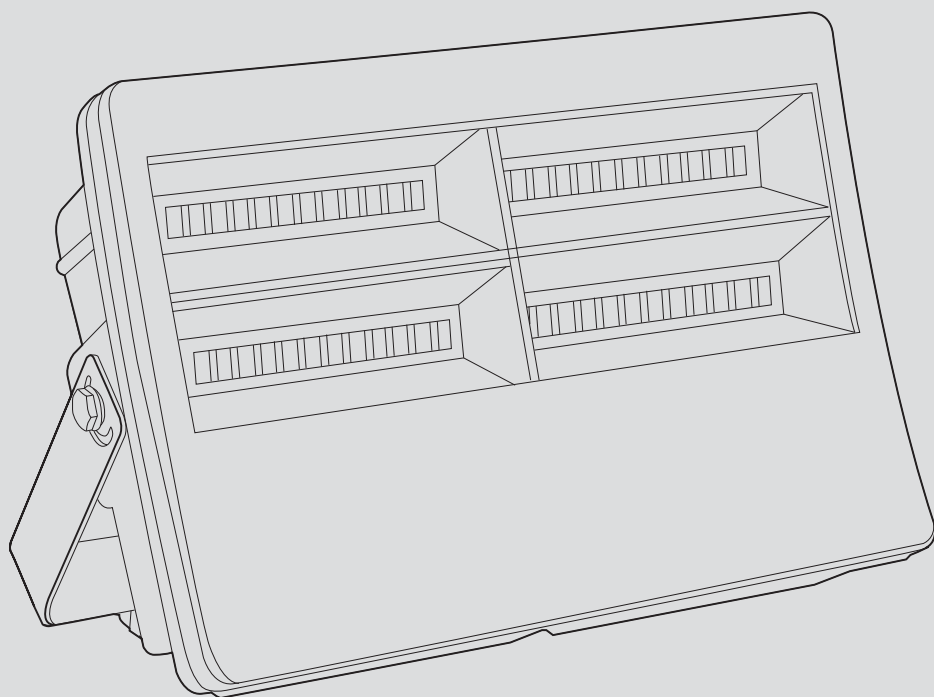# MIGHTYLITE PRO

Mightylite Pro 120W / 200W LED Floodlights
Models: MLP120 / MLP200



Installation & operating instructions

hylite

## HYLITE MIGHTYLITE PRO – INSTALLATION AND OPERATING INSTRUCTIONS

The Hylite Mightylite Pro floodlight a high-powered, professional LED floodlight which is suitable for use outdoors in a range of commercial applications including lighting perimeters, car parks, garden areas and outside warehouse facilities.
The unit requires connection to a 230 AC 50Hz mains electricity supply.

## 1. IMPORTANT SAFETY INSTRUCTIONS

**WARNING: THIS PRODUCT MUST BE INSTALLED BY A QUALIFIED ELECTRICIAN, AND CHECKED TO ENSURE IT IS SAFE, BEFORE USING.**

**PLEASE FOLLOW THESE INSTRUCTIONS CAREFULLY BEFORE ATTEMPTING TO INSTALL AND OPERATE THIS LIGHT.**

### 1.1. IMPORTANT INSTALLATION INSTRUCTIONS

⚠ The risk of electric shock should be minimized by the installation of appropriate safety devices including the incorporation of an RCCB (Residual Current Circuit Breaker) into the main distribution board.

⚠ DO NOT wire this floodlight into the lighting circuit. Use a switched fused spur. Cables should always be protected against short circuit and overload by use of an RCD.

⚠ Ensure the voltage marked on the product is the same as the electrical power supply to be used.

⚠ DO NOT install the light indoor or where it is likely to be knocked or hit; in hot or humid conditions such as near an exhaust outlet e.g. boiler flue, dryer outlet.

### 1.2. IMPORTANT OPERATION & MAINTENANCE INSTRUCTIONS

⚠ DO NOT position the light near flammable or combustible materials (such as wood, cloth, paper) or near flammable, combustible or explosive liquids, solids, gases or equipment.

⚠ DO NOT direct the light into a person's eyes. This light has a very intensive light output, which if incorrectly used could cause eye damage.

⚠ ALWAYS disconnect the mains power supply before servicing or performing any maintenance.

⚠ ALWAYS maintain the light in good condition, with repairs only undertaken by a qualified electrician.

⚠ ONLY carry out repairs using genuine parts. Non-authorized parts may be dangerous and will invalidate the warranty.

### 1.3. PARTS INCLUDED

1x Mightylite Pro LED Floodlight with connection box and cable gland
1 x Allen key
2 x Allen Screws M3 X 10 HE
2 x M8 X 12 Bolts
2 x M8 X 12 Large washer
6 x M8 x 10 Spring Washer
2 x M3 Small Washer
4 x Plastic Screw Cover 6mm
4 x Pipe Bracket Screw and Nut Stainless Steel 1/4 x 3/4
1 x Pipe Bracket 35.5cm Long
1 x U-Bracket 125mm x 320mm x 125mm

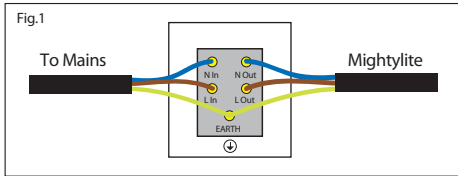### 1.4. TOOLS REQUIRED

Electric/hand-held drill
No.8 masonry drill bit
Electricians screwdriver
Large cross-head screwdriver
Small cross-head screwdriver
Wire cutters

THIS PRODUCT IS SUITABLE FOR WALL MOUNTING ONLY

## 2. WIRING REQUIREMENTS

- The unit requires connection to a 230 AC 50Hz mains electricity supply.
- It is recommended that the unit is connected to the lighting circuit via a 5 amp fused spur and using Twin & Earth 2-Core round flexible cable of at least 1mm gauge (waterproof cable should be used for outdoor installations).
- It is also advisable to install a single pole wall switch to allow easy control of the floodlight [Fig. 1].

Fig.1

To Mains    N In    N Out    Mightylite
            L In    L Out
            EARTH
              ⊕

## 3. FIXING THE MIGHTYLITE PRO

**WARNING: Isolate the power supply before installation.**

The Mightylite can be fixed in position by EITHER:

Option 1: Attaching the U bracket to the mounting surface and attaching the Mightylite to the U bracket, or
Option 2: Clamping the pipe bracket to the U bracket around a pipe or pole, and then attaching the Mightylite.

## 3.1. OPTION 1: ATTACHING THE MIGHTYLITE PRO VIA THE U BRACKET

If attaching the Mightylite Pro direct to a wall using the U bracket:

- Select a mounting point which is strong enough to support the weight of the Mightylite.
- Attach the Mightylite Pro to the U bracket using the two securing bolts provided [Fig.2].
- Position the unit against the mounting surface and mark the position for the U bracket, ensuring the wires can easily reach the unit.
- Use the U bracket Fixing Holes [Fig.3] to mark the 4 drill holes required to secure the U bracket to the wall (and mark the cable outlet location if required).
- Detach the Mightylite Pro from the U bracket, drill the wall and screw U bracket onto the wall using appropriate fixings which are able support the weight of the Mightylite Pro.
- Once the U bracket is securely attached to the wall, offer the Mightylite Pro up to the U bracket and secure using the securing bolts, spring washers and washers provided [Fig.2].
- Loosen the 4 screws holding the front of the connection box in place and remove.
- Feed the wire through the cable gland on the connection box gently tightening gland nut up against the gland body [Fig. 4] to ensure the wire(s) is secured in place and no water can get though into the connection box.
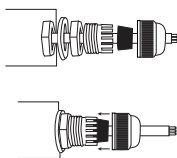- Wire the Mightylite Pro as described in Section 4.

Fig. 2

Fig. 3

Fixing Holes

Fig. 4

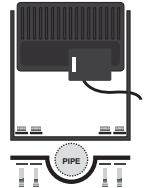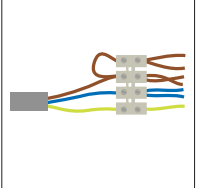Fig. 5    Fixing to a pipe

PIPE

Fig. 6

## 3.2. OPTION 2: ATTACHING THE MIGHTYLITE VIA THE PIPE BRACKET

If attaching the Mightylite Pro to a pipe or post using the pipe bracket, first ensure the pole is strong enough to support the weight of the Mightylite then proceed as follows:

- Establish the correct position for the Mightylite Pro on the pipe ensuring the wires can easily reach the unit.
- Position the pipe bracket and U bracket around the pipe and secure using appropriate nuts bolts and washers (not provided), as shown in [Fig.5]
- Offer the Mightylite Pro up to the U bracket and secure using the securing bolts, spring washers and washers provided [Fig.2].
- Loosen the 4 screws holding the front of the connection box in place, and remove.
- Feed the wire through the cable gland, gently tightening gland nut up against the gland body [Fig. 4] to ensure the wire(s) is secured in place and no water can get though into the connection box.
- Wire the Mightylite Pro as described in Section 4.

## 4. WIRING THE FLOODLIGHT

- Once the power cable has been fed through the cable gland, approximately 6mm of insulation should be stripped from each of the cores of AC cable ready to attach it to the terminal block in the front of the light fitting.

NOTE: The Hylite Mightylite Pro MLP120 and MLP200 are Class 1 fittings and therefore need to be Earthed
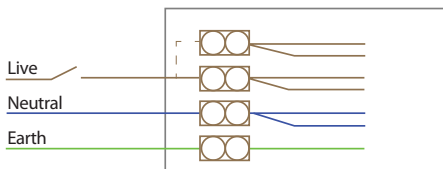
## 4.1 CONNECTING TO POWER SUPPLY

IMPORTANT: The Mightylite Pro has two dual channel drivers which control the 4 LED arrays within the Mightylite Pro. The four BROWN (Live) wires in the Mightylite Pro terminal, each operate as the Live for each of the LED arrays, enabling the arrays to be wired to be switched on and off independently of each other (See Section 4.2 Wiring Options). The two BLUE (Neutral) wires in the terminal operate as the Neutral for each of the drivers.

The unit is supplied with all 4 wires linked into 2 terminals which are, in turn, connected by a single BROWN wire. To wire the unit so all 4 LED arrays operate together from a single switch (Single Level wiring) proceed as follows:

- Connect the BROWN or RED (Live) wire to either terminal (marked "L") holding 2 BROWN wires in the floodlight unit, and linked together by a single BROWN wire [Fig.6].
- Connect the BLUE or BLACK (Neutral) wire to the terminal (marked "N") holding the 2 BLUE wires in the floodlight unit [Fig.6].
- Connect the YELLOW/GREEN or BARE (Earth) wire to the terminal (marked "EARTH") holding the YELLOW/GREEN wire in the floodlight unit
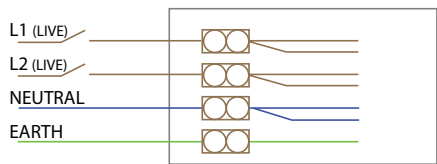
## 4.2 WIRING OPTIONS

Fig. 7 Wiring for Single Lighting Level

Live

Live

Neutral

Earth
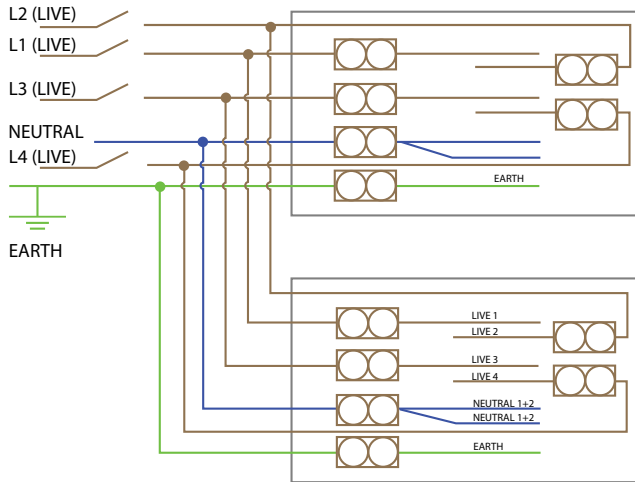
Note: One switch operates the Mightylite Pro which is always at full power (100% light level) when switched on.

Fig.8 Wiring for Two Lighting Levels

L1 (LIVE)

L2 (LIVE)

NEUTRAL

EARTH

Note: One switch operates two of the Mightylite Pro LED arrays, and another controls the other two arrays, enabling the unit to operate at 50% or 100% power dependent on switching.

Fig. 9: Wiring for Four Lighting Levels (using 2 units)

L2 (LIVE)
L1 (LIVE)
L3 (LIVE)
NEUTRAL
L4 (LIVE)

EARTH

EARTH

LIVE 1
LIVE 2
LIVE 3
LIVE 4
NEUTRAL 1+2
NEUTRAL 1+2
EARTH

Note: A separate switch is used to control each of the four LED arrays within one or more Mightylite Pro units. Diagram shows 2 units wired together so that both can operate at 25%, 50%, 75% or 100% light level dependent upon switching.

## 5. AFTER CONNECTING  POWER SUPPLY

- After the connections have been secured, the floodlight front (Connection Box front) should be fastened to the Connection Box using the 4 Connection Box Screws.

- Once screws are secure, the screw covers should be fitted [Fig.10]

- To secure the angle of light of the Mightylite Pro set the desired position, tighten the 2 Securing bolts then use the 2 x Allen screws and washers to lock the position of the Mightylite Pro on the U bracket [Fig.11].



Fig. 10



Fig. 11

## 6. TECHNICAL SPECIFICATION

| Ref: | MLP120B | MLP200B |
|---|---|---|
| Description: | Mightylite PRO 120W Floodlight | Mightylite PRO 200W Floodlight |
| Fascia: | Matt black polycarbonate | Matt black polycarbonate |
| Backplate: | Matt black aluminium | Matt black aluminium |
| Lens: | Frosted | Frosted |
| Wattage: | 120W | 200W |
| Lumens generated: | 12000 | 17000 |
| Voltage: | 80 -280V | 80 -280V |
| LED array: | 96 LEDs | 168 LEDs |
| Power factor: | >0.9 | >0.9 |
| Efficiency: | <80% | <80% |
| Colour temperature: | ANSI 5700K | ANSI 5700K |
| Max. LED life | 50,000 hrs | 50,000 hrs |
| Operating temperature: | -40°C to +60°C | -40°C to +60°C |
| Fixed using mounting bracket: | Yes | Yes |
| Optional pipe bracket: | Yes | Yes |
| Dimensions (mm): | 220(H) x 325(W) x 125(D) | 220(H) x 325(W) x 125(D) |
| Weight (kg): | 5.0 | 5.0 |
| Warranty: | 3 years | 3 years |