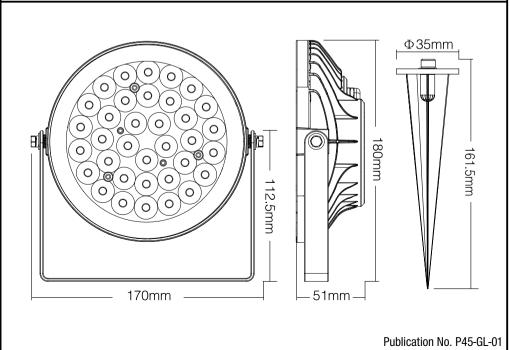


PAL-GL20 Garden Light



INSTALLATION & MAINTENANCE INSTRUCTIONS PAL-GL9 / PAL-GL20 GARDEN LIGHT

MODELS

- GL-9 available in RGB, Cool White,Warm White and RGB-CCT
- GL-20 available in RGB, Cool White,Warm White and RGB-CCT

FEATURES

- Wi-Fi Home Network Compatible and RF Controlled
- 15° Beam Angle
- Color Cloning
- Long Life LED
- Low Power Consumption
- Almost unlimited color selection at the Touch



Safety Warning and Procedures

Read and follow all instructions in this manual.

- 1) Ensure that the electrical system for your pool conforms with all the requirements of the National Electrical Code (NEC) and all relevant local codes and ordinances.
- 2) This 12V/24V DC Garden Light must be installed in accordance with the National Electrical Code by a Certified Electrician or Canadian Electrical Code. The electrician should also consult local building department concerning local codes.

DO NOT CONNECT THIS 12V/24V DC LIGHT DIRECT TO A 120V CIRCUIT.

Risk of Electric Shock! Install all Luminaires Ten (10) Feet (3.05 Metres) or more from the pool, spa or fountain.

PAL Garden Light Details

PAL Garden Light comes with the following items:

- Light with 1ft (30 cm) of Supply Cable
- Garden Stake

Power Supplies and Controllers

The PAL Garden Light is powered by the following:

- For Landscape Lighting Applications:
- Any Listed Landscape Class 2 Power Source/supply capable of supplying 12V DC (or 24V DC) constant voltage and suitable for wet locations.
- For Low Voltage Applications:
- Any Listed Class 2 Power Source/supply capable of supplying 12V DC (or 24V DC) constant voltage and suitable for wet locations when used in an environment were the power source/supply could get wet.
- * RGB Models require a separate 12V DC RGB Controller installed between power source and light(s).

Model	Input Voltage
PAL-GL9/GL20-RGB-A	12V DC
PAL-GL9/GL20-CW-A	12V DC
PAL-GL9/GL20-WW-A	12V DC
PAL-GL9/GL20-RGB-A-24	24V DC

Warning

Before wiring lights Disconnect Driver or Controller plug from AC power.

For complete wiring information regarding your transformer, refer to the manufacturers documentation provided with the transformer.

The main low voltage cable and the short landscape light wires should be buried a maximum of six (6) inches in the ground when connecting to the main low voltage cable. Be sure the short wire from the light is within six (6) inches from a building structure, a luminaire, or fitting. The main cable and short wire must be protected by routing it in close proximity to the luminaire or fitting, or next to a building structure such as a house or deck.

Lights vs Wattage

Depending on what PAL-GL model you have will determine the wattage.

Select the correct wattage driver/transformer to power the amount of lights determined by the wattage of each light. Eg. 5 x PAL-GL9-RGB-A Lights @ 7 watts per light = 35 watts so will require a 60VA Transformer/Controller. Note: Always buy a transformer/controller that has more capacity than required to avoid overloading.

Model No.	Wattage
PAL-GL9-RGB-A	7 watts
PAL-GL9-CW-A	9 watts
PAL-GL9-WW-A	9 watts
PAL-GL9-RGB-A-24	8 watts

Model No.	Wattage
PAL-GL20-RGB-A	20 watts
PAL-GL20-CW-A	20 watts
PAL-GL20-WW-A	20 watts
PAL-GL20-RGB-A-24	14 watts

Installation of Garden Lights

Garden Lights and recommended cable gauge.

Depending on the number of garden lights you are using and the power supply 12V or 24V DC depending on the model of Garden Light be sure to use the correct wire gauge and length to avoid voltage drop.

Additional Lengths of Cable:

Additional lengths of 79' cable are available to order in PAL-SJTW 2 Core (Cool/Warm White) Part No: 45-PAL-2C-79 or PAL-SJTW 4 Core (RGB) Part No: 45-PAL-4C-79 from your PAL Product Supplier.

Connection of Wires

Use silicon pre-filled wire nuts to seal the wire connection or apply silicon to the inside of the wire before connection to joining cable. This will stop water entering the cable causing risk of failure.

Caution: Do not bury wires until silicon is dry.

Note: It is recommended that the cable to be buried not more than 6" to protect against the elements.

Garden Light Placement and Orientation

The PAL-GL9 and PAL-GL20 Garden Lights are intended for wall mounting or ground mounting. The mounting arm is used for wall mounting and the garden stake is used for ground mounting.

Ground mounting: you should position the Garden light in the appropriate location by pushing the Garden Stake into the soil and directing the light fixture in the desired direction (upwards or downwards).

Risk of Electric Shock! Install all Luminaires Ten (10) Feet (3.05 Metres) or more from the pool, spa or fountain.

PAL PRODUCT WARRANTY DETAILS

The PAL product is guaranteed against defects in materials and/or workmanship, under normal domestic use for (12) twelve months.

Except as otherwise provided for by law, this guarantee becomes invalid if in the opinion of the Company the product has been misused, abused, damaged in transit, incorrectly installed, or connected to an electrical supply not corresponding with the products specification or a non-approved PAL power supply.

The Company is not responsible for forwarding freight charges or losses in transit.

If any part of the product proves to be defective within the warranty period, the defective part will be repaired or replaced, free of charge and at the discretion of Bellson Electric.

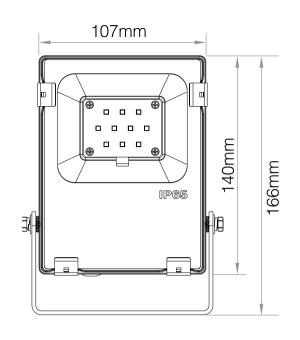
Bellson Electric shall not be liable for any loss of profits or any consequential, indirect or special loss, damage or injury of any kind whatsoever arising directly or indirectly from Bellson Electric products. This limitation does not apply to any liability under the Australian or New Zealand consumer legislation.

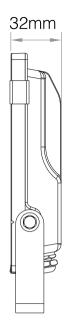
PLEASE REGISTER YOUR PRODUCT WARRANTY DETAILS ONLINE AT: www.bellson.com.au/register.htm

OR

You MUST retain some proof of purchase to provide evidence of the DATE of the original purchase.

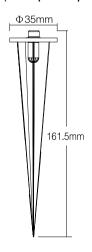
PAL-FL10 Garden Light





Publication No. P45-FL-01

Separate Garden Stake (for separate purchase if required):



INSTALLATION & MAINTENANCE INSTRUCTIONS PAL-FL10 FLOOD LIGHT

MODELS

□ FL-10 available in RGB, Cool White, Warm White and RGB-CCT

FEATURES

- Wi-Fi Home Network Compatible and RF Controlled
- □ 160° Beam Angle
- Color Cloning
- Long Life LED



Almost unlimited color selection at the Touch



Safety Warning and Procedures

Read and follow all instructions in this manual.

- 1) Ensure that the electrical system for your pool conforms with all the requirements of the National Electrical Code (NEC) and all relevant local codes and ordinances.
- 2) This 12V/24V DC Garden Light must be installed in accordance with the National Electrical Code by a Certified Electrician or Canadian Electrical Code. The electrician should also consult local building department concerning local codes.

DO NOT CONNECT THIS 12V/24V DC LIGHT DIRECT TO A 120V CIRCUIT.

Risk of Electric Shock! Install all Luminaires Ten (10) Feet (3.05 Metres) or more from the pool, spa or fountain.

PAL Flood Light Details

PAL Flood Light comes with the following items:

- 1) Light with 1ft (30 cm) of Supply Cable
- 2) Optional Extra: Garden Stake (Part No: 45-PAL-GS)

Power Supplies and Controllers

Model

PAL-FL10-RGB-A

PAL-FL10-CW-A

PAL-FL10-WW-A

PAL-FL10-RGB-A-24

Input Voltage

12V DC

12V DC

12V DC

24V DC

The PAL Flood Light is powered by the following:

- For Landscape Lighting Applications:
- Any Listed Landscape Class 2 Power Source/supply capable of supplying 12V DC (or 24V DC) constant voltage and suitable for wet locations.
- For Low Voltage Applications:
- Any Listed Class 2 Power Source/supply capable of supplying
- 12V DC (or 24V DC) constant voltage and suitable for wet locations when
- used in an environment were the power source/supply could get wet.
- * RGB Models require a separate 12V DC RGB Controller installed between power source and light(s).

Warning

Before wiring lights Disconnect Driver or Controller plug from AC power.

For complete wiring information regarding your transformer, refer to the manufacturers documentation provided with the transformer.

The main low voltage cable and the short landscape light wires should be buried a maximum of six (6) inches in the ground when connecting to the main low voltage cable. Be sure the short wire from the light is within six (6) inches from a building structure, a luminaire, or fitting. The main cable and short wire must be protected by routing it in close proximity to the luminaire or fitting, or next to a building structure such as a house or deck.

Lights vs Wattage

Depending on what PAL-FL model you have will determine the wattage.

Select the correct wattage driver/transformer to power the amount of lights determined by the wattage of each light. Eg. 5 x PAL-FL10-RGB-A Lights @ 10 watts per light = 50 watts so will require a 60VA Transformer/Controller. Note: Always buy a transformer/controller that has more capacity than required to avoid overloading.

Model No.	Wattage	
PAL-FL10-RGB-A	10 watts	
PAL-FL10-CW-A	10 watts	
PAL-FL10-WW-A	10 watts	
PAL-FL10-RGB-A-24	8 watts	

Installation of Flood Lights

Flood Lights and recommended cable gauge.

Depending on the number of flood lights you are using and the power supply 12V or 24V DC depending on the model of Flood Light be sure to use the correct wire gauge and length to avoid voltage drop.

Additional Lengths of Cable:

Additional lengths of 79' cable are available to order in PAL-SJTW 2 Core (Cool/Warm White) Part No: 45-PAL-2C-79 or PAL-SJTW 4 Core (RGB) Part No: 45-PAL-4C-79 from your PAL Product Supplier.

Connection of Wires

Use silicon pre-filled wire nuts to seal the wire connection or apply silicon to the inside of the wire before connection to joining cable. This will stop water entering the cable causing risk of failure.

Caution: Do not bury wires until silicon is dry.

Note: It is recommended that the cable to be buried not more than 6" to protect against the elements.

Flood Light Placement and Orientation

The PAL-FL10 Flood Lights are intended for wall mounting or ground mounting. The mounting arm is used for wall mounting and the garden stake is used for ground mounting.

Ground Mounting: You should position the Flood light in the appropriate location by pushing the Garden Stake (if purchased separately) into the soil and directing the light fixture in the desired direction (upwards or downwards).

Risk of Electric Shock! Install all Luminaires Ten (10) Feet (3.05 Metres) or more from the pool, spa or fountain.

PAL PRODUCT WARRANTY DETAILS

The PAL product is guaranteed against defects in materials and/or workmanship, under normal domestic use for (12) twelve months.

Except as otherwise provided for by law, this guarantee becomes invalid if in the opinion of the Company the product has been misused, abused, damaged in transit, incorrectly installed, or connected to an electrical supply not corresponding with the products specification or a non-approved PAL power supply.

The Company is not responsible for forwarding freight charges or losses in transit.

If any part of the product proves to be defective within the warranty period, the defective part will be repaired or replaced, free of charge and at the discretion of Bellson Electric.

Bellson Electric shall not be liable for any loss of profits or any consequential, indirect or special loss, damage or injury of any kind whatsoever arising directly or indirectly from Bellson Electric products. This limitation does not apply to any liability under the Australian or New Zealand consumer legislation.

PLEASE REGISTER YOUR PRODUCT WARRANTY DETAILS ONLINE AT: www.bellson.com.au/register.htm

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You MUST retain some proof of purchase to provide evidence of the DATE of the original purchase.