

FEATURES

- Control of up to 20 DALI ballasts per channel in up to 4 channels only for logarithmic curve.
- Ballast replacement allowed with automatic detection.
- Error detection and monitoring (except multiaddress DALI ballasts).
- Burn-in, Stand-by and Auto-off functionality for each channel.
- Not suitable for emergency lighting control.
- Manual control through buttons and status LED indicators.
- 110/230V 50/60Hz external power supply required.
- Total data saving on power failure.
- KNX BCU integrated.
- Size 67 x 90 x 80mm (4.5 DIN units).
- DIN rail mounting (EN 50022), through pressure.
- DALI Standard compatible.
- Compliant with the CE directives (CE-mark on the right side).

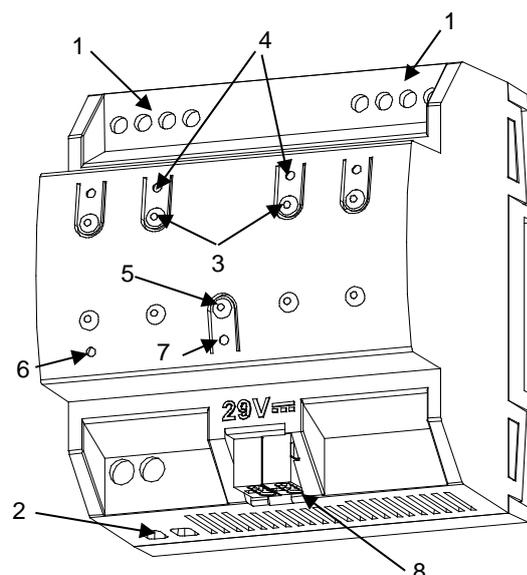


Figure 1. DALIBOX Broadcast 4CH

1. DALI channel output	2. External supply	3. DALI channel control button	4. DALI channel status LED
5. Programming/Test button	6. External supply LED	7. Programming/Test LED	8. KNX connector

Programming/test button: short button press to set programming mode. If this button is held while plugging the device into the KNX bus, it goes into safe mode.

Programming/Test LED: programming mode indicator (red). When the device goes into safe mode, it blinks (red) every half second. The test mode is indicated by the green color. During start up (after reset or power failure) and if the device is not in safe mode, LEDs indicator blinks red once.

GENERAL SYSTEM SPECIFICATIONS

CONCEPT		DESCRIPTION		
Type of device		Electric operation control device		
KNX supply	Voltage (typical)	29VDC SELV		
	Voltage range	21...31VDC		
	Maximum consumption	Voltage	mA	mW
		29VDC (typical)	7	203
24VDC ⁽¹⁾	10	240		
Bus connection		Typical TP1 bus connector for rigid cable 0.80mm Ø		
Ext. power supply	Voltage and frequency	110/230VAC 50/60Hz		
	Maximum consumption	150mA		
Operation temperature		from 0°C to +45°C		
Storage temperature		from -20°C to +55°C		
Operation humidity		5 to 95% RH (no condensation)		
Storage humidity		5 to 95% RH (no condensation)		
Complementary characteristics		Class B		
Protection class		II		
Operation type		Continuous operation		
Device action type		Type 1		
Electrical stress period		Long		
Degree of protection		IP20, clean environment		
Installation		Independent device to be mounted inside electrical panels with DIN rail (EN 50022)		
Minimal clearances		Not required		
Response on KNX bus failure		Data saving according to parameterization.		
Response on KNX bus restart		Data recovering change according to parameterization.		
Operation indication		Programming LED indicates programming mode (red) and test mode (green). Each DALI channel LED indicates its status (flashing = error, see Fig. 2; fixed = active output). Power supply LED indicates the presence of supply voltage.		
Weight		124g		
PCB CTI index		175V		
Housing material		PC FR V0 halogen free		

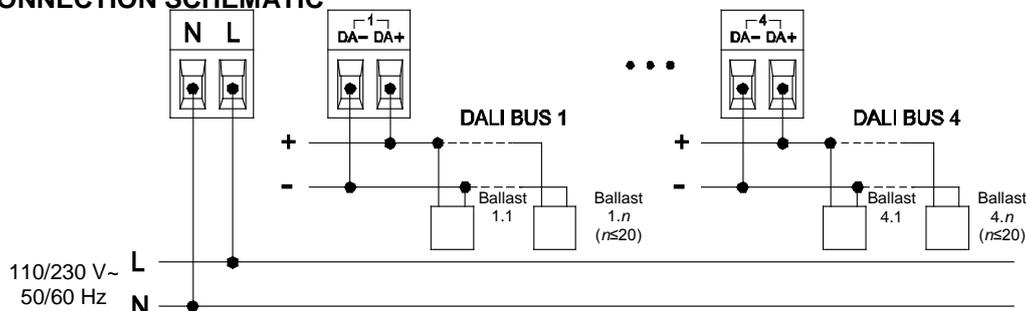
⁽¹⁾ Maximum consumption in the worst case scenario (KNX Fan-In model)

OUTPUT SPECIFICATIONS AND CONNECTIONS OF DALI CHANNELS	
CONCEPT	DESCRIPTION
Number of channels	4
Channel type	DALI bus
Channel voltage	16VDC SELV
Maximum current per output	40mA
Maximum DALI ballasts per channel ⁽²⁾	20
Maximum length of cable	300m (considering 1.5mm ²)
Short-circuit protection	YES
Overload protection	YES
Over-voltage protection	YES
Connection method	Screw terminal block
Cable cross-section	0.5mm ² to 2.5mm ² (26-12 AWG)

⁽²⁾ One DALI address is considered per DALI ballast.

INPUT SPECIFICATIONS AND CONNECTIONS OF EXTERNAL POWER SUPPLY		
CONCEPT	DESCRIPTION	
Fuse protection of supply to DALI power source	Voltage	250V
	Current	4A
	Response type	F (Fast acting)
Connection method	Screw terminal block	
Cable cross-section	0.5mm ² to 4mm ² (26-10 AWG)	

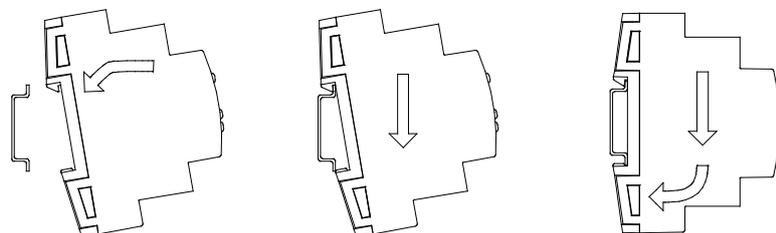
CONNECTION SCHEMATIC



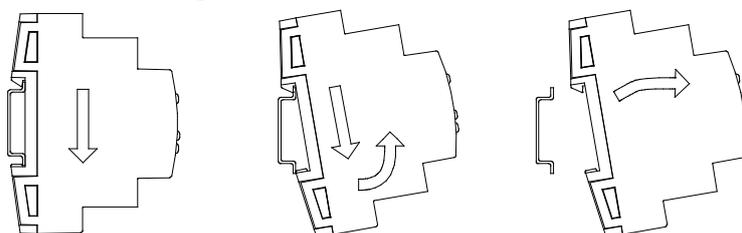
Notes:

- Electrical connection between different DALI channels must be avoided.
- In case of ballast replacement, please, pay attention to the defined steps on the manual.

Attaching DALIBOX Broadcast 4CH to DIN rail:



Removing DALIBOX Broadcast 4CH from DIN rail:



Short-circuit
Open circuit
Ballast failure
Lamp failure
Overload

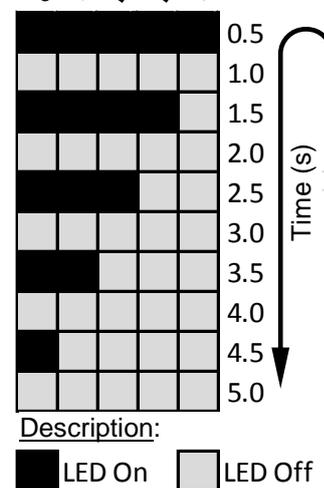


Figure 2. Error notification through DALI channel status LED

SAFETY INSTRUCTIONS



- Installation should only be performed by qualified electricians following applicable regulations on preventing accidents, as required by law.
- The installation must be equipped with a device assuring the omni-polar sectioning. A 10A circuit breaker is recommended.
- Do not connect Main Voltage (110/230VAC) or any other external voltages to any point of the KNX or DALI system.
- Connecting an external voltage might put the entire KNX system at risk.
- Make sure during the installation that there is always sufficient insulation between the main voltage 110/230VAC and the KNX or DALI bus or the extension inputs.
- Once the device is installed, it must not be accessible from the outside.
- Keep away from water and do not cover the device with clothes, paper or any other material when in use.
- The device has a short-circuit protection fuse that, in case of activation, it should not be rearmed or replaced except for our technical department.
- This device contains a security short-circuit proof transformer.
- The WEEE logo means that this device contains electronic parts and it must be discarded properly following the instructions of <http://zennio.com/weee-regulation>.

