

Sensors and Controls

# **basicDIM Wireless**

At a glance



**TRIDONIC**

# Table of Contents

- 1. What is basicDIM Wireless? 3
- 2. Important informations about basicDIM Wireless 3
- 3. Microcontroller types in basicDIM Wireless devices 3
  - 3.1. basicDIM Wireless devices ..... 3
  - 3.2. basicDIM Wireless LED drivers ..... 7
- 4. Software 10
  - 4.1. 4remote BT App ..... 10
  - 4.2. First time use ..... 10
- 5. Wiring Schemes 11
  - 5.1. basicDIM Wireless G2 ..... 11
  - 5.2. basicDIM Wireless Passive Module G2 ..... 11
  - 5.3. basicDIM Wireless SR ..... 13
  - 5.4. basicDIM Wireless Outdoor ..... 14
  - 5.5. smartSWITCH SFI 10 HF 5DP bDW ..... 15
  - 5.6. MSensor SFI 40 PIR 5DP bDW ..... 16
  - 5.7. basicDIM Wireless PWM CV 4CH ..... 17
  - 5.8. basicDIM Wireless 0-10V 2CH ..... 17

## 1. What is basicDIM Wireless?

The Casambi Ready basicDIM Wireless control technology allows versatile and professional interaction with all luminaires within an area – fully intuitive and with no additional wiring required. The basis for the wireless light management is found in the luminaire with the LED module, a 24 V constant voltage or DALI driver and one of the basicDIM Wireless modules. Users can choose whether to control the lighting using the 4remote BT App or via the basicDIM Wireless User Interface. **Up to 250\*** basicDIM Wireless devices can be conveniently controlled in one network via Bluetooth® wireless technology: switching on and off as well as dimming functions are just as simple as grouping luminaires and creating lighting settings. Tunable White luminaires change their colour temperature to suit the user. All the elements for integrating sensors are also in place. Each device can connect to one or multiple other devices (mesh connection) when added to a network.

## 2. Important informations about basicDIM Wireless

Parameter	Value
Technology	Bluetooth® wireless technology 4.0 / BLE
Compatibility	with all Casambi Ready devices
Compatible end-devices	Android 4.4 (KitKat) and higher iPhone 4S (iOS 5.0) and higher and iPad 3 (iOS 5.1) or higher
Max. number of networks	unlimited
Max. number of devices per network	127 (Classic network) / 250 (Evolution network)*
Max. number of scenes	unlimited
Max. number of groups	unlimited

\* only possible with devices which contain the new nRF52 microcontroller.

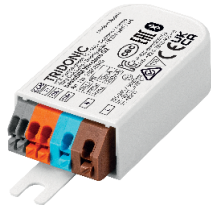
## 3. Microcontroller types in basicDIM Wireless devices

Module / device	nRF51 (old chip)	nRF52 (new chip)	Information
basicDIM Wireless Module	✓	✓	<b>From batch #1648 on</b> , nRF52 is used
basicDIM Wireless User Interface	✓	✓	<b>From batch #2917 on</b> , nRF52 is used

\* all other devices come with nRF52 (new chip)

3.1. basicDIM Wireless devices

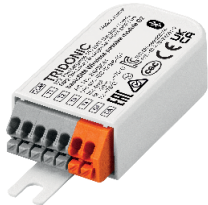
basicDIM Wireless Module G2:



Wireless control unit for dimmable LED drivers with DALI dimming interface.

Supply (AC)	220 - 240 V (50 / 60 Hz)
Max. output current	10 mA
Max. DALI wiring length	5 m at 1 mm² cross section
Connected devices	1
Functionality	DALI DT6 / DT8, Push Button, Sensor

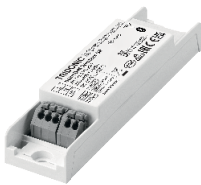
basicDIM Wireless Passive Module G2:



Wireless control unit for dimmable LED drivers with DALI dimming interface. Is supplied over DALI bus - no mains supply needed.

Supply (DC)	9.5 - 22.5 V (DALI)
Max. input current in standby	4 mA (30 mA at start)
Max. DALI bus current	250 mA
Connected devices	depending on DALI PS
Functionality	DALI DT6 / DT8 DALI-2 Sensor

basicDIM Wireless SR:



Wireless control unit for dimmable LED drivers with DALI dimming interface. Is supplied over DALI bus - no mains supply needed.

Supply (AC)	220 - 240 V (50 / 60 Hz)
Max. output current	18 mA
Max. DALI wiring length	300 m at 1.5 mm² cross section
Connected devices	1
Functionality	DALI DT6 / DT8, Push Button, Sensor

**basicDIM Wireless User Interface:**



Battery powered wireless wall switch which is able to control all sorts of basicDIM Wireless devices.

Supply (DC)	3 V battery (CR2430)
Battery life	2 - 5 years, depending on usage
Wireless range	up to 60 m
Functionality	4 scenes, Dim up / down, Colour temperature

**basicDIM Wireless Sensor 5DP 38rc:**



Offers wireless presence detection and daylight control for other basicDIM Wireless devices.

Supply (AC)	220 - 240 V (50 / 60 Hz)
Mounting height	max. 4 m
Detection range, mounted at height of 3 m	ø 8 m
Detection angle	53°
Light measurement at sensor head	1 - 2.000 lx (± 20 %)
Functionality	Presence, Daylight regulation

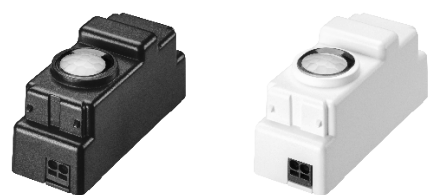
**smartSWITCH SFI 10 HF 5DP bDW:**



Offers wireless independent relay or presence detection for other basicDIM Wireless devices.

Supply (AC)	220 - 240 V (50 / 60 Hz)
Mounting height	max. 5 m
Detection range, mounted at height of 3 m	ø 6 m
Detection angle	30 - 150°
Functionality	Relay, Presence

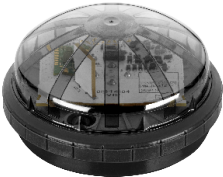
**MSensor SFI 40 PIR 5DP bDW:**



Offers wireless presence detection and daylight control for other basicDIM Wireless devices.

Supply (DC)	9.5 - 22.5 V
Mounting height	5 m
Detection angle for PIR detection	84°
Detection angle for light measurement	30 - 60°
Light measurement at sensor head	10 - 2.000 lx
Functionality	Presence, Daylight regulation

**basicDIM Wireless Outdoor:**



Wireless control unit for outdoor dimmable LED drivers with DALI dimming interface and integrated power supply.

Supply (DC)	9.5 - 22.5 V (DALI)
Max. input current in standby	13 mA (30 mA at start)
Max. DALI bus current	250 mA
Connected devices	depending on DALI PS
Functionality	DALI DT6, DALI-2 Sensor

**basicDIM Wireless PWM CV 4CH:**



Bluetooth®-controllable four-channel PWM dimmer  
for constant voltage loads.

Supply (DC)	12 - 24 V
Max. input current	6 A / 4 A (US)
Output voltage (DC)	12 - 24 V
Max. output current (free allocation to channels)	6 A / 4 A (US)
Connected loads	4
Functionality	PWM dimming

**basicDIM Wireless 0-10V 2CH:**



Bluetooth®-compatible, 2-channel control unit for dimmable  
0-10V LED loads.

Supply (DC / Class 2)	12 - 24 V
No-load input current	30 mA
Output voltage DC	0 - 10 V
Output voltage relay (DC)	12 - 24 V
Max. output current (relay)	100 mA
Input voltage range sensor (DC)	0 - 24 V
Connected devices	1 device / channel
Functionality	0-10V, Sensor

### 3.2. basicDIM Wireless LED drivers

basicDIM Wireless LED drivers come with an integrated basicDIM Wireless Interface and are available in a wide variety of variants.

Driver PRE constant current



Driver PRE 24V constant voltage



Driver PRE Tunable White



Constant current driver with ready2mains and I-SELECT 2 interface.

Types	LC 10/150-400/40 bDW SC PRE2 LC 17/250-700/50 bDW SC PRE2 LC 25/350-1050/50 bDW SC PRE2 LC 45/500-1400/50 bDW SC PRE2
Functionality	Dimmable
Push button interfaces	1
Functions	LED current Constant light output (CLO) DC level

Constant voltage driver with ready2mains and I-SELECT 2 interface.

Types	LC 35/24V bDW SC PRE2 LC 60/24V bDW SC PRE2 LC 100/24V bDW SC PRE2 LC 150/24V bDW SC PRE2
Functionality	Dimmable
Push button interfaces	1
Functions	Constant light output (CLO) DC level

Tunable White driver with I-SELECT 2 interface.

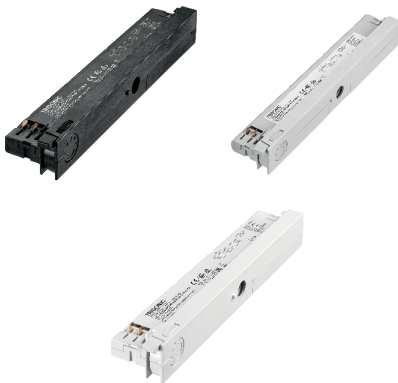
Types	LC 38/350-1050/50 bDW TW SR PRE2 LC 38 W 350–1050 mA bDW TW C PRE2
Functionality	Dimmable, colour temperature
Push button interfaces	2



Driver NFC SC EXC3



Driver NFC in-track EXC3



Constant current driver with NFC interface

Types	LC 14/150-400/42 bDW NFC SC EXC3 LC 28/300-700/42 bDW NFC SC EXC3 LC 38/650-1050/42 bDW NFC SC EXC3
Functionality	Dimmable
Push button interfaces	1
Functions	LED current Constant light output (CLO) DC level Enhanced constant light output (eCLO)

Constant current in-track driver with NFC interface

Types	LC 25/350-600 bDW NFC T EXC3 LC 40/500-1050 bDW NFC T EXC3
Functionality	Dimmable
Push button interfaces	1
Functions	LED current

## 4. Software

### 4.1. 4remote BT App

To be able to control basicDIM Wireless enabled luminaires, they must be integrated (paired) into a network. This is done via the 4remote BT-App. All settings are stored in the network, for example, names, pictures, groups, timers, scenes and switch settings.

If a unit is removed (unpaired) from a network, it will no longer have the network specific settings.

If a basicDIM Wireless unit is not part of any network, the Tridonic 4remote BT App will automatically display a pop-up window to add the unit to a network.

The functionality of the devices can be selected through profiles which can be selected if a device is in an unpaired state.



4remote BT App



### 4.2. First time use

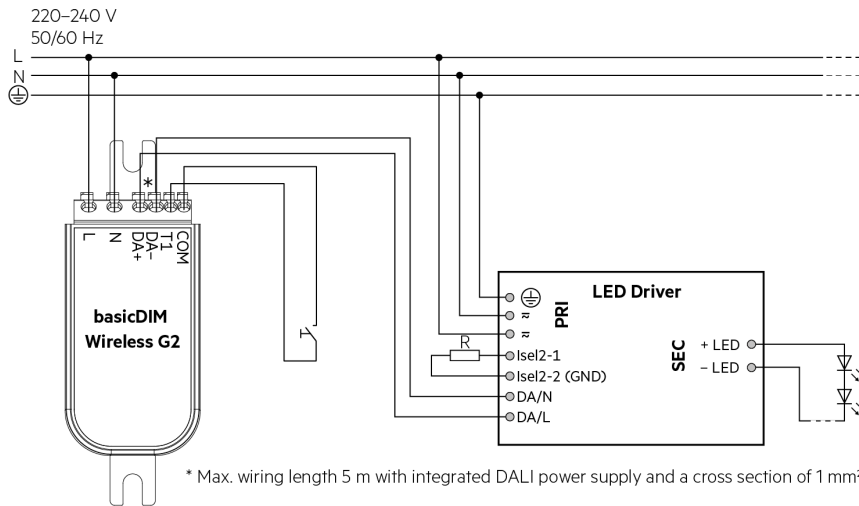
1. Download the app from Apple App Store or Google Play Store.
2. Power on your basicDIM Wireless enabled luminaires.
3. Open the app.
4. Tridonic 4remote BT App will automatically find all basicDIM Wireless enabled luminaires that are powered on.
5. Tap on "Take all luminaires into use".
6. The app will automatically add all found luminaires to one network and opens the "Luminaires" tab.
7. Following tabs are available in the 4remote BT App:
  - a. **"Luminaires"** tab - All basicDIM Wireless luminaires which are paired to the network can be grouped and controlled.
  - b. **"Gallery"** tab - All basicDIM Wireless luminaires which are paired to the network can be controlled with control-points, which are placed in captured pictures.
  - c. **"Scenes"** tab - Static and time based scenes, as well animations can be created and called manually.
  - d. **"More"** tab - Timers can be created, switches and sensors which are paired to the network can be configured, settings of network and app can be changed and devices can be unpaired from or paired to the network.



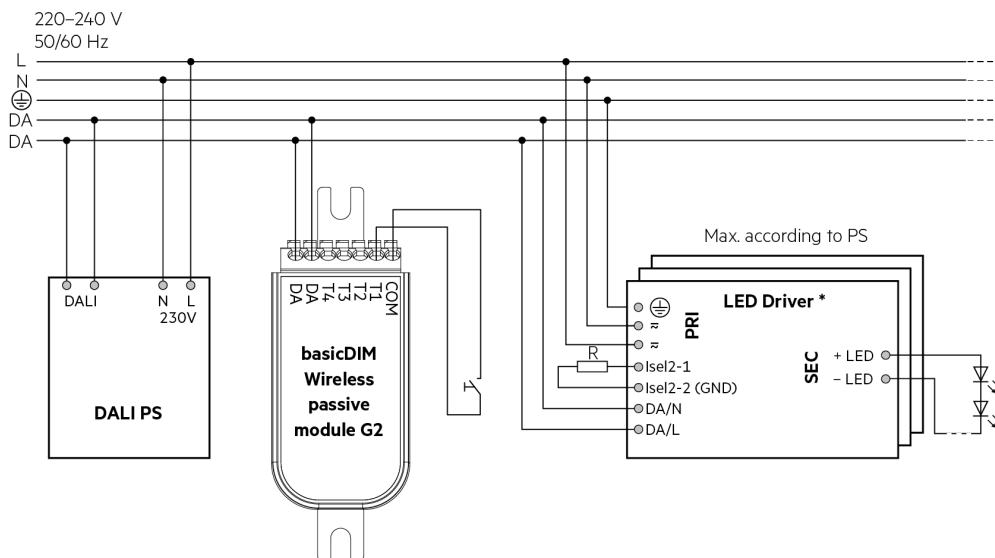
## 5. Wiring Schemes

The functionality of the devices can be selected through profiles which can be selected if a device is in an unpaired state.

### 5.1. basicDIM Wireless G2



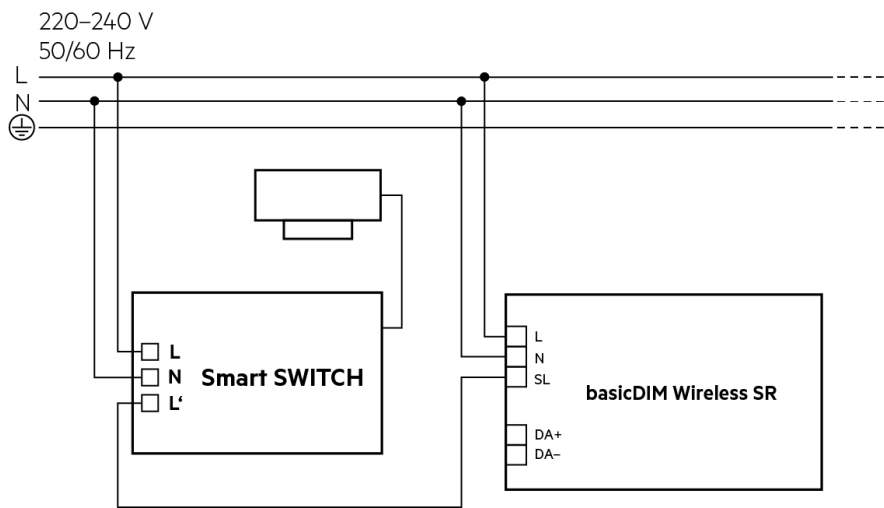
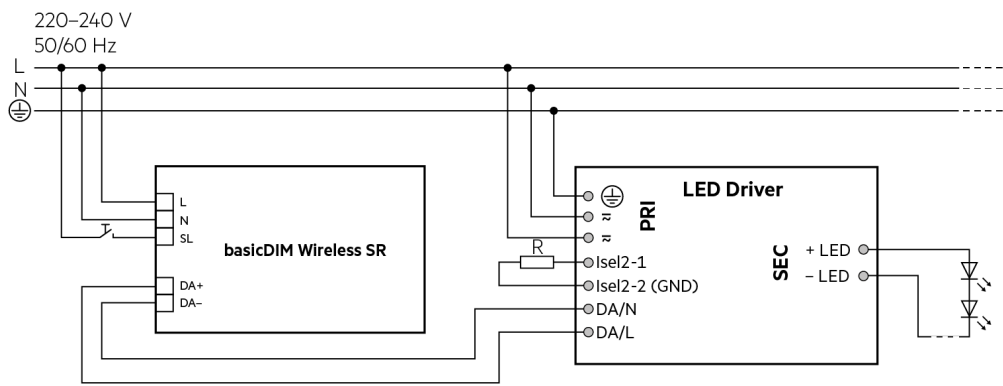
### 5.2. basicDIM Wireless Passive Module G2



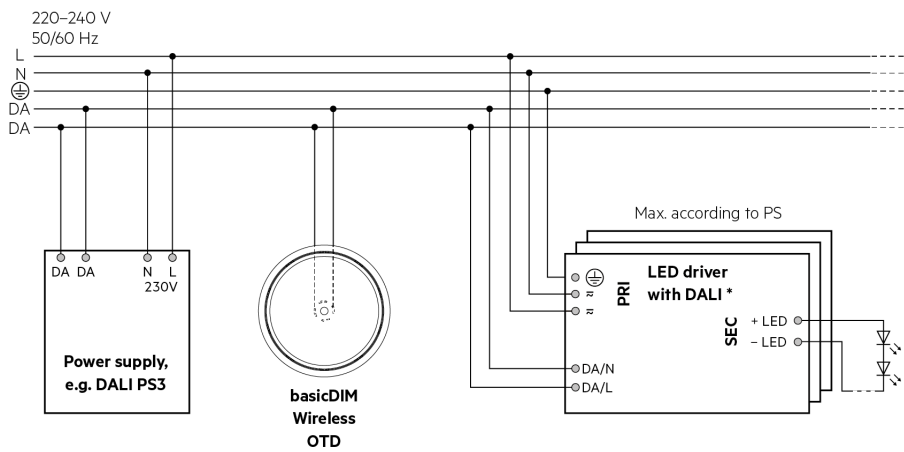
\* Max. 4 DALI single / group addresses (A0 ... A3 / G0 ... G3) controllable, depending on the device profile of the basicDIM Wireless module.  
The rest of the connected drivers can be controlled via broadcast – depending on the device profile.



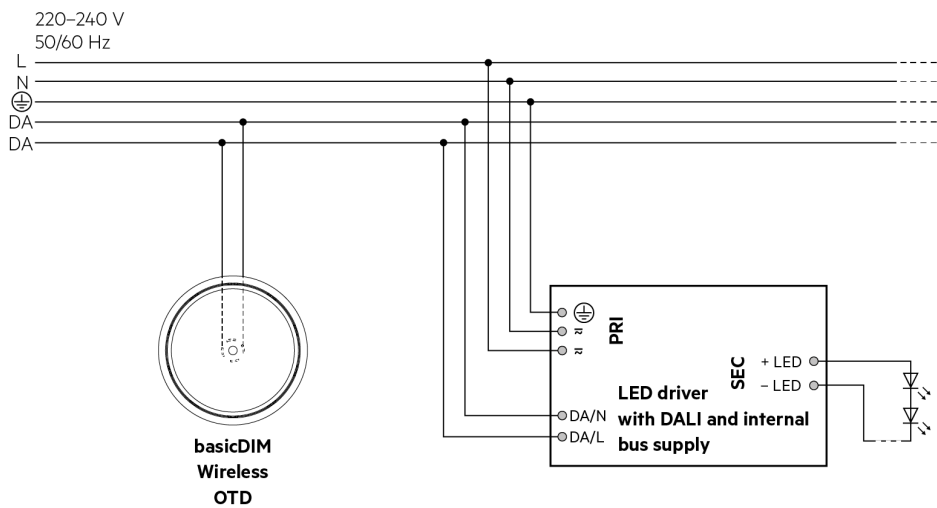
5.3. basicDIM Wireless SR

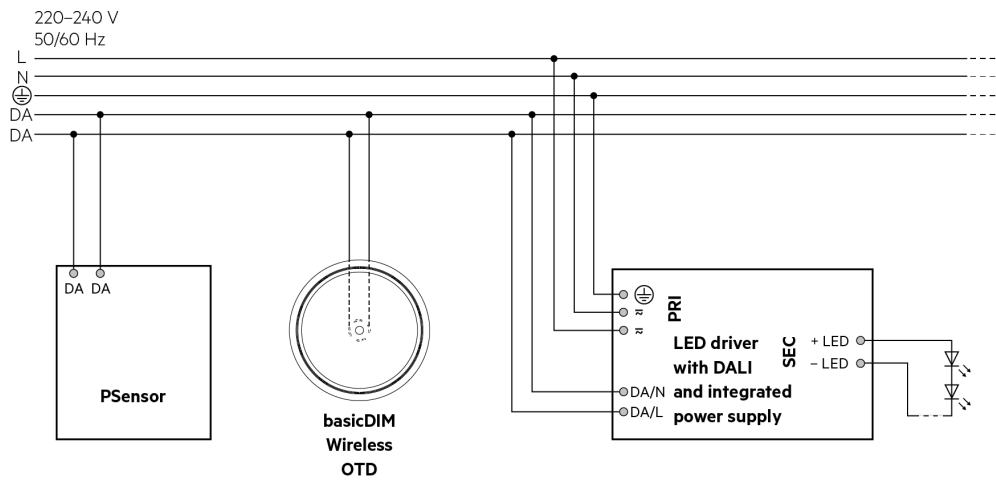


5.4. basicDIM Wireless Outdoor

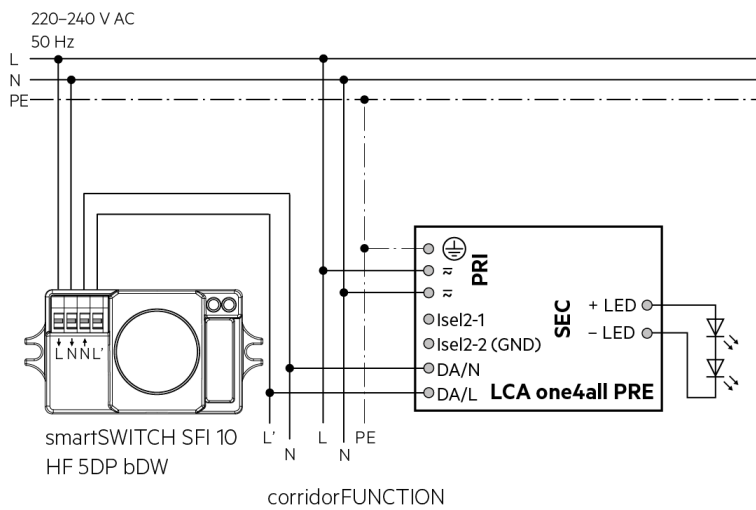


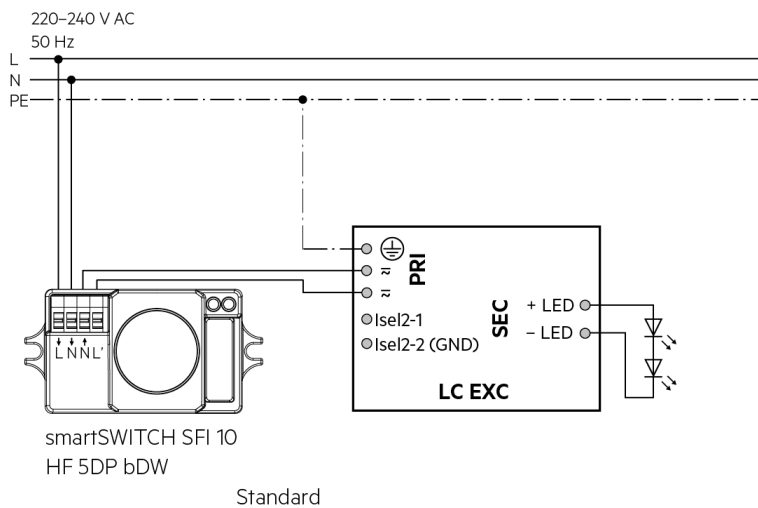
\* Max. 4 single / group addresses (A0 ... A3 / GO ... G3) controllable, depending on the device profile of the basicDIM Wireless module.  
The rest of the connected drivers can be controlled via broadcast – depending on the device profile.



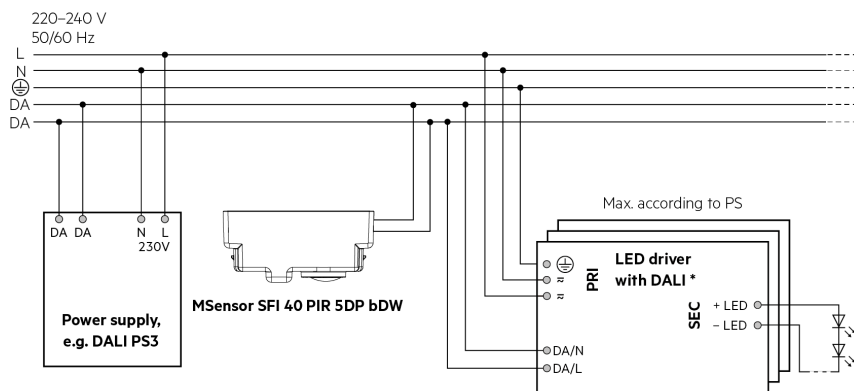


## 5.5. smartSWITCH SFI 10 HF 5DP bDW



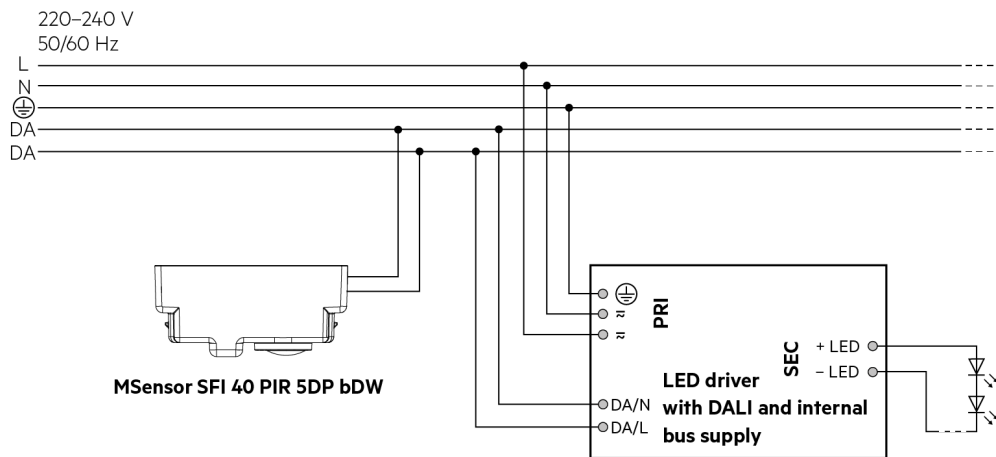


## 5.6. MSensor SFI 40 PIR 5DP bDW

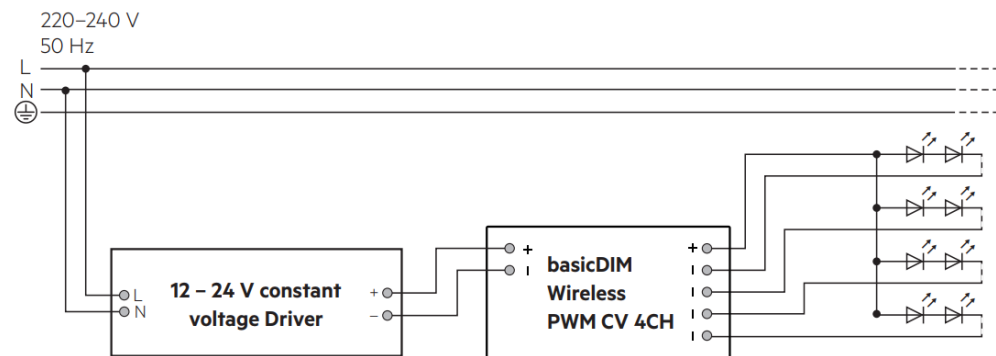


\* Max. 4 single / group addresses (A0 ... A3 / G0 ... G3) controllable,  
depending on the device profile of the basicDIM Wireless sensor.  
The rest of the connected drivers can be controlled via broadcast – depending on the device profile.





## 5.7. basicDIM Wireless PWM CV 4CH



## 5.8. basicDIM Wireless 0-10V 2CH

