

TECHNICAL MANUAL

UC searchlights and control panel

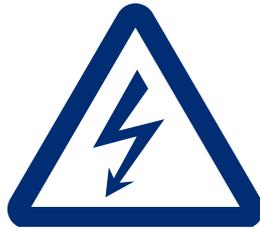


SINCE 1922

Den Haan Rotterdam

WARNING!

- Turn power off before inspection, installation or removal
- Keep combustible materials away from lamp
- Use eye protection when handling lamp
- Do not touch glass with bare hands, wear gloves
- Do not exceed 105% of rated voltage
- Allow lamp/fixture to cool before handling
- Do not use lamp if outer glass is scratched or broken



Damage due to inappropriate handling is not covered by the warranty.

DISCLAIMER

Despite constant care and attention DHR puts in its manuals it is still possible that information in this manual is incomplete or incorrect.

We do not guarantee that the information in the manual is suitable for the purpose for which the information was consulted. All information is offered in the state in which it actually is and without any (implicit) guarantee or warranty regarding its validity or its suitability for a particular purpose or otherwise. All illustrations are for illustrative purposes only. This manual is not intended to cover every possible detail about the product.

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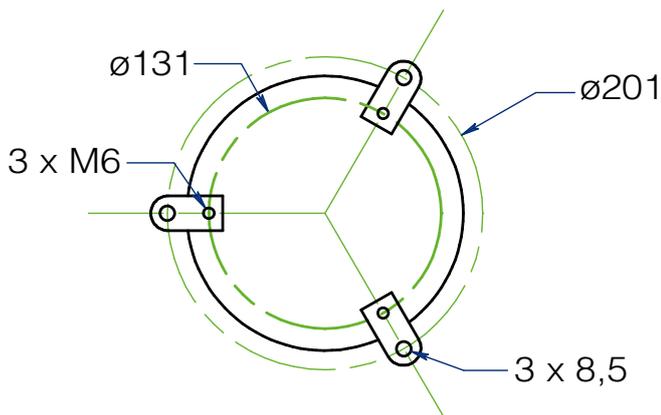
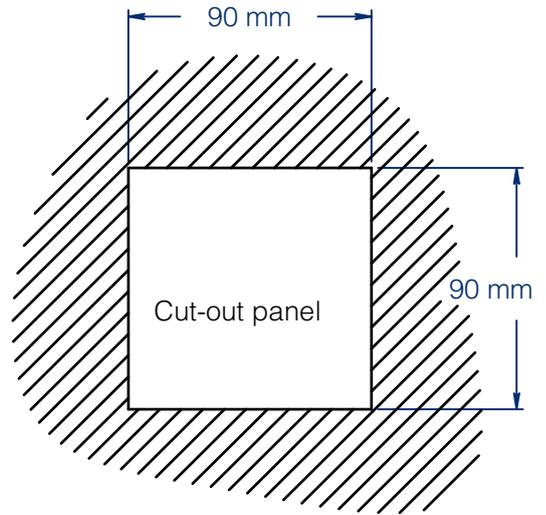
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1. MOUNTING INSTRUCTIONS

Mounting the panel

Place the control panel inside the wheelhouse, where it is protected against weather influences. The housing is especially constructed to be flush mounted in an instrument cabinet according the illustration on the right.

The minimum space needed behind the panel is 90 mm. (depth)



Searchlight installation

Install the searchlight in a horizontal upright position with sufficient space around the head of the searchlight to ensure it can move freely. The sticker on the motor housing indicates the front of the searchlight. The dimensions can be found on [page 7](#).

Electrical installation

Install the electrical wiring according to the wiring diagrams of [page 9 and 10](#). Keep the distance between the power supply and halogen lamp as short as possible. Long wires will increase a voltage drop near the halogen lamp, which affects the light output.



Warning!

Den Haan Rotterdam accepts no responsibility for any damage if the searchlight is installed incorrectly and/or used improperly. When in doubt consult a qualified electrical technician.

2. MAINTENANCE

Lamp replacement

1. Switch off the main power
Caution – hot lamp. Let the lamp cool down for at least 10 minutes before proceeding maintenance.
2. Open the drum
3. Remove the lamp from the lampholder
4. Ensure that the replacement lamp is of the same type
5. Take a clean cloth to place the new lamp
Do not touch the lamp with bare fingers, remove any fingerprints with a cloth and alcohol and rub it dry
6. Check the neoprene sealing of the front glass and rub it in with talcum powder
7. Close the drum
8. The searchlight is ready for use

Preventive maintenance

Clean the searchlight with clean water regularly. Do not use any aggressive cleaning agents.

3. SPECIFICATIONS CONTROL PANEL

- Pnom. : 15 W
- Unom.input : 12 – 24 VDC
- Unom.output motor (2x) : 4 – 10 VDC
- U output lamp : See input
- Protection class : IP 20
- Electrical insulation class : III
- Ambient temperature : 0 - 40°C

4. SPECIFICATIONS MOTOR HOUSING

- Pnom. motor : 6 W
- Unom. motor : 4 – 10 VDC
- Gear box - motor ratio : 1 : 370
- Tilt : + 15° / - 30°
- Max. Speed left / right approx. : 32°/ sec
- Max. Speed up / down approx. : 5° / sec
- Housing:
 - Material : Stainless steel 316
 - Finish : Brushed
 - Sealing : Neoprene, black
- Electrical insulation class : III
- Protection class : IPX5

All UC searchlights have an identical motorhousing.

5. SPECIFICATIONS DHR150/180 HEAD

- Housing DHR180/150:
 - Material : Stainless steel 316
 - Finish : Brushed
 - Sealing : Silicone, black
- Electrical insulation class : III
- Optics : Sealed beam mirror reflector
- Protection class : IP X6
- Ambient temperature : -25°C / + 40°C

DHR180 Lamp

Lamp	Voltage	Power	Intensity	Divergency	Range
PAR56	24VDC	170W	230.000cd	9° x 8°	480m
PAR56	12VDC	100W	225.000cd	9° x 5°	475m

DHR150 Lamp

Lamp	Voltage	Power	Intensity	Divergency	Range
PAR46	24VDC	250W	300.000cd	12° x 11°	550m
PAR46	12VDC	100W	200.000cd	11° x 6°	450m

6. SPECIFICATIONS DHR210/220 HEAD

- Housing 220/210:
 - Material : Chromated seawater resistant aluminium
 - Finish : UV-resistant powder coating, white RAL 9016
 - Sealing : Silicone, black (220 only)
- Electrical insulation class : I
- Optics : 210 - Sealed beam mirror reflector
: 220 – Aluminium reflector
- Protection class : 210 - IP X5
: 220 – IP66, c/w membrane vent
- Ambient temperature : -25°C / + 40°C

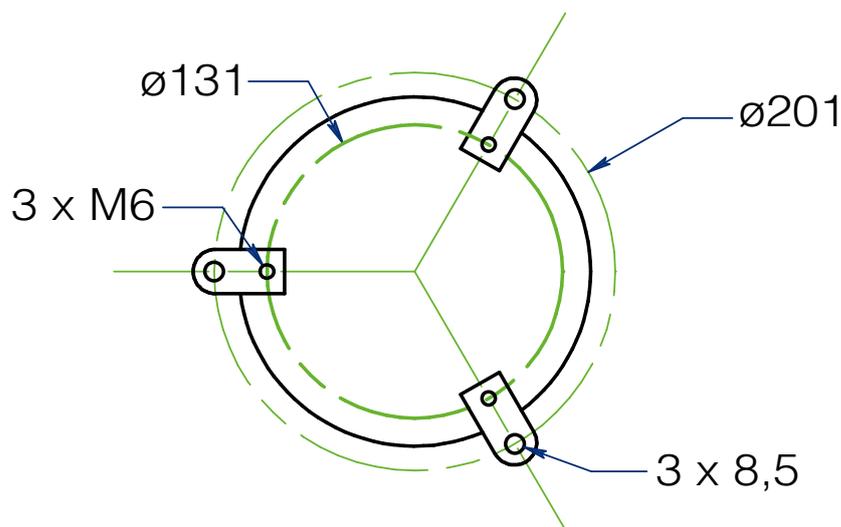
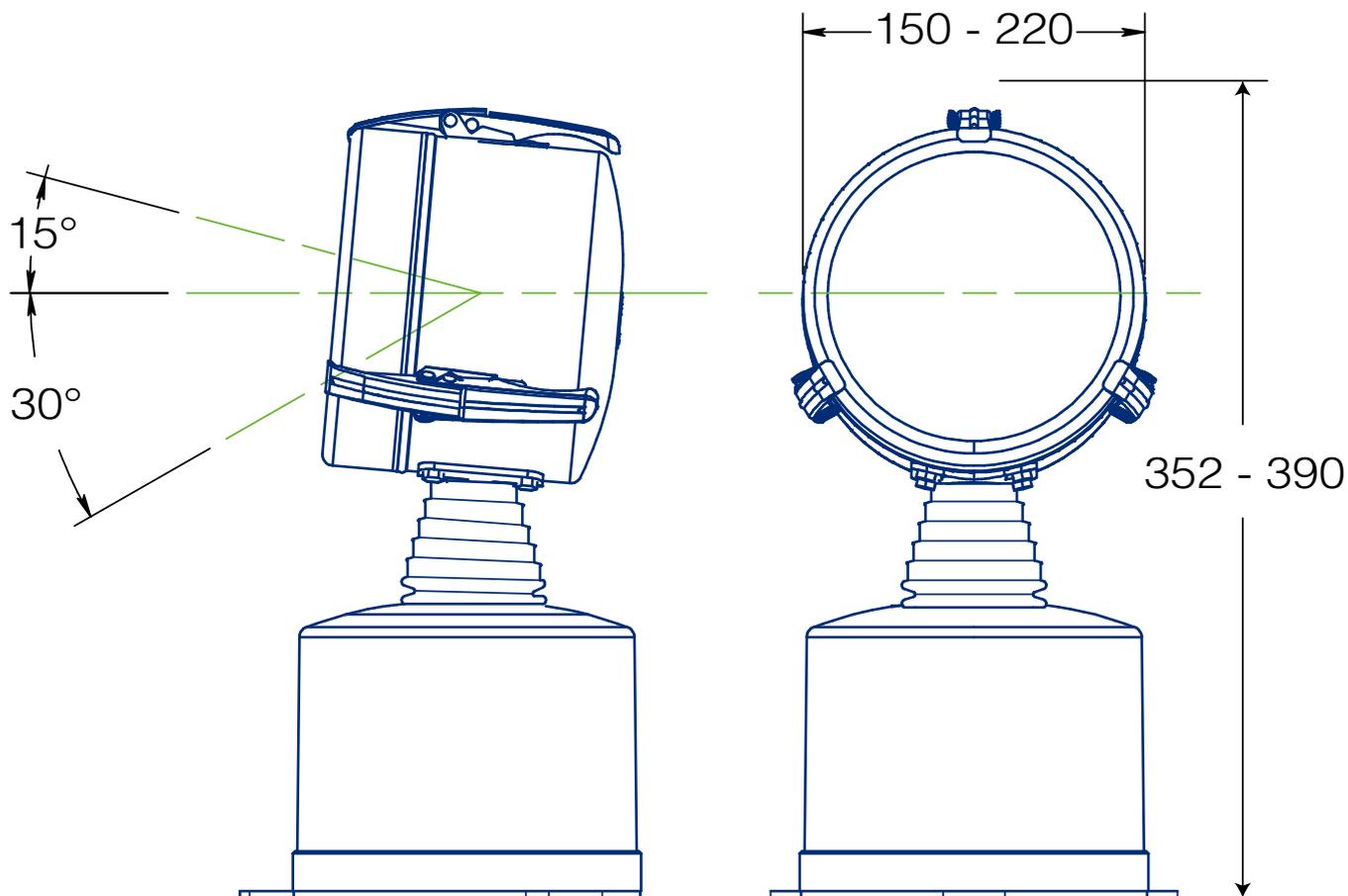
DHR220 Lamp

Lamp	Voltage	Power	Intensity	Divergency	Range
Halogen	230VAC	300W	120.000cd	15,5° x 21°	345m
Halogen	24VDC	250W	441.000cd	10° x 14°	664m
Halogen	12VDC	100W	131.000cd	9° x 16°	362m

DHR210 Lamp

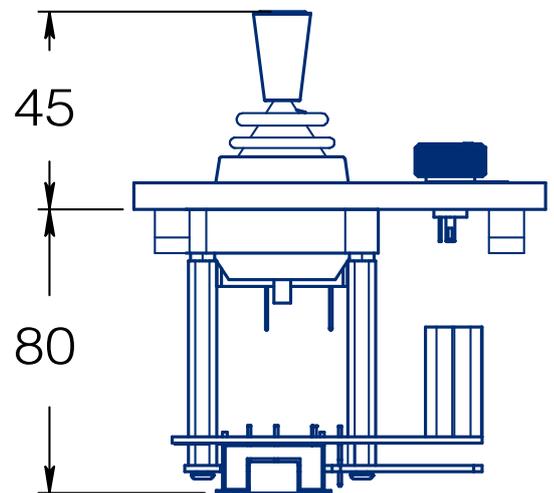
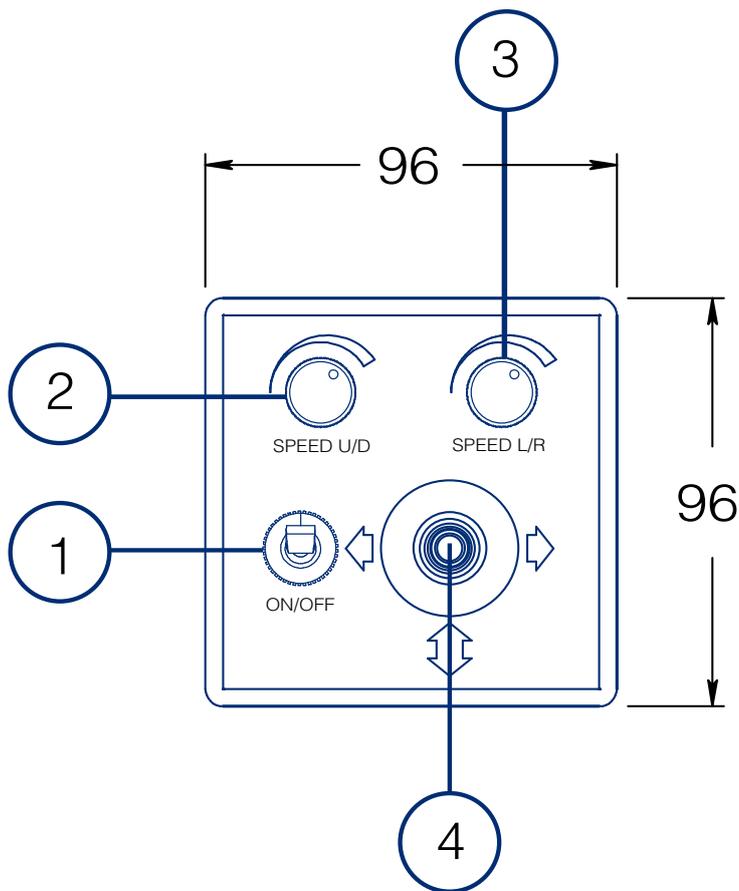
Lamp	Voltage	Power	Intensity	Divergency	Range
PAR64	230VAC	1000W	400.000cd	17° x 20°	630m
PAR64	115VAC	1000W	400.000cd	10° x 24°	630m
PAR46	24VDC	250W	500.000cd	7° x 8°	700m

7. DIMENSIONS SEARCHLIGHT



All sizes are in mm.

8. DIMENSIONS CONTROL PANEL



All sizes are in mm.

Controls

Switches

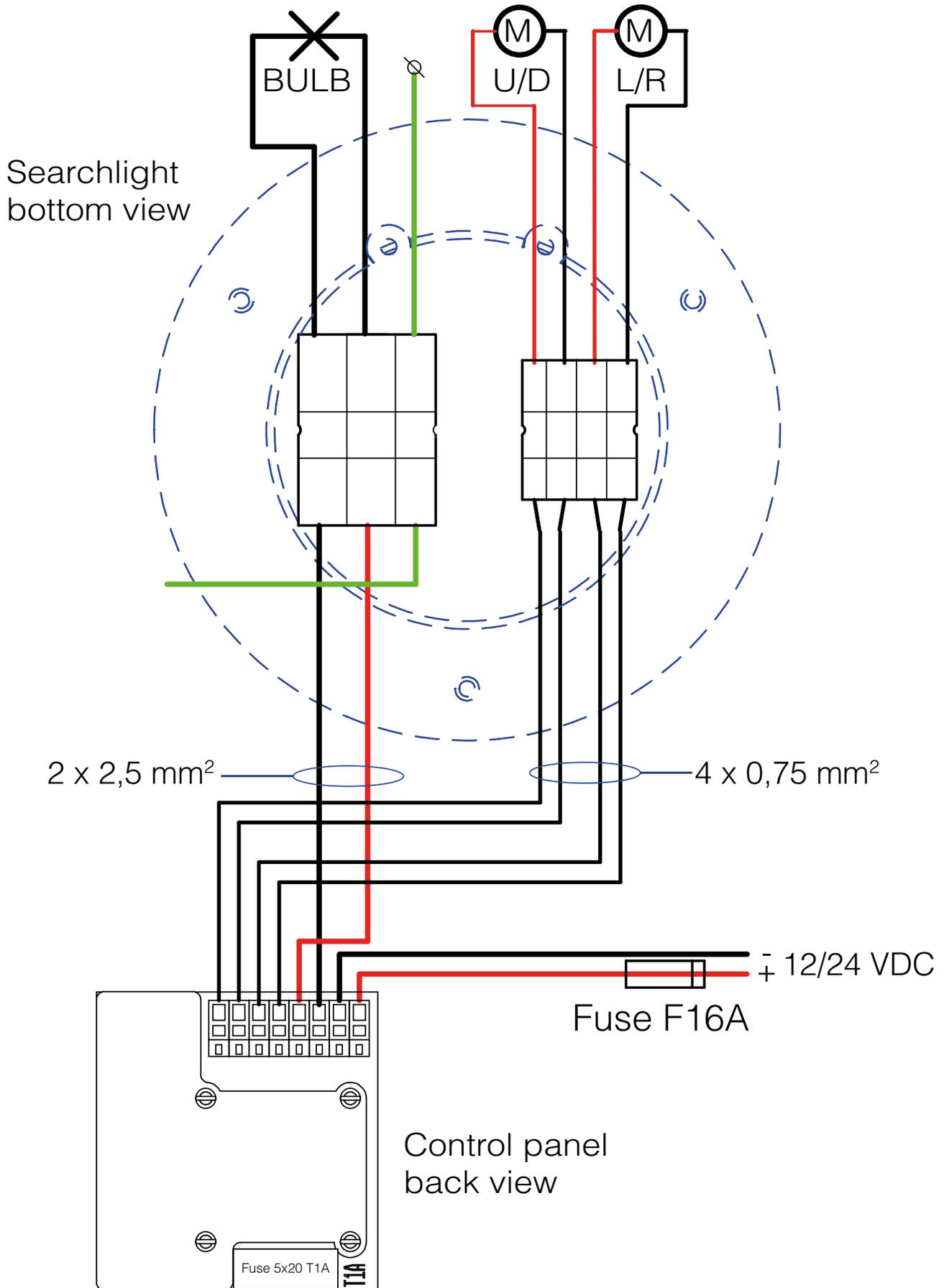
1. ON/OFF, switches the panel on or off.

Potentiometers

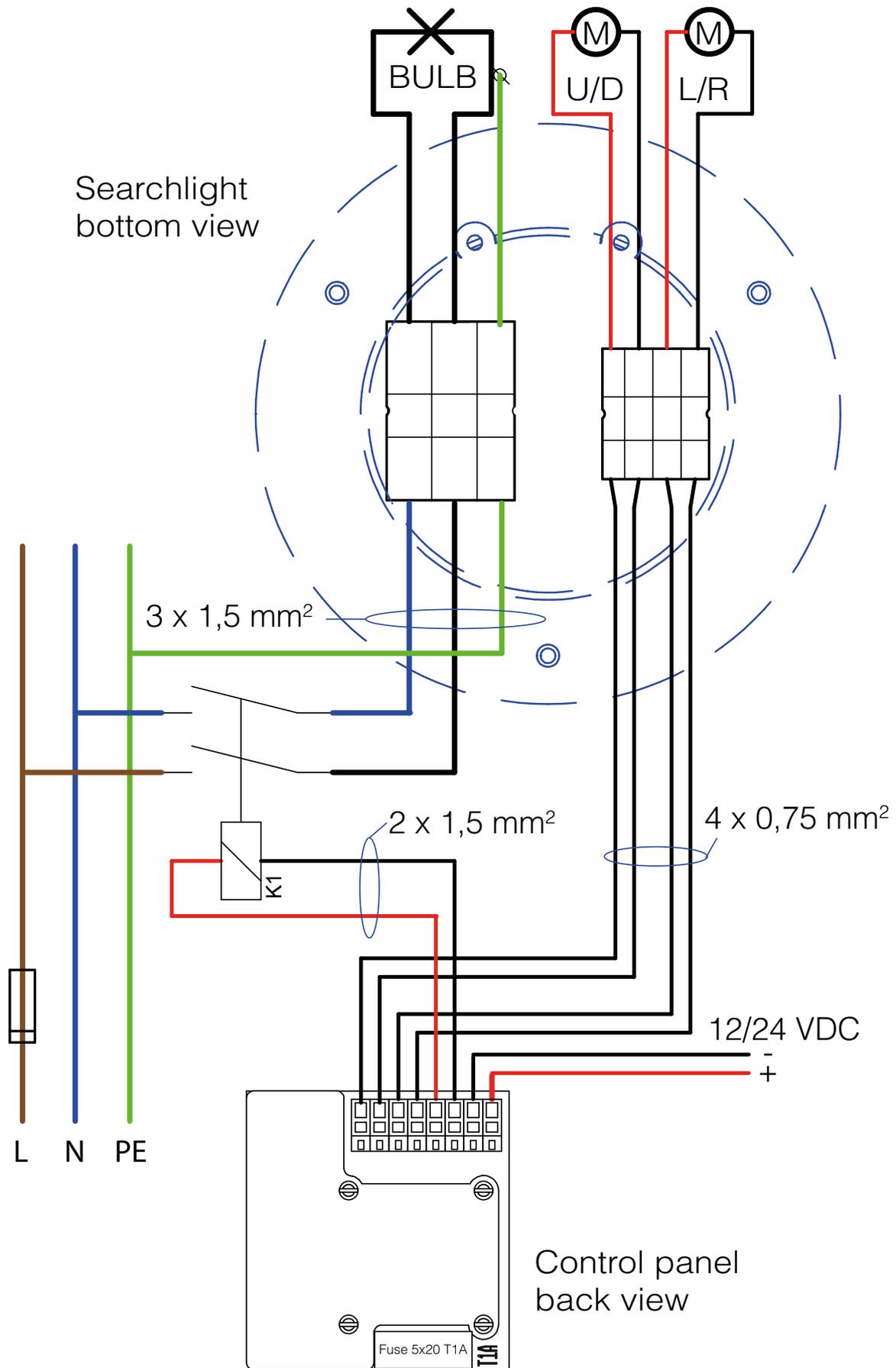
2. UP/DOWN, speed of the movement up and down.
3. LEFT/RIGHT, speed of the movement left and right.

4. Joystick, controls the direction of the movement.

9. WIRING DIAGRAM 12/24VDC



10. WIRING DIAGRAM 115/230VAC





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ADVANCED MARITIME SIGNALLING SOLUTIONS



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