

OEMLED

by ETi

H I G H P O W E R L E D s & C O N T R O L G E A R

2 0 0 7

CONTENTS

| | | |
|---|--|--------------------|
| Instructions and Power LED Basics | | Pages 4-7 |
| Power LED Spots |  | Pages 8-19 |
| Power LED Converters |  | Pages 20-30 |
| Power LED Magic System |  | Pages 31-43 |
| Power LED RGB & DMX Systems |  | Pages 44-66 |
| Power LED color Magic System |  | Pages 67-73 |
| Power LED Kits |  | Pages 74-81 |
| Power LED Components & Accessories |  | Pages 82-86 |

SPECIFICATIONS BAR

| MODEL | W Equivalent Power | Lumen Power | Output | | Lumens @ 1m | | | | oz. | V (typ.) | I (typ.) | Part Number |
|--------|--------------------------|----------------|--------|--------|-------------|------|------|------|--------|-------------|-------------|--------------|
| | | | I max | V max | Nar. | Med. | Wide | Flat | | | | |
| MINI T | 3 | 240 | 350mA | 10-28V | 340 | 100 | 360 | 408 | 1.8oz. | 19V | 350mA | QT-LVL00X00X |

Lumen Power indicates LED intensity

This parameter is calculated in watts and indicates the power of a halogen lamp with the same luminous efficiency as a LED module; so the value indicates the halogen power equivalent to the indicated LED module

Driver or fixture weight in ounces.

Narrow, medium, wide or flat lenses can determine how wide an area is illuminated, and how the light is diffused. The numbers above indicate the amount of light in (lumens) with the LEDs 3.3ft from the ground.

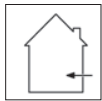
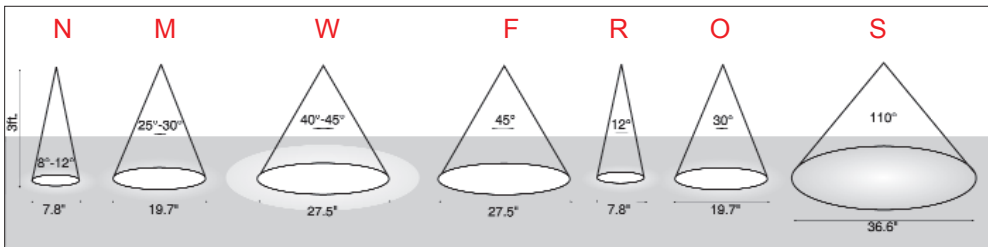
Current

Part number for ordering, "Please note, for most parts a lens and LED color need to be specified"

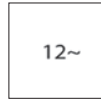
QT-LVL00X00X

lens — LED color

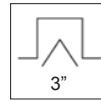
- N - Narrow Diffused
- M - Medium Diffused
- W - Wide Diffused
- F - Wide Flat Precision
- R - Mini Narrow Diffused
- O - Mini Medium Diffused
- S - no lens
- B - White
- W - Warm White
- R - Red
- V - Green
- A - Amber
- C - Blue



Equipment only for indoor installation



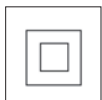
Operating voltage low voltage 12~



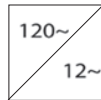
Min. assembly depth



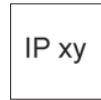
ceiling application



Safety classification 2



Operating voltage low voltage with power converter 120~ / 120~



Protection degree: (x) against solid bodies; (y) against liquids



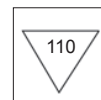
wall application



Safety classification 3



Operating voltage low voltage 120~



Transformer with built-in thermal protection



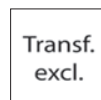
floor application



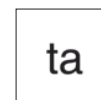
Round shaped cut out for installation 3" Dia.



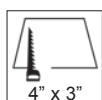
suitable for outdoor installation



Transformer driver or converter included or excluded



Operate in ambient temperature



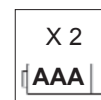
Rectangular or square shaped cut out for installation 4" x 3"



Always respect safety indications and do not look at if distance is under 6'



Transformer suitable for installation on regularly flammable surfaces



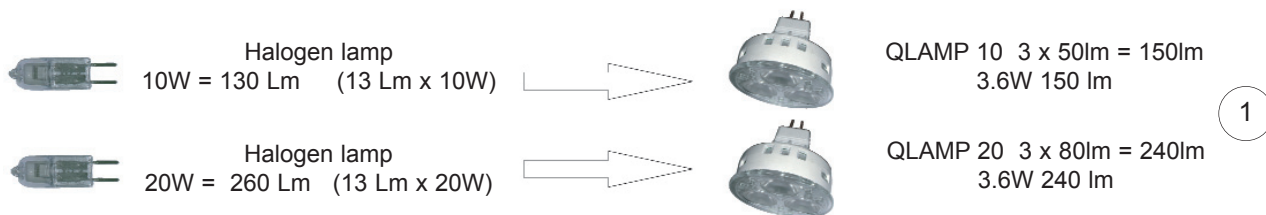
Battery required (not included)

Comparisons Between High Powered LEDs and Halogens

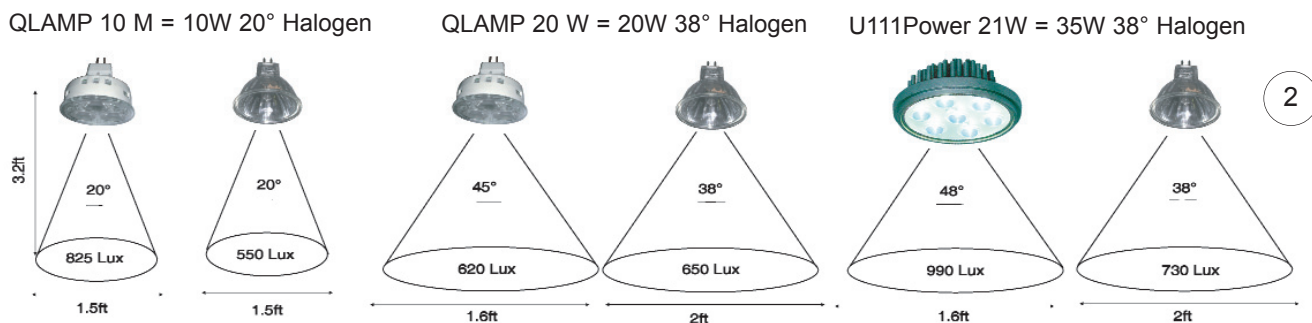
How to compare halogen lamps with Power LEDs?

Measurement parameters in reference to light output, are not relative to the wattage. The power indicated in W is wrongly identified as a reference of the quantity of light emitted. Actually the quantity of light emitted is given by the parameter LUMEN (lm) and the concentration of light on a certain surface is given by the parameter LUX (lx). The electric power WATT (W) indicates the consumed or absorbed energy and not the emitted light: - The luminous efficiency indicated in Lumen x W is given by the relation between the absorbed power and the emitted light. This value indicates the quantity of emitted light per consumption unit.

- Example: the luminous efficiency of a halogen lamp is 13 Lumen per absorbed W. So a halogen lamp of 10W produces a luminous flux of $13 \times 10 = 130$ Lumen. The 1W High Brightness LEDs that are presently in production have a luminous efficiency of 50 Lumen per absorbed W. This means that a LED module like QLAMP 10 with 3 LEDs gives a luminous flux from $50 \times 3 = 150$ Lumen to $90 \times 3 = 270$ Lumen. (Drawing 1)

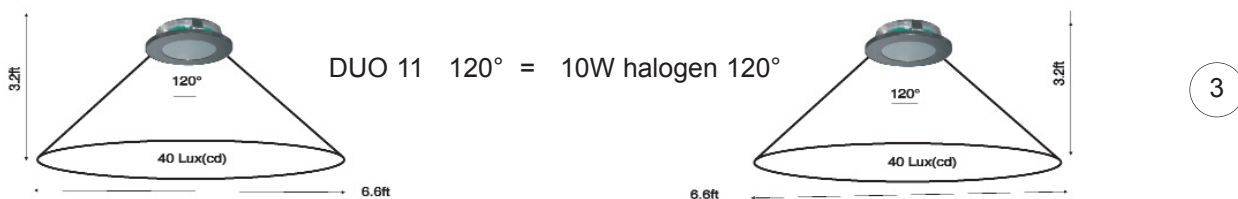


The luminous flux (lm) indicates the emitted light and not the perceived light that is given in Lux. In Drawing 2 Lux values (light perceived by the human eye) are given.



The examples indicated show with only about a third of the energy, the obtained luminous fluxes are much higher. (The comparisons have been made with lamps and modules which are actually in production and not with a lab.)

- A test consists in a comparison between two lighting sources using a screen with opal or frosted glass.
- A common halogen lamp for furniture makes use of an internal metal reflector while the equivalent DUO makes use of two LEDs of 1W without optics. (Drawing 3)

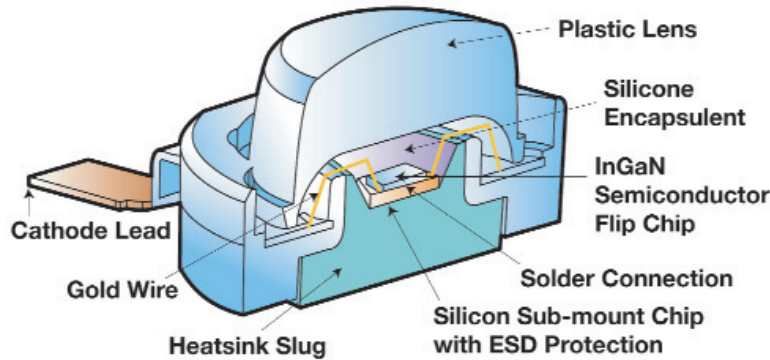


This test shows that 4W of LED light are needed to generate a flux that is equivalent to a 10W halogen lamp even if the LED is in unfavorable conditions because without optic while the halogen lamp has a reflecting parabola inside. In the previous test were 3W of LED light enough to generate a luminous flux equivalent to 10W. It seems evident that in a system where all the components are expressly in optimum conditions, the efficiency of the used LEDs is about three times higher than in the halogen systems.

Appendix: How to calculate the quantity of LEDs to use in replacement of halogen lighting - Beginning details: The power of the installed lamps (for instance 60W). Luminous flux: $15 \text{ Lumen} \times 60\text{W} = 900 \text{ Lumen}$ - When luminous efficiency of the LEDs is 50 Lumen / W: Desired luminous flux (see above) $900/50 = 18\text{W}$ - With an installation of a certain number of LED modules for a total of 18W, the luminous flux is comparable to an existing system of 60W.

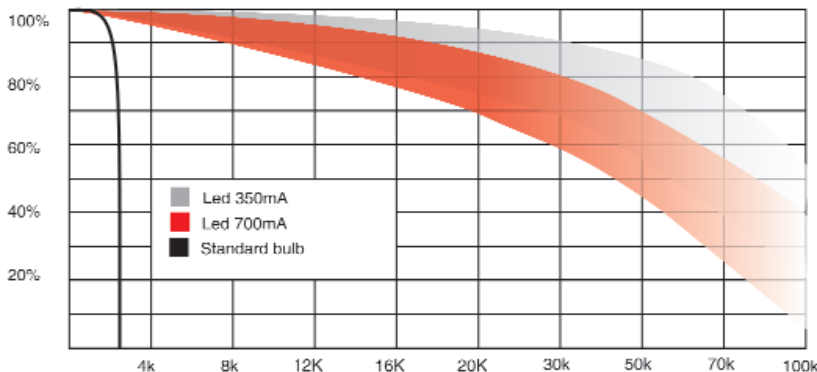
Power LED Life Duration

One of the advantages of Power Leds is their life duration. They are semiconductors and therefore have an almost endless life duration. Actually for the fabrication of these components some chemical materials that with time loose their efficiency are being used. As illustrated in the drawing, around the silicon chip is placed a smooth silicon gelatin which allows the passage of light and protects the chip from breakage caused by the different thermal expansions of the optic and by the heat-sink slug. With time, this gelatin tends to get opaque



thus reducing the luminous efficiency. As the hours go by, the plastic optic tends to get yellow, thus changing the shade of light. The internal reflector oxidizes and reflects less. All these processes develop over very long time periods, estimable in 100,000 working hours at the advised ambient temperature. Heat has the property of accelerating these processes and in combination with the thermal cycles of on/off switchings, they lead to a practical life duration of about half of the beginning value.

The life duration of a LED is based upon the process of the reduction of the luminous flux. This reduction indicates that a LED should be replaced when its luminous flux is equal to only 50% of its initial value. Having a logarithmic perception, this reduction of the luminous flux is less visible when measured with the eyes than when measured with an instrument.



The life duration of a LED module is thus of about 50,000 hours at the maximum allowed working temperature. This value is indicated in every catalogue page with ta.....

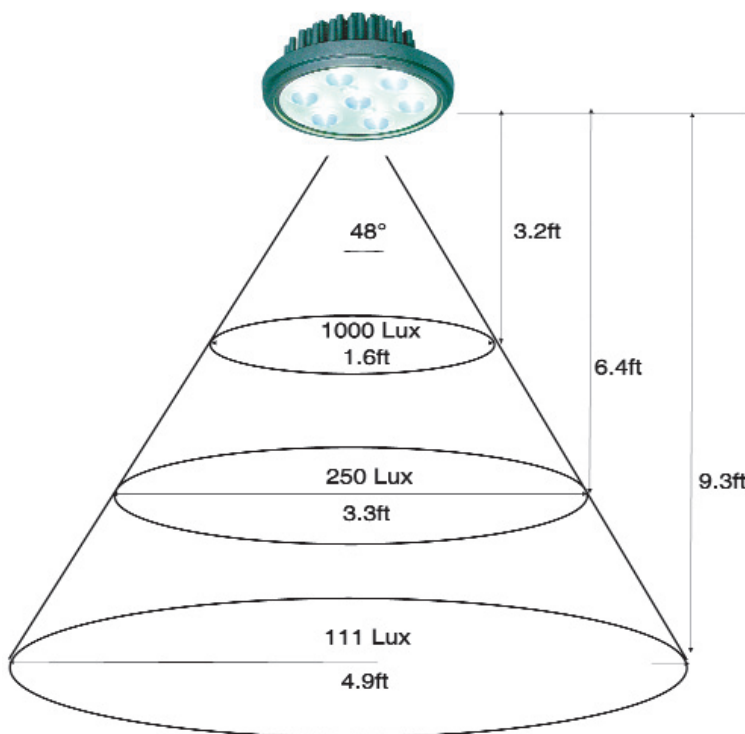
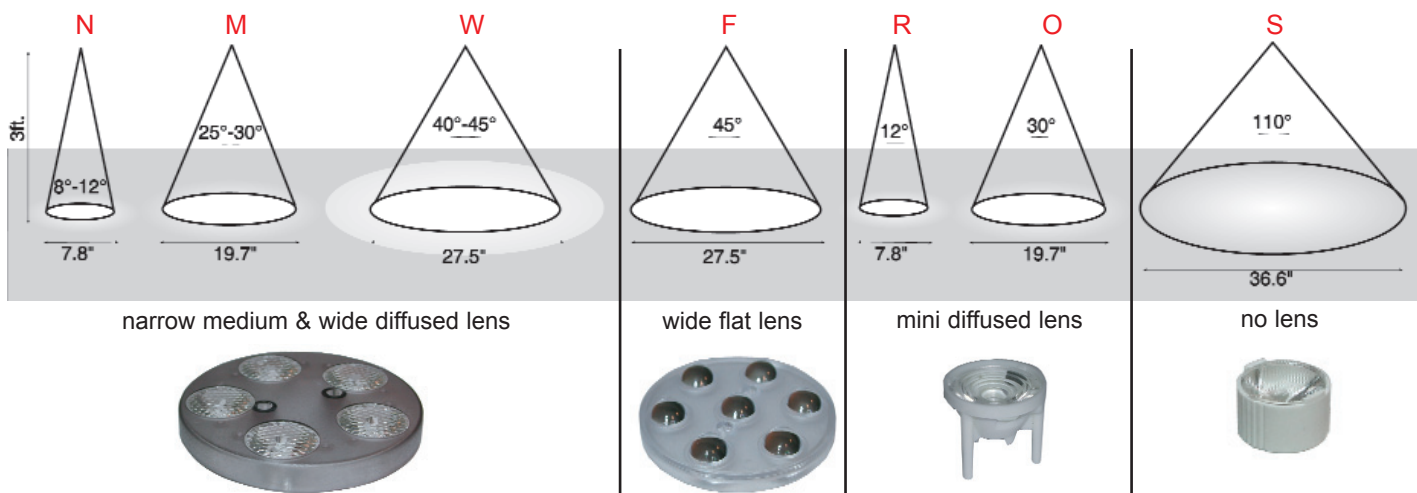
When working in more favorable circumstances than the maximum allowed, the life duration will be higher.

When working above the maximum allowed limits, the luminous flux will decline rapidly.

Optical Calculations

All the stated measurements in lux have been calculated according to the following parameters: the efficiency values of the optic calculated and declared by the optic constructor multiplied by the declared flux of the LED producer. These values are theoretical; there could be some small variations in the practical values. All the measurements are valid for LEDs fitted with a Lambertian optic.

Tests have been carried out with LEDs from the selection 6000K. In case LEDs from a Warm White selection are used (i.e. 3000K), the luminous values expressed in lux have to be considered at 20 - 25% lower because of the different luminous efficiency of these selections. The relating instrument is the luxometer type Pocket Lux 2 brand LMT. Exactness 0.5%. The given values have to be considered approximate. The values of the production may be slightly different from the ones declared because of the different LEDs supplied by Lumileds or in relation to the current value and the ambient temperature. The optics defined as "precision" produce an enlightened surface characterized by well-defined margins and an optime contrast between the enlightened and dark areas. The optics defined as "diffused" produce an enlightened surface characterized by faded margins and the passage from the enlightened to the dark area is gradual. By RGB and Ambient systems only diffused optics are to be used.



All luminous values present in this catalogue are given in lux at 1m distance. The 3.3ft distance coincides with the luminous value expressed in candles (cd), therefore the two values can be read as well in lux as in candles. For the calculations of lux values at different distances apply the following formula:

Lux @ 3.3ft / d² where d is the distance at which the luminosity shall be calculated and lux@3.3ft is the luminosity value given in catalog.

Example: an U111P module has a declared luminosity value of 1,000 lux at 1m distance. The luminous values of the same module at 6.4ft and 9.6ft are:

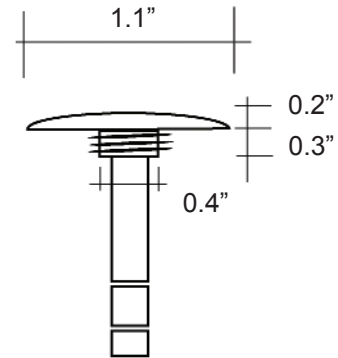
At 9.6ft distance: $1,000 / (3 \times 3) = 111$ lux
 At 6.4ft distance: $1,000 / (2 \times 2) = 250$ lux

For the calculation of the diameter of the luminous beam reflected at different distances from 3.3ft (indicated in catalog), it's necessary to multiply the diameter indicated in catalog (referred to 3.3ft distance) for the new distance value needed.
 Example: beam diameter at 3.3ft = 1.6ft / Beam diameter at 6.4ft : $3.3 \times 6.4 / 3.3$ / Beam diameter at 9.8ft = 4.9ft (3.3×9.8)

“FLOOR” Power LED Mini Spot

High Brightness LED spot - 1W - 350mA

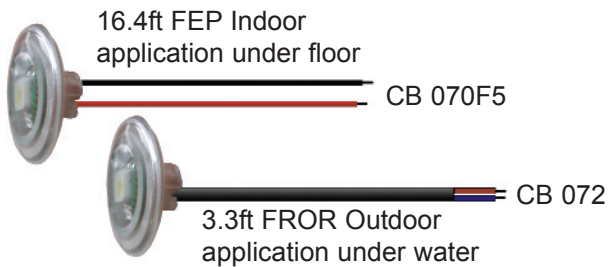
- Light power 39 - 50 lumen
- Pressure assembly into a Ø .4” hole
- Supplied with 16ft cable FEP or 3ft FROR
- White LED color standard. Other LED colors available on request.
- Walkover rated (max 200lbs)



| Model | W Equivalent Power | Lumen Type | Lux @ 1m diffused | V (typ.) | I (typ.) | Part Number |
|-------|--------------------|------------|-------------------|----------|----------|--------------|
| FLOOR | 3 | 40 | 18 | 3.6V | 350mA | QT-FL00R000X |

please specify LED color

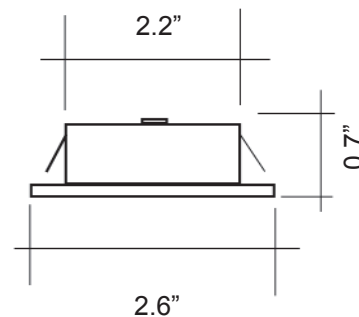
- White - B ○
- Warm White - W ●
- Red - R ●
- Green - V ●
- Amber - A ●
- Blue - C ●



“DUO” Power LED Flat Spot

High Brightness LED spot - 2 x 350mA

- Light power 100 - 220 lumen
- Supplied with 3.3ft cable and Mini Amp connector
- Supplied with frosted glass face plate. Different ring colors available
- White LED color standard. Other LED colors available on request.



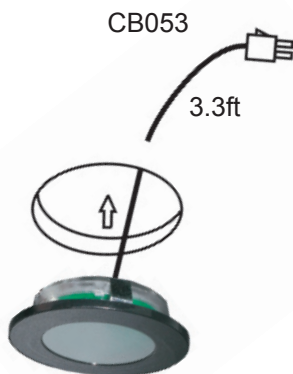
| Model | W Equivalent Power | Lumen Type | Lux @ 1m diffused | V (typ.) | I (typ.) | Part Number |
|-------|--------------------|------------|-------------------|----------|----------|--------------|
| DUO 1 | 7 | 100 | 20 | 7.2V | 350mA | QT-DUO10000X |
| DUO T | 10 | 140 | 37 | 6.6V | 350mA | QT-DUOT0000X |
| DUO U | 15 | 200 | 50 | 6.6V | 350mA | QT-DUOU0000X |

Ring face plate included, please specify color

1 2 3 4 5

please specify LED color

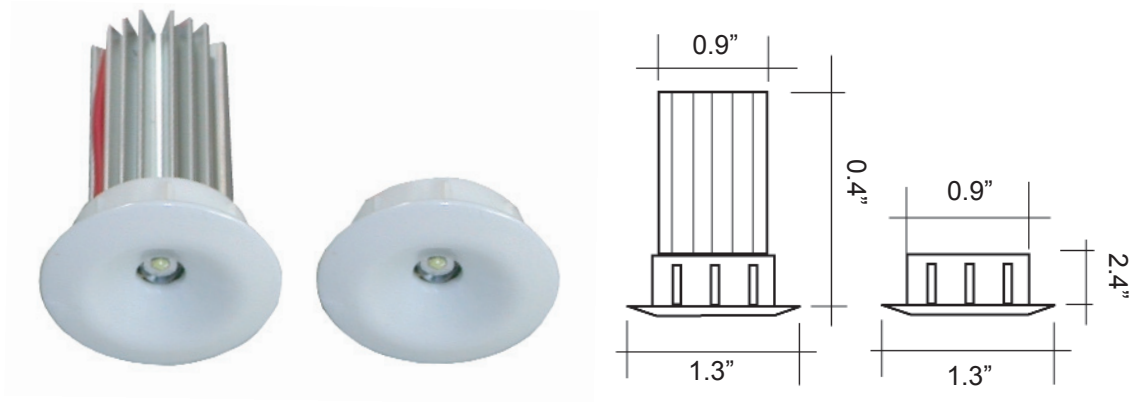
White - B ○
 Warm White - W ●
 Red - R ●
 Green - V ●
 Amber - A ●
 Blue - C ●



“MINI” Power LED Mini Spot

High Brightness LED spot - 350/700mA

- Light power 50 - 100 lumen
- Pressure assembly into a Ø 1” hole
- Supplied with 1ft cable and Mini Amp connector
- White LED color standard. Other LED colors available on request.



| Model | W Equivalent Power | Lumen Type | Lux @ 1m diffused | V (typ.) | I (typ.) | Part Number |
|--------|--------------------|------------|-------------------|----------|----------|--------------|
| MINI 1 | 3.5 | 50 | 17 | 3.6V | 350mA | QT-MINI1000X |
| MINI T | 6 | 80 | 25 | 3.1V | 350mA | QT-MINIT000X |
| MINI U | 7.5 | 100 | 28 | 3.1V | 350mA | QT-MINIU000X |
| MINI P | 6 | 85 | 25 | 3.6V | 700mA | QT-MINIP000X |

Plastic cover included,
please specify color

1 2 3 4

please specify LED color

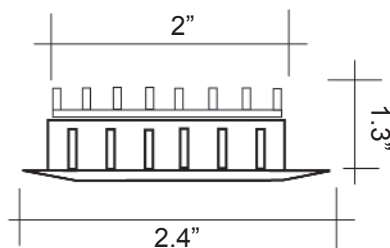
White - B ○
Warm White - W ●
Red - R ●
Green - V ●
Amber - A ●
Blue - C ●



“FLEX” Power LED Mini Spot

High Brightness LED spot - 3 x 350mA

- Light power 150 - 330 lumen
- Pressure assembly into a Ø 2” hole
- Supplied with 1ft cable and Mini Amp connector
- Different lens degrees available: narrow, medium and wide beam.
- White LED color standard. Other LED colors available on request.



| Model | W Equivalent Power | Lumen Type | Lux @1m (cd) | | | Flat | V (typ.) | I (typ.) | Part Number |
|--------|--------------------|------------|--------------|--------|------|------|----------|----------|--------------|
| | | | Narrow | Medium | Wide | | | | |
| FLEX 1 | 10 | 150 | 1880 | 440 | 320 | - | 9.6V | 350mA | QT-FLEX10X0X |
| FLEX T | 20 | 240 | 2360 | 840 | 590 | - | 9V | 350mA | QT-FLEXTX00X |
| FLEX U | 30 | 330 | 2900 | 940 | 670 | - | 9V | 350mA | QT-FLEXUX00X |

Plastic cover included, please specify color

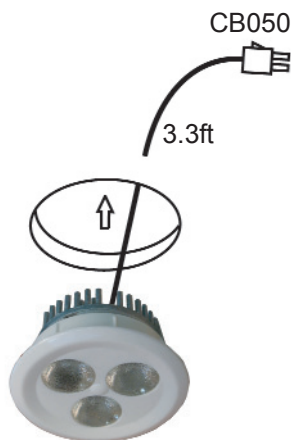
1 2 3 4

Lens

N - Narrow Diffused
M - Medium Diffused
W - Wide Diffused
F - Wide Flat Precision
R - Mini Narrow Diffused
O - Mini Medium Diffused
S - no lens

please specify LED color

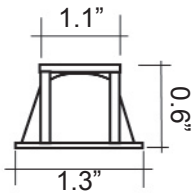
White - B ○
Warm White - W ●
Red - R ●
Green - V ●
Amber - A ●
Blue - C ●



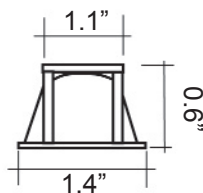
“MONO” Power LED Spot

High Brightness LED spot - 1W - 350mA

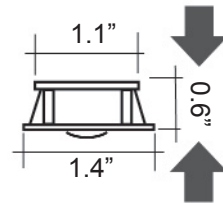
- Light power 50 - 100 lumen
- MONO 2 and F are suitable for being built in standard Ø 1.4” down-lights (MR 11 size)
- Supplied with 3.3ft cable and Mini Amp connector
- Different lens degrees available: narrow, medium and wide beam.
- White LED color standard. Other LED colors available on request.



MONO 1
Diffused



MONO 2 MR11
Diffused



MONO F MR11
Flat Precision

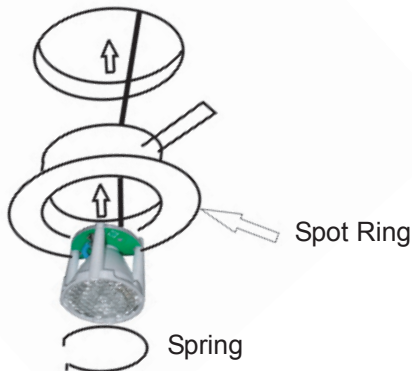
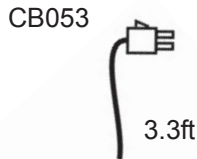
| Model | W Equivalent Power | Lumen Type | Lux @1m (cd) | | | | V (typ.) | I (typ.) | Part Number |
|--------|--------------------|------------|--------------|--------|------|------|----------|----------|--------------|
| | | | Narrow | Medium | Wide | Flat | | | |
| MONO | 3.5 | 50 | 850 | 285 | 90 | 85 | 3.6V | 350mA | QT-MONOXX00X |
| MONO T | 6 | 80 | 1100 | 385 | 126 | 110 | 3.1V | 350mA | QT-MONOXXT0X |
| MONO U | 7.5 | 100 | 1700 | 550 | 180 | 140 | 3.1V | 350mA | QT-MONOXXU0X |

Lens

- N - Narrow Diffused
- M - Medium Diffused
- W - Wide Diffused
- F - Wide Flat Precision
- R - Mini Narrow Diffused
- O - Mini Medium Diffused
- S - no lens

please specify LED color

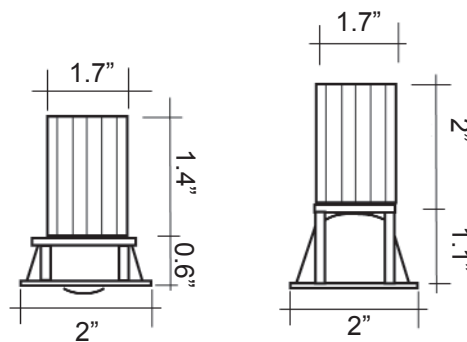
- White - B ○
- Warm White - W ●
- Red - R ●
- Green - V ●
- Amber - A ●
- Blue - C ●



“MONOPower” Power LED Spot

High Brightness LED spot - 3W - 700mA

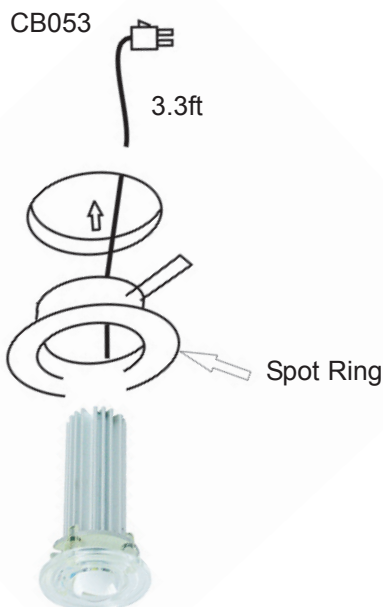
- Light power 80 - 160 lumen
- MONOP 2 and F are suitable for being built in standard Ø 1.4” down-lights (MR 11 size)
- Supplied with 3.3ft cable and Mini Amp connector
- Different lens degrees available: narrow, medium and wide beam.
- White LED color standard. Other LED colors available on request.



MONOP F MR11
Flat Precision

MONOP3 1/2MR11
Diffused

| Model | W Equivalent Power | Lumen Type | Lux @1m (cd) | | | | V (typ.) | I (typ.) | Part Number |
|---------|--------------------|------------|--------------|--------|------|------|----------|----------|---------------|
| | | | Narrow | Medium | Wide | Flat | | | |
| MONOP | 6 | 80 | 1360 | 440 | 140 | 120 | 3.6V | 700mA | QT-MONOPXX00X |
| MONOP T | 10 | 130 | 1900 | 710 | 710 | 700 | 3.1V | 700mA | QT-MONOPXXT0X |
| MONOP U | 12 | 160 | 4480 | 880 | 800 | 800 | 3.1V | 700mA | QT-MONOPXXU0X |



Lens

- N - Narrow Diffused
- M - Medium Diffused
- W - Wide Diffused
- F - Wide Flat Precision
- R - Mini Narrow Diffused
- O - Mini Medium Diffused
- S - no lens

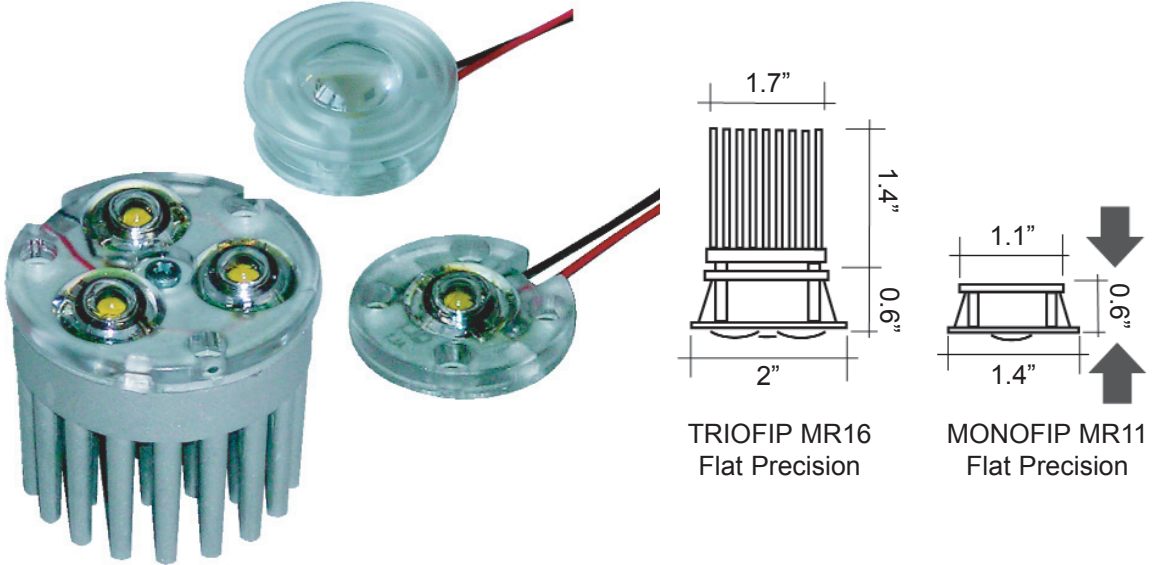
please specify LED color

- White - B ○
- Warm White - W ●
- Red - R ●
- Green - V ●
- Amber - A ●
- Blue - C ●

“IP” Power LED Spot IP66

High Brightness LED spot -350mA - IP66

- Light power: 80 - 240 lumen.
- TRIO and MONO-IP are suitable for being built
In standard Ø 1.4” & Ø 2” down-lights (MR 11 or MR 16 sizes)
- Supplied with 10” CB025F cable
- Available without the 110° lens or with the 45° Flat lens
- White LED color standard. Other LED colors available on request.



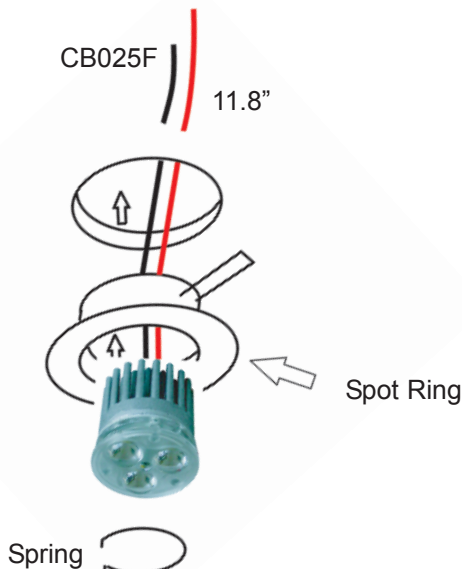
| Model | W Equivalent Power | Lumen Type | Lux @1m (cd) | | | Flat | V (typ.) | I (typ.) | Part Number |
|----------|--------------------|------------|--------------|--------|------|------|----------|----------|--------------|
| | | | Narrow | Medium | Wide | | | | |
| MONOF IP | 5 | 80 | - | - | 28 | 150 | 3.2V | 350mA | QT-MONOFIP0X |
| TRIOF IP | 18 | 240 | - | - | 79 | 160 | 9.6V | 350mA | QT-TROFIP0X |

Lens

- W - Wide Diffused
- F - Wide Flat Precision
- R - Mini Narrow Diffused
- O - Mini Medium Diffused
- S - no lens

please specify LED color

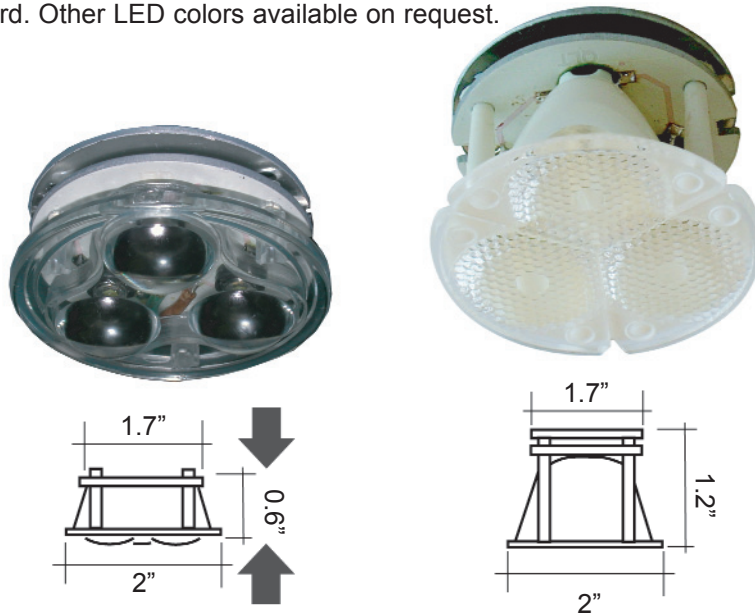
- White - B ○
- Warm White - W ●
- Red - R ●
- Green - V ●
- Amber - A ●
- Blue - C ●



“TRIO” Power LED Spot

High Brightness LED spot - 3 x 350mA

- Light power 150 - 330 lumen
- Suitable for being built in standard Ø 2” down-lights (MR 16 size)
- Supplied with 3.3ft cable and Mini Amp connector
- Different lens degrees available: narrow, medium and wide beam.
- White LED color standard. Other LED colors available on request.



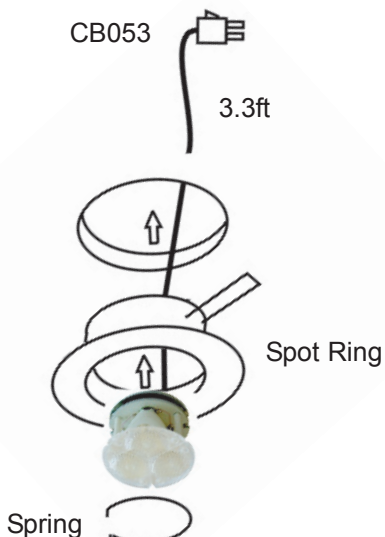
| Model | W Equivalent Power | Lumen Type | Lux @1m (cd) | | | Flat | V (typ.) | I (typ.) | Part Number |
|--------|--------------------|------------|--------------|--------|------|------|----------|----------|--------------|
| | | | Narrow | Medium | Wide | | | | |
| TRIO 1 | 10 | 150 | 2130 | 690 | 225 | 255 | 10.6V | 350mA | QT-TRIO1X00X |
| TRIO T | 20 | 210 | 2900 | 900 | 294 | 296 | 9.6V | 350mA | QT-TRIOXT00X |
| TRIO U | 30 | 330 | 4260 | 1290 | 420 | 340 | 9.6V | 350mA | QT-TRIOXU00X |

Lens

- N - Narrow Diffused
- M - Medium Diffused
- W - Wide Diffused
- F - Wide Flat Precision
- R - Mini Narrow Diffused
- O - Mini Medium Diffused
- S - no lens

please specify LED color

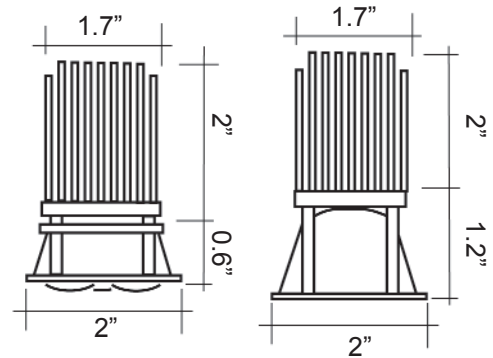
- White - B ○
- Warm White - W ●
- Red - R ●
- Green - V ●
- Amber - A ●
- Blue - C ●



“TRIOPower” Power LED Spot

High Brightness LED spot - 3 x 700mA

- Light power 240 - 490 lumen
- Suitable for being built in standard Ø 2” down-lights (MR 16 size)
- Supplied with a 3.3ft cable and Mini Amp connector
- Different lens degrees available: narrow, medium and wide beam.
- White LED color standard. Other LED colors available on request.



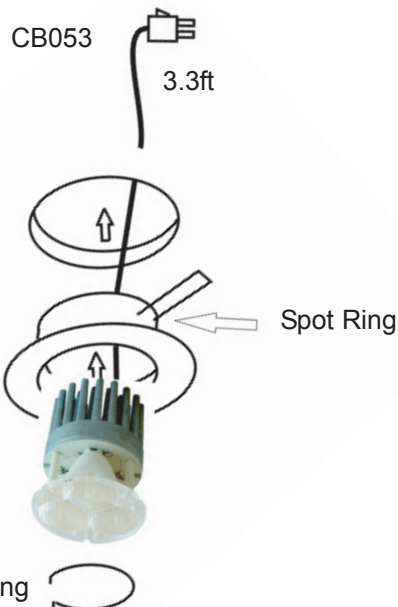
| Model | W Equivalent Power | Lumen Type | Lux @1m (cd) | | | Flat | V (typ.) | I (typ.) | Part Number |
|---------|--------------------|------------|--------------|--------|------|------|----------|----------|--------------|
| | | | Narrow | Medium | Wide | | | | |
| TRIOP 1 | 18 | 240 | 3400 | 1100 | 360 | 408 | 10.6V | 700mA | QT-TRIOPX00X |
| TRIOP T | 27 | 346 | 4700 | 1400 | 450 | 500 | 9.6V | 700mA | QT-TRIOPXT0X |
| TRIOP U | 37 | 495 | 6000 | 1800 | 560 | 630 | 9.6V | 700mA | QT-TRIOPXU0X |

Lens

- N - Narrow Diffused
- M - Medium Diffused
- W - Wide Diffused
- F - Wide Flat Precision
- R - Mini Narrow Diffused
- O - Mini Medium Diffused
- S - no lens

please specify LED color

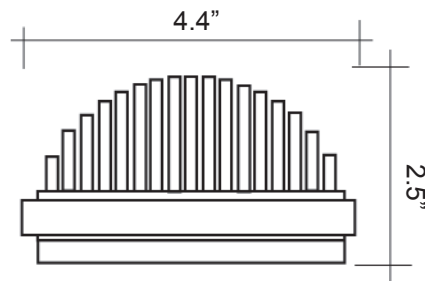
- White - B ○
- Warm White - W ●
- Red - R ●
- Green - V ●
- Amber - A ●
- Blue - C ●



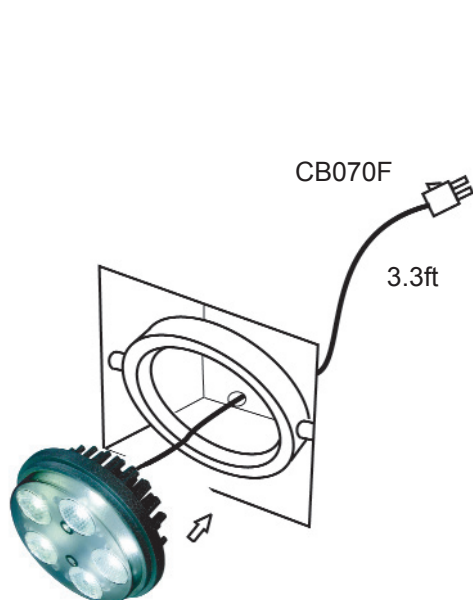
“U115 Power” Power LED Spot

High Brightness LED spot -5 x 500/700mA

- Light power 300 - 825 lumen
- Suitable for being built in standard AR111 down-lights
- Supplied with a 3.3ft cable and Mini Amp connector
- Different lens degrees available: narrow, medium and wide beam.
- White LED color standard. Other LED colors available on request.



| Model | W Equivalent Power | Lumen Type | Lux @1m (cd) | | | V (typ.) | I (typ.) | Part Number |
|--------|--------------------|------------|--------------|--------|------|----------|----------|--------------|
| | | | Narrow | Medium | Wide | | | |
| U115 L | 25 | 300 | 1400 | 700 | 420 | 19V | 500mA | QT-U115LX00X |
| U115 P | 30 | 400 | 1650 | 900 | 600 | 16V | 700mA | QT-U115PX00X |
| U115 T | 50 | 660 | 3500 | 1400 | 1000 | 16V | 700mA | QT-U115TX00X |
| U115 U | 63 | 825 | 4370 | 1750 | 1300 | 16V | 700mA | QT-U115UX00X |



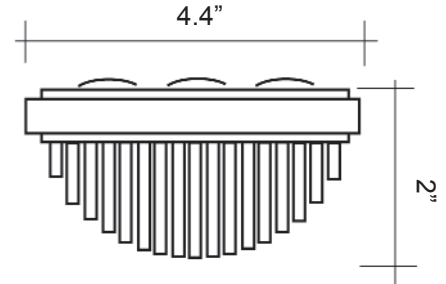
- Lens
- N - Narrow Diffused
 - M - Medium Diffused
 - W - Wide Diffused
 - F - Wide Flat Precision
 - R - Mini Narrow Diffused
 - O - Mini Medium Diffused
 - S - no lens

- please specify LED color
- White - B ○
 - Warm White - W ●
 - Red - R ●
 - Green - V ●
 - Amber - A ●
 - Blue - C ●

“U111 Power” Power LED Spot

High Brightness LED spot - 7 x 500/700mA

- Light power 420 - 1100 lumen
- Suitable for being built in standard AR111 down-lights
- Supplied with 3.3ft cable and Mini Amp connector
- Different lens degrees available: narrow, medium and wide beam.
- White LED color standard. Other LED colors available on request.



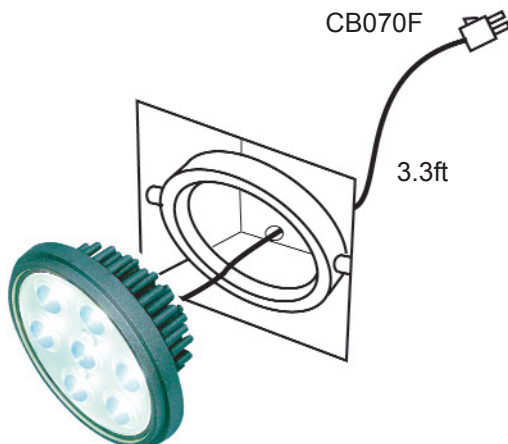
| Model | W Equivalent Power | Lumen Type | Lux @1m (cd) | | | | V (typ.) | I (typ.) | Part Number |
|--------|--------------------|------------|------------------|------------------|-----------------|-----------------|----------|----------|--------------|
| | | | Diff. 12° Narrow | Diff. 30° Medium | Flat 25° Medium | Flat 45° Wide | | | |
| U111 L | 32 | 420 | 2550 | 2200 | 3900 | 770 | 26V | 500mA | QT-U111LX00X |
| U111 P | 43 | 560 | 3000 | 2550 | 4800 | 920 | 26V | 700mA | QT-U111PX00X |
| Model | W Equivalent Power | Lumen Type | Lux @1m (cd) | | | | V (typ.) | I (typ.) | Part Number |
| | | | Diff. 13° Narrow | Diff. 36° Medium | Flat 42° Wide | Flat 60° X-Wide | | | |
| U111 T | 68 | 890 | 8300 | 1680 | 1280 | 1000 | 22.5V | 700mA | QT-U111TX00X |
| U111 U | 68 | 1110 | 10380 | 2100 | 1610 | 1260 | 22.5V | 700mA | QT-U111UX00X |

Lens

- N - Narrow Diffused
- M - Medium Diffused
- W - Wide Diffused
- F - Wide Flat Precision
- R - Mini Narrow Diffused
- O - Mini Medium Diffused
- S - no lens

please specify LED color

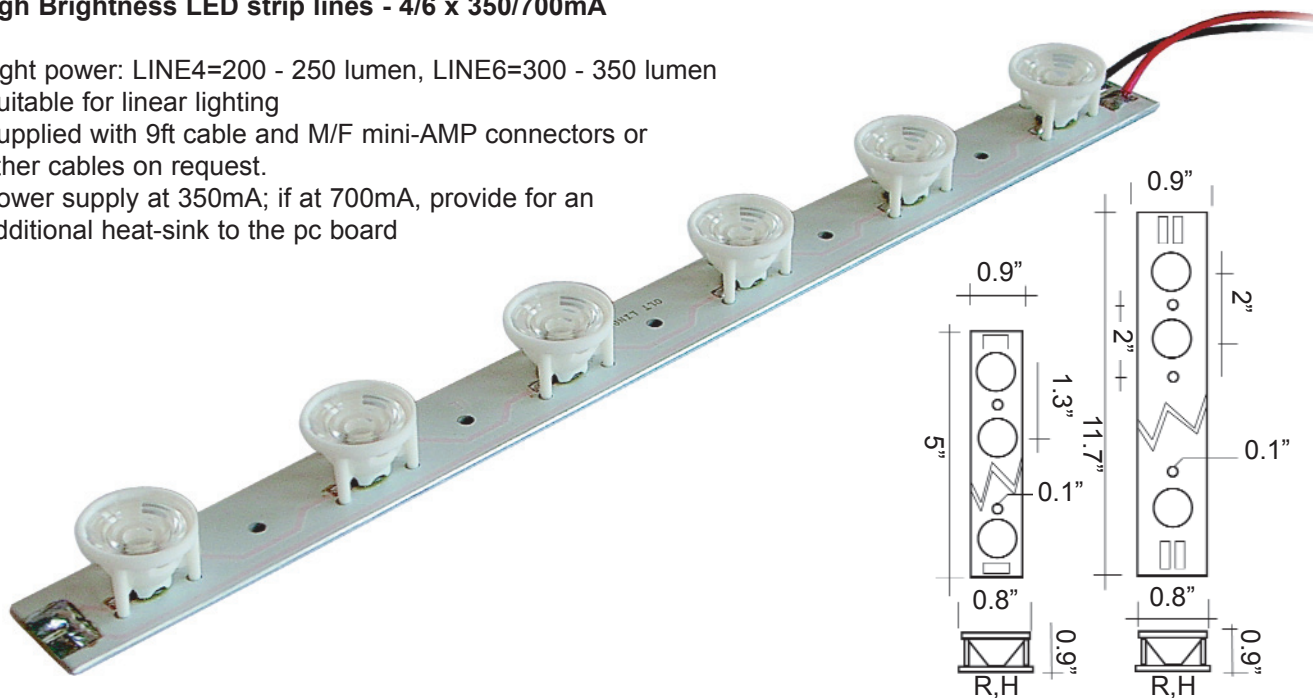
- White - B ○
- Warm White - W ●
- Red - R ●
- Green - V ●
- Amber - A ●
- Blue - C ●



“LINE” Power LED Strip Line

High Brightness LED strip lines - 4/6 x 350/700mA

- Light power: LINE4=200 - 250 lumen, LINE6=300 - 350 lumen
- Suitable for linear lighting
- Supplied with 9ft cable and M/F mini-AMP connectors or other cables on request.
- Power supply at 350mA; if at 700mA, provide for an additional heat-sink to the pc board



| Model | W Equivalent Power | Lumen Type | Lux @1m (cd)* | | | | V (typ.) | I (typ.) | Part Number |
|---------|--------------------|------------|---------------|--------|------|---------|----------|---------------|--------------|
| | | | Narrow | Medium | Wide | No Lens | | | |
| LINE6 | 23 | 300 | 1400 | 420 | 500 | 255 | 21.6V | 350mA | QT-LINE06X0X |
| LINE6 T | 36 | 480 | 1960 | 600 | 700 | 296 | 18V | 350mA / 700mA | QT-LINE06TXX |
| LINE6 U | 46 | 600 | 2800 | 1000 | 1000 | 340 | 18V | 350mA / 700mA | QT-LINE06UXX |
| LINE4 | 15 | 200 | 1400 | 1300 | 500 | 825 | 14.4V | 350mA | QT-LINE04X0X |
| LINE4 T | 24 | 320 | 1960 | 1000 | 700 | 340 | 12.8V | 350mA / 700mA | QT-LINE04TXX |
| LINE4 U | 30 | 420 | 2800 | 1300 | 1000 | 825 | 12.8V | 350mA / 700mA | QT-LINE04UXX |

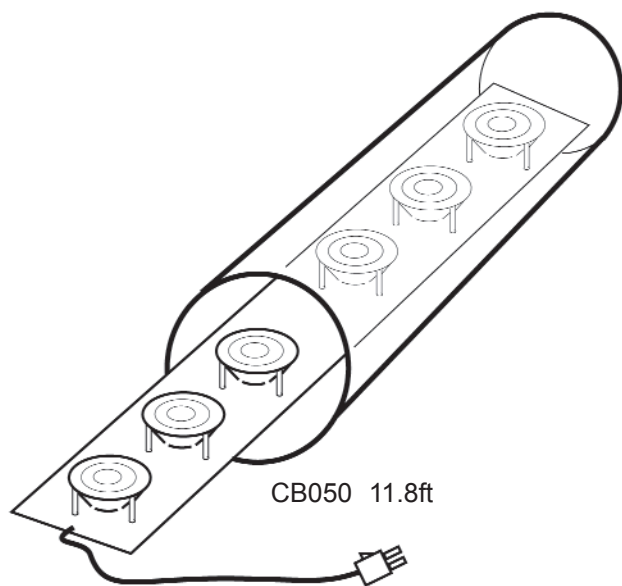
*Estimated values for single LED

Lens

- N - Narrow Diffused
- M - Medium Diffused
- W - Wide Diffused
- F - Wide Flat Precision
- R - Mini Narrow Diffused
- O - Mini Medium Diffused
- S - no lens

please specify LED color

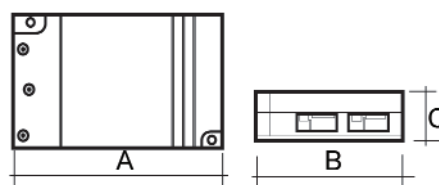
- White - B ○
- Warm White - W ●
- Red - R ●
- Green - V ●
- Amber - A ●
- Blue - C ●



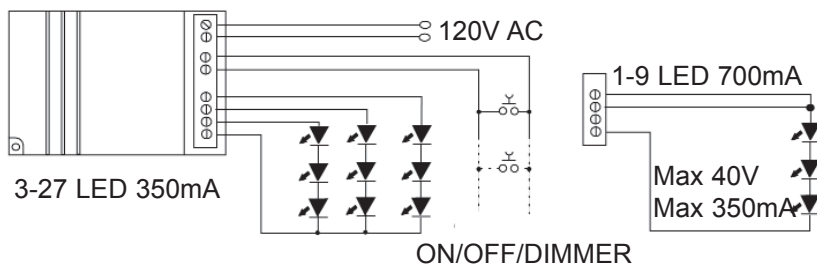
“Dimmer Box” Power LED Dimmer Converter

Dimmable converters for High Brightness LEDs

- Independent converter - IP40 - Insulation class II
- Light control - on, off and dimming - by one or more push-buttons
- Suitable for 1W High Brightness LEDs - Output in constant current 350mA \pm 10% - Series connection - Standard software cycle: 30 seconds (on request, 60 seconds)
- Self-resetting protection against over temperatures, open circuits and output's short circuits.
- Input voltage: 120V/AC DBOX31 - Steady output
- Parallel connection for max. 25 "DBox" controlled by the same (or more) push-buttons



| Model | LED | | Output | | Dimensions | | | oz. | Part Number |
|--------|-----|-----|--------|-------|--------------------|---|---|---------|--------------|
| | min | max | I max | V max | A | B | C | | |
| DBox31 | 3 | 24 | 350mA | 40V | 5.8" x 3.0" x 1.0" | | | 1.8 oz. | QT-DBOX3100B |



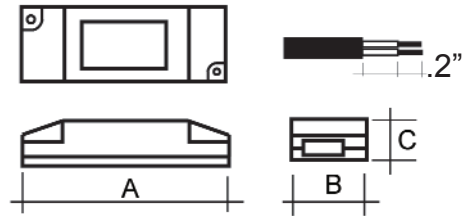
“PLK” Power LED Converter

Converters for High Brightness LEDs

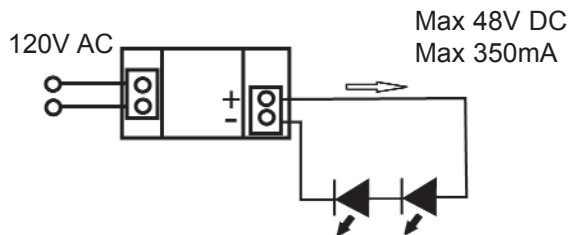
- Independent converter - IP40 - Insulation class II
- Suitable for supplying High Brightness LEDs 1W /3W /5W - Connection in series
- Output in steady current: 350mA, ±10%
- Self-resetting protection against over temperatures, open circuits and against output short circuits.
- Input voltage: 120V/AC - Steady output



H03VVH2F 2 x .03”



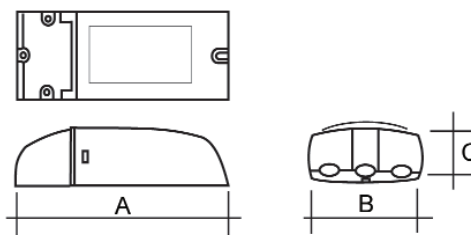
| Model | LED | | Output | | Dimensions | | | oz. | Part Number |
|---------|-----|-----|--------|-------|--------------------|---|---|---------|--------------|
| | min | max | I max | V max | A | B | C | | |
| PLK 110 | 1 | 9 | 350mA | 48V | 4.7" x 1.3" x 0.8" | | | 1.4 oz. | QT-PLK1101WB |



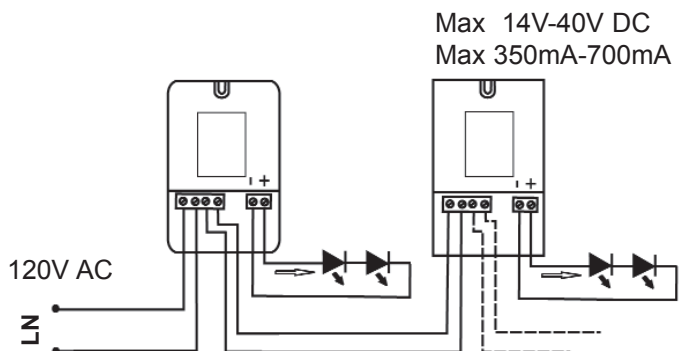
“DPL” Power LED Professional Converter

Converters for High Brightness LEDs

- Independent converter - IP40 - Insulation class II
- Suitable for supplying High Brightness LEDs 1W /3W /5W - Connection in series
- Output in steady current: 350mA - 700mA, $\pm 10\%$
- Self-resetting protection against over temperatures, open circuits and against output short circuits.
- Universal voltage: 120V/AC - Steady output



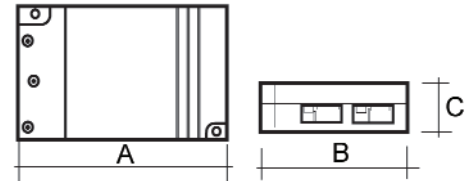
| Model | LED | | Output | | Dimensions | | | Part Number |
|---------|-----|-----|--------|-------|--------------------|---|---|-------------|
| | min | max | I max | V max | A | B | C | |
| DPL 110 | 1 | 9 | 350mA | 40V | 4.6" x 0.2" x 1.1" | | | 1.7 oz. |
| DPL 304 | 1 | 4 | 700mA | 14V | 4.6" x 0.2" x 1.1" | | | 1.7 oz. |



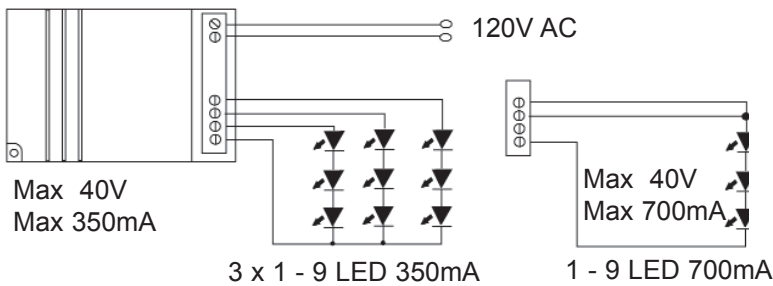
“Power Box” Power LED Converter

Converters for High Brightness LEDs

- Independent converter - IP40 - Insulation class II
- Suitable for supplying High Brightness 1W and 3W LEDs
- Series connection with three independent outputs
- Output in steady current: 3 x 350mA, ±10%
- Self-resetting protection against over temperatures, open circuits and against output short circuits.
- Input voltage: 120V/AC PBOX31 - Steady output



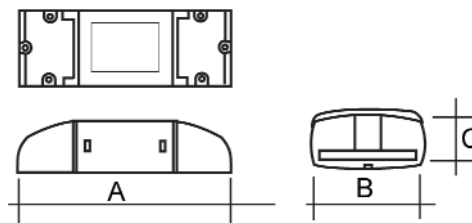
| Model | LED | | Output | | Dimensions | | | Part Number |
|---------|-----|-----|-----------|-------|----------------|---|---------|-------------|
| | min | max | I max | V max | A | B | C | |
| PBox 31 | 3 | 24 | 3 x 350mA | 40V | 5.8" x 3" x 1" | | 5.6 oz. | QT-LVL0000N |



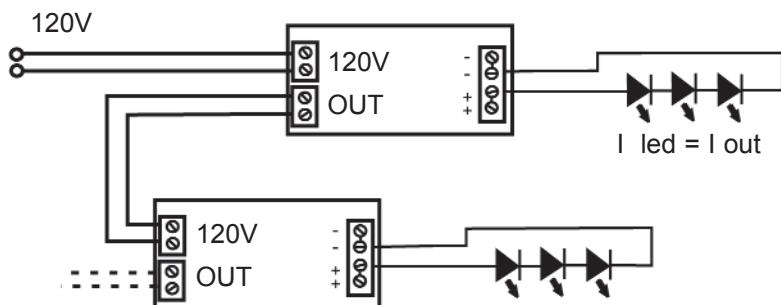
“PD” Power Design, Power LED Converter

Converters for High Brightness LEDs

- Independent converter - IP40 - Insulation class II
- Suitable for supplying High Brightness 1W and 3W LEDs Series connection
- Output in steady current: 350mA - 700mA, ±10%
- Self-resetting protection against over temperatures, open circuits and output short circuits.
- Voltage: 120V/AC - Steady output



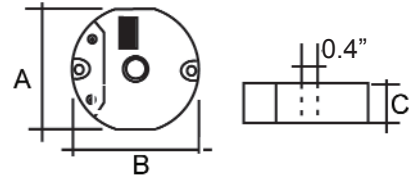
| Model | LED | | | Output | | Dimensions | | | oz. | Part Number |
|--------|-----|-----|------|--------|-------|--------------------|---|---|---------|--------------|
| | min | max | max* | I max | V max | A | B | C | | |
| PD 312 | 3 | 12 | 9 | 350mA | 48V | 5.4" x 1.6" x 1.1" | | | 0.7 oz. | QT-PD312000B |
| PD 309 | 3 | 9 | 7 | 700mA | 38V | 5.4" x 1.6" x 1.1" | | | 0.7 oz. | QT-PD309000B |



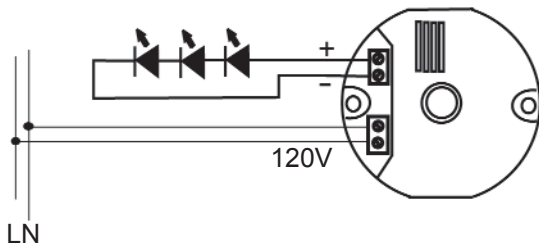
“RC” LED Round Converter

Converters for High Brightness LEDs

- Independent converter - IP40 - Insulation class II
- Suitable for supplying High Brightness 1W and 3W LEDs Series connection
- Output in steady current: 350mA - 700mA, $\pm 10\%$
- Self-resetting protection against over temperatures, against open circuit and against output short circuits
- Voltage: 120V/AC - Steady output



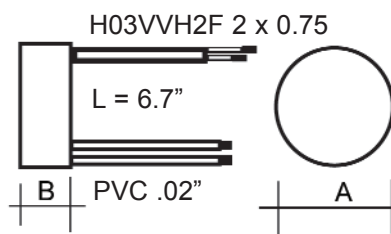
| Model | LED | | Output | | Dimensions | | | oz. | Part Number |
|--------|-----|-----|--------|-------|--------------------|---|---|---------|--------------|
| | min | max | I max | V max | A | B | C | | |
| RC 312 | 3 | 12 | 350mA | 48V | 3.1" x 3.0" x 0.9" | | | 2.8 oz. | QT-RC312000B |
| RC 309 | 3 | 9 | 700mA | 38V | 3.1" x 3.0" x 1.1" | | | 3.5 oz. | QT-RC309000B |



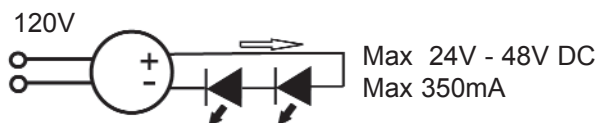
“PLR” Power LED Round Converter

Converters for High Brightness LEDs

- Built-in converter - IP40 - Insulation class II
- Suitable for supplying High Brightness LEDs 1W /3W - Connection in series
- Output in steady current: 350mA, ±10%
- Self-resetting protection against over temperatures, against open circuit and against output short circuits.
- Input voltage: 120V/AC - Steady output



| Model | LED min max | Output I max V max | Dimensions A B | oz. | Part Number |
|---------|----------------|-----------------------|-------------------|---------|--------------|
| PLR 106 | 1 6 | 350mA 24V | 2.0" x 0.8" | 1.8 oz. | QT-PLR1061WB |
| PLR 110 | 1 9 | 350mA 48V | 2.0" x 0.8" | 1.8 oz. | QT-PLR1011WB |



“DBOX” Kit Installation Example

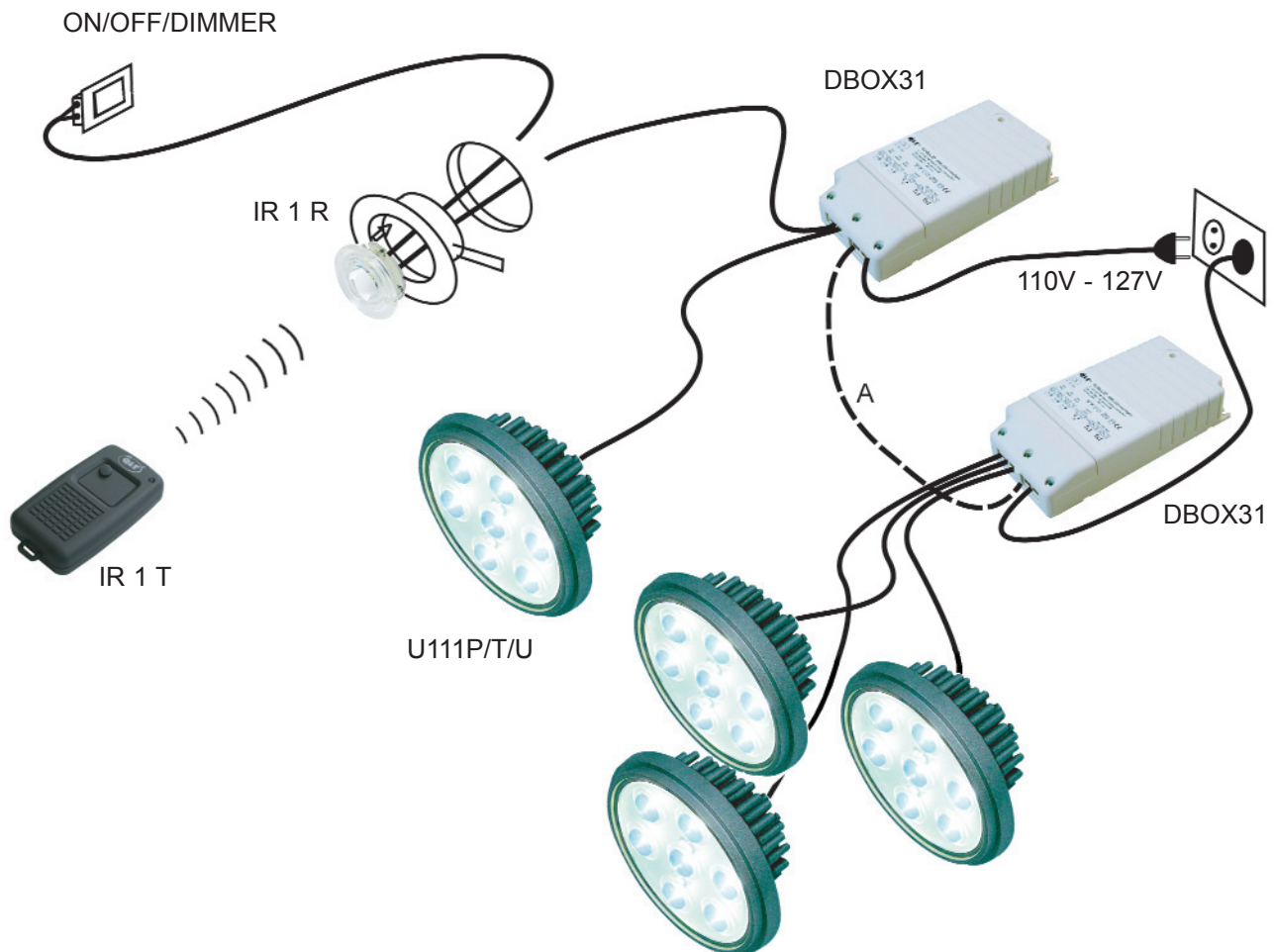
□ Dimmer Box □ system

The diagram shows how to configure the dimmable High Brightness lighting system using the DBOX31 driver.

A max. of 25 drivers can connect in parallel to the DBOX31.

All controlled by one push-button or by our IR1 system.

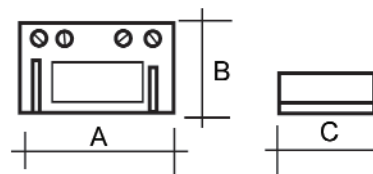
*One button to control all functions
Short push: switch on / switch off
Long push: light intensity regulation
Two short pushes: white color or max. light power*



“LV” Low Voltage Power LED Converter

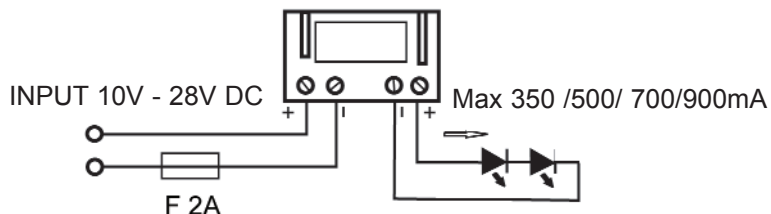
Converters for High Brightness LEDs

- Built-in converter - IP 20 - Insulation class III
- Suitable for supplying 1 - 3W High Brightness LEDs - Connection in series
- Output in steady current: 350mA - 900mA, $\pm 10\%$
- Self-resetting protection against over temperatures, against open circuits and against output short circuits.
- Input voltage: battery - Steady output



| Model | LED | | Output | | Dimensions | | | oz. | Part Number |
|-------|-----|------|--------|--------|--------------------|---|---|---------|--------------|
| | min | max | I max | V max | A | B | C | | |
| LVP | 1 | 3/6* | 350mA | 10-28V | 2.0" x 1.3" x 0.8" | | | 1.8 oz. | QT-LVP00000N |
| LVL | 1 | 3/6* | 500mA | 10-28V | 2.0" x 1.3" x 0.8" | | | 1.8 oz | QT-LVL00000N |
| LVQ | 1 | 3/6* | 700mA | 10-28V | 2.0" x 1.3" x 0.8" | | | 1.8 oz | QT-LVQ00000N |
| LVM | 1 | 3/6* | 900mA | 10-28V | 2.0" x 1.3" x 0.8" | | | 1.8 oz | QT-LVM00000N |

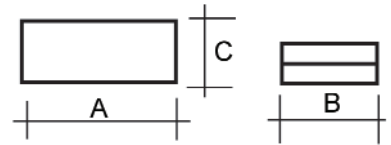
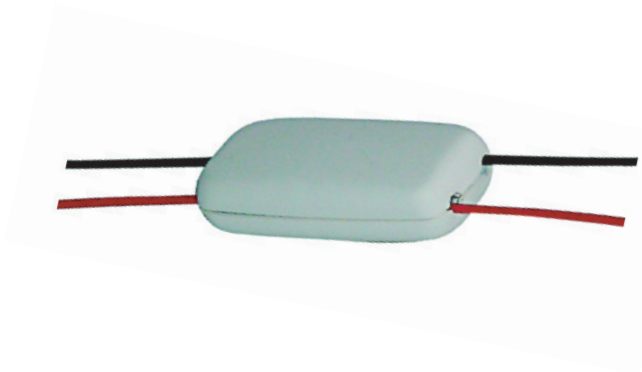
*11V - 15V max 3 Led - 22V - 28V max 6 LED



“LV” Universal Voltage to Current Converter

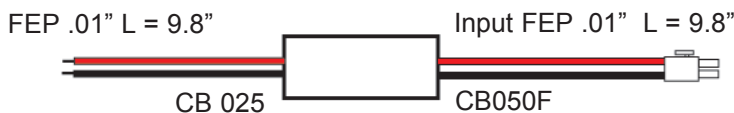
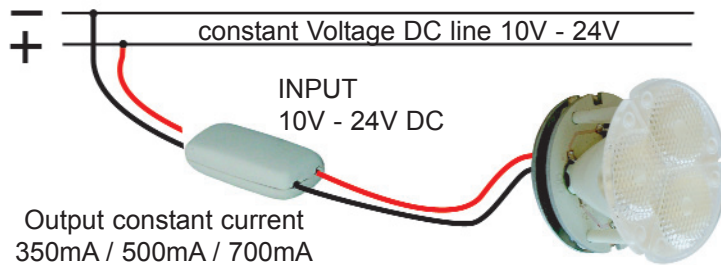
Converters for High Brightness LEDs

- Built-in converter - IP20 - Insulation class III
- Suitable for supplying High Brightness applications working in 12V / 24V constant voltage
- Output in steady current: 350mA - 700mA, ±10%
- Self-resetting protection against over temperatures, against open circuits and against output short circuits.
- Input: constant voltage - Output: constant current



| Model | LED min max | Output I max V max | Dimensions A B C | | Part Number |
|-------|-------------|--------------------|--------------------|---------|--------------|
| LVX | 1 3/6* | 350mA 10-28V | 1.6" x 0.7" x 0.5" | 1.8 oz. | QT-LVX00000N |
| LVZ | 1 3/6* | 500mA 10-28V | 1.6" x 0.7" x 0.5" | 1.8 oz. | QT-LVZ00000N |
| LVY | 1 3/6* | 700mA 10-28V | 1.6" x 0.7" x 0.5" | 1.8 oz. | QT-LVY00000N |

*11V - 15V max 3 Led - 22V - 28V max 6 LED



The Magic System

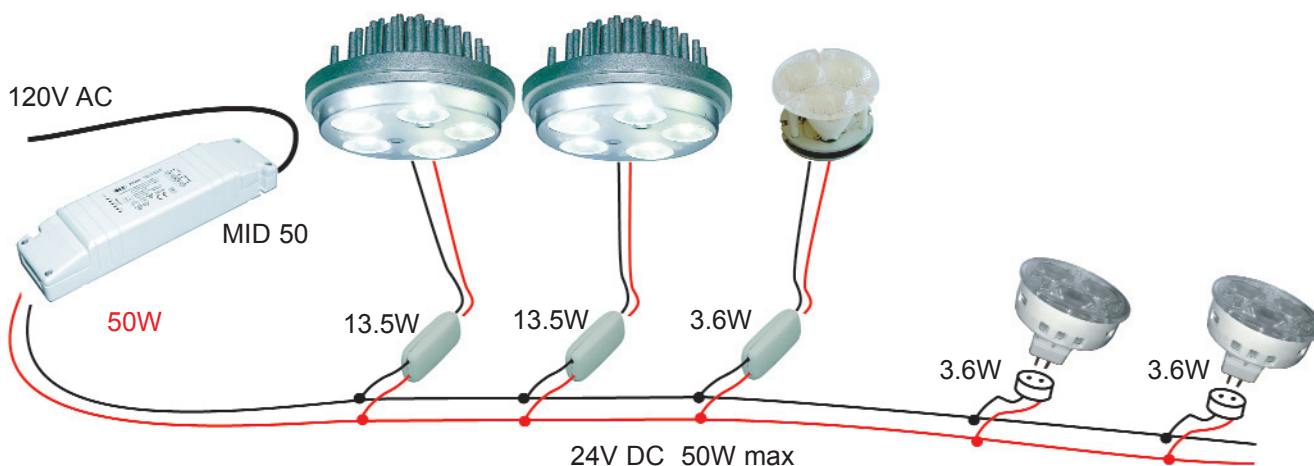
This revolutionary system provides the ability to configure lighting systems with Power LEDs in a simple manner with a minimum number of components.

The system is made up of a constant voltage (24V) driver that is available in different wattages to supply a large quantity of LED modules. Each one is delivered with a small constant voltage/constant current converter. This allows for, what was previously very complex configurations, to be installed with just two buss cables. With these two buss cables, it is then possible to connect up to 6 LED modules together.

It is even possible to connect both 350mA and 700mA modules together on the same line. These connections are possible thanks to new developments in LED modules. Traditional Power LED modules have been configured with a number of LEDs in a series circuit, mounted on a heat-sink, and supplied by an electronic driver. The Power LED modules are usually placed at a certain distance from the driver, in order to prevent the electrical components from suffering temperature stress or reduced life. With the new generation of highly miniaturized electrical components, it is now possible to produce electronic drivers that convert constant voltage into constant current. The converters can be easily installed along the buss cabling and in close proximity to the LED modules themselves. With a driver efficiency of approximately 95%, the converters don't generate heat and do not affect the over-all efficiency of the system.

The images below show the different drivers and LED modules that can be easily installed together. The driver must be of sufficient power to match the size of the load. For every module, the maximum wattage is clearly indicated:

The sum of all the different module's wattages must never exceed the driver's wattage.



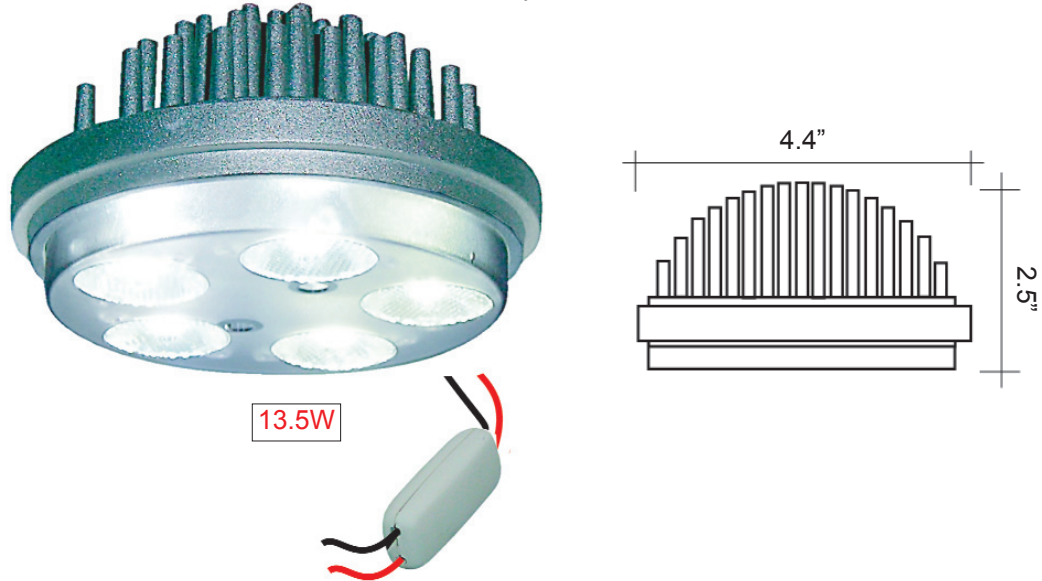
$$\boxed{50W} \geq \boxed{13.5W} + \boxed{13.5W} + \boxed{3.6W} + \boxed{3.6W} + \boxed{3.6W} = 37.8W$$

Max output power U115-DC + U115-DC + TRIO-DC + QLAMP + QLAMP

“U115-DC” Power LED Spot

High Brightness LED application - 24V - 13,5W

- Input: 22V/DC - 24V/DC Therewith supplied converter, type LVY, 700mA
- Suitable for being built in standard Ø4.4” AR111 downlights
- Supplied with 9.8” + 9.8” FEP leads, red (+) black (-)with miniAMP connector
- Different lens degrees available: narrow, medium and wide beam
- White LED color standard. Other LED colors available on request.



| Model | W Equivalent Power | Lumen Type | Lux @1m (cd) | | | Flat | V (typ.) | W (typ.) | Part Number |
|----------|--------------------|------------|--------------|--------|------|------|----------|----------|--------------|
| | | | Narrow | Medium | Wide | | | | |
| U115P DC | 39 | 400 | 2700 | 1000 | 750 | - | 12V | 13.5W | QT-U115PDCXX |
| U115T DC | 49 | 640 | 4370 | 1750 | 1300 | - | 12V | 13.5W | QT-U115TDCXX |
| U115U DC | 61 | 800 | 5200 | 2100 | 1500 | - | 12V | 13.5W | QT-U115UDCXX |

12VDC - 24VDC

9.8” + 9.8” FEP ZCB050F

Spot ring AR111 included, please specify color

1 2 3 4

Lens

N - Narrow Diffused
M - Medium Diffused
W - Wide Diffused
F - Wide Flat Precision
R - Mini Narrow Diffused
O - Mini Medium Diffused
S - no lens

please specify LED color

White - B ○
 Warm White - W ●
 Red - R ●
 Green - V ●
 Amber - A ●
 Blue - C ●

9.8” FEP CB050F

9.8” FEP CB025F

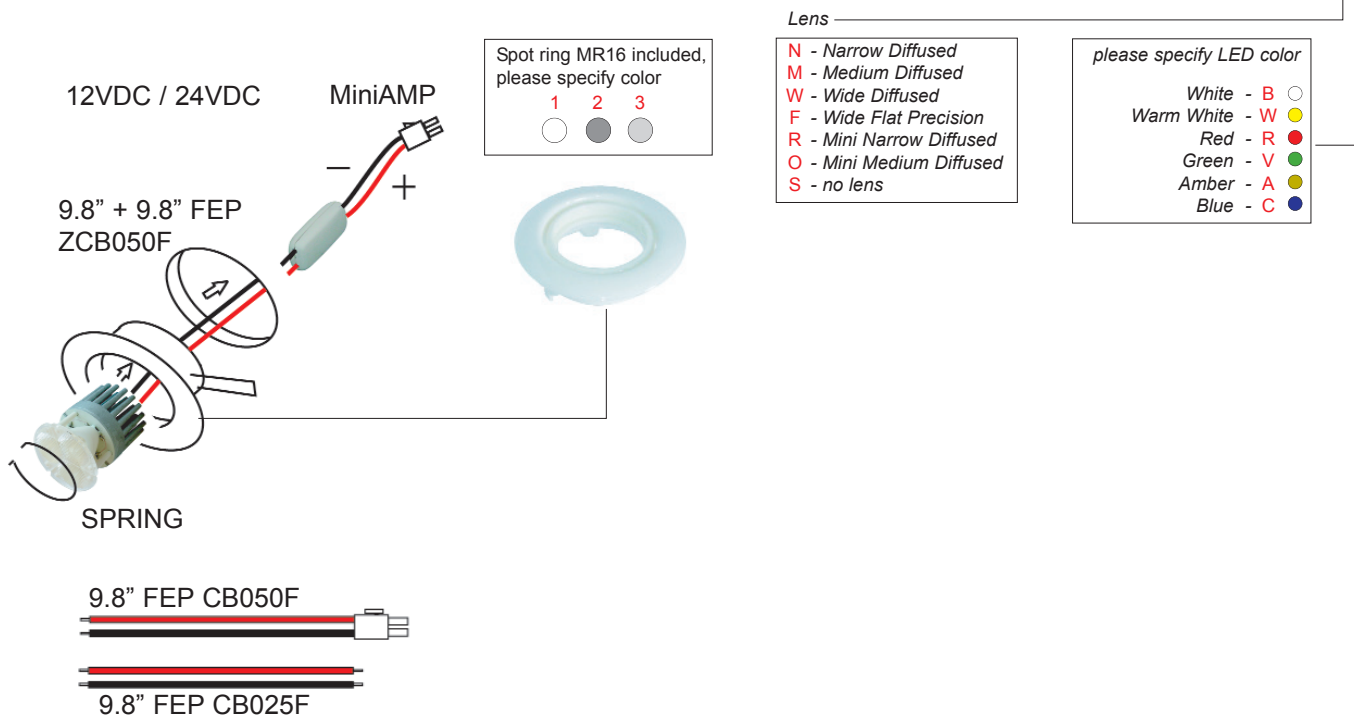
“TRIOP-DC” Power LED Spot

High Brightness LED spot - 12V - 24V - 8W

- Input: 12VDC / 24V/DC With the supplied converter, type LVY, 700Ma
- Suitable for being built in standard Ø 2” MR16 downlights
- Supplied with 9.8” + 9.8” FEP leads, red (+) black (-) with miniAMP connector
- Different lens degrees available: narrow, medium and wide beam
- White LED color standard. Other LED colors available on request.



| Model | W Equivalent Power | Lumen Type | Lux @1m (cd) | | | V (typ.) | W (typ.) | Part Number |
|----------|--------------------|------------|--------------|--------|------|-----------|----------|--------------|
| | | | Narrow | Medium | Wide | | | |
| TRIOP DC | 10 | 150 | 3400 | 1100 | 360 | 12V / 24V | 8W | QT-TRIOPDCXX |
| TRIOP TC | 20 | 210 | 4900 | 1480 | 490 | 12V / 24V | 7.3W | QT-TRIOPTCXX |
| TRIOP UC | 30 | 330 | 2100 | 2100 | 690 | 12V / 24V | 7.3W | QT-TRIOPUCXX |

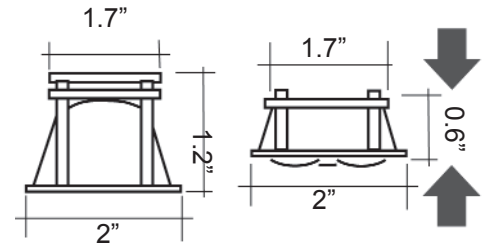


“TRIO-DC” Power LED Spot

High Brightness LED spot - 12V - 24V - 3.6W

- Input: 12V/DC - 28V/DC with a supplied, type LVX converter, 350mA
- Suitable for being built in standard Ø 2” MR16 downlights
- Supplied with 9.8” + 9.8” FEP leads, red (+) black (-) and miniAMP connector
- Different lens degrees available:
narrow, medium and wide beam
- White LED color standard.
- Other LED colors available on request.

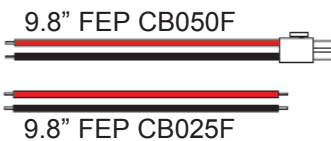
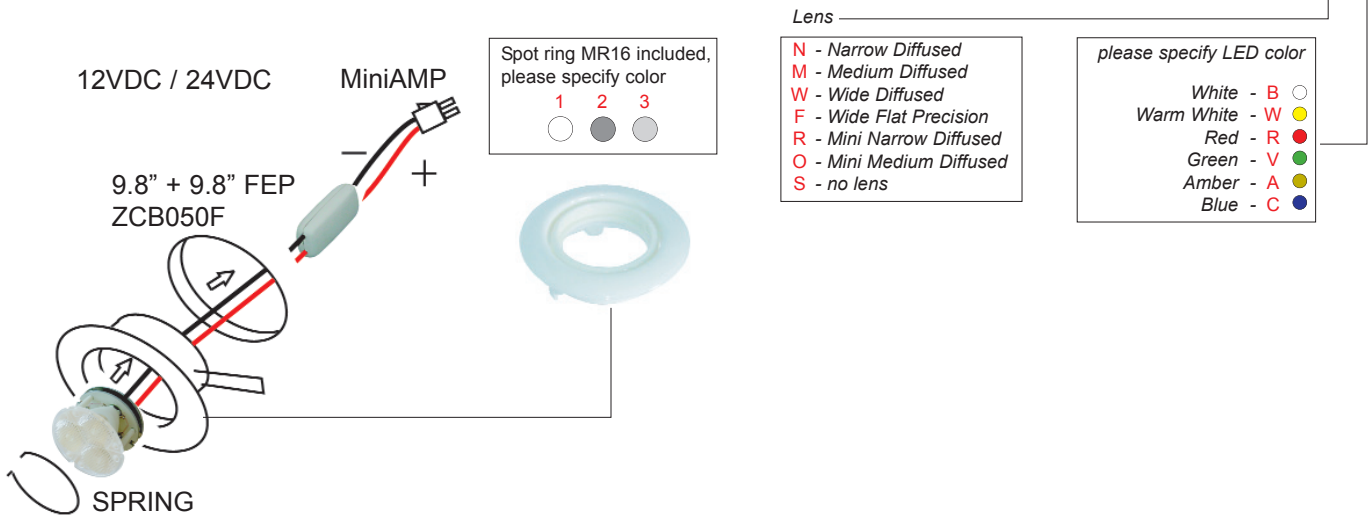
3.6W



TRIO MR 16
Diffused

TRIOFlat MR 16

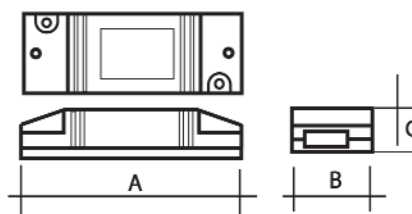
| Model | W Equivalent Power | Lumen Type | Lux @1m (cd) | | | Flat | V (typ.) | W (typ.) | Part Number |
|----------|--------------------|------------|--------------|--------|------|------|-----------|----------|---------------------------------------|
| | | | Narrow | Medium | Wide | | | | |
| TRIODC | 10 | 150 | 2600 | 825 | 270 | 270 | 12V / 24V | 4W | QT-TRIODC X 0 X |
| TRIODC T | 20 | 210 | - | 600 | 330 | 295 | 12V / 24V | 3.6W | QT-TRIODC X T X |
| TRIODC U | 30 | 330 | - | 765 | 415 | 375 | 12V / 24V | 3.6W | QT-TRIODC X U X |



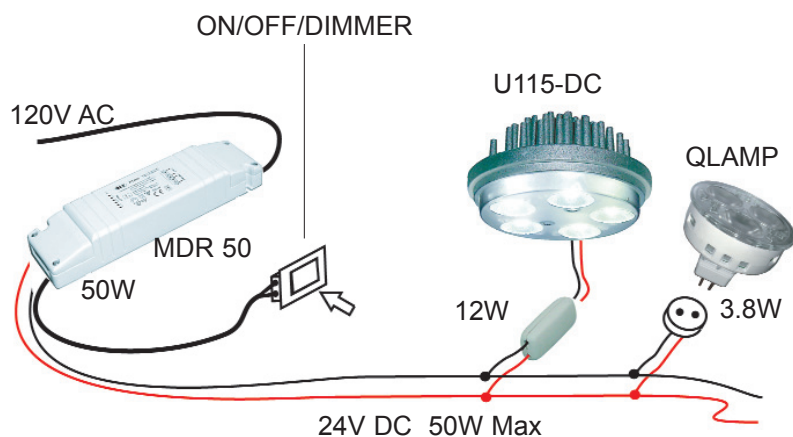
“MDR” Maxi Power Design Dimmable LED Modular Converter

Driver for LED modules

- Independent driver - IP40 - Insulation class II
- Output in steady voltage, 24V \pm 10%
- Self-resetting protection against over temperatures, against open circuit and against output short circuits
- Input voltage: 100V/AC - 265V/AC Steady output
- Power factor: 0.96
- Possible parallel connection for higher output power



| Model | Output V | Output I max | Dimensions | | | oz. | Part Number |
|--------|----------|--------------|------------|------|------|---------|--------------|
| | | | A | B | C | | |
| MDR 50 | 24V | 2000mA | 8.1" | 2.0" | 1.4" | 3.8 oz. | QT-MDR05000B |



INSTALLATION EXAMPLE

Q-LAMP Technology

Housing made of thermo conductive plastic material

High efficiency PC board (>93%)

Led- fitted aluminum PC board

Light-diffused flat optic

Fixing ring



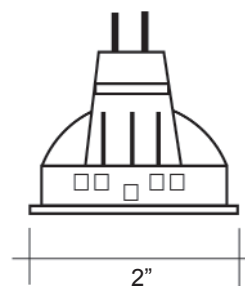
The max. lighting efficiency and max. performances are given when QLamp is used with 12V - 24V/DV drivers, like ETI types PDV24 or MD50 Q-lamp can be entirely dimmed from 0 to 100% by PWM drivers (MAX.200Hz), like ETI type MDR50 Q-lamp can be installed in already existing systems with 12V-AC50Hz electromechanical and/or toroidal transformers; in this case the lighting efficiency is lower of 20%, if not more - We recommend not to use the lamp with low-voltage electronic transformers, as this may cause problem to the system, even the break down of the components.

| Model | W Equivalent Power | Lumen Type | Lux @1m (cd) | | | Flat | V (typ.) | W (typ.) | Part Number |
|----------|--------------------|------------|--------------|--------|------|------|-----------|----------|--------------|
| | | | Narrow | Medium | Wide | | | | |
| QLAMP 10 | 10 | 150 | 1880 | 440 | 320 | - | 12v / 24V | 3.6W | QT-QLAMP10XX |
| QLAMP 20 | 20 | 210 | 2360 | 840 | 590 | - | 12v / 24V | 3.6W | QT-QLAMP20XX |
| QLAMP 30 | 30 | 330 | 2900 | 940 | 670 | - | 12v / 24V | 3.6W | QT-QLAMP30XX |

“Q-LAMP” Powered LED Lamp

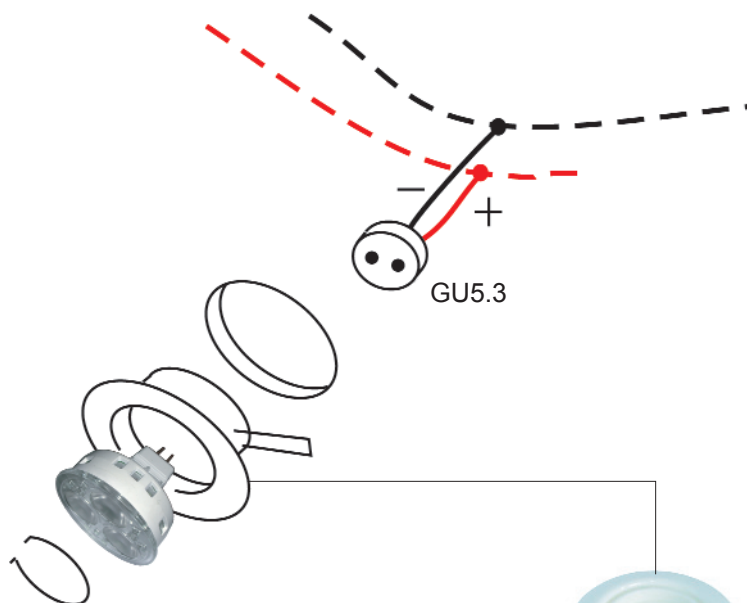
High Brightness LED Lamp - 12V - 24V

- Universal input* AC/DC - Built-in converter, type LVX, 350mA
- *12V / 24V drivers and other supply sources, as described in the table below
- Suitable for being built in standard Ø 2” MR16 downlights
- Different lens degrees available: narrow, medium and wide beam
- White LED color standard. Other LED colors available on request.



Qlamp MR 16
G5.3 GU5.3

3.6W



please specify LED color

- White - B ○
- Warm White - W ●
- Red - R ●
- Green - V ●
- Amber - A ●
- Blue - C ●

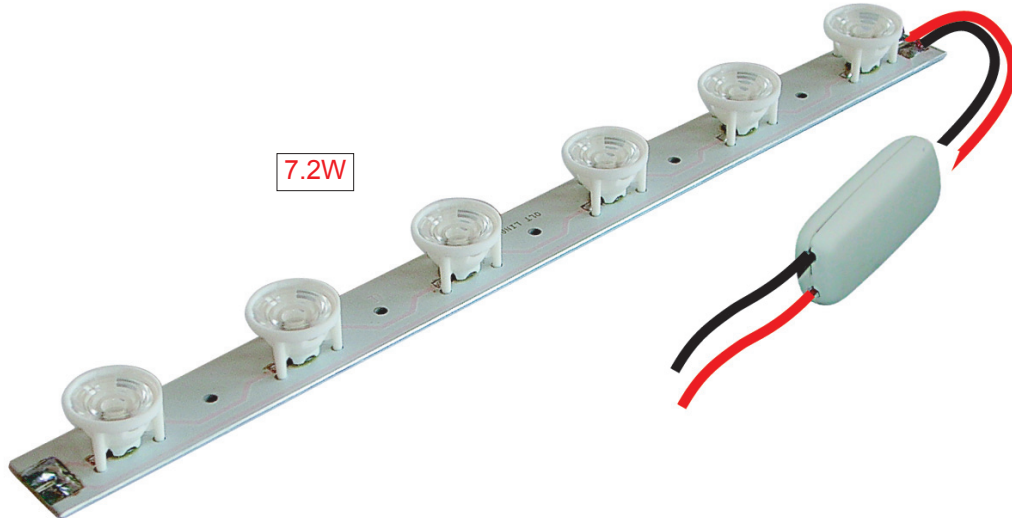
Spot ring MR16 included,
please specify color

- 1 ○
- 2 ●
- 3 ●

“LIN6-DC” Power LED Spot

High Brightness LED strip line - 24V - 7.2W

- Input: 22V/DC - 24V/DC Therewith supplied converter, type LVX, 350mA
- Supplied with 9.8” + 9.8” FEP leads, red (+) black (-) with miniAMP connector
- Three different versions available: narrow beam, medium beam and without optic
- White LED color standard. Other LED colors available on request.



| Model | W Equivalent Power | Lumen Type | Lux @1m (cd) | | | | V (typ.) | W (typ.) | Part Number |
|-----------|--------------------|------------|--------------|--------|------|--------|-----------|----------|---------------------------|
| | | | Narrow | Medium | Wide | NoLens | | | |
| LINE 6 DC | 23 | 300 | 1400 | 750 | 500 | 17 | 12V / 24V | 8.3W | QT-LINE06 XDCX |
| LINE T DC | 36 | 480 | 1960 | 1050 | 700 | 25 | 12V / 24V | 7.3W | QT-LINE0T XDCX |
| LINE U DC | 46 | 600 | 2800 | 1500 | 1000 | 28 | 12V / 24V | 7.3W | QT-LINE0U XDCX |

Lens

- N - Narrow Diffused
- M - Medium Diffused
- W - Wide Diffused
- F - Wide Flat Precision
- R - Mini Narrow Diffused
- O - Mini Medium Diffused
- S - no lens

please specify LED color

- White - B ○
- Warm White - W ●
- Red - R ●
- Green - V ●
- Amber - A ●
- Blue - C ●

9.8” FEP CB050F



9.8” FEP CB050F



9.8” + 9.8” FEP

24VDC



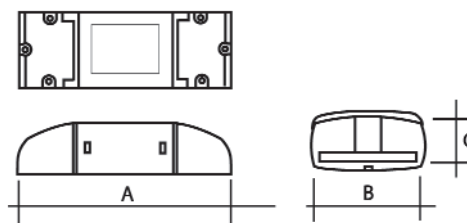
“PDV” Power Design LED Module Converter

Driver for LED modules

- Independent driver IP40 Insulation class II
- Output in steady voltage, $\pm 10\%$
- Self-resetting protection against over temperatures, open circuits and against output short circuits
- Input voltage: 120V/AC Steady output

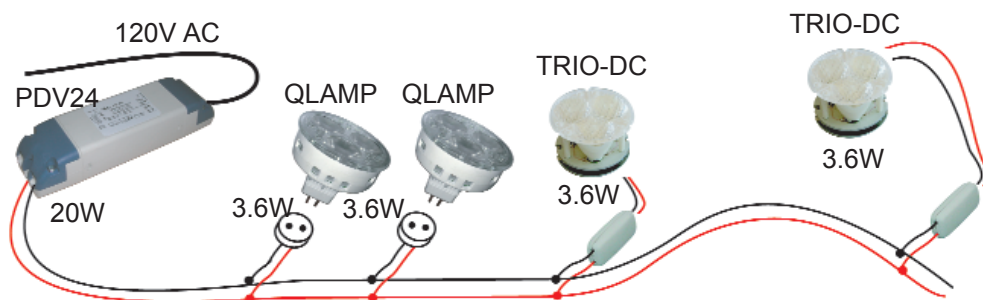


20W



| Model | Output V | Output I max | Dimensions | | | oz. | Part Number |
|-------|----------|--------------|--------------------|---|---|---------|--------------|
| | | | A | B | C | | |
| PDV12 | 12V | 1100mA | 5.4" x 5.1" x 1.1" | | | 3.9 oz. | QT-PDV12000B |
| PDV24 | 24V | 700mA | 5.4" x 5.1" x 1.1" | | | 3.9 oz. | QT-PDV24000B |

INPUT 120V/AC

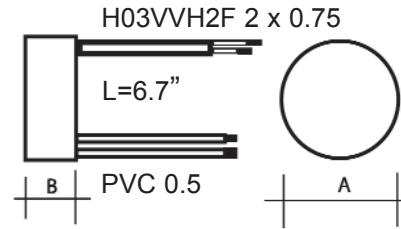


Installation Example

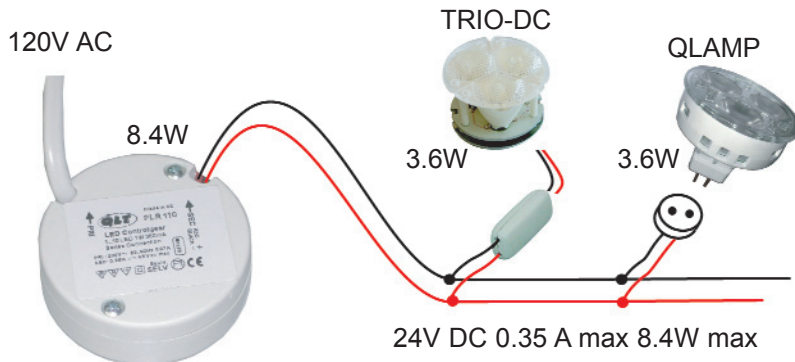
“PMR” Round LED Module Converter

Converters for LED modules

- Built-in converter - IP40 - Insulation class II
- Output in steady voltage, $\pm 10\%$
- Self-resetting protection against over temperatures, open circuits and against output short circuits.
- Input tension: 120V/AC - Steady output



| Model | Output V | Output mA | Dimensions A B | oz. | Part Number |
|--------|----------|-----------|----------------|---------|--------------|
| PMR 12 | 12 V | 700mA | 2.1" x 0.8" | 1.8 oz. | QT-PMR12000B |
| PMR 24 | 24 V | 350mA | 2.1" x 0.8" | 1.8 oz. | QT-PMR24000B |

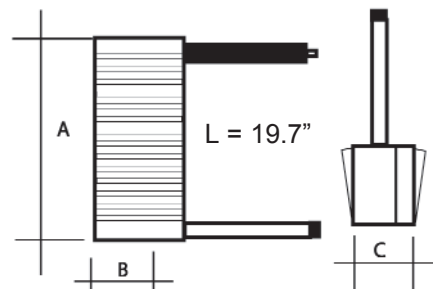


Installation Example

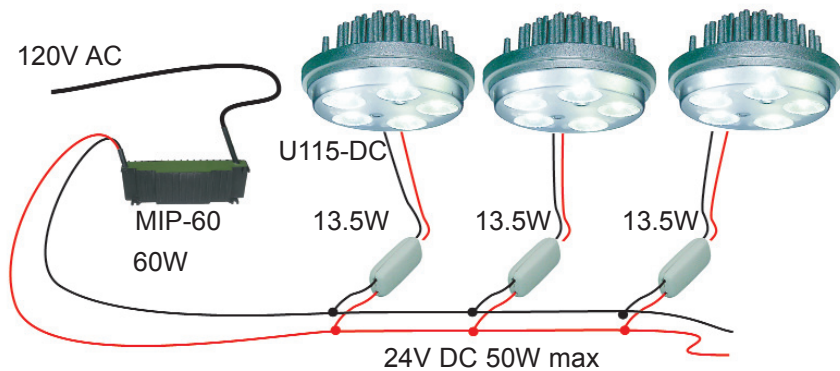
“MIP” Maxi Power Design IP65 LED Module Converter

Driver for LED modules

- Independent driver IP65 Insulation class II
- Output in steady voltage, 12V or 24V $\pm 10\%$
- Self-resetting protection against over temperatures, open circuits and against output short circuits
- Input voltage: 100V/AC - 265V/AC Steady output
- Power factor: 0.96



| Model | Output V | Output I | Dimensions | | | oz. | Part Number |
|--------|----------|----------|--------------------|---|---|----------|--------------|
| | | | A | B | C | | |
| MIP 60 | 24V | 2500mA | 8.1" x 2.0" x 1.4" | | | 17.6 oz. | QT-MIP06000N |
| MIP 40 | 12V | 3300mA | 8.1" x 2.0" x 1.4" | | | 17.6 oz. | QT-MIP04000N |

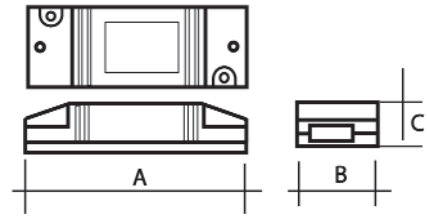


Installation Example

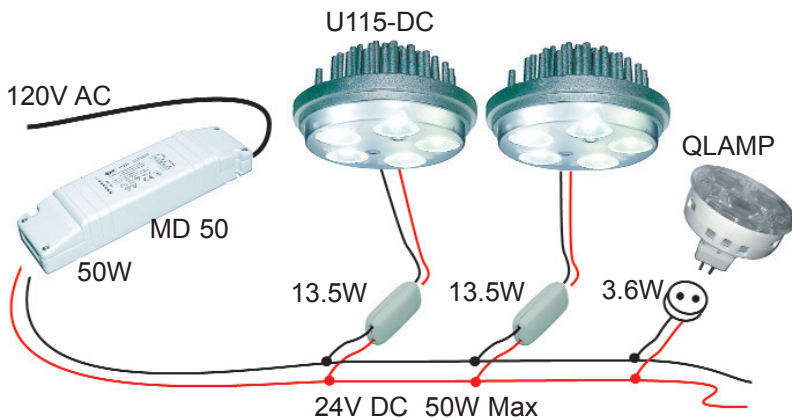
“MD” Maxi Power Design LED Modular Converter

Driver for LED modules

- Independent driver - IP40 - Insulation class II
- Output in steady voltage, $\pm 10\%$
- Self-resetting protection against over temperatures, open circuits and against output short circuits
- Input voltage: 100V/AC - 265V/AC Steady output
- Power factor: 0.96



| Model | Output V | Output I | Dimensions | | | oz. | Part Number |
|-------|----------|----------|------------------|---|---|---------|--------------|
| | | | A | B | C | | |
| MD 40 | 24V | 1600mA | 8.1" x 2" x 1.4" | | | 3.5 oz. | QT-MD040000B |
| MD 50 | 24V | 2080mA | 8.1" x 2" x 1.4" | | | 4.2 oz. | QT-MD050000B |

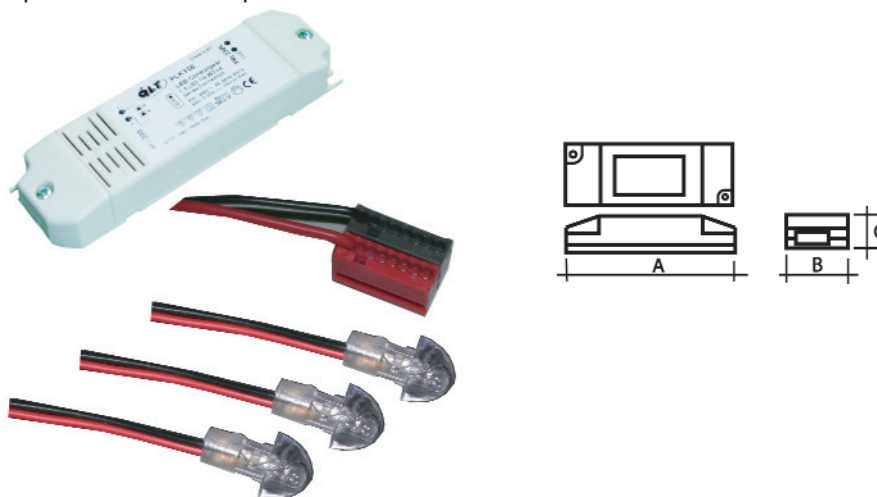


Installation Example

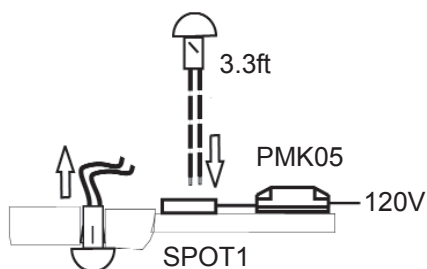
“Decor LED” Kit System

LED Decorative systems

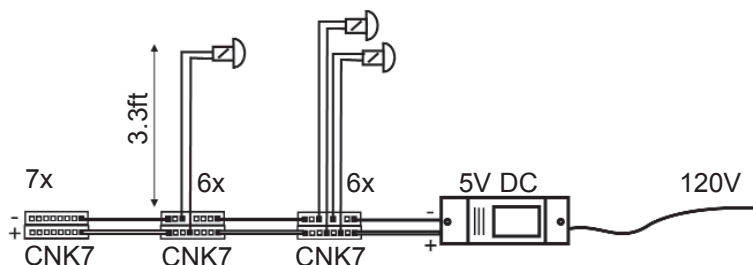
- Independent converter PMK05 - IP40 - Insulation class II
- Minispot 5V/DC, 20mA - White light (available in blue)
- Minispot with 1m rigid cables for multiple connection to specially polarized fast terminal blocks.
- High light efficiency - Consumption of 0,12W for every spot.
- Cool light system (LED) - No maintenance
- Possible connection from 1 up to max. 30 minispots.



| Model | Mini Spot min max | Dimensions | | | oz. | Part Number |
|--------|----------------------|--------------------|---|---|---------|-------------------------------|
| | | A | B | C | | |
| PMK05 | 1 30 | 4.6" x 1.3" x .9" | | | 2.1 oz. | QT-PMK050000B |
| SPOT1B | - | 1" x Ø 9" | | | 0.7 oz. | QT-SPOT1B00B |
| CNK7 | 7 | 0.7" x 0.4" x 0.4" | | | 0.4 oz. | QT-O00120GR00 + QT-O00130RO00 |



please specify LED color
 White - B ○
 Blue - C ●



RGB System

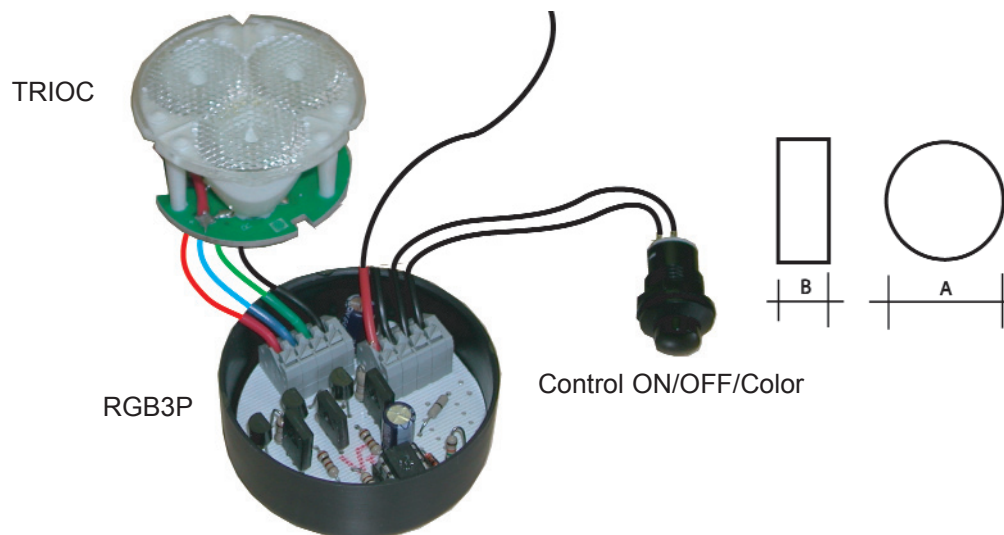
□RGB□ (Red-Green-Blue) system

One of the most important features of High Brightness LEDs is the pureness of the emitted light. If three High Brightness LEDs in green, blue and red are switched on at the same time, these three LEDs together produce the white light. If the single currents of the three LEDs are well regulated, all desired colors can be obtained. ETI introduces a new and modular system for colored lighting. Just through one push-button only (patented system) all system functions are carried out very easily. With a short push you switch on/off the system; keep on pushing the button, you see all colors changing; just stopping pushing the button the color running in that moment is fixed. "Color memory": switching on the system again, the color previously selected is restored. With two further short pushes the light goes back to the white color. Through a prolonged push for over 20 seconds colors start changing automatically. This automatic color running cycle can be stopped by a short push at any moment. Through this innovative RGB system it's possible to install very easy lighting systems and all of the same color. To every driver "RGPIO31" it's possible to connect up to 9 pcs spot TRIOColor, 2 spot U115RGB or 9 pcs TRIOAmbient. By using RGPIO31 device with TRIOColor spots you can regulate the colored light; by using the same RGPIO31 device with TRIOAmbient spots you can regulate the the color temperature of white light running from a warm white 2850□K to a cool white 8000□K (patented system). Possible parallel connection of max. 25 drivers "RGPIO" controlled by one or more push buttons

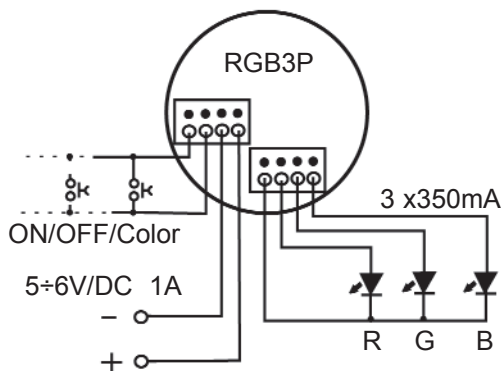
“RGB3” Power LED RGB Controller

Converters for High Brightness LEDs in "RGB" systems

- Built-in controller device - IP20 - Insulation class II
- Light control (on, off and dimming) by one push-button
- Suitable for 3 x 1W High Brightness LEDs (spots TRIOColor / Ambient) - Output in constant current 350mA, $\pm 10\%$ - Series connection - Standard software cycle: 17 seconds (on request, 30 or 60 seconds)
- Connection with fast terminal blocks
- Input voltage: by 5V/DC - 6V/DC 1,1A battery or by PLP502 converter.



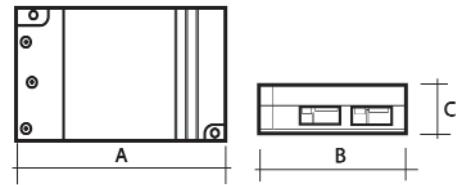
| Model | LED min max | Output I max V max | Dimensions A x B | oz. | Part Number |
|-------|----------------|-----------------------|---------------------|---------|--------------|
| RGB3P | 3 3 | 350mA 6V DC | 2.0" x 0.8" | 1.8 oz. | QT-RGB3P000N |



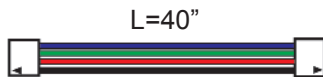
“RGBBox” Power LED RGB Converter

Converters for High Brightness LEDs in "RGB" systems

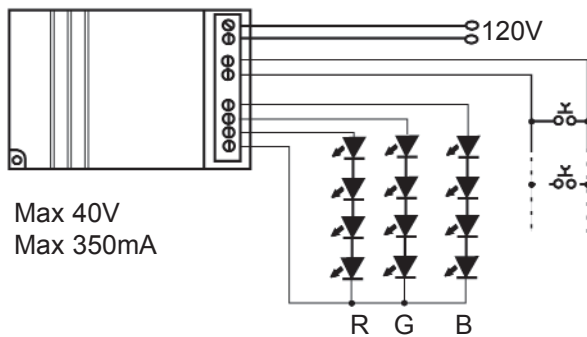
- Independent converter - IP40 - Insulation class II
- Light control - on, off and dimming - by one or more push-buttons
- Suitable for 1W High Brightness LEDs
- Output in constant current 350mA, ±10%
- Series connection - Standard software cycle:
17 seconds (on request, 30 or 60 seconds)
- Self-resetting protection against over temperatures, open circuits and against output's short circuits.
- Input voltage: 120V/AC - 267V/AC RBGBOX31 - Steady output
- Parallel connection for max. 25 "RGBBox" controlled by the same (or more) push-buttons



| Model | LED | | Output | | Dimensions | | | oz. | Part Number |
|-----------|-----|-----|--------|-------|--------------------|---|---|---------|---------------|
| | min | max | I max | V max | A | B | C | | |
| RGBBox 31 | 3 | 24 | 350mA | 40V | 5.7" x 3.0" x 1.1" | | | 5.6 oz. | QT-RGBBOX310B |



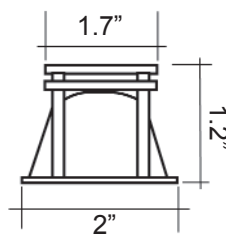
PATENTED



“TRIOAmbient” Natural Light Power LED Spot

High Brightness LED spot - 3 x 1W - 350mA

- Generates all the shades of white color (Patented)
- Light power up 150 lumen
- Suitable for being built in standard Ø 2” downlights
- Delivered with 2 x CB064, 11.8” 4 pins cables (M/F) with AMP connectors

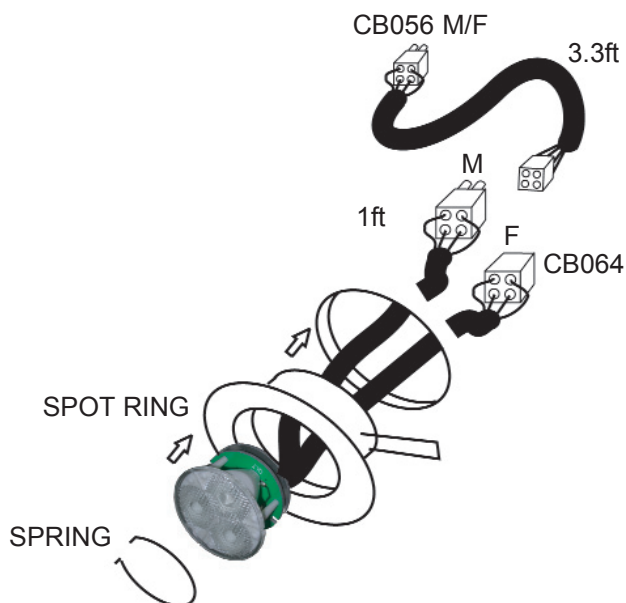


TRIOA MR 16

| Model | W Equivalent Power | Lumen Type | Lux @1m (cd) | | | | V (typ.) | I (typ.) | Part Number |
|-------|--------------------|------------|--------------|--------|------|---------|----------|-----------|---------------------------|
| | | | Narrow | Medium | Wide | No Lens | | | |
| TRIOA | 5 | 150 | 2100 | 690 | 225 | 25 | 3.6V | 3 x 350mA | QT-TRIOA X 000 |

Lens

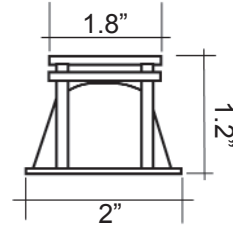
- N** - Narrow Diffused
- M** - Medium Diffused
- W** - Wide Diffused
- F** - Wide Flat Precision
- R** - Mini Narrow Diffused
- O** - Mini Medium Diffused
- S** - no lens



“TRIOColor” RGB-System Power LED Spot

High Brightness LED spot - 3 x 350mA

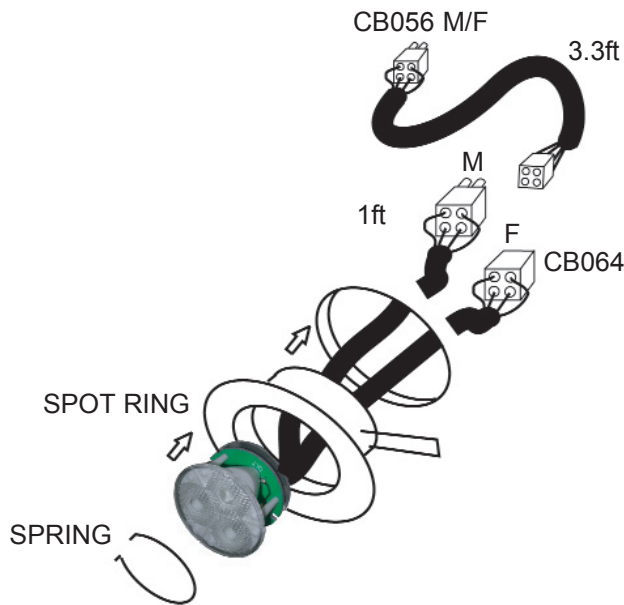
- Light power up 117 - 140 lumen
- Suitable for being built in standard 50 downlights
- Delivered with 2 x CB064, 30 cm 4 pins cables (M/F) with AMP connectors



TRIOColor MR16

| Model | W Equivalent Power | Lumen Type | Lux @1m (cd)* | | | | V (typ.) | I (typ.) | Part Number |
|-----------|--------------------|------------|---------------|--------|------|---------|----------|-----------|------------------|
| | | | Narrow | Medium | Wide | No Lens | | | |
| TRIOColor | 9 | 120 | 1600 | 400 | 140 | 25 | 3.6V | 3 x 350mA | QT-TRIOColorX000 |

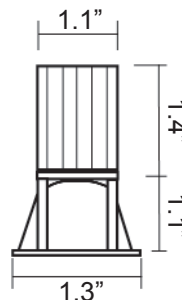
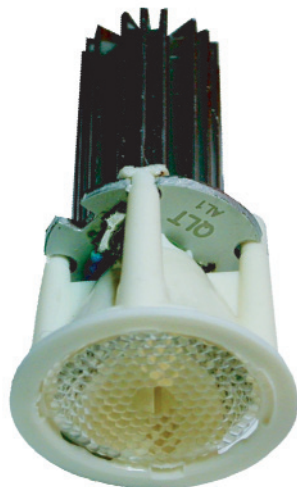
- Lens
- N - Narrow Diffused
 - M - Medium Diffused
 - W - Wide Diffused
 - F - Wide Flat Precision
 - R - Mini Narrow Diffused
 - O - Mini Medium Diffused
 - S - no lens



“TRIOColor Trix” RGB-System Power LED Spot

High Brightness LED spot - 3 x 350mA

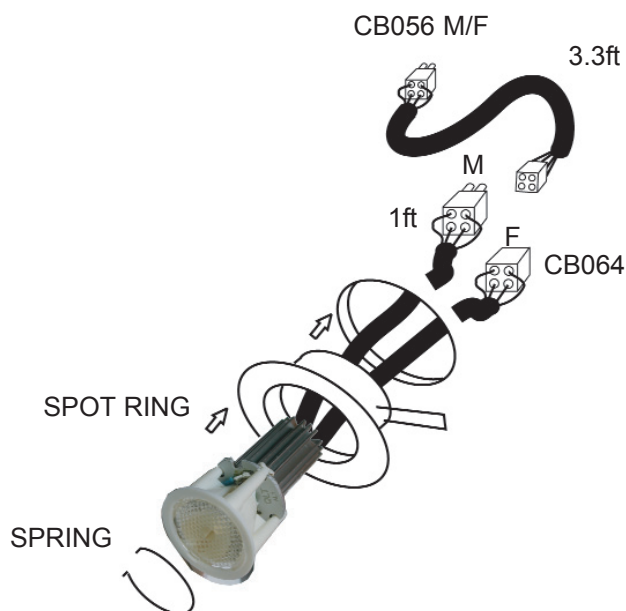
- Light power up 70 - 80 lumen
- Suitable for being built in standard Ø 1.3” downlights
- Delivered with 2 x CB064, 11.8” 4 pins cables (M/F) with AMP connectors
- Fitted with 1 LEDs type "tricolor 3 x 1W"



TRIOC T MR11
Difused

| Model | W Equivalent Power | Lumen Type | Lux @1m (cd)* | | | | V (typ.) | I (typ.) | Part Number |
|--------|--------------------------|---------------|---------------|--------|------|---------|-------------|-------------|--------------|
| | | | Narrow | Medium | Wide | No Lens | | | |
| TRIOCT | 5 | 70 | - | 350 | 120 | - | 3.6V | 3 x 350mA | QT-TRIOCTX00 |

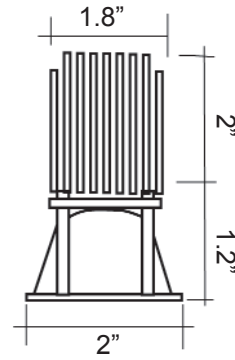
- Lens
- N - Narrow Diffused
 - M - Medium Diffused
 - W - Wide Diffused
 - F - Wide Flat Precision
 - R - Mini Narrow Diffused
 - O - Mini Medium Diffused
 - S - no lens



“TRIOColor Power” RGB-System Power LED Spot

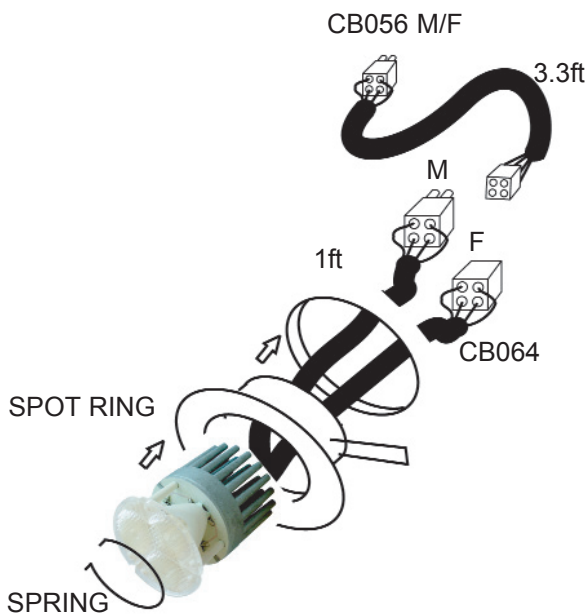
High Brightness LED spot - 3 x 3 x 350mA

- Light power up 230 - 300 lumen
- Suitable for being built in standard Ø 2” downlights
- Delivered with 2 x CB064, 11.8” 4 pins cables (M/F) with AMP connectors
- Fitted with 3 LEDs type “tricolor 3 x 1W”



TRIO P MR 16
Diffused

| Model | W Equivalent Power | Lumen Type | Lux @1m (cd)* | | | V (typ.) | I (typ.) | Part Number | |
|--------|--------------------|------------|---------------|--------|------|----------|----------|-------------|--------------|
| | | | Narrow | Medium | Wide | | | | No Lens |
| TRIOCP | 16 | 210 | - | 1200 | 420 | 75 | 3.6V | 3 x 350mA | QT-TRIOCPX00 |

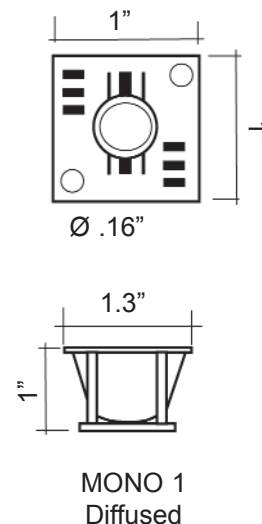


- Lens
- N - Narrow Diffused
 - M - Medium Diffused
 - W - Wide Diffused
 - F - Wide Flat Precision
 - R - Mini Narrow Diffused
 - O - Mini Medium Diffused
 - S - no lens

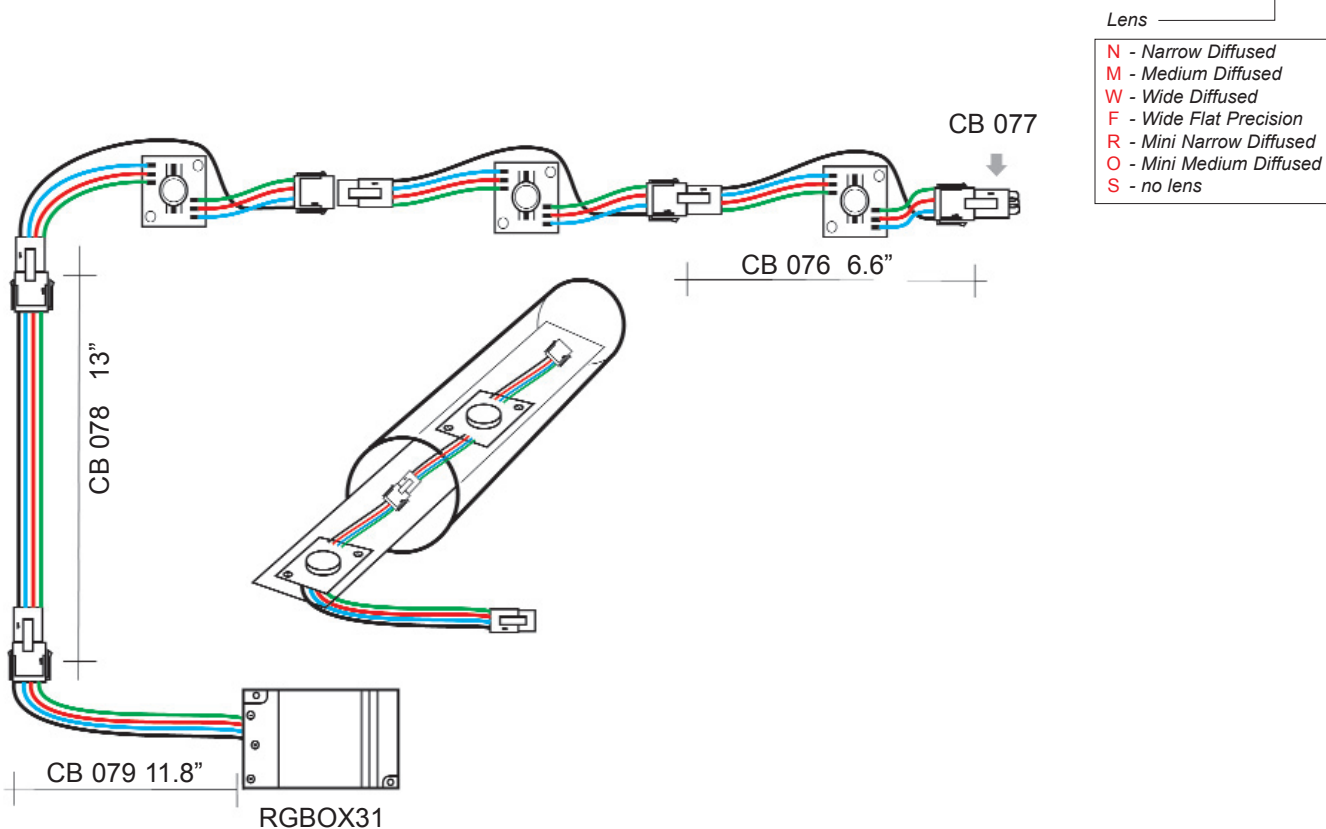
“TRIX” RGB - Tricolor Module Power LED Spot

High Brightness LED Module - 3 x 350mA

- Light power up 70 lumen
- Module fixing absolutely on metallic surfaces through screws and Loctite glue (Type 351 or 3872)
- Delivered with 2xCB076, 6” cables, and 4-pin Molex connectors (M/F)



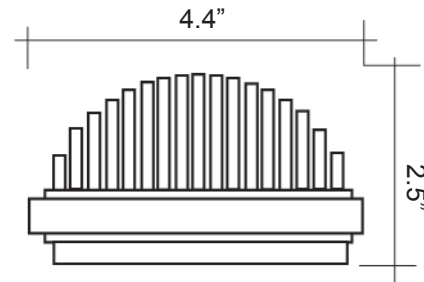
| Model | W Equivalent Power | Lumen Type | Lux @1m (cd)* | | | | V (typ.) | I (typ.) | Part Number |
|-------|--------------------|------------|---------------|--------|------|---------|----------|-----------|--------------|
| | | | Narrow | Medium | Wide | No Lens | | | |
| TRIX | 5 | 70 | - | - | 130 | 25 | 3.6V | 3 x 350mA | QT-TRIXX0000 |



“U115 Color RGB” RGB-System Power LED Spot

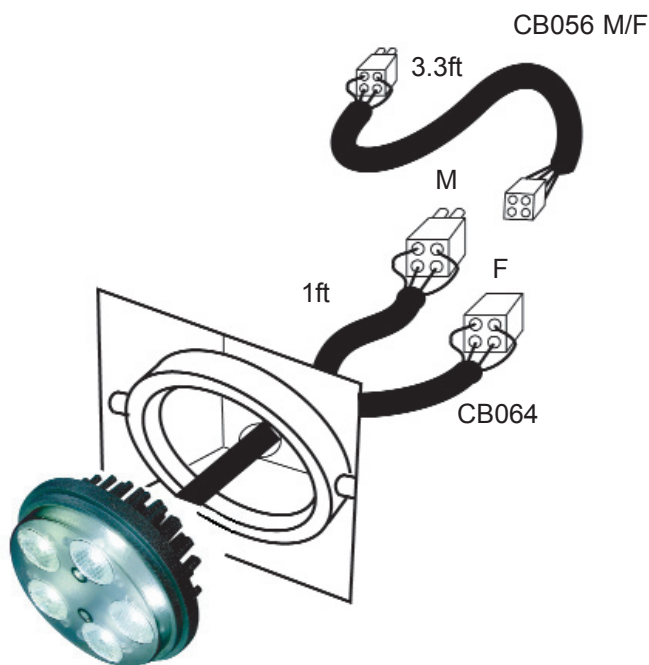
High Brightness LED spot - 5 x 3 x 350mA

- Light power up 350 - 370 lumen
- Suitable for being built in standard AR111 downlights, Ø 4.4”
- Delivered with CB064, 4pin cables (M/F) with AMP connectors
- Fitted with 5 LEDs type "Tricolor 3 x 1W"



U115C - AR 111

| Model | W Equivalent Power | Lumen Type | Lux @1m (cd)* | | | V (typ.) | I (typ.) | Part Number | |
|-------|--------------------|------------|---------------|--------|------|----------|----------|-------------|---------------------------|
| | | | Narrow | Medium | Wide | | | | No Lens |
| U115C | 26 | 350 | - | 620 | 400 | - | 10.2V | 3 x 350mA | QT-U115C X 000 |

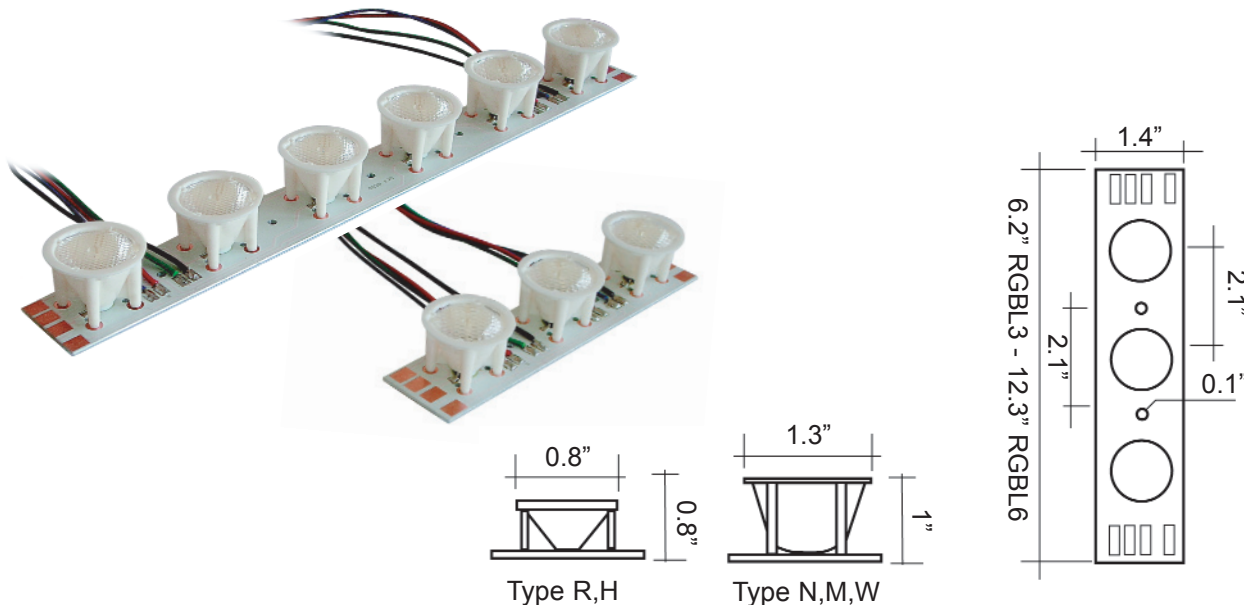


- Lens
- N - Narrow Diffused
 - M - Medium Diffused
 - W - Wide Diffused
 - F - Wide Flat Precision
 - R - Mini Narrow Diffused
 - O - Mini Medium Diffused
 - S - no lens

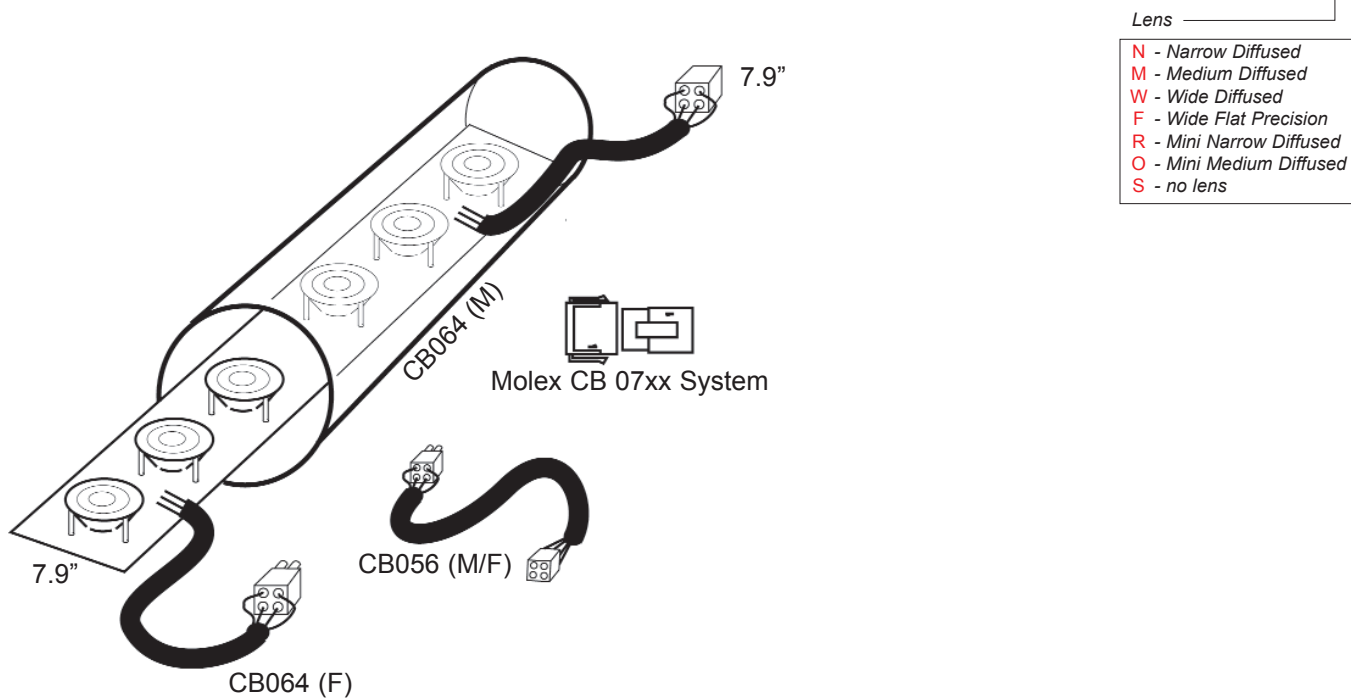
“RGBLine” RGB Power LED Strip Line

High Brightness LED strip line - 3/6 x 350mA

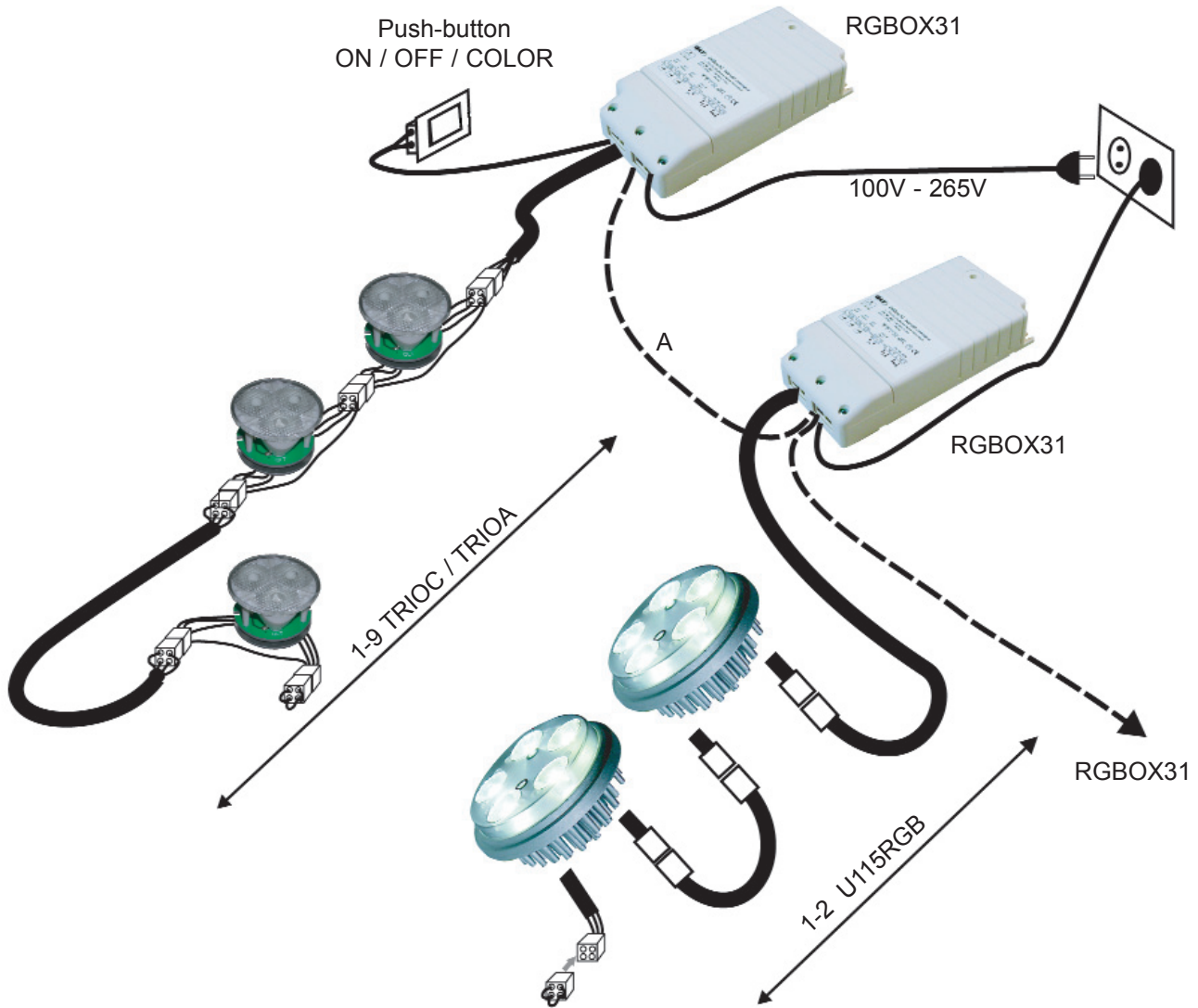
- Light power: 117 - 150 lumen for RGB3L, 230 - 300 lumen for RGB6L
- Suitable for colored linear lighting
- Delivered with 2 x CB064, 2 x 7.7” 4 pins cables (M/F) with AMP connectors
- Available also with CB077, CB078, CB079 cables and Molex connectors



| Model | W Equivalent Power | Lumen Type | Lux @1m (cd)* | | | | V (typ.) | I (typ.) | Part Number |
|-------|--------------------|------------|---------------|--------|------|---------|----------|-----------|--------------|
| | | | Narrow | Medium | Wide | No Lens | | | |
| RGB3L | 9 | 130 | 1400 | 600 | 250 | 25 | 3.6V | 3 x 350mA | QT-RGB03LX00 |
| RGB6L | 18 | 260 | 1400 | 600 | 250 | 25 | 3.6V | 3 x 350mA | QT-RGB06LX00 |



“RGB” & “Natural Light” Kit Installation Example



TRIOColor system

The diagram shows how to make High Brightness lighting systems with changeable light color. By using our "RGPIO31" driver, you can connect up to 9 pcs TRIOColor spots or up 2 U115RGB spots. As an alternative to TRIOColor spots you can use TRIOAmbient spots. Using a parallel connection of max. 25 drivers "RGPIO31" controlled by one or more push buttons, all the RGPIO units are synchronized by a polarized cable A.

“IR 1” Infra Red 1 Controller

IR Remote Control for RGBBox/DBox

·One push button to control all functions

Short push: switch on / switch off

Long push: color regulation

Two short pushes: white color

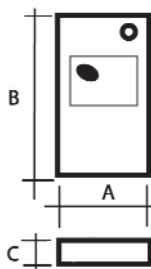
·Emission range: 20 - 33ft - Delivered without batteries, use 12V MN21

·The IR Receiver-Lens is suitable for being mounted into MR11 spot rings (Ø 1.4")

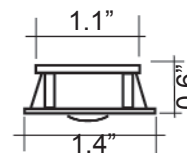
·Possible parallel connection between the IR Receiver-Lens and the push-buttons controlling the RGBOX device



IR 1 T

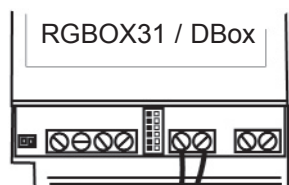


IR 1R RECEIVER



IR 1R

| Model | Output / Input | Dimensions | | | oz. | Part Number |
|--------|----------------|--------------------|---|---|---------|--------------|
| | | A | B | C | | |
| IR 1 T | 36Khz IR | 1.7" x 2.9" x 0.7" | | | 1.0 oz. | QT-IR1T00000 |
| IR 1 R | 36Khz IR | Ø 1.4" | | | 0.5 oz. | QT-IR1R00000 |



IR 1R Receiver

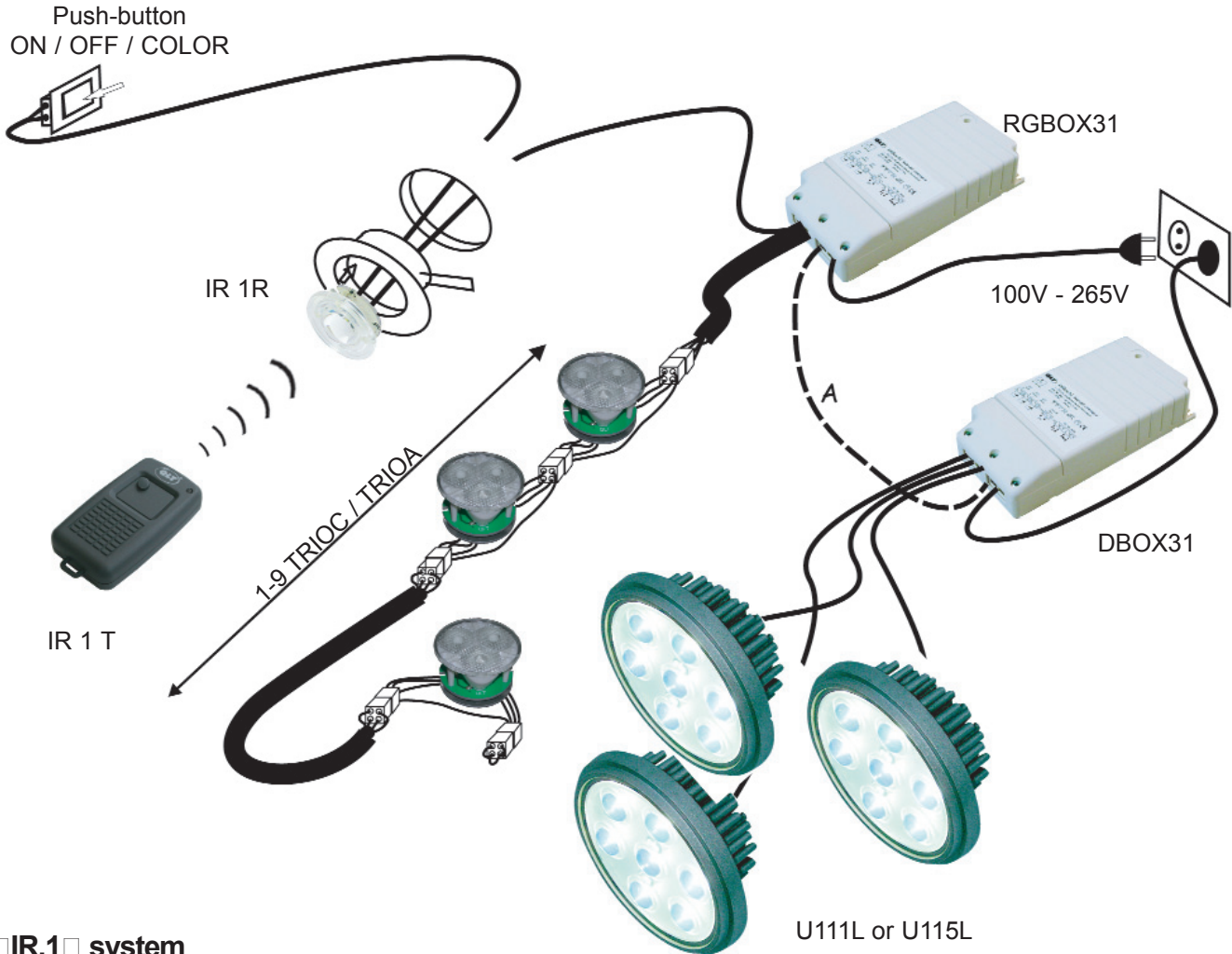
Spot ring MR11 included,
please specify color



IR 1T
Transmitter



“IR 1 - RGB / DBOX System” Kit Installation Example



□IR.1□ system

The scheme shows how to make High Brightness lighting systems controlled by IR-1 transmitter. Using our RBOX31 driver, you can connect up to 9 pcs, TRIOColor or TRIOAmbient spots and regulate the light colors.

Using the DBOX31 driver, it's then possible to regulate the intensity of light (Dimmer). A possible parallel connection of 25 drivers max. RBOX31 or DBOX31 can all be controlled by the IR 1 transmitter.

One push button to control all functions:

Short push: switch on / switch off

Long push: color regulation or dimming

Two short pushes: white color or max. light power.

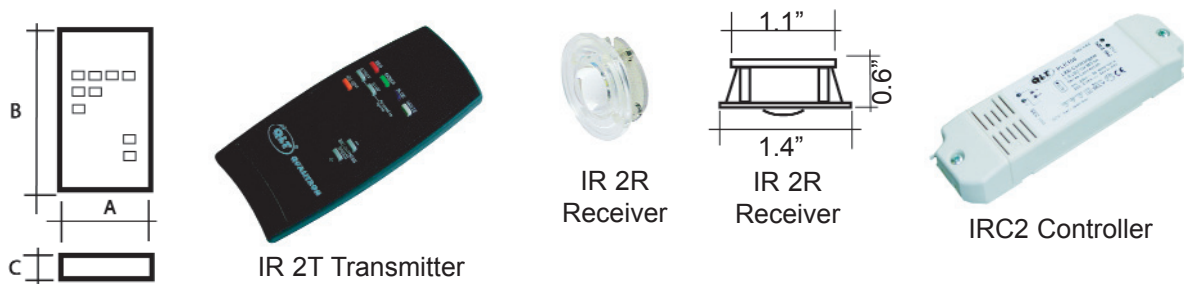
“IR2R” Infra Red 2 Controller

Multifunction IR Remote Control for RGBOX

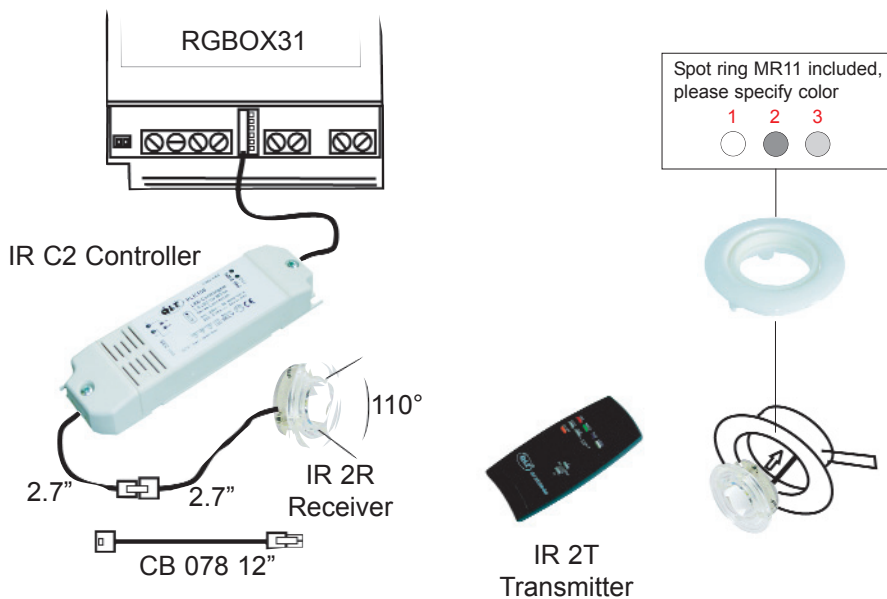
·9 push-buttons to control all functions:

- switch on/off**
- RGB colors**
- white color,**
- rainbow cycle**
- velocity**
- intensity**

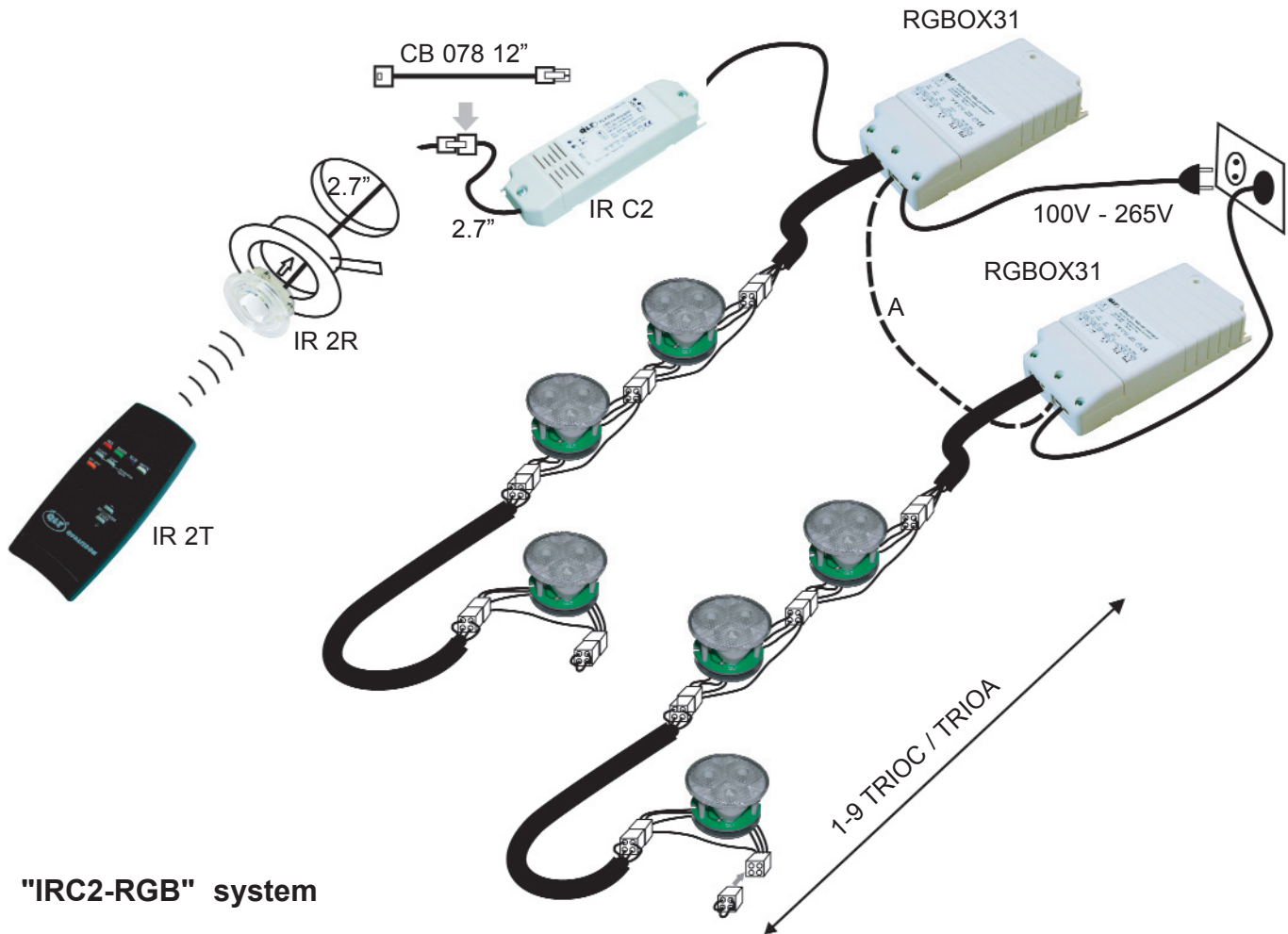
- Emission range: 20ft - 30ft
- Requires 2 1.5V AAA Batteries (*not included*)
- The IR Receiver-Lens is suitable for being mounted into MR11 spot rings (Ø 1.4")
(Controller board with PWM output for RGBOX included.)



| Model | Output / Input | Dimensions | | | oz. | Part Number |
|--------------------|----------------|------------|------|------|---------|--------------|
| | | A | B | C | | |
| IR 2 T | 36Khz IR | 1.7" | 2.9" | 0.7" | 1.0 oz. | QT-IR2T00000 |
| IR2R (IR2R + IRC2) | 36Khz IR | Ø 1.4" | | | 0.5 oz. | QT-IR2R00000 |



“IRC2” RGB System



"IRC2-RGB" system

The diagram shows how to make High Brightness lighting systems with changeable light color by using our "RGBOX31" driver. It is possible to connect up to 9 TRIOColor spots for a maximum power of 27W with a universal supply tension 100V/AC - 265V/AC. As an alternative to TRIOColor spots, you can use TRIOAmbient spots in parallel connection with up to 25 RGBOX31 drivers max. All can be controlled by the IR 2 system.

9 push- buttons to control all functions:

- switch on*
- RGB colors*
- white color*
- rainbow cycle*
- velocity*
- intensity*

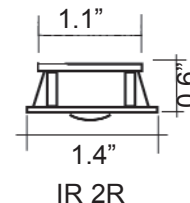
“IR3R” Infra Red 3 Controller

Multifunction IR Remote Control for 24 V Systems

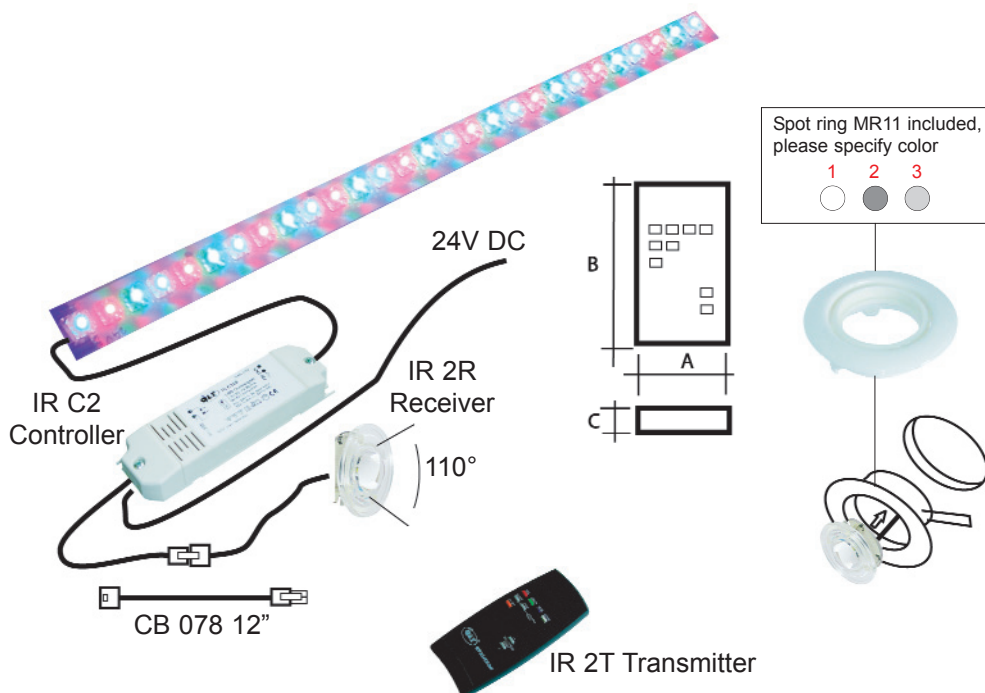
·9 push- buttons to control all functions:

- switch on**
- RGB colors**
- white color**
- rainbow cycle**
- velocity**
- intensity**

- Emission range: 20ft - 33ft.
- Requires 1.5V AAA Batteries (*not included*)
- The IR Receiver-Lens is suitable for being mounted into MR11 spot rings (Ø 1.4”)
- Controller board IRC3 with PWM output 24V constant voltage.



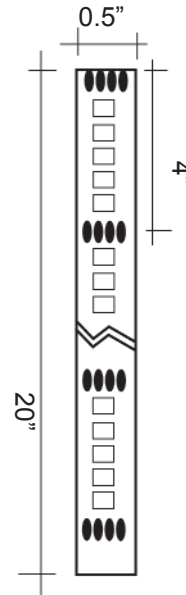
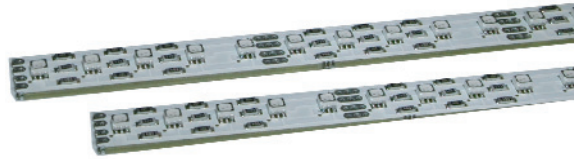
| Model | Output / Input | Dimensions | | | oz. | Part Number |
|--------------------|----------------|------------|------|------|---------|--------------|
| | | A | B | C | | |
| IR 2 T | 36 Khz I.R. | 2.4" | 5.5" | 0.8" | 1.0 oz. | QT-IR2T00000 |
| IR3R (IR2R + IRC3) | 36 Khz I.R. | Ø 1.4" | | | 0.5 oz. | QT-IR3R00000 |



“STRIP & Custom” LED Strip Custom Designed LED Applications

Modular 24V RGB Stripe Lines

- 4” stripe modules (STRIP25) - Terminals to be soldered
- Connection in series mode - On request, cabling for 10” M/F
- Max. consumption: 300mA / 600mA for every 19.5” stripe and 600mA for 5LED module (4”)
- Luminous flux: 2 lm every LED (white color), 50lm every stripe



| Model | Output / Input | Dimensions | | | oz. | Part Number |
|----------|----------------|------------|------|------|---------|--------------|
| | | A | B | C | | |
| STRIP 25 | 24V DC 300mA | 19.7" | 0.5" | 0.2" | 1.8 oz. | QT-STRIP2500 |
| STRIP 50 | 24V DC 600mA | 19.7" | 0.5" | 0.2" | 1.8 oz. | QT-STRIP5000 |

ETI's Technical and Project Department is at the customers' complete disposal for the realization of LED applications.

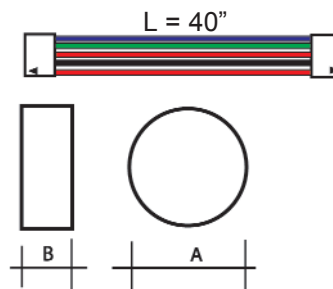


“DMX1” DMX Interface for RGBBox

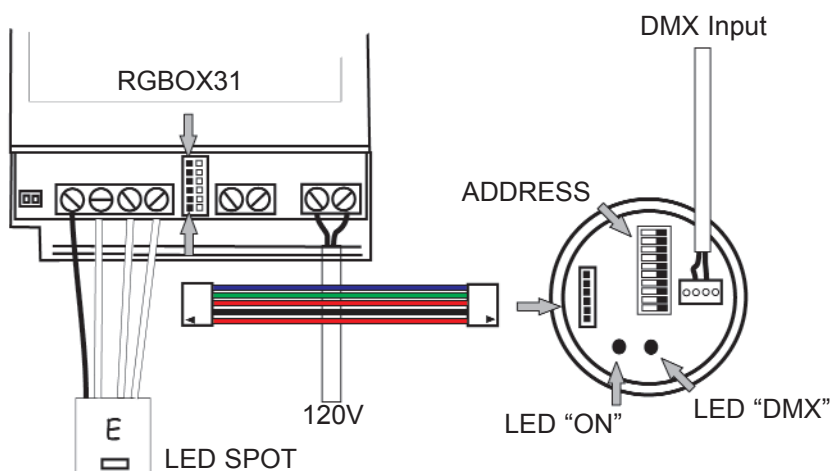
DMX interface for RGB systems

- DMX512 interface to be combined with PWM driver RGBOX
- Input supply by polarized connection cable - IP00 - Insulation class II
- 9 DIP switches to select the first address (3 channels)
- Self-test to check all functions.
(when illuminated, the 2 LEDs on the board indicate ON mode and receiving DMX signal.)

(supply connection cable for driver RGBox included)



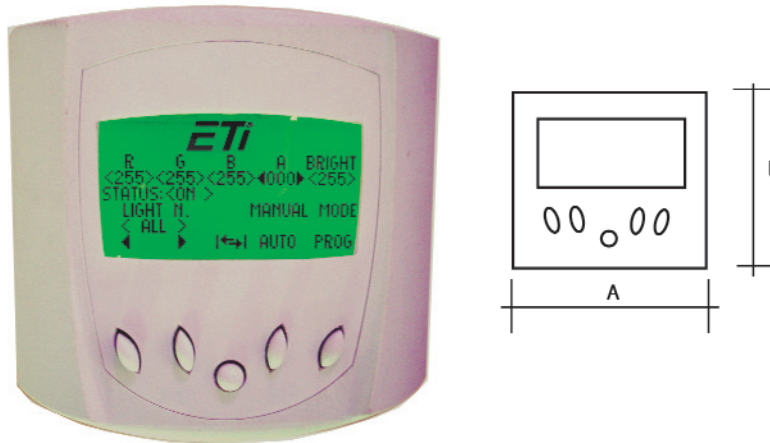
| Model | Input | Output | Dimensions A x B | oz. | Part Number |
|-------|--------|---------------|---------------------|---------|-------------|
| DMX1 | DMX512 | 3 X PWM 200Hz | 2.0" x 0.8" | 0.7 oz. | QT-DMX00000 |



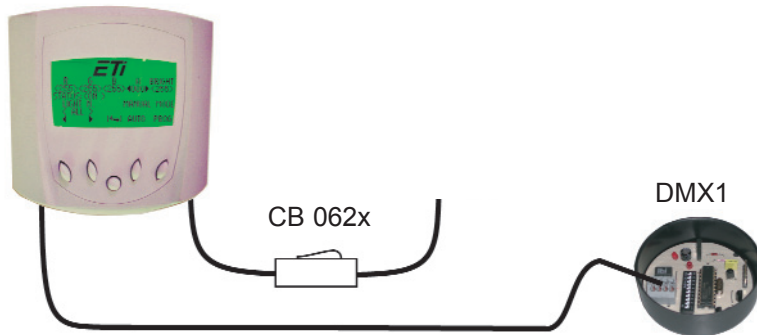
“DMXC” DMX Generator Controller

DMX generator controller for RGB systems for RGB and dimmable systems

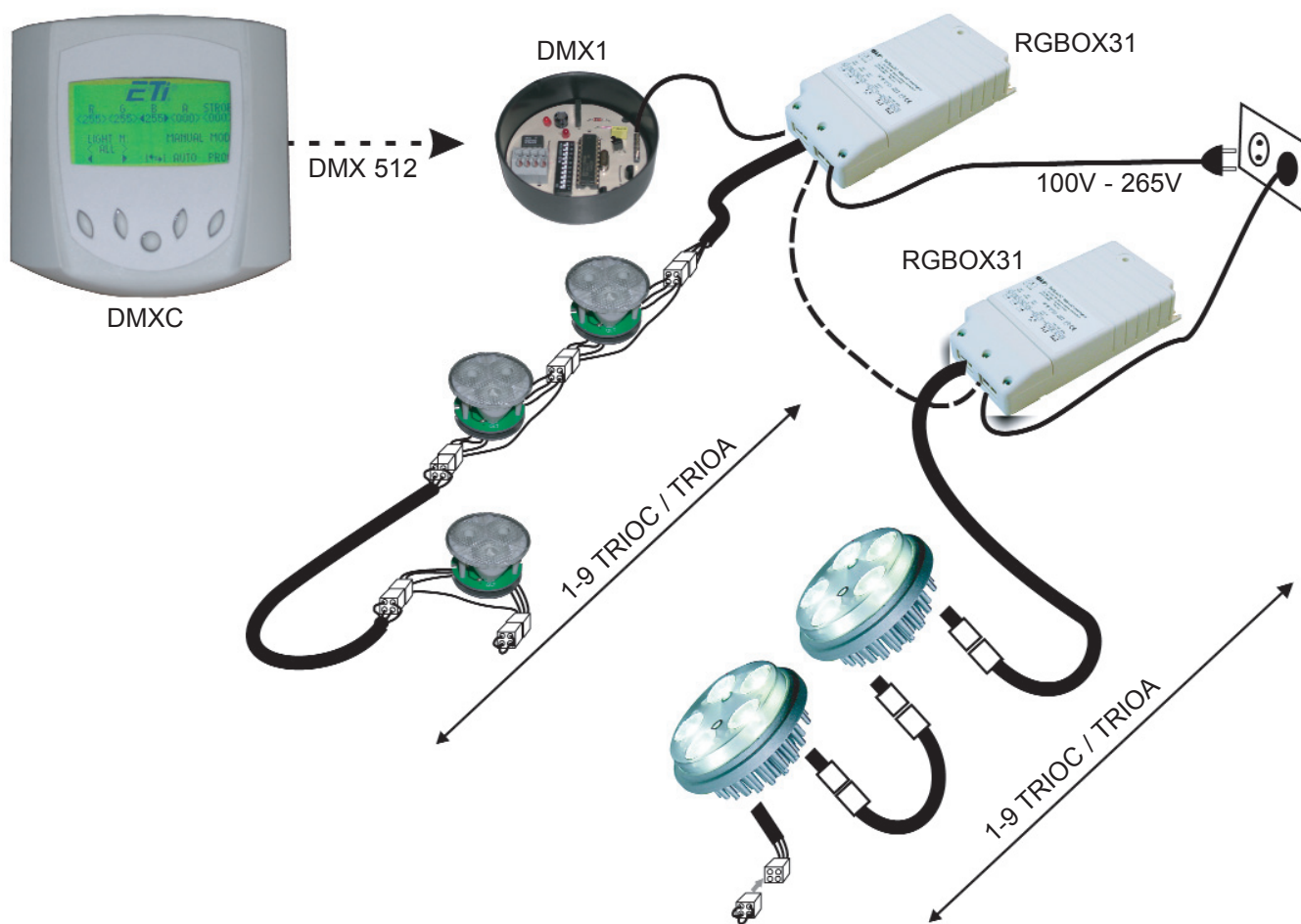
- DMX512 generator to control RGB systems
Fitted with PLP low-tension driver - IP20 - Insulation class II
- Suitable to control up to max. 6 independent DMX addresses.
- Green rear lighted LCD display - 128 x 64 - visualizing all levels and functions.
- Functioning in RGB manual mode or automatic mode through "scene program"
- Function modes available: on/off and dimmer of all channels contemporary



| Model | Input | Output | Dimensions A x B | oz. | Part Number |
|-------|--------|-------------|---------------------|---------|---------------|
| DMXC1 | DMX512 | 6ch 0 - 255 | 3.8" x 3.8" | 0.7 oz. | QT-DMXC100000 |



“DMX - RGB System” Kit Installation Example



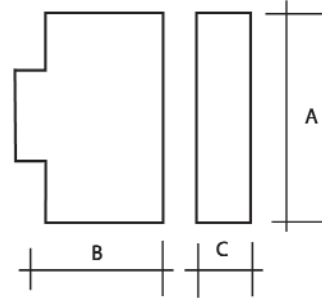
□DMX□ system

The scheme shows how to make High Brightness lighting systems with changeable light color. By using our "RGBOX31" driver, you can connect up to 9 TRIOColor spots or up to 2 U115RGB. As an alternative to TRIOColor spots, you can use TRIOAmbient spots. Parallel connection of max. 25 "RGBOX31" drivers can all be controlled by the DMX-PWM interface, type DMX1, and by the signal DMX512 produced by the DMXC general controller.

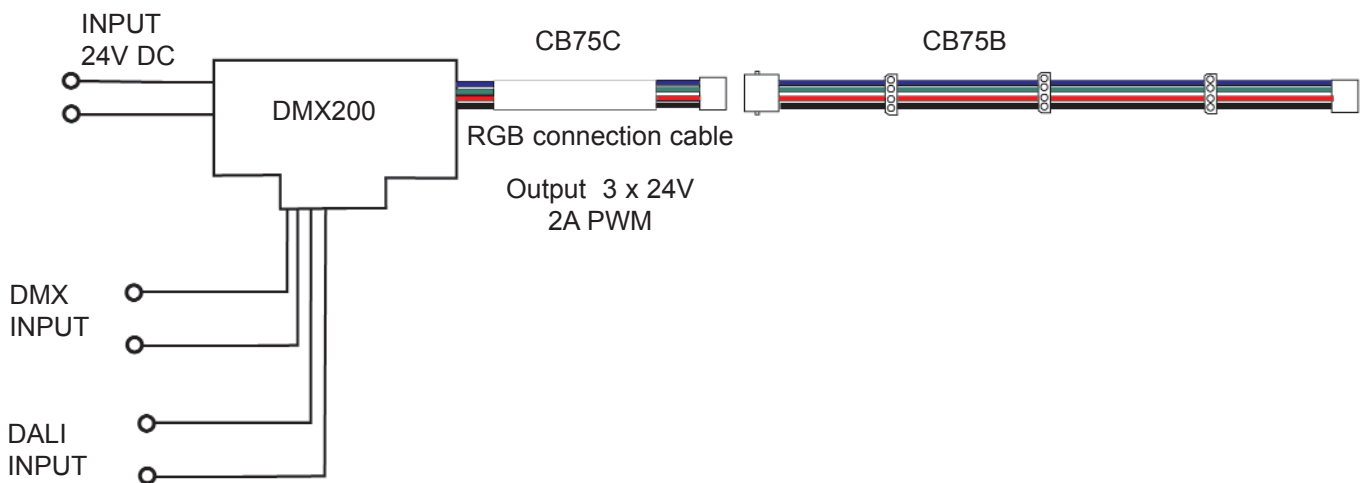
“DMX200” DMX - DALI Universal PWM Controller

DMX/DALI interface for 24V systems

- Protocol interface from DMX/DALI to PWM 24V
- Input: 24V DC - IP30 - Insulation class II
- DIP switches to select DMX address - Signal led inside
- Separate inputs for DALI and DMX
- High output current, max 2A by every channel. 150W in total.
- Possible connection with RGB STRIP, TRIOC-DC, U115RGB-DC.



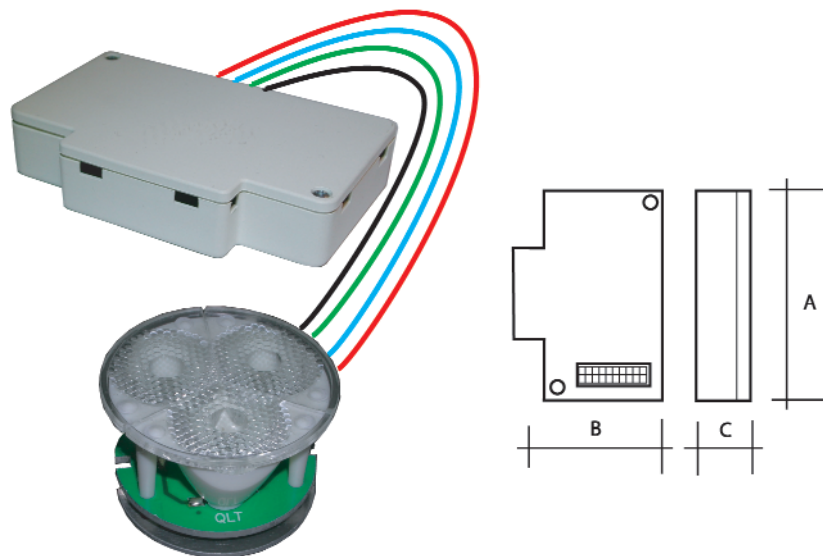
| Model | Input | Output | Dimensions A x B x C | oz. | Part Number |
|--------|---------------|---------------|-------------------------|---------|--------------|
| DMX200 | DMX512 / DALI | 3 x PWM 200Hz | 4.3" x 2.6" x 0.9" | 1.7 oz. | QT-DMX200000 |



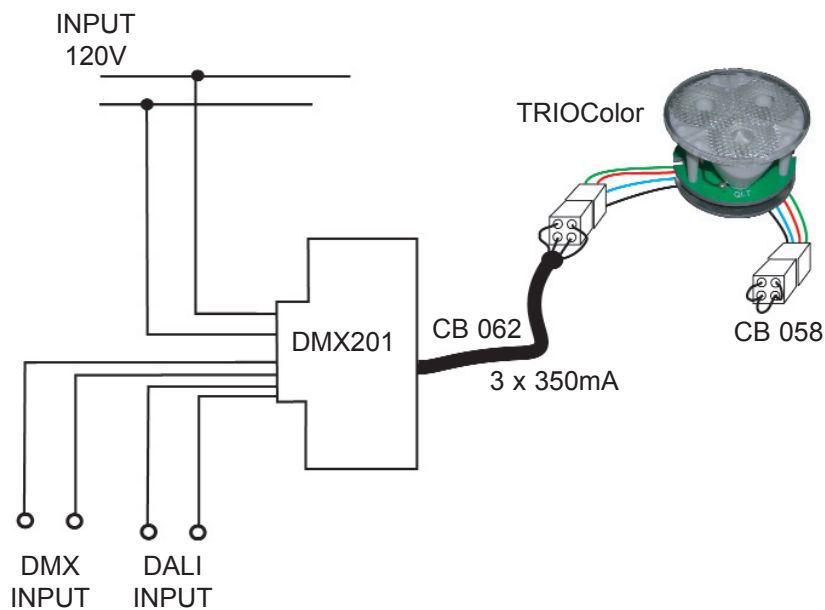
“DMX 201” DMX - DALI TRIColor Controller

DMX/DALI interface for 1 TRIOColor / Ambient

- Protocol interface from DMX/DALI to PWM 3 x 350mA
- Input: 90V/AC - 260V/AC - IP30 - Insulation class II
- DIP switches to select DMX address - Signalization led inside
- Separate inputs for DALI and DMX



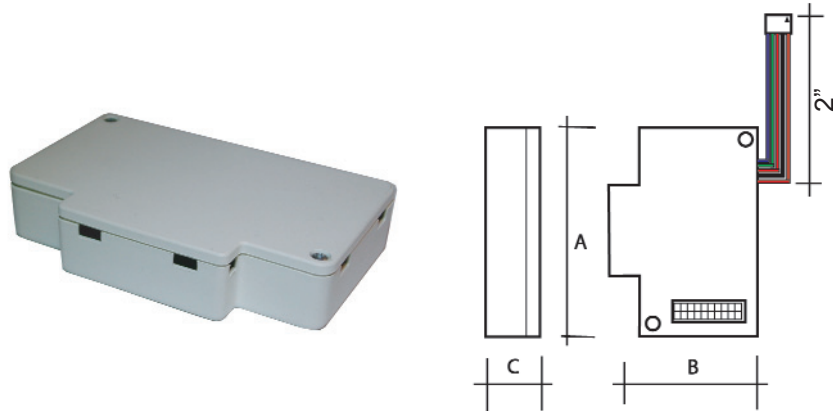
| Model | Input | Output | Dimensions A x B x C | oz. | Part Number |
|--------|---------------|-----------|-------------------------|---------|--------------|
| DMX201 | DMX512 / DALI | 3 x 350mA | 4.3" x 2.6" x .09" | 1.7 oz. | QT-DMX201000 |



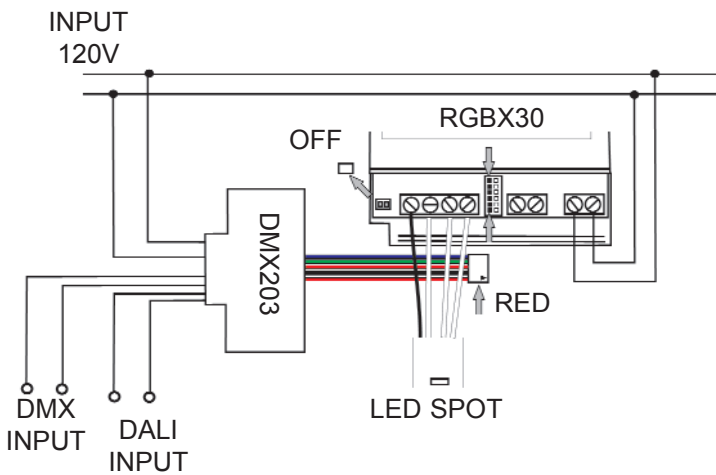
“DMX 203” DMX - DALI Universal Interface to PWM

DMX/DALI interface for RGB systems

- Protocol interface from DMX/DALI to PWM 5V
- Input: 90260V AC - 260V AC - IP30 - Insulation class II
- DIP switches to select DMX address - Signalization led inside
- Separate inputs for DALI and DMX
- Possible connection to our RGBOX31 (max. 50 devices).



| Model | Input | Output | Dimensions A x B x C | oz. | Part Number |
|--------|---------------|---------------|-------------------------|---------|--------------|
| DMX203 | DMX512 / DALI | 3 x PWM 200Hz | 4.3" x 2.8" x 0.9" | 1.7 oz. | QT-DMX203000 |



Color Magic System

This revolutionary system provides the ability to configure lighting systems with Power LEDs in a simple manner with a minimum number of components. Designed for professional lighting applications, this system is made up of one high power driver with PWM 24V output on the three RGPIO50 channels. The output voltage is transferred to the RGB spots through a 4pin buss cable. The small constant current converters are fitted directly along the buss cables. This allows the installation of different LED modules on the same control circuit. It is possible to add more RGPIO50 drivers to the installation of high power lighting systems. The color control can be carried out through one or more simple push buttons or a DMX1 interface. The RGPIO50 can be controlled by our remote control systems type IR1R or IR2.

Other application possibilities:

DMX2 interface

Push buttons

IR1R receiver or DMX signal with external 24V Driver.

IRC3 interface, connect the IR2R receiver with external 24V Driver.

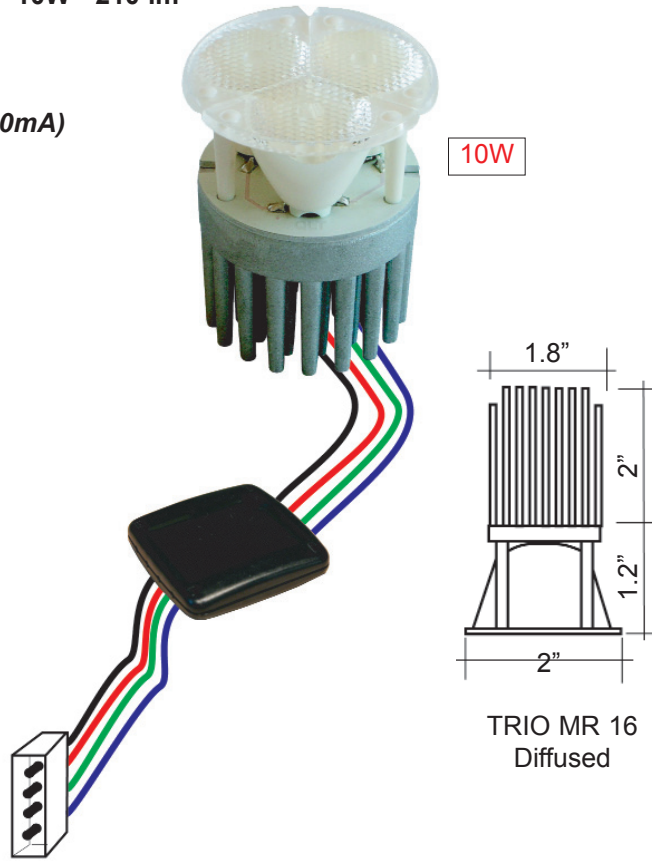
“TRIOPC-DC” RGB Power LED Spot

High Brightness LED spot - 12V - 24V - 10W - 210 lm

·Input: 12V/DC - 24V/DC PWM for RGB.

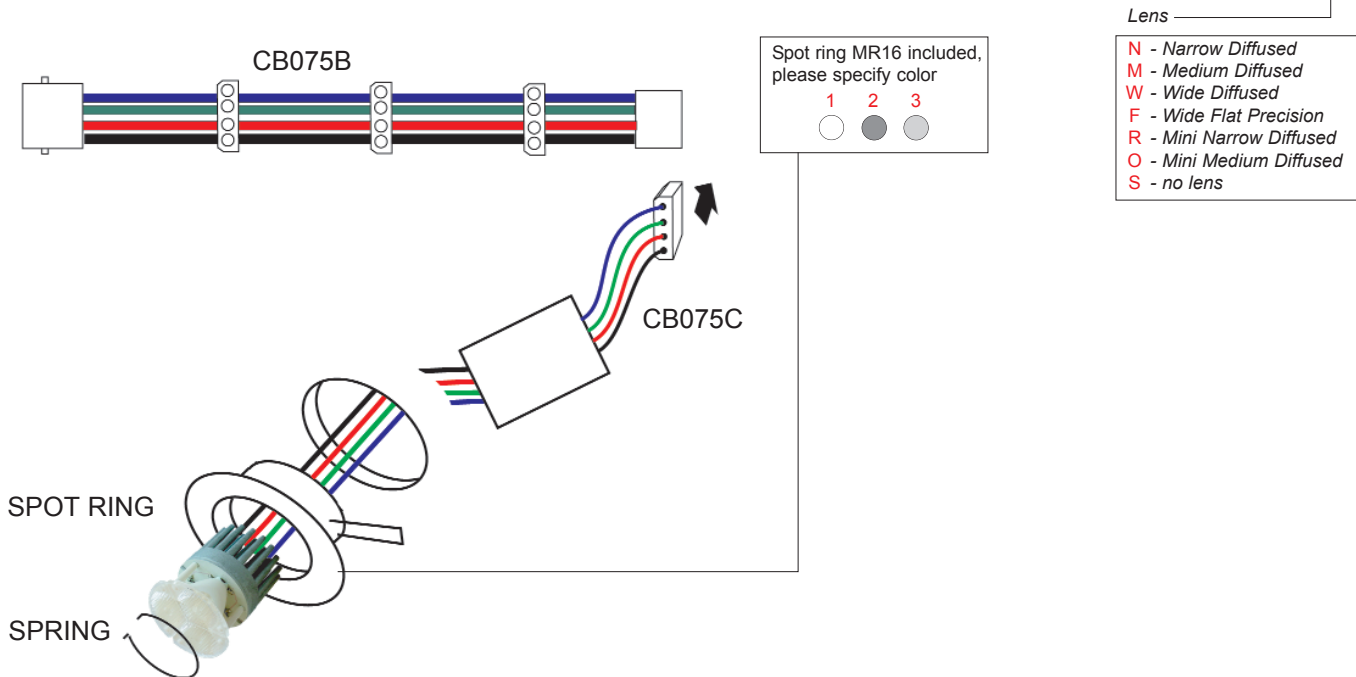
(converter included: type 3 x LVX, 350mA)

- Suitable for being built in standard Ø 2” MR16 downlights
- Supplied with 10” and 20” FEP leads and connector type CB075C.
- Lens degrees available:
narrow, medium and wide beam



TRIO MR 16
Diffused

| Model | W Equivalent Power | Lumen Type | Lux @1m (cd) | | | | V (typ.) | W (typ.) | Part Number |
|---------|--------------------|------------|--------------|--------|------|---------|-----------|----------|---------------------------|
| | | | Narrow | Medium | Wide | No Lens | | | |
| TRIO PC | 16 | 210 | - | 1200 | 420 | 75 | 12V / 24V | 10W | QT-TRIOPC X DC |



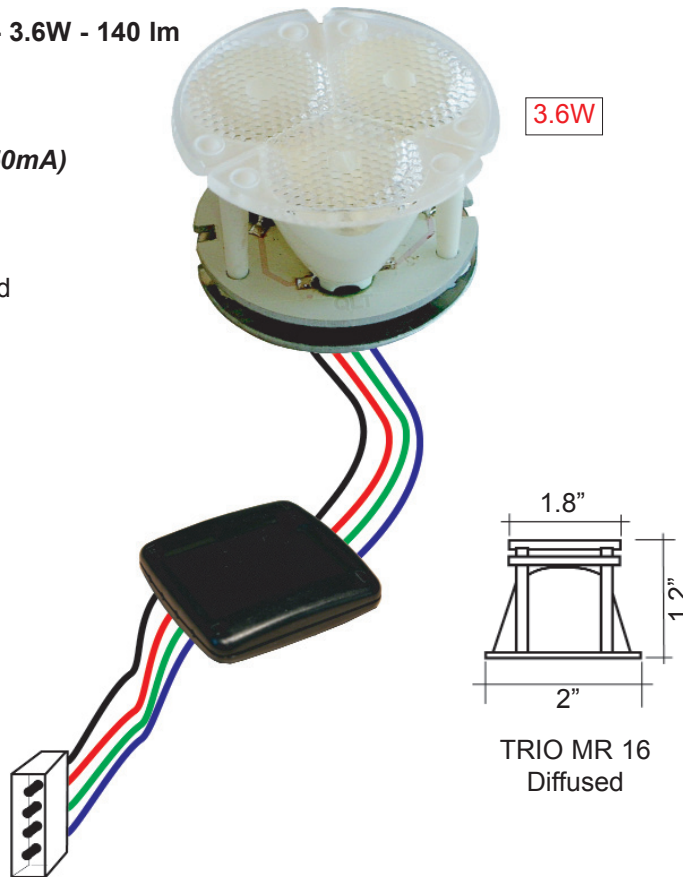
“TRIOC-DC” RGB Power LED Spot

High Brightness LED spot - 12V - 24V - 3.6W - 140 lm

·Input: 12V/DC 24V/DC PWM for RGB

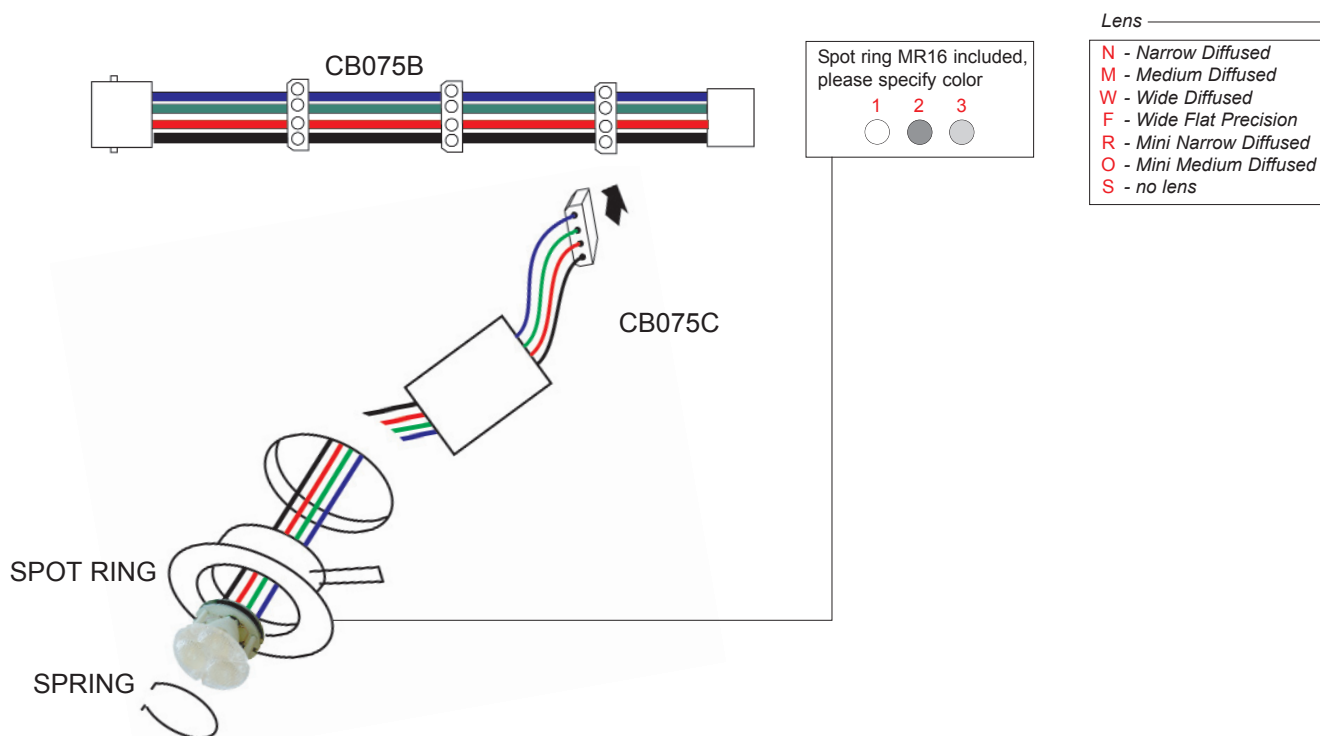
(converter included: type 3 x LVX, 350mA)

- Suitable for being built in standard Ø 2” MR16 downlights
- Supplied with 10” and 20” FEP leads and connector type CB075C.
- Lens degrees available: narrow, medium and wide beam



TRIO MR 16
Diffused

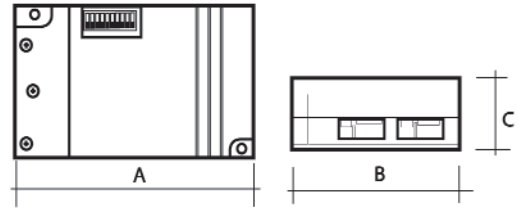
| Model | W Equivalent Power | Lumen Type | Lux @1m (cd) | | | | V (typ.) | W (typ.) | Part Number |
|----------|--------------------|------------|--------------|--------|------|---------|-----------|----------|--------------|
| | | | Narrow | Medium | Wide | No Lens | | | |
| TRIOC DC | 5 | 140 | - | 400 | 140 | 25 | 12V / 24V | 3.6W | QT-TRIOCDGX0 |



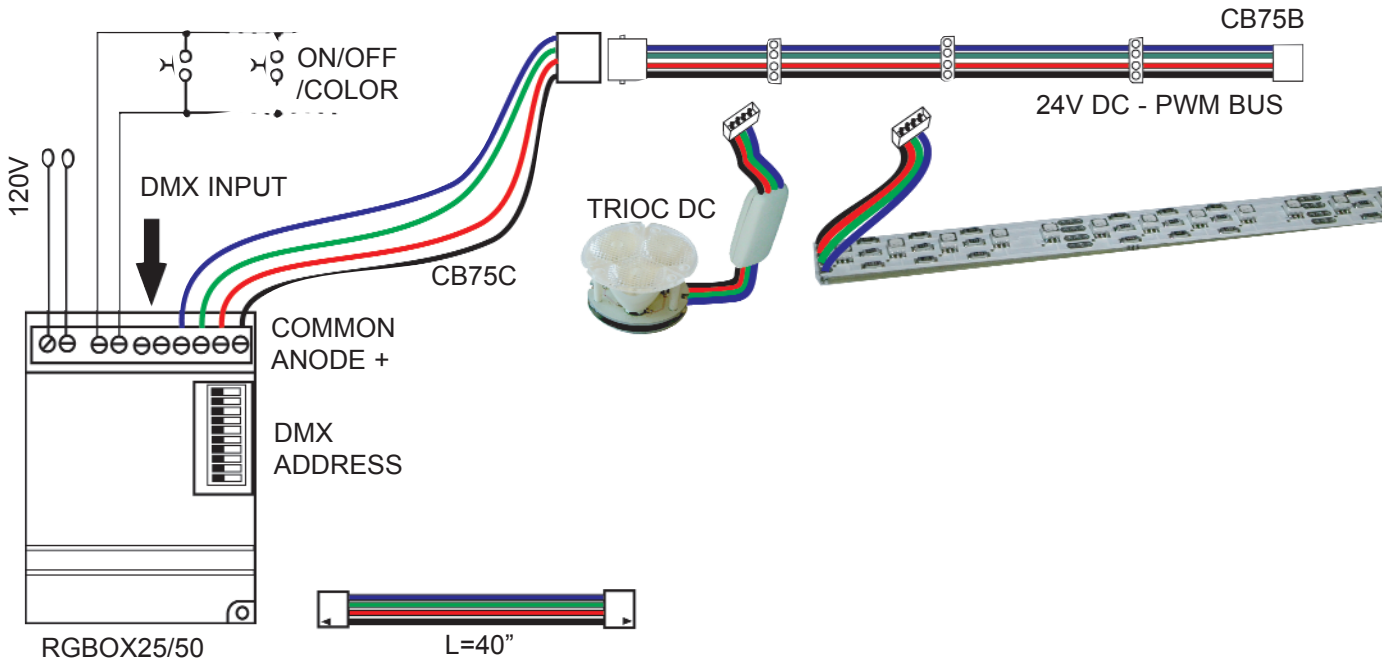
“R G B O X” with DMX push-button input RGB Power LED Converter

Converters for High Brightness LEDs in “R G B” systems

- Independent converter - IP40 - Insulation class II
- Light control: on off and color regulation by one or more button pushes
- DMX input with self-test function and LED signal
- Suitable for 24V RGB systems, constant voltage output 3 x 24V PWM
- Parallel connection for max. 15 "R G B o x" controlled by the same (or more) push-buttons
- Input voltage: 100V/AC - 265V/AC Steady output



| Model | V max | Output | | Dimensions | | | oz. | Part Number |
|----------|-------|--------|-------|--------------------|---|---|-------|-------------|
| | | PWM | I max | A | B | C | | |
| RGBOX 50 | 24V | 200Hz | 350mA | 5.8" x 3.0" x 1.5" | | | 7 oz. | QT-LVL0000N |



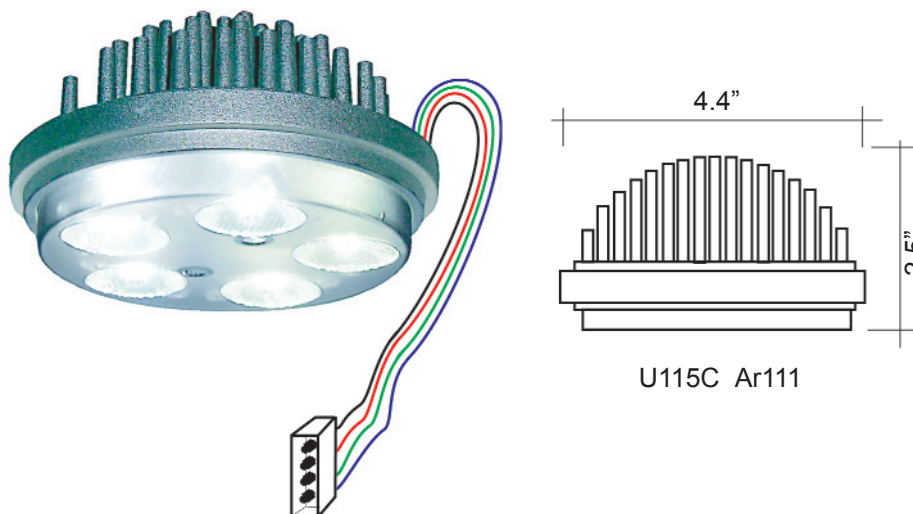
“U115-DC” RGB Power LED Spot

High Brightness LED spot 24V - 17W - 350 lm

·Input: 24V /DC PWM for RGB.

(converter included: type 3 x LVX, 350mA)

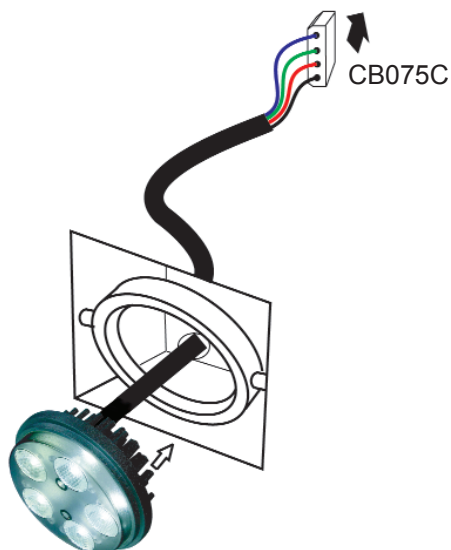
- Suitable for being built in standard AR111 downlights, Ø 2.8”
- Delivered with 10” and 20” leads and connector type CB075C
- Fitted with 5 x Tricolor Leds (3 x 1W each)



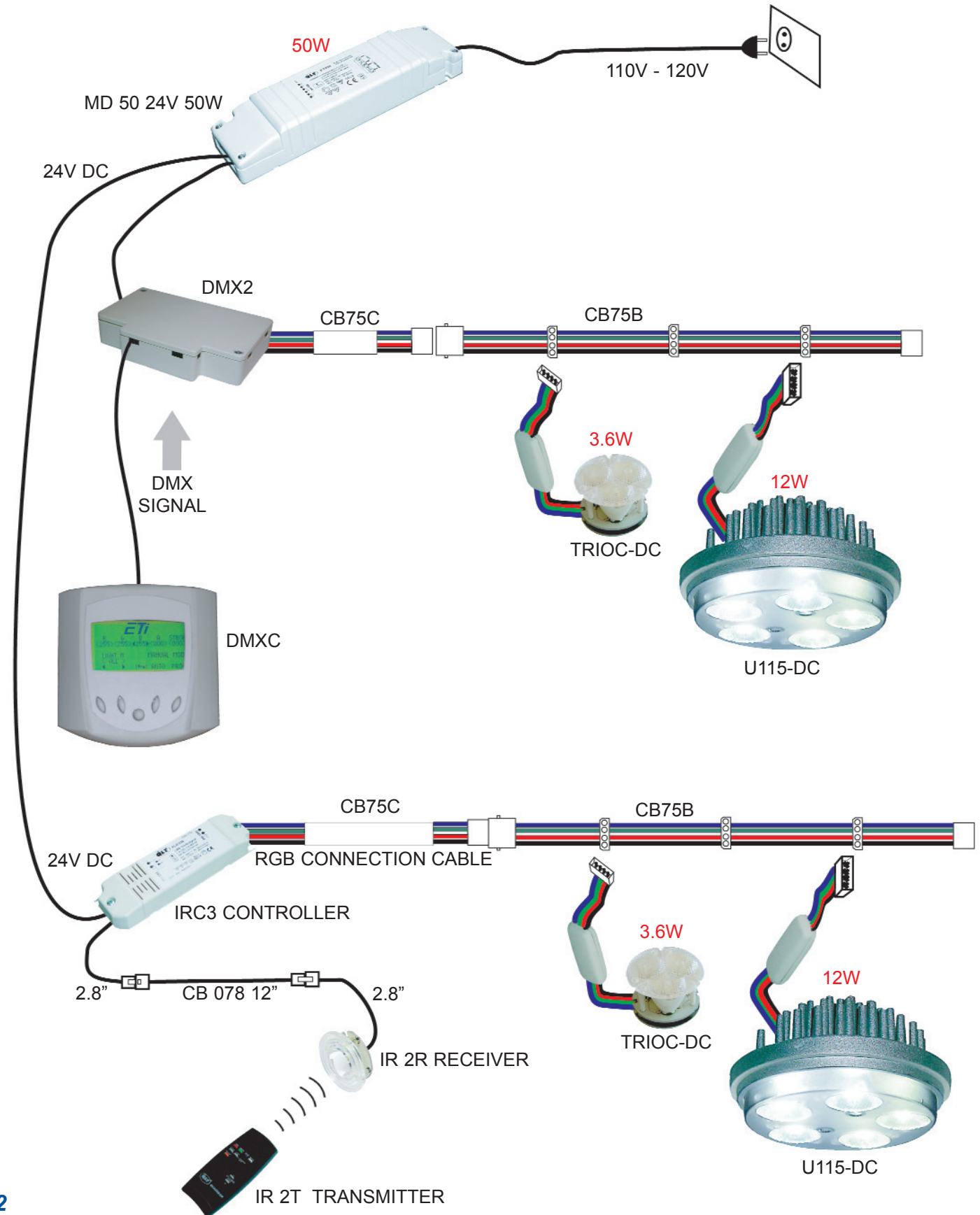
| Model | W Equivalent Power | Lumen Type | Lux @1m (cd) | | | | V (typ.) | W (typ.) | Part Number |
|----------|--------------------|------------|--------------|--------|------|--------|----------|----------|---------------------------|
| | | | Narrow | Medium | Wide | NoLens | | | |
| U115C-DC | 25 | 350 | - | 620 | 400 | - | 12V | 17W | QT-U115C X 0DC |



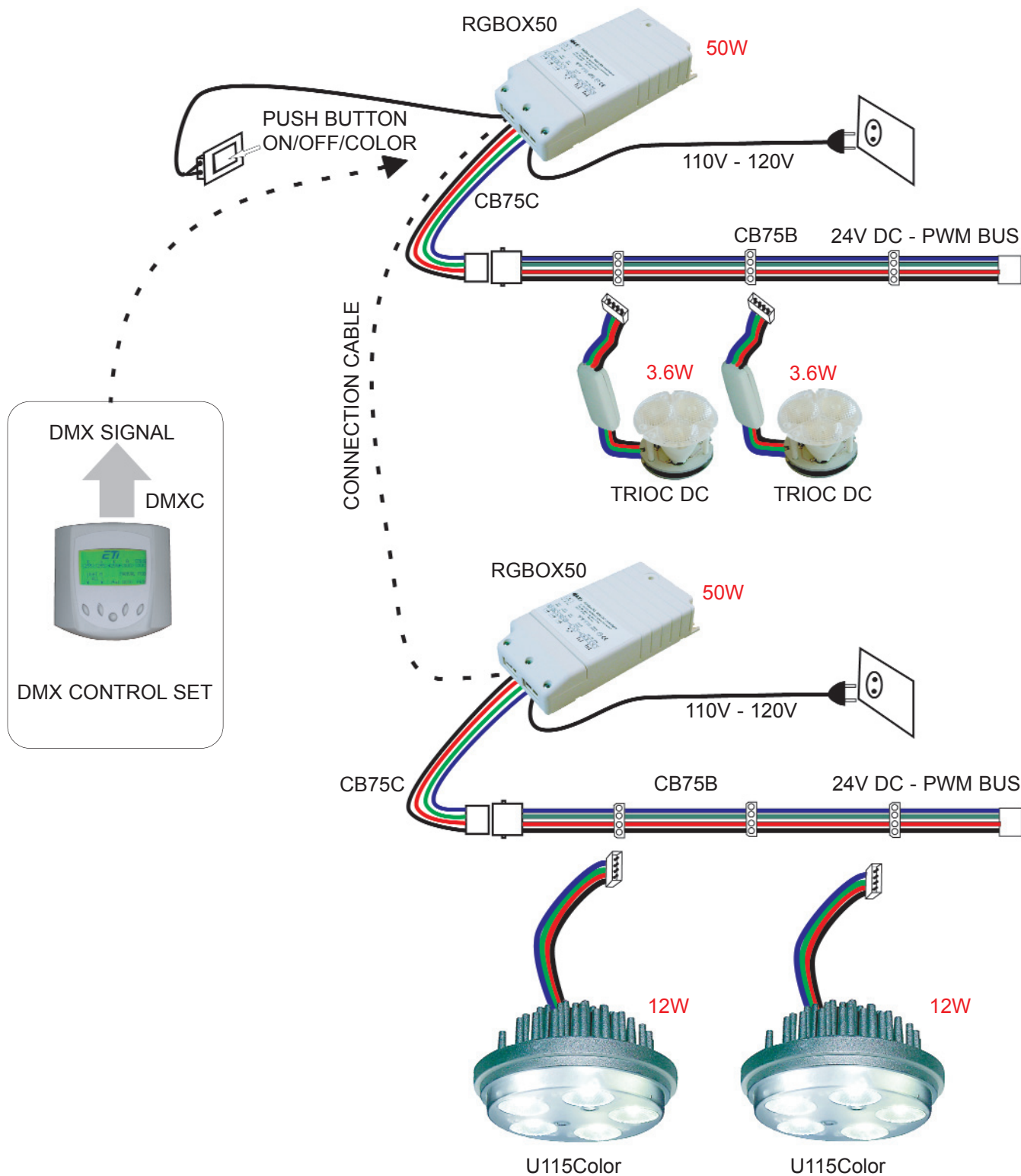
- Lens
- N - Narrow Diffused
 - M - Medium Diffused
 - W - Wide Diffused
 - F - Wide Flat Precision
 - R - Mini Narrow Diffused
 - O - Mini Medium Diffused
 - S - no lens



“Magic System RGB” Kit Installation Example



“Magic System RGB” RGPIO 50 Kit Installation Example



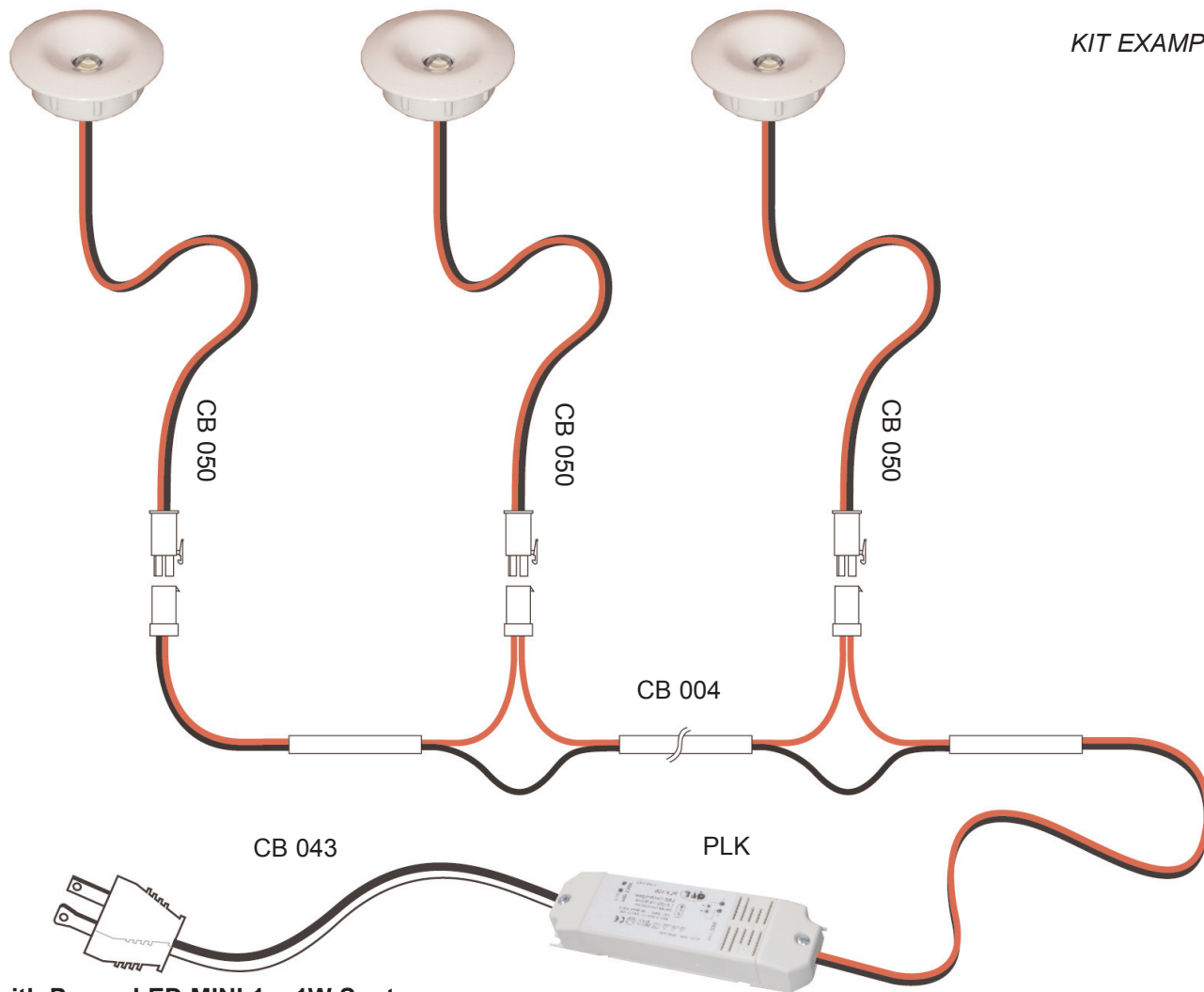
Power LED Kits

Kit with Power LED MINI 1 x 1W Spots

- The kit arrives supplied with installation instructions and a LED driver fitted with suitable primary and secondary cables.
- LED applications available in white color. On request other LED colors.

“MINI” Power LED Kit

KIT EXAMPLE



Kit with Power LED MINI 1 x 1W Spots

- The kit is supplied with installation instructions and the LED driver fitted with suitable primary and secondary cables.
- LED applications available in white color.

(Other LED colors available on request)

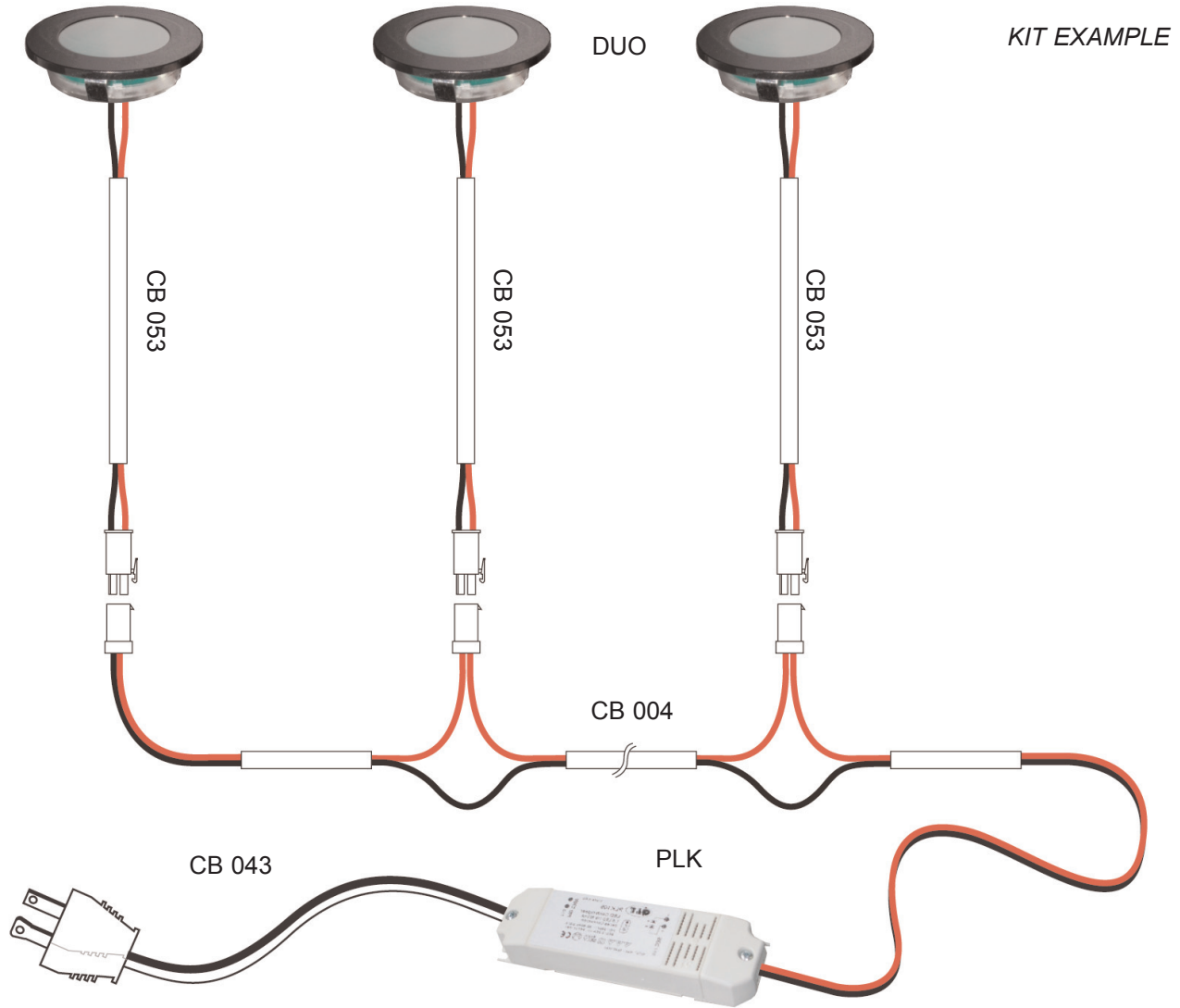
| Model | LED N° mod | Cables | | Converter | Box | | | Part Number |
|---------|------------|--------|------------|-----------|--------------------|---|---|--------------|
| | | Input | Output | | A | B | C | |
| K2MINI | 2 x MINI | CB 004 | CB 042 | PLK106 | 6.7" x 4.5" x 3.1" | | | QT-K2MINIPLX |
| K3MINI | 3 x MINI | CB 004 | CB 043 | PLK106 | 6.7" x 4.5" x 3.1" | | | QT-K3MINIPLX |
| K5MINI | 5 x MINI | CB 004 | CB 065 | PLK106 | 6.7" x 4.5" x 3.1" | | | QT-K5MINIPLX |
| K9MINI | 9 x MINI | CB 004 | CB 067 | PLK110 | 6.7" x 4.5" x 3.1" | | | QT-K9MINIPLX |
| K27MINI | 27 x MINI | CB 004 | 3 x CB 067 | PBOX31 | 7.9" x 6.5" x 4.5" | | | QT-K27MINXXB |

Plastic cover included,
please specify color

1 2 3 4

○ ● ● ●

“DUO” Power LED Kit



Kit with Power LED DUO 2 x 1 W Spots

- The kit is supplied with installation instructions and the LED driver fitted with suitable primary and secondary cables.
- LED applications available in white color.

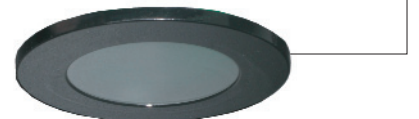
(Other LED colors available on request)

| Model | LED N° mod | Cables | | Converter | Box | | | Part Number |
|-------|------------|--------|--------|-----------|--------------------|---|---|--------------|
| | | Input | Output | | A | B | C | |
| K2DUO | 2 x DUO | CB 004 | CB 042 | PLK106 | 6.7" x 4.5" x 3.1" | | | QT-K2DUOPL0X |
| K3DUO | 3 x DUO | CB 004 | CB 043 | PLK110 | 6.7" x 4.5" x 3.1" | | | QT-K3DUOPL0X |

Ring face plate included,
please specify color

1 2 3 4 5

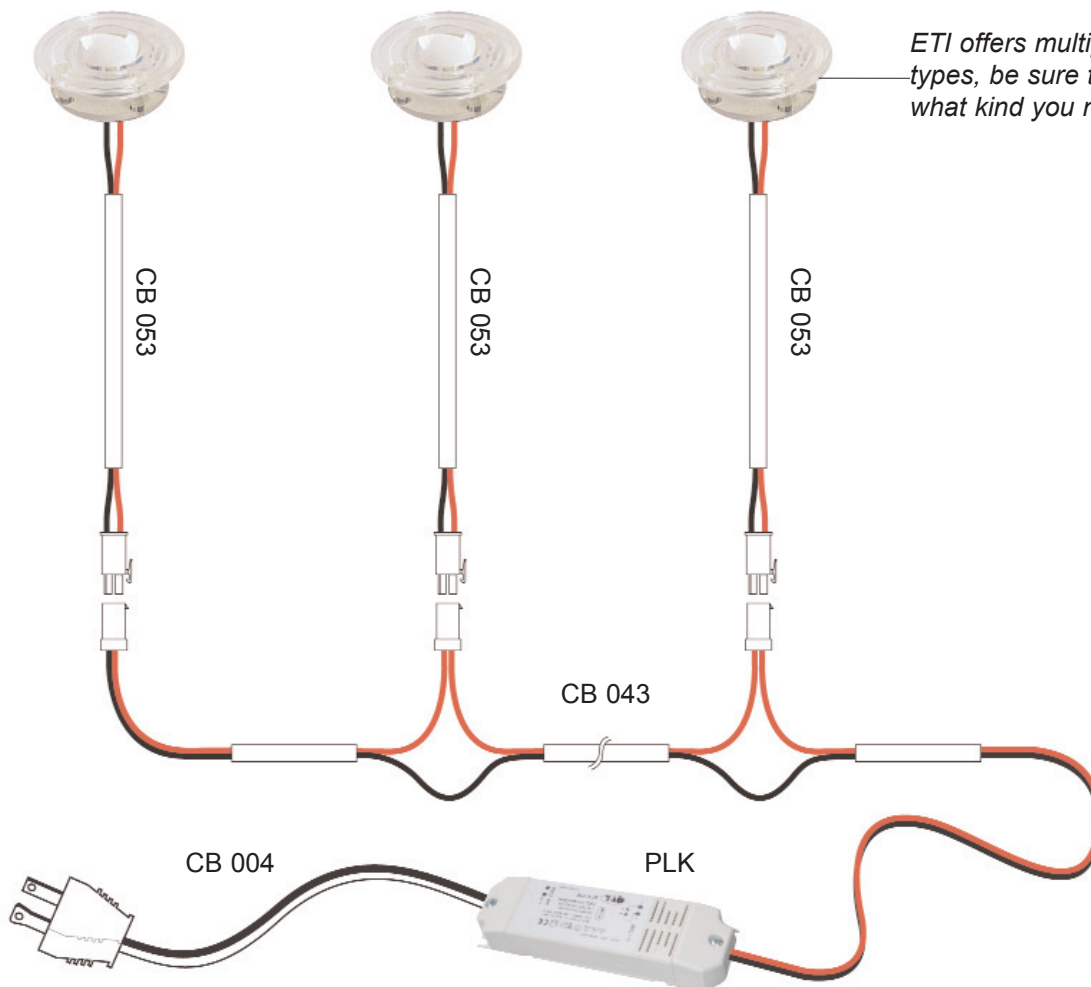
○ ● ● ● ●



“MONO” Power LED Kit

KIT EXAMPLE

ETI offers multiple lens types, be sure to specify what kind you need.



Kit with Power LED MONO 1 x 1W Spots

- The kit is supplied with installation instructions and the LED driver fitted with suitable primary and secondary cables.
- LED applications available in white color.

(Other LED colors available on request)

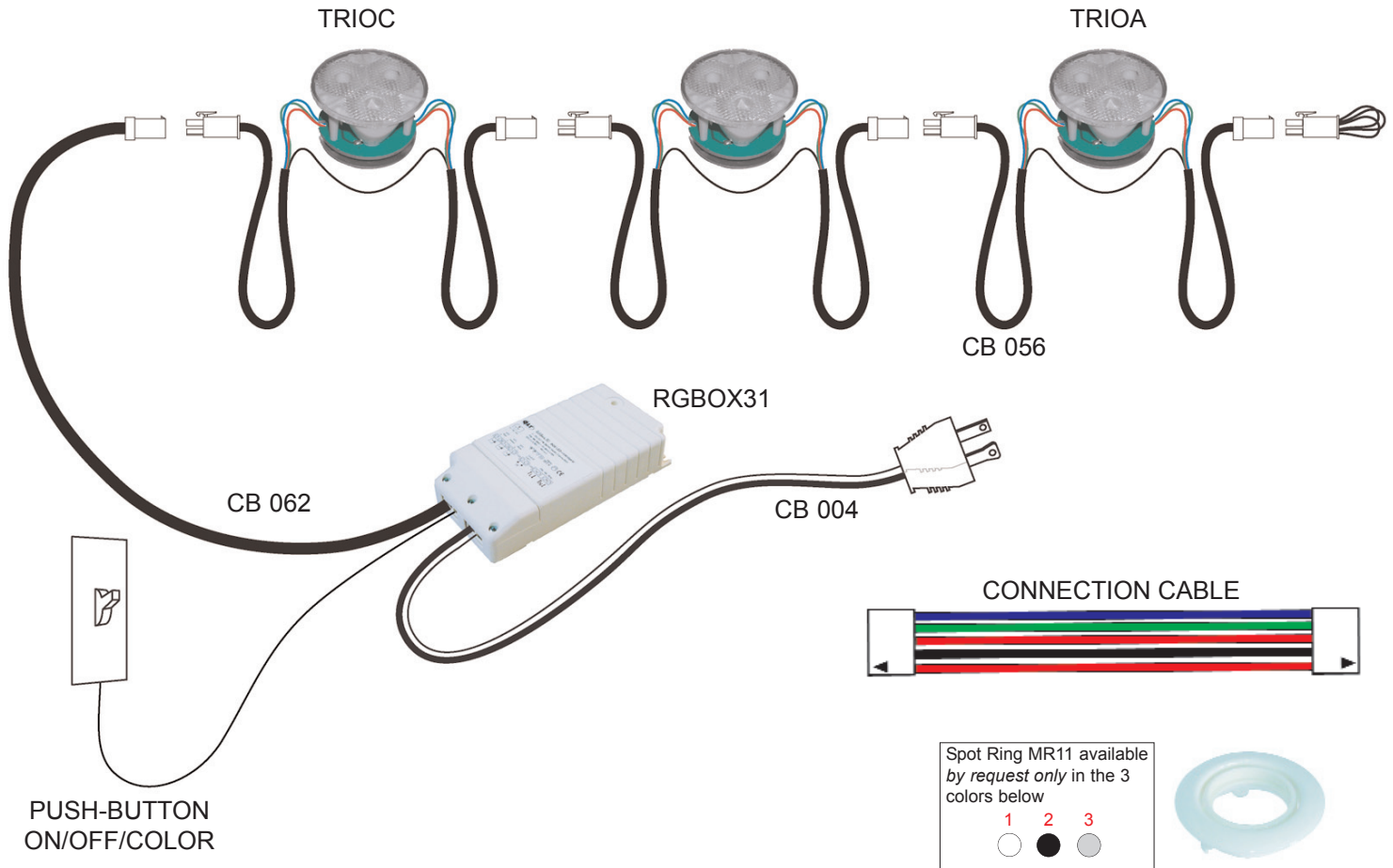
| Model | LED N° mod | Cables | | Converter | Box | | | Part Number |
|--------|------------|--------|--------|-----------|--------------------|---|---|--------------|
| | | Input | Output | | A | B | C | |
| K1MONO | 1 x MONO | CB 004 | CB 019 | PLK106 | 6.7" x 4.5" x 3.1" | | | QT-K1MONOPLX |
| K2MONO | 2 x MONO | CB 004 | CB 042 | PLK106 | 6.7" x 4.5" x 3.1" | | | QT-K2MONOPLX |
| K3MONO | 3 x MONO | CB 004 | CB 043 | PLK106 | 6.7" x 4.5" x 3.1" | | | QT-K3MONOPLX |
| K5MONO | 5 x MONO | CB 004 | CB 065 | PLK106 | 6.7" x 4.5" x 3.1" | | | QT-K5MONOPLX |
| K6MONO | 6 x MONO | CB 004 | CB 071 | PLK110 | 7.9" x 6.5" x 4.5" | | | QT-K6MONOPLX |
| K9MONO | 9 x MONO | CB 004 | CB 067 | PLK110 | 7.9" x 6.5" x 4.5" | | | QT-K9MONOPLX |

Spot Ring MR11 included, please specify color



“RGB & Natural Light” Power LED Kit

KIT EXAMPLE



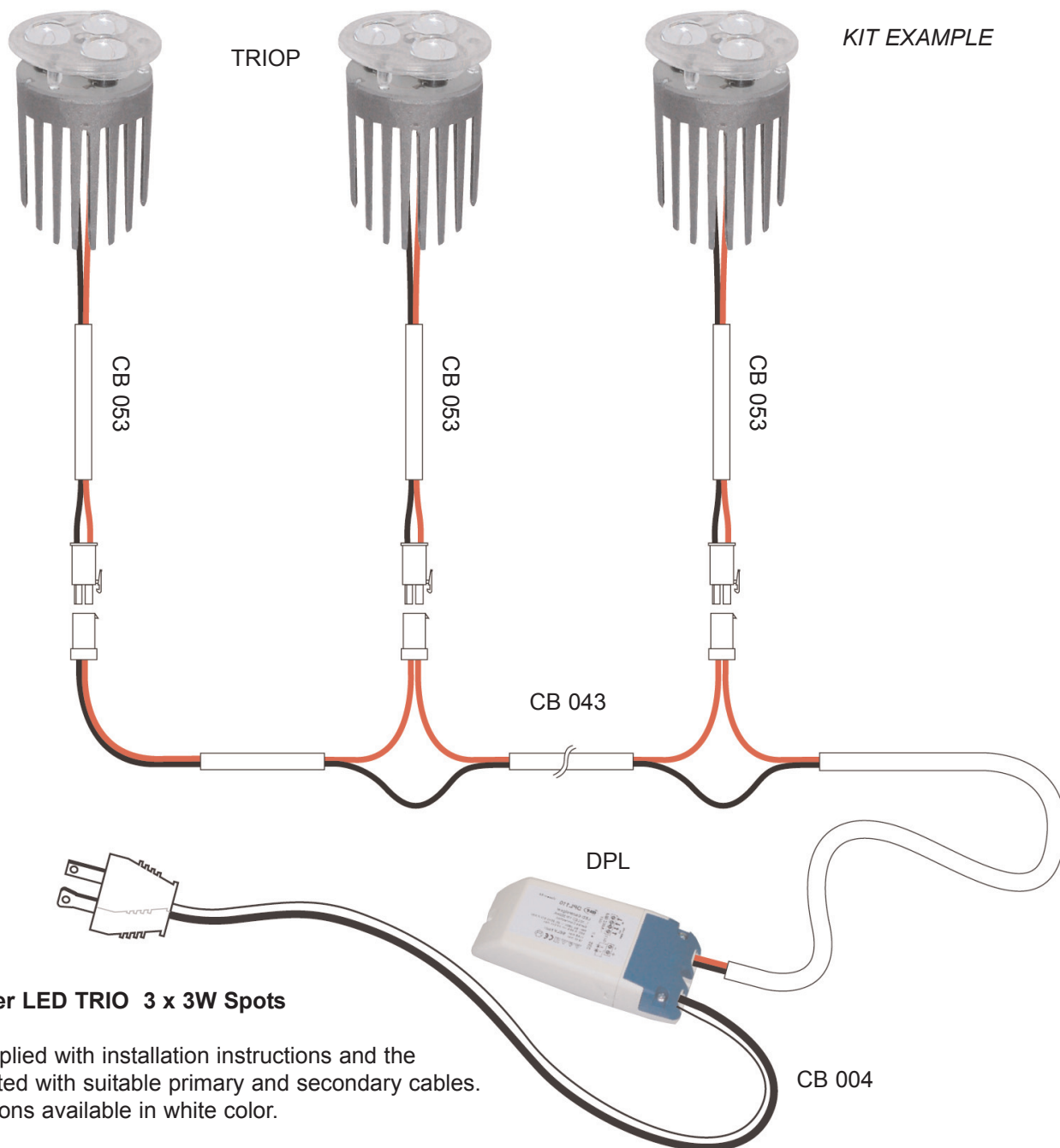
Kit RGB-Natural Light - High Brightness LED spots

- The kit is supplied with installation instructions and the LED driver fitted with suitable primary and secondary cables.
- push-button color control, on/off, dimming and memory.

(MR 16 plastic ring available on request)

| Model | LED N° mod | Cables | | Converter | Box | | | Part Number |
|---------|------------|-----------------|------------|-----------|--------------------|---|---|--------------|
| | | Input | Output | | A | B | C | |
| KRBOX | | CB 004 + CB 062 | | RBOX31 | 7.9" x 6.5" x 4.5" | | | QT-KRBOX31B |
| K3TRIOC | 3 x TRIOC | CB 004 + CB 062 | 3 x CB 056 | RBOX31 | 12" x 7.6" x 4.5" | | | QT-K03TRICRG |
| K6TRIOC | 6 x TRIOC | CB 004 + CB 062 | 6 x CB 056 | RBOX31 | 12" x 10.2" x 4.5" | | | QT-K06TRICRG |
| K9TRIOC | 9 x TRIOC | CB 004 + CB 062 | 9 x CB 056 | RBOX31 | 12" x 10.2" x 4.5" | | | QT-K09TRICRG |
| K3TRIOA | 3 x TRIOA | CB 004 + CB 062 | 3 x CB 056 | RBOX31 | 12" x 7.6" x 4.5" | | | QT-K03TRIARG |
| K6TRIOA | 6 x TRIOA | CB 004 + CB 062 | 6 x CB 056 | RBOX31 | 12" x 10.2" x 4.5" | | | QT-K06TRIARG |
| K9TRIOA | 9 x TRIOA | CB 004 + CB 062 | 9 x CB 056 | RBOX31 | 12" x 10.2" x 4.5" | | | QT-K09TRIARG |

“TRIOP” Power LED Kit



Kit with Power LED TRIO 3 x 3W Spots

- The kit is supplied with installation instructions and the LED driver fitted with suitable primary and secondary cables.
- LED applications available in white color.

(Other LED colors available on request)

| Model | LED N° mod | Cables | | Converter | Box | | | Part Number |
|---------|------------|--------|--------|-----------|--------------------|---|---|--------------------------|
| | | Input | Output | | A | B | C | |
| K1TRIOP | 1 x TRIOP | CB 004 | CB 019 | DPL304 | 6.6" x 4.5" x 3.1" | | | QT-K1TRIOPD X |
| K2TRIOP | 2 x TRIOP | CB 004 | CB 042 | PD309 | 6.6" x 4.5" x 3.1" | | | QT-K2TRIOPD X |
| K3TRIOP | 3 x TRIOP | CB 004 | CB 043 | PD309 | 7.8" x 6.5" x 4.5" | | | QT-K3TRIOPD X |

Spot Ring MR11 included, please specify color



“U115” Power LED Kit

KIT EXAMPLE



Kit with Power Led U115 Spots

- The kit is supplied with installation instructions and the LED driver fitted with suitable primary and secondary cables.
- LED applications available in white color.

(Other LED colors available on request)

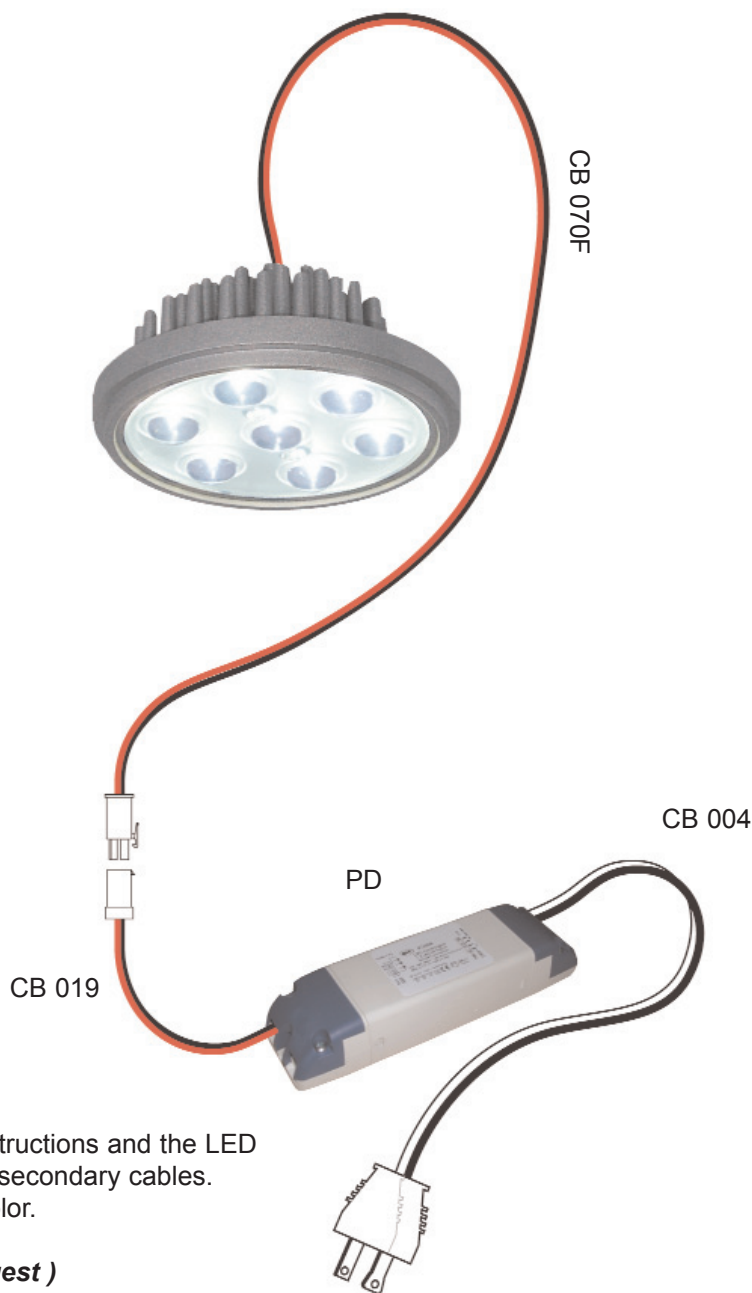
| Model | LED N° mod | Cables | | Converter | Box | | | Part Number |
|---------|--------------------|--------|--------|-----------|--------------------|---|---|--------------------------|
| | | Input | Output | | A | B | C | |
| K1U115P | 1 x U115P - 5 x 3W | CB 004 | CB 019 | PD 309 | 8.9" x 7.9" x 2.6" | | | QT-K1U15PPD X |
| K1U115L | 1 x U115L - 5 x 1W | CB 004 | CB 019 | DPL110 | 8.9" x 7.9" x 2.6" | | | QT-K1U15LDP X |

Spot ring AR111 included,
please specify color



“U111” Power LED Kit

KIT EXAMPLE



Kit with Power LED U111 Spots

- The kit is supplied with installation instructions and the LED driver fitted with suitable primary and secondary cables.
- LED applications available in white color.

(Other LED colors available on request)

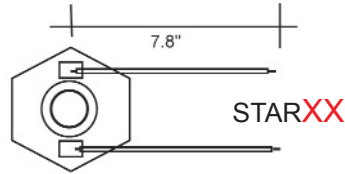
| Model | LED N° mod | Cables | | Converter | Box | | | Part Number |
|--------|---------------|--------|--------|-----------|--------------------|---|---|--------------|
| | | Input | Output | | A | B | C | |
| K2MINI | 2 x MINI | CB 004 | CB 042 | PLK106 | 2.0" x 1.5" x 0.8" | | | QT-K2MINIPLX |
| K2MINI | 2 x MINI | CB 004 | CB 042 | PLK106 | 2.0" x 1.5" x 0.8" | | | QT-K2MINIPLX |
| K2MINI | 2 x MINI | CB 004 | CB 042 | PLK106 | 2.0" x 1.5" x 0.8" | | | QT-K2MINIPLX |



Components and Accessories

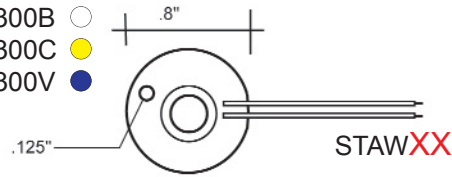
LED 350/700mA

- | | | | |
|---------------|---|--------------|---|
| QT-LXHLMW1DB | ○ | QT-LXHLLW3C0 | ○ |
| QT-LXHLMW1DB | ● | QT-LXHLLR3C0 | ● |
| QT-LXHLMRRDC | ● | QT-LXHLLM3C0 | ● |
| QT-LXHLMMD1DR | ● | | |
| QT-LXHLMMD1DV | ● | | |
| QT-LXHLMML1DA | ● | | |



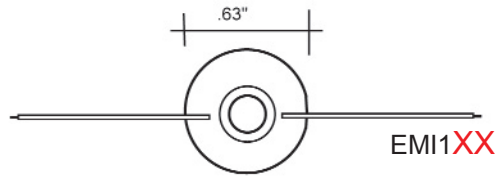
LED 350/700mA

- | | | | |
|--------------|---|--------------|---|
| QT-STAWPW00B | ○ | QT-STAWP300B | ○ |
| QT-STAWPW00W | ● | QT-STAWP300C | ● |
| QT-STAWPW00C | ● | QT-STAWP300V | ● |
| QT-STAWPW00R | ● | | |
| QT-STAWPW00V | ● | | |
| QT-STAWPW00A | ● | | |



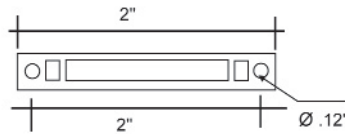
LED 350mA

- | | |
|--------------|---|
| QT-EMI1W000B | ○ |
| QT-EMI1W00WW | ● |
| QT-EMI1W000C | ● |
| QT-EMI1W000R | ● |
| QT-EMI1W000V | ● |
| QT-EMI1W000A | ● |



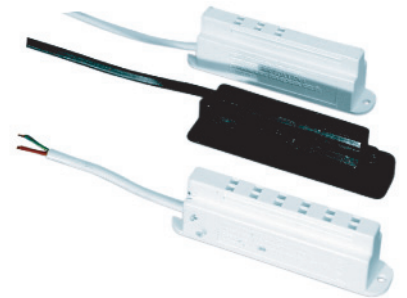
LED 350/500mA

- | | |
|--------------|---|
| QT-CL1000000 | ○ |
| QT-CL10000WW | ● |



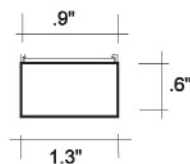
CL 100

- | | | |
|-------------|---------------------------------|--------------------|
| QT-0300000B | Mini AMP 3 connector with 19.7" | 2 x .25" PVC White |
| QT-0330000N | Mini AMP 3 connector with 19.7" | 2 x .25" PVC Black |
| QT-0400000B | Mini AMP 6 connector with 19.7" | 2 x .25" PVC White |
| QT-0130000N | Mini AMP 6 connector with 19.7" | 2 x .25" PVC Black |



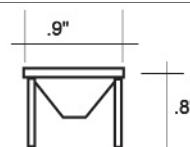
Components and Accessories

QT-00LECOILN 10°
 QT-00LECOILM 25°
 QT-00LECOILW 40°
 QT-00LECOILQ 90 x 15°
 QT-0FTSLLH00 Holder Round



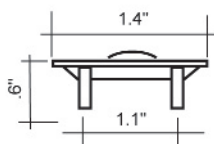
LECOIL + HOLDER LECOILX

QT-LPHNB3L1H 12°
 QT-LPHMB3L1H 30°
 QT-LPHNB3L10 12°
 QT-LPHMB3L10 30°



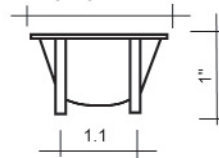
LELPHX LEFRAX

QT-FHSHNB11H 8° - 12°
 QT-FHSHMB11H 25° - 30°
 QT-FHSHWB11H 40° - 45°
 QT-FHSHNBM11 8° - 12°
 QT-FHSHMBM11 25° - 30°
 QT-FHSHWBM11 40° - 45°
 QT-LEMONFW00 40° - 45°



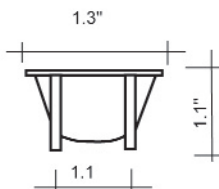
LEMONF MR 11

MONO 1 1.3"
 MONO 2 1.4"



LEMON1

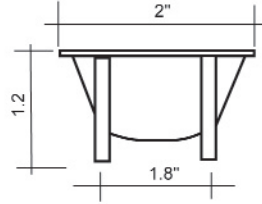
QT-00LETRIXM 25° - 30°
 QT-00LETRIXW 40° - 45°



LETRIX MR 11

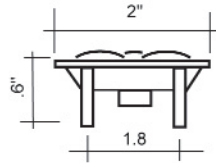
Cables & Connectors

QT-FT3HNB11H 8° - 12°
 QT-FTSHMB11H 25° - 30°
 QT-FT3HWB11H 40° - 45°



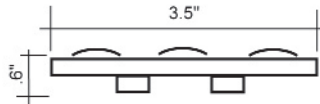
LETRIOX MR 16

QT-LENTRIOFR 40° - 45°



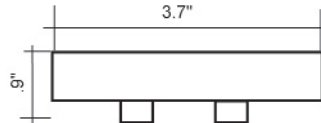
LETRIFX MR 16

QT-LEAR11112 7 x 12°
 QT-LEAR11125 7 x 25°
 QT-LEAR11130 7 x 30°
 QT-LEAR11140 7 x 40°



AR111XX

QT-U115N0000 5 x 12°
 QT-U115M0000 5 x 30°
 QT-U115W0000 5 x 45°



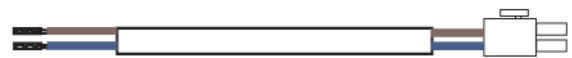
LEU115X

Polarity : Always respect the cable polarity. **Red or brown** cable = positive (+); **black or blue** = negative (-)

| | | | | |
|--------------|-----|------|-------|-------------|
| QT-050F00000 | FEP | .01" | 11.8" | Red /Black |
| QT-070F00000 | FEP | .01" | 39" | Red / Black |
| QT-070F000RN | FEP | .01" | 197" | Red / Black |



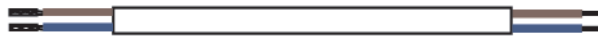
| | | | | |
|--------------|-----|----------|-------|-------|
| QT-04000000B | PVC | 2 x .03" | 13.8" | White |
| QT-05300000B | PVC | 2 x .03" | 39.4" | White |



Components and Accessories

Polarity : Always respect the cable polarity. **Red or brown** cable = positive (+); **black or blue** = negative (-)

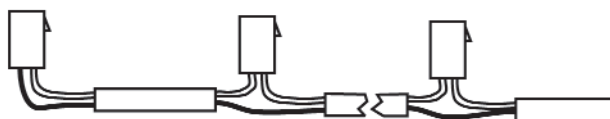
| | | | | |
|--------------|----------|----------|-------|---------------|
| QT-01100000B | PVC | 2 x .03" | 9.8" | White |
| QT-01200000N | PVC | 2 x .03" | 9.8" | Black |
| QT-05400000B | PVC | 2 x .03" | 39.4" | White |
| QT-072000000 | FROR | 2 x .02" | 39.4" | Grey Outdoor |
| QT-080000000 | RN-F H05 | 2 x .03" | 39.4" | Black Outdoor |



| | | | | |
|--------------|-----|------|-------|-------|
| QT-08300000N | PVC | .02" | 8.7" | Black |
| QT-08400000R | PVC | .05" | 8.7" | Red |
| QT-09000000R | FEP | .01" | 11.8" | Red |
| QT-09000000N | FEP | .01 | 11.8 | Black |
| QT-06300000B | SIL | .03" | 15.7" | White |
| QT-03900000B | SIL | .06" | 15.7" | White |
| QT-03800000R | SIL | .03 | 9.8" | Red |



| | | | | | |
|--------------|-----|----------|---------------|-------|-------|
| QT-01900000B | PVC | 2 x .03" | 13.8" | White | 1 AMP |
| QT-042000000 | PVC | 2 x .03" | 19.6" + 19.6" | White | 2 AMP |
| QT-043000000 | PVC | 2 x .03" | 1.2" x 19.6" | White | 3 AMP |
| QT-065000000 | PVC | 2 x .03" | 2.0" x 19.6" | White | 5 AMP |
| QT-071000000 | PVC | 2 x .03" | 2.4" x 19.6" | White | 6 AMP |
| QT-067000000 | PVC | 2 x .03" | 3.5" x 19.6" | White | 9 AMP |



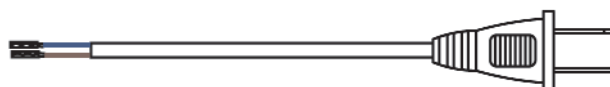
QT-032000000 MINI AMP JUMPER



| | | | | | |
|----------------|-----|----------|---------------|---------|--------|
| QT-0621000000 | PVC | 2 x .03" | 39.4" + 19.7" | Transp. | ON/OFF |
| QT-06200000000 | PVC | 2 x .03" | 39.4" + 19.7" | Black | ON/OFF |


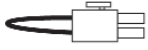





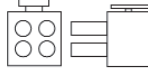



| | | | | |
|--------------|-----|----------|-------|-------|
| QT-00300000N | PVC | 2 x .03" | 59" | Black |
| QT-00400000B | PVC | 2 x .03" | 59" | White |
| QT-00500000B | PVC | 2 x .03" | 78.8" | White |



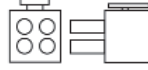


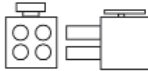



Cables & Connectors

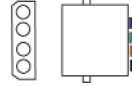




RGBOX System AMP Mini

| | | | | | | |
|--------------|-----------------|-----------------------|-------|---|---|---|
| QT-058000000 | Mini Amp 4 poli | RGB system Terminator | | |  |  |
| QT-056000000 | PVC 4 x .02" | 39.4" | Black |  | RGB Connection Cable |  |
| QT-069000000 | PVC 4 x .02" | 118.1" | Black |  | |  |
| QT-062000000 | PVC 4 x .02" | 19.7" | Black | | RGB Connection Cable |  |
| QT-064000000 | PVC 4 x .02" | 7.8" | Black |  | RGB Connection Cable |  |

TRIX System MOLEX Mini Fit

| | | | | | | |
|--------------|-----------------------|-----------------|--|---|---|---|
| QT-077000000 | Molex Mini Fit 4 poli | Tricolor system | | |  |  |
| QT-078000000 | PVC 4 x .01" | 11.8" | |  | RGB Connection Cable |  |
| QT-079000000 | PVC 4 x .01" | 11.8" | | | RGB Connection Cable |  |
| QT-076000000 | PVC 4 x .01" | 2 x 2.8" | |  | RGB Connection Cable |  |

Magic Color System

| | | | | | | |
|--------------|--------------|-----------|--|---|----------------------|---|
| QT-075A00000 | PVC 4 x .02" | 39.4" | |  | RGB Connection Cable |  |
| QT-075C00000 | PVC 4 x .02" | 19.7" | | | RGB Connection Cable |  |
| QT-075B00000 | PVC 4 x .02" | 4 x 19.7" | |  | |  |



9659 Wendell Road
Dallas Texas 75243

tel: 866.356.4458
fax: 866.516.1924

www.OEMLED.com