing Edge Version  
On-off Version

## Hardware Features

-  HBTD8200S/F: ON/OFF control with load ratings: 400VA (capacitive) & 800W (resistive)
-  HBTD8200T/F: Trailing edge output - 150VA (capacitive)
-  HBTD8200V/F: 1-10V output: 400VA (capacitive) & 800W (resistive) with relay control
-  HBTD8200D/F: 100mA DALI broadcast output for up to 50 LED drivers
-  Compact design with two screw holes to be built inside luminaires
-  2 Push inputs for flexible manual control
-  Zero crossing detection circuit to reduce in-rush current and prolong relay lifetime (HBTD8200S/F and HBTD8200V/F)
-  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

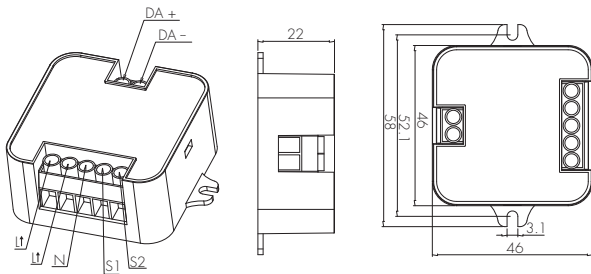
## Technical Specifications

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
Storage temperature	-20°C ~ 60°C
Relative humidity	20 ~ 90%
IP rating	IP20
Insulation	Class II

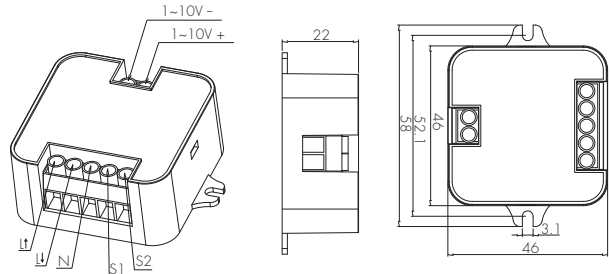
Input & Output Characteristics	
Operating voltage:	
HBTD8200S/F	220~240VAC 50Hz
HBTD8200T/F	230VAC 50Hz
HBTD8200V/F	220~240VAC 50Hz
HBTD8200D/F	220~240VAC 50/60Hz
Stand-by power	<0.5W
Load ratings:	
HBTD8200S/F	400VA(Capacitive), 800W(Resistive)
HBTD8200T/F	150VA(Capacitive), 150W(Resistive)
HBTD8200V/F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

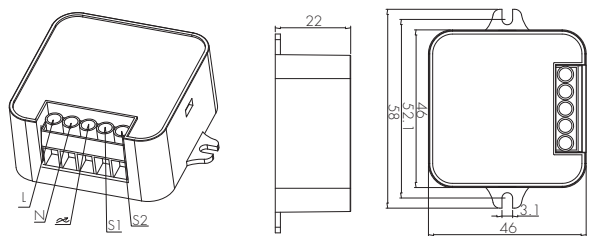
HBTD8200D/F - DALI Version



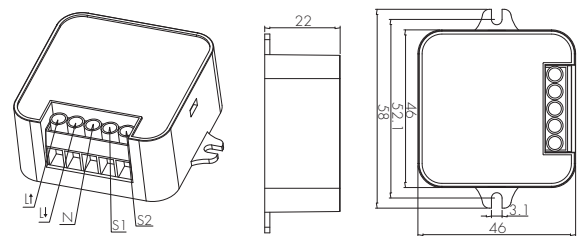
HBTD8200V/F - 1-10V Version



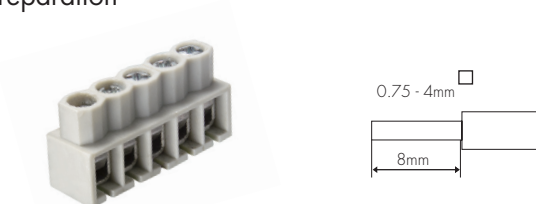
HBTD8200T/F - Trailing Edge Version



HBTD8200S/F - On/off Version



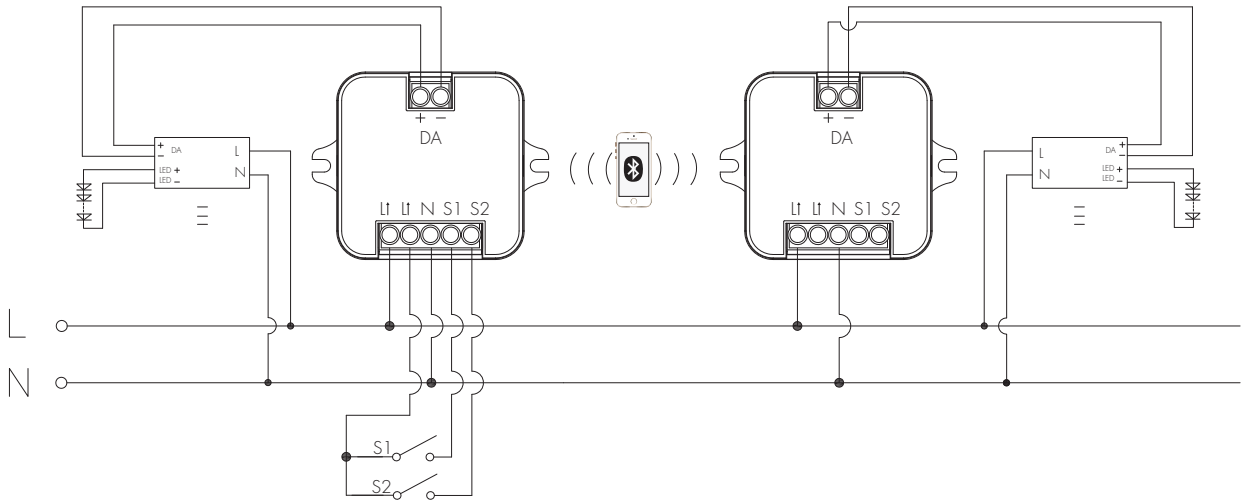
## Wire Preparation



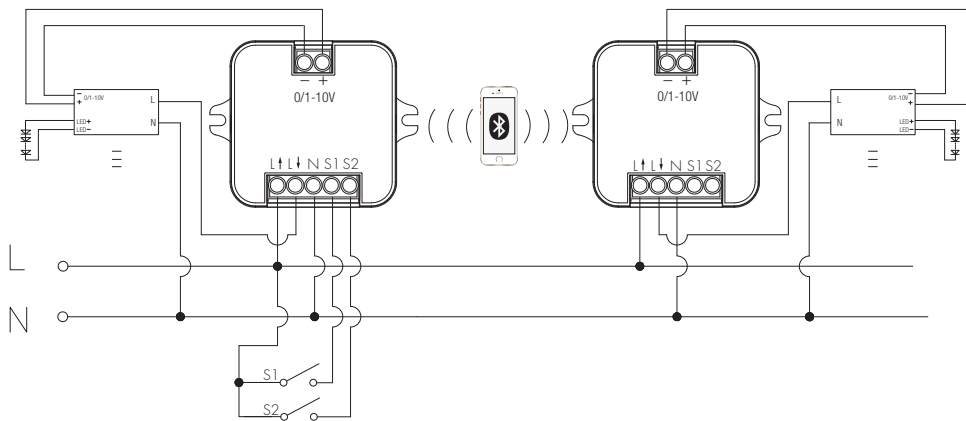
To make or release the wire from the terminal, use a screwdriver to push down the button.

# Wiring Diagram

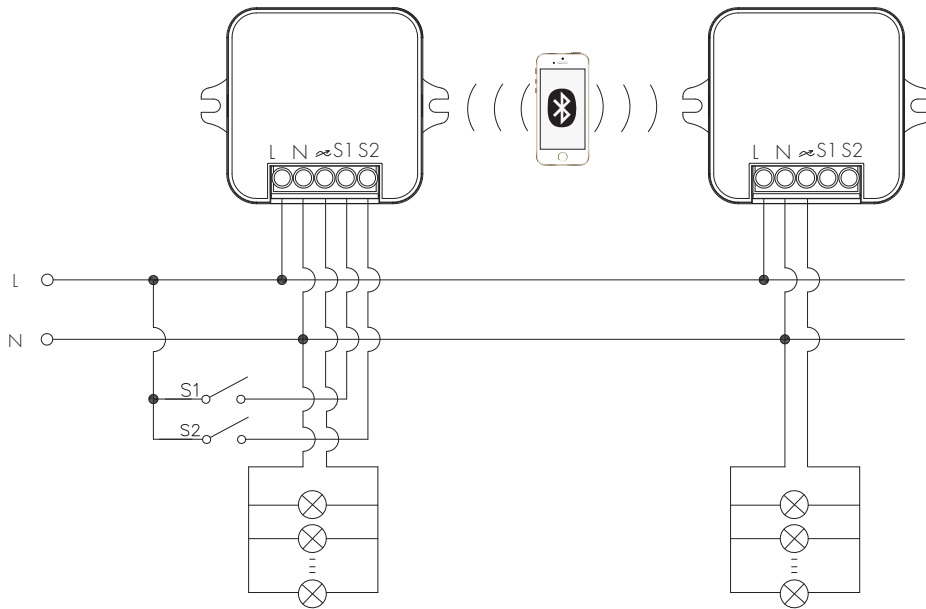
DALI Version  
HBT8200D/F



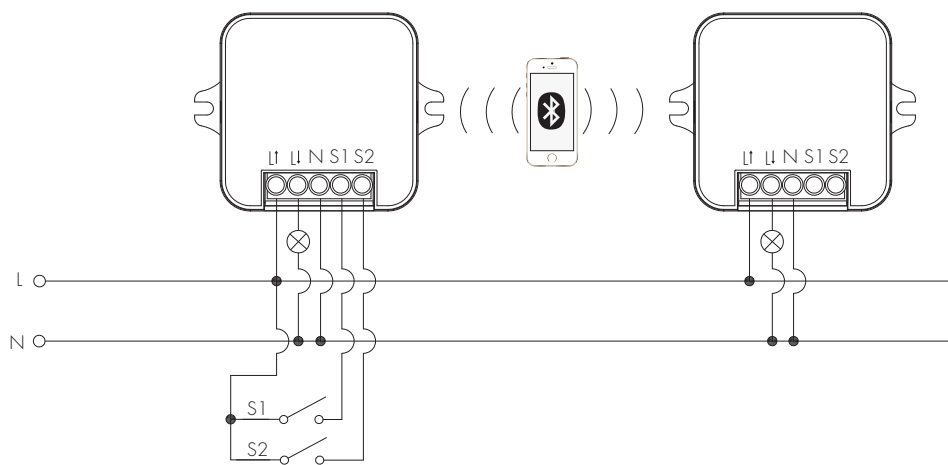
1-10V Version  
HBT8200V/F



Trailing Edge Version (150VA)  
 HBTD8200T/F



On/off Version  
 HBTD8200S/F



## 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 Sensors
3. Regarding Hytronik standard guarantee policy, please refer to [www.hytronik.com/download/knowledge](http://www.hytronik.com/download/knowledge) ->Hytronik Standard Guarantee Policy