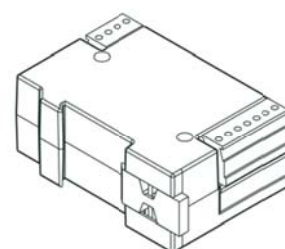
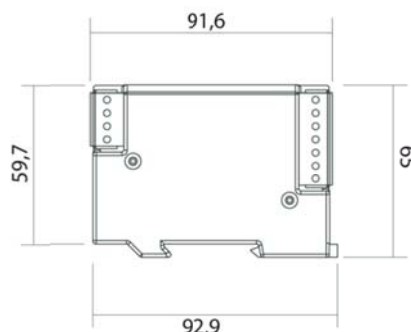
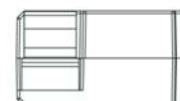


Installation guide

SL31 – Remote management

Compact smart controller range for street lighting – electronic ballasts



Range description :

SL31-EDA-4-T	Street lighting controller DALI ballast, ON/OFF and dimming 1 power output (600W -3A) 2 outputs for control up to 4 DALI ballasts (2by default, for 4 consult us) 1 NO/NC auxiliary relay
SL31-EDA-ECS-T	Street lighting controller DALI ballast, ON/OFF and dimming + dry entry contact 1 power output (600W -3A) 2 outputs for control up to 2 DALI ballasts 1 NO/NC auxiliary relay 1 Dry entry contact
SL31-ED-ECS-M-T	Street lighting controller 1-10V ballast, ON/OFF and dimming + dry entry contact 1 power output (600W -3A) 2 outputs for 1-10V dimming 1 NO/NC auxiliary relay 1 Dry entry contact Measure
SL31-1T	Street lighting controller DALI, 1-10V, magnetic ballasts, ON/OFF 1 power output (600W -3A) 1 NO/NC auxiliary relay
Measure option (M)	Measure U, I, Power factor, T°

For magnetic dimming version, autonomous or driven version, please refer to specific guides.

Material installation :

- Installation upstream the ballast in the luminary junction box.
- Maximum installable nodes by segment controller: 150
- Maximum distance between nodes: 150 meters.

Step 1: Make wiring according to your application and your product (Dali, 1-10V, ballast output powering, auxiliary on/off output)

Beware : ballast powering must go through controller

- ⇒ Diagram of connections printed on the product (or use diagrams of next section)
- ⇒ Wiring using two removable connectors: 4 points for control wiring; 7 points for power and relay.

Step 2: Remove bar code stamp placed on the box side and paste it on a document allowing to know luminary reference associated to this box as well as localization and lamp type.

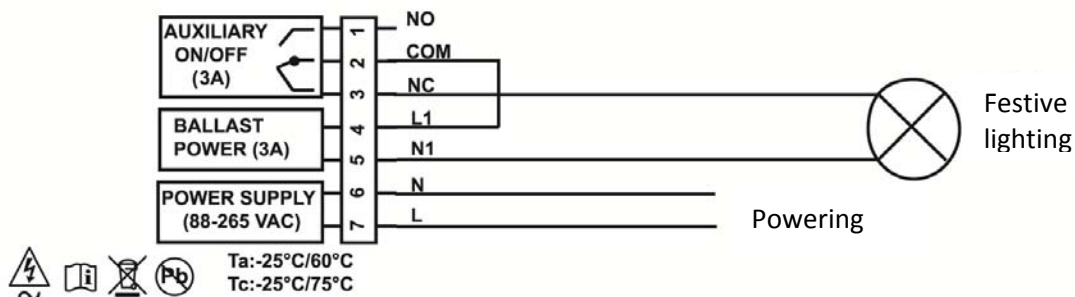
Step 3: place SL31 in the Class II junction box on DIN rail, be careful to place 7 points connector at bottom, or directly in the luminary

Step 4: Connect power supply to the controller.

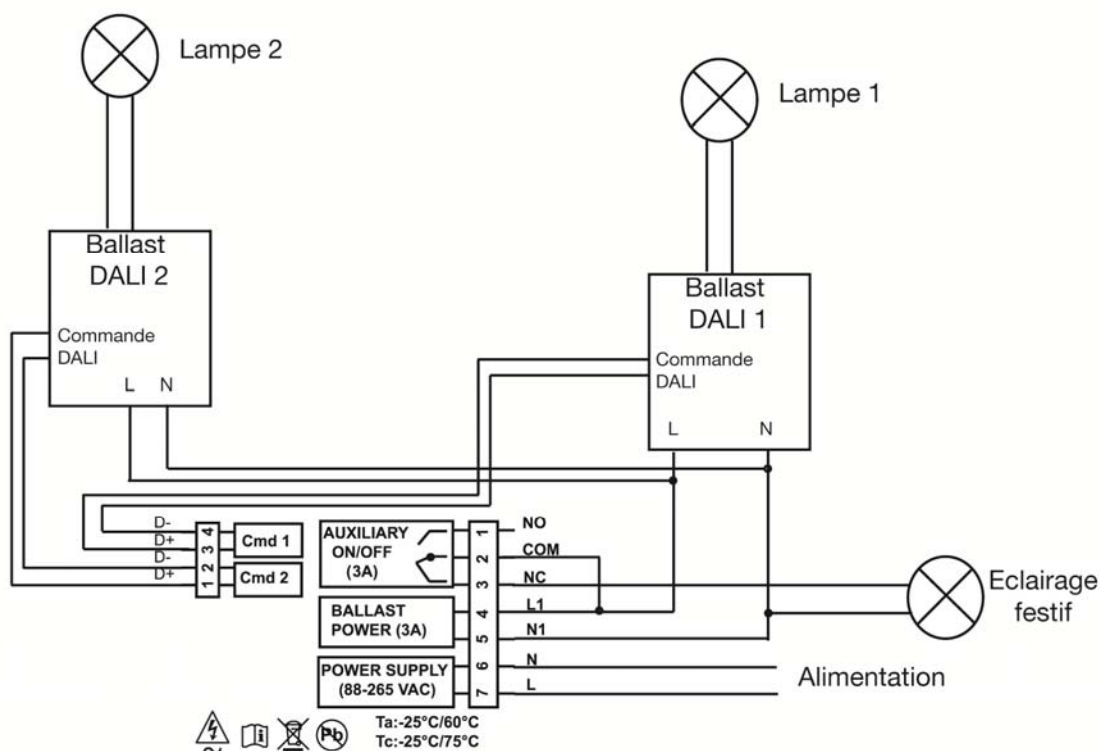
Auxiliary output: you must not connect any charge that may create noise on Power line network. If you wish to use auxiliary output as powering, please contact Citylone in order to get confirmation that product you will connect on auxiliary output will not disrupt power line network.

Wiring examples :

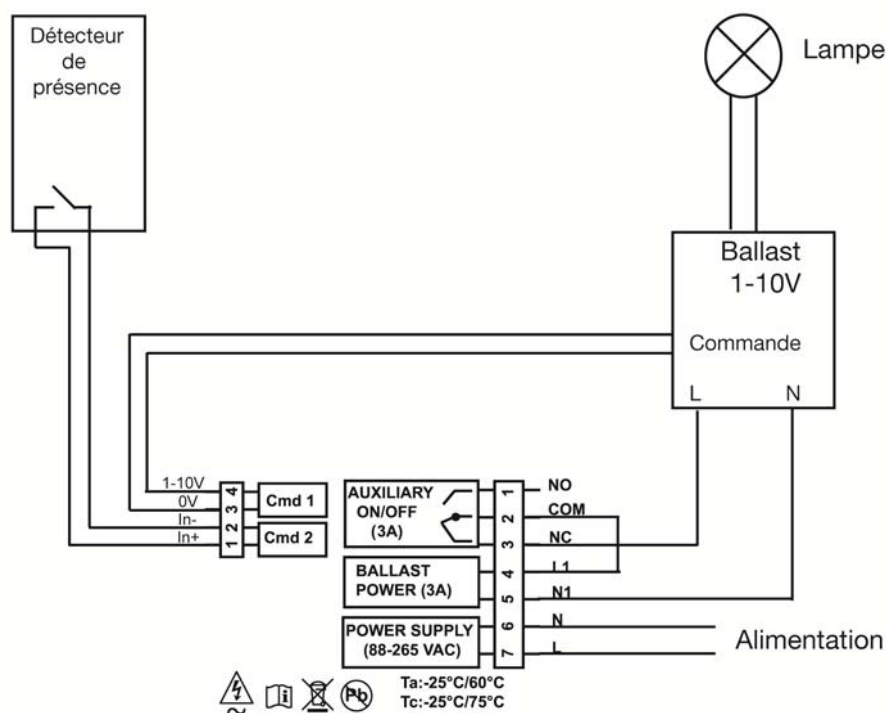
Example of wiring of SL31-1T with on festive lighting in ON/OFF



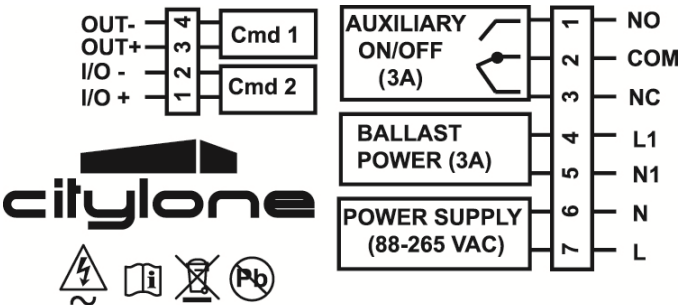
Example of wiring of SL31-EDA4 with two DALI ballasts and on festive lighting in ON/OFF



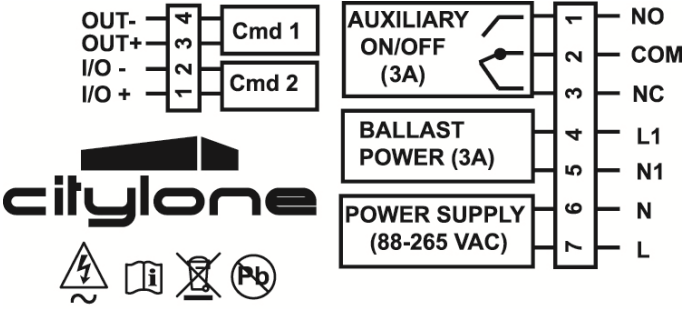
Example of wiring of SL31-ED-ECS-M-T with 1-10 ballasts and presence sensor



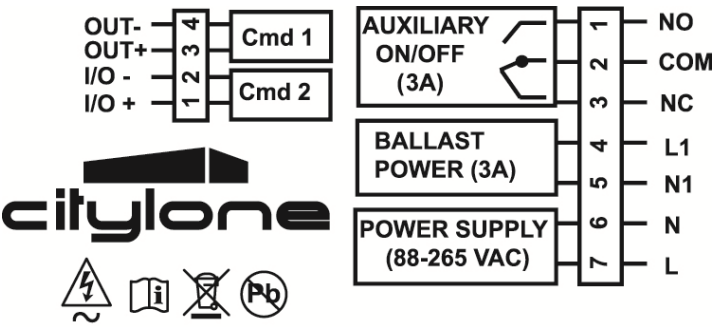
Controller installation for DALI ballast:

SL31-EDA4-T	
Main characteristics	Dimming version for DALI ballast Installation on DIN rail into the junction box or in the luminary Beware: for using more than on ballast by output, it is mandatory to address the ballasts (see Remote controller notice for more information)
Electrical characteristics	Power supply: Universal 85-265VAC – 50/60 Hz. LON® network: Power line PL3120 LON® nodes, based on LONTalk® protocol, CENELEC EN50065. (2400 to 4800 baud) C band. Input: One line and one neutral for powering. Output: 1 permanent powering output for DALI ballast (600W -3A max) and 1 auxiliary independent output NO/NF (3A max). Control: 2 control outputs for DALI ballasts (1 ballasts by output, for 2 by output please consult us). For installation with one lamp, it must be connected on DALI 1. On SL31 Dali you can only connect DALI slaves (eg : Ballast, Citylone sensor) Ballast: Electronic DALI.
Mechanical specifications	IP2X box DIN rail PC V0
Wiring	7 points removable connector (5,08 mm max) 4 points removable connector (5,08 mm max) Cables section 0.2 to 3 mm ² max single stranded, 2.5mm ² max multistrand Integrated infrared sensor
Environment	Using temperature: -25°C to +65°C. Storage temperature: -25°C to +70°C.
Installation	In class II junction box in the luminary pole, integrated on DIN rail.Or in the luminary For a polarised DALI ballast, please check that SL31 Out+ and Out- are respectively connected to DA+ and DA- of DALI ballast
Auxiliary output : COM = Common. NC = Normally closed. NO = Normally opened. Ballast : N1 = Neutral to connect on ballast neutral. L1 = Filtered line to connect on ballast line. Power supply : N = Neutral to connect to power supply neutral. L = Line to connect to power supply line Command 1 : Out- : output order 1 DALI- Out+ : output order 1 DALI+ Command 2 : I/O- : output order 2 DALI- I/O+ : output order 2 DALI+	 <p>The diagram shows a 7-pin terminal block with the following connections:</p> <ul style="list-style-type: none"> Pin 1: OUT- (Command 1) Pin 2: OUT+ (Command 1) Pin 3: I/O- (Command 2) Pin 4: I/O+ (Command 2) Pin 5: AUXILIARY ON/OFF (3A) Pin 6: BALLAST POWER (3A) Pin 7: POWER SUPPLY (88-265 VAC) <p>On the right side, the corresponding output types are listed:</p> <ul style="list-style-type: none"> Pin 1: NO Pin 2: COM Pin 3: NC Pin 4: L1 Pin 5: N1 Pin 6: N Pin 7: L <p>Below the diagram are safety symbols: a lightning bolt in a triangle (warning), a book icon (manual), a crossed-out incandescent bulb (no incandescent), and a crossed-out battery (no battery).</p>

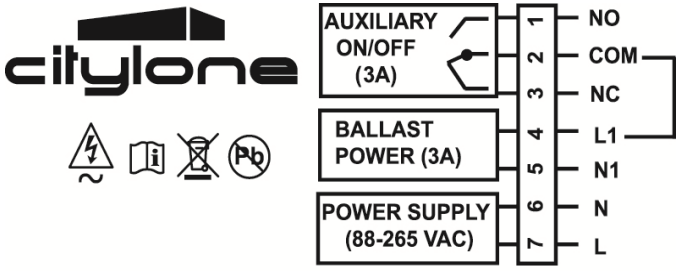
Controller installation for DALI ballast with Dry entry contact

SL31-EDA-ECS-T	
Main characteristics	Dimming version for DALI ballast + dry entry contact Installation on DIN rail into the junction box or in the luminary Beware: for using more than on ballast by output, it is mandatory to address the ballasts (see Remote controller notice for more information)
Electrical characteristics	Power supply: Universal 85-265VAC – 50/60 Hz. LON® network: Power line PL3120 LON® nodes, based on LONTalk® protocol, CENELEC EN50065. (2400 to 4800 baud) C band. Input: One line and one neutral for powering. Output: 1 permanent powering output for DALI ballast (600W -3A max) and 1 auxiliary independent output NO/NF (3A max). Control: 1 control output for DALI ballasts (2 ballasts max) 1 dry entry contact For installation with one lamp, it must be connected on DALI 1. On SL31 Dali you can only connect DALI slaves (eg : Ballast, Citylone sensor) Ballast: Electronic DALI
Mechanical specifications	IP2X box DIN rail PC V0
Wiring	7 points removable connector (5,08 mm max) 4 points removable connector (5,08 mm max) Cables section 0.2 to 3 mm² max single stranded, 2.5mm² max multistrand Integrated infrared sensor
Environment	Using temperature: -25°C to +65°C. Storage temperature: -25°C to +70°C.
Installation	In class II junction box in the luminary pole, integrated on DIN rail. Or in the luminary For a polarised DALI ballast, please check that SL31 Out+ and Out- are respectively connected to DA+ and DA- of DALI ballast
Auxiliary output : COM = Common. NC = Normally closed. NO = Normally opened. Ballast : N1 = Neutral to connect on ballast neutral. L1 = Filtered line to connect on ballast line. Power supply : N = Neutral to connect to power supply neutral. L = Line to connect to power supply line Command 1 : Out- : output order 1 DALI- Out+ : output order 1 DALI+ Command 2 : I/O- : dry contact entry I/O+ : dry contact entry	

Controller installation for 1-10V ballast

SL31-ED-ECS-M-T	
Main characteristics	Dimming version for 1-10V ballast + measure + dry entry contact Installation on DIN rail into the junction box or in the luminary
Electrical characteristics	<p>Power supply: Universal 85-265VAC – 50/60 Hz.</p> <p>LON® network: Power line PL3120 LON® nodes, based on LONTalk protocol, CENELEC EN50065. (2400 to 4800 baud) C band.</p> <p>Input: One line and one neutral for powering.</p> <p>Output: 1 permanent powering output for 1-10V ballast (600W -3A max) and 1 auxiliary independent output NO/NF (3A max). This auxiliary output is used to cut power supply when network is powered permanently</p> <p>Control : 1 control output for 1-10V ballast 1 dry entry contact</p> <p>Output current 1-10V : 5mA</p> <p>Ballast: Electronic 1-10V</p>
Mechanical specifications	IP2X box DIN rail PC V0
Wiring	7 points removable connector (5,08 mm max) 4 points removable connector (5,08 mm max) Cables de section 0.2 to 3 mm ² max single stranded, 2.5mm ² max multistrand Integrated infrared sensor
Environment	Using temperature: -25°C to +65°C. Storage temperature: -25°C to +70°C.
Installation	In class II junction box in the luminary pole integrated on DIN rail. Or in the luminary
<p>Auxiliary output : COM = Common. NC = Normally closed. NO = Normally opened.</p> <p>Ballast : N1 = Neutral to connect on ballast neutral. L1 = Filtered line to connect on ballast line.</p> <p>Power supply : N = Neutral to connect to power supply neutral. L = Line to connect to power supply line</p> <p>Command 1 : Out- : GND Out+ : 1-10V</p> <p>Command 2 : I/O- : dry contact entry I/O+ : dry contact entry</p>	

Controller installation for DALI / 1-10V / magnetic ballast (ON/OFF):

SL31-1T-T	
Main characteristics	ON/OFF version, all kind of ballasts Installation on DIN rail into the junction box or in the luminary except for magnetic ballasts.
Electrical characteristics	Power supply: Universal 85-265VAC – 50/60 Hz. LON® network: Power line PL3120 LON® nodes, based on LONTalk protocol, CENELEC EN50065. (2400 to 4800 baud) C band. Input: One line and one neutral for powering. Output: 1 permanent powering output (600W -3A max) and 1 auxiliary independent output NO/NF (3A max). Ballast : Electronic 1-10V or DALI, magnetic
Mechanical specifications	IP2X box DIN rail PC V0
Wiring	7 points removable connector (5,08 mm max) 4 points removable connector (5,08 mm max) Cables section 0.2 to 3 mm ² max single stranded, 2.5mm ² max multistrand Integrated infrared sensor
Environment	Using temperature: -25°C to +65°C. Storage temperature: -25°C to +70°C.
Installation	In class II junction box in the luminary pole. Integrated on DIN rail.
<u>Auxiliary output :</u> COM = Common. NC = Normally closed. NO = Normally opened. <u>Ballast :</u> N1 = Neutral to connect on ballast neutral. L1 = Filtered line to connect on ballast line. <u>Power supply :</u> N = Neutral to connect to power supply neutral. L = Line to connect to power supply line	

Configuration accessories



An infrared configuration remote controller (SL-TP-T) can be added to your installation in order to parameterize your controllers.

This remote controller will be connected through an infrared sensor, directly integrated into the product. It allows testing of different outputs and help to address DALI ballasts.

For more information, please refer to specific user guide.

Contact :

For any additional question or information needed, please contact:

Citylone – 19 Route du Pont d'Arthaud – 69510 MESSIMY – France

Tél. : +33 (0)4 78 45 65 65 – Fax : +33 (0)4 78 19 29 05

support-citylone@groupe-arcom.com

<http://www.citylone.com>