



DALI Bridge Module

Wiring and installation manual

Overview

The OSRAM DALI Bridge attaches to the GreenBus II® network and enables the ENCELIUM® EXTEND Light Management System to digitally control DALI ballasts/drivers.

The module makes each DALI-compliant ballast addressable via the GreenBus II. It will obtain its address during the commissioning process and no actions are required during installation.

The following model is available:

Part Number
EN-DB-1L-GB2

Important Safeguards



When using electrical equipment, basic safety precautions should always be followed, including the following:

- READ AND FOLLOW ALL SAFETY INSTRUCTIONS.
- Do not let power supply cords touch hot surfaces.
- Do not mount near gas or electric heaters.
- Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
- The use of accessory equipment is not recommended by OSRAM as it may cause an unsafe condition.
- Do not use this equipment for other than the intended use.



SAVE THESE INSTRUCTIONS

GreenBus II Wiring Protocol

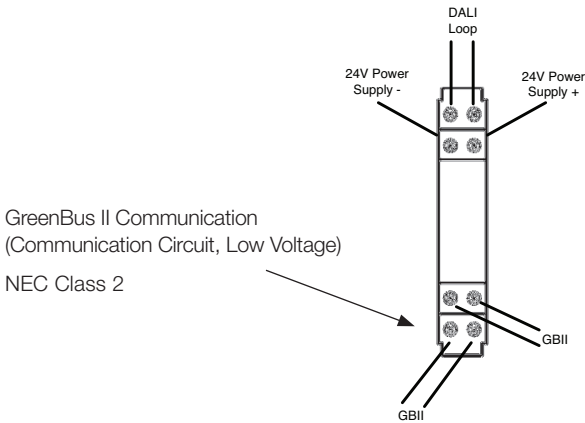
Communication Circuit (24Vbc, NEC Class 2)

GreenBus II® Wiring Protocol is a low-cost, high reliability communication means to report information back to the ENCELIUM® EXTEND Light Management System (LMS) and to obtain optimum brightness settings for light fixtures from the system – optimized to result in minimum energy costs for any given building.

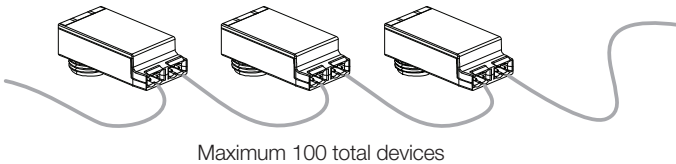
The GreenBus II wiring originates at an ENCELIUM EXTEND Manager and propagates in a daisy-chain or “T” fashion from module to module (or other compatible equipment).



GreenBus II uses proprietary connectors and jacks for ease of installation only. GreenBus II is a proprietary standard. Connect to ENCELIUM EXTEND LMS only. Do not connect to other circuits.



Most jurisdictions allow running the DALI bus as a NEC Class 1 circuit together with line power supplying the DALI ballasts (consult applicable local electrical and building codes).



GreenBus II must be laid out as per ENCELIUM EXTEND LMS supplied drawing. If changes are required, determine an optimum wiring path utilizing the supplied prefabricated cables, based on the position of light fixtures and sensors. As the modules obtain power via the GreenBus II, the number of modules on each chain is limited. It is suggested to leave room for future system upgrades and to limit the number of modules per chain to 100 units during initial installation.

One or more DALI Bridge Modules are permitted per ENCELIUM EXTEND Manager channel with a combined maximum of 64 DALI ballasts per channel. Each ENCELIUM EXTEND Manager can therefore control up to 512 DALI ballasts.

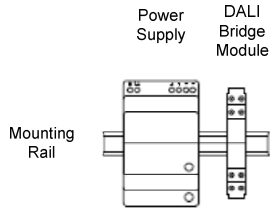
Module Installation

The DALI Bridge Module must be connected to a 24 V_{DC} power supply. OSRAM recommends use of power supply p/n 6EP1331-1SH03. This power supply is capable of powering up to four DALI Bridge Modules.



Do not connect more than four DALI Bridge Modules to the 6EP1331-1SH03 power supply or abnormal behavior could occur on the DALI Loop.

In a typical installation, the DALI Bridge Modules are mounted onto a 35x7.5 or 35x15 “top-hat” style DIN rail. The DALI Bridge Modules may be mounted to the same DIN rail as the 24 V_{DC} power supply.



Do not reverse the 24 V_{DC} polarity connections from the power supply to the DALI Bridge Module or damage may result.

Installation Notes

The DALI Bridge Modules are to be installed in dry, indoor locations ONLY.

Do not connect more than 64 DALI-compliant ballasts per GreenBus II® channel.

Do not connect DALI sensors or switches to the DALI Bridge Module.

Troubleshooting

There are no user-serviceable parts inside of the Area Lighting Controller.

Please return the device to OSRAM SYLVANIA Inc. if service is required.

Regulatory Approval

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment under FCC rules.

This equipment has been tested and found to comply with the limits in accordance to CAN ICES-3 (A)/NMB-3(A).

The contents of this Wiring and Installation Manual are subject to change without notice.

OSRAM SYLVANIA Inc.
200 Ballardvale Street
Wilmington, MA 01887 USA
888-531-7573
www.osram.us/ds

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