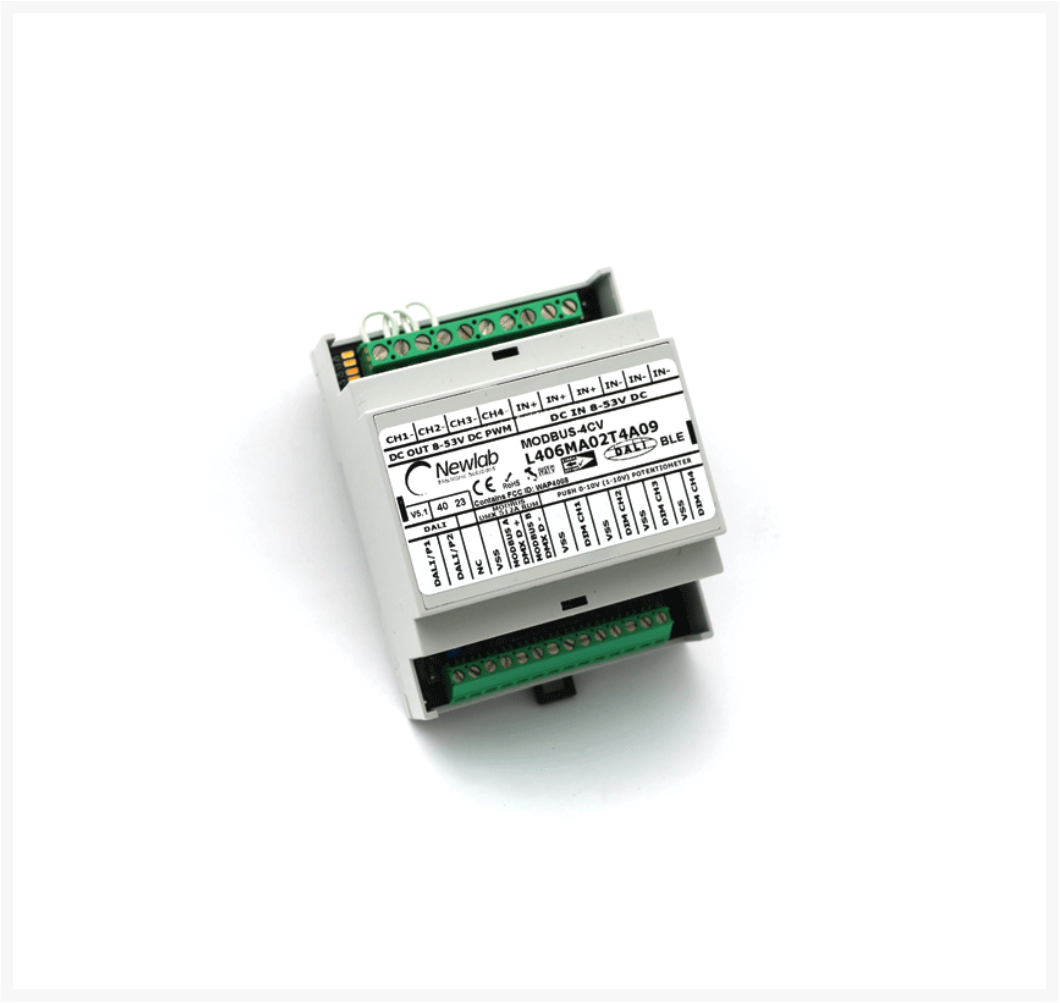
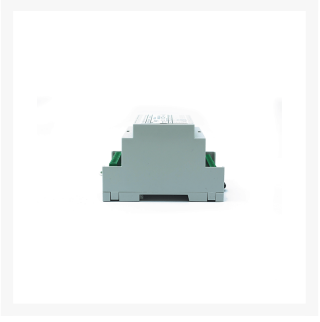
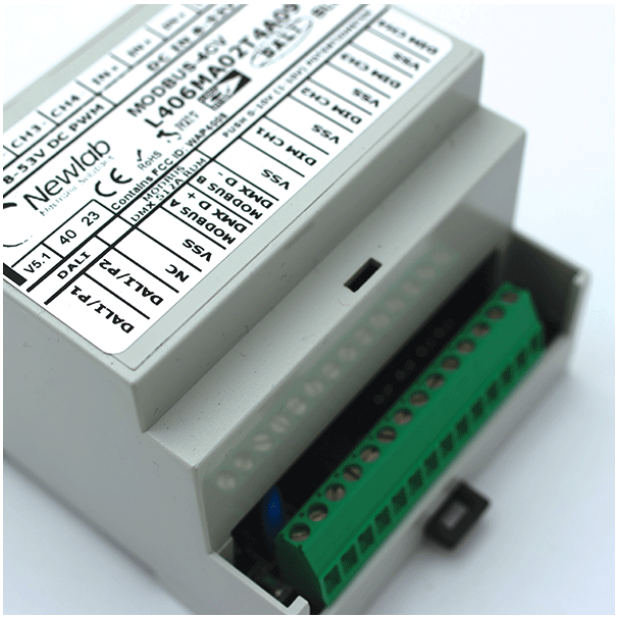
4-Channel DIN Rail 8-53Vdc Dimmer

£206.34
Excl. Tax: £171.95

Product Images







Short Description

4-channel DIN rail dimmer control module. This dimmer can be used to control low voltage lighting with 8Vdc to 53Vdc input. This dimmer module has a vast specification, being controllable by MODBUS DMX, PUSH, DALI and 0-10V. It can be programmed using Bluetooth.

- RGBW compatible with 4 inputs and programmable scenes and control via Bluetooth
- Optional management with fifth button for switching dimmer module on/off
- LED indicates correct power supply
- 4x LEDs indicate output status
- Can be bench tested with optional setup device (6012.PRG)
- Power terminals 0.2-2.5mm2
- 350Hz PWM frequency
- Protection against reverse polarity, open circuit, voltage spikes, overheating

Description

Technical Specification

A 4 channel constant voltage dimmer module DMX/PUSH/DALI/POT/0-10/BLE

PWM constant voltage output with 4 channels

Input power range: 8-53Vdc

Output power range in constant voltage PWM 8-53Vdc with current from 0A to 8A (384W at 48Vdc per channel max.)

In mono channel mode, max. current from 0A to 32A (1536W at 48Vdc)

Output channels can be made to operate in parallel

Programmable using app Android/IOS Newlab Go into the following modes: Single channel, RGB, RGBW, tuneable white

MASTER/SLAVE function for digital synchronisity with other Newlab dimmers or DMX512A compatible devices

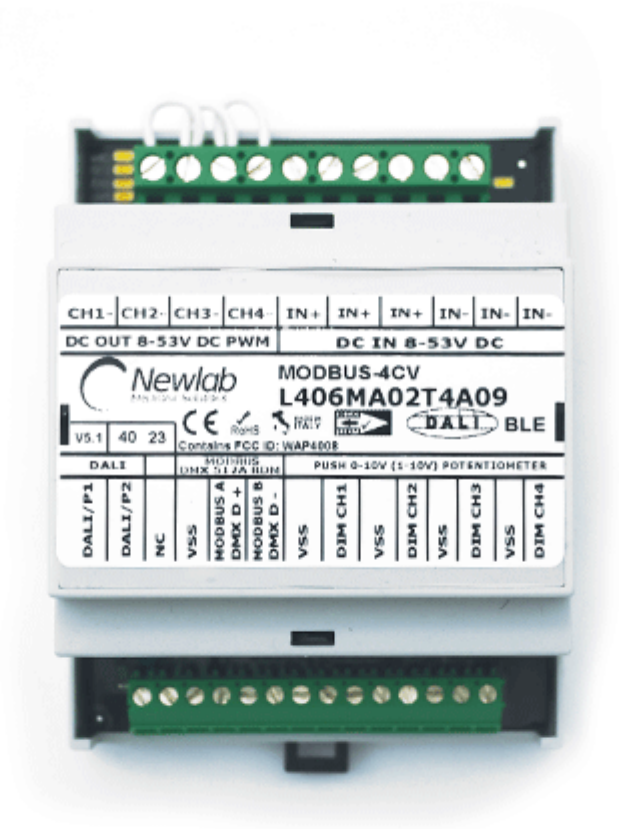
390Hz PWM frequency (programmable)

Converter function DAL to DMX

Ambient operating termperature -20°C to +50°C

IP20 rated

Protected against reverse polarity, open circuit, voltage spikes, overheating, short circuit



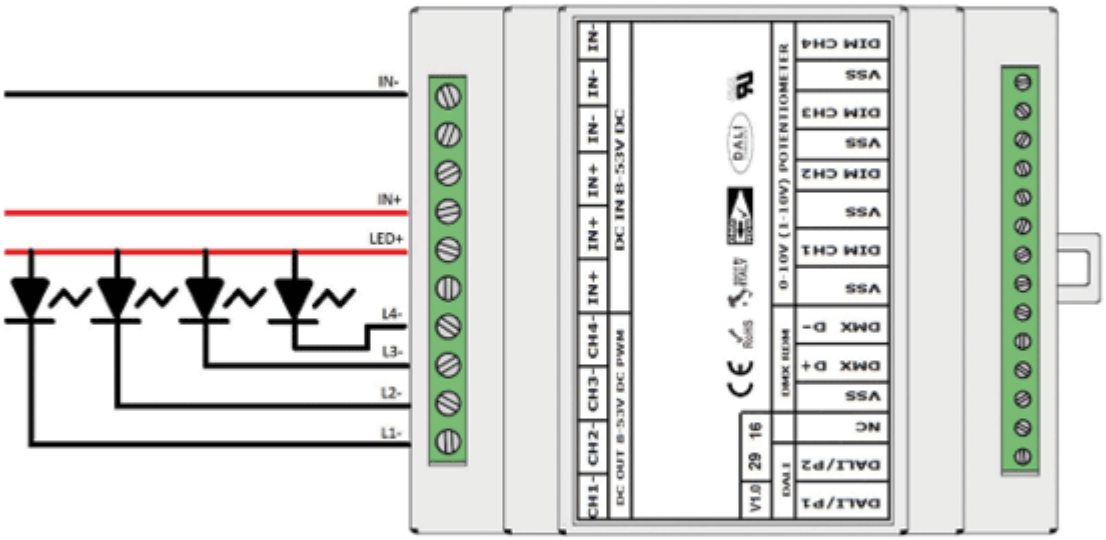
Control Inputs

Type	Quantity
DMX512 RDM	1
Isolated switch	1
Non-isolated switch	4
DALI	1
Potentiometer (variable resistor)	4
0-10V Passive (non-isolated)	4
1-10V Passive (non-isolated)	4
Bluetooth LE	1

Synchronised Outputs

Type	Quantity
DMX512	1
PWM	4

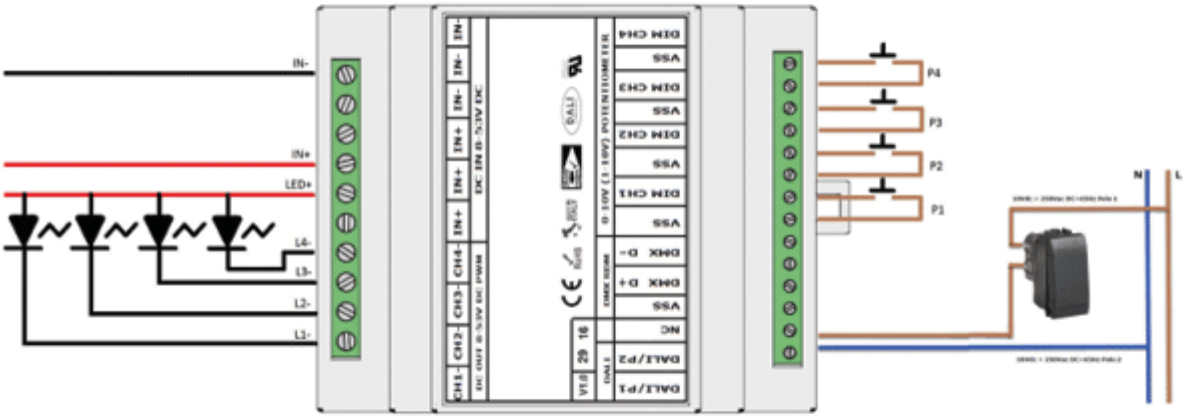
LED Connection



The 6012 dimmer module must be powered according to the polarity indicated above using the DC IN terminals (+ and -). In circumstances where the polarity is inverted, the device will not suffer any damage.

The connection of the LED lights on the 4 output channels (constant voltage output with common +) must be done using the terminals IN+, CH1-, CH2-, CH3-, CH4- as shown above. In single channel mode, it is recommended to connect together the poles CH1-, CH2-, CH3-, CH4- in order to evenly distribute the load.

Push Switch Connection



In this mode, the 4 output channels can be controlled using 4 independent switches as shown above.

Momentary (Push) Switch Functionality

Single push (fast push <1 sec) - Turns on or off the output.

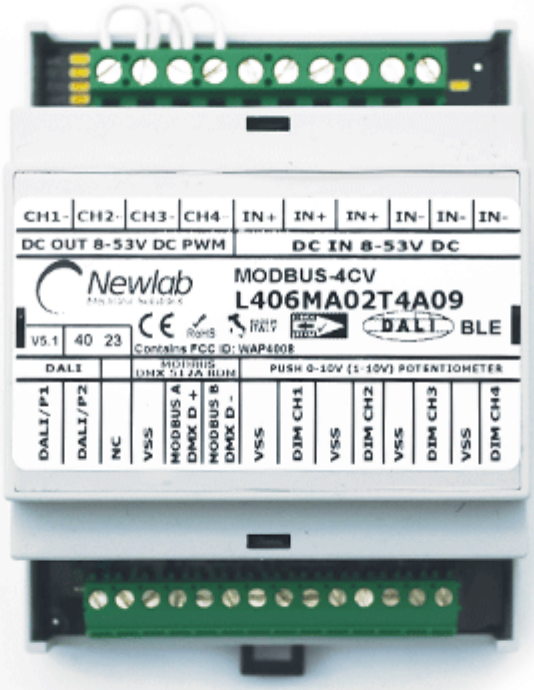
Double push (fast push <1 sec) - Triggers maximum output (100%).

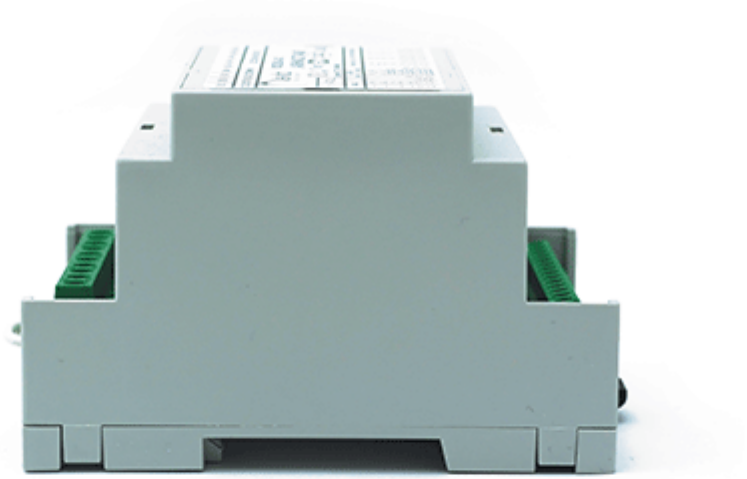
Long press (>1 sec) - If the dimmer is off, triggers the minimum output (programmable, default 1%). If the dimmer is on, a long press operates the dimming functionality of the output (increase/reduce).

The optional isolated switch connected to the DALI/P1 and DALI/P2 poles can be conencted to a voltage from 10Vdc to 250VAC. A fast push of this switch turns off all channels simultaneously. This is useful if the dimmer module has no physical switches connected to P1, P2, P3 and P4 but is being controlled solely via Bluetooth.

In this mode, the parameters received from the DALI bus are also repeated via DMX512/RDM bus on the fixed channels 1-2-3-4: 1st DALI device - DMX512 address 1, 2nd DALI device - DMX512 address 2, 3rd DALI device - DMX512 address 3, 4th DALI device - DMX512 address.


CH1-
CH2-
CH3-
CH4-
DC OUT 8-53V DC PWM
IN+
IN+
IN+
IN-
IN-
IN-
DC IN 8-53V DC
MODBUS-4CV
L406MA02T4A09
DALI
BLE
Newlab
RoHS
Contains FCC ID: WAP4008
V5.1
40
23
DALI
PUSH 0-10V (1-10V) POTENTIOMETER
DALI/P1
DALI/P2
NC
VSS
MODBUS A
DMX D+
MODBUS B
DMX D-
VSS
DIM CH1
VSS
DIM CH2
VSS
DIM CH3
VSS
DIM CH4


CH1-
CH2-
CH3-
CH4-
IN+
IN+
IN+
IN-
IN-
IN-
DC OUT 8-53V DC PWM
DC IN 8-53V DC
Newlab
MODBUS-4CV
L406MA02T4A09
V5.1
40 23
DALI
BLE
Contains FCC ID: WAP4808
DALI
PUSH 0-10V (1-10V) POTENTIOMETER
DALI/P1
DALI/P2
NC
VSS
MODBUS A
DMX D +
MODBUS B
DMX D -
VSS
DIM CH1
VSS
DIM CH2
VSS
DIM CH3
VSS
DIM CH4



Supported Modes

The 6012 dimmer module can work in various modes and is changed using the 6012.PRG programming device (physically plugged-in)

Mode1. Default 4 separate dimmers. In this default mode, the dimmer can operate 4 independent loads up to 8A per channel. This can be managed via MODBUS RTU MASTER with RS485 bus.

Mode2. Mono channel device up to 32A.

Mode3. 2 separate dimmers with independent loads up to 16A.

Mode4. 2 separate dimmers - dim to warm.

Mode5. 2 separate dimmers - tunable white.

Mode6. RGBW up to 8A per channel.

Mode7. Slave DMX-512/RDM (no Bluetooth) 4 channels. In this mode, the dimmer can be managed by a DMX-512/RDM bus. The device uses 4 channels DMX-512/RDM, starting from the base address. In this mode, the device works in a linear curve and the fade function is disabled.

Mode8. Slave DMX-512/RDM (no Bluetooth) 4 channels with programmable parameters. In this mode, the dimmer can be managed by a DMX-512/RDM bus. The device uses 4 channels DMX-512/RDM, starting from the base address. The device's response curve is programmable and the fade can be enabled or disabled.

Mode9. Slave DMX-512/RDM (no Bluetooth) mono channel. In this mode, the dimmer can be managed by a DMX-512/RDM bus. The device uses a single channel DMX-512/RDM, starting from the base address. Max. 32A. In this mode, the device works in a linear curve and the fade function is disabled.

Mode10. Slave DMX-512/RDM (no Bluetooth) mono channel with programmable parameters. In this mode, the dimmer can be managed by a DMX-512/RDM bus. The device uses a single channel DMX-512/RDM, starting from the base address. Max. 32A.

Mode11. 4 channel DALI (no Bluetooth). In this mode, the device functions as a 4 channel DALI dimmer. The dimmer is recognised as 4 independent DALI devices. The max. current absorbtion of the DALI bus is circa 2mA. In this mode, the parameters received from the DALI bus are repeated also in the DMX-512/RDM bus on fixed channels 1-2-3-4 (see above).

Mode12. Mono channel DALI (No Bluetooth). In this mode, the device functions as single channel DALI dimmer. The max. current absorbtion of the DALI bus is circa 2mA. In this mode, the parameters received from the DALI bus are repeated also in the DMX-512/RDM bus on fixed channels 1-2-3-4 (see above).

Mode13. Push (not isolated) 4 channels inc. Bluetooth. In this mode, the 4 output channels can be operated by 4 NO switches.

Mode14. Push (isolated) mono channel inc. Bluetooth. In this mode, the 4 output channels can be operated in synchroniscity using a NO switch and can handle 32A max. In this mode it is also possible to manage the device with the smart app. In this mode, the parameters received from the DALI bus are repeated also in the DMX-512/RDM bus on fixed channels 1-2-3-4 (see above).

Mode15. 4 channel Linear potentiometer (100Kohm) 0-10V/1-10V (not isolated). In this mode, the 6012 dimmer can be controlled with analog signals. A 0-10V/1-10V signal can be used or alternatively a linear potentiometer with a 100Kohm value. Each analog channel controls the luminosity of the corresponding output channel. Max. current absorbtion in this mode is 0.1mA. The default dimming curve follows and logarithmic pattern proportionate to the controlling voltage. A voltage less than 1V is interpreted as 0.

Mode16. Standalone show mode with bus DMX-512 control. In this mode, the dimmer operates in a show mode, preprogrammed by DMX. The optional isolated switch connected to DALI/P1 and DALI/P2 can be connected to a voltage between 10Vdc and 250VAC. A fast push of this switch switches on and off all the luminaires connected. This mode is for when no physical switches are connected to P1, P2, P3, or P4 and the system is being used solely via Bluetooth.

Mode17. Temporary activation mode - 4 independent channels. In this mode, it is possible to control the 4 channels using an NO switch. When not being actively used, all 4 channels are set to minimum luminosity (can be programmed with 6012.PRG). When a contact is closed, the corresponding channel illuminates to manx. luminosity. This output is held for the duration of the contact closure and then for the programmed time (changeable with 6012.PRG). Once the timer has elapsed, the luminosity returns to the minimum level. In this mode, the parameters received from the DALI bus are repeated also in the DMX-512/RDM bus on fixed channels 1-2-3-4 (see above).

Android & IOS App

The app can control the switching on and off as well as the output level of each channel.

Luminaires can be grouped and managed with minimal effort.

Light scenes can be created.

No pairing required for Bluetooth connection.

The dimmer can be managed in 1 to 4 channels: Single channel, 4 synchronised channels, RGB (3 channels or 3 zones), RGBW (4 channels or 4 zones), tunable white.

Settings simply saved by closing the app or disconnecting the smart device.

Google play

Additional Information

Weight (kg)	0.100000
Output Voltage	Multi
IP Rating	IP20
Dimmer	Yes