

## ecoBright® Light Eco® Plus HID-XLR—Installation & User Manual

### Installation Instructions

#### Mounting

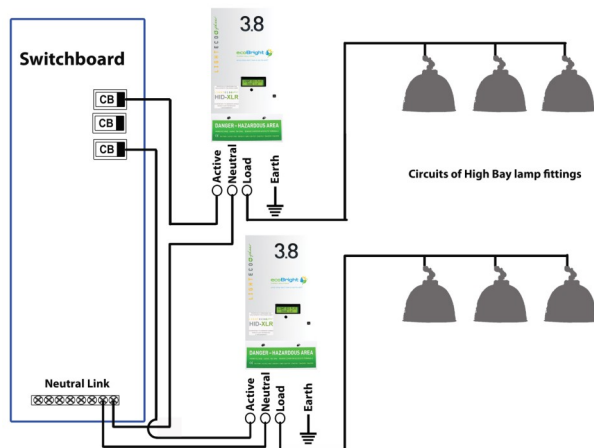
The ecoBright® Light Eco® Plus HID-XLR energy controller can be vertically, horizontally or ceiling mounted.

The energy controller must have adequate ventilation and *should never be mounted upside down.*

When energy controllers are mounted in rows the following minimum separation between units must be observed:

Horizontal space between units	50mm
Vertical space between units	100mm

Typical Connection for well loaded High Intensity Discharge (HID) lighting circuits



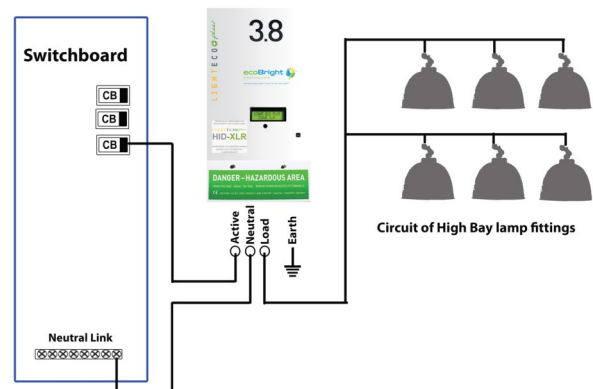
#### Electrical Connection

Connections to the ecoBright® Light Eco® Plus HID-XLR are made at the terminal block under the small cover at the base of the unit.

Only qualified Electrical Contractors are permitted to connect the ecoBright® Light Eco® Plus HID-XLR to lighting circuits. Before connecting, all lighting circuits must be measured for current (Amp) load with all lights operating normally.

Maximum load permitted is **16 (sixteen) Amps**.

Typical Connection for lightly loaded HID lighting circuits where some circuits can be combined



### Operation

The ecoBright® Light Eco® Plus HID-XLR energy controller is fully automatic and requires no user operation to perform its intended task of saving more than 17% of the lighting power on the circuit.

#### Principle of operation

High Intensity Discharge (HID) lighting such as Mercury Vapour, Metal Halide and High Pressure Sodium lamps require high power to start up and unlike fluorescent lamps, the time needed to operate at full temperature and output can be as long as 12-15 minutes. The ecoBright® Light Eco® Plus HID-XLR is specially configured to safely and effectively reduce power to HID lamps with minimal impact on performance whilst saving more than 17% of power. The ecoBright® Light Eco® Plus HID-XLR is a microprocessor controlled device that permits HID lamps to reach optimal temperature and output and when conditions are appropriate, switches to *economy mode* and automatically reduces power to the lamps.

Whilst in *economy mode* the ecoBright® Light Eco® Plus HID-XLR constantly monitors the power and returns to *full power mode* if required. *Full power mode* is typically engaged when additional lamps are turned on or if a critical drop in supply power occurs; *full power mode* can also be engaged manually as required for lamp maintenance tasks.

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Made to **ISO 9002 Quality Standard**  
Complies with A/NZ Standard: **3350.1**  
Holds **Australian C-Tick Approval: N1759**  
Complies with European EMC Standards:  
**EN55015, EN60598, EN60742 & EN61000**



## Installation & User Manual (Continued)

### User Display

The ecoBright® Light Eco® Plus HID-XLR energy controller has an LCD display mounted on the front panel that gives an immediate indication of its operation and energy saving. The following information is a summary of the display output along with information on what each output means:

Condition	Display	Description
Lamps off	Lights Off	Lamps are off and unit is in standby
Lamps switched on New lamp load After bypass or programming	Warm Up 230 V, 11 A, 2.0kW	Lamps have just been switched on and are warming up. Unit is in full power mode. Volts, Amps and Power (in kW) values are displayed.
Economy	Eco Saves 18% 210 V, 9.9 A, 1.7kW	Unit is in economy mode. Volts, Amps and Power (in kW) values are displayed.
Supply voltage too low	Low Mains Voltage	Unit has detected a critical drop in mains voltage. Unit is in full power mode. Volts, Amps and Power (in kW) values are displayed.
Overload	Overload (flashing) 245 V, 21 A, 4.1kW	Unit is in full power safe mode. Circuit breaker on lamps is likely to trip.
Bypass switch activated	Bypass Mode 43 minutes	Unit has been commanded into Bypass Mode for lamp maintenance. Unit is in full power mode. Unit will return to economy mode in 43 minutes.

### Bypass Function

The ecoBright® Light Eco® Plus HID-XLR energy controller is fitted with a switch that when operated, commands the unit to *full power mode* for a preset time period. The main purpose of the bypass feature is to enable lamp maintenance and lamp changing to occur with lamps operating at full power or when full light output is required.

Factory preset time is 60 minutes and a countdown timer is displayed to indicate time remaining. At the end of the time period, the ecoBright® Light Eco® Plus HID-XLR energy controller checks the lighting system and if operating conditions are correct, it resumes *economy mode*.

Should the operator want to resume economy mode before the countdown timer runs out, pressing the bypass switch a second time will cause the ecoBright® Light Eco® Plus HID-XLR energy controller to commence the 15 minute cycle to return to *economy mode*.

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