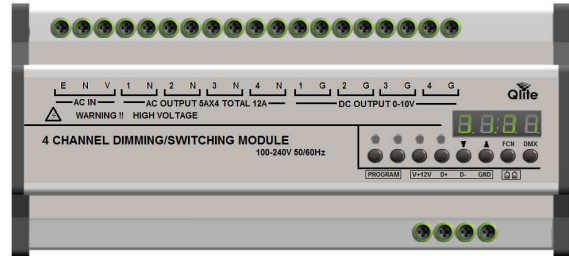


## 4 CHANNEL DIMMING/SWITCHING MODULE

The QL-405 is a 4 channel dimming/switching module designed for small to medium sized lighting automation requirements. Any output of this module can be programmed for “switched mode”, “Phase dimming mode” or “0-10V dimming mode”. The DIN rail mountable module is totally self contained with its own integral PSU and can be configured as a part of a central system or as a standalone system. In a standalone mode, the module operates in the QL NET mode. When used as a part of a central system with QL NE100 controller, the module operates in DMX-512 mode.

This module can be fitted along with protection devices in the distribution board or into a cabinet with any other modules. The metal construction has been designed and built for safety, reliability & serviceability with standard DIN rail mountable fixing arrangement. The channel numbers for each output can be configured.

After power loss, on restoration the system will restore each channel to the “last scene selected” prior to the power loss.



- Operates in Stand-alone mode and centralized mode with QL NE100
- Each channel configurable as leading edge phase dimming, 0-10V dimming or switching mode
- Up to 99 zones configurable in QL NET mode
- Up to 8 Programmable partition zones
- Up to 8 programmable scenes in QL NET mode
- Accepts standard DMX-512 signal
- DIN rail mountable
- Module current output viewable on the LCD display
- Manual adjustable dimming level for each channel
- In-built current detection function
- Auto shutdown on overload

## 4 CHANNEL DIMMING/SWITCHING MODULE

### Specifications

#### Power Supply

100-270V AC, 50/60 Hz

#### Power Requirement

30mA @ 240V AC

#### QL NET Power Supply Capacity

400mA

#### Protocol

QL NET, DMX-512

#### Output Rating

Max per channel : 5A

Max per module : 12A

#### Connectors

QL NET/DMX-512 : Non-detachable 4 pin 3.5mm connector, 2 nos. 6P6C connection jack

Power in : Non-detachable 3 pin 3.5mm connector

Phase/Neutral out : Non-detachable 8 pin 3.5mm connector (2 per output)

0-10V DC out : Non-detachable 8 pin 3.5mm connector (2 per output)

Programming Port : 2.54mm 8 pin bar connector

#### Configuration Buttons

▲, ▼, FCN and DMX

#### Manual Control Buttons

1, 2, 3 and 4

#### LED indicators

4 Green LEDs mimicking the output of the 4 channels

#### Display

LCD

#### Dimming Curve

Square Law

#### Minimum Load

40W

#### Dimmer Efficiency

PF = 0.5 @ 50% load

#### Environment

Ambient Temperature : 0°C to 40°C  
(The module can however be used at higher temperatures if suitable "derated")

Relative Humidity : less than 80%

#### Safety Regulatory Compliance

CE

#### Dimensions

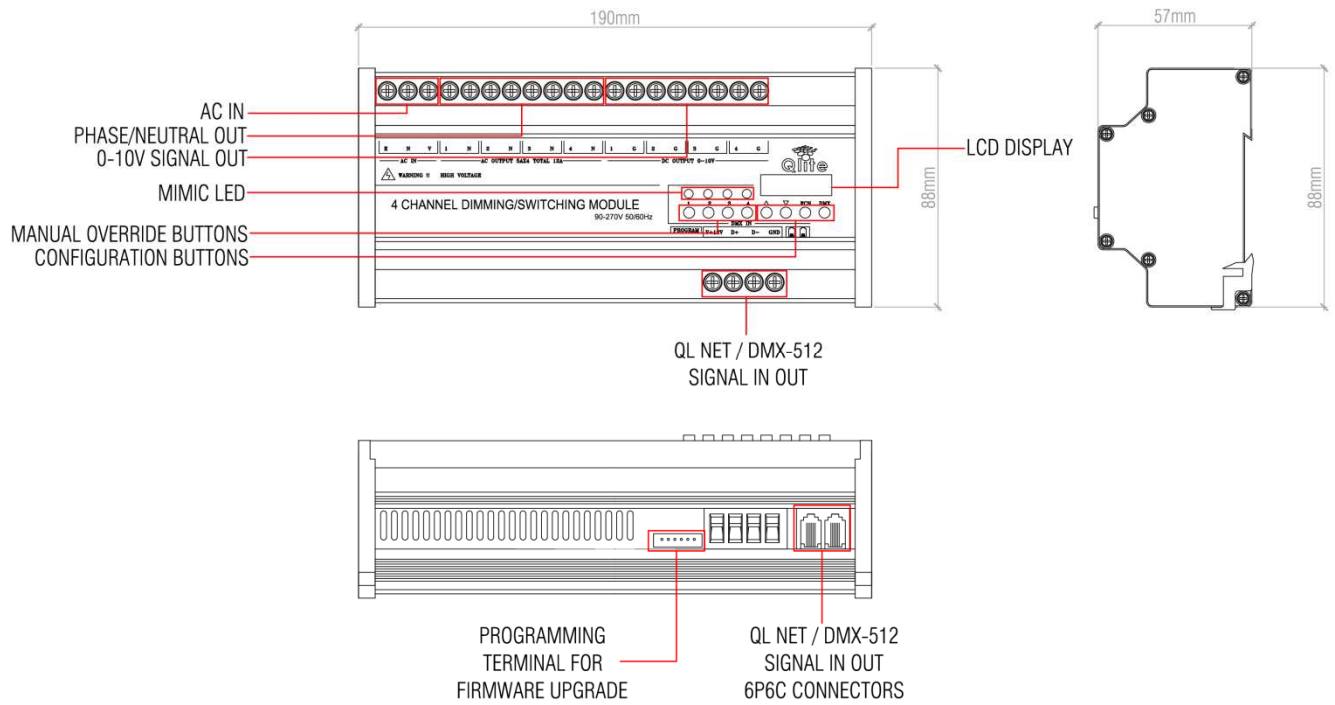
190mm (W) x 88mm (H) x 57mm (D)

#### Weight

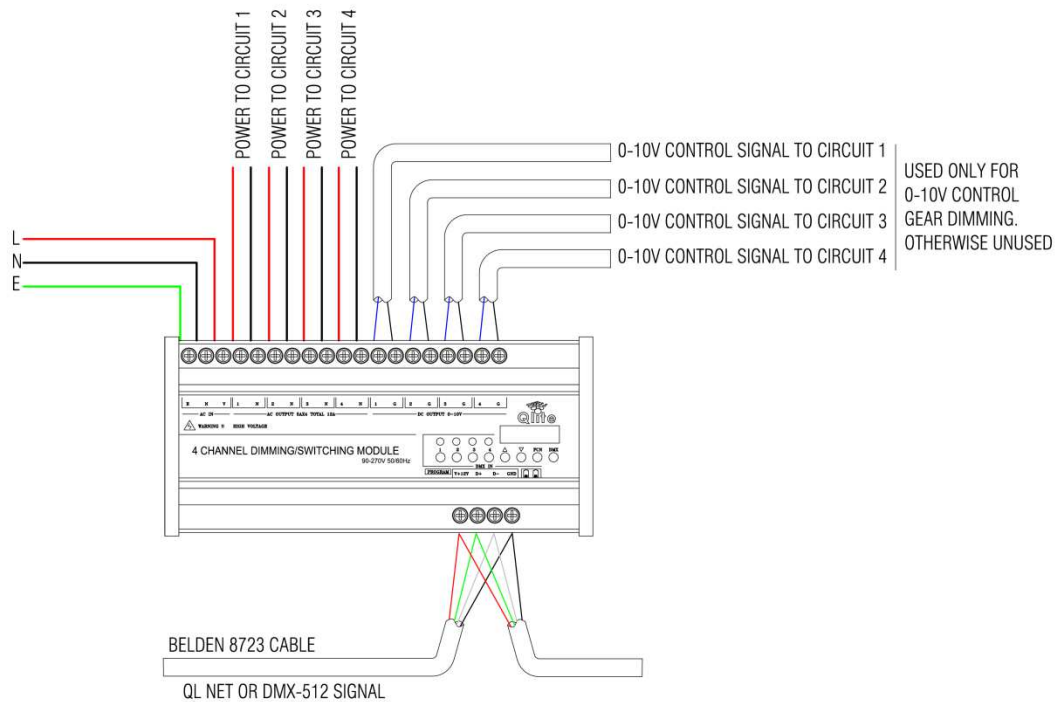
500g

# QL-405

## 4 CHANNEL DIMMING/SWITCHING MODULE



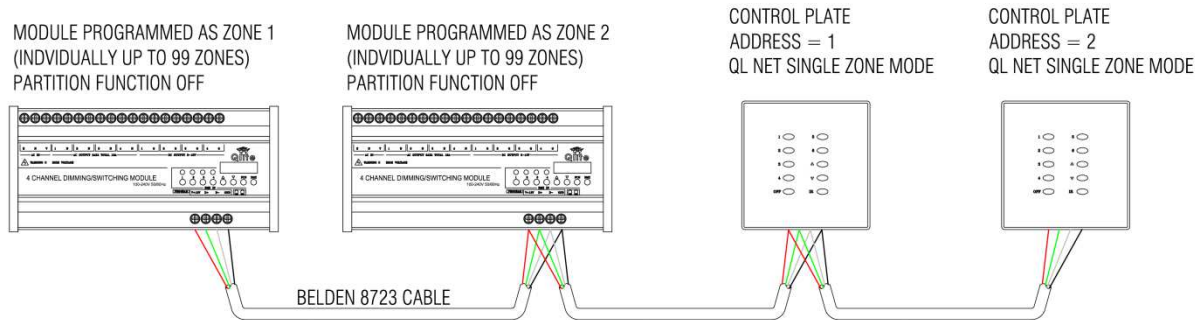
**Fig 1. Module Details**



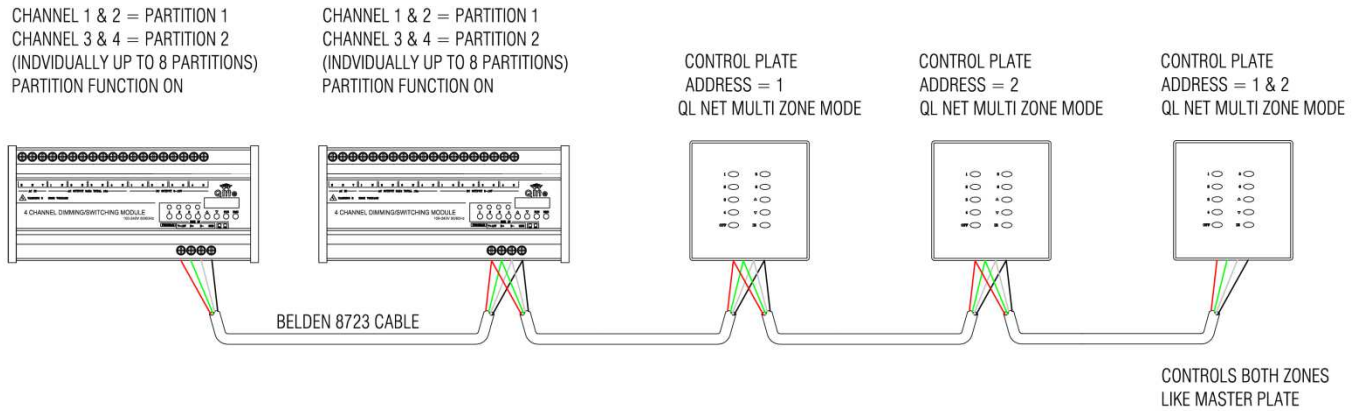
**Fig 2. Module Connections**

## 4 CHANNEL DIMMING/SWITCHING MODULE

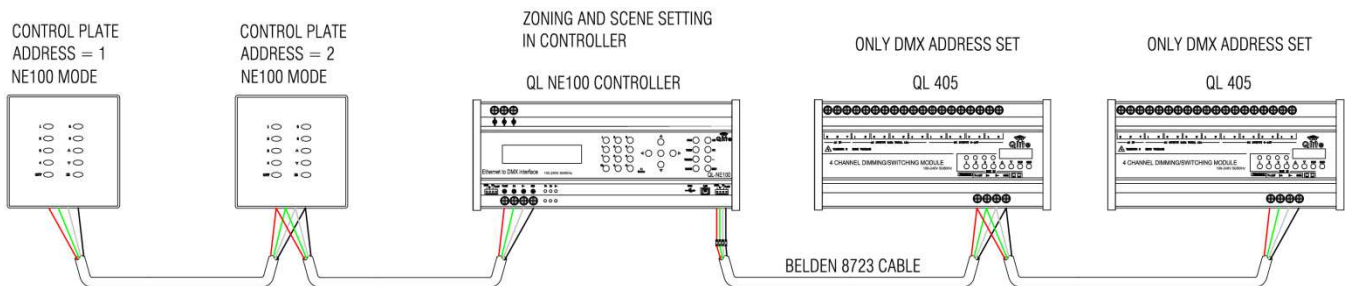
### Typical Applications



**Fig 3. Application Example : QL NET mode**



**Fig 4. Application Example : QL NET mode**



**Fig 5. Application Example : NE100 mode**