

# LED Power Supply Catalogue



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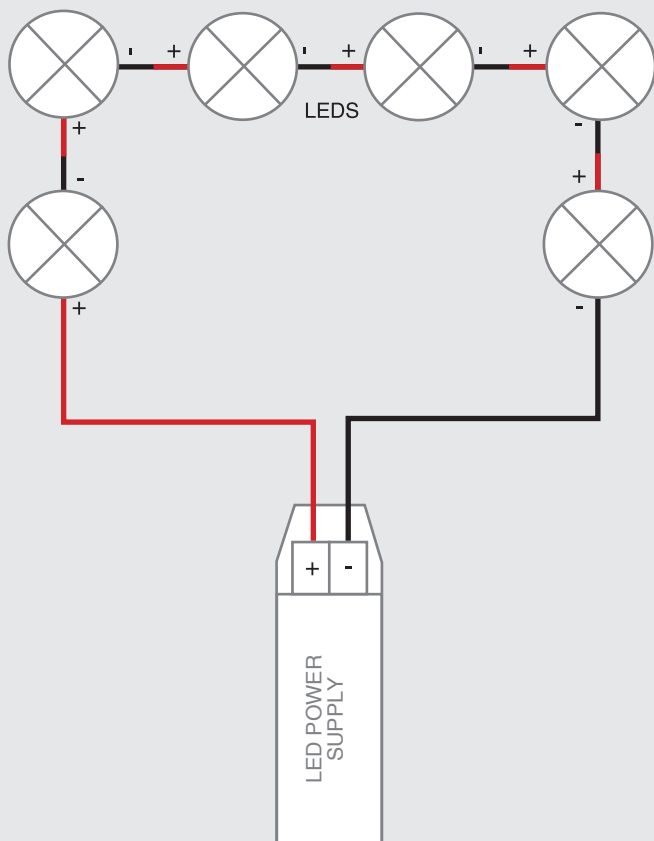
## Introduction : LED Power Supplies

We offer a full range of LED power supplies for your low voltage LED lights. These LED power supplies are available in both constant current(mA) and constant voltage(V).

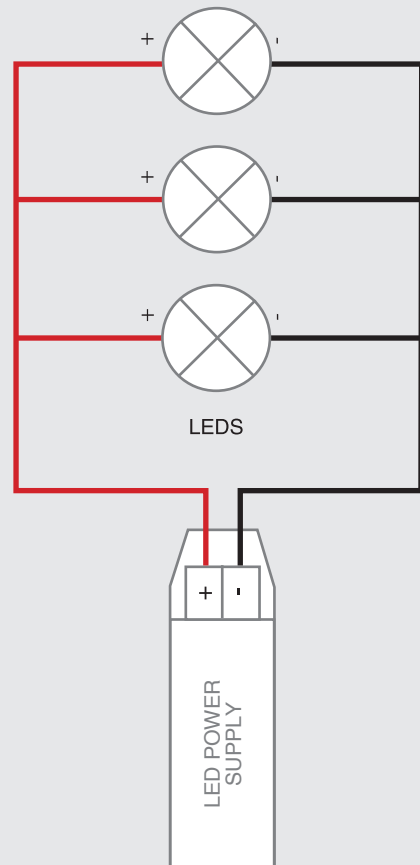
Constant Current LEDs are wired in series to give a constant amperage to each LED on the LED power supply. Common amperages are 350mA and 700mA although many other mA versions are on the market. Constant current LEDs are mainly used for spotlight type lights.

Constant Voltage LEDs are wired in parallel to give a constant voltage to each LED on the LED power supply. Common voltages are 12V and 24V. These LEDs are used mainly in LED tape and strips although you can find these in other types of light fitting.

Constant Current Series Wiring (mA)



Constant Voltage Parallel Wiring (V)



There is a choice of dimming or switching LED power supplies. The dimming options are, Normal, Push Button, 1-10V and Dali.

**The different dimming types are explained opposite;**

## Normal Dimming Wiring

Using a normal dimmer reduces the voltage to the light. The more the voltage is reduced, the more the light is dimmed. Uses standard mains wiring Live, Neutral and Earth. Only Live and Switch Live is connected to the dimmer.

There are two types of mains dimming;

- Leading Edge dimming – Start of the sine-wave section is chopped – used on electronic and toroidal transformers. Has higher minimum wattage.
- Trailing Edge – End of the sine-wave is chopped – used on electronic transformers. Has low minimum wattage and very quiet operation.

It is the LED driver and dimmer that must be compatible – not the LED light fitting. If the minimum load of the dimmer is not met by the load of the LED, then dummy load (Resload 10W) should be used on that circuit. A dummy load can also be used to stabilize an LED circuit.

## Push Dimming

A push switch, also called a bell push, retractive or push-to-make switch is used for Push Dimming. This type of switch returns to its original position after being pressed. These switches are used with an LED power supply that has the push dimming function. The switch is pressed quickly to turn the lights on or off. A long press dims the lights, once the light is at the required level you stop pressing the switch. Uses standard mains wiring Live, Neutral and Earth. Only Live and Switch Live is connected to the push switch. No minimum wattage is required.

## 1-10V Dimming

1-10V dimming is also known as 0-10V, and Analogue dimming. 0-10V is basically the same as 1-10V except the light source can be dimmed to zero off. There is a standard to make sure all 1-10V dimmers and LED power supplies are compatible. There are different 1-10V dimmers available. A standard 1-10V dimmer operates and looks the same way as a normal dimmer. Full scene setting control systems are available with 1-10V outputs.

A standard 1-10V dimmer uses Live and Switch Live to switch the lights on/off and also uses a separate pair of cables to control the dimming. 1V dims the light to the minimum brightness and 10V sets the light to the maximum brightness. No minimum wattage is required.

## DALI Dimming

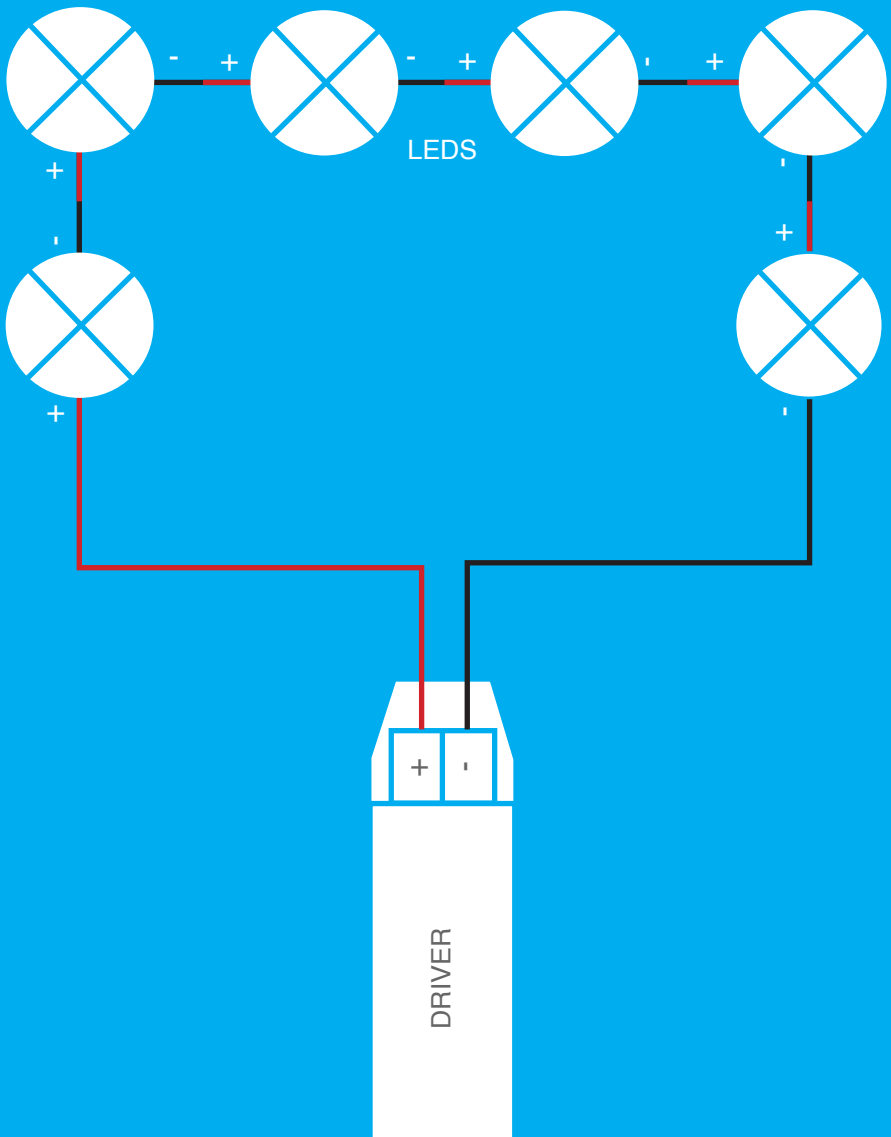
DALI stands for Digital Addressable Lighting Interface. DALI devices are individually addressable, so they can all run from one mains supply but dim individually if required. DALI controls can be broadcast only so all DALI lights dim together. DALI dimmer are not available as a normal dimmer in the wall. They are only used with control systems.

Power supplies can listen to incoming signals and send back information on the lamp state, ballast state, emergency pack state etc. to a control system. DALI controls tend to be larger systems rather than wall switches and can be very complex. The maximum number of addresses on a DALI network is 64, but control systems can have multiple DALI groups, enabling large scale systems to be built up. No minimum wattage is required.

## Switching Wiring

Switching drivers are used when no dimmers are required. These can work on any switch.

# Constant Current - Series Power Supplies (mA)

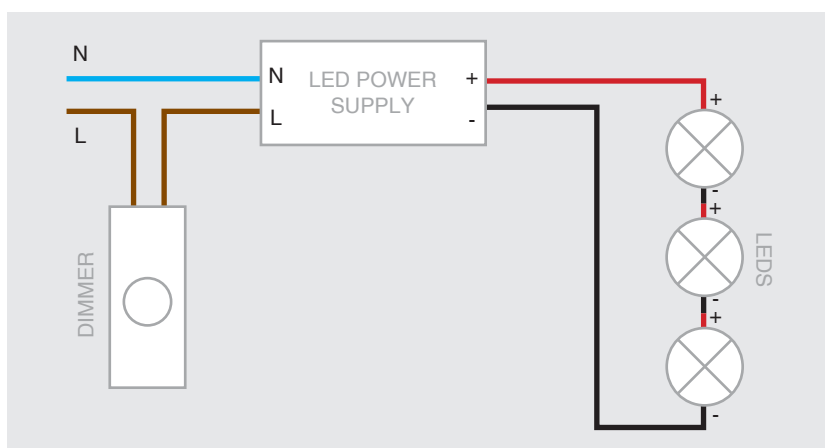


Constant current LED Drivers are mainly used for spotlights









## Constant Current, Series Wired Power Supplies (mA) : Normal Dimming

### Normal Dimming Wiring

Using a normal dimmer reduces the voltage to the light. The more the voltage is reduced, the more the light is dimmed. Uses standard mains wiring Live, Neutral and Earth. Only Live and Switch Live is connected to the dimmer.



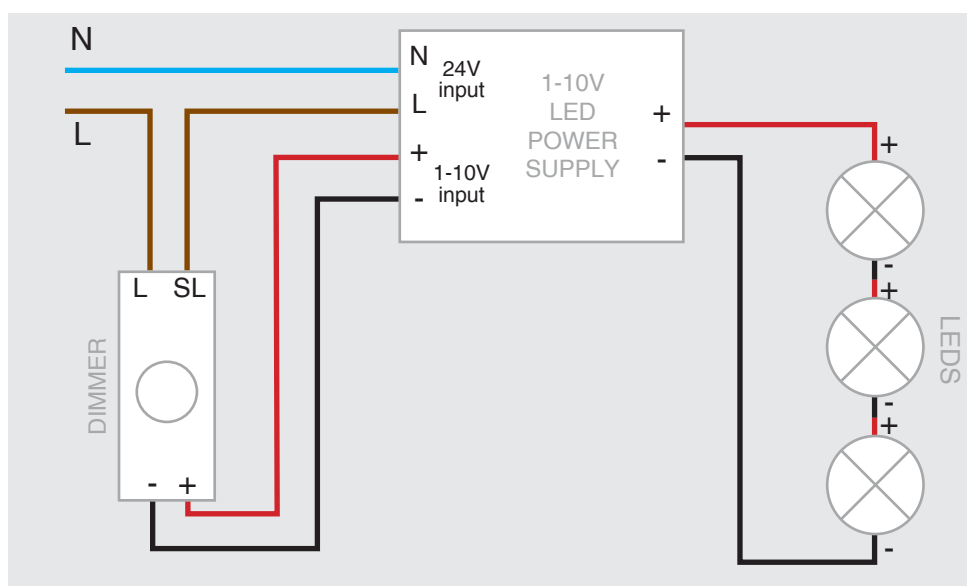
### Normal Dimming Drivers

Driver	Product Code	Input Voltage	Output Amperage	Max Wattage	Length (mm)	Width (mm)	Height (mm)	Price excl VAT
 Dimmable LED Driver 1W-15W	DCMULTI MD 15W	240V	150mA 250mA 350mA 400mA 450mA 500mA 600mA 700mA	7.5W 12.5W 15.8W 15.2W 15.8W 15W 15W 15.4W	140	45	27	<b>£29.50</b>
 Dimmable LED Driver 1W-25W	DCMULTI MD 25W	240V	300mA 350mA 500mA 550mA 650mA 700mA 850mA 900mA	15W 17.5W 25W 24.8W 24.7W 24.5W 25.5W 25.2W	155	54	20	<b>£34.83</b>
 Dimmable LED Driver 1W-50W	DCMULTI MD 50W	240V	150mA 250mA 350mA 400mA 450mA 500mA 600mA 700mA	35W 42.5W 45W 50.4W 49.5W 50W 49.4W 50.4W	178	61	24	<b>£44.25</b>
 Dimming LED Driver 6W	DC350MA 6W DIM	200-240V	350mA	6W	109	45	25	<b>£11.50</b>
 LED Driver 8W 700mA	DC700MA 8W DC	240V	700mA	8W	58	35	21	<b>£17.05</b>
 LED Driver 15W 350mA	DC350MA 15W DIM	180-240V	350mA	15W	140	45	30	<b>£15.33</b>
 LED Driver 15W 700mA	DC700MA 15W DIM	180-240V	700mA	15W	140	45	30	<b>£24.69</b>
 DCJolly MD 32W + push dimming	DCJOLLY MD 240V	240V	350mA 500mA 550mA 700mA 750mA 12V 24V 28V	17W 24W 25W 32W 32W 10W 20W 22W	166	47	35	<b>£32.00</b>

RESLOAD maybe required - see page 15






## Normal Dimming Wiring

Using a normal dimmer reduces the voltage to the light. The more the voltage is reduced, the more the light is dimmed. Uses standard mains wiring Live, Neutral and Earth. Only Live and Switch Live is connected to the dimmer.



A standard 1-10V dimmer uses Live and Switch Live to switch the lights on/off and also uses a separate pair of cables to control the dimming. 1V dims the light to the minimum brightness and 10V sets the light to the maximum brightness. No minimum wattage is required.

## 1-10V Dimming Drivers

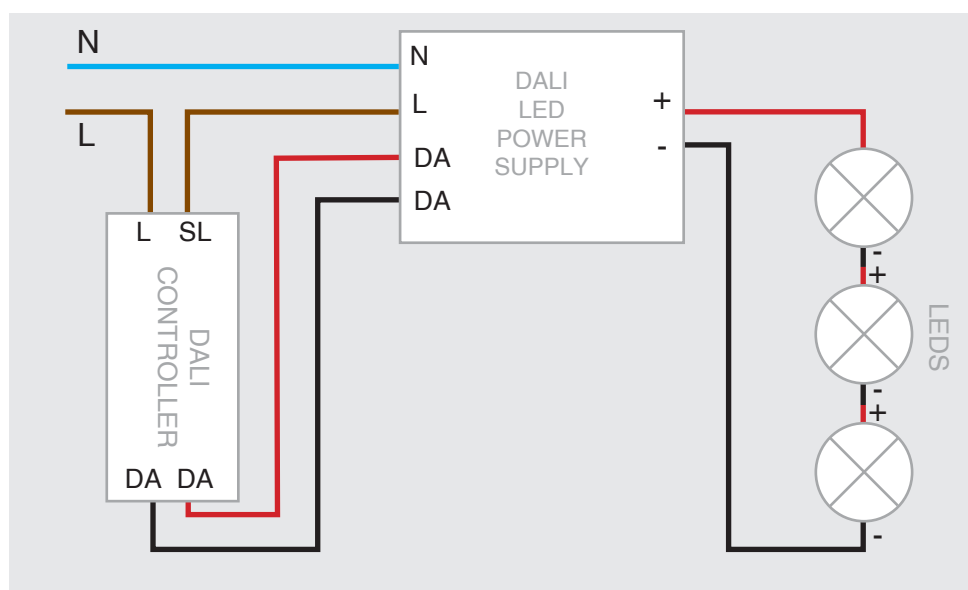
Driver		Product Code	Input Voltage	Output Amperage Voltage	Max Wattage	Length (mm)	Width (mm)	Height (mm)	Price excl VAT
	1-10V Dimmable LED Driver 6W	DCJOLLYMICRO1-10	240V	350mA	6W	57	50	22	£24.15
	1-10V LED Driver 36W + push dimming	DCJOLLYMINI 1-10	110-240V	350mA 500mA 700mA	15W 22W 25W	103	67	21	£35.20
	1-10V LED Driver 42W	LED36W 700 1-10	220-240V	700mA	36W	153	40	31	£30.72
	1-10V / Push Button Dimmable Driver 50W + push dimming	DCJOLLYMAXI 1-10	110-240V	350mA 500mA 700mA 900mA 1050mA 1400mA	25W 35W 50W 50W 50W 50W	120	78	21	£50.00
	1-10V Dimmable LED Driver (Constant Current & Constant Voltage)	DCJOLLYMIDI 1-10	240V	250mA 350mA 400mA 450mA 500mA 550mA 600mA 12V 24V 28V	14W 19W 22W 25W 25W 25W 25W 8W 17W 20W	103	67	21	£49.80





## Constant Current, Series Wired Power Supplies (mA) : Dali

### Dali Wiring

DALI stands for Digital Addressable Lighting Interface. DALI devices are individually addressable, so they can all run from one mains supply but dim individually if required. DALI controls can be broadcast only so all DALI lights dim together. DALI dimmer are not available as a normal dimmer in the wall. They are only used with control systems.

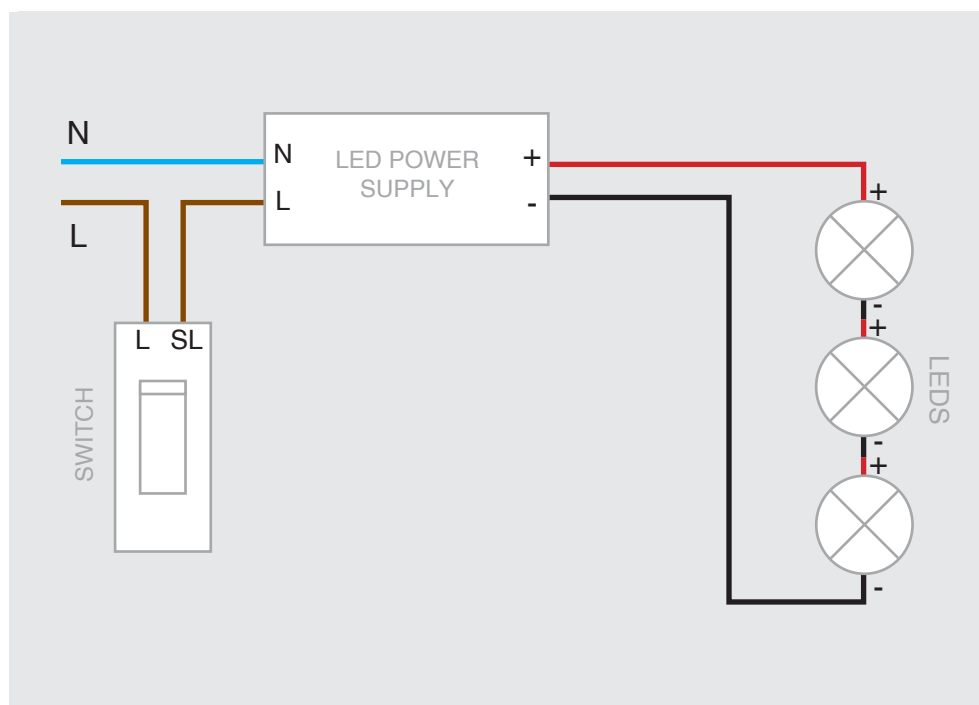


### Dali Dimming Drivers

Driver		Product Code	Input Voltage	Output Amperage Voltage	Max Wattage	Length (mm)	Width (mm)	Height (mm)	Price <small>excl VAT</small>
	DC Jolly Mid Dali 20W	DCJOLLY DALI MIN	110-240V	250mA 350mA 400mA 450mA 500mA 550mA 600mA 700mA	10W 15W 17W 19W 20W 20W 20W 20W	110	52	22	<b>£26.10</b>
	Dali Dimmable LED 32W Driver	DCJOLLY DALI	110-240V	350mA 500mA 700mA	15W 22W 25W	100	65	21	<b>£32.20</b>
	Dali Dimmable LED 50W Driver	DCJOLLY DALI MAX	110-240V	350mA 500mA 700mA 900mA 1050mA	25W 35W 50W 50W 50W	120	78	21	<b>£51.00</b>

## Switching Wiring

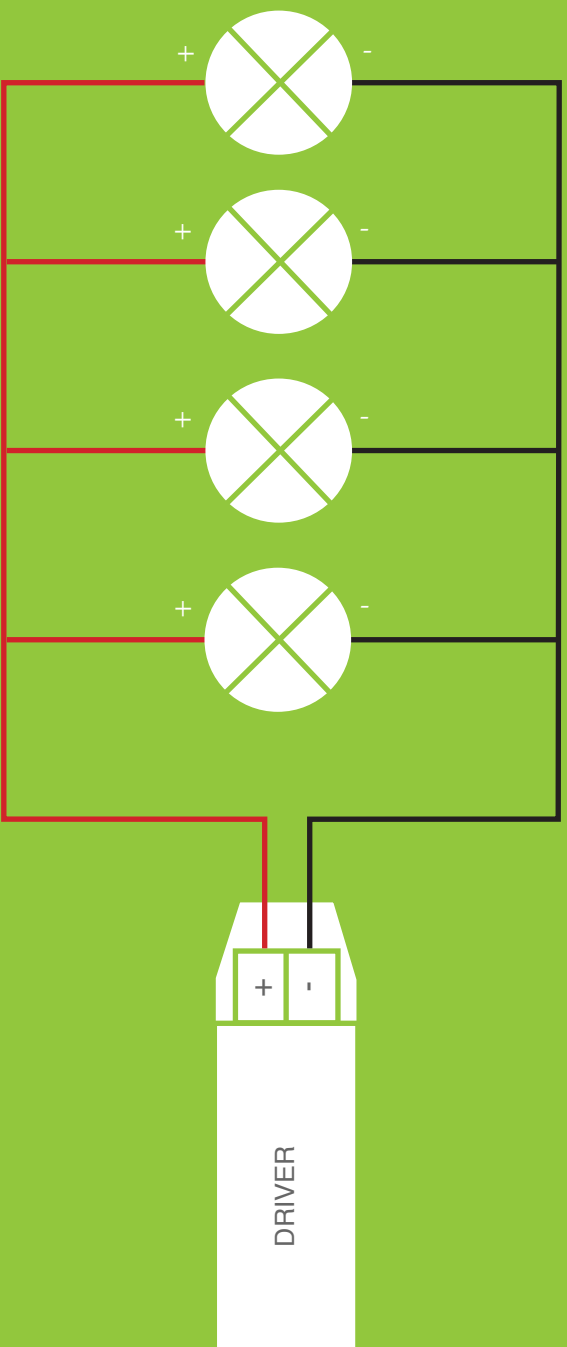
Switching LED power supplies are used when no dimmers are required. These can work on any switch.



## Constant Current LED Switching Drivers

Driver	Product Code	Input Voltage	Output Amperage Voltage	Max Wattage	Length (mm)	Width (mm)	Height (mm)	Price excl VAT
 Switched Plug LED Driver 5W	13A 350MA PLUG	120-240V	350mA	5W	80	50	58	<b>£12.50</b>
 LED Driver 8W 350mA	BULL 350MA 8W	100-240V	350mA	8W	60	35	21	<b>£9.50</b>
 LED Driver 11W	DC350MA 11W	110-240V	350mA	11W	115	20	32	<b>£10.00</b>
 LED Driver 12W	DC700MA 12W DC	100-265V	700mA	12W	115	34	19	<b>£19.40</b>
 LED Driver 15W	DC350mA 15W	220-240V	350mA	15W	115	34	19	<b>£12.46</b>
 LED Driver 18W	LED18W 350	220-240V	350mA	18W	133	40	31	<b>£26.78</b>
 LED Driver 36W	LED36W 700	240V	700mA	36W	153	40	31	<b>£25.72</b>

## Constant Voltage - Parallel Wired Power Supplies (V)

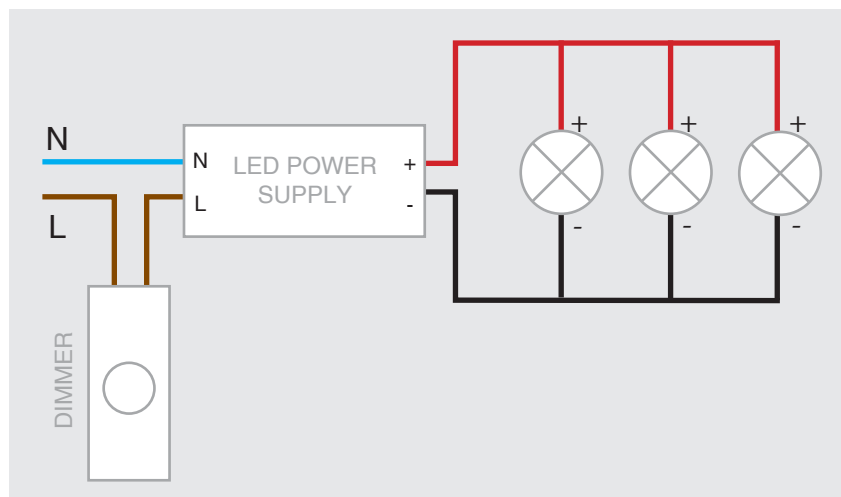


Constant Voltage LED Drivers are mainly used for LED Tape




## Constant Voltage, Parallel Wired Power Supplies (V) : Normal Dimming

### Normal Dimming Wiring











Using a normal dimmer reduces the voltage to the light. The more the voltage is reduced, the more the light is dimmed. Uses standard mains wiring Live, Neutral and Earth. Only Live and Switch Live is connected to the dimmer.



### Normal Dimming Drivers

Driver	Product Code	Input Voltage	Output Amperage Voltage	Max Wattage	Length (mm)	Width (mm)	Height (mm)	Price excl VAT
	Triac LED Dimming Driver 8W 12V	DIMDRIV2 12V 8W	180-250V 12V	8W	80	36	23	<b>£13.77</b>
	Triac LED Dimming Driver 8W 24V	DIMDRIV2 24V 8W	180-250V 24V	8W	80	36	23	<b>£13.77</b>
	Triac LED Dimming Driver 15W 12V	DIMDRIV2 12V 15W	180-250V 12V	15W	95	40	25	<b>£16.87</b>
	Triac LED Dimming Driver 15W 24V	DIMDRIV2 24V 15W	180-250V 24V	15W	95	40	25	<b>£16.87</b>
	Triac LED Dimming Driver 25W 12V	DIMDRIV2 12V 25W	180-250V 12V	25W	153	52	22	<b>£24.39</b>
	Triac LED Dimming Driver 25W 24V	DIMDRIV2 24V 25W	180-250V 24V	25W	153	52	22	<b>£24.39</b>
	Triac LED Dimming Driver 50W 12V	DIMDRIV2 12V 50W	180-250V 12V	50W	178	60	24	<b>£36.63</b>
	Triac LED Dimming Driver 50W 24V	DIMDRIV2 24V 50W	180-250V 24V	50W	178	60	24	<b>£36.63</b>
	Triac LED Dimming Driver 75W 12V	DIMDRIV2 12V 75W	180-250V 12V	75W	180	56	50	<b>£49.17</b>
	Triac LED Dimming Driver 75W 24V	DIMDRIV2 24V 75W	180-250V 24V	75W	180	56	50	<b>£49.17</b>

## Normal Dimming Drivers

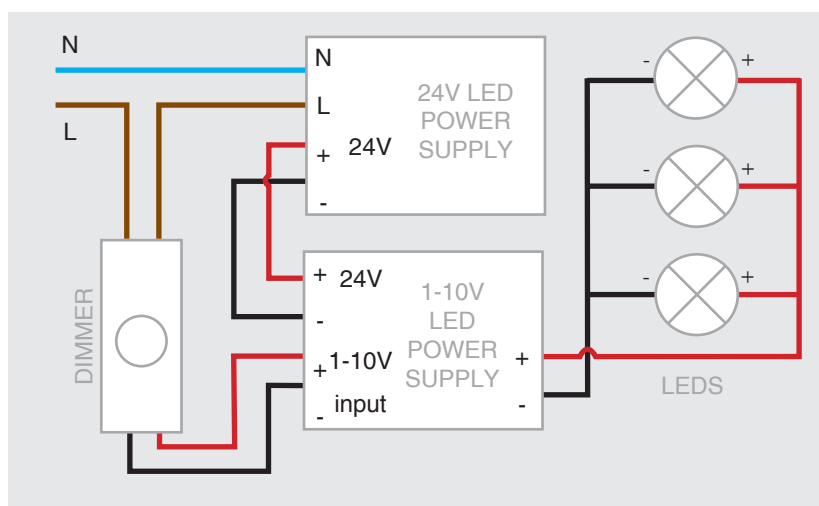
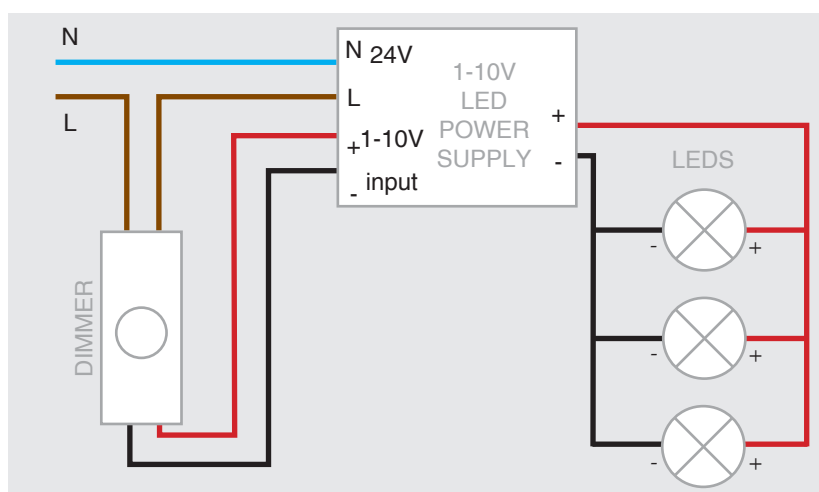
Driver	Product Code	Input Voltage	Output Amperage Voltage	Max Wattage	Length (mm)	Width (mm)	Height (mm)	Price excl VAT
 Triac LED Dimming Driver 100W 12V	DIMDRIV2 12V100W	180-250V	12V	100W	230	70	46	<b>£64.44</b>
 Triac LED Dimming Driver 100W 24V	DIMDRIV2 24V100W	180-250V	24V	100W	230	70	46	<b>£64.44</b>
 Triac LED Dimming Driver 120W 12V	DIMDRIV2 12V120W	180-250V	12V	120W	230	70	46	<b>£71.25</b>
 Triac LED Dimming Driver 120W 24V	DIMDRIV2 24V120W	180-250V	24V	120W	230	70	46	<b>£71.25</b>
 Triac LED Dimming Driver 150W 12V	DIMDRIV2 12V150W	180-250V	12V	150W	200	79	50	<b>£80.72</b>
 Triac LED Dimming Driver 150W 24V	DIMDRIV2 24V150W	180-250V	24V	150W	200	79	50	<b>£80.72</b>
 Triac LED Dimming Driver 200W 12V	DIMDRIV2 12V200W	180-250V	12V	200W	256	78	47	<b>£96.66</b>
 Triac LED Dimming Driver 200W 24V	DIMDRIV2 24V200W	180-250V	24V	200W	256	78	47	<b>£96.66</b>
 Triac LED Dimming Driver 320W 12V	DIMDRIV2 12V320W	180-250V	12V	320W	276	78	47	<b>£115.00</b>
 Triac LED Dimming Driver 320W 24V	DIMDRIV2 24V320W	180-250V	24V	320W	276	78	47	<b>£115.00</b>

## Constant Voltage, Parallel Wired Power Supplies (V) : 1-10V

### 1-10V Wiring

1-10V dimming is also known as 0-10V, and Analogue dimming. 0-10V is basically the same as 1-10V except the light source can be dimmed to zero off. There is a standard to make sure all 1-10V dimmers and LED power supplies are compatible. There are different 1-10V dimmers available. A standard 1-10V dimmer operates and looks the same way as a normal dimmer. Full scene setting control systems are available with 1-10V outputs.

A standard 1-10V dimmer uses Live and Switch Live to switch the lights on/off and also uses a separate pair of cables to control the dimming. 1V dims the light to the minimum brightness and 10V sets the light to the maximum brightness. No minimum wattage is require

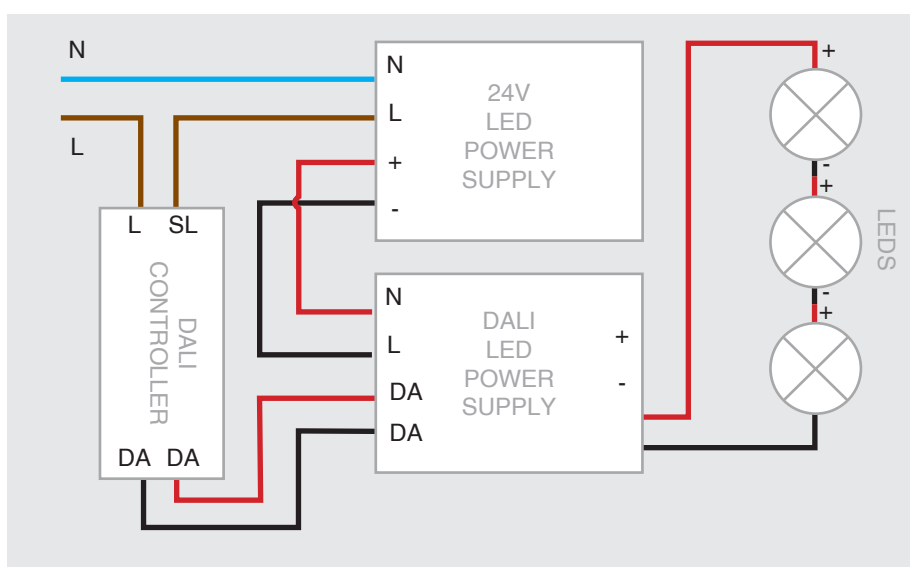
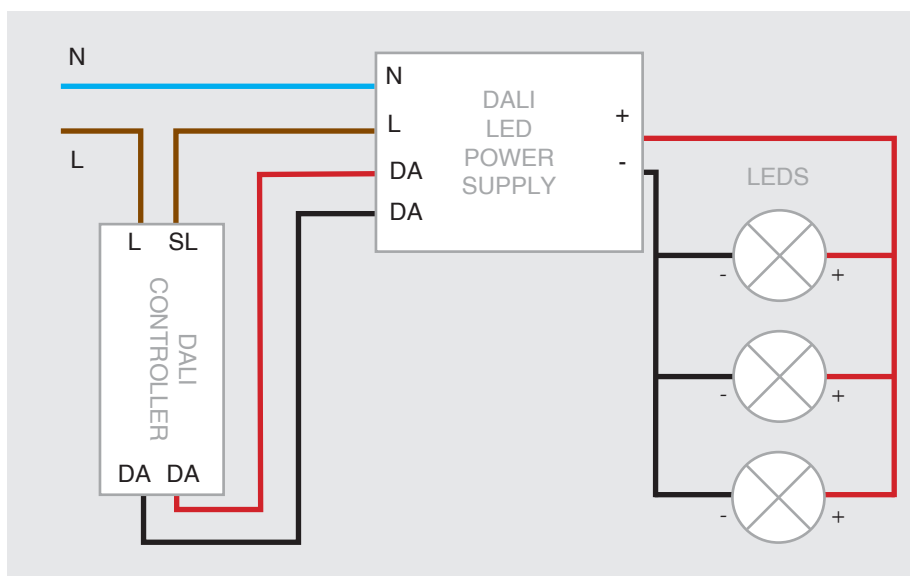


### 1-10V Dimming Drivers





Driver	Product Code	Input Voltage	Output Amperage Voltage	Max Wattage	Length (mm)	Width (mm)	Height (mm)	Price excl VAT
 1-10V / Push Button Dimmable Driver 288W	ECP80112A288W	12-24V	12 - 24V	288W	145	46	16	<b>£59.00</b>
 1-10V LED Driver 120W	DC OTDIM 120W24V	10-24V	10 - 24V	120W	172	42	20	<b>£65.76</b>
 1-10V RGB Dimmable Driver 100W	DC120W 24V VSTR	220-240V	24V	120W	235	58	50	<b>£67.00</b>
 1-10V Dimming Driver 25W	LPF25D24 IP67	100-240V	24V	25W	146	40	33	<b>£39.00</b>
 1-10V Dimming Driver 40W	LPF40D24 IP67	100-240V	24V	40W	161	40	31	<b>£48.00</b>
 1-10V Dimming Driver 60W	LPF60D24 IP67	100-240V	24V	60W	161	40	31	<b>£55.00</b>
 1-10V Dimming Driver 90W	LPF90D24 IP67	100-240V	24V	90W	161	61	36	<b>£70.00</b>

## Dali Wiring

DALI stands for Digital Addressable Lighting Interface. DALI devices are individually addressable, so they can all run from one mains supply but dim individually if required. DALI controls can be broadcast only so all DALI lights dim together. DALI dimmer are not available as a normal dimmer in the wall. They are only used with control systems.



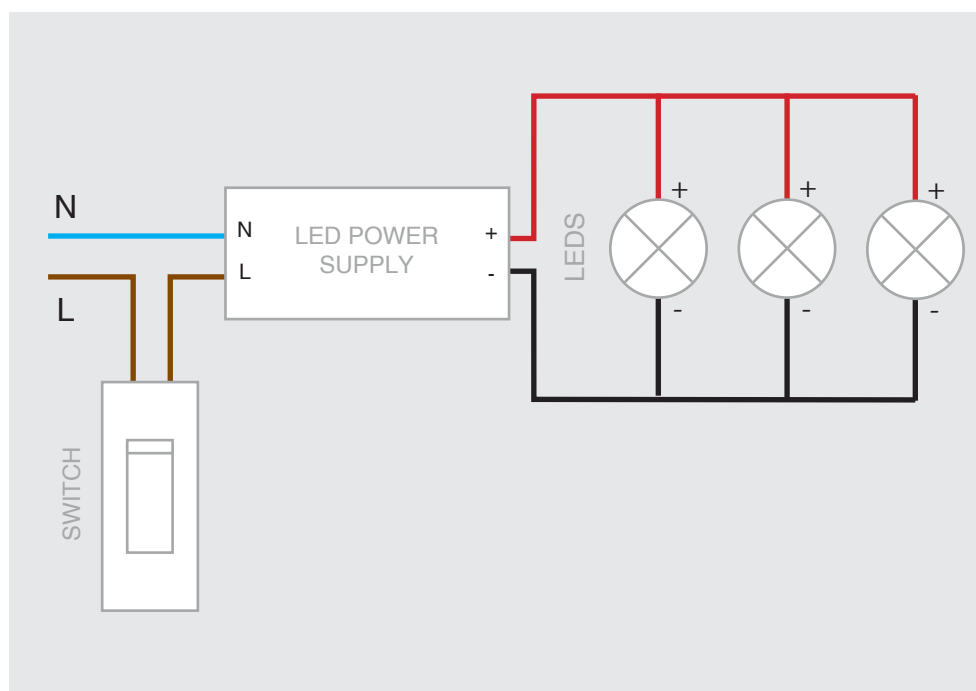
## Dali Dimming Drivers

Driver	Product Code	Input Voltage	Output Amperage Voltage	Max Wattage	Length (mm)	Width (mm)	Height (mm)	Price excl VAT
 Optotronic Oti Dali LED 75W Driver	DC OTIDALI 75/24	220-240V	24V	75W	220	45	45	<b>£181.50</b>
 Optotronic Oti Dali LED 120W Driver	DC OTIDALI 10-24	10-24V	10V/24V	120W	170	20	42	<b>£96.25</b>
 DCC Dali Interface (Requires DCJOLLY MD 240V)	DCC DALI	100-240V	n/a	n/a	115	34	19	<b>£32.00</b>
 Dali-CV LED Interface Dimmable Driver	DALI 801-8A	12-36V	12-36V	192W	100	37	20	<b>£90.00</b>








## Constant Voltage, Parallel Wired Power Supplies (V) : Switching

### Switching Wiring

Switching drivers are used when no dimmers are required. These can work on any switch.














### Constant Voltage 12V LED Switching Drivers

Driver	Product Code	Input Voltage	Output Amperage Voltage	Max Wattage	Length (mm)	Width (mm)	Height (mm)	Price excl VAT
	LED Driver 10W	DC1012V	220-240V 12V	10W	75	36	19	<b>£13.00</b>
	LED Driver 25W	RS2512	100-240V 12V	25W	90	50	29	<b>£16.00</b>
	LED Driver 50W	RS5012	100-240V 12V	50W	98	98	36	<b>£26.00</b>
	LED Driver 100W	RS10012	100-240V 12V	100W	155	98	38	<b>£36.00</b>
	LED Driver 150W	RS15012	100-240V 12V	150W	198	95	38	<b>£46.00</b>
	LED Driver 200W	HRPG20012 NO FAN	100-240V 12V	200W	204	95	38	<b>£120.00</b>
	LED Driver 200W	SP20012	100-240V 12V	200W	198	95	48	<b>£71.60</b>
	LED Driver 320W	SP32012	100-240V 12V	320W	215	115	50	<b>£90.00</b>

RS SAFETY COVER required for **metal LED power supplies**



## Constant Voltage 24V LED Switching Drivers

Driver		Product Code	Input Voltage	Output Amperage Voltage	Max Wattage	Length (mm)	Width (mm)	Height (mm)	Price excl VAT
	LED Driver 10W	DC1024VLS	220-240V	24V	10W	75mm	35	19	<b>£13.00</b>
	LED Driver 90W	PTDC9024VB	100-240V	24V	90W	120	65	40	<b>£91.37</b>
	LED Driver 25W	RS2524	100-240V	24V	25W	90	50	29	<b>£18.70</b>
	LED Driver 50W	RS5024	100-240V	24V	50W	98	98	36	<b>£26.00</b>
	LED Driver 100W	RS10024	100-240V	24V	100W	155	35	20	<b>£38.40</b>
	LED Driver 150W	RS15024	100-240V	24V	150W	198	95	38	<b>£46.00</b>
	LED Driver 200W	HRPG20024 NO FAN	100-240V	24V	200W	204	95	38	<b>£120.00</b>
	LED Driver 200W	SP20024	100-240V	24V	200W	198	95	48	<b>£71.60</b>
	LED Driver 240W waterproof	HLG240H24A IP65	100-240V	24V	240W	245	67	38	<b>£75.90</b>
	LED Driver 320W	SP32024	100-240V	24V	320W	215	115	50	<b>£90.00</b>
	LED Driver 320W IP65	HLG320H24A IP65	100-240V	24V	320W	230	90	45	<b>£109.90</b>

RS SAFETY COVER required for **metal LED power supplies**

## LED Power Supply Accessories : Constant Current & Constant Voltage

### Resistive Load 240V

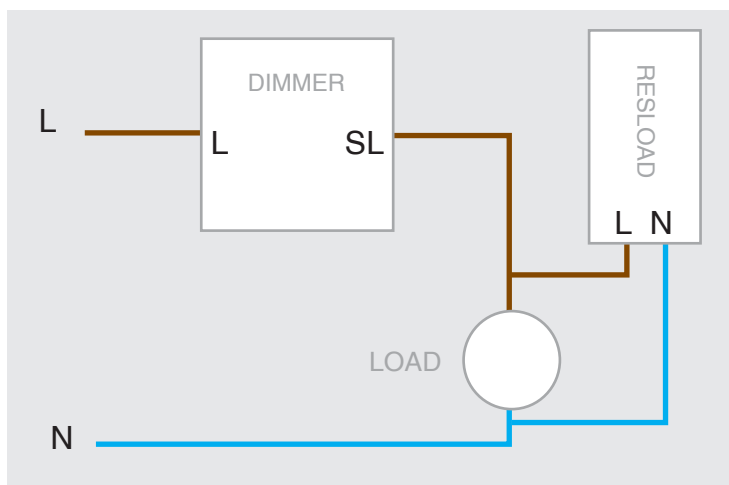
Resload, resistive load can be used to try to eliminate lamp instability and flicker when dimming non-resistive loads such as mains directly dimmable LED lamps, compact fluorescent lamps or dimmable transformers.


For direct mains dimmable lamps the RESLOAD is connected at a suitable light fitting, in parallel across the load, between the dimmed variable live and neutral.

For mains dimmable transformers the RESLOAD is connected across the primary (variable mains input) side of the transformer.

The RESLOAD is designed to be placed into the ceiling void and can be passed through a 63mm diameter cut-out, the typical size for downlighters.

### Resload Wiring



Product	Product Code	Input Voltage	Output Amperage Voltage	Max Wattage	Length (mm)	Width (mm)	Height (mm)	Price excl VAT
 Resistive Load 240V	RESLOAD	240V	N/A	10W	130	62	200	£20.10

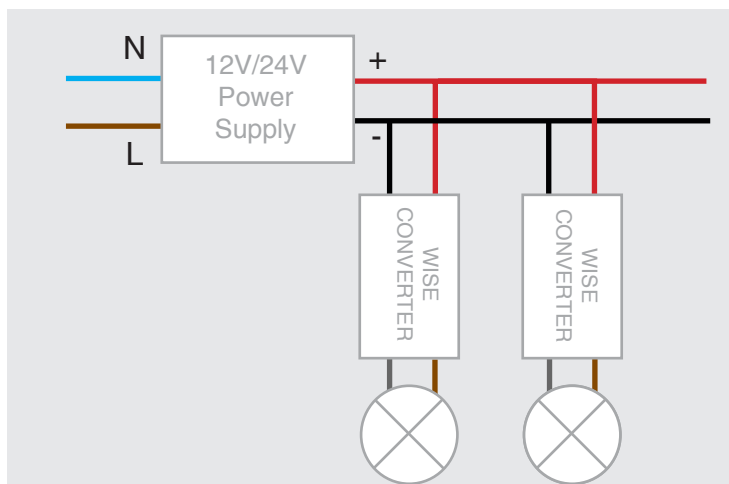
### Wise Convertors



The Wise Converter is a LED power supply for 350mA/700mA constant LEDs.

It has a maximum wattage of 6W for 350mA/15W for 700mA LEDs. The power supply for the convertor is 6-30V DC. We recommend using 24V DC.

Thanks to its electronic components that are treated with resin, the product can be used in humid environments. The unit has built in thermic and short circuit protection.

### Wise Convertor Wiring






Product	Product Code	Input Voltage	Output Amperage Voltage	Max Wattage	Length (mm)	Width (mm)	Height (mm)	Price excl VAT
 Wise Converter 350mA	WISE CONVERTER 3	6-30V	350mA	6W	41	21	22	£7.50
 Wise Converter 700mA	WISE CONVERTER 7	6-30V	700mA	15W	41	21	22	£16.75

## Interior Driver Enclosures







Driver Enclosures are used in conjunction with our LED Drivers to secure it to surfaces. They also protect the driver and enclose the live terminals, making it a necessary purchase where the driver may be exposed. Two holes are drilled either side of the enclosure for wiring.

Product	Product Code	IP Rating	Length (mm)	Width (mm)	Height (mm)	Price excl VAT
 Transformer Enclosure Small	ECOLRS 25-50	IP00	145	93	105	<b>£18.00</b>
 Transformer Enclosure Large	ECORSP 25-320	IP00	284	94	128	<b>£19.00</b>
 RS / SP Driver Safety Cover	RS SAFETY COVER	IP00	95	50	100	<b>£3.00</b>

## Exterior Driver Enclosures



Driver Enclosures are used in conjunction with our LED Drivers to secure it to surfaces. They also protect the driver and enclose the live terminals, making it a necessary purchase where the driver may be exposed. Two holes are drilled either side of the enclosure for wiring.

Product	Product Code	IP Rating	Length (mm)	Width (mm)	Height (mm)	Price excl VAT
 Waterproof Small Outdoor Box	WISECASE *SML*	IP54	200	155	22	<b>£37.10</b>
 Waterproof Large Outdoor Box	WISECASE *LRG*	IP54	256	198	80	<b>£50.00</b>
 Weatherproof Enclosure	GW44210/B380	IP56	400	300	130	<b>£35.30</b>
 Weatherproof Enclosure	GW44211/B460	IP56	500	400	175	<b>£50.40</b>

Available at...

Head Office / Showroom / Trade Counter  
19-23 Lydden Road, Wandsworth,  
London, SW18 4LT

Showroom / Trade Counter  
82-84 New Kings Road, Fulham,  
London, SW6 4LU

t : 020 8874 2234    f : 020 8871 2262    e : [info@mr-resistor.co.uk](mailto:info@mr-resistor.co.uk)



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