

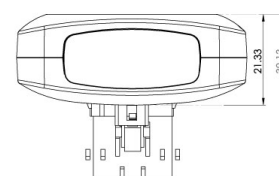
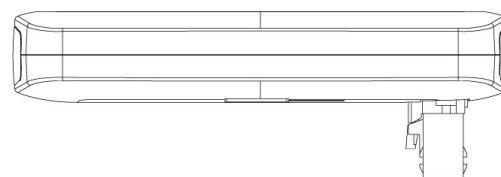
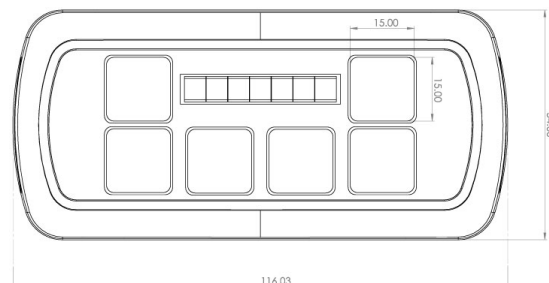


## Linx6 Universal Controller



### FEATURES

- 6 dynamic RGB switches
- Switch 1 & 2 rated to 10 amp (max) each, limited to 15 amps overall
- Switches 3,4,5,6 rated to 2 amp (max) each, limited to 8 amps overall
- Overall global limit 23amps
- User configurable latching or momentary functions
- User configurable 'activation' switch colour (red, amber, green, blue & white)
- User configurable traffic director LED signal bar (can be deactivated)
- User configurable back light & activation switch colour
- Dynamic hierarchy switch selection (parent & child configurable)
- Dynamic master switch selection
- Dynamic 999 & kill switch feature
- Activate/deactivate audible buzzer
- Factory reset feature
- Over current monitor and deactivation feature (3 flashes & beeps)
- Automatic 90 min sleep mode & single switch wake-up feature
- 3000mm rear cable
- Standard transparent decal labels included
- Mountable fixing kit included
- 2 year warranty
- 8 - 30 volt operation
- IP52 sealed
- EMC/R10 compliant
- Manufactured in the United Kingdom





## Introduction

The LINX6 is a 6-way dynamic universal controller. This switched output is capable of switching all types of load applications including resistive, inductive and capacitive. The primary purpose is to switch Redtronic lighting and audible products and is ideal for traffic director control.

The LINX6 consists of 6 independently controlled outputs, two with a high current switching output of 10A each and four with a maximum switching of 2A per output and an overall limit across the 6 outputs of 23A.

The outputs are monitored and if overcurrent is detected the outputs are immediately switched off. A fault will be indicated with 3 flashes and 3 beeps. The output cannot be re-enabled until the LINX6 has been power cycled.

The end user has the ability to place legends on the keys to indicate what the output does. There is also an ability to change the activation colour and mode of the switches (the default is red and latching). This allows the end user to customise the LINX6 to fit their needs.

## Part Numbers

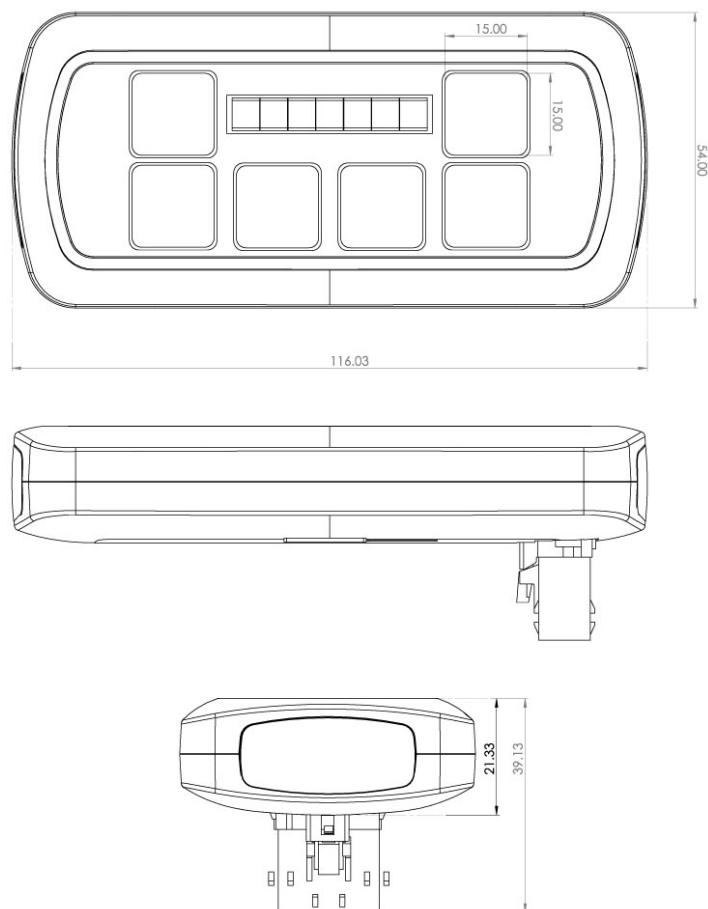
LINX6	Permanent install / hardwired
LINX-AM1	Spare Part: LINX adjustable mount

## Technical Specification

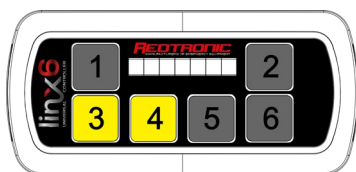
Overall Size (enclosure)	116mm x 54mm x 21mm
Overall Size (including connector)	116mm x 54mm x 39mm
Material	ASA+PC-FR (UL 94 V-0)
Colour	Grey/Black
IP rating	IP 52
Supplies	12v or 24v
Output Current limit	OP1 & OP2 limited to 10A each (overall limit of 15 amps) OP3-6 limited to 2A each (overall limit of 8 amps) Limited to 23A across all outputs.
Output Number	6
Backlight	Red, Amber, Green, Blue and White
Selectable colours	Red, Amber, Green, Blue and White
Default	Default (Red latching)
Cables	8 x power and switched output cable 3M long
Selectable switch modes	Latching or Momentary
Monitoring	Overcurrent monitoring per channel. Overall overcurrent monitoring across the 6 outputs.
Sleep Mode	90 minutes as standard (may vary between 70-110 minutes temperature dependant & environmental conditions)
Switch force	260 gf
Switch life	100000 Cycles
Working minimum voltage (DC)	8v
Working maximum voltage (DC)	30v
Operating Temperature (°C)	-40°C to +85°C
Standby Current	30mA
Leakage current	Negligible
RoHS complaint	Yes
Sleep / Idle mode	2 hours
Sleep / Idle mode current draw	30mA



## Dimensions

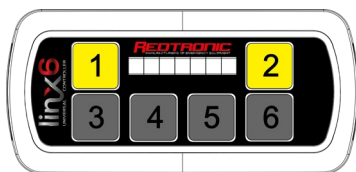


## Configuration



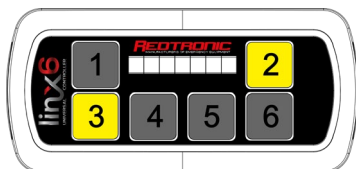
### Switch function & colour

1. Unit is depowered
2. Simultaneously hold switches 3 & 4
3. Power unit (wait for 3 seconds for the 2<sup>nd</sup> 'beep') & enter switch function & colour setup mode
4. Select the function & colour of each switch by momentarily selecting each switch which will cycle through in the following order:
  - Red (latching) *Permanently illuminated*
  - Blue (latching) *Permanently illuminated*
  - Green (latching) *Permanently illuminated*
  - Amber (latching) *Permanently illuminated*
  - White (latching) *Permanently illuminated*
  - Red (momentary) *Flashing*
  - Blue (momentary) *Flashing*
  - Green (momentary) *Flashing*
  - Amber (momentary) *Flashing*
  - White (momentary) *Flashing*
5. Power cycle to save setting.



#### Active/deactivate buzzer

1. Unit is depowered
2. Simultaneously hold switches 1 & 2
3. Power unit (wait for 3 seconds for the 2<sup>nd</sup> 'beep') to deactivate the buzzer.
4. Power cycle to save setting.
5. Repeat the procedure to reactivate buzzer.

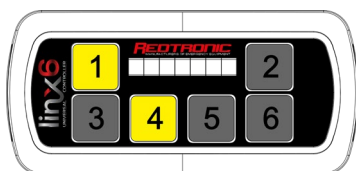


#### Hierarchy switch selection *(this feature pre-sets a single parent switch which (when selected) 'unlocks' any child switches. Child switches can only be powered when the parent switch is activated)*

1. Unit is depowered
2. Simultaneously hold switches 2 & 3
3. Power unit (wait for 3 seconds for the 2<sup>nd</sup> 'beep') to enter hierarchy switch setup mode
4. Select the desired parent switch by momentarily selecting the switch until it illuminates on full brightness. Select the desired child switches by selecting each switch until it is dimmed. Any switches which should not be within the hierarchy should be off. The switches can be cycled in the following order:
  - CHILD SWITCH *Dimmed*
  - PARENT SWITCH *Full brightness*
  - NO HIERARCHY *Off*

It is not possible to select more than one parent switch. Attempting to select more than one parent will automatically deactivate the first selected switch.

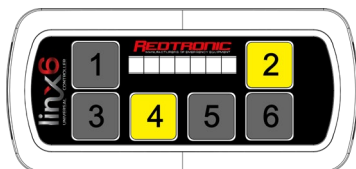
5. Power cycle to save setting.



#### Master switch selection *(this feature pre-sets a single master switch which (when selected) automatically saves which slave switches were activated on the last power cycle)*

1. Unit is depowered
2. Simultaneously hold switches 1 & 4
3. Power unit (wait for 3 seconds for the 2<sup>nd</sup> 'beep') to enter master switch setup mode
4. Select the desired master switch by momentarily selecting the switch until it illuminates on full brightness. All remaining switches will automatically be considered slave switches of the master.

It is not possible to select more than one master switch. Attempting to select more than one master will automatically change the first selected switch.
5. Power cycle to save setting.



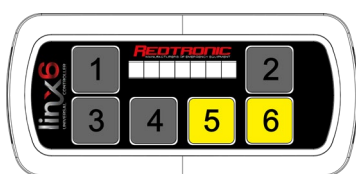
#### 999/kill switch selection *(the 999 feature pre-sets a single 'emergency' switch which (when selected) automatically powers multiple preconfigured child switches. The kill feature cancels those same pre-set switches, e.g. upon arrival at scene)*

1. Unit is depowered
2. Simultaneously hold switches 2 & 4
3. Power unit (wait for 3 seconds for the 2<sup>nd</sup> 'beep') to enter 999/kill switch setup mode
6. Select the desired 999 and/or kill switch by momentarily selecting the switch until it illuminates (999 – blue, kill – red). All remaining switches can pre-set as slave switches by selecting them until they illuminate on dimmed white. It is not possible to select more than one master switch. Attempting to select more than one master will



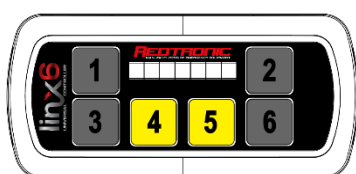
automatically change the first selected switch. The switches can be cycled in the following order:

- CHILD SWITCH *Dimmed white*
  - KILL SWITCH *Full brightness RED*
  - 999 SWITCH *Full brightness BLUE*
  - 999 & KILL SWITCH *(Hidden Feature – see step 5 below)*
  - OFF *Non-illuminated*
4. Power cycle to save setting.
  5. Note, it is possible to allocate the same switch as a 999 and a kill switch. Once on the blue switch, simply hold the switch for 3 seconds and release, the switch will start to flash (alternate between blue and red). This is now a multi-function switch. **When in use, this switch will now enable the user to trigger 999 feature (push switch once) as well as the kill switch feature (hold switch).**



**Traffic Director signal bar** *(this feature pre-sets up to three switches which will act as traffic director functions. Ultimately it toggles the signal bar on/off for any switch and will trail LED's as per the user selection.)*

1. Unit is depowered
2. Simultaneously hold switches 5 & 6
3. Power unit (wait for 3 seconds for the 2<sup>nd</sup> 'beep') to enter TD signal bar switch setup mode.
4. Select the specific switch that you want to operate the TD function demonstrated via the signal bar. If you do not want to use all TD functions simply de-select & re-select any switch to move to the next TD switch feature within the cycle. The switches can be cycled in the following order:
  - RIGHT TO LEFT
  - LEFT TO RIGHT
  - CENTRE OUT
  - DOUBLE FLASH (FULL BRIGHTNESS)
  - DOUBLE FLASH (DIMMED BRIGHTNESS)
  - END (Go back to step 1 to reconfigure)
5. Power cycle to save setting.

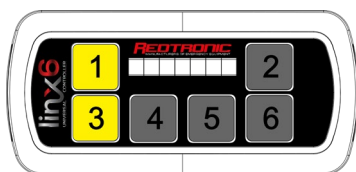


*completely different colour.)*

**Switch back light colour** *(this feature pre-sets each switch its own independent backlight colour. The switch activation colour can be a*

1. Unit is depowered
2. Simultaneously hold switches 4 & 5
3. Power unit (wait for 3 seconds for the 2<sup>nd</sup> 'beep') to enter back light switch setup mode.
4. Scroll through the backlight colour options by selecting the switches. The switches can be cycled in the following order:
  - Red (latching)
  - Blue (latching)
  - Green (latching)
  - Amber (latching)
  - White (latching)
5. Power cycle to save setting.





#### Factory Reset

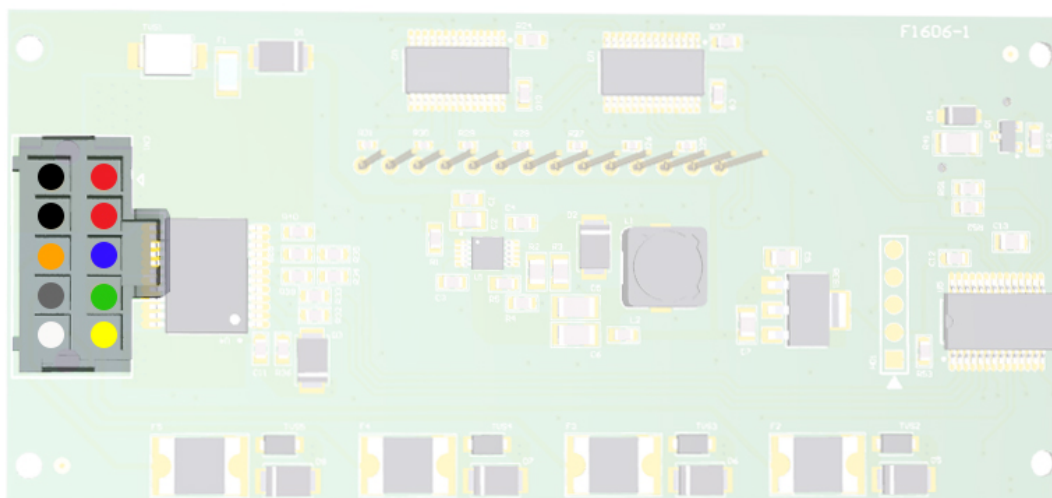
1. Unit is depowered
2. Simultaneously hold switches 1 & 3
3. Power unit (wait for 3 seconds for the 2<sup>nd</sup> 'beep') to restore factory settings.

## Installation

#### Description of cable functions

The 2 x red power cables should be fused appropriately (recommended at 23 amps).  
High current switches 1 & 2 are limited to a maximum current of 15 amps combined.

PCB Connection	Cable	Function	Current Rating
1	Red	Power / Positive	23 amps (fused)
2	Red		
3	Black	Earth / Negative	
4	Black		
5	Blue	Output 1	10 amps
6	Green	Output 2	10 amps
7	Yellow	Output 3	2 amps
8	White	Output 4	2 amps
9	Grey	Output 5	2 amps
10	Orange	Output 6	2 amps



#### Attaching decals to LINX6 overlay

- It is recommended that the LINX6 is configured/programmed before attaching the decals.
- It is important the LINX6 overlay (switch surface) is free of dirt and grease before application of the decals. Ideally the decals should be applied to the overlay using tweezers to avoid natural skin oils affecting performance of the adhesion.
- The decal adhesion will take 24 hours to properly adhere to the overlay surface but once adhered, the decal should not be relocated to another position. The decals are considered a consumable part and therefore not covered under the product warranty. Replacements can be ordered separately.