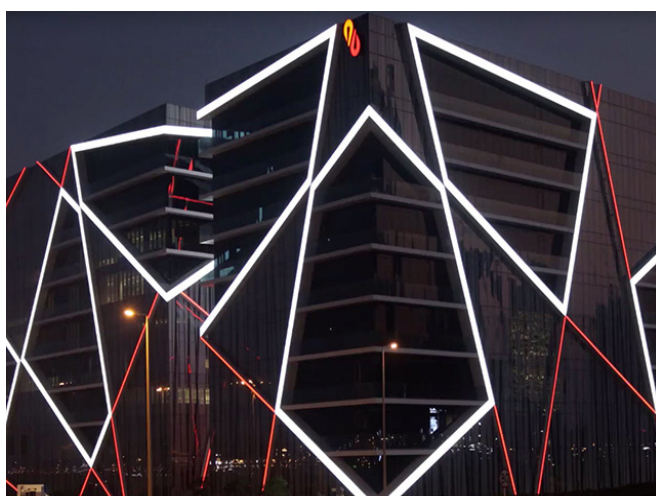


BaltLED

Crown Opto LED til skilte- og interiørløsninger



Indhold

| | |
|---|-----------|
| Hvad er BaltLED | 3 |
| Crown Opto S0 | 4 |
| Crown Opto S1 | 7 |
| Crown Opto S2 | 10 |
| Crown Opto S3 | 13 |
| Crown Opto S4 | 16 |
| Crown Mini | 19 |
| Crown Opto S0+ | 22 |
| Crown Opto S1+ | 25 |
| Crown Duo W1 | 28 |
| Crown Duo W3 | 31 |
| Crown Opto SHF-1 12VDC | 34 |
| Signbridge SLIM PLUS - BPSP.S-60-12V.1 | 37 |
| Signbridge SLIM PLUS - BPSP.S-100-12V.1 | 39 |
| Signbridge PLUS - BPSP-40-12V.1 | 41 |
| Signbridge PLUS - BPSP-60-12V.1 | 43 |
| Signbridge PLUS - BPSP-100-12V.1 | 45 |
| Signbridge PLUS - BPSP-150-12V.1 | 47 |
| Signbridge PLUS - BPSP-150-12V.1-B | 49 |
| Linelit ZigZag | 51 |
| Project calculation | 54 |
| Relaterede produkter | 57 |

Vi glæder os til den nye lysende-rejse...

Den danske skilte- og interiørbranche bobler af kreative og grafiske kompetencer. Vi er derfor stolte over, at kunne servicere branchen endnu bedre. Vink Plast har nemlig indgået partnerskab med BaltLED, som er en førende Europæisk producent og udvikler af LED løsninger.

Vi ved noget om materialerne, og vil gøre alt for, at være din og branchens foretrukne leverandør på materialer. Hos os får du akryl fra førende brands som PERSPEX® og GREEN-CAST®, 3M® lyskasssefolier og med partnerskabet med BaltLED kan vi nu også tilbyde dig LED komponenter i Europæisk kvalitet med leveringssikkerhed og til konkurrencedygtige priser. Det tillader vi os, at kalde One Stop Shopping.

Vink Plast og BaltLED har en klar ambition om, at blive nr. 1 i Danmark på lys til skilte og interiør. Vi tilbyder dig teknisk support til udvikling af LED projekter og lagerfører et standard sortiment i både LED moduler og strømforsyninger – alt sammen tilgængeligt i vores webshop til omgående levering. BaltLED har også en lang række special LED moduler, som kan leveres på få dage fra producenten. BaltLED kan tilmed indgå i den tekniske rådgivning og vejledning på store som små projekter, og samtidig også udvikle unikke specialløsninger.

Samspillet mellem LED, akryl og folier kan tilføre den ekstra dimension af kvalitet og agilitet, som understøtter branchen og produktion af LED løsninger i Danmark. Vi glæder os til den nye og lysende rejse, sammen med den danske skilte- og interiørbranche...



CROWN OPTO S0



ITEM DESCRIPTION

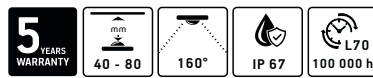
Crown OPTO STELLAR series modules are designed to illuminate low-depth letters and lightboxes. S0 module application is ranging from 40 to 80 mm in depth. These modules come with L70 100 000 h lifetime for 6500K and L70 50,000 h for other colours, granting 5 years warranty. Crown OPTO STELLAR – a great option for projects when economical, although a quality solution is needed.

APPLICATION

- Channel letters signs and light boxes
- Recommended depth 40 – 80 mm

FEATURES & BENEFITS

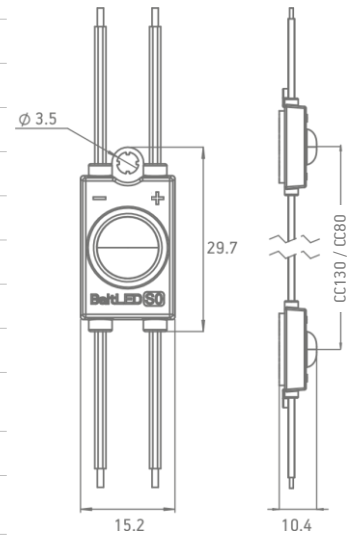
- Compact design
- Efficiency up to 123 lm/W
- IP67 protection class
- Availability of red, green and blue colours in 12VDC
- 5-year warranty



GENERAL SPECIFICATIONS

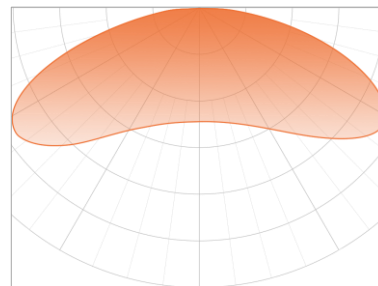
| | |
|-----------------------|--|
| SUPPLY VOLTAGE | 12 VDC 24 VDC |
| POWER | 0.2 W 0.35 W |
| RECOMMENDED DEPTH | From 40 to 80 mm |
| CC DISTANCE | 130 mm 80 mm |
| BINNING | 3 SDCM |
| OPERATING TEMPERATURE | -30 °C ~ +60 °C |
| STORAGE TEMPERATURE | +5 °C ~ +50 °C |
| STORAGE CONDITIONS | Relative humidity <60% |
| CERTIFICATION | CE, UKCA, RoHS and UL compliant |
| IP CLASS | IP 67 |
| LIFETIME | L70 100,000 h (6500K) L70 50,000 h (other colors) |
| WARRANTY | 5 years (24/7)* |

*Warranty is applied only and if storage, mounting and maintenance conditions, stated in the installation guide, are followed.



* Dimensions are in mm

LIGHT DISTRIBUTION GRAPH



Beam angle: 160°

ORDERING INFORMATION

| SKU | SUPPLY VOLTAGE | POWER | CC DISTANCE | LUMEN OUTPUT, LM | COLOUR TEMP. |
|-------------------------|----------------|--------|-------------|------------------|--------------|
| BMP-S0-01UH160CW700 | 12 VDC | 0.35 W | 130 mm | 43 | 6500 K |
| BMP-S0-01UH160NW400 | 12 VDC | 0.35 W | 130 mm | 42 | 4000 K |
| BMP-S0-01UH160WW300 | 12 VDC | 0.35 W | 130 mm | 40 | 3000 K |
| BMP-S0-01UH160RC | 12 VDC | 0.35 W | 130 mm | 15 | red |
| BMP-S0-01UH160GC | 12 VDC | 0.35 W | 130 mm | 25 | green |
| BMP-S0-01UH160BC | 12 VDC | 0.35 W | 130 mm | 6 | blue |
| BMP-S0-01UH160CW700-24V | 24 VDC | 0.2 W | 80 mm | 25 | 6500 K |

PACKAGING INFORMATION

| | CHAIN | BAG | BOX |
|---------------|-------------------------------|--------------------------------|--------------------------------|
| 6500 K 12VDC | | | |
| 4000 K 12VDC | 60 pcs (net weight: 0.38 kg) | 120 pcs (net weight: 0.79 kg) | 1200 pcs (net weight: 8.20 kg) |
| 3000 K 12VDC | | | |
| 6500 K 24VDC | 150 pcs (net weight: 0.67 kg) | 150 pcs (net weight: 0.69 kg) | 1500 pcs (net weight: 7.20 kg) |
| OTHER COLOURS | 70 pcs (net weight: 0.375 kg) | 140 pcs (net weight: 0.745 kg) | 1400 pcs (net weight: 8.00 kg) |

5 YEARS WARRANTY

IP 67

CE

RoHS Compliant

UL Certified

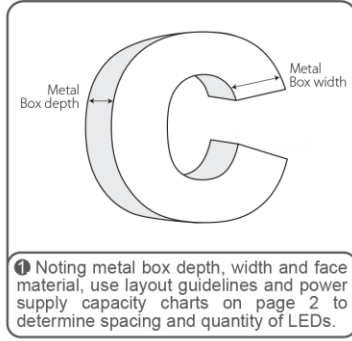
Recycling symbol

CROWN OPTO SO INSTALLATION GUIDE

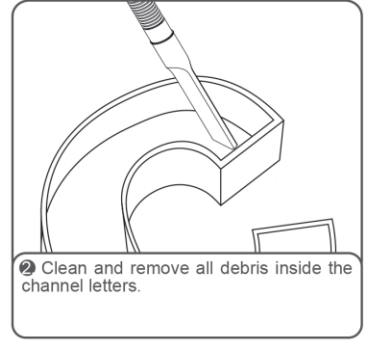
READ THE INSTRUCTIONS CAREFULLY BEFORE MOUNTING



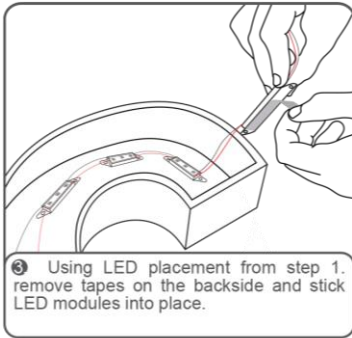
Tools required:
Wire strippers, drill and screwdriver and screws.



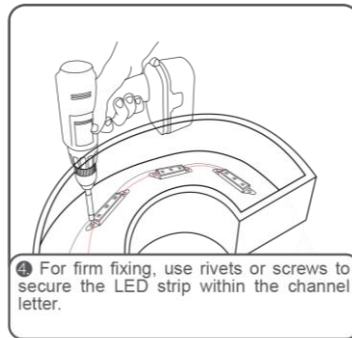
1 Noting metal box depth, width and face material, use layout guidelines and power supply capacity charts on page 2 to determine spacing and quantity of LEDs.



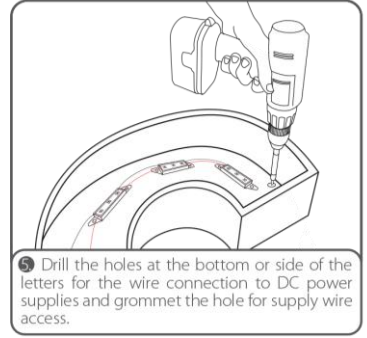
2 Clean and remove all debris inside the channel letters.



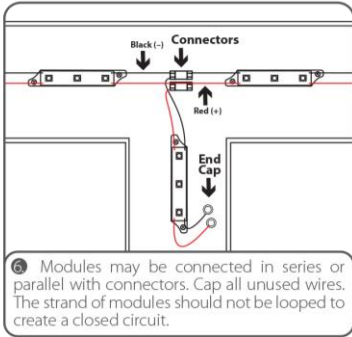
3 Using LED placement from step 1, remove tapes on the backside and stick LED modules into place.



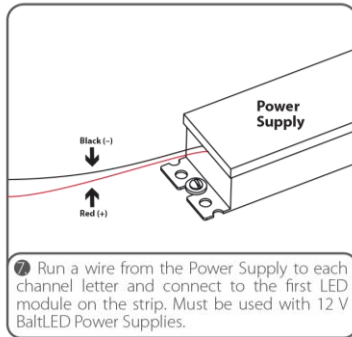
4 For firm fixing, use rivets or screws to secure the LED strip within the channel letter.



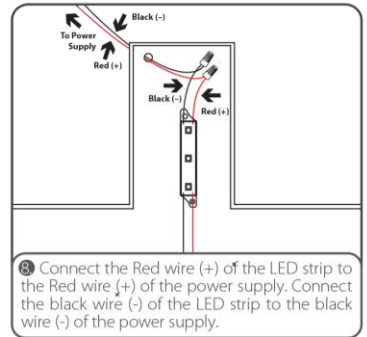
5 Drill the holes at the bottom or side of the letters for the wire connection to DC power supplies and grocket the hole for supply wire access.



6 Modules may be connected in series or parallel with connectors. Cap all unused wires. The strand of modules should not be looped to create a closed circuit.

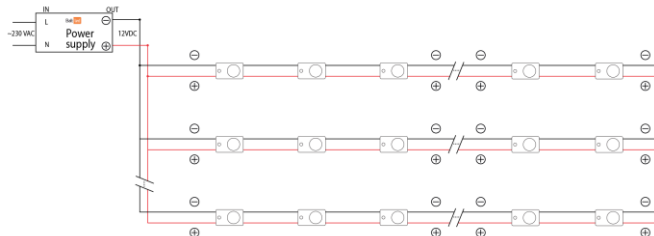


7 Run a wire from the Power Supply to each channel letter and connect to the first LED module on the strip. Must be used with 12 V BaltLED Power Supplies.



8 Connect the Red wire (+) of the LED strip to the Red wire (+) of the power supply. Connect the black wire (-) of the LED strip to the black wire (-) of the power supply.

CONNECTION SCHEME



! 70 pcs - max number of modules in one chain when the power supplied from single end.
! String end voltage can't be less than 11V, do not exceed specified module string length

POWER SUPPLY LOAD RECOMMENDATIONS

| POWER SUPPLY | QUANTITY | 2 m* | | 5 m* | | 10 m* | |
|----------------|----------|---------|-----------------|------|-----------------|-------|-----------------|
| | | modules | mm ² | AWG | mm ² | AWG | mm ² |
| BPSP-40-12V.1 | 90 | 1.5 | 16 | 2.5 | 14 | 6 | 12 |
| BPSP-60-12V.1 | 135 | 1.5 | 16 | 4 | 13 | 10 | 8 |
| BPSP-100-12V.1 | 225 | 2.5 | 14 | 6 | 10 | 10 | 8 |
| BPSP-150-12V.1 | 340 | 4 | 13 | 10 | 8 | 16 | 6 |

* Distance between power supply and modules.
! Power loss less than 5%.
! Recommendations for optimal use of power supply.

5
YEARS
WARRANTY

IP 67

CE

RoHS
Compliant

UL
Certified

—

CROWN OPTO SO INSTALLATION GUIDE

MOUNTING AND USING RECOMENDATIONS

- Be careful not to go beyond recommended maximum quantities of modules for a power supply. Overload may cause blinking or a failure.
- For mounting only pan head tapping screws must be used. The screws must apply DIN 7049 or DIN 968 standards.
- These modules are designed to work with constant-voltage power supply. Use only recommended power supplies, do not connect to a constant-current power supplies as it will cause immediate failure of modules.
- Before installing make sure, that the fixing area can bear the total weight of the modules.
- Please install LED modules with appropriate cables. There is a possibility, that cables may get disconnected due to contractions, caused by temperature changes.
- Please check that sulphur constituent is not contained in used components when the module is installed.
- Make sure to install modules in a place with a sufficient breathability in order to prevent lifetime reduction by heat. Operating temperature should not exceed +50 °C.
- When installing a module in a fixture (signboard), make sure to provide ventilation for constituent sulphur, drainage for rain water to prevent aged deteriorations.
- When fixing cables of the modules do not use metal cable stop. The tunic of the cable may be damaged and therefore lead to short-circuited.
- Be sure to install modules at a maintainable place.
- In order to prevent LED from breaking down caused by static electricity, make sure not to touch the metal parts of the cable directly with bare hands.
- Make sure to apply correct polarity and direction of the modules. If mistaken, it will lead to failure and break down of the modules.
- When trying to perform lighting test (burn-in test), be sure to connect module to a power supply. Modules can fail to light up due to over-current. If the power supply is turned on without LED modules connected, modules can be connected only 5 minutes after the power supply has been turned off. Residual electricity may cause damage to modules.
- Avoid applying force while bending, twisting or pulling the power supply cables to minimize the risk of electrical shock.
- If any signs of smoke or the smell of burning plastic occurs, turn off modules immediately and investigate the power supply and the wiring carefully.
- Make sure to record and keep product lot and installation date of the modules.

STORAGE AND MAINTANANCE CONDITIONS

- Before the maintenance, turn off the power and maintain the modules after modules cool down. Otherwise, electric shock or burn may occur.
- Do not pull the wiring while removing the modules to prevent possible disconnections.
- Make sure to store modules at dry places, avoid elevated temperatures, high pressures, vibrations, corrosive or combustive gas, direct sunlight.
- Do not wipe or spray modules with volatile materials, such as thinner or benzene as it may lead to combustion and malfunctioning.
- Modules cannot operate at presence of materials containing sulphur components or where sulphur containing gas is generated as it leads to changes in light color and malfunctioning.

GENERAL CONDITIONS

- Installation of modules must carried out by a qualified technician according to handling standards of electrical equipment.
- Modules and power supply have absolute maximum rating. Comply with the specifications to avoid failures or combustion.
- Avoid placing any high temperature objects around the modules, also avoid putting cloth or paper on the modules. It may lead to combustion, burnout, overheat, failure, deformation.
- Modules cannot be used in high-temperature environments, also they must not be subjected to vibration, shock, particles, corrosive or combustive gas. If not followed, it may cause fire, burnouts, bad insulation, failures, overheating and injuries.
- Do not insert or remove power plugs with wet hands to avoid electrical shock.
- While connecting or disconnecting electrical cords avoid being close to any heating equipment. It may lead to melting of the cords cause electrical shock.
- Do not modify the module. This may lead to electrical shock, failure, burnout, changes in module color.
- Do not install modules under direct sunlight or falling water. This may lead to electrical shock, burnouts, overheat, even combustion.
- While installing modules at humid areas, grounding of the power supply must be done.
- Modules cannot be used in combination with other types of modules, as this may lead to failure.
- Modules can be used at ambient temperatures ranging from -30 °C to +50 °C..

© 2021, All rights reserved BaltLED, UAB. Specifications are subject to change without notice.

CROWN OPTO S1



ITEM DESCRIPTION

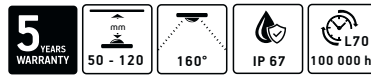
Crown OPTO STELLAR series modules are designed to illuminate middle-depth letters and lightboxes. S1 module application is ranging from 50 to 120 mm in depth. These modules come with L70 100 000 h lifetime for 6500K and L70 50,000 h for other colours, granting 5 years warranty. Crown OPTO STELLAR – a great option for projects when economical, although a quality solution is needed.

APPLICATION

- Channel letters signs and light boxes
- Recommended depth 50 – 120 mm

FEATURES & BENEFITS

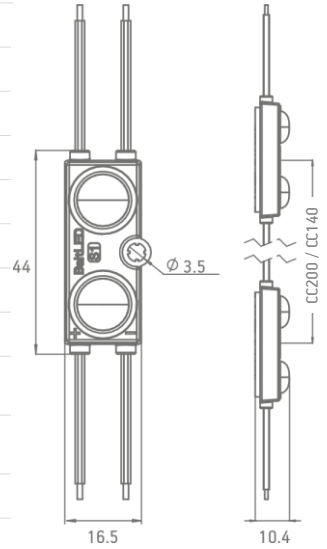
- Compact design
- CRI >80
- Efficiency up to 115 lm/W
- IP67 protection class
- Availability of red, green and blue colours in 12VDC
- 5-year warranty



GENERAL SPECIFICATIONS

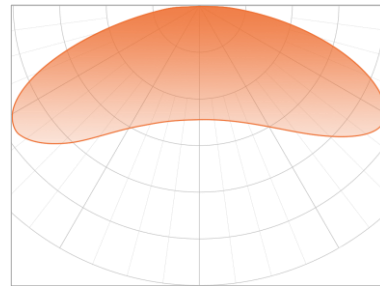
| | |
|-----------------------|--|
| SUPPLY VOLTAGE | 12 VDC 24 VDC |
| POWER | 0.5 W 0.75 W |
| RECOMMENDED DEPTH | From 50 to 120 mm |
| CC DISTANCE | 200 mm 140 mm |
| BINNING | 3 SDCM |
| OPERATING TEMPERATURE | -30 °C ~ +60 °C |
| STORAGE TEMPERATURE | +5 °C ~ +50 °C |
| STORAGE CONDITIONS | Relative humidity <60% |
| CERTIFICATION | CE, UKCA, RoHS and UL compliant |
| LIFETIME | L70 100,000 h (6500K) L70 50,000 h (other colors) |
| IP CLASS | IP 67 |
| WARRANTY | 5 years (24/7)* |

*Warranty is applied only and if storage, mounting and maintenance conditions, stated in the installation guide, are followed.



* Dimensions are in mm

LIGHT DISTRIBUTION GRAPH



Beam angle: 160°

ORDERING INFORMATION

| SKU | SUPPLY VOLTAGE | POWER | CC DISTANCE | LUMEN OUTPUT, LM | COLOUR TEMP. |
|-------------------------|----------------|--------|-------------|------------------|--------------|
| BMP-S1-02UH160CW700 | 12 VDC | 0.75 W | 200 mm | 83 | 6500 K |
| BMP-S1-02UH160NW400 | 12 VDC | 0.75 W | 200 mm | 80 | 4000 K |
| BMP-S1-02UH160WW300 | 12 VDC | 0.75 W | 200 mm | 77 | 3000 K |
| BMP-S1-02UH160RC | 12 VDC | 0.75 W | 200 mm | 30 | red |
| BMP-S1-02UH160GC | 12 VDC | 0.75 W | 200 mm | 50 | green |
| BMP-S1-02UH160BC | 12 VDC | 0.75 W | 200 mm | 13 | blue |
| BMP-S1-02UH160CW700-24V | 24 VDC | 0.5 W | 140 mm | 57 | 6500 K |

PACKAGING INFORMATION

| | CHAIN | BAG | BOX |
|-------|-------------------------------|-------------------------------|-------------------------------|
| 12VDC | 50 pcs (net weight: 0.40 kg) | 100 pcs (net weight: 0.83 kg) | 1000 pcs (net weight 8.60 kg) |
| 24VDC | 120 pcs (net weight: 0.86 kg) | 120 pcs (net weight: 0.88 kg) | 1200 pcs (net weight 9.10 kg) |

© 2023, All rights reserved BaltLED, UAB. Specifications are subject to change without notice.

www.baltled.com
April 12, 2023

Balt led

5 YEARS WARRANTY

IP 67

CE

RoHS Compliant

UL Certified

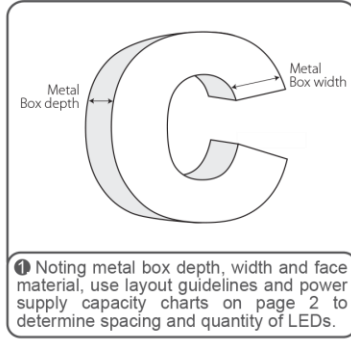
Recycling symbol

CROWN OPTO S1 INSTALLATION GUIDE

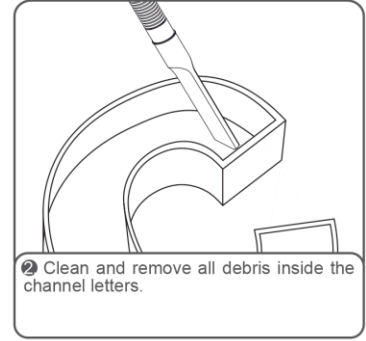
READ THE INSTRUCTIONS CAREFULLY BEFORE MOUNTING



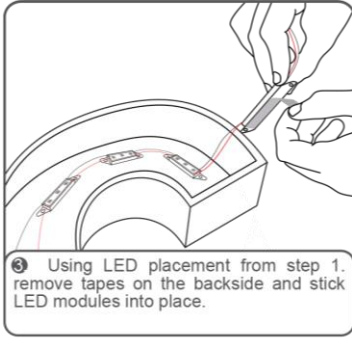
Tools required:
Wire strippers, drilland screwdriver and screws.



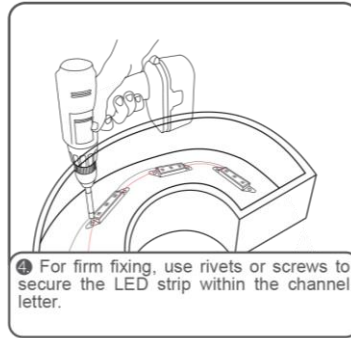
1 Noting metal box depth, width and face material, use layout guidelines and power supply capacity charts on page 2 to determine spacing and quantity of LEDs.



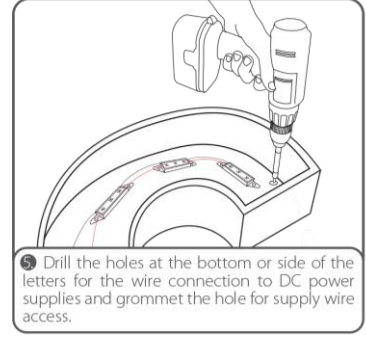
2 Clean and remove all debris inside the channel letters.



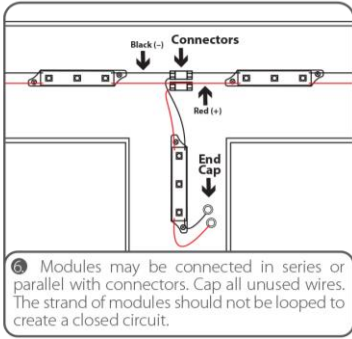
3 Using LED placement from step 1, remove tapes on the backside and stick LED modules into place.



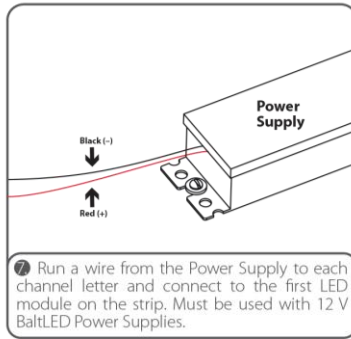
4 For firm fixing, use rivets or screws to secure the LED strip within the channel letter.



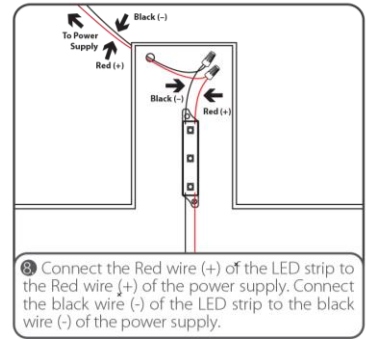
5 Drill the holes at the bottom or side of the letters for the wire connection to DC power supplies and grommet the hole for supply wire access.



6 Modules may be connected in series or parallel with connectors. Cap all unused wires. The strand of modules should not be looped to create a closed circuit.

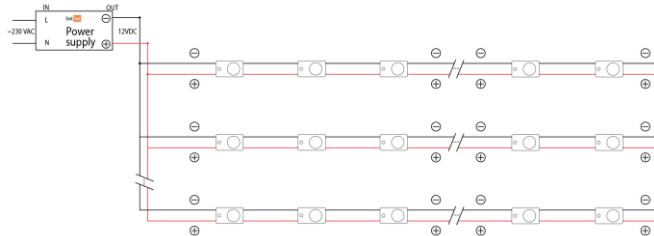


7 Run a wire from the Power Supply to each channel letter and connect to the first LED module on the strip. Must be used with 12 V BaltLED Power Supplies.



8 Connect the Red wire (+) of the LED strip to the Red wire (+) of the power supply. Connect the black wire (-) of the LED strip to the black wire (-) of the power supply.

CONNECTION SCHEME



! 50 pcs - max number of modules in one chain when the power supplied from single end.
! String end voltage can't be less than 11V, do not exceed specified module string length

POWER SUPPLY LOAD RECOMMENDATIONS

| POWER SUPPLY | QUANTITY | 2 m* | | 5 m* | | 10 m* | |
|----------------|----------|---------|-----------------|------|-----------------|-------|-----------------|
| | | modules | mm ² | AWG | mm ² | AWG | mm ² |
| BPSP-40-12V.1 | 42 | 1.5 | 16 | 2.5 | 14 | 6 | 12 |
| BPSP-60-12V.1 | 64 | 1.5 | 16 | 4 | 13 | 10 | 8 |
| BPSP-100-12V.1 | 105 | 2.5 | 14 | 6 | 10 | 10 | 8 |
| BPSP-150-12V.1 | 160 | 4 | 13 | 10 | 8 | 16 | 6 |

* Distance between power supply and modules.
! Power loss less than 5%.
! Recommendations for optimal use of power supply.

5 YEARS WARRANTY

IP 67

CE

RoHS Compliant

UL Certified

RoHS Compliant

CROWN OPTO S1 INSTALLATION GUIDE

MOUNTING AND USING RECOMENDATIONS

- Be careful not to go beyond recommended maximum quantities of modules for a power supply. Overload may cause blinking or a failure.
- For mounting only pan head tapping screws must be used. The screws must apply DIN 7049 or DIN 968 standards.
- These modules are designed to work with constant-voltage power supply. Use only recommended power supplies, do not connect to a constant-current power supplies as it will cause immediate failure of modules.
- Before installing make sure, that the fixing area can bear the total weight of the modules.
- Please install LED modules with appropriate cables. There is a possibility, that cables may get disconnected due to contractions, caused by temperature changes.
- Please check that sulphur constituent is not contained in used components when the module is installed.
- Make sure to install modules in a place with a sufficient breathability in order to prevent lifetime reduction by heat. Operating temperature should not exceed +50 °C.
- When installing a module in a fixture (signboard), make sure to provide ventilation for constituent sulphur, drainage for rain water to prevent aged deteriorations.
- When fixing cables of the modules do not use metal cable stop. The tunic of the cable may be damaged and therefore lead to short-circuited.
- Be sure to install modules at a maintainable place.
- In order to prevent LED from breaking down caused by static electricity, make sure not to touch the metal parts of the cable directly with bare hands.
- Make sure to apply correct polarity and direction of the modules. If mistaken, it will lead to failure and break down of the modules.
- When trying to perform lighting test (burn-in test), be sure to connect module to a power supply. Modules can fail to light up due to over-current. If the power supply is turned on without LED modules connected, modules can be connected only 5 minutes after the power supply has been turned off. Residual electricity may cause damage to modules.
- Avoid applying force while bending, twisting or pulling the power supply cables to minimize the risk of electrical shock.
- If any signs of smoke or the smell of burning plastic occurs, turn off modules immediately and investigate the power supply and the wiring carefully.
- Make sure to record and keep product lot and installation date of the modules.

STORAGE AND MAINTANANCE CONDITIONS

- Before the maintenance, turn off the power and maintain the modules after modules cool down. Otherwise, electric shock or burn may occur.
- Do not pull the wiring while removing the modules to prevent possible disconnections.
- Make sure to store modules at dry places, avoid elevated temperatures, high pressures, vibrations, corrosive or combusive gas, direct sunlight.
- Do not wipe or spray modules with volatile materials, such as thinner or benzene as it may lead to combustion and malfunctioning.
- Modules cannot operate at presence of materials containing sulphur components or where sulphur containing gas is generated as it leads to changes in light color and malfunctioning.

GENERAL CONDITIONS

- Installation of modules must carried out by a qualified technician according to handling standards of electrical equipment.
- Modules and power supply have absolute maximum rating. Comply with the specifications to avoid failures or combustion.
- Avoid placing any high temperature objects around the modules, also avoid putting cloth or paper on the modules. It may lead to combustion, burnout, overheat, failure, deformation.
- Modules cannot be used in high-temperature environments, also they must not be subjected to vibration, shock, particles, corrosive or combusive gas. If not followed, it may cause fire, burnouts, bad insulation, failures, overheating and injuries.
- Do not insert or remove power plugs with wet hands to avoid electrical shock.
- While connecting or disconnecting electrical cords avoid being close to any heating equipment. It may lead to melting of the cords cause electrical shock.
- Do not modify the module. This may lead to electrical shock, failure, burnout, changes in module color.
- Do not install modules under direct sunlight or falling water. This may lead to electrical shock, burnouts, overheat, even combustion.
- While installing modules at humid areas, grounding of the power supply must be done.
- Modules cannot be used in combination with other types pf modules, as this may lead to failure.
- Modules can be used at ambient temperatures ranging from -30 °C to +50 °C..

© 2021, All rights reserved BaltLED, UAB. Specifications are subject to change without notice.

CROWN OPTO S2



ITEM DESCRIPTION

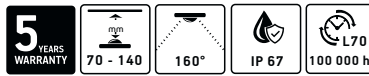
Crown OPTO STELLAR series modules are designed to illuminate middle-depth letters and lightboxes. S2 module application is ranging from 70 to 140 mm in depth. These modules come with L70 100 000 h lifetime for 6500K and L70 50,000 h for other colours, granting 5 years warranty. Crown OPTO STELLAR – a great option for projects when economical, although a quality solution is needed.

APPLICATION

- Channel letters signs and light boxes
- Recommended depth 70 – 140 mm

FEATURES & BENEFITS

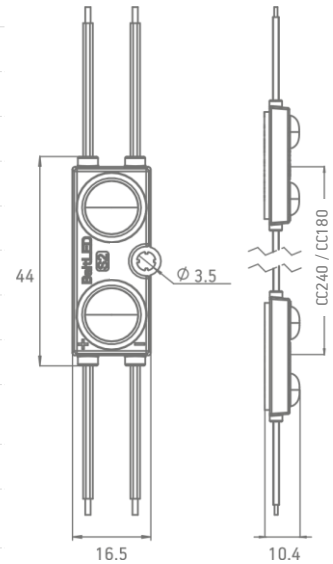
- Compact design
- Efficiency up to 115 lm/W
- IP67 protection class
- 5-year warranty



GENERAL SPECIFICATIONS

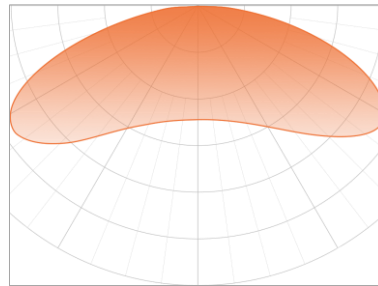
| | |
|-----------------------|--|
| SUPPLY VOLTAGE | 12 VDC 24 VDC |
| POWER | 1.0 W 0.8 W |
| RECOMMENDED DEPTH | From 70 to 140 mm |
| CC DISTANCE | 240 mm 180 mm |
| BINNING | 3 SDCM |
| OPERATING TEMPERATURE | -30 °C ~ +60 °C |
| STORAGE TEMPERATURE | +5 °C ~ +50 °C |
| STORAGE CONDITIONS | Relative humidity <60% |
| CERTIFICATION | CE, UKCA, RoHS and UL compliant |
| IP CLASS | IP 67 |
| LIFETIME | L70 100,000 h (6500K) L70 50,000 h (other colors) |
| WARRANTY | 5 years (24/7)* |

*Warranty is applied only and if storage, mounting and maintenance conditions, stated in the installation guide, are followed.



* Dimensions are in mm

LIGHT DISTRIBUTION GRAPH



Beam angle: 160°

ORDERING INFORMATION

| SKU | SUPPLY VOLTAGE | POWER | CC DISTANCE | LUMEN OUTPUT, LM | COLOUR TEMP. |
|-------------------------|----------------|-------|-------------|------------------|--------------|
| BMP-S2-02UH160CW700 | 12 VDC | 1.0 W | 240 mm | 114 | 6500 K |
| BMP-S2-02UH160CW700-24V | 24 VDC | 0.8 W | 180 mm | 92 | 6500 K |

PACKAGING INFORMATION

| | CHAIN | BAG | BOX |
|-------|------------------------------|-------------------------------|--------------------------------|
| 12VDC | 40 pcs (net weight: 0.39 kg) | 120 pcs (net weight: 1.07 kg) | 1080 pcs (net weight: 10.1 kg) |
| 24VDC | 90 pcs (net weight: 0.59 kg) | 90 pcs (net weight: 0.61 kg) | 810 pcs (net weight: 5.80 kg) |

© 2023, All rights reserved BaltLED, UAB. Specifications are subject to change without notice.

5 YEARS WARRANTY

IP 67

CE

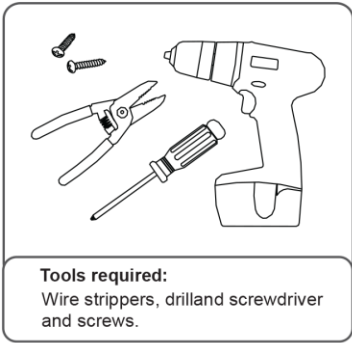
RoHS Compliant

UL Certified

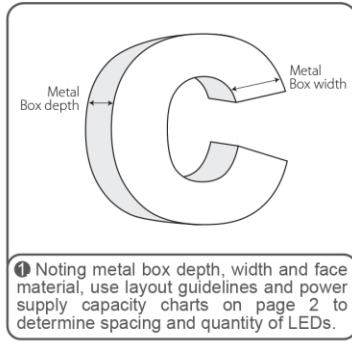
Recycling symbol

CROWN OPTO S2 INSTALLATION GUIDE

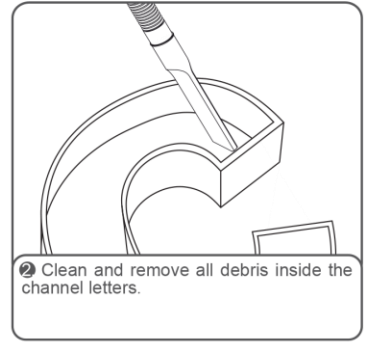
READ THE INSTRUCTIONS CAREFULLY BEFORE MOUNTING



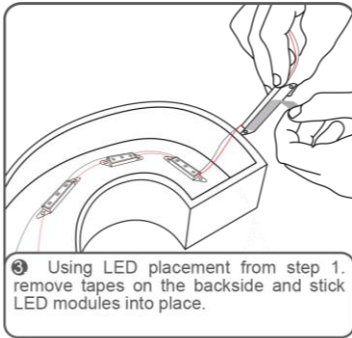
Tools required:
Wire strippers, drilland screwdriver and screws.



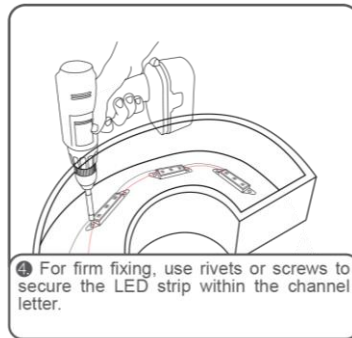
1 Noting metal box depth, width and face material, use layout guidelines and power supply capacity charts on page 2 to determine spacing and quantity of LEDs.



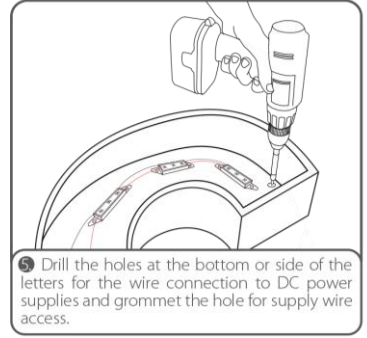
2 Clean and remove all debris inside the channel letters.



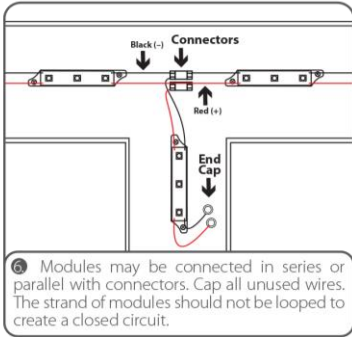
3 Using LED placement from step 1, remove tapes on the backside and stick LED modules into place.



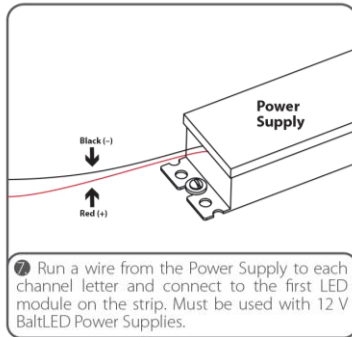
4 For firm fixing, use rivets or screws to secure the LED strip within the channel letter.



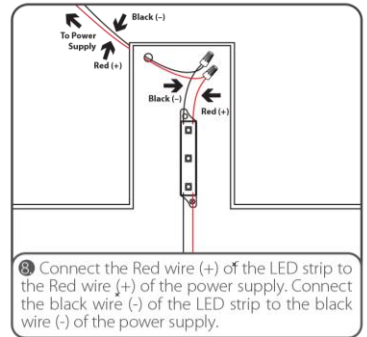
5 Drill the holes at the bottom or side of the letters for the wire connection to DC power supplies and grommet the hole for supply wire access.



6 Modules may be connected in series or parallel with connectors. Cap all unused wires. The strand of modules should not be looped to create a closed circuit.

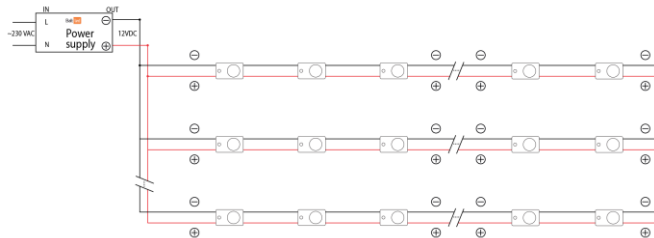


7 Run a wire from the Power Supply to each channel letter and connect to the first LED module on the strip. Must be used with 12 V BaltLED Power Supplies.



8 Connect the Red wire (+) of the LED strip to the Red wire (+) of the power supply. Connect the black wire (-) of the LED strip to the black wire (-) of the power supply.

CONNECTION SCHEME



! 40 pcs - max number of modules in one chain when the power supplied from single end.
! String end voltage can't be less than 11V, do not exceed specified module string length

POWER SUPPLY LOAD RECOMMENDATIONS

| POWER SUPPLY | QUANTITY | 2 m* | | 5 m* | | 10 m* | |
|----------------|----------|---------|-----------------|------|-----------------|-------|-----------------|
| | | modules | mm ² | AWG | mm ² | AWG | mm ² |
| BPSP-40-12V.1 | 32 | 1.5 | 16 | 2.5 | 14 | 6 | 12 |
| BPSP-60-12V.1 | 48 | 1.5 | 16 | 4 | 13 | 10 | 8 |
| BPSP-100-12V.1 | 80 | 2.5 | 14 | 6 | 10 | 10 | 8 |
| BPSP-150-12V.1 | 120 | 4 | 13 | 10 | 8 | 16 | 6 |

* Distance between power supply and modules.
! Power loss less than 5%.
! Recommendations for optimal use of power supply.

5
YEARS
WARRANTY

IP 67

CE

RoHS
Compliant

UL
Certified

—

CROWN OPTO S2 INSTALLATION GUIDE

MOUNTING AND USING RECOMENDATIONS

- Be careful not to go beyond recommended maximum quantities of modules for a power supply. Overload may cause blinking or a failure.
- For mounting only pan head tapping screws must be used. The screws must apply DIN 7049 or DIN 968 standards.
- These modules are designed to work with constant-voltage power supply. Use only recommended power supplies, do not connect to a constant-current power supplies as it will cause immediate failure of modules.
- Before installing make sure, that the fixing area can bear the total weight of the modules.
- Please install LED modules with appropriate cables. There is a possibility, that cables may get disconnected due to contractions, caused by temperature changes.
- Please check that sulphur constituent is not contained in used components when the module is installed.
- Make sure to install modules in a place with a sufficient breathability in order to prevent lifetime reduction by heat. Operating temperature should not exceed +50 °C.
- When installing a module in a fixture (signboard), make sure to provide ventilation for constituent sulphur, drainage for rain water to prevent aged deteriorations.
- When fixing cables of the modules do not use metal cable stop. The tunic of the cable may be damaged and therefore lead to short-circuited.
- Be sure to install modules at a maintainable place.
- In order to prevent LED from breaking down caused by static electricity, make sure not to touch the metal parts of the cable directly with bare hands.
- Make sure to apply correct polarity and direction of the modules. If mistaken, it will lead to failure and break down of the modules.
- When trying to perform lighting test (burn-in test), be sure to connect module to a power supply. Modules can fail to light up due to over-current. If the power supply is turned on without LED modules connected, modules can be connected only 5 minutes after the power supply has been turned off. Residual electricity may cause damage to modules.
- Avoid applying force while bending, twisting or pulling the power supply cables to minimize the risk of electrical shock.
- If any signs of smoke or the smell of burning plastic occurs, turn off modules immediately and investigate the power supply and the wiring carefully.
- Make sure to record and keep product lot and installation date of the modules.

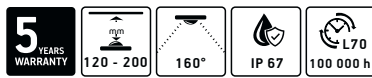
STORAGE AND MAINTANANCE CONDITIONS

- Before the maintenance, turn off the power and maintain the modules after modules cool down. Otherwise, electric shock or burn may occur.
- Do not pull the wiring while removing the modules to prevent possible disconnections.
- Make sure to store modules at dry places, avoid elevated temperatures, high pressures, vibrations, corrosive or combusive gas, direct sunlight.
- Do not wipe or spray modules with volatile materials, such as thinner or benzene as it may lead to combustion and malfunctioning.
- Modules cannot operate at presence of materials containing sulphur components or where sulphur containing gas is generated as it leads to changes in light color and malfunctioning.

GENERAL CONDITIONS

- Installation of modules must carried out by a qualified technician according to handling standards of electrical equipment.
- Modules and power supply have absolute maximum rating. Comply with the specifications to avoid failures or combustion.
- Avoid placing any high temperature objects around the modules, also avoid putting cloth or paper on the modules. It may lead to combustion, burnout, overheat, failure, deformation.
- Modules cannot be used in high-temperature environments, also they must not be subjected to vibration, shock, particles, corrosive or combusive gas. If not followed, it may cause fire, burnouts, bad insulation, failures, overheating and injuries.
- Do not insert or remove power plugs with wet hands to avoid electrical shock.
- While connecting or disconnecting electrical cords avoid being close to any heating equipment. It may lead to melting of the cords cause electrical shock.
- Do not modify the module. This may lead to electrical shock, failure, burnout, changes in module color.
- Do not install modules under direct sunlight or falling water. This may lead to electrical shock, burnouts, overheat, even combustion.
- While installing modules at humid areas, grounding of the power supply must be done.
- Modules cannot be used in combination with other types pf modules, as this may lead to failure.
- Modules can be used at ambient temperatures ranging from -30 °C to +50 °C..

CROWN OPTO S3



ITEM DESCRIPTION

Crown OPTO STELLAR series modules are designed to illuminate bigger-depth letters and lightboxes. S3 module application is ranging from 120 to 200 mm in depth. These modules come with L70 100 000 h lifetime for 6500K and L70 50,000 h for other colours, granting 5 years warranty. Crown OPTO STELLAR – a great option for projects when economical, although a quality solution is needed.

APPLICATION

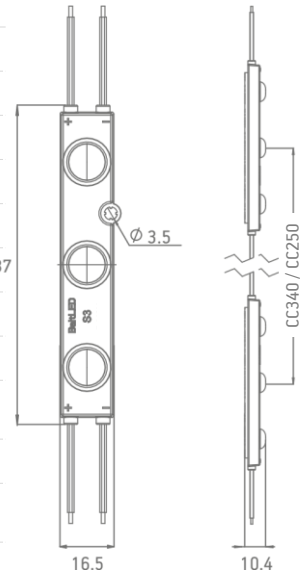
- Channel letters signs and light boxes
- Recommended depth 120 – 200 mm

FEATURES & BENEFITS

- Compact design
- Efficiency up to 118 lm/W
- IP67 protection class
- Availability of red, green and blue colours in 12VDC
- 5-year warranty

GENERAL SPECIFICATIONS

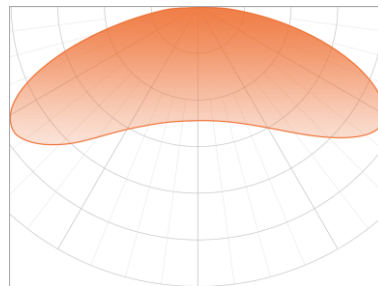
| | |
|-----------------------|--|
| SUPPLY VOLTAGE | 12 VDC 24 VDC |
| POWER | 1.1 W 1.5 W |
| RECOMMENDED DEPTH | From 120 to 200 mm |
| CC DISTANCE | 340 mm 250mm |
| BINNING | 3 SDCM |
| OPERATING TEMPERATURE | -30 °C ~ +60 °C |
| STORAGE TEMPERATURE | +5 °C ~ +50 °C |
| STORAGE CONDITIONS | Relative humidity <60% |
| CERTIFICATION | CE, UKCA, RoHS and UL compliant |
| IP CLASS | IP 67 |
| LIFETIME | L70 100,000 h (6500K) L70 50,000 h (other colors) |
| WARRANTY | 5 years (24/7)* |



* Dimensions are in mm

*Warranty is applied only and if storage, mounting and maintenance conditions, stated in the installation guide, are followed.

LIGHT DISTRIBUTION GRAPH



Beam angle: 160°

ORDERING INFORMATION

| SKU | SUPPLY VOLTAGE | POWER | CC DISTANCE | LUMEN OUTPUT, LM | COLOUR TEMP. |
|-------------------------|----------------|-------|-------------|------------------|--------------|
| BMP-S3-03UH160CW700 | 12 VDC | 1.5 W | 340 mm | 176 | 6500 K |
| BMP-S3-03UH160NW401 | 12 VDC | 1.5 W | 340 mm | 152 | 4000 K |
| BMP-S3-03UH160WW301 | 12 VDC | 1.5 W | 340 mm | 152 | 3000 K |
| BMP-S3-03UH160RC | 12 VDC | 1.5 W | 340 mm | 52 | red |
| BMP-S3-03UH160CW700-24V | 24 VDC | 1.1 W | 250 mm | 128 | 6500 K |

PACKAGING INFORMATION

| | CHAIN | BAG | BOX |
|-------|------------------------------|------------------------------|--------------------------------|
| 12VDC | 25 pcs (net weight: 0.39 kg) | 75 pcs (net weight: 1.22 kg) | 675 pcs (net weight: 11.20 kg) |
| 24VDC | 60 pcs (net weight: 0.75 kg) | 60 pcs (net weight: 0.77 kg) | 540 pcs (net weight: 7.2 kg) |

© 2023, All rights reserved BaltLED, UAB. Specifications are subject to change without notice.

5 YEARS WARRANTY

IP 67

CE

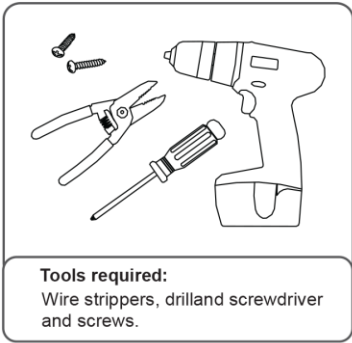
RoHS Compliant

UL Certified

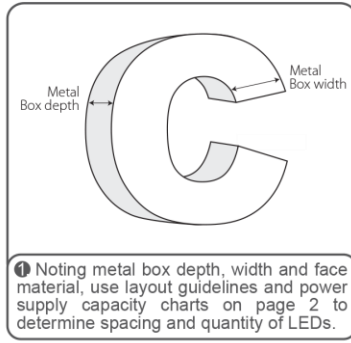
Recycling symbol

CROWN OPTO S3 INSTALLATION GUIDE

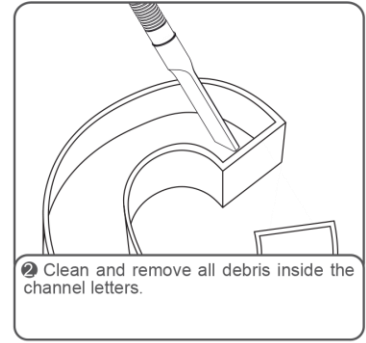
READ THE INSTRUCTIONS CAREFULLY BEFORE MOUNTING



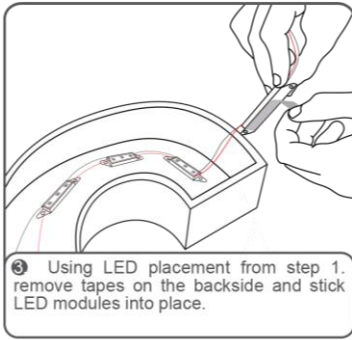
Tools required:
Wire strippers, drilland screwdriver and screws.



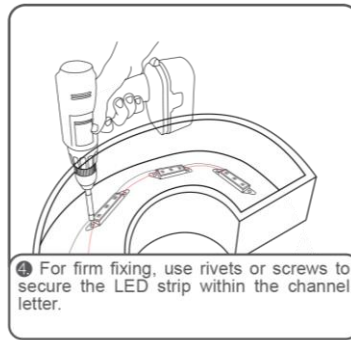
1 Noting metal box depth, width and face material, use layout guidelines and power supply capacity charts on page 2 to determine spacing and quantity of LEDs.



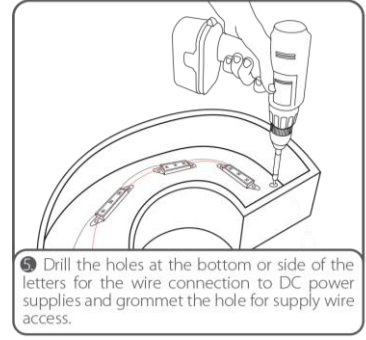
2 Clean and remove all debris inside the channel letters.



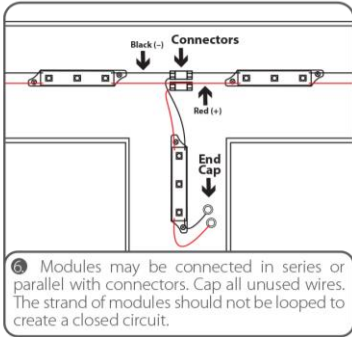
3 Using LED placement from step 1, remove tapes on the backside and stick LED modules into place.



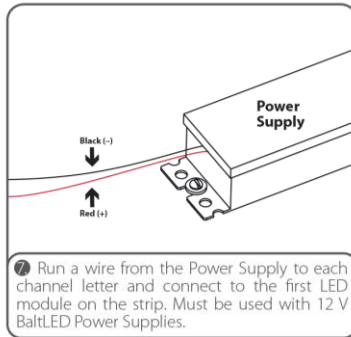
4 For firm fixing, use rivets or screws to secure the LED strip within the channel letter.



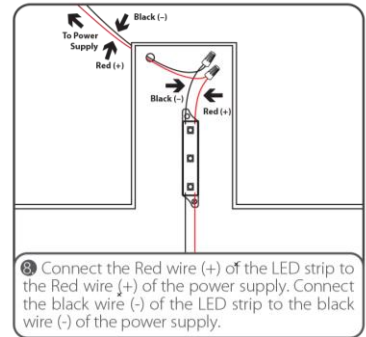
5 Drill the holes at the bottom or side of the letters for the wire connection to DC power supplies and grommet the hole for supply wire access.



6 Modules may be connected in series or parallel with connectors. Cap all unused wires. The strand of modules should not be looped to create a closed circuit.

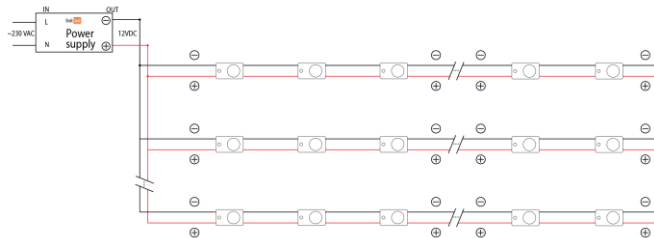


7 Run a wire from the Power Supply to each channel letter and connect to the first LED module on the strip. Must be used with 12 V BaltLED Power Supplies.



8 Connect the Red wire (+) of the LED strip to the Red wire (+) of the power supply. Connect the black wire (-) of the LED strip to the black wire (-) of the power supply.

CONNECTION SCHEME



! 25 pcs - max number of modules in one chain when the power supplied from single end.
! String end voltage can't be less than 11V, do not exceed specified module string length

POWER SUPPLY LOAD RECOMMENDATIONS

| POWER SUPPLY | QUANTITY | 2 m* | | 5 m* | | 10 m* | |
|----------------|----------|---------|-----------------|------|-----------------|-------|-----------------|
| | | modules | mm ² | AWG | mm ² | AWG | mm ² |
| BPSP-40-12V.1 | 21 | 1.5 | 16 | 2.5 | 14 | 6 | 12 |
| BPSP-60-12V.1 | 32 | 1.5 | 16 | 4 | 13 | 10 | 8 |
| BPSP-100-12V.1 | 65 | 2.5 | 14 | 6 | 10 | 10 | 8 |
| BPSP-150-12V.1 | 80 | 4 | 13 | 10 | 8 | 16 | 6 |

* Distance between power supply and modules.
! Power loss less than 5%.
! Recommendations for optimal use of power supply.

5 YEARS WARRANTY

IP 67

CE

RoHS Compliant

UL Certified

Recycling symbol

CROWN OPTO S3 INSTALLATION GUIDE

MOUNTING AND USING RECOMENDATIONS

- Be careful not to go beyond recommended maximum quantities of modules for a power supply. Overload may cause blinking or a failure.
- For mounting only pan head tapping screws must be used. The screws must apply DIN 7049 or DIN 968 standards.
- These modules are designed to work with constant-voltage power supply. Use only recommended power supplies, do not connect to a constant-current power supplies as it will cause immediate failure of modules.
- Before installing make sure, that the fixing area can bear the total weight of the modules.
- Please install LED modules with appropriate cables. There is a possibility, that cables may get disconnected due to contractions, caused by temperature changes.
- Please check that sulphur constituent is not contained in used components when the module is installed.
- Make sure to install modules in a place with a sufficient breathability in order to prevent lifetime reduction by heat. Operating temperature should not exceed +50 °C.
- When installing a module in a fixture (signboard), make sure to provide ventilation for constituent sulphur, drainage for rain water to prevent aged deteriorations.
- When fixing cables of the modules do not use metal cable stop. The tunic of the cable may be damaged and therefore lead to short-circuited.
- Be sure to install modules at a maintainable place.
- In order to prevent LED from breaking down caused by static electricity, make sure not to touch the metal parts of the cable directly with bare hands.
- Make sure to apply correct polarity and direction of the modules. If mistaken, it will lead to failure and break down of the modules.
- When trying to perform lighting test (burn-in test), be sure to connect module to a power supply. Modules can fail to light up due to over-current. If the power supply is turned on without LED modules connected, modules can be connected only 5 minutes after the power supply has been turned off. Residual electricity may cause damage to modules.
- Avoid applying force while bending, twisting or pulling the power supply cables to minimize the risk of electrical shock.
- If any signs of smoke or the smell of burning plastic occurs, turn off modules immediately and investigate the power supply and the wiring carefully.
- Make sure to record and keep product lot and installation date of the modules.

STORAGE AND MAINTANANCE CONDITIONS

- Before the maintenance, turn off the power and maintain the modules after modules cool down. Otherwise, electric shock or burn may occur.
- Do not pull the wiring while removing the modules to prevent possible disconnections.
- Make sure to store modules at dry places, avoid elevated temperatures, high pressures, vibrations, corrosive or combusive gas, direct sunlight.
- Do not wipe or spray modules with volatile materials, such as thinner or benzene as it may lead to combustion and malfunctioning.
- Modules cannot operate at presence of materials containing sulphur components or where sulphur containing gas is generated as it leads to changes in light color and malfunctioning.

GENERAL CONDITIONS

- Installation of modules must carried out by a qualified technician according to handling standards of electrical equipment.
- Modules and power supply have absolute maximum rating. Comply with the specifications to avoid failures or combustion.
- Avoid placing any high temperature objects around the modules, also avoid putting cloth or paper on the modules. It may lead to combustion, burnout, overheat, failure, deformation.
- Modules cannot be used in high-temperature environments, also they must not be subjected to vibration, shock, particles, corrosive or combusive gas. If not followed, it may cause fire, burnouts, bad insulation, failures, overheating and injuries.
- Do not insert or remove power plugs with wet hands to avoid electrical shock.
- While connecting or disconnecting electrical cords avoid being close to any heating equipment. It may lead to melting of the cords cause electrical shock.
- Do not modify the module. This may lead to electrical shock, failure, burnout, changes in module color.
- Do not install modules under direct sunlight or falling water. This may lead to electrical shock, burnouts, overheat, even combustion.
- While installing modules at humid areas, grounding of the power supply must be done.
- Modules cannot be used in combination with other types pf modules, as this may lead to failure.
- Modules can be used at ambient temperatures ranging from -30 °C to +50 °C..

CROWN OPTO S4



ITEM DESCRIPTION

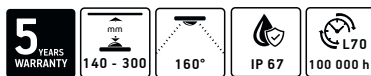
Crown OPTO STELLAR series modules are designed to illuminate huge depth letters and lightboxes. S4 module application is ranging from 140 to 300 mm in depth. These modules come with L70 100 000 h lifetime for 6500K and L70 50,000 h for other colours, granting 5 years warranty. Crown OPTO STELLAR – a great option for projects when economical, although a quality solution is needed.

APPLICATION

- Channel letters signs and light boxes
- Recommended depth 140 – 300 mm

FEATURES & BENEFITS

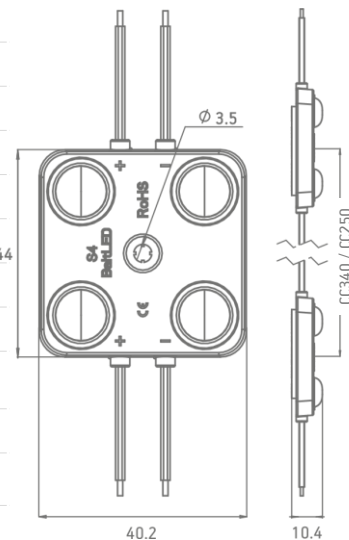
- Efficiency up to 119 lm/W
- IP67 protection class
- 5-year warranty



GENERAL SPECIFICATIONS

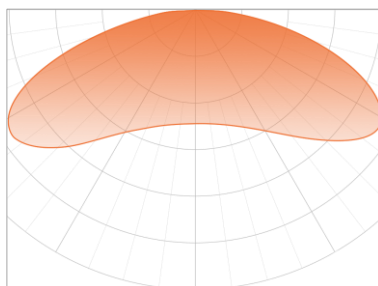
| | |
|-----------------------|--|
| SUPPLY VOLTAGE | 12 VDC 24 VDC |
| POWER | 2.0 W 1.4 W |
| RECOMMENDED DEPTH | From 140 to 300 mm |
| CC DISTANCE | 340 mm 250 mm |
| BINNING | 3 SDCM |
| OPERATING TEMPERATURE | -30 °C ~ +60 °C |
| STORAGE TEMPERATURE | +5 °C ~ +50 °C |
| STORAGE CONDITIONS | Relative humidity <60% |
| CERTIFICATION | CE, RoHS, UKCA and UL compliant |
| IP CLASS | IP 67 |
| LIFETIME | L70 100,000 h (6500K) L70 50,000 h (other colors) |
| WARRANTY | 5 years (24/7)* |

*Warranty is applied only and if storage, mounting and maintenance conditions, stated in the installation guide, are followed.



* Dimensions are in mm

LIGHT DISTRIBUTION GRAPH



Beam angle: 160°

ORDERING INFORMATION

| SKU | SUPPLY VOLTAGE | POWER | CC DISTANCE | LUMEN OUTPUT, LM | COLOUR TEMP. |
|-------------------------|----------------|-------|-------------|------------------|--------------|
| BMP-S4-04UH160CW700 | 12 VDC | 2.0 W | 340 mm | 237 | 6500 K |
| BMP-S4-04UH160CW700-24V | 24 VDC | 1.4 W | 250 mm | 161 | 6500 K |

PACKAGING INFORMATION

| | CHAIN | BAG | BOX |
|-------|------------------------------|------------------------------|--------------------------------|
| 12VDC | 20 pcs (net weight: 0.46 kg) | 60 pcs (net weight: 1.42 kg) | 420 pcs (net weight: 10.20 kg) |
| 24VDC | 50 pcs (net weight: 0.96 kg) | 50 pcs (net weight: 0.98 kg) | 350 pcs (net weight: 7.10 kg) |

© 2023, All rights reserved BaltLED, UAB. Specifications are subject to change without notice.

5 YEARS WARRANTY

IP 67

CE

UK CA

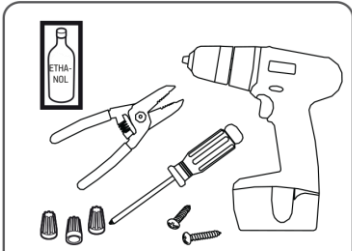
RoHS Compliant

UL Certified

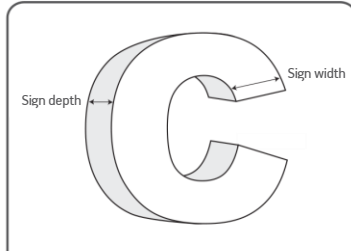
UL Certified

CROWN OPTO S4 12VDC | 24VDC INSTALLATION GUIDE

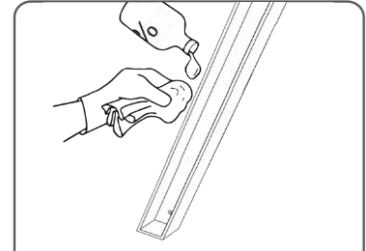
READ THE INSTRUCTIONS CAREFULLY BEFORE MOUNTING



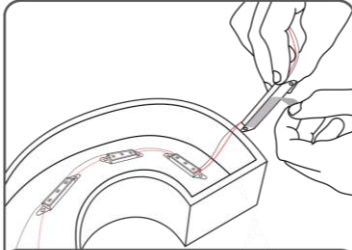
Tools required:
Wires, wire strippers, drill, screwdriver, screws, surface cleaner, wire connectors and end caps.



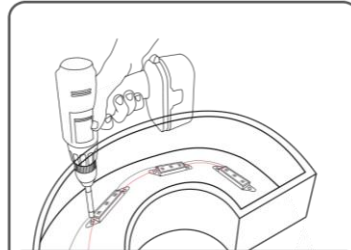
1. Noting the sign depth, width and face material, use layout guidelines from datasheet and power supply capacity charts below to determine spacing and quantity of LEDs.



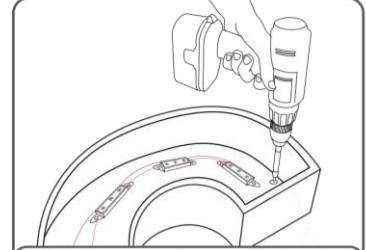
2. Clean the inside of the sign with surface cleaner (e.g. ethanol) to make sure it is free of dirt.



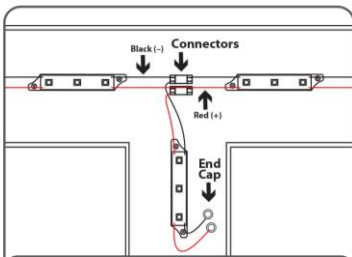
3. Using LED placement from step 1 remove tapes on the backside and stick LED modules into place.



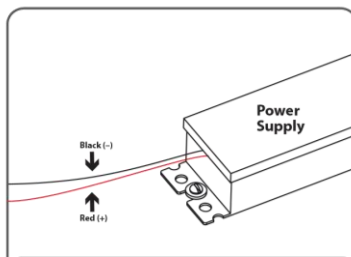
4. For firm fixing, use rivets or screws to secure the LED module within the channel letter.



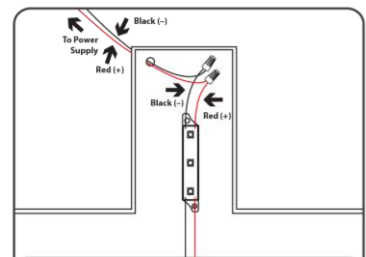
5. Drill the holes at the bottom or side of the letters for the wire connection to DC power supplies and grommet the hole for supply wire access.



6. Modules may be connected in series or parallel with connectors. Cap all unused wires. The strand of modules should not be looped to create a closed circuit.

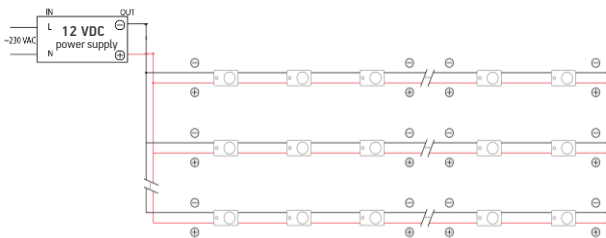


7. Run a wire from the power supply to each channel letter and connect to the first LED module on the strip. Must be used with 12 V or 24 V BaltLED Power Supplies.

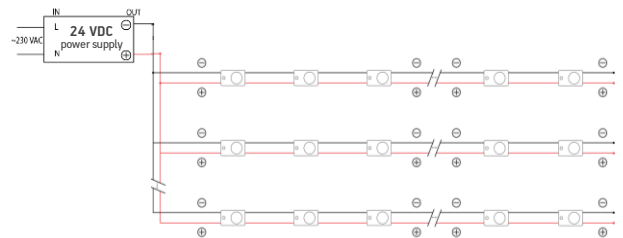


8. Connect the Red wire (+) of the LED module to the Red wire (+) of the power supply. Connect the black wire (-) of the LED module to the black wire (-) of the power supply.

CONNECTION SCHEME



! 20 pcs - max number of modules in one chain when the power supplied from single end.
! String end voltage can't be less than 11V, do not exceed specified module string length



! 50 pcs - max number of modules in one chain when the power supplied from single end.
! String end voltage can't be less than 20V, do not exceed specified module string length

POWER SUPPLY LOAD RECOMMENDATIONS

| 12 VDC POWER SUPPLY | QUANTITY | 2 m* | | 5 m* | | 10 m* | |
|---------------------|----------|-----------------|-----|-----------------|-----|-----------------|-----|
| | modules | mm ² | AWG | mm ² | AWG | mm ² | AWG |
| BPSP-40-12V.1 | 16 | 1.5 | 16 | 2.5 | 14 | 6 | 12 |
| BPSP-60-12V.1 | 24 | 1.5 | 16 | 4 | 13 | 10 | 8 |
| BPSP-100-12V.1 | 40 | 2.5 | 14 | 6 | 10 | 16 | 6 |
| BPSP-150-12V.1 | 75 | 4 | 13 | 10 | 8 | 25 | 4 |

| 24 VDC POWER SUPPLY | QUANTITY | 2 m* | | 5 m* | | 10 m* | |
|---------------------|----------|-----------------|-----|-----------------|-----|-----------------|-----|
| | modules | mm ² | AWG | mm ² | AWG | mm ² | AWG |
| BPSP-40-24V.1 | 26 | 1.5 | 16 | 2.5 | 14 | 2.5 | 14 |
| BPSP-60-24V.1 | 39 | 2.5 | 14 | 2.5 | 14 | 4 | 13 |
| BPSP-100-24V.1 | 64 | 4 | 13 | 4 | 13 | 6 | 10 |

© 2022, All rights reserved BaltLED, UAB. Specifications are subject to change without notice.

MOUNTING AND USING RECOMENDATIONS

- Be careful not to go beyond recommended maximum quantities of modules for a power supply. Overload may cause blinking or a failure.
- For mounting only pan head tapping screws must be used. The screws must apply DIN 7049 or DIN 968 standards.
- These modules are designed to work with constant-voltage power supply. Use only recommended power supplies, do not connect to a constant-current power supplies as it will cause immediate failure of modules.
- Before installing make sure, that the fixing area can bear the total weight of the modules.
- Please install LED modules with appropriate cables. There is a possibility, that cables may get disconnected due to contractions, caused by temperature changes.
- Please check that sulphur constituent is not contained in used components when the module is installed.
- Make sure to install modules in a place with a sufficient breathability in order to prevent lifetime reduction by heat. Operating temperature should not exceed +60 °C.
- When installing a module in a fixture (signboard), make sure to provide ventilation for constituentsulphur, drainage for rainwater to prevent aged deteriorations.
- When fixing cables of the modules do not use metal cable stop. The tunic of the cable may be damaged and therefore lead to short-circuited.
- Be sure to install modules at a maintainable place.
- In order to prevent LED from breaking down caused by static electricity, make sure not to touch the metal parts of the cabledirectly with bare hands.
- Make sure to apply correct polarity and direction of the modules. If mistaken, it will lead to failure and break down of themodules.
- When trying to perform lighting test (burn-in test), be sure to connect module to a power supply. Modules can fail to light up due to over-current. If the power supply is turned on without LED modules connected, modules can be connected only 5 minutes after the power supply has been tuned off. Residual electricity may cause damage to modules.
- Avoid applying force while bending, twisting or pulling the power supply cables to minimize the risk of electrical shock.
- If any signs of smoke or the smell of burning plastic occurs, turn off modules immediately and investigate the power supply and the wiring carefully.
- Make sure to record and keep product lot and installation date of the modules.

STORAGE AND MAINTANANCE CONDITIONS

- Before the maintenance, turn off the power and maintain the modules after modules cool down. Otherwise, electric shock or burn may occur.
- Do not pull the wiring while removing the modules to prevent possible disconnections.
- Make sure to store modules at dry places, avoid elevated temperatures, high pressures, vibrations, corrosive or combusive gas, direct sunlight.
- Do not wipe or spray modules with volatile materials, such as thinner or benzene as it may lead to combustion and malfunctioning.
- Modules cannot operate at presence of materials containing sulphur components or where sulphur containing gas is generated as it leads to changes in light color and malfunctioning.

GENERAL CONDITIONS

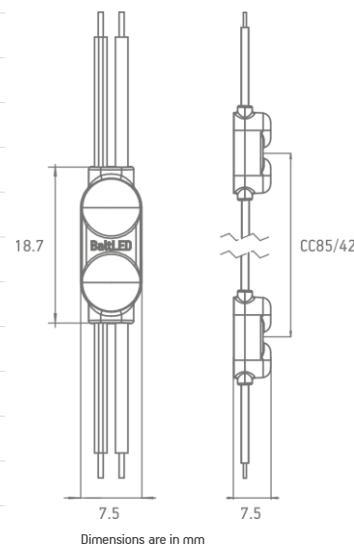
- Installation of modules must be carried out by a qualified technician according to handling standards of electrical equipment.
- Modules and power supply have absolute maximum rating. Comply with the specifications to avoid failures or combustion.
- Avoid placing any high temperature objects around the modules, also avoid putting cloth or paper on the modules. It may lead to combustion, burnout, overheat, failure, deformation.
- Modules cannot be used in high-temperature environments, also they must not be subjected to vibration, shock, particles, corrosive or combusive gas. If not followed, it may cause fire, burnouts, bad insulation, failures, overheating and injuries.
- Do not insert or remove power plugs with wet hands to avoid electrical shock.
- While connecting or disconnecting electrical cords avoid being close to any heating equipment. It may lead to melting of the cords cause electrical shock.
- Do not modify the module. This may lead to electrical shock, failure, burnout, changes in module color.
- Do not install modules under direct sunlight or falling water. This may lead to electrical shock, burnouts, overheat, even combustion.
- While installing modules at humid areas, grounding of the power supply must be done.
- Modules cannot be used in combination with other types of modules, as this may lead to failure.
- Modules can be used at ambient temperatures ranging from -30 °C to +60 °C..

CROWN MINI



GENERAL SPECIFICATIONS

| | |
|-----------------------|------------------------|
| SUPPLY VOLTAGE | 12 VDC |
| POWER | 0.3 W |
| RECOMMENDED DEPTH | From 20 to 60 mm |
| CC DISTANCE | 85 mm; 42 mm |
| BINNING | 3 SDCM |
| OPERATING TEMPERATURE | -30 °C ~ +50 °C |
| STORAGE TEMPERATURE | +5 °C ~ +70 °C |
| STORAGE CONDITIONS | Relative humidity <60% |
| IP CLASS | IP66 |
| CERTIFICATION | CE and RoHS compliant |
| LIFETIME | L70 50,000 h |
| WARRANTY | 5 years* |

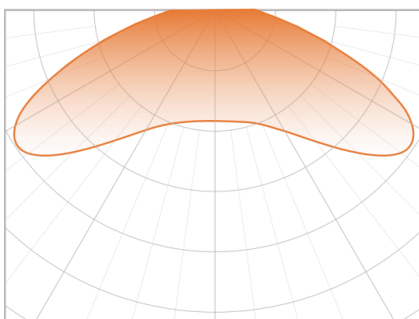


*Warranty is applied only and if storage, mounting and maintenance conditions, stated in the installation guide, are followed.

ITEM DESCRIPTION

Crown MINI is best for the uniform illumination of shallow depth narrow channel letters. These modules are designed to fit in backlit and halo-lit applications with depths as low as 20 mm and widths as narrow as 8 mm. Great illumination uniformity can be achieved with 85 mm / 42 mm distance between modules and flexible silicone insulation wires allowing easy installation. A 5-year warranty with L70 for 50,000 hours is applied.

LIGHT DISTRIBUTION GRAPH



Beam angle: 155°

APPLICATION

- Shallow depth narrow channel letters
- Recommended depth 20 – 60 mm

FEATURES & BENEFITS

- Extremely small size
- High CRI > 82
- Efficiency up to 93 lm/W
- IP66 protection class
- Made in Europe
- 5 year warranty

ORDERING INFORMATION

| SKU | CC DISTANCE | POWER | LUMEN OUTPUT | COLOUR TEMP. |
|----------------------|-------------|-------|--------------|--------------|
| BMP-5M-02UH160CW70 | 85 mm | 0.3 W | 28 lm | 6500 ± 250 K |
| BMP-5M-02UH160WW30 | 85 mm | 0.3 W | 27 lm | 3000 ± 200 K |
| BMP-5M-02UH160CW70CC | 42 mm | 0.3 W | 28 lm | 6500 ± 250 K |
| BMP-5M-02UH160WW30CC | 42 mm | 0.3 W | 27 lm | 3000 ± 200 K |

ORDERING QUANTITY

| CHAIN | BAG | BOX |
|--------------------------------|---------------------------------|----------------------------------|
| 50 pcs (net weight: ~0.076 kg) | 100 pcs (net weight: ~0.162 kg) | 2000 pcs (net weight: ~3.300 kg) |

CROWN MINI installation guide

Inside the bag:
Packing card with modules.

Needed for mounting:
Wire strippers, glue.

1. Attach the optional holder accessory to the base. Hold the end of the LED module string and pull it, the cable will unroll by spinning.

2. Clean and remove all debris inside the channel letters.

3. Remove protective layer from the backside and stick LED modules into place.

4. For firm fixing, use glue to secure the LED modules within the channel letter.

5. Connect the modules with waterproof connectors.

6. Cap all unused wires. Do not connect positive wires to negative wires.

7. Close the channel letter.

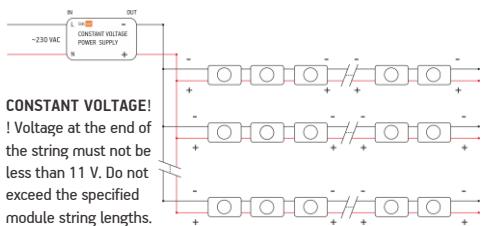
8. Choose a 12 VDC waterproof power supply.

9. Connect the white wire (+) of the LED modules to the positive wire (+) of the power supply. Connect the white wire with black line (-) of the LED modules to the negative wire (-) of the power supply. Use waterproof connectors.

10. Finish by connecting AC power line to the input wires of the power supply.

11. Channel letter is ready to be illuminated.

CONNECTION SCHEME



CONNECTION SCHEME

| POWER SUPPLY | QUANTITY modules | 2 m* | | 5 m* | | 10 m* | |
|----------------|------------------|-----------------|-----|-----------------|-----|-----------------|-----|
| | | mm ² | AWG | mm ² | AWG | mm ² | AWG |
| BPSP-40-12V.1 | 90 | 1.5 | 16 | 2.5 | 14 | 6 | 12 |
| BPSP-60-12V.1 | 135 | 1.5 | 16 | 4 | 13 | 10 | 8 |
| BPSP-100-12V.1 | 225 | 2.5 | 14 | 6 | 10 | 10 | 8 |
| BPSP-150-12V.1 | 340 | 4 | 13 | 10 | 8 | 16 | 6 |

* Distance between power supply and modules.
! Power loss less than 5%.
! Recommendations for optimal use of the power supply.



CROWN MINI installation guide

SAFETY PRECAUTIONS

- Installation of modules must be carried out by a qualified technician in accordance with relevant electrical equipment handling standards.
- Before installing, make sure that the fixing area can bear the total weight of the modules.
- Modules and power supplies have absolute maximum ratings. Comply with the specifications to avoid failure, damage and injury.
- Do not modify the module. This may lead to damage, injury and will void the warranty.
- Do not connect the modules to a power supply that is turned on! Injury and module failure may occur. If a power supply is turned on with no load (for example because of a bad connection), turn the power supply off and allow 5 minutes for it to fully discharge before continuing work on the installation.
- Avoid placing any high temperature objects around the modules. Also avoid putting cloth or paper on the modules. It may lead to combustion, burnout, overheat, failure, deformation.
- Before performing maintenance, turn off the power and allow the modules to cool down. Otherwise there is a danger of burns or electric shock.
- Do not wipe or spray modules with volatile materials such as thinner or benzene as it may lead to damage or spontaneous combustion.
- If there are any signs of smoke or there is a smell of burnt plastic, turn off power to the installation immediately and investigate the power supply and wiring carefully.
- Ensure that power supply and other system components are properly earthed if using Class 0 or Class I power supplies.

INSTALLATION RECOMMENDATIONS

- The adhesive tape is for temporary mounting only! Additional adhesives or fasteners must be used for permanent installation.
- Be sure to install modules in maintainable places.
- Avoid using excessive force during installation in order to minimize the risk of damage to modules or cabling.
- Be careful not to go beyond the recommended maximum quantities of modules for a given power supply. Overload may cause blinking, uneven illumination or failure.
- These modules are designed to work with constant-voltage power supplies. Use only recommended power supplies. Do not connect to constant-current power supplies, as doing so will cause immediate failure of modules.
- Please install LED modules using appropriate cables. There is a possibility of cables disconnecting or breaking due to shrinkage caused by temperature changes.
- Make sure to provide sufficient ventilation and rainwater drainage for the installation containing the modules to prevent shortening their lifetime due to excess heat, long-term exposure to water or ice damage. Operating temperature should be within -30-50 °C.
- When fixing the cabling of the installation, avoid using metal cable ties or brackets – they may damage the cable insulation and cause short-circuits.
- In order to prevent LED breakdown caused by static discharge, make sure not to touch the wiring of the modules with bare hands.
- Make sure to check the module connections for the correct polarity. Reversed connections may lead to failure.
- Do not pull on the wiring while removing the modules – risk of damage.
- Do not install modules under direct sunlight or falling water – premature failure may occur.

STORAGE AND GENERAL REMARKS

- Make sure to store modules in a dry place, avoid elevated temperatures, high pressures, vibrations, corrosive or combustible materials, direct sunlight.
- Modules cannot be used in combination with other types of modules. This may cause colour and brightness mismatches and lead to premature failure.
- Please ensure that the materials and components used in the installation do not contain or emit sulphuric compounds. Sulphuric compounds attack the LED module components and may lead to changes in colour and premature failure.
- Make sure to keep records of the lot numbers and installation dates of the modules.

CROWN OPTO S0+



ITEM DESCRIPTION

Crown OPTO S0+ is a new solution for uniform illumination of single-sided lightboxes and bigger channel letters with depth ranging from 40 to 90 mm. Due to the new optics, we have used with this module, light is distributed more evenly inside the lightboxes or channel letters. As these modules have a better light distribution pattern, they can be installed with a 170 mm step. For fixing modules in place, adhesive tape is used. To ensure the convenient use of it, we designed the tape with a finger lift edge liner for quick and easy removal of the protective layer. Crown OPTO S0+ comes with L80 50 000 h lifetime and 5 years (24/7) warranty.

APPLICATION

- Single-sided lightboxes and bigger channel letters
- Recommended depth 40 – 90 mm

FEATURES & BENEFITS

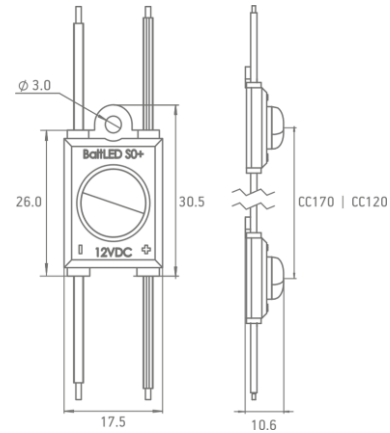
- Efficiency up to 128 lm/W
- 170 mm distance between centers of modules
- IP67 protection class
- L80 50, 000 h lifetime
- 5-year 24/7 warranty
- Easy tear finger-lift tape for faster installation



GENERAL SPECIFICATIONS

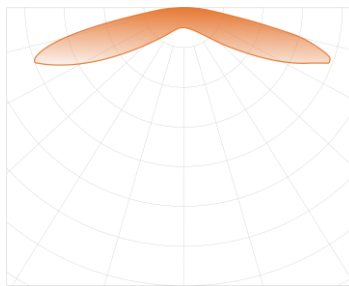
| | |
|-----------------------|------------------------|
| SUPPLY VOLTAGE | 12 VDC |
| POWER | 0.5 W |
| RECOMMENDED DEPTH | from 40 to 90 mm |
| CC DISTANCE | 170 mm 120 mm |
| BINNING | 3 SDCM |
| OPERATING TEMPERATURE | -30 °C ~ +50 °C |
| STORAGE TEMPERATURE | +5 °C ~ +70 °C |
| STORAGE CONDITIONS | Relative humidity <60% |
| CERTIFICATION | CE and RoHS compliant |
| IP CLASS | IP67 |
| LIFETIME | L80 50,000 h |
| WARRANTY | 5 years (24/7)* |

*Warranty is applied only and if storage, mounting and maintenance conditions, stated in the installation guide, are followed.



Dimensions are in mm

LIGHT DISTRIBUTION GRAPH



Beam angle: 160°

ORDERING INFORMATION

| SKU | CC DISTANCE, MM | POWER, W | LUMEN OUTPUT, LM | COLOUR TEMP. | STATUS |
|-------------------------|-----------------|----------|------------------|--------------|----------|
| BMOP-SP-LE1A160865E05 | 170 | 0.5 | 63 | 6500 K | IN STOCK |
| BMOP-SP-LE1A160865E05CC | 120 | 0.5 | 63 | 6500 K | IN STOCK |
| BMOP-SP-LE1A160840E05 | 170 | 0.5 | 64 | 4000 K | IN STOCK |
| BMOP-SP-LE1A160830E05 | 170 | 0.5 | 50 | 3000 K | IN STOCK |
| BMOP-SP-LE1A160RE05 | 170 | 0.45 | 20 | red | IN STOCK |
| BMOP-SP-LE1A160GE05 | 170 | 0.5 | 44 | green | IN STOCK |
| BMOP-SP-LE1A160BE05 | 170 | 0.5 | 11 | blue | IN STOCK |

PACKAGING INFORMATION

| CC DISTANCE, MM | CHAIN | BAG | BOX |
|-------------------------|-----------------|------------------|--------------------|
| BMOP-SP-LE1A160865E05 | 60 pcs (0.4 kg) | 120 pcs (0.8 kg) | 1440 pcs (10.4 kg) |
| BMOP-SP-LE1A160865E05CC | 80 pcs (0.6 kg) | 160 pcs (1.2 kg) | 2240 pcs (18.0 kg) |
| BMOP-SP-LE1A160840E05 | 60 pcs (0.4 kg) | 120 pcs (0.8 kg) | 2400 pcs (18.0 kg) |
| BMOP-SP-LE1A160830E05 | 60 pcs (0.4 kg) | 120 pcs (0.8 kg) | 2400 pcs (18.0 kg) |
| BMOP-SP-LE1A160RE05 | 60 pcs (0.4 kg) | 120 pcs (0.8 kg) | 2400 pcs (18.0 kg) |
| BMOP-SP-LE1A160GE05 | 60 pcs (0.4 kg) | 120 pcs (0.8 kg) | 2400 pcs (18.0 kg) |
| BMOP-SP-LE1A160BE05 | 60 pcs (0.4 kg) | 120 pcs (0.8 kg) | 2400 pcs (18.0 kg) |

© 2021, All rights reserved BaltLED, UAB. Specifications are subject to change without notice.



CROWN OPTO SO+ INSTALLATION GUIDE

READ THE INSTRUCTIONS CAREFULLY BEFORE MOUNTING

Tools required. Wires, wire strippers, drill, screwdriver, screws, surface cleaner, wire connectors and end caps.

1. Clean the inside of the sign with surface cleaner (e.g. ethanol) to make sure it is free of dirt.

2. Remove protective layer from the backside of the module and stick LED modules into place.

3. For firm fixing, use screws to secure LED modules within the lightbox. Depending on the mounting surface, set proper torque to not damage the module mounting lugs.

4. Connect the modules with waterproof connectors.

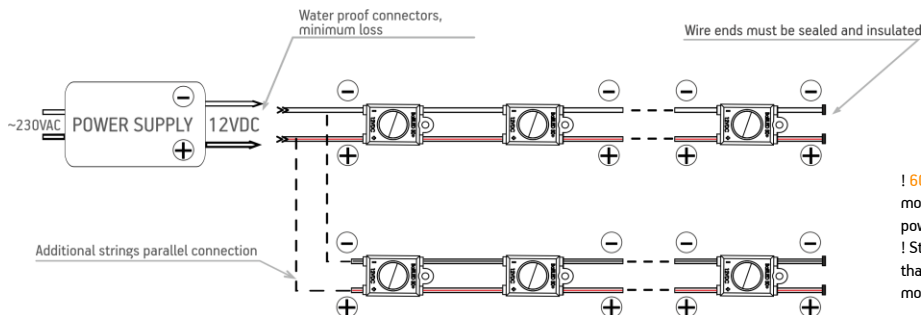
5. Cap all unused wires. The strand of modules should not be looped to create a closed circuit.

6. Choose a 12 VDC waterproof power supply

7. Connect the white wire with red stripe (+) of the LED modules to the positive wire (+) of the power supply. Connect the white wire (-) to the negative wire (-) of power supply. Use waterproof connectors.

8. Finish by connecting AC power line to the input wires of the power supply.

CONNECTION SCHEME



! 60 pcs - max number of modules in one chain when the power supplied from single end.
! String end voltage can't be less than 11V, do not exceed specified module string length

POWER SUPPLY LOAD RECOMMENDATIONS

| POWER SUPPLY | QUANTITY | 2 m* | | 5 m* | | 10 m* | |
|----------------|----------|---------|-----------------|------|-----------------|-------|-----------------|
| | | modules | mm ² | AWG | mm ² | AWG | mm ² |
| BPSP-40-12V.1 | 64 | 1.5 | 16 | 2.5 | 14 | 6 | 12 |
| BPSP-60-12V.1 | 96 | 1.5 | 16 | 4 | 13 | 10 | 8 |
| BPSP-100-12V.1 | 160 | 2.5 | 14 | 6 | 10 | 10 | 8 |
| BPSP-150-12V.1 | 240 | 4 | 13 | 10 | 8 | 16 | 6 |

* Distance between power supply and modules.
! Power loss less than 5%.
! Recommendations for optimal use of power supply.



CROWN OPTO SO+ INSTALLATION GUIDE

SAFETY PRECAUTIONS

- Installation of modules must be carried out by a qualified technician in accordance with relevant electrical equipment handling standards.
- Before installing, make sure that the fixing area can bear the total weight of the modules.
- Modules and power supplies have absolute maximum ratings. Comply with the specifications to avoid failure, damage and injury.
- Do not modify LED module. This may lead to damage, injury and will void the warranty.
- Do not connect LED modules to a power supply that is turned on! Injury and module failure may occur. If a power supply is turned on with no load (for example because of a bad connection), turn the power supply off and allow 5 minutes for it to fully discharge before continuing work on the installation.
- Avoid placing any high temperature objects around the modules. Also avoid putting cloth or paper on the modules. It may lead to combustion, burnout, overheat, deformation or other failure.
- Before performing maintenance, turn off the power and allow the modules to cool down. Otherwise there is danger of burns or electric shock.
- Do not wipe or spray modules with volatile materials such as thinner or benzene as it may lead to damage or spontaneous combustion.
- If there are any signs of smoke or there is a smell of burnt plastic, turn off power to the installation immediately and investigate the power supply and wiring carefully.
- Ensure that power supply and other system components are properly earthed if using Class 0 or Class I power supplies.

INSTALLATION RECOMMENDATIONS

- Adhesive tape is for temporary mounting only! Additional adhesives or fasteners must be used for permanent installation.
- Be sure to install modules in maintainable places.
- Avoid using excessive force during installation in order to minimize the risk of damage to modules or cabling.
- Be careful not to go beyond the recommended maximum quantities of modules for a given power supply. Overload may cause blinking, uneven illumination or failure.
- These modules are designed to work with constant-voltage power supplies. Use only recommended power supplies. Do not connect to constant-current power supplies, as doing so will cause immediate failure of modules.
- Please install LED modules using appropriate appliance wiring material and cables.
- Make sure to provide sufficient ventilation and rainwater drainage for the installation containing the modules to prevent shortening their lifetime due to excess heat, long-term exposure to water or ice damage. Operating temperature should be within -30–50 °C.
- When fixing the cabling of the installation, avoid using metal cable ties or brackets – they may damage the cable insulation and cause short-circuits.
- In order to prevent LED breakdown caused by static discharge, make sure not to touch the wiring of the modules with bare hands.
- Make sure to check the module connections for the correct polarity. Reversed connections may lead to failure.
- Do not pull on the wiring while removing the modules – risk of damage.
- Do not install modules under direct sunlight or falling water – premature failure may occur.

STORAGE AND GENERAL REMARKS

- Make sure to store modules in a dry place, avoid elevated temperatures, high pressures, vibrations, corrosive or combustible materials, direct sunlight.
- Modules cannot be used in combination with other types of modules. This may cause colour and brightness mismatches and lead to premature failure.
- Please ensure that the materials and components used in the installation do not contain or emit sulphuric compounds. Sulphuric compounds attack the LED module components and may lead to changes in colour and premature failure.
- Make sure to keep records of the lot numbers and installation dates of the modules.

CROWN OPTO S1+



ITEM DESCRIPTION

Crown OPTO S1+ is a new solution for uniform illumination of single-sided lightboxes and bigger channel letters with depth ranging from 80 to 140 mm. Due to the new optics, we have used with this module, light is distributed more evenly inside the lightboxes or channel letters. As these modules have a better light distribution pattern and longer wires, they can be installed with a 250 mm step. To make the installation work easy and fast, these modules come with the adhesive containing a finger lift edge liner for convenient removal of the protective layer.

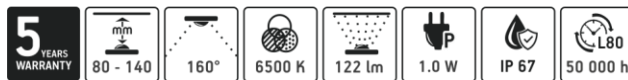
Crown OPTO S1+ modules have 5 years (24/7) warranty with L80 for 50 000 hours.

APPLICATION

- Single-sided lightboxes and bigger channel letters
- Recommended depth 80 – 140 mm

FEATURES & BENEFITS

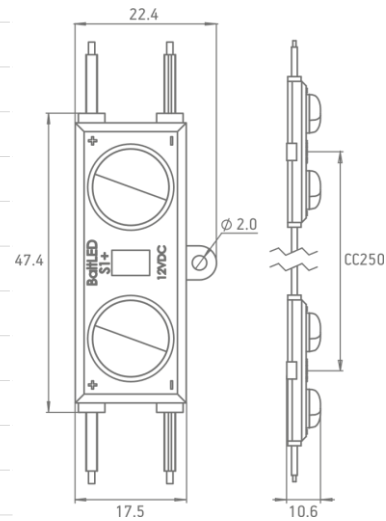
- Efficiency up to 122 lm/W
- 250 mm distance between centers of modules
- IP67 protection class
- L80 50, 000 h lifetime
- 5-year 24/7 warranty
- Easy tear finger-lift tape for faster installation



GENERAL SPECIFICATIONS

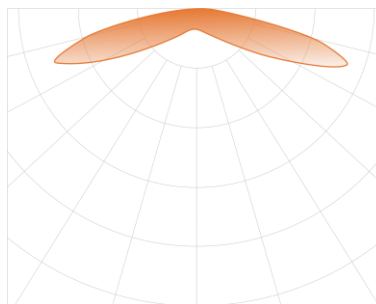
| | |
|-----------------------|------------------------|
| SUPPLY VOLTAGE | 12 VDC |
| POWER | 1.0 W |
| RECOMMENDED DEPTH | from 80 to 140 mm |
| CC DISTANCE | 250 mm |
| BINNING | 3 SDCM |
| OPERATING TEMPERATURE | -30 °C ~ +50 °C |
| STORAGE TEMPERATURE | +5 °C ~ +70 °C |
| STORAGE CONDITIONS | Relative humidity <60% |
| CERTIFICATION | CE and RoHS compliant |
| IP CLASS | IP67 |
| LIFETIME | L80 50,000 h |
| WARRANTY | 5 years (24/7)* |

*Warranty is applied only and if storage, mounting and maintenance conditions, stated in the installation guide, are followed.



* Dimensions are in mm

LIGHT DISTRIBUTION GRAPH



Beam angle: 160°

ORDERING INFORMATION

| SKU | POWER, W | LUMEN OUTPUT, LM | COLOUR TEMP. | STATUS |
|----------------------|----------|------------------|--------------|----------|
| BMOP-SP-LE2A160865E1 | 1.0 | 122 | 6500 K | IN STOCK |
| BMOP-SP-LE2A160840E1 | 1.0 | 121 | 4000 K | IN STOCK |
| BMOP-SP-LE2A160830E1 | 1.0 | 93 | 3000 K | IN STOCK |
| BMOP-SP-LE2A160RE09 | 0.9 | 34 | red | IN STOCK |
| BMOP-SP-LE2A160GE1 | 1.0 | 85 | green | IN STOCK |
| BMOP-SP-LE2A160BE1 | 1.0 | 20 | blue | IN STOCK |

PACKAGING INFORMATION

| SKU | CHAIN | BAG | BOX |
|----------------------|------------------|------------------|--------------------|
| BMOP-SP-LE2A160865E1 | 35 pcs (0.42 kg) | 70 pcs (0.85 kg) | 840 pcs (10.6 kg) |
| BMOP-SP-LE2A160840E1 | 35 pcs (0.42 kg) | 70 pcs (0.85 kg) | 1120 pcs (15.0 kg) |
| BMOP-SP-LE2A160830E1 | 35 pcs (0.42 kg) | 70 pcs (0.85 kg) | 1120 pcs (15.0 kg) |
| BMOP-SP-LE2A160RE09 | 35 pcs (0.42 kg) | 70 pcs (0.85 kg) | 1120 pcs (15.0 kg) |
| BMOP-SP-LE2A160GE1 | 35 pcs (0.42 kg) | 70 pcs (0.85 kg) | 1120 pcs (15.0 kg) |
| BMOP-SP-LE2A160BE1 | 35 pcs (0.42 kg) | 70 pcs (0.85 kg) | 1120 pcs (15.0 kg) |

© 2021, All rights reserved BaltLED, UAB. Specifications are subject to change without notice.

5 YEARS WARRANTY

IP67



CROWN OPTO S1+ INSTALLATION GUIDE

READ THE INSTRUCTIONS CAREFULLY BEFORE MOUNTING

Tools required. Wires, wire strippers, drill, screwdriver, screws, surface cleaner, wire connectors and end caps.

1. Clean the inside of the sign with surface cleaner (e.g. ethanol) to make sure it is free of dirt.

2. Remove protective layer from the backside of the module and stick LED modules into place.

3. For firm fixing, use screws to secure LED modules within the lightbox. Depending on the mounting surface, set proper torque to not damage the module mounting lugs.

4. Connect the modules with waterproof connectors.

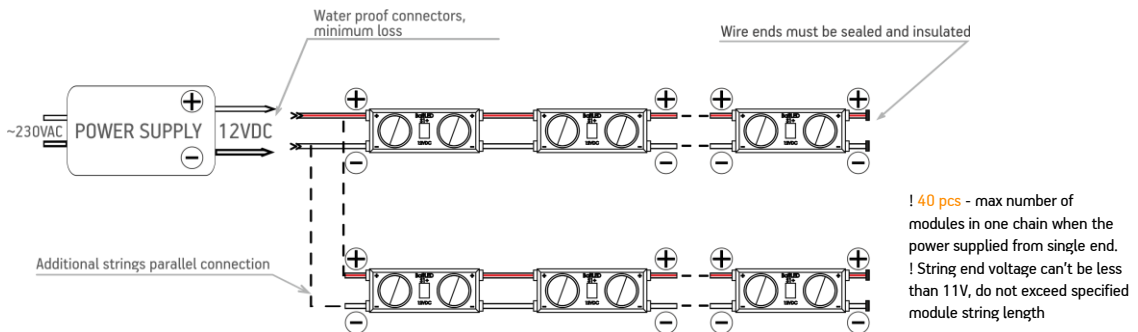
5. Cap all unused wires. The strand of modules should not be looped to create a closed circuit.

6. Choose a 12 VDC waterproof power supply

7. Connect the white wire with red stripe (+) of the LED modules to the positive wire (+) of the power supply. Connect the white wire (-) to the negative wire (-) of power supply. Use waterproof connectors.

8. Finish by connecting AC power line to the input wires of the power supply.

CONNECTION SCHEME



POWER SUPPLY LOAD RECOMMENDATIONS

| POWER SUPPLY | QUANTITY | 2 m* | | 5 m* | | 10 m* | | |
|----------------|----------|---------|-----------------|------|-----------------|-------|-----------------|-----|
| | | modules | mm ² | AWG | mm ² | AWG | mm ² | AWG |
| BPSP-40-12V.1 | 32 | | 1.5 | 16 | 2.5 | 14 | 6 | 12 |
| BPSP-60-12V.1 | 48 | | 1.5 | 16 | 4 | 13 | 10 | 8 |
| BPSP-100-12V.1 | 80 | | 2.5 | 14 | 6 | 10 | 10 | 8 |
| BPSP-150-12V.1 | 120 | | 4 | 13 | 10 | 8 | 16 | 6 |

* Distance between power supply and modules.
! Power loss less than 5%.
! Recommendations for optimal use of power supply.

© 2021, All rights reserved BaltLED, UAB. Specifications are subject to change without notice.



SAFETY PRECAUTIONS

- Installation of modules must be carried out by a qualified technician in accordance with relevant electrical equipment handling standards.
- Before installing make sure that the fixing area can bear the total weight of the modules.
- Modules and power supplies have absolute maximum ratings. Comply with the specifications to avoid failure, damage and injury.
- Do not modify LED module. This may lead to damage, injury and will void the warranty.
- Do not connect LED modules to a power supply that is turned on! Injury and module failure may occur. If a power supply is turned on with no load (for example because of a bad connection), turn the power supply off and allow 5 minutes for it to fully discharge before continuing work on the installation.
- Avoid placing any high temperature objects around the modules. Also avoid putting cloth or paper on the modules. It may lead to combustion, burnout, overheat, deformation or other failure.
- Before performing maintenance, turn off the power and allow the modules to cool down. Otherwise there is danger of burns or electric shock.
- Do not wipe or spray modules with volatile materials such as thinner or benzene as it may lead to damage or spontaneous combustion.
- If there are any signs of smoke or there is a smell of burnt plastic, turn off power to the installation immediately and investigate the power supply and wiring carefully.
- Ensure that power supply and other system components are properly earthed if using Class 0 or Class I power supplies.

INSTALLATION RECOMMENDATIONS

- Adhesive tape is for temporary mounting only! Additional adhesives or fasteners must be used for permanent installation.
- Be sure to install modules in maintainable places.
- Avoid using excessive force during installation in order to minimize the risk of damage to modules or cabling.
- Be careful not to go beyond the recommended maximum quantities of modules for a given power supply. Overload may cause blinking, uneven illumination or failure.
- These modules are designed to work with constant-voltage power supplies. Use only recommended power supplies. Do not connect to constant-current power supplies, as doing so will cause immediate failure of modules.
- Please install LED modules using appropriate appliance wiring material and cables.
- Make sure to provide sufficient ventilation and rainwater drainage for the installation containing the modules to prevent shortening their lifetime due to excess heat, long-term exposure to water or ice damage. Operating temperature should be within -30-50 °C.
- When fixing the cabling of the installation avoid using metal cable ties or brackets – they may damage the cable insulation and cause short-circuits.
- In order to prevent LED breakdown caused by static discharge make sure not to touch the wiring of the modules with bare hands.
- Make sure to check the module connections for the correct polarity. Reversed connections may lead to failure.
- Do not pull on the wiring while removing the modules – risk of damage.
- Do not install modules under direct sunlight or falling water – premature failure may occur.

STORAGE AND GENERAL REMARKS

- Make sure to store modules in a dry place, avoid elevated temperatures, high pressures, vibrations, corrosive or combustible materials, direct sunlight.
- Modules cannot be used in combination with other types of modules. This may cause colour and brightness mismatches and lead to premature failure.
- Please ensure that the materials and components used in the installation do not contain or emit sulphuric compounds. Sulphuric compounds attack the LED module components and may lead to changes in colour and premature failure.
- Make sure to keep records of the lot numbers and installation dates of the modules.

CROWN DUO W1



ITEM DESCRIPTION

Crown DUO W1 - a perfect solution for illumination of shallow and medium depth (80-160 mm) double-sided lightboxes. These modules ensure uniform and bright illumination on different materials, like acrylic glass or textile of up to 1.5-meter height LED boxes. Made from quality components, Crown DUO W1 show extreme endurance at harsh working conditions (IP66) and have a 5-year warranty with L80 for 50,000 hours.

APPLICATION

- Double-sided lightboxes with depth from 100 to 160 mm
- Maximum height of light box 1 500 mm
- Bus shelters, billboards

FEATURES & BENEFITS

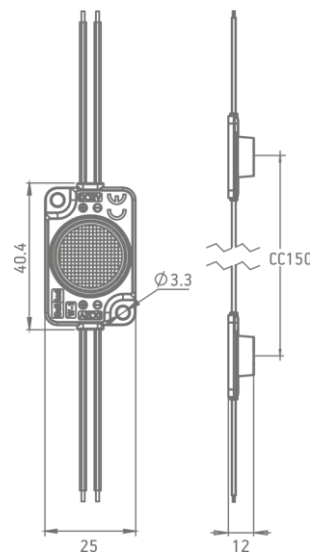
- 5-year warranty
- Integrated CC controller
- IP66 protection class
- Special optimised elliptical lens 18 x 50
- CRI >80
- 12 V solution



GENERAL SPECIFICATIONS

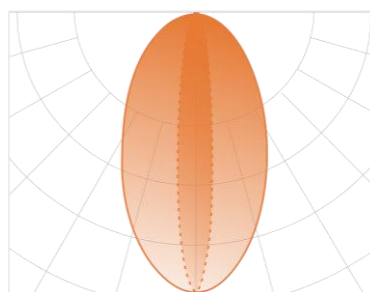
| | |
|-----------------------|------------------------|
| SUPPLY VOLTAGE | 12 VDC |
| POWER | 1.4 W |
| CRI | 80 |
| RECOMMENDED DEPTH | From 80 to 160 mm |
| CC DISTANCE | 150 mm |
| BINNING | 3 SDCM |
| OPERATING TEMPERATURE | -20 °C ~ +50 °C |
| STORAGE TEMPERATURE | -30 °C ~ +60 °C |
| STORAGE CONDITIONS | Relative humidity <60% |
| CERTIFICATION | CE and RoHS compliant |
| IP CLASS | IP 66 |
| LIFETIME | L80 50,000 h |
| WARRANTY | 5 years* |

*Warranty is applied only and if storage, mounting and maintenance conditions, stated in the installation guide, are followed.



Dimensions are in mm

LIGHT DISTRIBUTION GRAPH



Beam angle: 18x50°

ORDERING INFORMATION

| PRODUCT NAME | POWER, W | LUMEN OUTPUT, LM | COLOUR TEMP. |
|------------------|----------|------------------|--------------|
| BMP-W1-DS865E1.4 | 1.4 | 130 | 6500 K |
| BMP-W1-DS840E1.4 | 1.4 | 130 | 4000 K |
| BMP-W1-DS830E1.4 | 1.4 | 118 | 3000 K |

| CHAIN | BAG | BOX |
|------------------------------|------------------------------|---------------------------------|
| 30 pcs (net weight: ~0.3 kg) | 90 pcs (net weight: ~0.9 kg) | 1260 pcs (net weight: ~12.6 kg) |

© 2021, All rights reserved BaltLED, UAB. Specifications are subject to change without notice.

5 YEARS WARRANTY

IP 66

RoHS Compliant

CE

WEEE

CROWN DUO W1 INSTALLATION GUIDE

READ THE INSTRUCTIONS CAREFULLY BEFORE MOUNTING

Tools required. Wires, wire strippers, drill, screwdriver, screws, surface cleaner, wire connectors and end caps.

1. Clean the inside of the sign with surface cleaner (e.g., ethanol) to make sure it is free of dirt.

2. Remove protective layer from the backside of the module and stick LED modules into place.

3. For firm fixing, use screws to secure LED modules within the lightbox. Depending on the mounting surface, set proper torque to not damage the module mounting lugs.

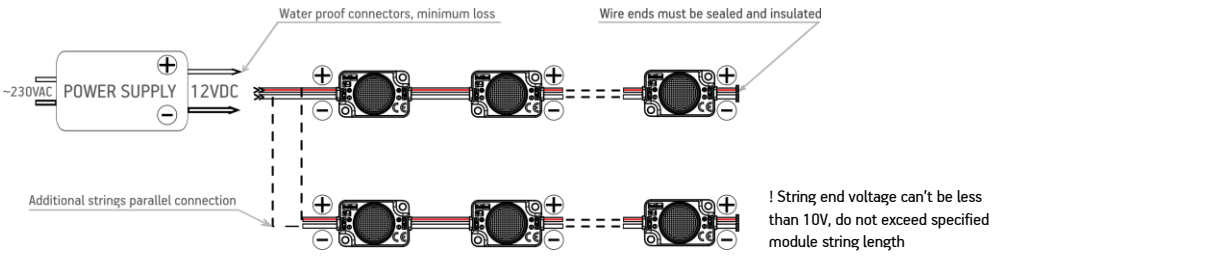
4. Cap all unused wires. The strand of modules should not be looped to create a closed circuit.

5. All modules should be connected only parallel!

6. Choose a 12 VDC waterproof power supply

7. Connect the white wire with red stripe (+) of the LED modules to the positive wire (+) of the power supply. Connect the white wire (-) to the negative wire (-) of power supply. Use waterproof connectors.

8. Finish by connecting AC power line to the input wires of the power supply.



POWER SUPPLY LOAD RECOMMENDATIONS

| POWER SUPPLY | QUANTITY | 2 m* | | 5 m* | | 10 m* | |
|----------------|----------|---------|-----------------|------|-----------------|-------|-----------------|
| | | modules | mm ² | AWG | mm ² | AWG | mm ² |
| BPSP-40-12V.1 | 25 | 1.5 | 16 | 2.5 | 14 | 6 | 10 |
| BPSP-60-12V.1 | 35 | 1.5 | 16 | 4 | 13 | 10 | 8 |
| BPSP-100-12V.1 | 60 | 2.5 | 14 | 6 | 10 | 16 | 6 |

! Power loss less than 5%.
! Recommendations for optimal use of power supply.

5
YEARS
WARRANTY

IP 66

RoHS
Compliant

CE



CROWN DUO W1 INSTALLATION GUIDE

MOUNTING AND USING RECOMENDATIONS

- Be careful not to go beyond recommended maximum quantities of modules for a power supply. Overload may cause blinking or a failure.
- These modules are designed to work with constant-voltage power supply. Use only recommended power supplies, do not connect to a constant-current power supplies as it will cause immediate failure of modules.
- Before installing make sure, that the fixing area can bear the total weight of the modules.
- Please install LED modules with appropriate cables. There is a possibility, that cables may get disconnected due to contractions, caused by temperature changes.
- Please check that sulphur constituent is not contained in used components when the module is installed.
- Make sure to install modules in a place with a sufficient breathability in order to prevent lifetime reduction by heat. Operating temperature should not exceed +50 °C.
- When installing a module in a fixture (signboard), make sure to provide ventilation for constituent sulphur, drainage for rain water to prevent aged deteriorations.
- When fixing cables of the modules do not use metal cable stop. The insulation of the cable may be damaged and therefore lead to short-circuited.
- Be sure to install modules at a maintainable place.
- In order to prevent LED from breaking down caused by static electricity, make sure not to touch the metal parts of the cable directly with bare hands.
- Make sure to apply correct polarity and direction of the modules. If mistaken, it will lead to failure and break down of the modules.
- When trying to perform lighting test (burn-in test), be sure to connect module to a power supply. Modules can fail to light up due to over-current. If the power supply is turned on without LED modules connected, modules can be connected only 5 minutes after the power supply has been turned off. Residual electricity may cause damage to modules.
- Avoid applying force while bending, twisting or pulling the power supply cables to minimize the risk of electrical shock.
- If any signs of smoke or the smell of burning plastic occurs, turn off modules immediately and investigate the power supply and the wiring carefully.
- Make sure to record and keep product lot and installation date of the modules.
- Modules can be used at ambient temperatures ranging from -20 °C to +50 °C.

STORAGE AND MAINTANANCE CONDITIONS

- Before the maintenance, turn off the power and maintain the modules after modules cool down. Otherwise, electric shock or burn may occur.
- Do not pull the wiring while removing the modules to prevent possible disconnections.
- Make sure to store modules at dry places, avoid elevated temperatures, high pressures, vibrations, corrosive or combusive gas, direct sunlight.
- Do not wipe or spray modules with volatile materials, such as thinner or benzene as it may lead to combustion and malfunctioning.
- Modules cannot operate at presence of materials containing sulphur components or where sulphur containing gas is generated as it leads to changes in light color and malfunctioning.

GENERAL CONDITIONS

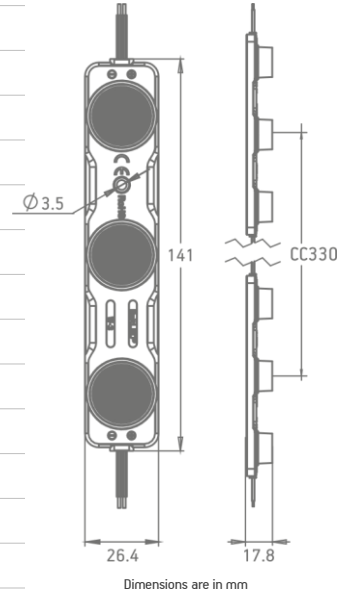
- Installation of modules must carried out by a qualified technician according to handling standards of electrical equipment.
- Modules and power supply have absolute maximum rating. Comply with the specifications to avoid failures or combustion.
- Avoid placing any high temperature objects around the modules, also avoid putting cloth or paper on the modules. It may lead to combustion, burnout, overheat, failure, deformation.
- Modules cannot be used in high-temperature environments, also they must not be subjected to vibration, shock, particles, corrosive or combusive gas. If not followed, it may cause fire, burnouts, bad insulation, failures, overheating and injuries.
- Do not insert or remove power plugs with wet hands to avoid electrical shock.
- While connecting or disconnecting electrical cords avoid being close to any heating equipment. It may lead to melting of the cords cause electrical shock.
- Do not modify the module. This may lead to electrical shock, failure, burnout, changes in module color.
- Do not install modules under direct sunlight or falling water. This may lead to electrical shock, burnouts, overheat, even combustion.
- While installing modules at humid areas, grounding of the power supply must be done.
- Modules cannot be used in combination with other types of modules, as this may lead to failure.

CROWN DUO W3



GENERAL SPECIFICATIONS

| | |
|-----------------------|---------------------------|
| SUPPLY VOLTAGE | 24 VDC |
| POWER | 3.6 W |
| CRI | 80 |
| RECOMMENDED DEPTH | From 140 to 250 mm |
| CC DISTANCE | 330 mm |
| BINNING | 5 SDCM |
| OPERATING TEMPERATURE | -20 °C ~ +50 °C |
| STORAGE TEMPERATURE | -30 °C ~ +60 °C |
| STORAGE CONDITIONS | Relative humidity <60% |
| CERTIFICATION | CE, RoHS and UL compliant |
| IP CLASS | IP 66 |
| LIFETIME | L80 50,000 h |
| WARRANTY | 5 years* |



*Warranty is applied only and if storage, mounting and maintenance conditions, stated in the installation guide, are followed.

ITEM DESCRIPTION

Crown DUO W3 is best for the illumination of shallow and medium depth (140-250mm) double-sided lightboxes. Equipped with advanced optic lenses these modules ensure uniform and bright illumination on different materials, like acrylic glass or textile of up to 2.5-meter height LED boxes. Thanks to the 24V system, more modules can be connected into one chain reducing voltage drops on long chains. Thus, giving availability to reduce electrical connections.

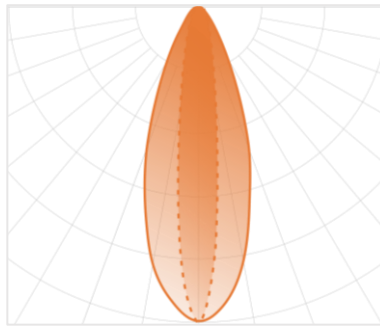
APPLICATION

- Double-sided light boxes with depth ranging from 140 to 250 mm
- Maximum height of light box 2 500 mm
- Bus shelters, billboards

FEATURES & BENEFITS

- 5-year warranty
- Integrated CC controller
- IP66 protection class
- Special optimised elliptical lens 15x45
- CRI 80
- 24 V solution

LIGHT DISTRIBUTION GRAPH



Beam angle: 15x45°

ORDERING INFORMATION

| PRODUCT NAME | POWER, W | LUMEN OUTPUT, LM | COLOUR TEMP. |
|------------------|----------|------------------|--------------|
| BMP-W3-DS865E3.6 | 3.6 | 300 | 6500 K |

| CHAIN | BAG | BOX |
|--------------------------------|--------------------------------|---------------------------------|
| 10 pcs (net weight: ~0.055 kg) | 10 pcs (net weight: ~0.056 kg) | 320 pcs (net weight: ~17.92 kg) |

© 2021, All rights reserved BaltLED, UAB. Specifications are subject to change without notice.

5 YEARS WARRANTY

IP 68

CE

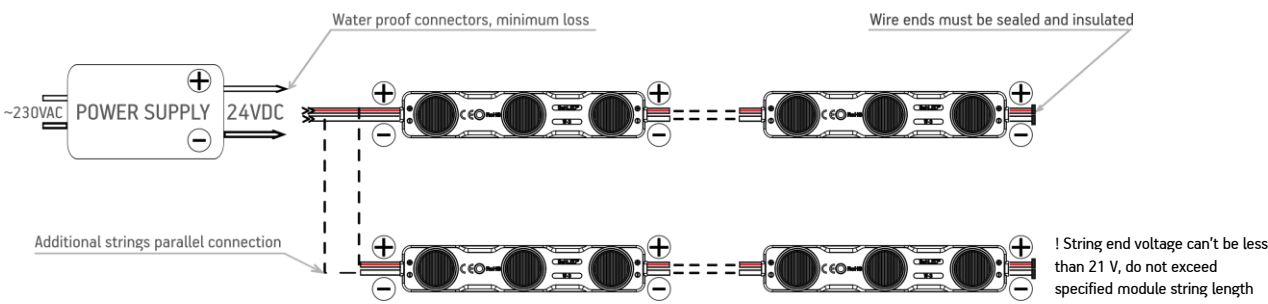
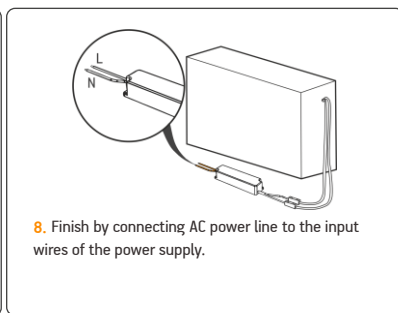
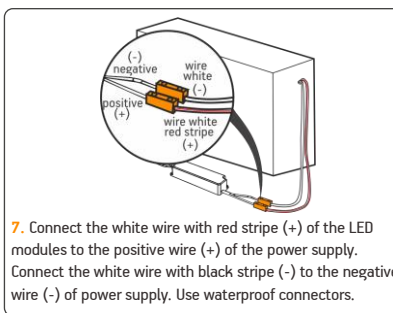
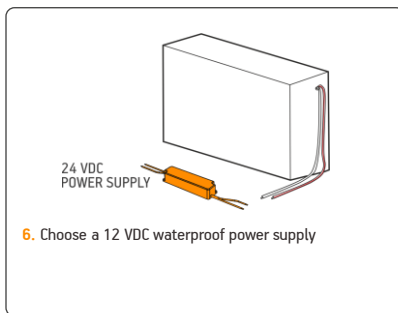
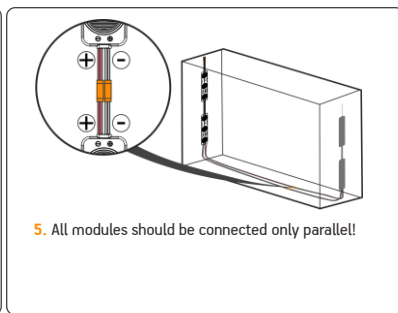
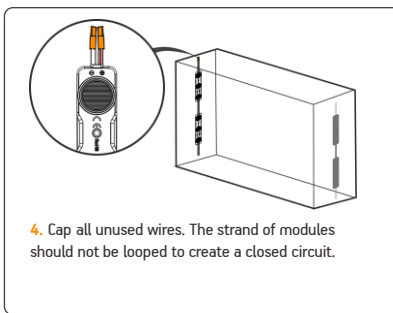
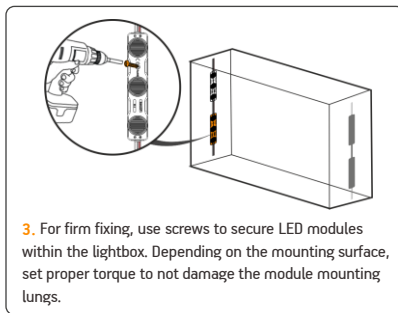
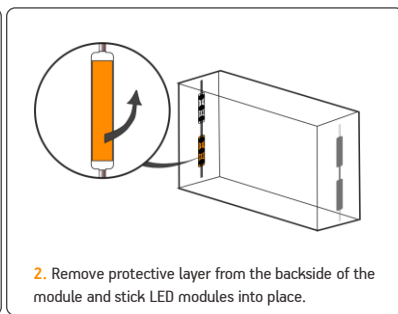
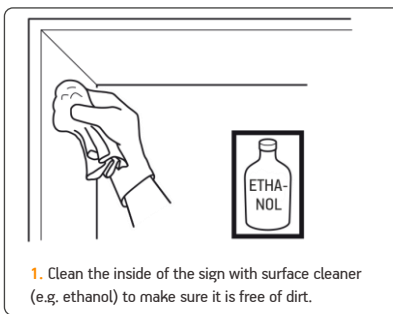
RoHS Compliant

UL Certified

UL Certified

CROWN DUO W3 INSTALLATION GUIDE

READ THE INSTRUCTIONS CAREFULLY BEFORE MOUNTING



POWER SUPPLY LOAD RECOMMENDATIONS

| POWER SUPPLY | QUANTITY | 2 m* | | 5 m* | | 10 m* | |
|----------------|----------|---------|-----------------|------|-----------------|-------|-----------------|
| | | modules | mm ² | AWG | mm ² | AWG | mm ² |
| BPSP-40-24V.1 | 10 | 1.5 | 16 | 2.5 | 14 | 4 | 12 |
| BPSP-60-24V.1 | 15 | 1.5 | 16 | 4 | 13 | 6 | 10 |
| BPSP-100-24V.1 | 25 | 2.5 | 14 | 6 | 10 | 10 | 8 |

! Power loss less than 5%.
! Recommendations for optimal use of power supply.

5
YEARS
WARRANTY

IP 68

CE

RoHS
Compliant

UL
Certified



CROWN DUO W3 INSTALLATION GUIDE

MOUNTING AND USING RECOMENDATIONS

- Be careful not to go beyond recommended maximum quantities of modules for a power supply. Overload may cause blinking or a failure.
- These modules are designed to work with constant-voltage power supply. Use only recommended power supplies, do not connect to a constant-current power supplies as it will cause immediate failure of modules.
- Before installing make sure, that the fixing area can bear the total weight of the modules.
- Please install LED modules with appropriate cables. There is a possibility, that cables may get disconnected due to contractions, caused by temperature changes.
- Please check that sulphur constituent is not contained in used components when the module is installed.
- Make sure to install modules in a place with a sufficient breathability in order to prevent lifetime reduction by heat. Operating temperature should not exceed +50 °C.
- When installing a module in a fixture (signboard), make sure to provide ventilation for constituent sulphur, drainage for rain water to prevent aged deteriorations.
- When fixing cables of the modules do not use metal cable stop. The insulation of the cable may be damaged and therefore lead to short-circuited.
- Be sure to install modules at a maintainable place.
- In order to prevent LED from breaking down caused by static electricity, make sure not to touch the metal parts of the cable directly with bare hands.
- Make sure to apply correct polarity and direction of the modules. If mistaken, it will lead to failure and break down of the modules.
- When trying to perform lighting test (burn-in test), be sure to connect module to a power supply. Modules can fail to light up due to over-current. If the power supply is turned on without LED modules connected, modules can be connected only 5 minutes after the power supply has been turned off. Residual electricity may cause damage to modules.
- Avoid applying force while bending, twisting or pulling the power supply cables to minimize the risk of electrical shock.
- If any signs of smoke or the smell of burning plastic occurs, turn off modules immediately and investigate the power supply and the wiring carefully.
- Make sure to record and keep product lot and installation date of the modules.
- Modules can be used at ambient temperatures ranging from -20 °C to +50 °C.

STORAGE AND MAINTANANCE CONDITIONS

- Before the maintenance, turn off the power and maintain the modules after modules cool down. Otherwise, electric shock or burn may occur.
- Do not pull the wiring while removing the modules to prevent possible disconnections.
- Make sure to store modules at dry places, avoid elevated temperatures, high pressures, vibrations, corrosive or combustive gas, direct sunlight.
- Do not wipe or spray modules with volatile materials, such as thinner or benzene as it may lead to combustion and malfunctioning.
- Modules cannot operate at presence of materials containing sulphur components or where sulphur containing gas is generated as it leads to changes in light color and malfunctioning.

GENERAL CONDITIONS

- Installation of modules must carried out by a qualified technician according to handling standards of electrical equipment.
- Modules and power supply have absolute maximum rating. Comply with the specifications to avoid failures or combustion.
- Avoid placing any high temperature objects around the modules, also avoid putting cloth or paper on the modules. It may lead to combustion, burnout, overheat, failure, deformation.
- Modules cannot be used in high-temperature environments, also they must not be subjected to vibration, shock, particles, corrosive or combustive gas. If not followed, it may cause fire, burnouts, bad insulation, failures, overheating and injuries.
- Do not insert or remove power plugs with wet hands to avoid electrical shock.
- While connecting or disconnecting electrical cords avoid being close to any heating equipment. It may lead to melting of the cords cause electrical shock.
- Do not modify the module. This may lead to electrical shock, failure, burnout, changes in module color.
- Do not install modules under direct sunlight or falling water. This may lead to electrical shock, burnouts, overheat, even combustion.
- While installing modules at humid areas, grounding of the power supply must be done.
- Modules cannot be used in combination with other types of modules, as this may lead to failure.

CROWN OPTO SHF-1



ITEM DESCRIPTION

With Crown OPTO SHF-1 we introduce a better solution for illumination of slim light boxes. Designed for depths ranging from 50 to 150 mm. This solution also allows you to reduce installation time and save up on module quantity. As they have a better light distribution pattern, you need less modules for 1m² compared to competitor solutions. Powered by top quality brand LED for the best performance these modules show extreme endurance at harsh working conditions (IP66) and have 5-year warranty with L80 at 60,000 hours.

APPLICATION

- Small depth light boxes
- Recommended depth 50-150 mm
- Red, green and blue colours available

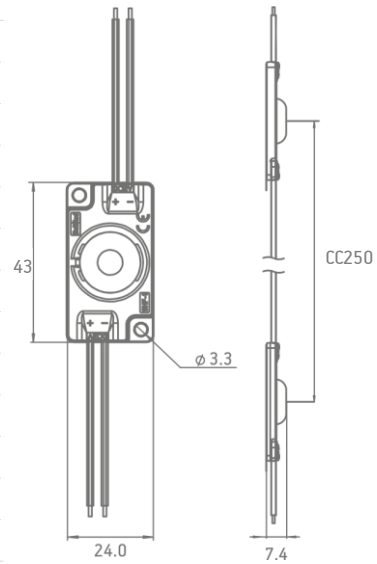
FEATURES & BENEFITS

- Top quality LED
- Significantly wide beam angle
- Outstanding pitching
- Pure 3SDCM
- Mirroring wire connection for better module placing
- High waterproof class
- Aluminum PCB for the best thermal management
- Two side holes for module locking
- Slim design
- Thermal tape for easy heat dissipation
- Finger-lift for faster installation

GENERAL SPECIFICATIONS

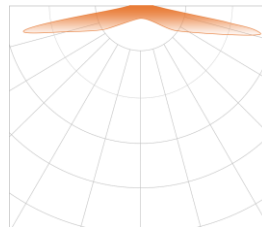
| | |
|-----------------------|-----------------------------|
| SUPPLY VOLTAGE | 12 VDC 24 VDC |
| POWER | 1.2 W, 0.5 W |
| CRI | 80 |
| RECOMMENDED DEPTH | from 50 to 150 mm |
| CC DISTANCE | 250 mm |
| BINNING | 3 SDCM |
| OPERATING TEMPERATURE | -20 °C ~ +50 °C |
| STORAGE TEMPERATURE | -30° ~ +60 °C |
| STORAGE CONDITIONS | Relative humidity <60% |
| CERTIFICATION | CE, RoHS and UKCA compliant |
| IP CLASS | IP66 |
| LIFETIME | L80B10 60 000 h |
| WARRANTY | 5 years (24/7)* |

*Warranty is applied only and if storage, mounting and maintenance conditions, stated in the installation guide, are followed.



* Dimensions are in mm

LIGHT DISTRIBUTION GRAPH



Beam angle: 176°

ORDERING INFORMATION

| SKU | POWER, W | LUMEN OUTPUT, LM | COLOUR TEMP. | STATUS |
|----------------------|----------|------------------|--------------|------------|
| BMP-SHF1-830E0.5 | 0.5 | 69 | 3000 K | PRE-ORDER* |
| BMP-SHF1-840E0.5 | 0.5 | 72 | 4000 K | PRE-ORDER* |
| BMP-SHF1-870E0.5 | 0.5 | 74 | 7000 K | PRE-ORDER* |
| BMP-SHF1-BE0.5 | 0.5 | 15 | BLUE | PRE-ORDER* |
| BMP-SHF1-GE0.5 | 0.5 | 53 | GREEN | PRE-ORDER* |
| BMP-SHF1-RE0.5 | 0.5 | 27 | RED | PRE-ORDER* |
| BMP-SHF1-830E1.2 | 1.2 | 138 | 3000 K | IN STOCK |
| BMP-SHF1-840E1.2 | 1.2 | 144 | 4000 K | IN STOCK |
| BMP-SHF1-870E1.2 | 1.2 | 147 | 7000 K | IN STOCK |
| BMP-SHF1-830E0.5-24V | 0.5 | 61 | 3000 K | PRE-ORDER* |
| BMP-SHF1-840E0.5-24V | 0.5 | 65 | 4000 K | PRE-ORDER* |
| BMP-SHF1-870E0.5-24V | 0.5 | 66 | 7000 K | PRE-ORDER* |
| BMP-SHF1-830E1.2-24V | 1.2 | 124 | 3000 K | PRE-ORDER* |
| BMP-SHF1-840E1.2-24V | 1.2 | 129 | 4000 K | PRE-ORDER* |
| BMP-SHF1-870E1.2-24V | 1.2 | 132 | 7000 K | IN STOCK |

* Pre-order products will be available only with MOQ from 5000 pcs., lead time ~8 weeks. For precise lead time, contact our Customer Service.

PACKAGING INFORMATION

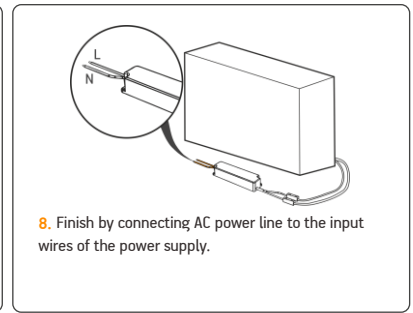
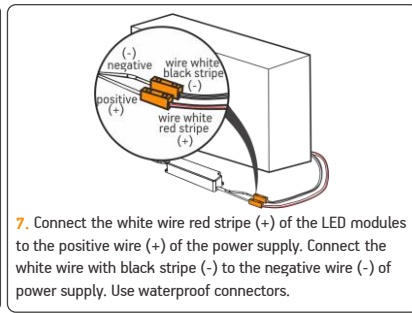
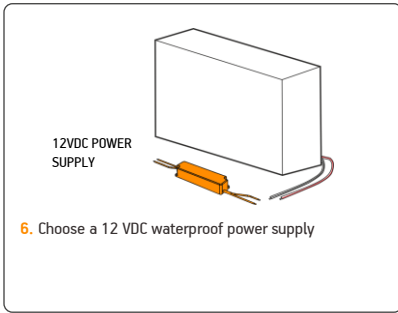
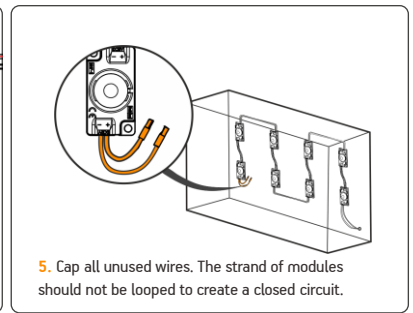
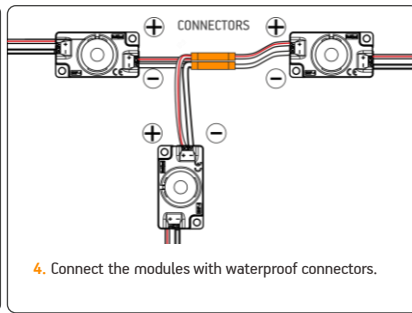
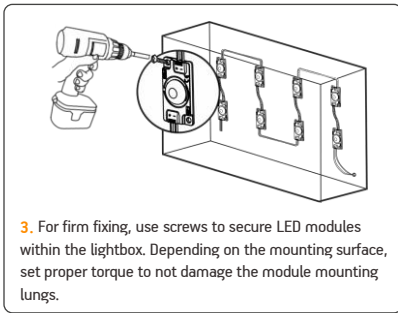
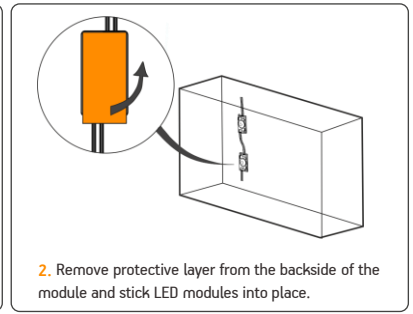
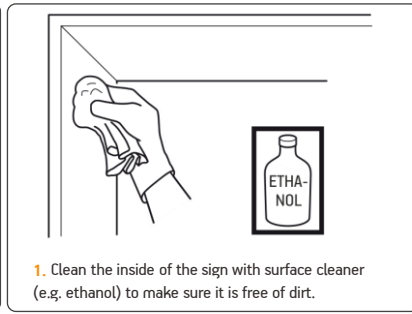
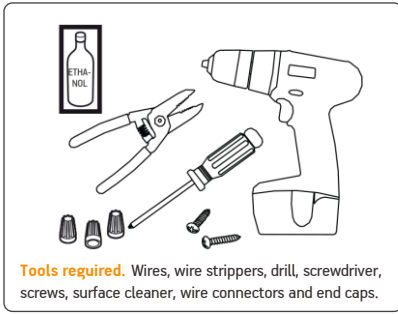
| | CHAIN | BAG | BOX |
|--------------|-------------------|--------------------|---------------------|
| 12VDC - 0.5W | 40 pcs. (0.40 kg) | 160 pcs. (1.61 kg) | 960 pcs. (10kg) |
| 24VDC - 0.5W | 80 pcs. (0.80 kg) | 160 pcs. (1.61 kg) | 960 pcs. (10 kg) |
| 12VDC - 1.2W | 30 pcs. (0.30 kg) | 180 pcs. (1.81 kg) | 1080 pcs. (11.3 kg) |
| 24VDC - 1.2W | 60 pcs. (0.60 kg) | 180 pcs. (1.81 kg) | 1080 pcs. (11.3 kg) |

© 2022, All rights reserved BaltLED, UAB. Specifications are subject to change without notice.

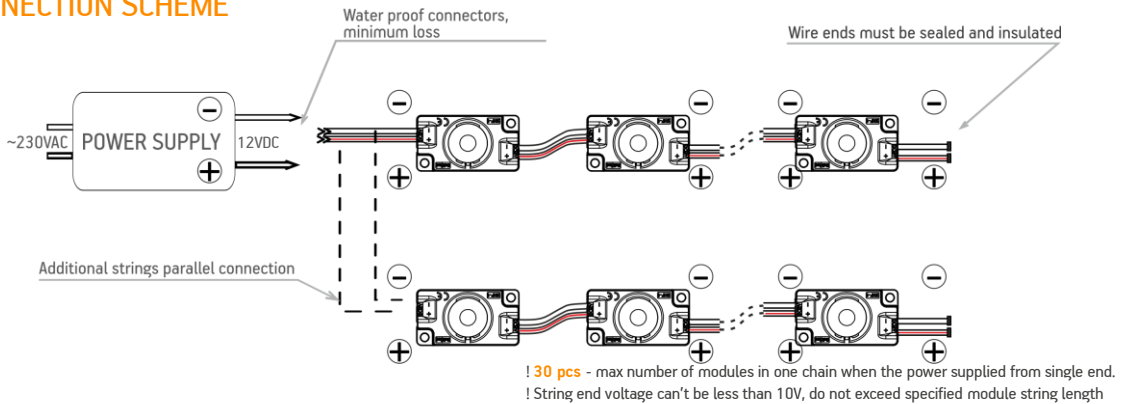
5 YEARS WARRANTY

CROWN OPTO SHF-1 12VDC INSTALLATION GUIDE

READ THE INSTRUCTIONS CAREFULLY BEFORE MOUNTING



CONNECTION SCHEME



POWER SUPPLY LOAD RECOMMENDATIONS

| POWER SUPPLY | QUANTITY modules | 2 m* | | 5 m* | | 10 m* | |
|----------------|---------------------|-----------------|-----|-----------------|-----|-----------------|-----|
| | | mm ² | AWG | mm ² | AWG | mm ² | AWG |
| BPSP-40-12V.1 | 32 | 1.5 | 16 | 2.5 | 14 | 6 | 12 |
| BPSP-60-12V.1 | 50 | 1.5 | 16 | 4 | 13 | 10 | 8 |
| BPSP-100-12V.1 | 82 | 2.5 | 14 | 6 | 10 | 10 | 8 |
| BPSP-150-12V.1 | 125 | 4 | 13 | 10 | 8 | 16 | 6 |

* Distance between power supply and modules.
! Recommendations for optimal use of power supply.

© 2022, All rights reserved BaltLED, UAB. Specifications are subject to change without notice.



CROWN OPTO SHF-1 INSTALLATION GUIDE

MOUNTING AND USING RECOMENDATIONS

- Be careful not to go beyond recommended maximum quantities of modules for a power supply. Overload may cause blinking or a failure.
- For mounting only pan head tapping screws must be used. The screws must apply DIN 7049 or DIN 968 standards.
- These modules are designed to work with constant-voltage power supply. Use only recommended power supplies, do not connect to a constant-current power supplies as it will cause immediate failure of modules.
- Before installing make sure, that the fixing area can bear the total weight of the modules.
- Please install LED modules with appropriate cables. There is a possibility, that cables may get disconnected due to contractions, caused by temperature changes.
- Please check that sulphur constituent is not contained in used components when the module is installed.
- Make sure to install modules in a place with a sufficient breathability in order to prevent lifetime reduction by heat. Operating temperature should not exceed +50 °C.
- When installing a module in a fixture (signboard), make sure to provide ventilation for constituentsulphur, drainage for rain water to prevent aged deteriorations.
- When fixing cables of the modules do not use metal cable stop. The tunic of the cable may be damaged and therefore lead to short-circuited.
- Be sure to install modules at a maintainable place.
- In order to prevent LED from breaking down caused by static electricity, make sure not to touch the metal parts of the cabledirectly with bare hands.
- Make sure to apply correct polarity and direction of the modules. If mistaken, it will lead to failure and break down of themodules.
- When trying to perform lighting test (burn-in test), be sure to connect module to a power supply. Modules can fail to light up due to over-current. If the power supply is turned on without LED modules connected, modules can be connected only 5 minutes after the power supply has been tuned off. Residual electricity may cause damage to modules.
- Avoid applying force while bending, twisting or pulling the power supply cables to minimize the risk of electrical shock.
- If any signs of smoke or the smell of burning plastic occurs, turn off modules immediately and investigate the power supply and the wiring carefully.
- Make sure to record and keep product lot and installation date of the modules.

STORAGE AND MAINTANANCE CONDITIONS

- Before the maintenance, turn off the power and maintain the modules after modules cool down. Otherwise, electric shock or burn may occur.
- Do not pull the wiring while removing the modules to prevent possible disconnections.
- Make sure to store modules at dry places, avoid elevated temperatures, high pressures, vibrations, corrosive or combusive gas, direct sunlight.
- Do not wipe or spray modules with volatile materials, such as thinner or benzene as it may lead to combustion and malfunctioning.
- Modules cannot operate at presence of materials containing sulphur components or where sulphur containing gas is generated as it leads to changes in light color and malfunctioning.

GENERAL CONDITIONS

- Installation of modules must carried out by a qualified technician according to handling standards of electrical equipment.
- Modules and power supply have absolute maximum rating. Comply with the specifications to avoid failures or combustion.
- Avoid placing any high temperature objects around the modules, also avoid putting cloth or paper on the modules. It may lead to combustion, burnout, overheat, failure, deformation.
- Modules cannot be used in high-temperature environments, also they must not be subjected to vibration, shock, particles, corrosive or combusive gas. If not followed, it may cause fire, burnouts, bad insulation, failures, overheating and injuries.
- Do not insert or remove power plugs with wet hands to avoid electrical shock.
- While connecting or disconnecting electrical cords avoid being close to any heating equipment. It may lead to melting of the cords cause electrical shock.
- Do not modify the module. This may lead to electrical shock, failure, burnout, changes in module color.
- Do not install modules under direct sunlight or falling water. This may lead to electrical shock, burnouts, overheat, even combustion.
- While installing modules at humid areas, grounding of the power supply must be done.
- Modules cannot be used in combination with other types pf modules, as this may lead to failure.
- Modules can be used at ambient temperatures ranging from -20 °C to +50 °C..

SIGNBRIDGE SLIM PLUS

60 W LED driver. Model: BPSP.S-60-12V.1



FEATURES

- Metal housing design with functional ground
- Built-in active PFC function
- Class 2 power supply
- IP68 rating for indoor or outdoor installations
- Typical lifetime $\geq 50,000$ hours
- 5 years warranty

CONFORMITY & STANDARDS

EMC Emission:

- compliance to EN55015

EMC Immunity:

- EN55015
- EN61547
- EN61000-3-2
- EN61000-3-3
- CB
- CE-LVD:
 - IEC/EN61347-1,
 - IEC/EN61347-2-13,
 - UL8750
 - UL1310



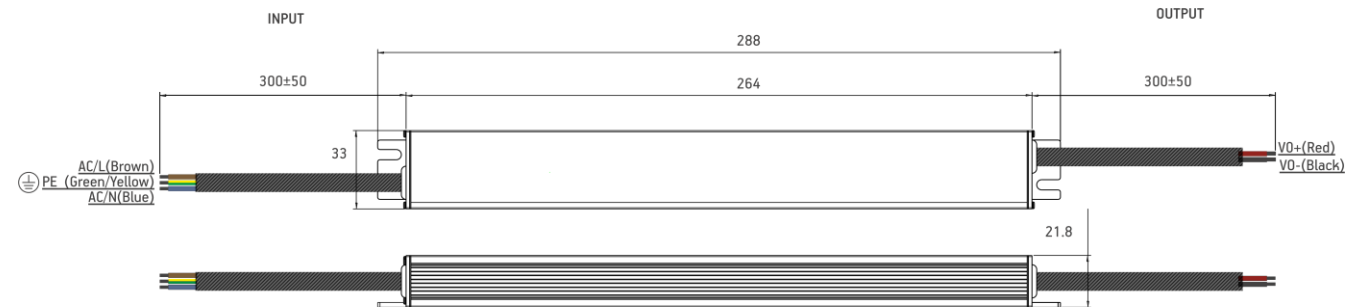
GENERAL SPECIFICATIONS

| | |
|----------------------|--|
| EFFICIENCY | $\geq 85\%$ (230 VAC) |
| COLD START | 3000 ms (230 VAC) |
| OPERATING CONDITIONS | $-40\text{ }^{\circ}\text{C} \sim +50\text{ }^{\circ}\text{C}$; 20 ~ 95% humidity |
| STORAGE CONDITIONS | $-40\text{ }^{\circ}\text{C} \sim +80\text{ }^{\circ}\text{C}$; 10 ~ 95% humidity |
| IP CLASS | IP68 |
| PROTECTIONS INCLUDED | Over voltage Over current Short circuit Over temperature |
| WARRANTY | 5 years, $\geq 50\,000$ h |

QUANTITY OF DRIVERS PER CIRCUIT BREAKER

| | |
|--------------------------------|--------------------------------|
| CIRCUIT BREAKER OF TYPE C 16 A | CIRCUIT BREAKER OF TYPE C 25 A |
| 30 units (230 VAC) | 40 units (230 VAC) |

DIMENSIONS (MM)



Balt led

INPUT

| | |
|----------------------|---------------------------|
| INPUT VOLTAGE RANGE | 100 – 240 Vac; 47 – 63 Hz |
| MAX INPUT AC CURRENT | 0.9 A Max |
| MAX INRUSH CURRENT | ≤ 60 A |
| POWER FACTOR | ≥ 0.95 (230 VAC) |

OUTPUT

| | |
|----------------|------|
| OUTPUT CURRENT | 5 A |
| OUTPUT VOLTAGE | 12 V |
| OUTPUT POWER | 60 W |

ORDERING INFORMATION

| SKU | UNIT NET WEIGHT, G | UNIT DIMENSIONS (LxWxH), MM | STATUS |
|-----------------|--------------------|-----------------------------|-----------|
| BPSP.S-60-12V.1 | 360.0 | 264 x 33 x 21.8 | AVAILABLE |

5 YEARS WARRANTY

IP 68

CE

RoHS Compliant

UK CA

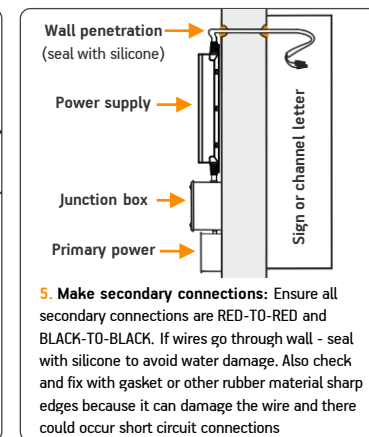
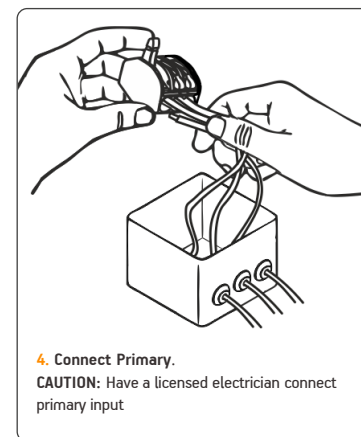
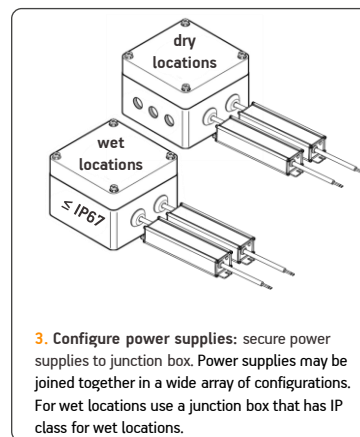
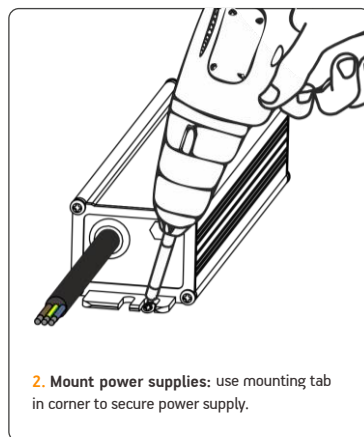
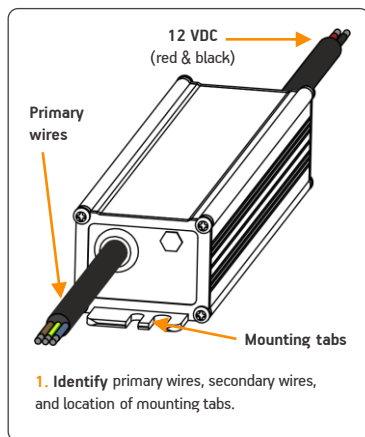
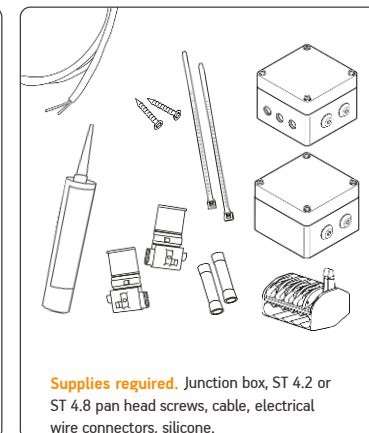
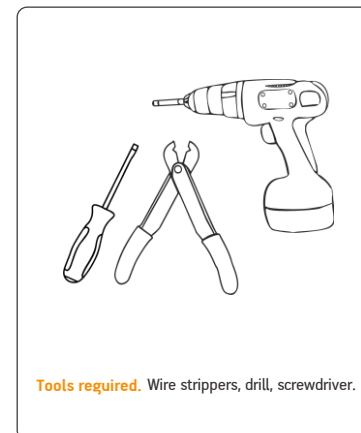
I

SIGNBRIDGE 60 W LED DRIVER

INSTALLATION GUIDE FOR MODEL: **BPSP.S-60-12V.**

READ THE INSTRUCTIONS CAREFULLY BEFORE MOUNTING

- Power supply operating temperature is from -40 to +50 °C. To ensure adequate ventilation, mounting power supplies without a secondary enclosure is recommended.
- Space power supplies by standard knockout locations 19 mm minimum. If two or more power supplies are used, spacing must be at least 25 mm end-to-end, and 102 mm on each side. Power supply spacing to thermoplastic, wood, fibre, or other combustible enclosure materials must be 25 mm.
- Ensure power supplies are not overloaded by verifying output current is less than 5 DC amps. For best performance recommending up to 4 DC amps.
- Use of photocells or timing device is recommended to ensure power supplies are off during day light hours, when sign illumination is not needed. Higher daytime temperatures and unnecessary operation may shorten power supply lifetime.



SIGNBRIDGE SLIM PLUS

100 W LED driver. Model: BPSP.S-100-12V.1



FEATURES

- Metal housing design with functional ground
- Built-in active PFC function
- Class 2 power supply
- IP68 rating for indoor or outdoor installations
- Typical lifetime $\geq 50,000$ hours
- 5 years warranty

CONFORMITY & STANDARDS

EMC Emission:

- compliance to EN55015

EMC Immunity:

- EN55015
- EN61547
- EN61000-3-2
- EN61000-3-3

CB

CE-LVD:

- IEC/EN61347-1,
- IEC/EN61347-2-13,
- UL8750
- UL1310



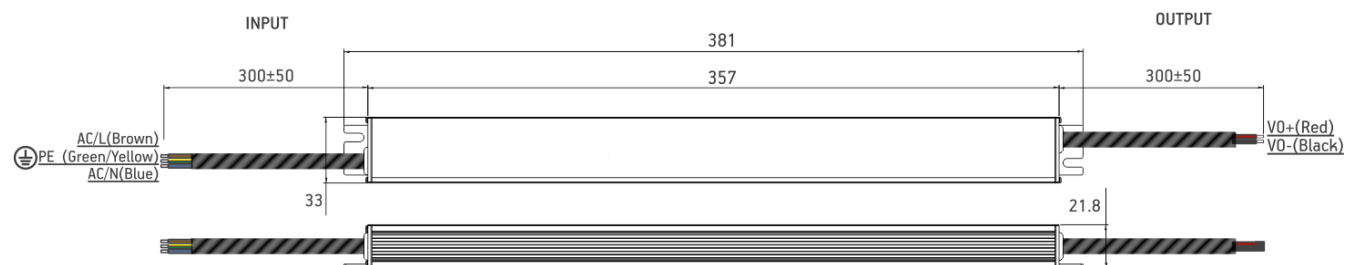
GENERAL SPECIFICATIONS

| | |
|----------------------|--|
| EFFICIENCY | $\geq 92\%$ (230 VAC) |
| COLD START | 3000 ms (230 VAC) |
| OPERATING CONDITIONS | $-40\text{ }^{\circ}\text{C} \sim +50\text{ }^{\circ}\text{C}$; 20 ~ 95% humidity |
| STORAGE CONDITIONS | $-40\text{ }^{\circ}\text{C} \sim +80\text{ }^{\circ}\text{C}$; 10 ~ 95% humidity |
| IP CLASS | IP68 |
| PROTECTIONS INCLUDED | Over voltage Over current Short circuit Over temperature |
| WARRANTY | 5 years, $\geq 50\,000$ h |

QUANTITY OF DRIVERS PER CIRCUIT BREAKER

| | |
|--------------------------------|--------------------------------|
| CIRCUIT BREAKER OF TYPE C 16 A | CIRCUIT BREAKER OF TYPE C 25 A |
| 20 units (230 VAC) | 30 units (230 VAC) |

DIMENSIONS (MM)



Balt led

INPUT

| | |
|----------------------|---------------------------|
| INPUT VOLTAGE RANGE | 100 – 240 Vac; 47 – 63 Hz |
| MAX INPUT AC CURRENT | 1.3 A Max |
| MAX INRUSH CURRENT | ≤ 70 A |
| POWER FACTOR | ≥ 0.95 (230 VAC) |

OUTPUT

| | |
|----------------|--------|
| OUTPUT CURRENT | 8.33 A |
| OUTPUT VOLTAGE | 12 V |
| OUTPUT POWER | 100 W |

ORDERING INFORMATION

| SKU | UNIT NET WEIGHT, G | UNIT DIMENSIONS (LxWxH), MM | STATUS |
|------------------|--------------------|-----------------------------|------------|
| BPSP.S-100-12V.1 | 530.0 | 357 x 33 x 21.8 | PRE-ORDER* |

* For pre-order products MOQ and precise lead time, contact your country manager.

5 YEARS WARRANTY

IP 68

CE

RoHS Compliant

UK CA

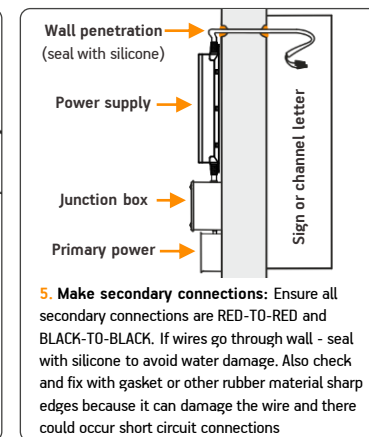
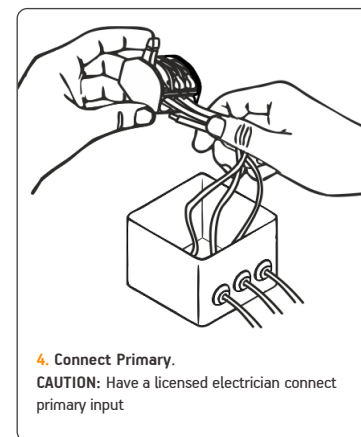
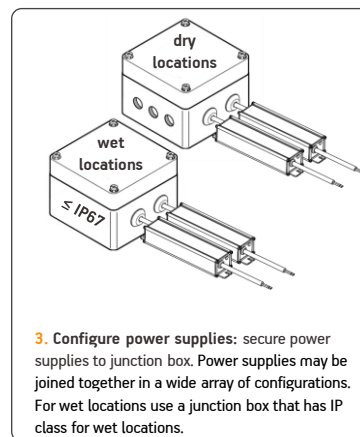
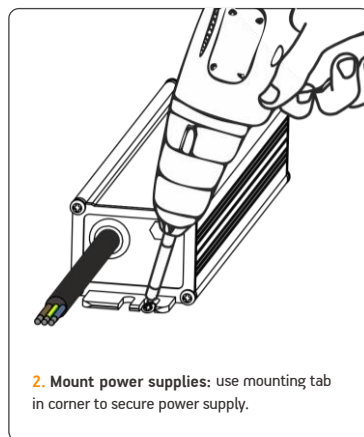
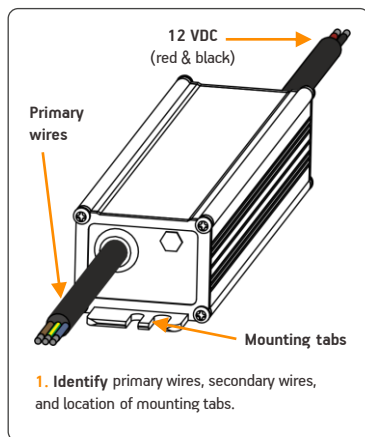
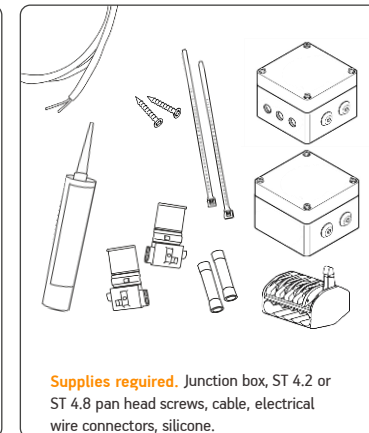
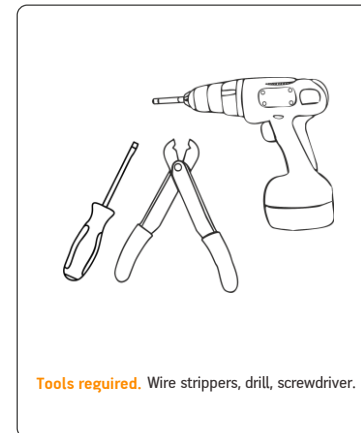
I

SIGNBRIDGE 100 W LED DRIVER

INSTALLATION GUIDE FOR MODEL: **BPSP.S-100-12V.**

READ THE INSTRUCTIONS CAREFULLY BEFORE MOUNTING

- Power supply operating temperature is from -40 to +50 °C. To ensure adequate ventilation, mounting power supplies without a secondary enclosure is recommended.
- Space power supplies by standard knockout locations 19 mm minimum. If two or more power supplies are used, spacing must be at least 25 mm end-to-end, and 102 mm on each side. Power supply spacing to thermoplastic, wood, fibre, or other combustible enclosure materials must be 25 mm.
- Ensure power supplies are not overloaded by verifying output current is less than 8.33 DC amps. For best performance recommending up to 6.66 DC amps.
- Use of photocells or timing device is recommended to ensure power supplies are off during day light hours, when sign illumination is not needed. Higher daytime temperatures and unnecessary operation may shorten power supply lifetime.



SIGNBRIDGE PLUS

40 W LED driver. Model: BPSP-40-12V.1



FEATURES

- Constant voltage mode output
- Metal housing design with functional ground
- Built-in active PFC function
- IP68 rating for indoor or outdoor installations
- Typical lifetime $\geq 50,000$ hours
- 5 years warranty

CONFORMITY & STANDARDS

EMC Emission:

- compliance to EN55015

EMC Immunity:

- EN55015
- EN61547
- EN61000-3-2
- EN61000-3-3
- CB
- CE-LVD:
 - IEC/EN61347-1,
 - IEC/EN61347-2-13,



GENERAL SPECIFICATIONS

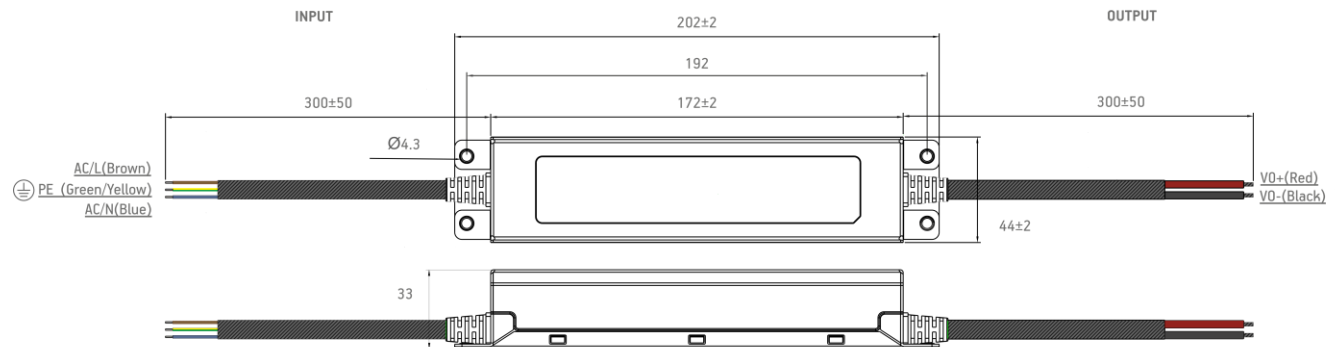
| | |
|----------------------|--|
| EFFICIENCY (TYP.) | $\geq 86\%$ (230 VAC) |
| COLD START | $\leq 3000\text{ms}$ (230 VAC) |
| OPERATING CONDITIONS | $-40^\circ\text{C} \sim +60^\circ\text{C}$; 20 ~ 95% humidity |
| STORAGE CONDITIONS | $-40^\circ\text{C} \sim +80^\circ\text{C}$; 10 ~ 95% humidity |
| IP CLASS | IP68 |
| PROTECTIONS INCLUDED | Over voltage Over current Short circuit |
| WARRANTY | 5 years, $\geq 50\,000$ h |

QUANTITY OF DRIVERS PER CIRCUIT BREAKER

CIRCUIT BREAKER OF TYPE C 16 A

28 units (230 VAC)

DIMENSIONS



* Dimensions are in mm

Balt led

INPUT

| | |
|----------------------|---------------------------|
| INPUT VOLTAGE RANGE | 200 – 240 VAC; 50 – 60 Hz |
| MAX INPUT AC CURRENT | 0.3 A Max |
| MAX INRUSH CURRENT | ≤ 50 A (100-277 VAC) |
| POWER FACTOR | ≥ 0.90 (230 VAC) |

OUTPUT

| | |
|----------------|--------|
| OUTPUT CURRENT | 3.3 A |
| OUTPUT VOLTAGE | 12 VDC |
| OUTPUT POWER | 40 W |

ORDERING INFORMATION

| SKU | UNIT NET WEIGHT, G | UNIT DIMENSIONS (LxWxH), MM |
|---------------|--------------------|-----------------------------|
| BPSP-40-12V.1 | 450.0 | 172x44x33 |

5 YEARS WARRANTY

IP 68

CE

RoHS Compliant

UK CA

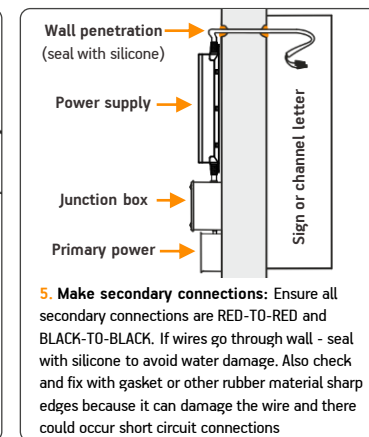
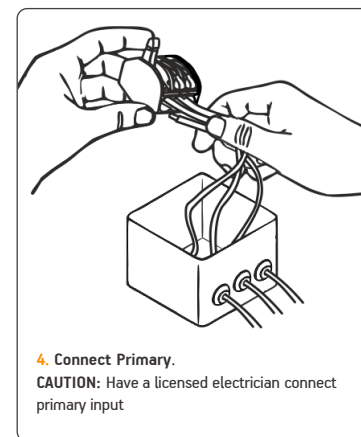
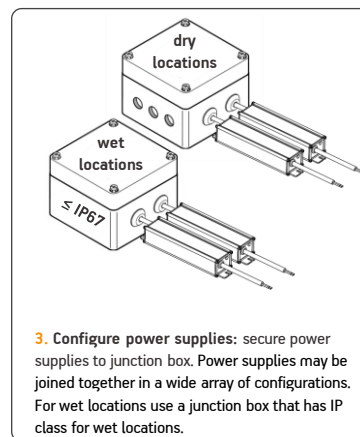
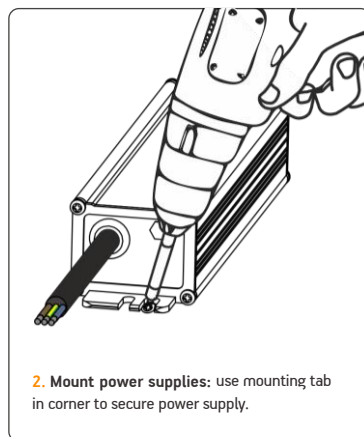
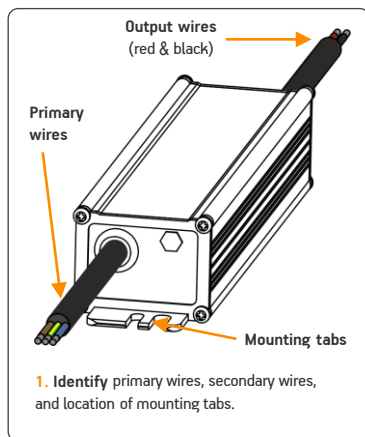
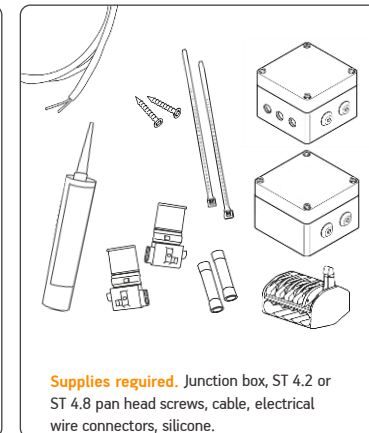
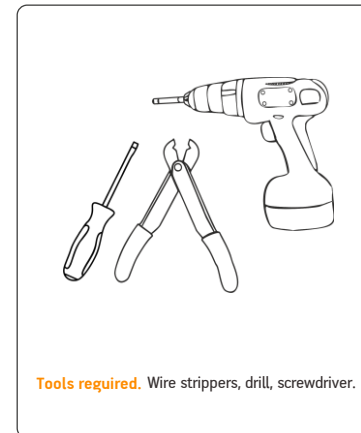
I

SIGNBRIDGE 40 W LED DRIVER

INSTALLATION GUIDE FOR MODEL: **BPSP-40-24V.1**

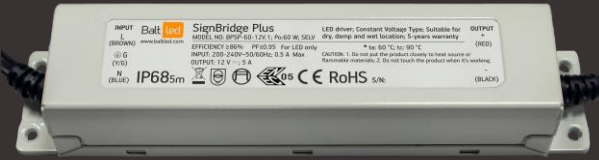
READ THE INSTRUCTIONS CAREFULLY BEFORE MOUNTING

- Power supply operating temperature is from -40 to +60 °C. To ensure adequate ventilation, mounting power supplies without a secondary enclosure is recommended.
- Space power supplies by standard knockout locations 19 mm minimum. If two or more power supplies are used, spacing must be at least 25 mm end-to-end, and 102 mm on each side. Power supply spacing to thermoplastic, wood, fibre, or other combustible enclosure materials must be 25 mm.
- Ensure power supplies are not overloaded by verifying output current is less than 3.3 DC amps. For best performance recommending up to 2.64 DC amps.
- Use of photocells or timing device is recommended to ensure power supplies are off during day light hours, when sign illumination is not needed. Higher daytime temperatures and unnecessary operation may shorten power supply lifetime.



SIGNBRIDGE PLUS

60 W LED driver. Model: BPS-60-12V.1



FEATURES

- Metal housing design with functional ground
- Built-in active PFC function
- IP68 rating for indoor or outdoor installations
- Typical lifetime $\geq 50,000$ hours
- 5 years warranty

CONFORMITY & STANDARDS

EMC Emission:

- compliance to EN55015

EMC Immunity:

- EN55015
- EN61547
- EN61000-3-2
- EN61000-3-3
- CB
- ENEC
- CE-LVD:
 - IEC/EN61347-1,
 - IEC/EN61347-2-13,
 - UL8750
 - UL1310



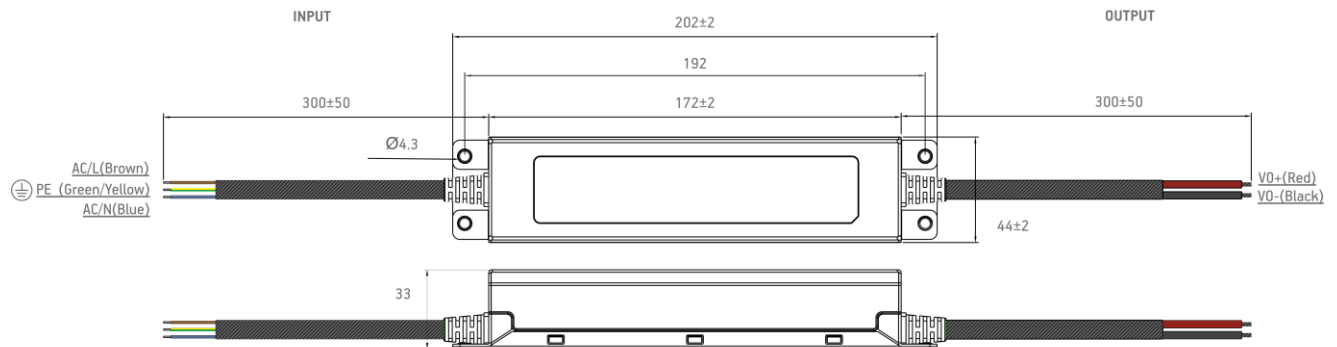
GENERAL SPECIFICATIONS

| | |
|----------------------|--|
| EFFICIENCY | $\geq 86\%$ (230 VAC) |
| COLD START | 3000 ms (230 VAC) |
| OPERATING CONDITIONS | $-40\text{ }^{\circ}\text{C} \sim +55\text{ }^{\circ}\text{C}$; 20 ~ 95% humidity |
| STORAGE CONDITIONS | $-40\text{ }^{\circ}\text{C} \sim +80\text{ }^{\circ}\text{C}$; 10 ~ 95% humidity |
| IP CLASS | IP68 |
| PROTECTIONS INCLUDED | Over voltage Over current Short circuit Over temperature |
| WARRANTY | 5 years, $\geq 50\,000$ h |

QUANTITY OF DRIVERS PER CIRCUIT BREAKER

| | |
|--------------------------------|--------------------------------|
| CIRCUIT BREAKER OF TYPE C 16 A | CIRCUIT BREAKER OF TYPE C 25 A |
| 5 units (230 VAC) | 8 units (230 VAC) |

DIMENSIONS (MM)



INPUT

| | |
|----------------------|---------------------------|
| INPUT VOLTAGE RANGE | 200 – 240 Vac; 50 – 60 Hz |
| MAX INPUT AC CURRENT | 0.5 A Max |
| MAX INRUSH CURRENT | ≤ 50 A |
| POWER FACTOR | ≥ 0.90 (230 VAC) |

OUTPUT

| | |
|----------------|------|
| OUTPUT CURRENT | 5 A |
| OUTPUT VOLTAGE | 12 V |
| OUTPUT POWER | 60 W |

ORDERING INFORMATION

| SKU | UNIT NET WEIGHT, G | UNIT DIMENSIONS (LxWxH), MM | STATUS |
|--------------|--------------------|-----------------------------|-----------|
| BPS-60-12V.1 | 450.0 | 172 x 44 x 33 | AVAILABLE |

5 YEARS WARRANTY

IP 68

05

CE

RoHS Compliant

UK CA

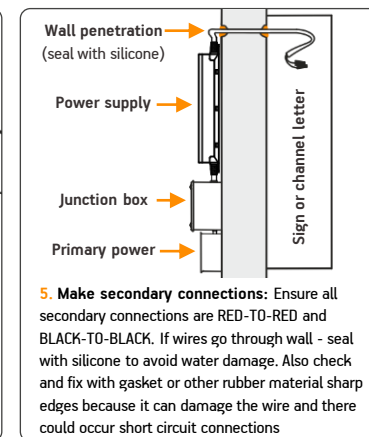
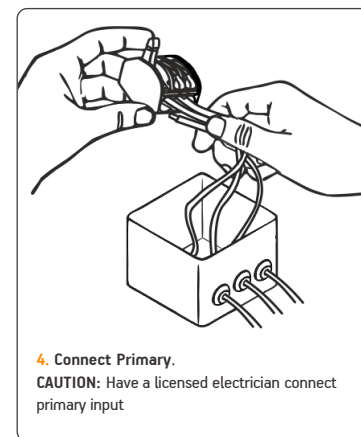
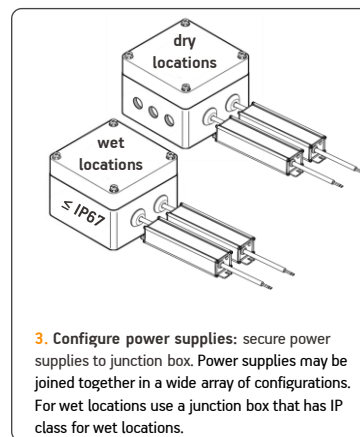
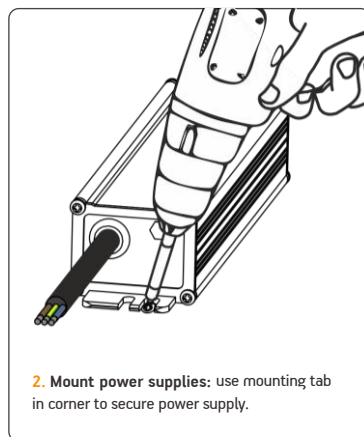
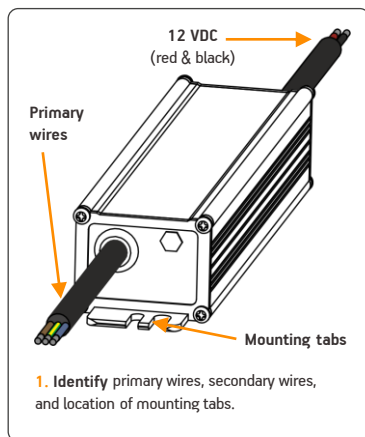
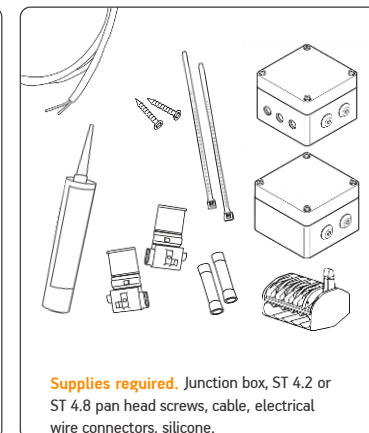
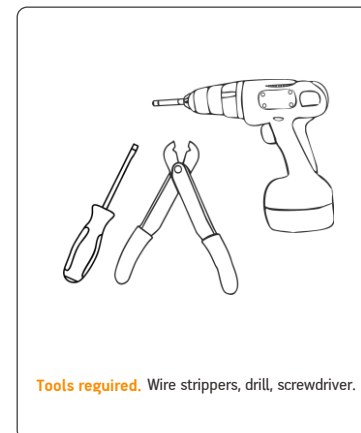
I

SIGNBRIDGE 60 W LED DRIVER

INSTALLATION GUIDE FOR MODEL: **BPSP-60-12V.**

READ THE INSTRUCTIONS CAREFULLY BEFORE MOUNTING

- Power supply operating temperature is from -40 to +55 °C. To ensure adequate ventilation, mounting power supplies without a secondary enclosure is recommended.
- Space power supplies by standard knockout locations 19 mm minimum. If two or more power supplies are used, spacing must be at least 25 mm end-to-end, and 102 mm on each side. Power supply spacing to thermoplastic, wood, fibre, or other combustible enclosure materials must be 25 mm.
- Ensure power supplies are not overloaded by verifying output current is less than 5 DC amps. For best performance recommending up to 4 DC amps.
- Use of photocells or timing device is recommended to ensure power supplies are off during day light hours, when sign illumination is not needed. Higher daytime temperatures and unnecessary operation may shorten power supply lifetime.



SIGNBRIDGE PLUS

100 W LED driver. Model: BPSP-100-12V.1



FEATURES

- Metal housing design with functional ground
- Built-in active PFC function
- IP68 rating for indoor or outdoor installations
- Typical lifetime $\geq 50,000$ hours
- 5 years warranty

CONFORMITY & STANDARDS

EMC Emission:

- compliance to EN55015

EMC Immunity:

- EN55015
- EN61547
- EN61000-3-2
- EN61000-3-3
- CB
- ENEC
- CE-LVD:
 - IEC/EN61347-1,
 - IEC/EN61347-2-13,
 - UL8750
 - UL1310



Balt led

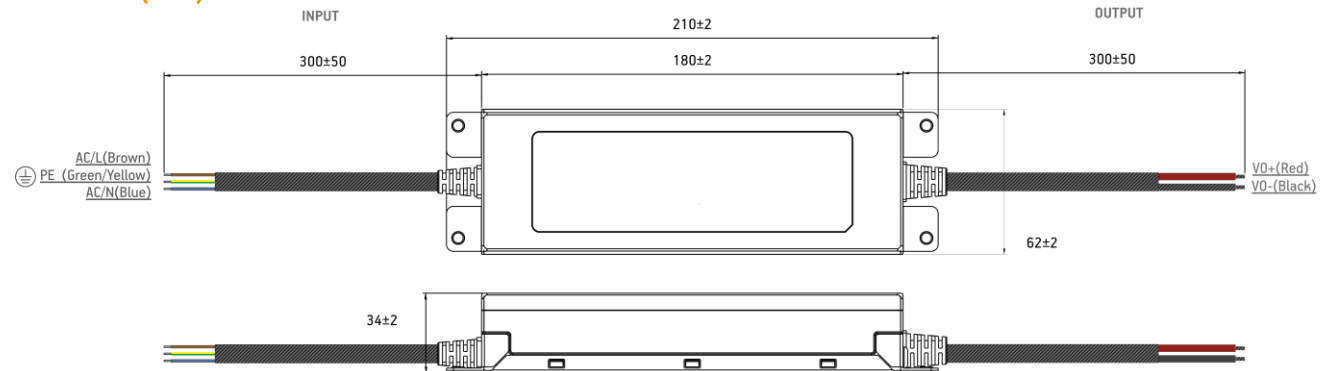
GENERAL SPECIFICATIONS

| | |
|----------------------|--|
| EFFICIENCY (TYP.) | $\geq 88\%$ (230 VAC) |
| COLD START | 3000 ms (230 VAC) |
| OPERATING CONDITIONS | $-40^{\circ}\text{C} \sim +55^{\circ}\text{C}$; 20 ~ 95% humidity |
| STORAGE CONDITIONS | $-40^{\circ}\text{C} \sim +80^{\circ}\text{C}$; 10 ~ 95% humidity |
| IP CLASS | IP68 |
| PROTECTIONS INCLUDED | Over voltage Over current Short circuit Over temperature |
| WARRANTY | 5 years, $\geq 50\,000$ h |

QUANTITY OF DRIVERS PER CIRCUIT BREAKER

| | |
|--------------------------------|--------------------------------|
| CIRCUIT BREAKER OF TYPE C 16 A | CIRCUIT BREAKER OF TYPE C 25 A |
| 3 units (230 VAC) | 8 units (230 VAC) |

DIMENSIONS (MM)



INPUT

| | |
|----------------------|---------------------------|
| INPUT VOLTAGE RANGE | 200 – 240 Vac; 50 – 60 Hz |
| MAX INPUT AC CURRENT | 0.8 A Max |
| MAX INRUSH CURRENT | ≤ 80 A |
| POWER FACTOR | ≥ 0.95 (230 VAC) |

OUTPUT

| | |
|----------------|--------|
| OUTPUT CURRENT | 8.33 A |
| OUTPUT VOLTAGE | 12 V |
| OUTPUT POWER | 100 W |

ORDERING INFORMATION

| SKU | UNIT NET WEIGHT, G | UNIT DIMENSIONS (LxWxH), MM | STATUS |
|----------------|--------------------|-----------------------------|-----------|
| BPSP-100-12V.1 | 750.0 | 180 x 62 x 34 | AVAILABLE |

5 YEARS WARRANTY

IP 68

05

CE

RoHS Compliant

UK CA

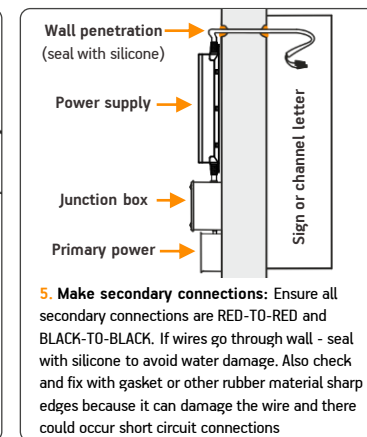
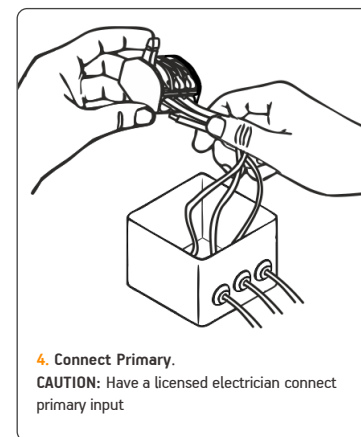
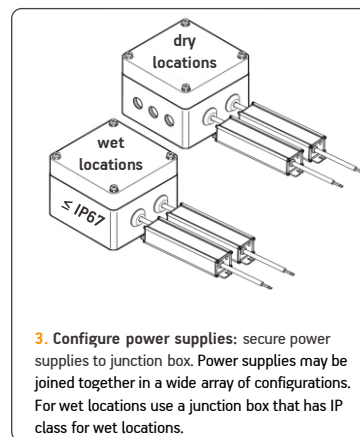
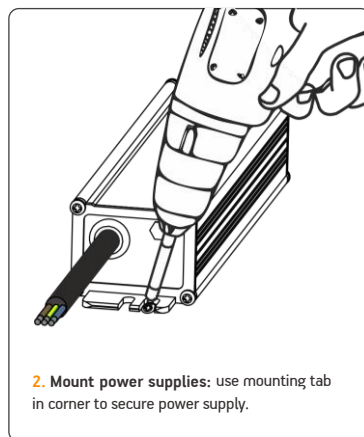
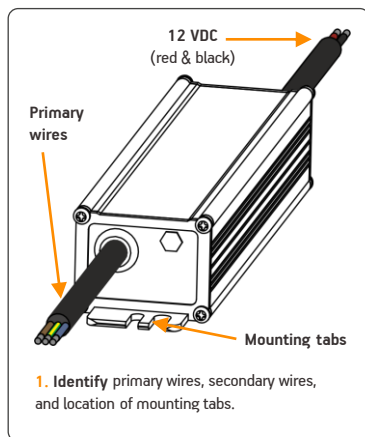
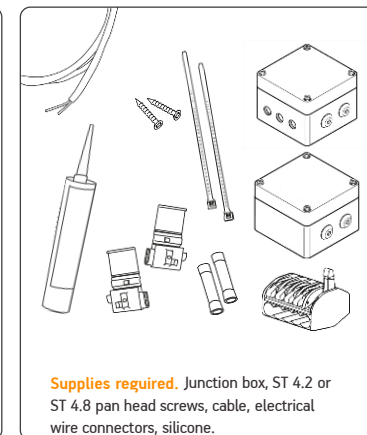
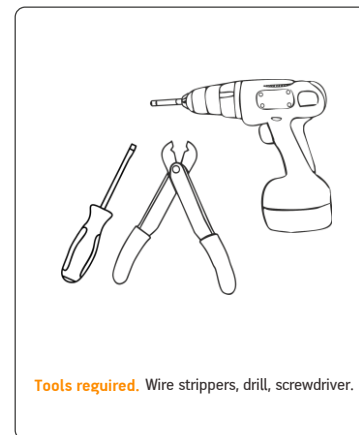
I

SIGNBRIDGE 100 W LED DRIVER

INSTALLATION GUIDE FOR MODEL: **BPSP-100-12V.**

READ THE INSTRUCTIONS CAREFULLY BEFORE MOUNTING

- Power supply operating temperature is from -40 to +55 °C. To ensure adequate ventilation, mounting power supplies without a secondary enclosure is recommended.
- Space power supplies by standard knockout locations 19 mm minimum. If two or more power supplies are used, spacing must be at least 25 mm end-to-end, and 102 mm on each side. Power supply spacing to thermoplastic, wood, fibre, or other combustible enclosure materials must be 25 mm.
- Ensure power supplies are not overloaded by verifying output current is less than 8.33 DC amps. For best performance recommending up to 6.64 DC amps.
- Use of photocells or timing device is recommended to ensure power supplies are off during day light hours, when sign illumination is not needed. Higher daytime temperatures and unnecessary operation may shorten power supply lifetime.



SIGNBRIDGE PLUS

150 W LED driver. Model: BPSP-150-12V.1



FEATURES

- Metal housing design with functional ground
- Built-in active PFC function
- IP68 rating for indoor or outdoor installations
- Typical lifetime $\geq 50,000$ hours
- 5 years warranty

CONFORMITY & STANDARDS

EMC Emission:

- compliance to EN55015

EMC Immunity:

- EN55015
- EN61547
- EN61000-3-2
- EN61000-3-3
- CB
- ENEC
- CE-LVD:
 - IEC/EN61347-1,
 - IEC/EN61347-2-13,
 - UL8750
 - UL1310



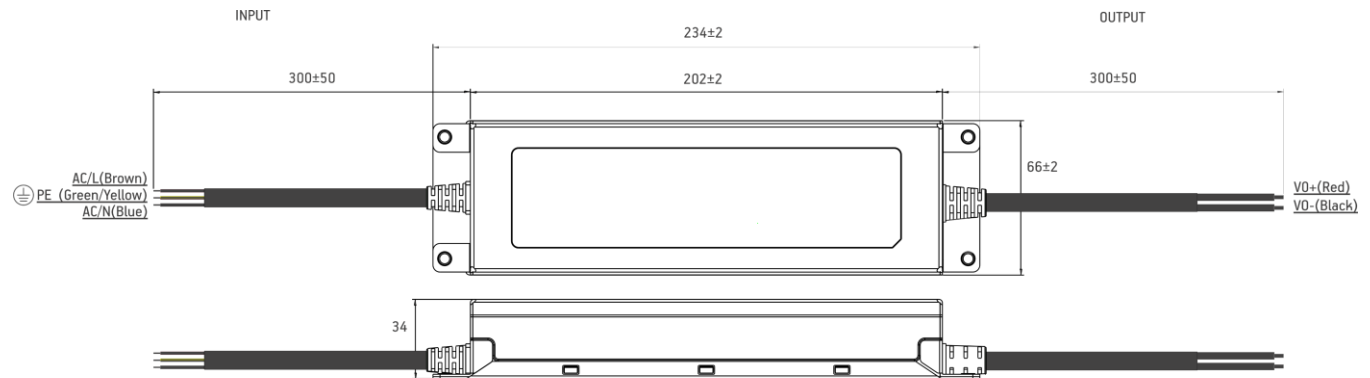
GENERAL SPECIFICATIONS

| | |
|----------------------|--|
| EFFICIENCY (TYP.) | $\geq 92\%$ (230 VAC) |
| COLD START | 3000 ms (230 VAC) |
| OPERATING CONDITIONS | $-40^{\circ}\text{C} \sim +45^{\circ}\text{C}$; 20 ~ 95% humidity |
| STORAGE CONDITIONS | $-40^{\circ}\text{C} \sim +80^{\circ}\text{C}$; 10 ~ 95% humidity |
| IP CLASS | IP68 |
| PROTECTIONS INCLUDED | Over voltage Over current Short circuit Over temperature |
| WARRANTY | 5 years, $\geq 50,000$ h |

QUANTITY OF DRIVERS PER CIRCUIT BREAKER

| | |
|--------------------------------|--------------------------------|
| CIRCUIT BREAKER OF TYPE C 16 A | CIRCUIT BREAKER OF TYPE C 25 A |
| 3 units (230 VAC) | 8 units (230 VAC) |

DIMENSIONS (MM)



Balt led

INPUT

| | |
|----------------------|---------------------------|
| INPUT VOLTAGE RANGE | 200 – 240 Vac; 50 – 60 Hz |
| MAX INPUT AC CURRENT | 2.1 A Max |
| MAX INRUSH CURRENT | ≤ 70 A |
| POWER FACTOR | ≥ 0.95 (230 VAC) |

OUTPUT

| | |
|----------------|--------|
| OUTPUT CURRENT | 12.5 A |
| OUTPUT VOLTAGE | 12 V |
| OUTPUT POWER | 150 W |

ORDERING INFORMATION

| SKU | UNIT NET WEIGHT, G | UNIT DIMENSIONS (LxWxH), MM | STATUS |
|----------------|--------------------|-----------------------------|-----------|
| BPSP-150-12V.1 | 916.0 | 202 x 66 x 34 | AVAILABLE |

5 YEARS WARRANTY

IP 68

05

CE

RoHS Compliant

UK CA

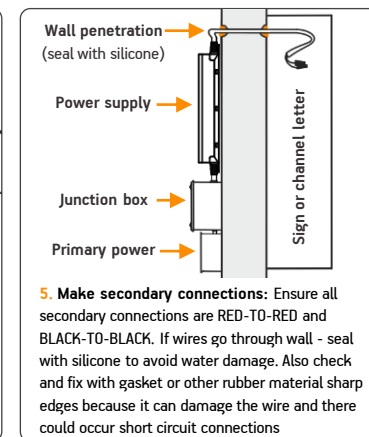
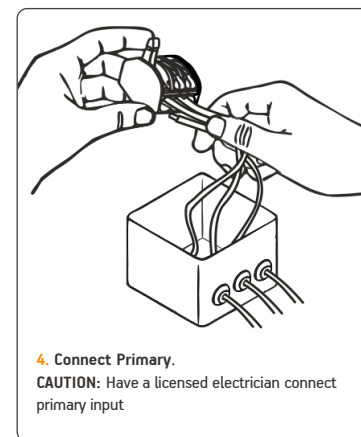
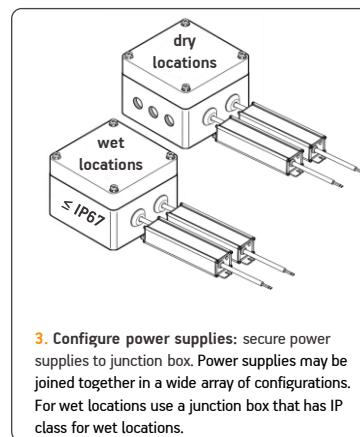
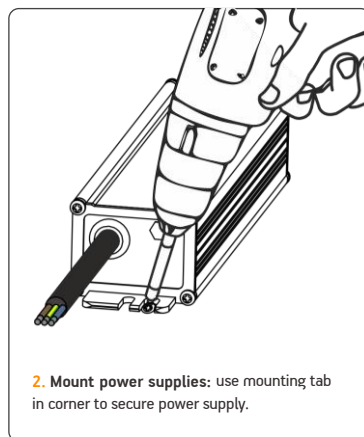
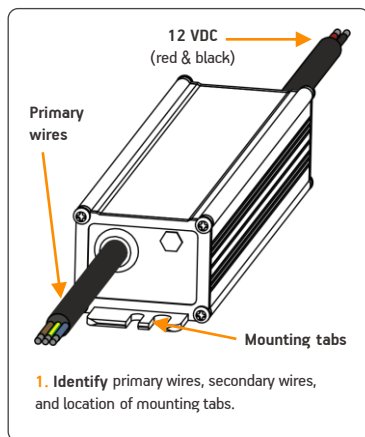
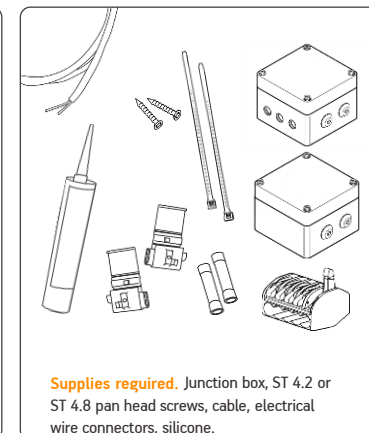
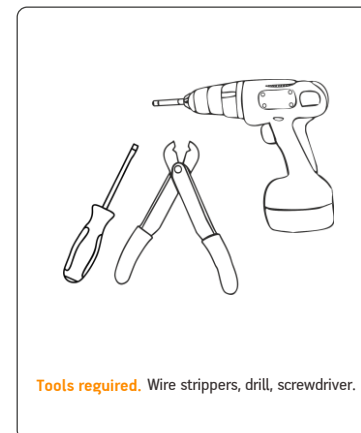
I

SIGNBRIDGE 150 W LED DRIVER

INSTALLATION GUIDE FOR MODEL: **BPSP-150-12V.**

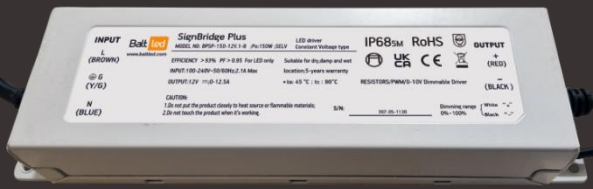
READ THE INSTRUCTIONS CAREFULLY BEFORE MOUNTING

- Power supply operating temperature is from -40 to +45 °C. To ensure adequate ventilation, mounting power supplies without a secondary enclosure is recommended.
- Space power supplies by standard knockout locations 19 mm minimum. If two or more power supplies are used, spacing must be at least 25 mm end-to-end, and 102 mm on each side. Power supply spacing to thermoplastic, wood, fibre, or other combustible enclosure materials must be 25 mm.
- Ensure power supplies are not overloaded by verifying output current is less than 12.5 DC amps. For best performance recommending up to 10 DC amps.
- Use of photocells or timing device is recommended to ensure power supplies are off during day light hours, when sign illumination is not needed. Higher daytime temperatures and unnecessary operation may shorten power supply lifetime.



SIGNBRIDGE PLUS

150 W dimmable LED driver. Model: BPS-150-12V.1-B



FEATURES

- 3-in-1 dimming: resistors | PWM | 0-10V
- Metal housing design with functional ground
- Built-in active PFC function
- IP68 rating for indoor or outdoor installations
- Typical lifetime >50,000 hours
- 5 years warranty

CONFORMITY & STANDARDS

- EMC Emission:
- compliance to EN55015, PART15B
- EMC Immunity:
- EN55015
 - EN61547
 - EN61000-3-2
 - EN61000-3-3
 - CB
 - CE-LVD:
 - IEC/EN61347-1
 - IEC/EN61347-2-13
 - UL8750
 - UL1310



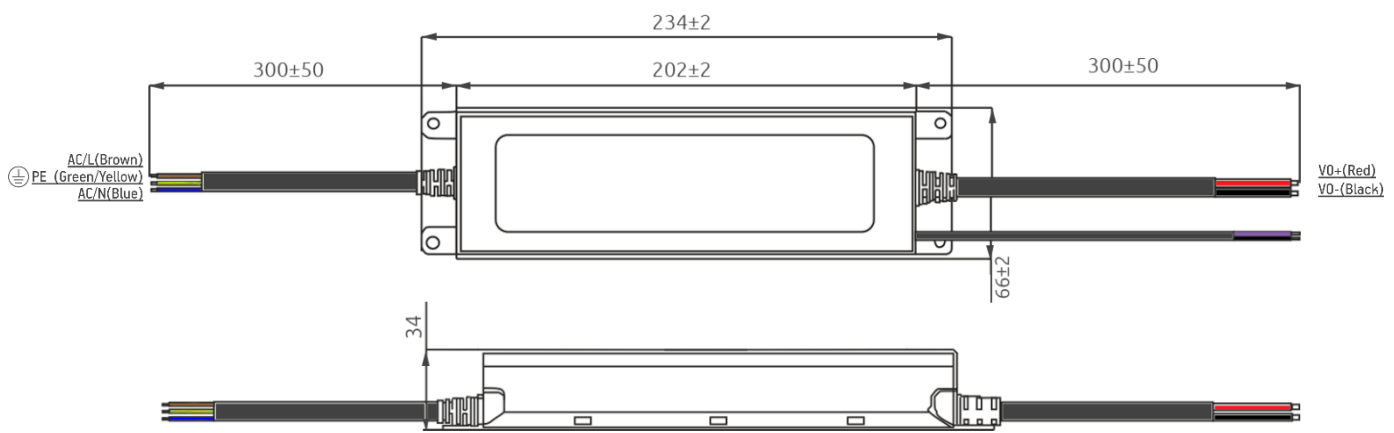
GENERAL SPECIFICATIONS

| | |
|----------------------|---|
| EFFICIENCY | ≥92% (230 VAC) |
| COLD START | 3000 ms (230 VAC) |
| OPERATING CONDITIONS | -40°C ~ +45°C; 20 ~ 95% humidity |
| STORAGE CONDITIONS | -40°C ~ +80°C; 10 ~ 95% humidity |
| IP CLASS | IP68 |
| PROTECTIONS INCLUDED | Over voltage Over current Short circuit Over temperature |
| WARRANTY | 5 years, ≥50 000 h |

QUANTITY OF DRIVERS PER CIRCUIT BREAKER

| | |
|--------------------------------|--------------------------------|
| CIRCUIT BREAKER OF TYPE C 16 A | CIRCUIT BREAKER OF TYPE C 25 A |
| 3 units (230 VAC) | 8 units (230 VAC) |

DIMENSIONS (MM)



INPUT

| | |
|----------------------|---------------------------|
| INPUT VOLTAGE RANGE | 200 – 240 Vac; 50 – 60 Hz |
| MAX INPUT AC CURRENT | 2.1 A Max |
| MAX INRUSH CURRENT | ≤70 A |
| POWER FACTOR | ≥0.95 (230 VAC) |

OUTPUT

| | |
|----------------|--------|
| OUTPUT CURRENT | 12.5 A |
| OUTPUT VOLTAGE | 12 V |
| OUTPUT POWER | 150 W |

ORDERING INFORMATION

| SKU | UNIT NET WEIGHT, G | UNIT DIMENSIONS (LxWxH), MM | STATUS |
|-----------------|--------------------|-----------------------------|----------|
| BPS-150-12V.1-B | 916.0 | 202 x 66 x 34mm | IN STOCK |

5 YEARS WARRANTY

IP 68

CE

RoHS Compliant

UK CA

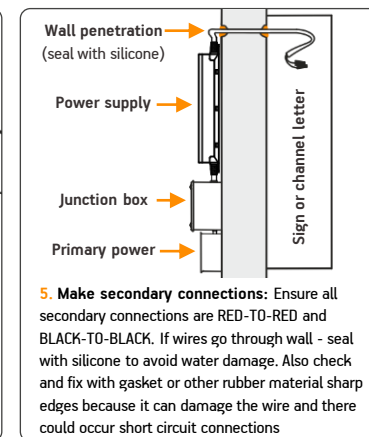
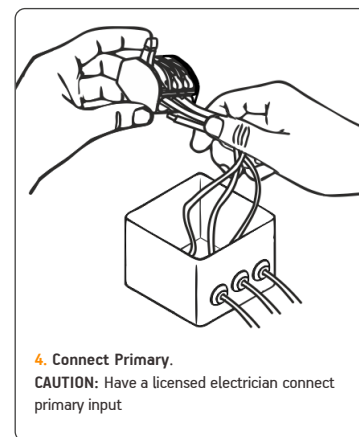
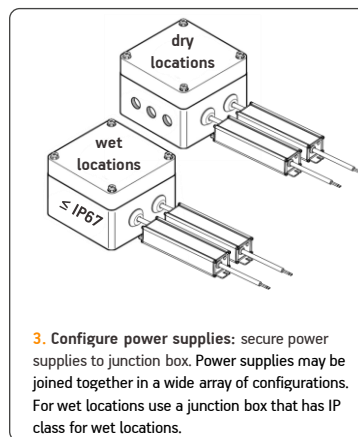
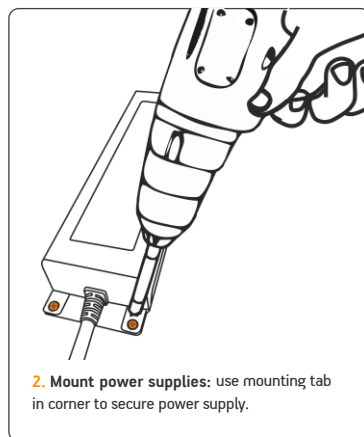
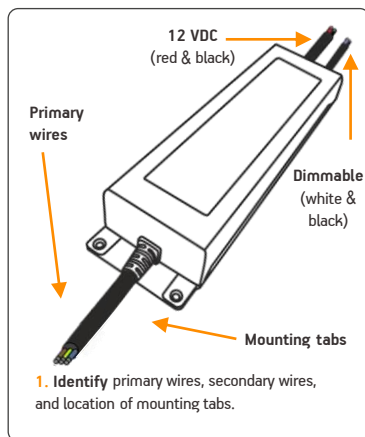
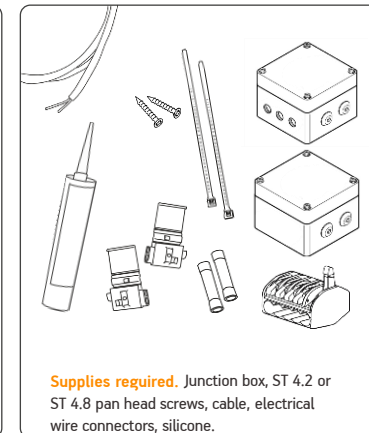
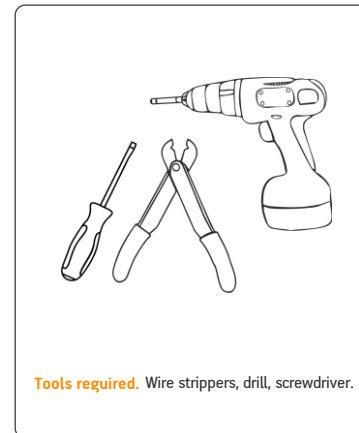
I

SIGNBRIDGE PLUS 150 W DIMMABLE LED DRIVER

INSTALLATION GUIDE FOR MODEL: **BPSP-150-12V.1-B**

READ THE INSTRUCTIONS CAREFULLY BEFORE MOUNTING

- Power supply operating temperature is from -40 to +45 °C. To ensure adequate ventilation, mounting power supplies without a secondary enclosure is recommended.
- Space power supplies by standard knockout locations 19 mm minimum. If two or more power supplies are used, spacing must be at least 25 mm end-to-end, and 102 mm on each side. Power supply spacing to thermoplastic, wood, fibre, or other combustible enclosure materials must be 25 mm.
- Ensure power supplies are not overloaded by verifying output current is less than 12.5 DC amps. For best performance recommending up to 10 DC amps.
- Use of photocells or timing device is recommended to ensure power supplies are off during day light hours, when sign illumination is not needed. Higher daytime temperatures and unnecessary operation may shorten power supply lifetime.



LINELIT ZIGZAG



ITEM DESCRIPTION

Flexible LED strips with 72 LEDs reaching up to 120 lm/w efficacy. Comes with double-sided tape for easy peel and use; the low temperature double sided copperplate design and low voltage drop. Great bendable and twistable design perfect for small light boxes and 3D letters.

APPLICATION

- Aluminium profiles
- Advertisement boxes
- Signs
- General lighting
- Automotive accents
- Accent decor

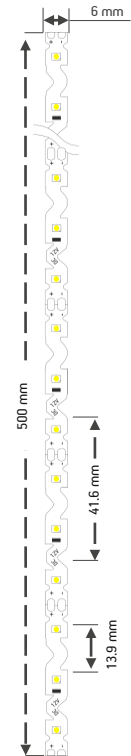
FEATURES & BENEFITS

- 5-years warranty
- Durable thermal conductive double-sided adhesive tape
- Compact 6 mm width
- Bendable and twistable led strip
- Low voltage drop

GENERAL SPECIFICATIONS

| | |
|-----------------------|-----------------------|
| SUPPLY VOLTAGE | 12 VDC |
| WATTS PER METER | 7.2 W |
| CRI | 80 |
| LEDs PER METER | 72 |
| CUTTING STEP | 41.6 mm |
| STRIP WIDTH | 6 mm |
| COLOUR / CCT | 3000 K 6500 K |
| OPERATING TEMPERATURE | -20 °C ~ +45 °C |
| STORAGE TEMPERATURE | +5 °C ~ +70 °C |
| CERTIFICATION | CE and RoHS compliant |
| IP CLASS | IP 20 |
| LIFETIME | L80 60 000 h |
| WARRANTY | 5 years |
| MOUNTING OPTIONS | double-sided tape |

DIMENSIONS, MM



ORDER INFORMATION

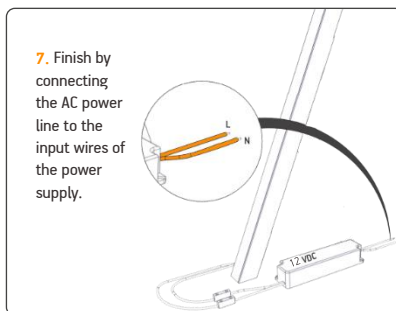
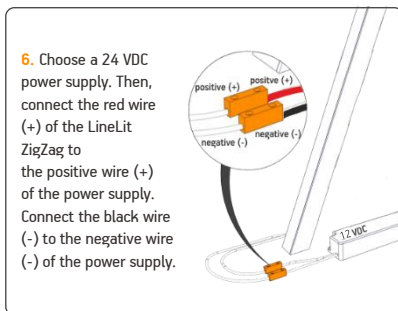
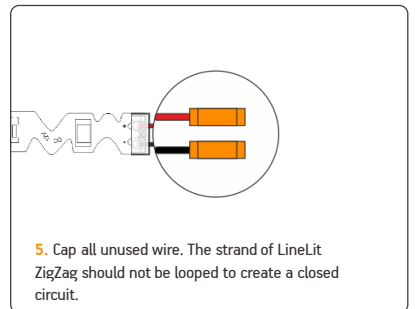
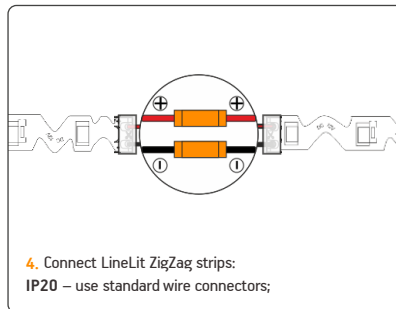
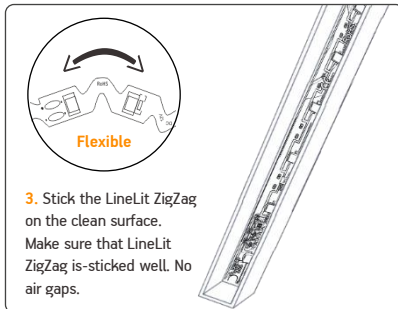
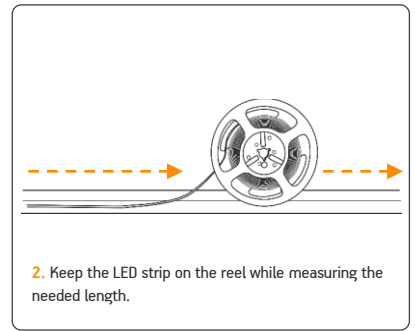
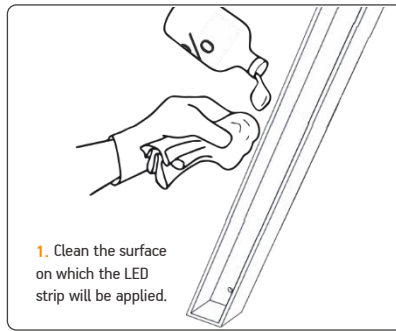
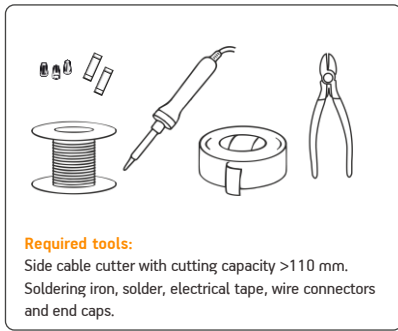
| SKU | POWER per METER, W | COLOUR | EFICACY, LM/W | LUMEN OUTPUT, LM |
|---------------------|--------------------|--------|---------------|------------------|
| BLSP-ZZ-LE72830I7.2 | 7.2W | 3000 K | 113 | 814 |
| BLSP-ZZ-LE72865I7.2 | 7.2W | 6500 K | 120 | 864 |

PACKAGING INFORMATION

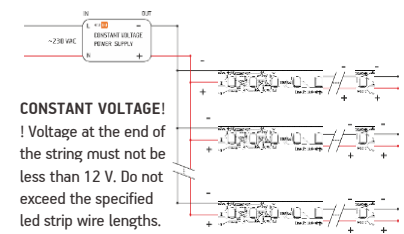
| SKU | CRI | METERS per REEL | REELS per BOX | LENGTH per BOX, M | WEIGHT per BOX, kg |
|---------------------|-------|-----------------|---------------|-------------------|--------------------|
| BLSP-ZZ-LE72830I7.2 | 3000K | 5 | 50 | 250 | 5 |
| BLSP-ZZ-LE72865I7.2 | 6500K | 5 | 50 | 250 | 5 |

LINELIT ZIGZAG LED STRIP (IP20) installation guide

FOR LONG-LASTING PERFORMANCE



CONNECTION SCHEME:



! Only PWM dimming is suitable for LineLit ZigZag.

FOR THE BEST PERFORMANCE:

- ✓ The LineLit ZigZag should be used on Aluminum profiles
- ✗ Do not bend the LineLit ZigZag very aggressively.
- ✗ Do not keep the soldering iron on solder parts longer than 3 seconds.
- ✗ Do not touch the LED diode or other components the with soldering iron.



LineLit ZigZag LED STRIP (IP20) installation guide

FOR LONG-LASTING PERFORMANCE

SAFETY PRECAUTIONS:

- Installation of LED strip must be carried out by a qualified technician in accordance to relevant electrical equipment handling standards.
- Before installing make sure that the fixing area can bear the total weight of the led strips.
- Led strips and power supplies have absolute maximum ratings. Comply with the specifications to avoid failure, damage and injury.
- Do not modify led strips. This may lead to damage, injury and will void the warranty.
- Do not connect led strips to a power supply that is turned on! Injury and led strips failure may occur. If a power supply is turned on with no load (for example because of a bad connection), turn the power supply off and allow 5 minutes for it to fully discharge before continuing work on the installation.
- Avoid placing any high-temperature objects around the led strips. Also avoid putting cloth or paper on the led strips. It may lead to combustion, burnout, overheat, failure, deformation.
- Avoid mechanical stress on LED strip, especially on LEDs and other electrical components.
- Avoid dusty environment while mounting LED strip.
- Before performing maintenance, turn off the power and allow the led strips to cool down. Otherwise, there is a danger of burns.
- Do not wipe or spray led strips with volatile materials such as thinner or benzene as it may lead to damage or spontaneous combustion.
- If there are any signs of smoke or there is a smell of burnt plastic, turn off power to the installation immediately, and investigate the power supply and wiring carefully.
- Ensure that power supply and other system components are properly earthed if using Class 0 or Class I power supplies.

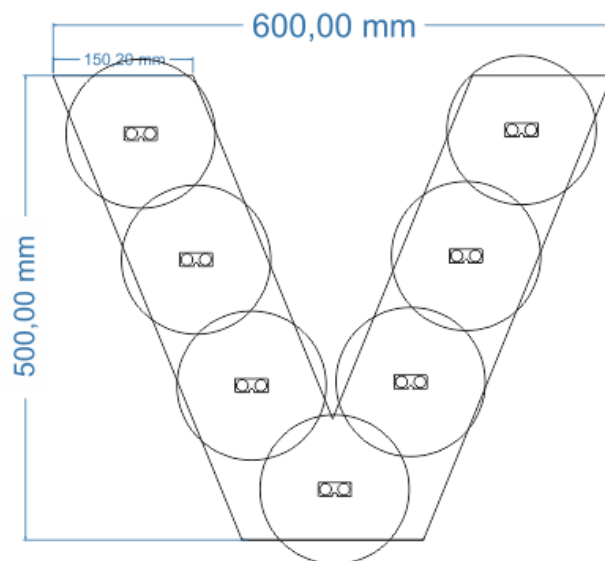
INSTALLATION RECOMMENDATIONS

- Be sure to install led strips in maintainable places.
- Avoid using excessive force during installation in order to minimize the risk of damage to led strips or cabling.
- Be careful not to go beyond the recommended maximum quantities of led strips for a given power supply. Overload may cause blinking, uneven illumination, or failure.
- These LED strips are designed to work with constant-voltage power supplies. Recommend to use BaltLED SignBridge power supplies. Do not connect to constant-current power supplies, as doing so will cause immediate failure of led strips.
- Please install led strips using appropriate cables. There is a possibility of cables disconnecting or breaking due to shrinkage caused by temperature changes.
- Make sure to provide sufficient ventilation and rainwater drainage for the installation containing the led strips to prevent shortening their lifetime due to excess heat, long-term exposure to water or ice damage. Operating temperature should be within -20°C ~ 45 °C.
- When fixing the cabling of the installation avoid using metal cable ties or brackets – they may damage the cable insulation and cause short-circuits.
- In order to prevent LED breakdown caused by static discharge make sure not to touch the wiring of the led strips with bare hands.
- Connect only to power supply with 12V DC output. Red wire to positive output of power supply. Black wire to negative output of power supply
- Do not install led strips under direct sunlight or falling water – premature failure may occur.

STORAGE AND GENERAL REMARKS

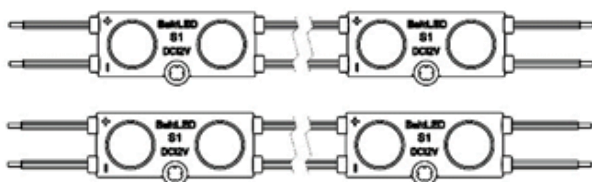
- Make sure to store led strips in a dry place, avoid elevated temperatures, high pressures, vibrations, corrosive or combustible materials, direct sunlight.
- Led strips cannot be used in combination with other types of led strips. This may cause colour and brightness mismatches and lead to premature failure.
- Please ensure that the materials and components used in the installation do not contain or emit sulphuric compounds. Sulphuric compounds attack the led strips components and may lead to changes in colour and premature failure.
- Make sure to keep records of purchasing and installation dates of the led strips.

PROJECT CALCULATION



DISTANCES BETWEEN MODULES

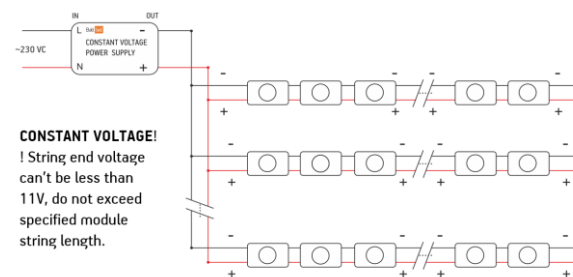
distance between centers 160 mm



distance between rows 160 mm

35 pcs. – Max number of modules in one chain

CONNECTION SCHEME

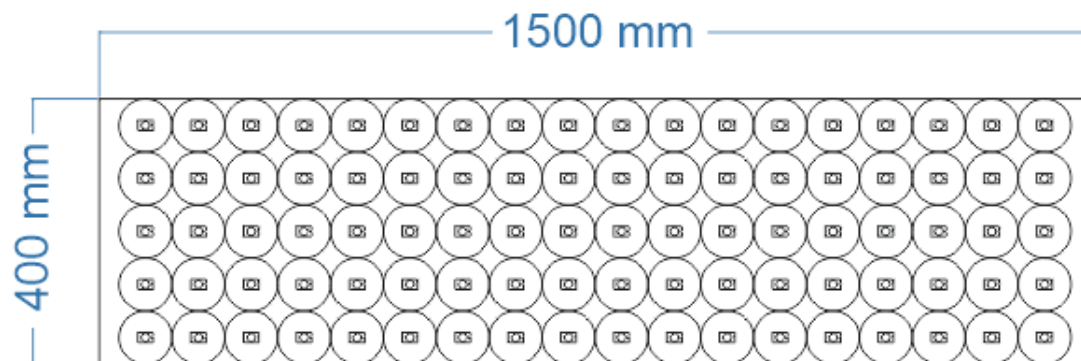


NOTE: Incorrect connection may cause short circuit and product failure.
WARNING: Make sure power supply is unplugged during LED wires connection.
FOR MORE INFORMATION please refer to the installation guide

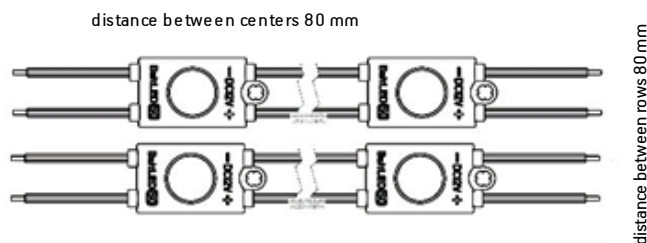
OUR SOLUTION

| | |
|------------------------------|----------------------|
| DEPTH | 90 mm |
| WARRANTY (MODULES) | 5 years |
| WARRANTY (POWER SUPPLY) | 5 years |
| MODULES | CROWN OPTO S1+ |
| SKU | BMOP-SP-LE2A160865E1 |
| QUANTITY | 7 pcs. |
| COLOUR TEMPERATURE | 6500 K |
| TOTAL POWER CONSUMPTION | 7 W |
| POWER SUPPLY 1 | BPSP-40-12V.1 |
| POWER SUPPLY 2 | |
| QUANTITY OF POWER SUPPLIES 1 | 1 pcs. |
| QUANTITY OF POWER SUPPLIES 2 | |

PROJECT CALCULATION

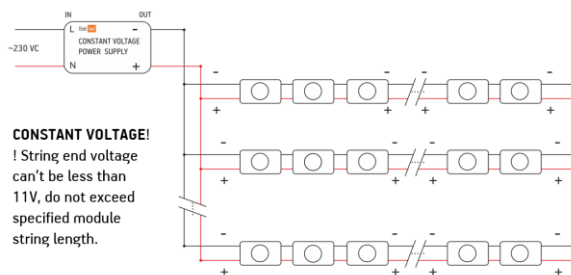


DISTANCES BETWEEN MODULES



70 pcs. – Max number of modules in one chain

CONNECTION SCHEME

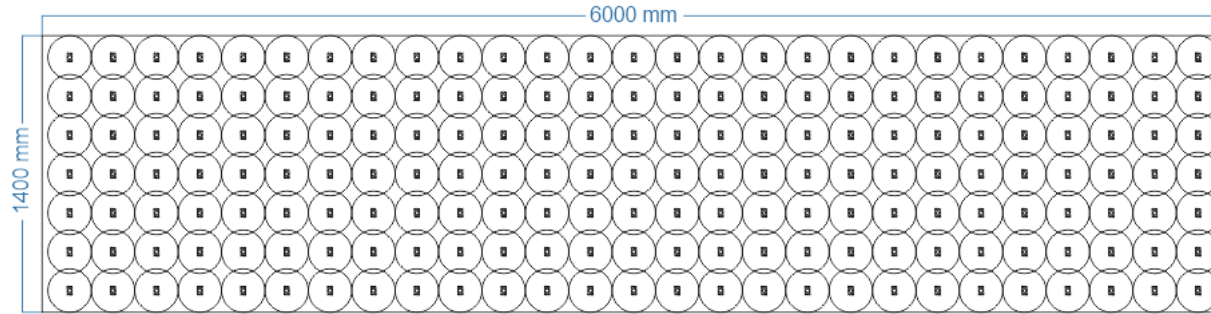


NOTE: Incorrect connection may cause short circuit and product failure.
WARNING: Make sure power supply is unplugged during LED wires connection.
FOR MORE INFORMATION please refer to the installation guide

OUR SOLUTION

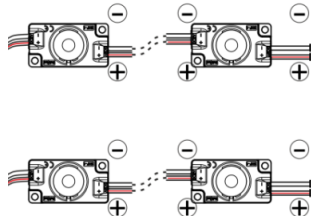
| | |
|------------------------------|---------------------|
| DEPTH | 50 mm |
| WARRANTY (MODULES) | 5 years |
| WARRANTY (POWER SUPPLY) | 5 years |
| MODULES | CROWN OPTO S0 |
| SKU | BMP-S0-01UH160CW652 |
| QUANTITY | 90 pcs. |
| COLOUR TEMPERATURE | 6500 K |
| TOTAL POWER CONSUMPTION | 32 W |
| POWER SUPPLY 1 | BPSP-40-12V.1 |
| POWER SUPPLY 2 | |
| QUANTITY OF POWER SUPPLIES 1 | 1 pcs. |
| QUANTITY OF POWER SUPPLIES 2 | |

PROJECT CALCULATION



DISTANCES BETWEEN MODULES

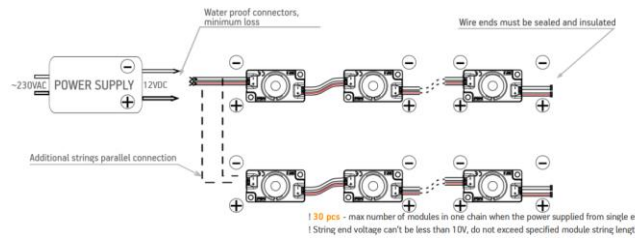
distance between centers 220 mm



30 pcs. – Max number of modules in one chain

distance between rows 220 mm

CONNECTION SCHEME



NOTE: Incorrect connection may cause short circuit and product failure.

WARNING: Make sure power supply is unplugged during LED wires connection.

FOR MORE INFORMATION please refer to the installation guide

OUR SOLUTION

| | |
|------------------------------|------------------|
| DEPTH | 100 mm |
| WARRANTY (MODULES) | 5 years |
| WARRANTY (POWER SUPPLY) | 5 years |
| MODULES | CROWN OPTO SHF-1 |
| SKU | BMP-SHF1-870E1.2 |
| QUANTITY | 189 pcs. |
| COLOUR TEMPERATURE | 7000 K |
| TOTAL POWER CONSUMPTION | 227 W |
| POWER SUPPLY 1 | BPSP-150-12V.1 |
| POWER SUPPLY 2 | |
| QUANTITY OF POWER SUPPLIES 1 | 2 pcs. |
| QUANTITY OF POWER SUPPLIES 2 | |

One-stop-shop:

Få alt til reklamebranchen hos VINK

3

Relaterede
varer til
BaltLED



Lyskassefolier

3M™ 3630 & 3635 E-cut

En premium lyskillefolie-serie skabt til at lave lyskilte på en front af glas eller akryl (PMMA) typisk som anvendelser som LED skiltning. De mange farver som serien findes i muliggør massevis af udtryk som sammen med LED belysning bagved skaber uendelige e-cut løsninger med spil i lyset eller som "rene" skilte i prædefinerede farver.



Green Cast®

100% regenereret PMMA (akrylplader)

Det lyder måske for godt til at være sandt – men det er sandt. Vink Plast kan nu tilbyde en 100 % regenereret, støbt akrylplade under brandet Vink® PMMA Greencast®. Pladerne har samme egenskaber som støbt virgin PMMA, hvilket åbner op for samme anvendelsesmuligheder. Vink® PMMA Green Cast® leveres i klare plader samt sort, hvid samt en opal LED kvalitet fra vores lager i Randers. Det kan også skaffes i pladetykkelser fra 3- til 25 mm i flere farver og varianter ved forespørgsel.



Perspex®

UV- og vejrstabilitet, høj transparens, god slagstyrke og en bred vifte af farver. Perspex® akryl er en af skiltebranchens foretrukne materialer skilte og dekorationsmaterialer på grund af dens alsidighed og store farveudvalg. Akryl er fremragende til skilteløsninger, dekoration af bygninger, udskaarne logoer bagbelyste skilte og meget mere. Det kan formes på utallige måder og der kan endda graves i det, trykkes på det

shop.vink.dk



Overblik over
ordre, priser og rabatter



Køb når det passer dig



Kundeservice stadig
så god som altid

50 års erfaring

Du er i trygge hænder hos Vink Plast, som er en sund arbejdsplads, hvor medarbejderne har en høj anciennitet.

Vink Plast

Kristrup Engvej 9
DK-8960 Randers SØ
Tlf. 89 110 100
email: info@vink.dk

Alle informationer i dette hæfte er givet ud fra vor bedste viden og uden ansvar for Vink Plast ApS.

Tekniske oplysninger bygger i vid udstrækning på informationer fra forskellige råvareleverandører.

Kopiering og gengivelse af indhold eller uddrag i anden sammenhæng kun efter forudgående aftale.

Vink Plast ApS, 14. juni 2023 1.30 PM

Vink tryksager: Jævnfør vores miljøpolitik, trykkes alle vores brochure på FSC-certificeret papir hos et svanemærket trykkeri. Det er et af mange tiltag hos Vink Plast, hvor vi ønsker at tage del i ansvaret for miljøet, og løfte i samlet flok.



VINK
PLAST

