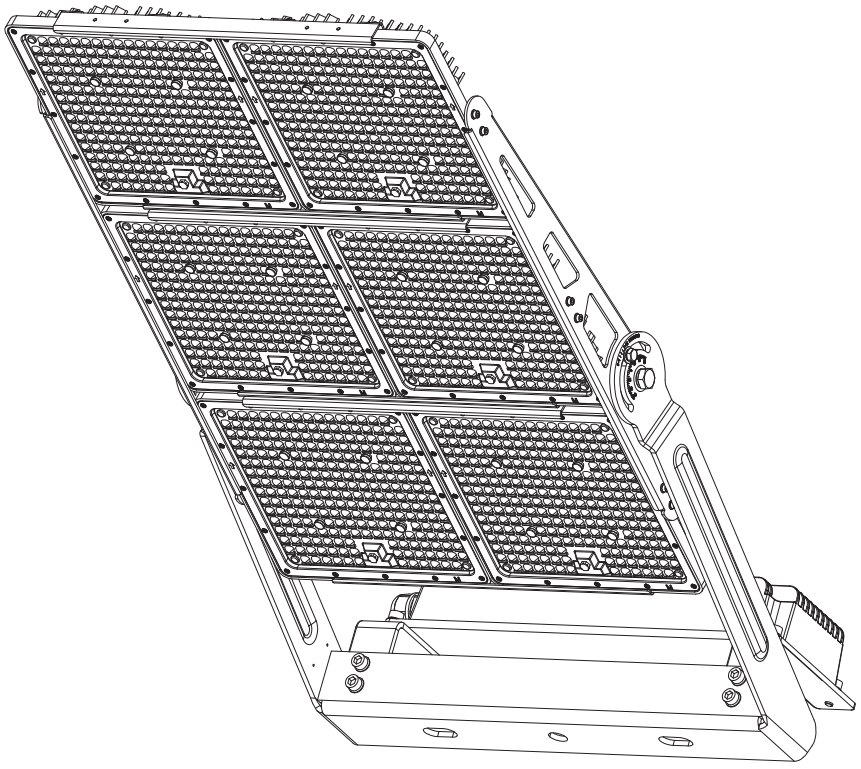
Abacus®
Leaders in Lighting

INSTALLATION MANUAL

Challenger 1 LED-1500W



V2.0

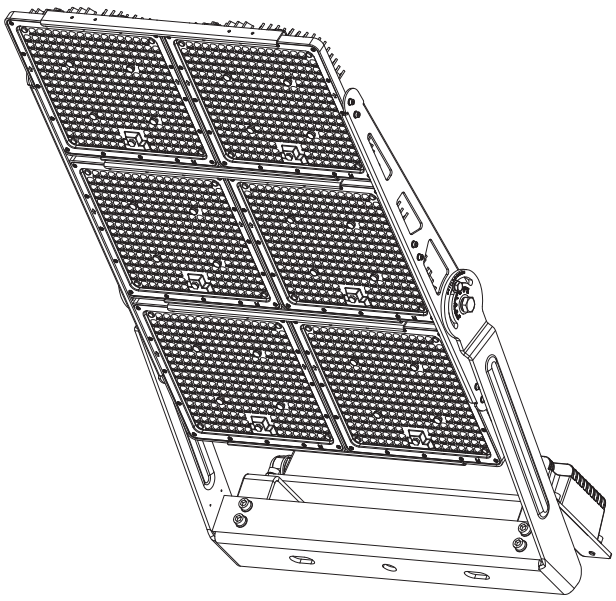
READ AND FOLLOW ALL SAFETY INSTRUCTIONS.

SAVE THE MANUAL FOR FUTURE REFERENCE!

⚠ WARNING

To avoid electric shock:

• Installation and wiring of luminaire must be in accordance with all applicable local codes.
• Installation, inspection, and maintenance of luminaires should be performed by a qualified electrician.
• DO NOT make or alter any open holes in the luminaire. Do not modify the luminaire.
• DO NOT install damaged product.
• Make sure electrical power is OFF before and during installation and maintenance.
• Make sure the equipment is properly grounded.
• Make sure the supply voltage is same as the rated fixture voltage.



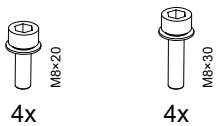
To perform maintenance:

• Only use luminaire in its intended location.
• Make sure the luminaire is not covered with material that will prevent convection or conduction cooling.
• It's suggested to perform visual, electrical, and mechanical inspections on a regular basis.
• Allow luminaire to cool before handling. Do not touch enclosure or light source.

LUMINAIRE PARAMETER

Working Temperature	Standard: -40℃~+25℃ Dim down 20% as high temperature version: +25℃~+50℃		
Storing Temperature	-40℃~+65℃	Working Humidity	15%~90%RH
IP Rating		IP66	

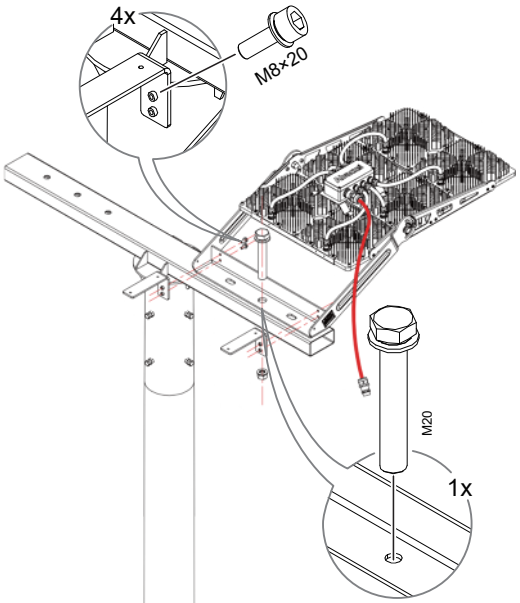
WHAT COMES IN THE PACKAGE

1. Luminaire Body	1	√
2. Driver Mounting Brackets	2	√
3. Bolts  4x 4x	8	√
4. Installation Manual	1	√
5. Quality Certificate	1	√

OPTION 1 – Overslung installation

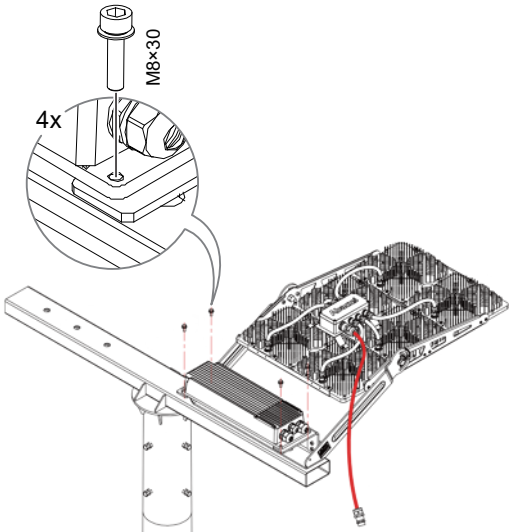
1

- Install the floodlight on the mounting bracket with an M20 (grade 8.8 or higher) nut and bolt (max torque settings 500Nm)
- Install driver mounting brackets with the bolts included.



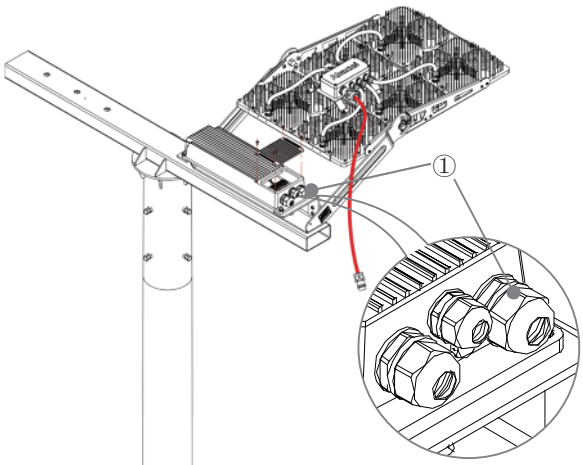
2

- Install the driver onto the driver mounting brackets with the bolts included.



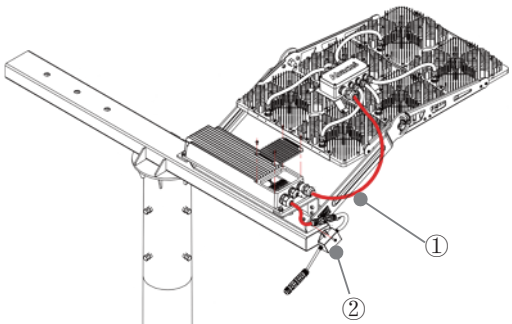
3

- Remove the driver terminal cover (4 bolts T20 Torx)
- Remove the cable gland ①



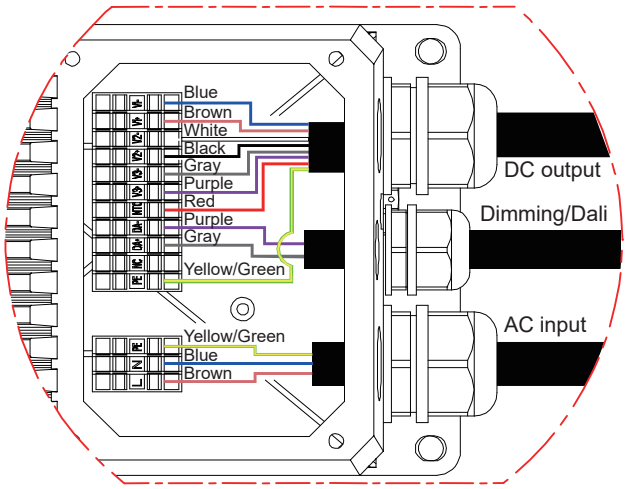
4

- Install the DC output cable with gland ① to the driver (gland to body torque settings 3.43Nm)
- Install the Surge Protection Device onto the bracket.



5

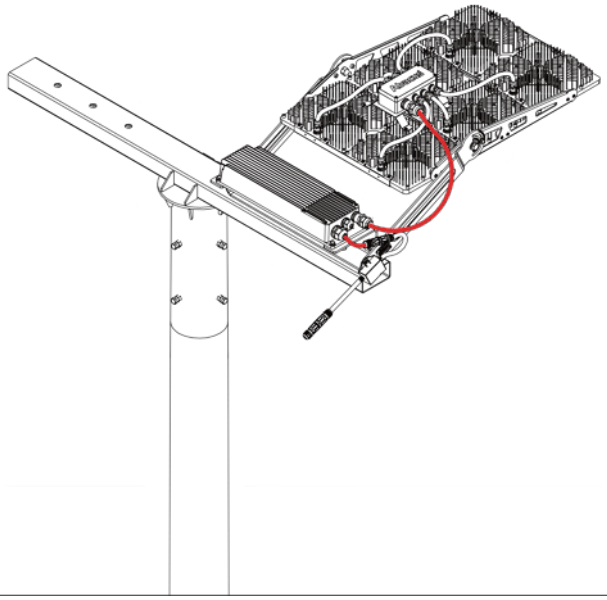
• Connect the DC output cables to the relevant driver terminal blocks, as shown below.



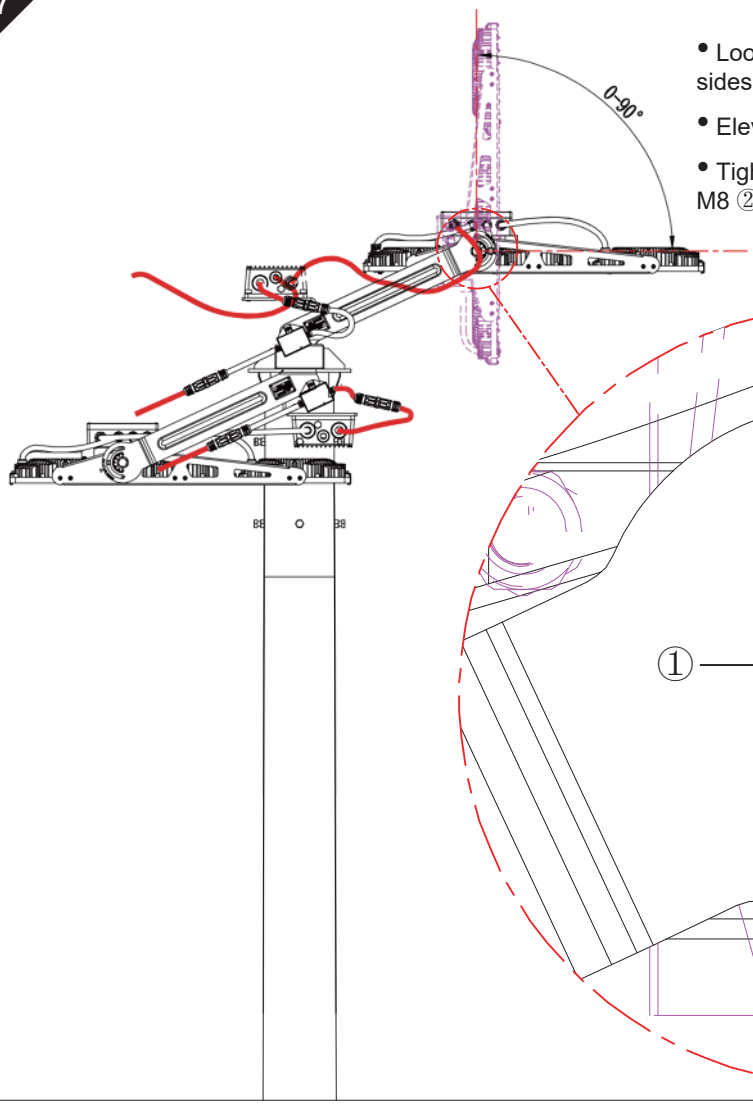
6

• Tighten the glands to cables to the torque settings below:
  o M25 gland – 5Nm
  o M20 gland – 3.5Nm

• Close the driver terminal cover with the 4 No. T20 torx bolts (torque settings 1.6Nm)



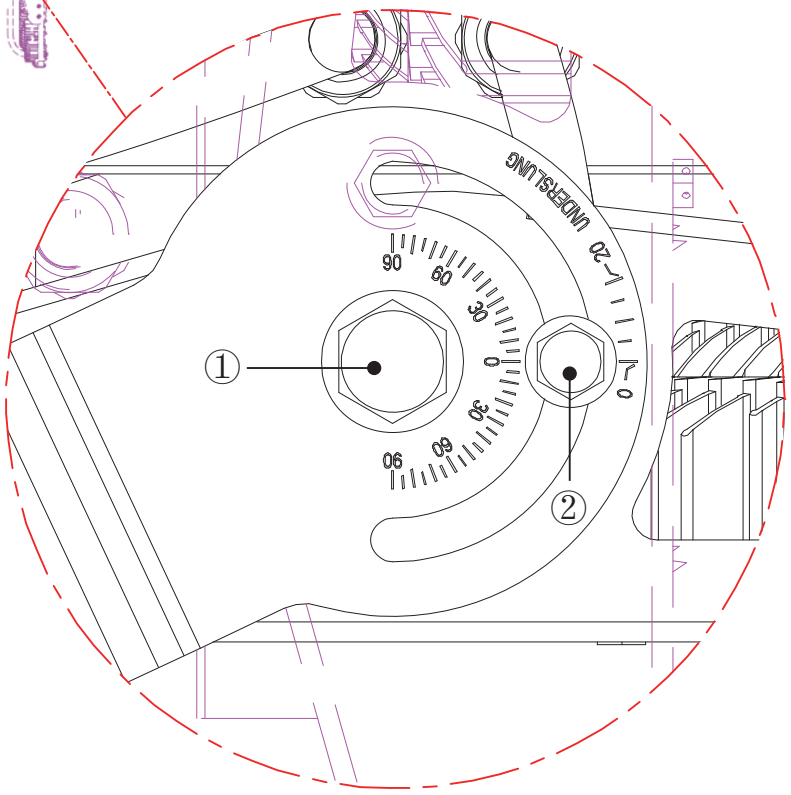
7



• Loosen M14 ① and M8 ② bolts located on both sides of the floodlight.

• Elevate the floodlight to the relevant angles.

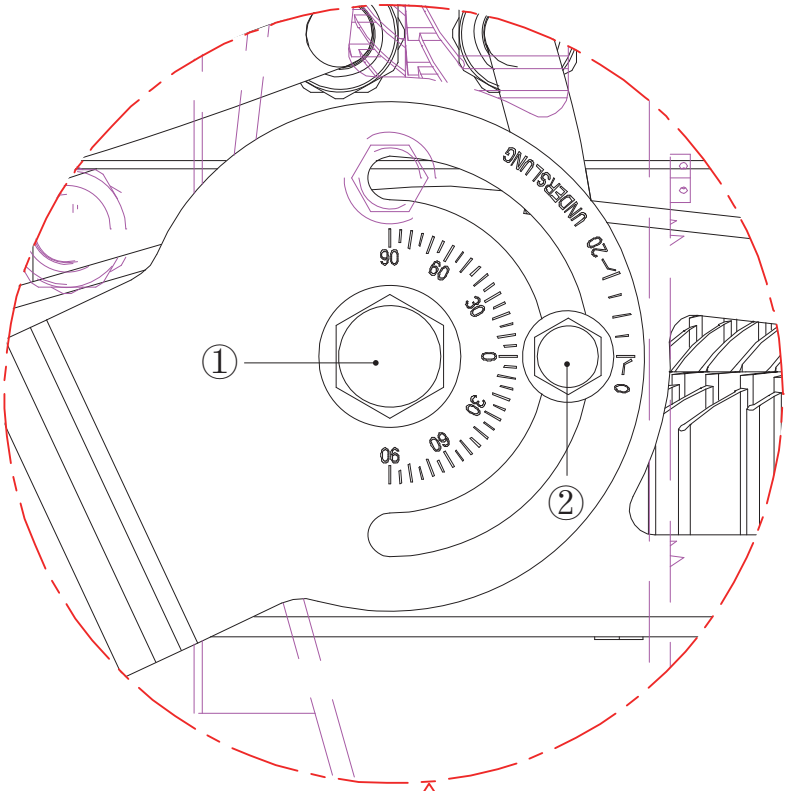
• Tighten the M14 ① (40~45Nm) and M8 ② (30~35Nm) bolts.



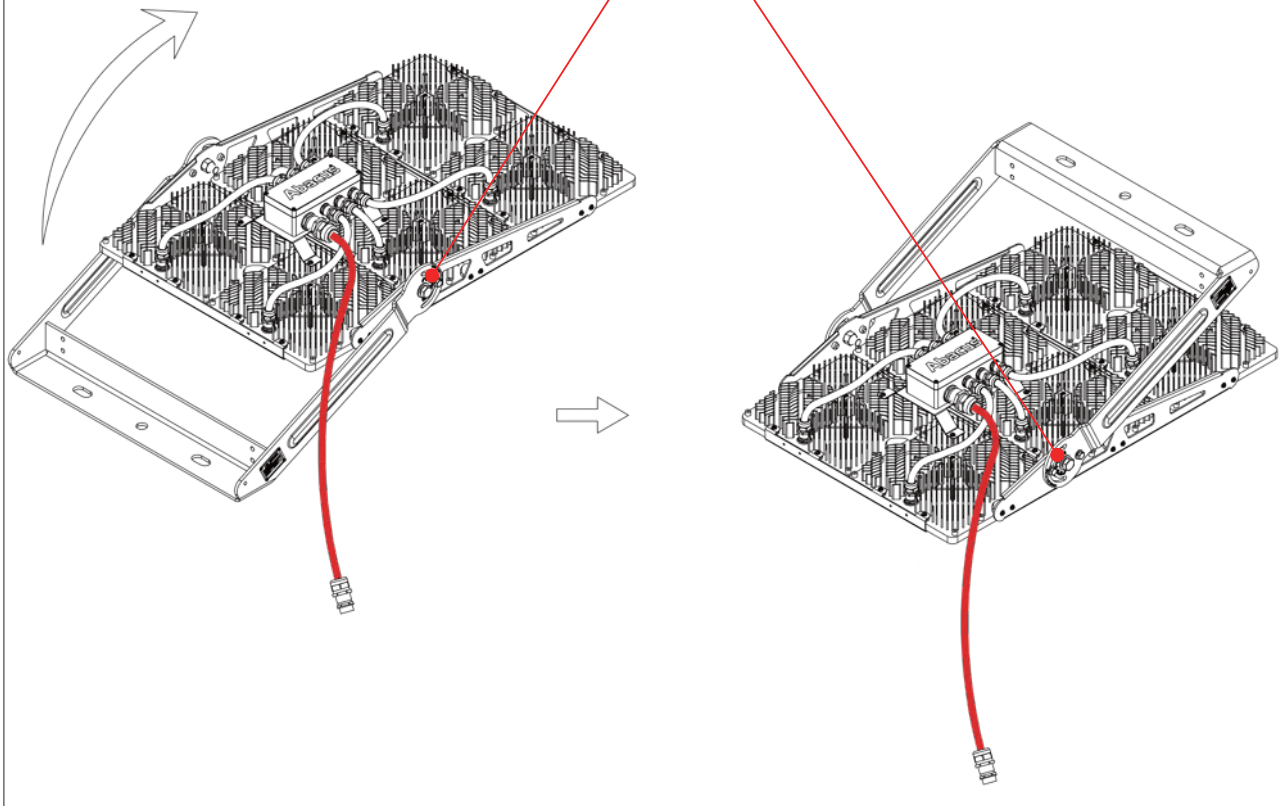
OPTION 2 – Overslung and underslung installation

1

- Loosen the M14 ① and M8 ② bolts on both sides of the floodlight bracket.



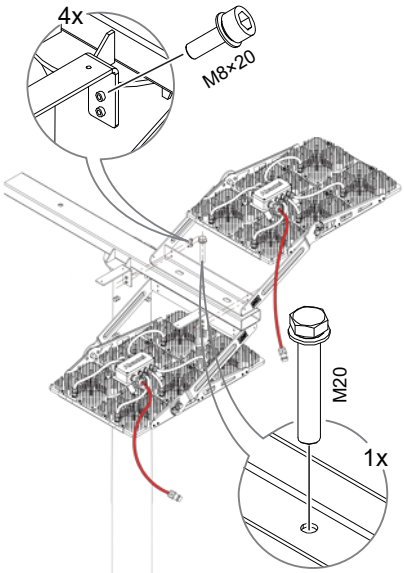
- Rotate the bracket as shown below.



2

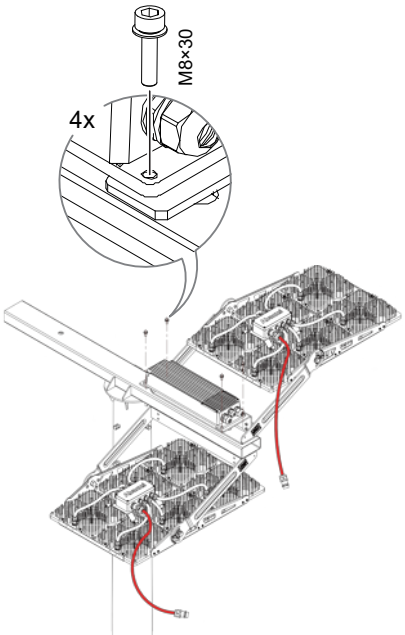
- Install the floodlight on the mounting bracket with an M20 (grade 8.8 or higher) nut and bolt (max torque settings 500Nm)

- Install the driver mounting brackets for the top floodlight with the bolts included.



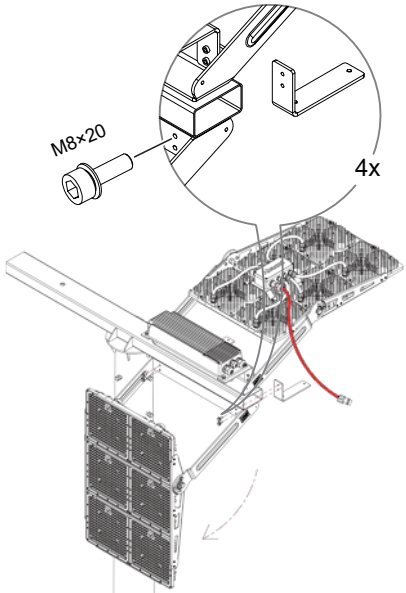
3

- Install the driver on the top floodlight's driver mounting brackets with the bolts included.



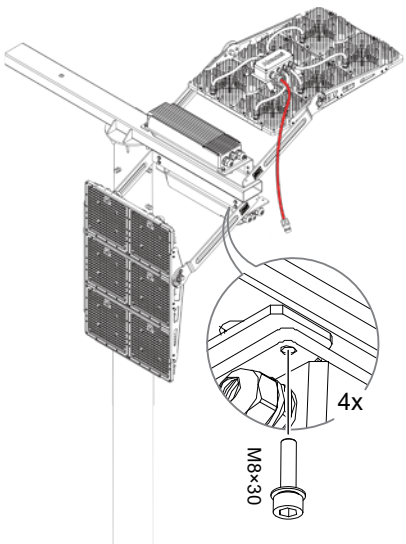
4

- Lower the bottom floodlight as shown below and install the driver mounting brackets with the bolts included.



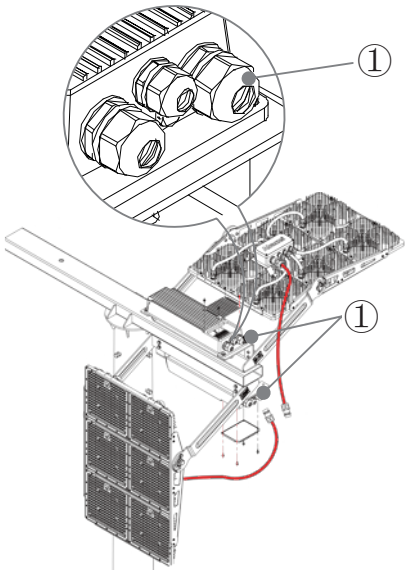
5

- Install the driver for the bottom floodlight with the bolts included.



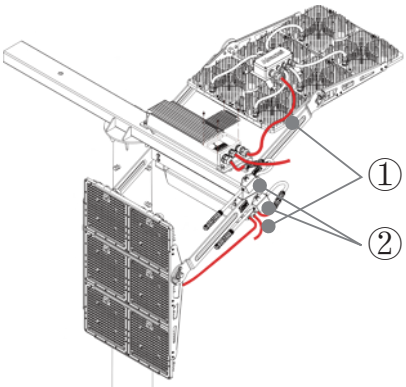
6

- Remove the driver terminal covers on both drivers (4 bolts T20 Torx).
- Remove the cable gland ① on both drivers.



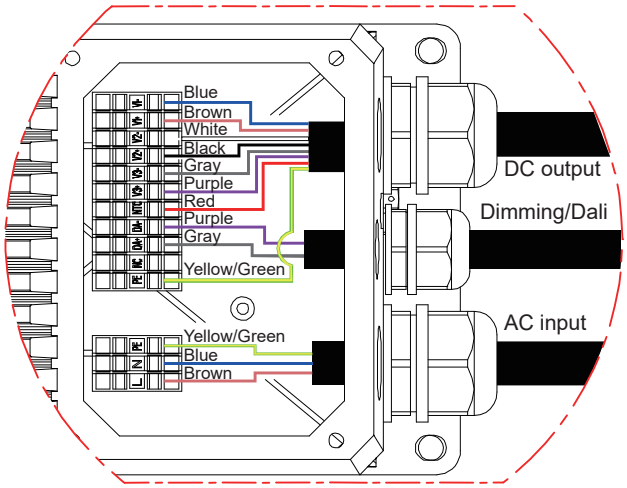
7

- Install the DC output cables with gland ① into the drivers (gland to body torque settings 3.43Nm)
- Install the Surge Protection Devices ② into both brackets.



8

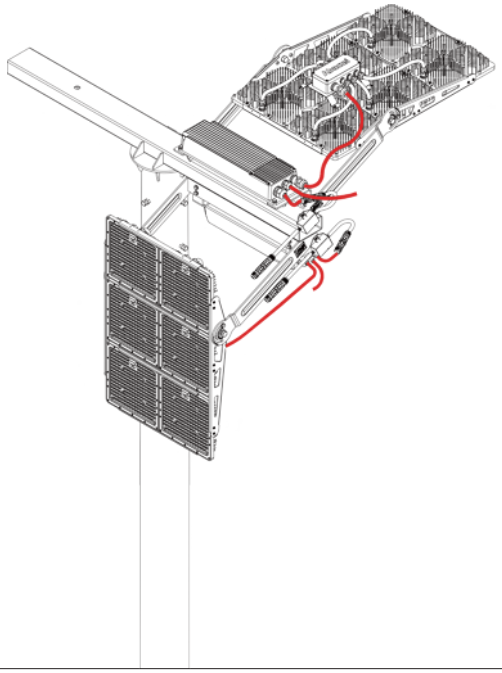
• Connect the DC output cables to the relevant driver terminal blocks, as shown below.



9

• Tighten the glands to cables to the torque settings below:
  o M25 gland – 5Nm
  o M20 gland – 3.5Nm

• Close the driver terminal cover with the 4 No. T20 torx bolts (torque settings 1.6Nm)

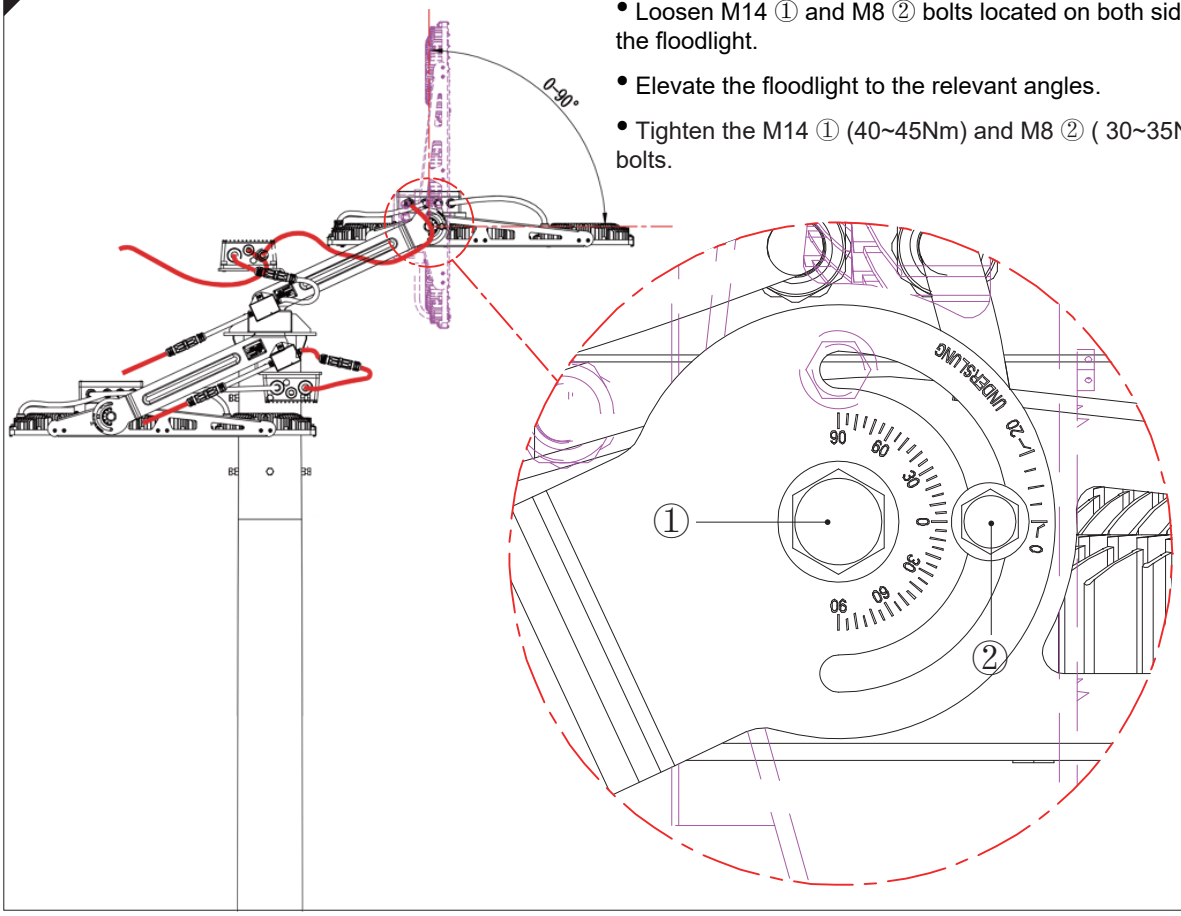


10

• Loosen M14 ① and M8 ② bolts located on both sides of the floodlight.

• Elevate the floodlight to the relevant angles.

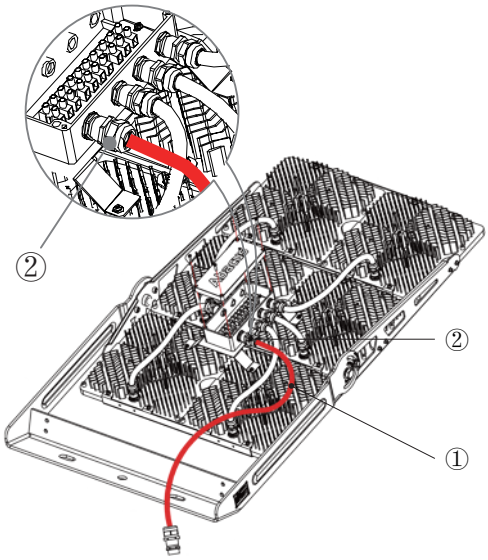
• Tighten the M14 ① (40~45Nm) and M8 ② (30~35Nm) bolts.



OPTION 3 – remote driver installation

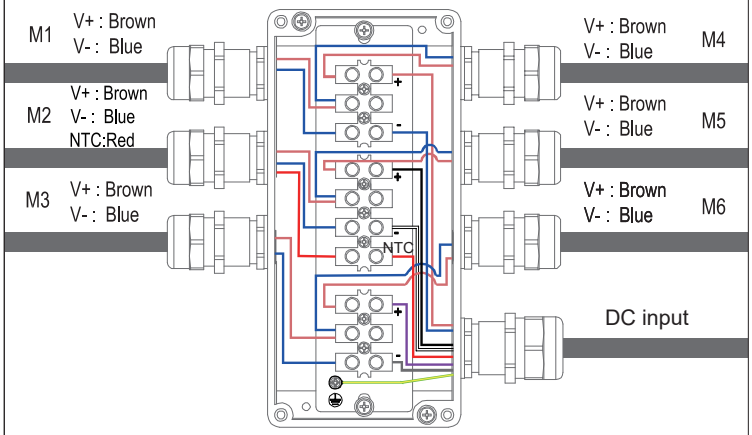
1

- Open the floodlight junction box.
- Disconnect the DC input 8 wire cable ① (H07RN-F 8x1.0mm2) and remove it
- Replace the gland ② if required.

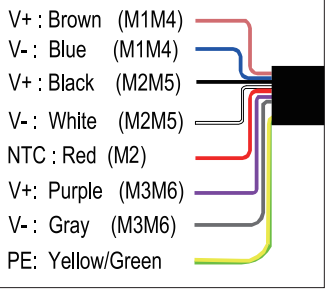


2

- Connect a new DC input cable of sufficient length and connect it as per below (max cable length 200m).
- Use new M25 gland if required (not included).
- Use cable protection if required (not included).

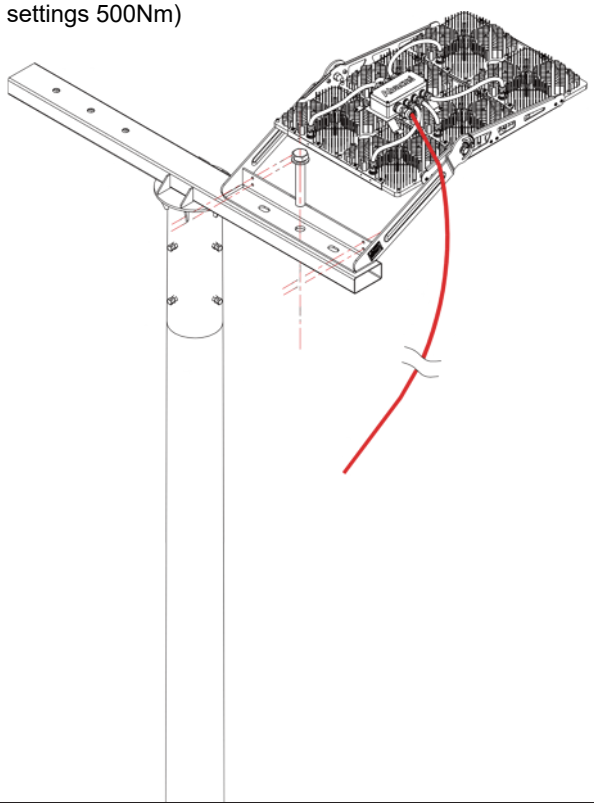


1500W 1 single cable for NTC.



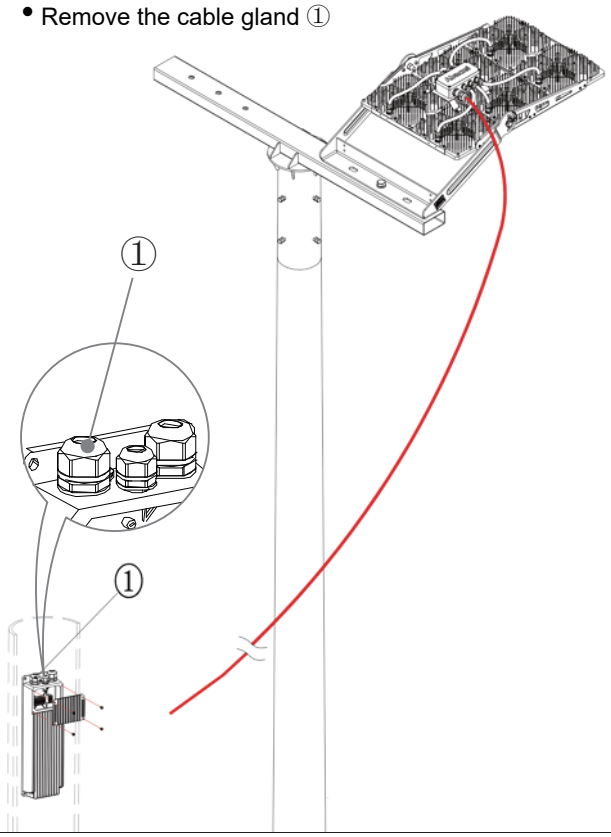
3

- Install the floodlight on the mounting bracket with an M20 (grade 8.8 or higher) nut and bolt (max torque settings 500Nm)



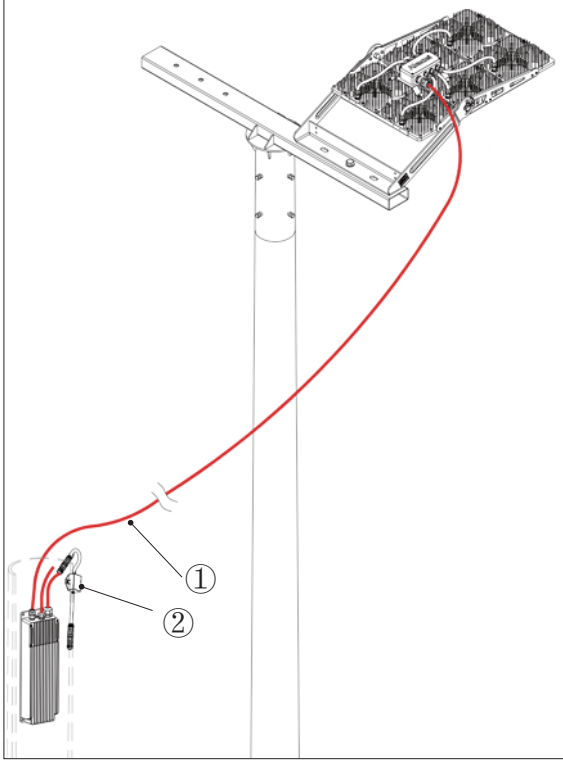
4

- Remove the driver terminal cover (4 bolts T20 Torx)
- Remove the cable gland ①



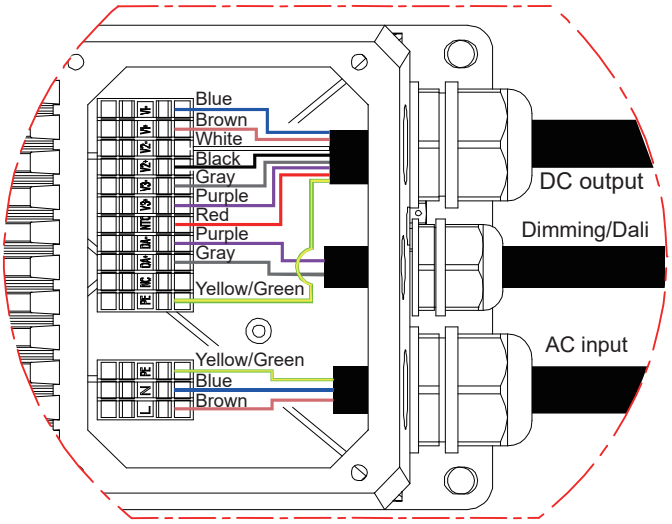
5

- Install the DC output cable with gland ① to the driver (gland to body torque settings 3.43Nm)
- Install the Surge Protection Device ②



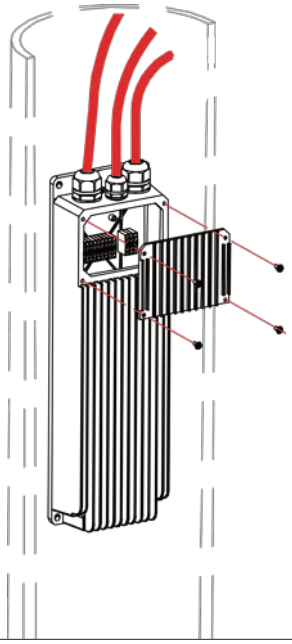
6

- Connect the DC output cables to the relevant driver terminal blocks, as shown below.



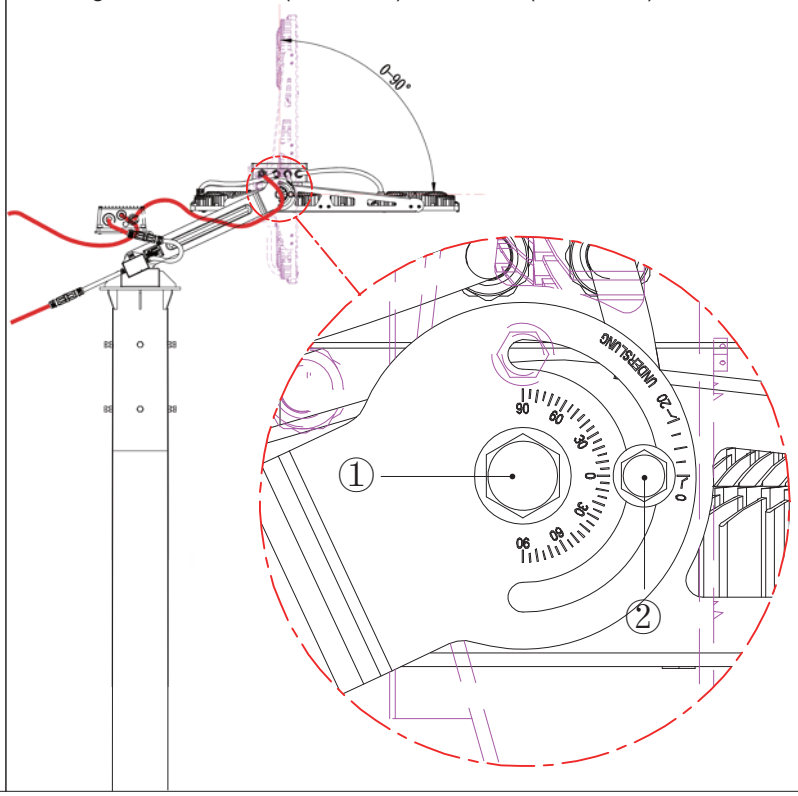
7

- Tighten the glands to cables to the torque settings below:
  - o M25 gland – 5Nm
  - o M20 gland – 3.5Nm
- Close the driver terminal cover with the 4 No. T20 torx bolts (torque settings 1.6Nm)

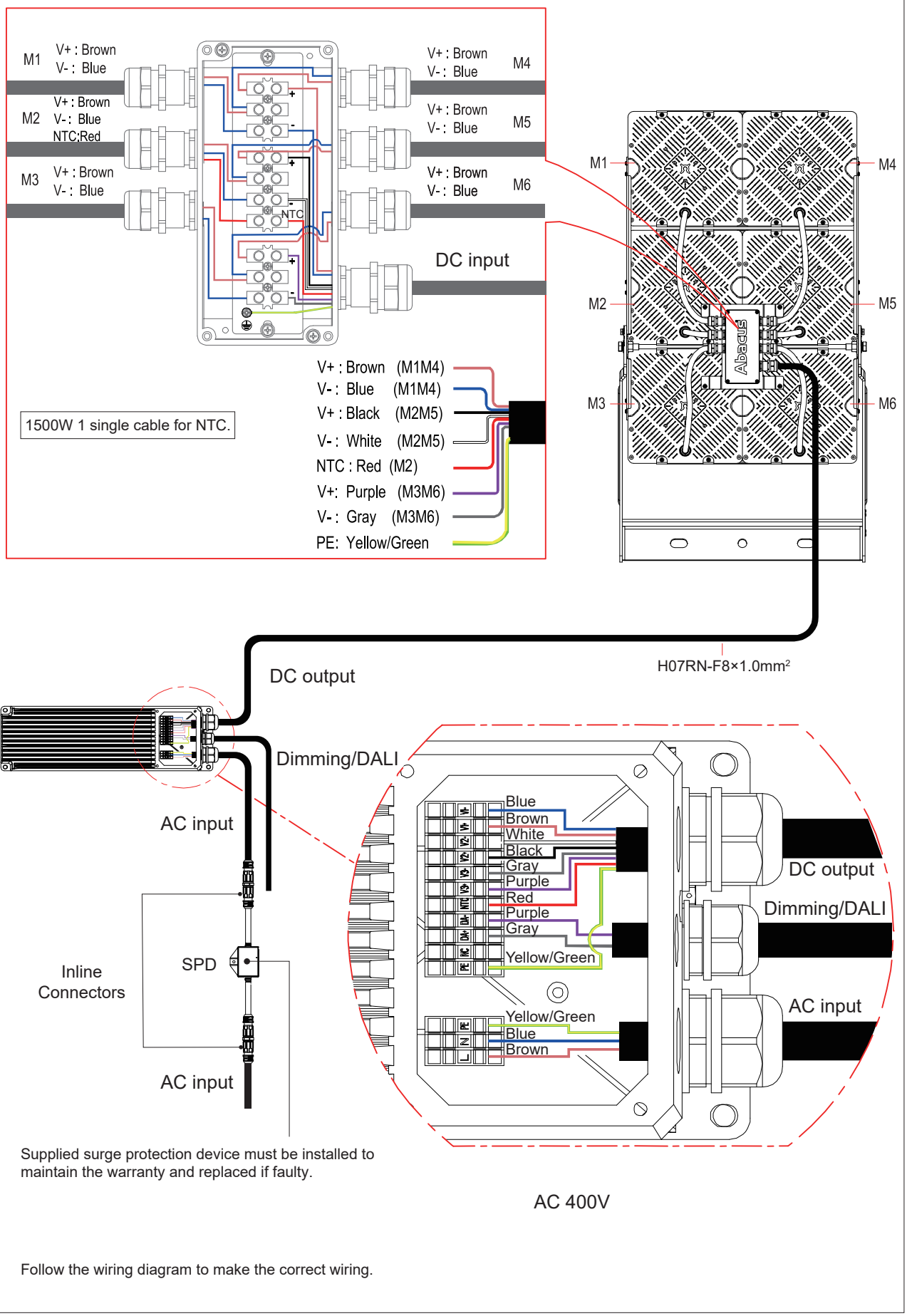


8

- Loosen M14 ① and M8 ② bolts located on both sides of the floodlight.
- Elevate the floodlight to the relevant angles.
- Tighten the M14 ① (40~45Nm) and M8 ② (30~35Nm) bolts.

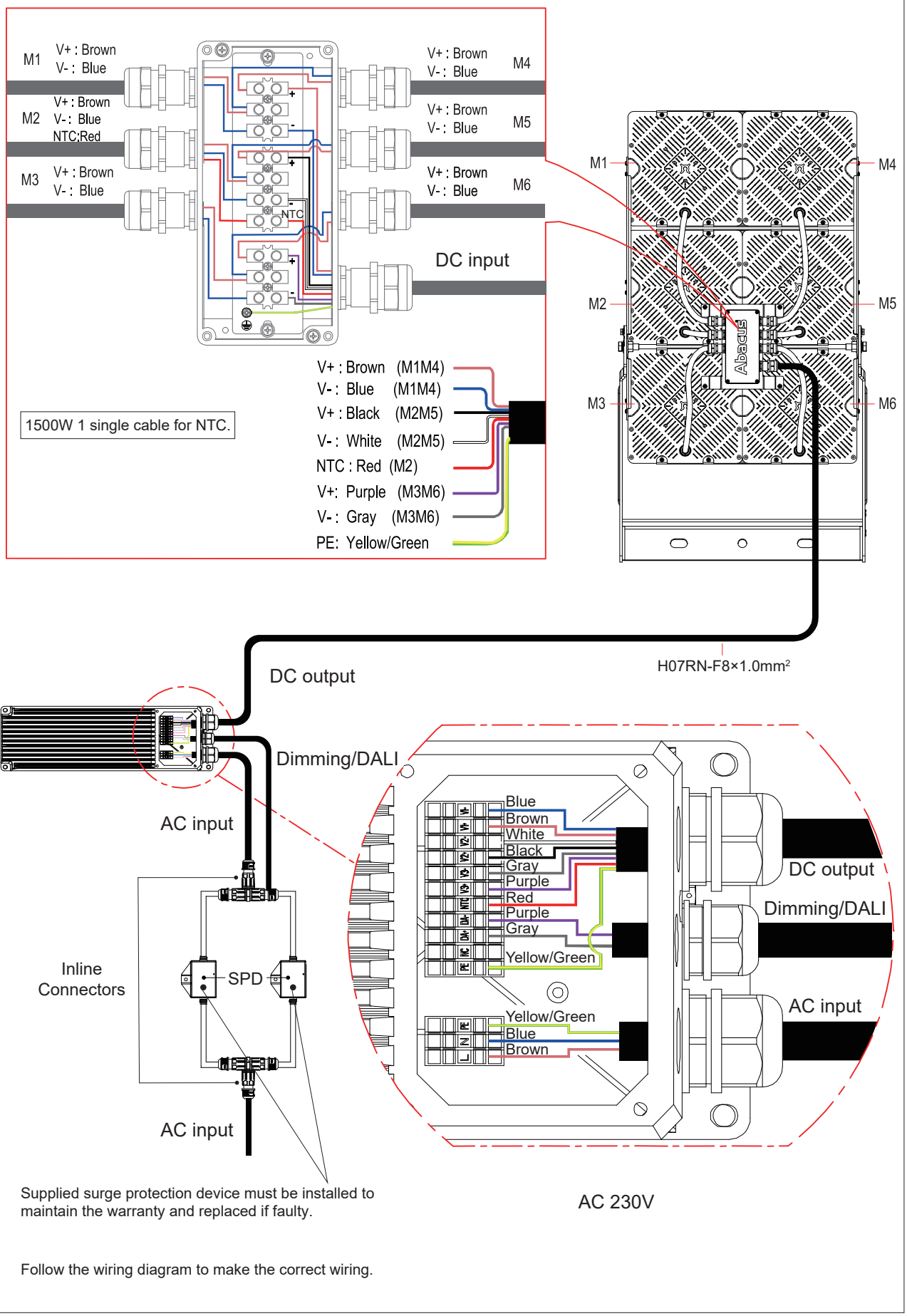


CONNECTIONS



Supplied surge protection device must be installed to maintain the warranty and replaced if faulty.

Follow the wiring diagram to make the correct wiring.



Supplied surge protection device must be installed to maintain the warranty and replaced if faulty.

Follow the wiring diagram to make the correct wiring.

Mintenence

There are no consumable parts to replace in this product and it should be disposed off at the end of its life in accordance with the WEEE directive
.
The product should be inspected annually and cleaned with a non-aggressive product.

Any deterioration in the cables should be noted and reported to a suitably qualified electrician who will advise an appropriate course of action.

The Surge Protective Device (SPD) will need replacing when it comes to the end of its useful life. This should be checked for operation during the annual maintenance.