

# MOODSETLED

## Environmental Dimmer



- LED and Incandescent environmental dimmer
- Remote control by Wallplates or DMX
- Fade times up to 10 hours
- Fade resolution 2500 steps
- A, B, C and Off preset levels with Up/Dn adjust
- External control of level and fade time
- Thermal-magnetic circuit breakers
- 8 and 20 amp models available

## MOODSETLED OPERATION

**POWER UP TO OFF OR PRESET A LEVEL:** Sets power up level either to Off, or to the Preset A level with a 10 second fade up (overridden in Auto Cross fade mode)

**LED OR INCANDESCENT LAMP TYPE:** Sets the dimmer curve to suit LED or incandescent lamps

**AUTO CROSS FADE MODE:** If On, a press of the B or C keys starts a crossfade between Preset B and C levels, at the crossfade time set by the Fade Time control

**UP/DOWN TAP:** If set On, a fast double tap swaps between full On and Off. If set Off, Up and Down keys adjust the current level with a 5 second fade time

**AUXILLARY KEY MODE:** In Delay Off mode, pressing the Aux key holds the current level for 10 x Fade Time setting, then fades out over 10 seconds. In Panic On Mode, pressing the Aux key fades to Full over 5 seconds

**A KEY MODE:** If set to On, the Preset A key selects A level. If set to On/Off, pressing the Preset A key swaps between Off and the Preset A level (a push-on, push-off action)

**A LEVEL - EXTERNAL OR INTERNAL:** Sets the Preset A level to either the front panel Fade Time, or to an external fader or other controllers such as a real time clock, daylight sensor etc, with 5v or 10 v input level select on the PCB

**FADE TIME- EXTERNAL OR INTERNAL:** Sets the fade time to either to the front panel Fade Time, or to an external fader or other + 5v source

**FADE TIME:** The time for all fades between Preset levels A, B, C and Off may be varied from 2 seconds to 60 minutes. When the Aux key is used in Delay Off mode, the time scale is multiplied by 10 to give a delay of 20 seconds to 10 hours, before fading out over 10 seconds

**A B C PRESET LEVELS:** These three controls set the lighting level for each of the preset key selections A, B and C. Each level may be set in the range from Off to Full

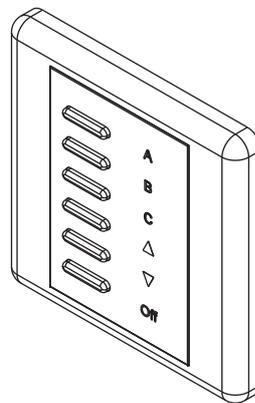
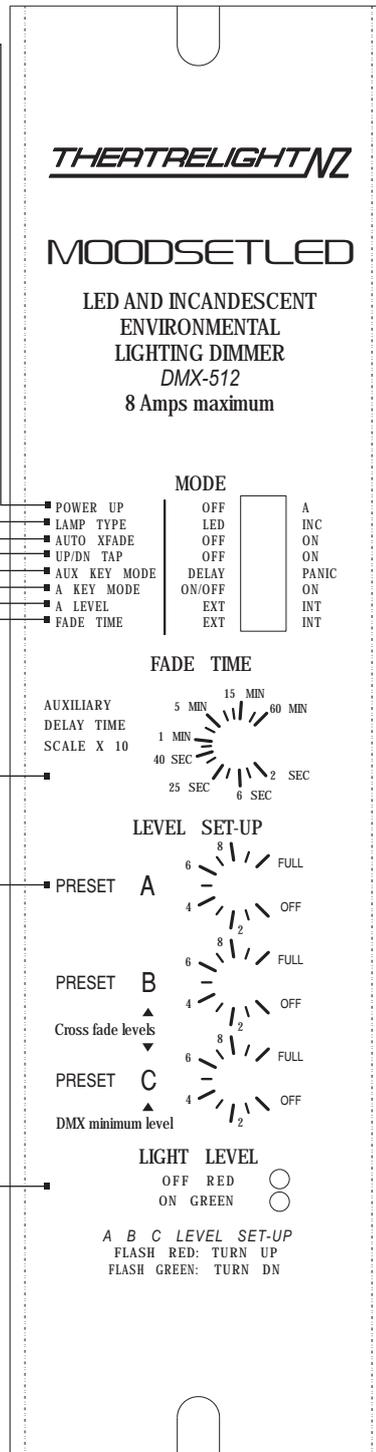
**LIGHT LEVEL LEDs:** When output level is Off, the red LED lights; when up, the green LED lights. Modification of a preset level by the Up and Down keys sets these LEDs flashing: to match the preset level to the edited level, turn up the preset level if the red LED is flashing, turn down the preset level if the green LED is flashing. When red and green are both on, preset and edited level match.

**PCB DIPSWITCHES:** Dipswitches 1 to 6 add respectively 1, 2, 4, 8, 16 and 32 to the base address of 1, allowing operation on DMX addresses up to 64. Dipswitch 7 when down connects a 120 ohm DMX terminator across the DMX line. Dipswitch 8 slows LED bulb response time to the thermal inertia of incandescent bulbs: Up = short fade profile (<500w incandescents), Dn = long fade profile (>500w incandescents)

**DMX WIRING:** DMX input is single ended: wire DMX+ to terminal 2 (DMX In), DMX- to PCB terminal 1 (0v). Leave DMX common unconnected. Use a DMX splitter such as Theatrelight's TL- SP4 for larger installations.

**DMX OPERATION:** When DMX is present, the output level is the highest of DMX, A, B, C and Off levels. Pressing the Up or Dn keys overrides the DMX level until A, B, C or Off keys are pressed. DMX levels fade at a min 3 seconds rate.

**KEYPLATE:** 6 button flushplate with A, B, C, Up, Down and Off keys. Internal LEDs light up in the keys to display the current preset selection, and flash while fading. Off LED flashes continuously if the Aux key is pressed in Delay Off mode, while A, B and C LEDs flash together if the Aux key is pressed in Panic On mode



## MOODSETLED FEATURES

These new versions of Theatrelight's original Moodsets provide smooth dimming of both incandescent bulbs and leading edge mains dimmable LED bulbs. Instead of the expensive and delicate IGBTs or MOSFETs used in trailing edge dimmers, MoodsetLED modules use robust SCRs capable of tripping the supplied MCB on repeated short circuits with no damage. They are the perfect choice when updating large installations of incandescent bulbs to modern long life, power saving LED bulbs. Applications include restaurants, hotel lobbies/ballrooms/chandeliers, museums and art galleries, theatre house lights, chicken sheds, and other industrial and horticultural uses requiring the smooth dimming of large numbers of LED bulbs.

### SPECIFICATIONS:

**LOAD:** Incandescent load 8 Amps (MoodsetLED 8) and 20 Amps (MoodsetLED 20) maximum with suitable cooling. When using leading edge mains dimmable LED bulbs, derate to 50%. Both models smoothly dim most brands of leading edge mains dimmable LED bulbs from a single 4 watt bulb up to the permitted maximum load

**CIRCUITRY:** Microprocessor driving heavy duty SCRs via high frequency pulse transformer. EMI filtering is by toroidal choke, 120usec linear rise-time, with load DC component less than 1 volt

**MAINS INPUT:** 220~240vac 45-60Hz standard (100-120 vac models to order), 1000vac isolation mains to controls

**POWER CONSUMPTION:** Less than 2 Watts when load is Off. Losses less than 2% of total load when On

**KEY INPUTS:** Short-to-earth operation, with built-in 2mA pull-up to internal 5 volt supply. Multiple keys may be commoned to one input, and the inputs of multiple Moodsets may be commoned to one or more keys

**ANALOGUE INPUTS:** +5v control signals, suitable for 5k-10k ohm potentiometers for both the external A Fader and Fade Time inputs. External A input can also be set to +10v

**LED INDICATOR OUTPUTS:** Pull-down to 0v, current limited to 10 mA. Each output can drive up to 5 high efficiency LEDs

**CONTROL WIRING:** All control inputs and outputs may be wired using Extra Low Voltage cable such as Cat 5/6 cable

**DIMMING RESOLUTION:** 2500 steps when fading between Off and Full including from DMX levels. Final target level resolution from Presets or DMX is 256 steps

**DMX SPECIFICATIONS:** Single ended, Earth referenced DMX input, address from 1-64. Up to 50 Moodsets can be commoned on one DMX line. A DMX Terminator of 120 ohms can be set by dipswitch 7 on the PCB (set this only on the last DMX device in the DMX line)

**MCB SHORT CIRCUIT PROTECTION:** Each unit must be powered from a TLNZ brand MCB (supplied). MCBs are rated at 13 amps for the 8 amp model and 20 amps for the 20 amp model

**MOUNTING:** Mounting centres are 60mm for the 8 amp model and 80mm for the 20 amp. Modules should be mounted vertically in a well ventilated cabinet (0-40 C non-condensing) with acoustic isolation from living areas

### DIMENSIONS & WEIGHT:

MoodsetLED 8: 225mm high x 100mm deep x 60mm wide, weight 0.90 Kg

MoodsetLED 20: 225mm high x 100mm deep x 80mm wide, weight 1.55 Kg

Your Local Distributor:

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