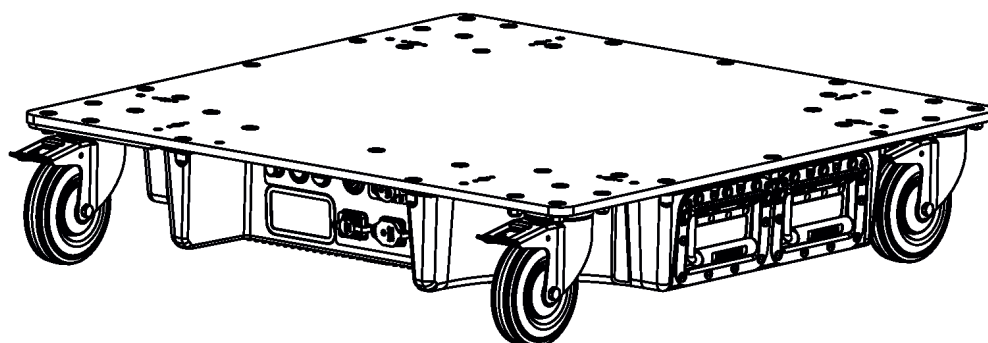




PowerDolly™



QR code for user manual



USER MANUAL

ROBE® lighting s.r.o. • Czech Republic • www.robe.cz

Preliminary ver.

PwerDolly

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**FOR YOUR OWN SAFETY, PLEASE READ THIS USER MANUAL CAREFULLY
BEFORE INSTALLING THE PRODUCT .**

1. Safety instructions

CAUTION!

The PowerDolly is designed to be used in outdoor locations and is intended for professional applications only.

This product has left our premises in absolutely perfect condition. In order to maintain this condition and to ensure a safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes written in this manual.

The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual or any unauthorized modification to the product.

Operate the PowerDolly only after having familiarized with its functions. Do not permit operation by persons not qualified for operating thePowerDolly.

If the PowerDolly has been exposed to drastic temperature fluctuation (e.g. after transportation), do not switch it on immediately. The arising condensation water might damage your device. Leave the device switched off until it has reached room temperature.

This device falls under protection class I. Therefore it is essential to connect the yellow/green conductor to earth.

The electric connection, repairs and servicing must be carried out by a qualified employee.

The PowerDolly is a source of electrical energy. Disconnect light devices from the PowerDolly before handling them.

When choosing the installation spot, please make sure that the PowerDolly is not exposed to extreme heat or dust. Please avoid using the product in direct sunlight and near fire sources.

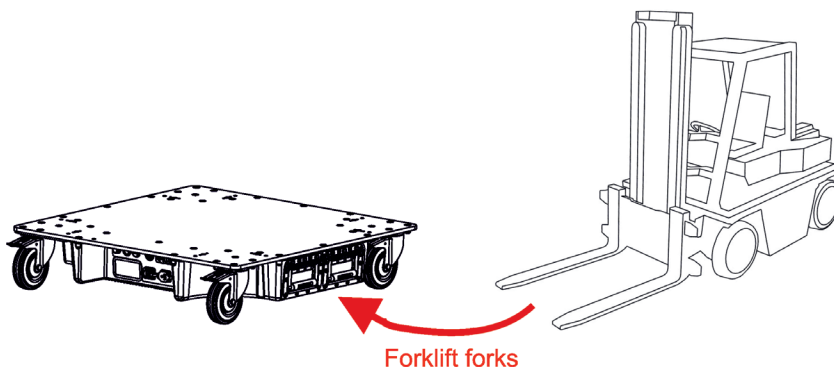
Do not locate the PowerDolly in any area prone to standing water.

Please consider that unauthorized modifications on the Power Dolly are forbidden due to safety reasons.

Please avoid storing the product in a place with high temperature, high humidity, and direct sunlight.

Do not cover the product when in use. When in use, the product should be kept in the shade.

The product must be handled with care. The product can only be lifted and manipulated by its handles with the help of 2 people or using a forklift truck. Forks of the forklift must be slid under PowerDolly only from the side of handles - see picture below.



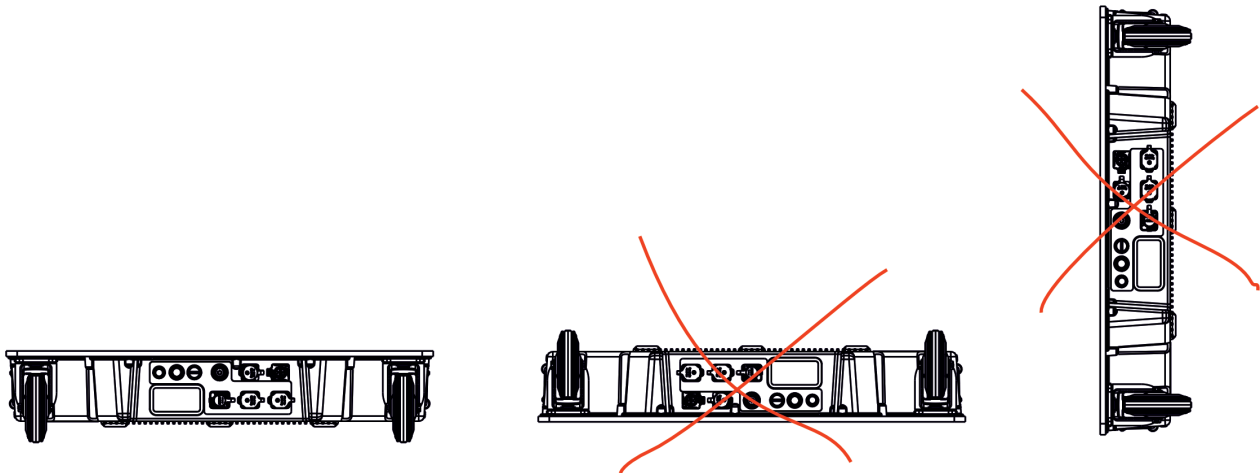
No fixture may be placed on the PowerDolly when it is being handled by a forklift.

If the PowerDolly is not being manipulated, its wheels must be secured by the wheel brakes, especially if light device are installed on the PowerDolly.

The PowerDolly must be placed on the flat horizontal ground without inclination.

Please use the original packaging if the PowerDolly is to be transported.

During PowerDolly operation or its transportation, only horizontal position of the PowerDolly is allowed.



When not in use for an extended duration, charge the product to 60%. Prolonged storage with a significantly depleted battery may cause irreparable damage and reduce the product's lifespan.

If you need to store the product for a long time, please make sure to deplete the charge once every six months, and then recharge it to about 60 %.

The product must be stored charged at a temperature between -5°C and +35°C (23°F and 95 °F, in a dry, ventilated, clean area away from direct sunlight.

Please do not store the product for a long time in a car or warehouse or other places that may experience extremely high or low temperatures, to prevent the battery life from shortening amongst other failures.

The mains outputs ON/OFF switch must be in the OFF position during connection, transport and storage the PowerDolly and if the Power Dolly is not in use. Disconnect the product from mains if it is not in use.

Device with an electrical power of more than 2000 W must not be connected to the PowerDolly.

The photovoltaic (PV) input is a maximum of 1600 W (MPP voltage range: 10 VDC – 145 VDC). Exceeding the solar panel voltage limit of 145VDC may result in damage to the PowerDolly. Such damages are not covered under the warranty

Please note that solar panel charging effectiveness may vary due to weather, climate, and other environmental conditions.

Do not use the device when it is completely discharged.

Do not disassemble the product. Incorrect assembly may result in electric shock or fire. Refer servicing to qualified service personnel.

Warning

Disconnecting the PowerDolly from mains does not reduce the risk of electric shock when you remove top cover of the product.

Service work on uncovered device may only be carried out by a qualified person which is familiar with working on the battery-powered devices.

Make sure you comply with local requirements and applicable regulations when installing the product.

The product (covers and cables) must not be exposed to a high frequency electromagnetic field higher than 3V/m. Immunity of the equipment is designed according to the standard EN 55035 Electromagnetic compatibility of multimedia equipment - Immunity requirements.

Emission of the equipment complies with the standard EN55032 Electromagnetic compatibility of multimedia equipment – Emission Requirements according to class B.

Contains FCC ID: 2A6PL-DMXRDMRW001

Contains IC: 29573-DMXRDMRW001

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

The [Device] wireless operation is safe and complies to RF Exposure requirements

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

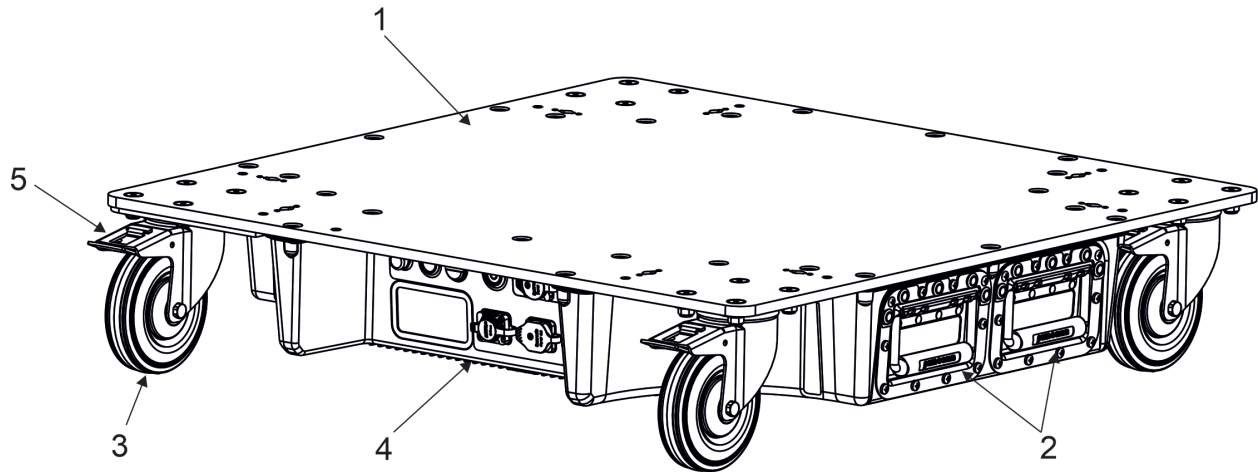
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

WARNING!

PowerDolly with input voltage 220-240V AC/50Hz must not be connected to the mains 100-120V AC/60Hz.

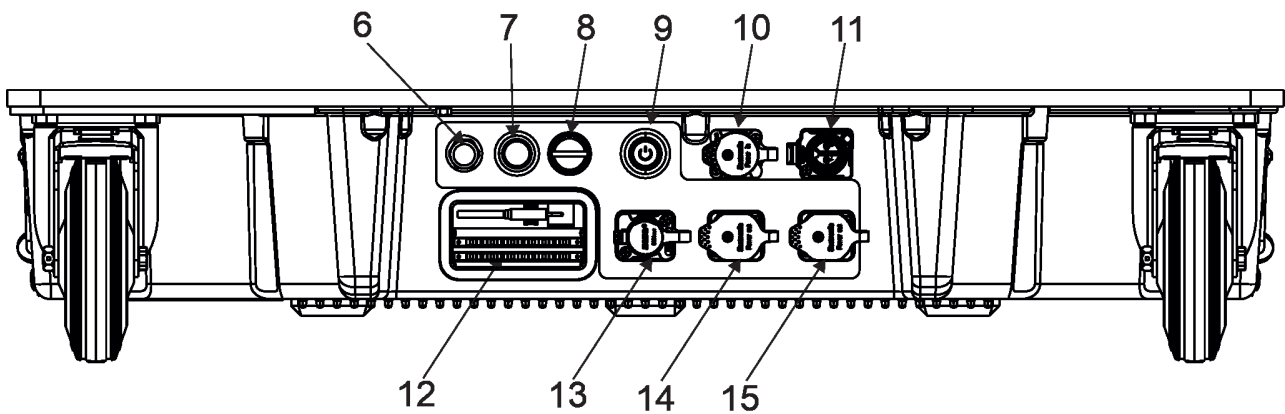
PowerDolly with input voltage 100-120V AC/60Hz must not be connected to the mains 220-240V AC/50Hz.

2. Description of the fixture



- 1 - Top cover
- 2 - Handle (4x)
- 3 - Wheel (4x)
- 4 - Front panel
- 5 - Wheel brake (4x)

Front panel



- 6 - Gore valve
- 7 - Wireless DMX unlink buton
- 8 - Main fuse
- 9 - Power on/off button
- 10 - Mains input
- 11 - Solar input
- 12 - LED indicator
- 13 - DMX/RDM out
- 14 - Mains output
- 15 - Mains output

To activate mains outputs (14) and (15) or charge the battery, the Power ON/OFF button (9) has to be on.

3. Installation

The PowerDolly must be installed by a qualified electrician in accordance with all national and local electrical and construction codes and regulations.

3.1 Connection to the mains

For protection from electric shock, the PowerDolly must be earthed!

Power cable is enclosed to the fixture. If you need to install a power plug on the power cable to allow connection to power outlets, install a grounding-type (earthed) plug, following the plug manufacturer's instructions. If you have any doubts about proper installation, consult a qualified electrician.

Core (EU)	Core (US)	Connection	Plug Terminal Marking
Brown	Black	Live	L
Light blue	White	Neutral	N
Yellow/Green	Green	Earth	

This device falls under class one and must be earthed (grounded).

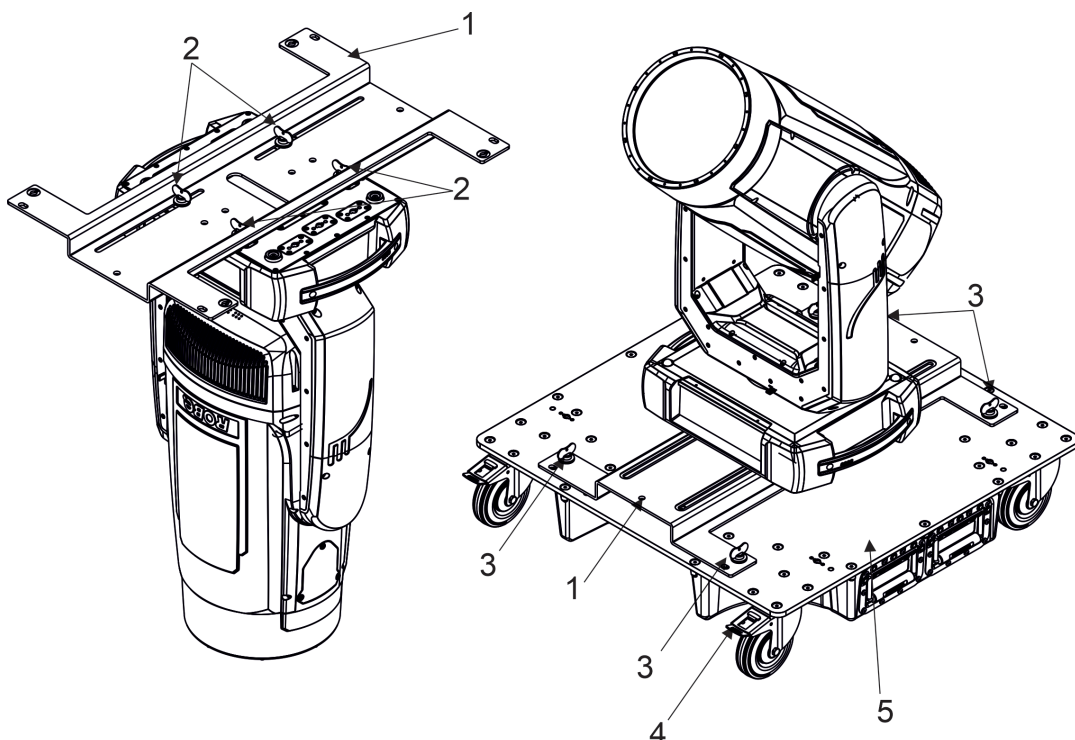
3.2 Fastening the fixture on the PowerDolly

Design of the PowerDolly allows you to fasten single fixture on the PowerDolly by means of the mounting adaptor or multiply fixtures installation using 1.5 m high truss fastened on the PowerDolly.

The fixture must be always secured to the PowerDolly, it cannot stand loosely on the PowerDolly. The fixture must not light on the PowerDolly surface.

Single fixture installation.

1. Fasten the fixture mounting bracket (1) on the base of the fixture by means of the four quick-lock fasteners (2) and tighten the fasteners fully clockwise.
2. Place the fixture with mounting bracket (1) installed on the top cover (5) of the PowerDolly and tighten the four quick-lock fasteners (3) fully clockwise.
3. Secure the PowerDolly from moving by means of four wheel brakes (4).

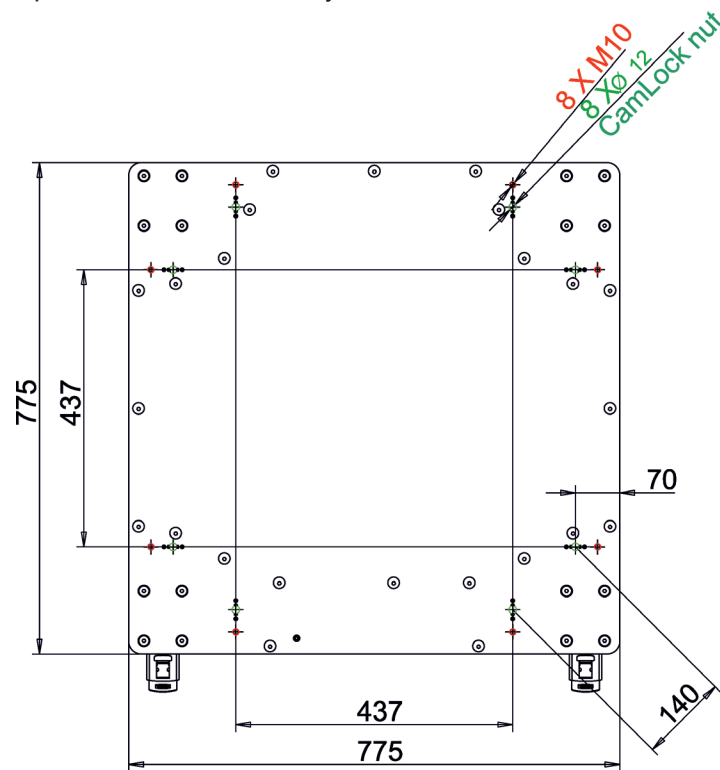


Note.

The top cover of the PowerDolly allows two methods of fastening the mounting bracket (1): by four quick-lock fasteners or by four screws M10.

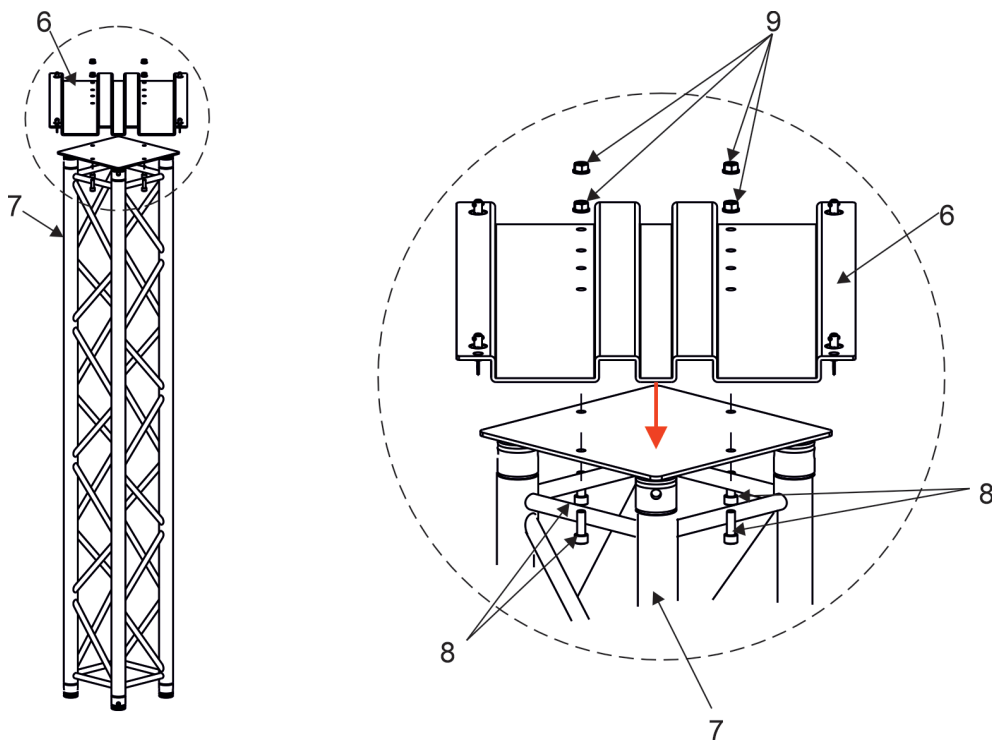
The mounting bracket can be mounted rotated by 90°.

Fastening points on the top cover of the PowerDolly:

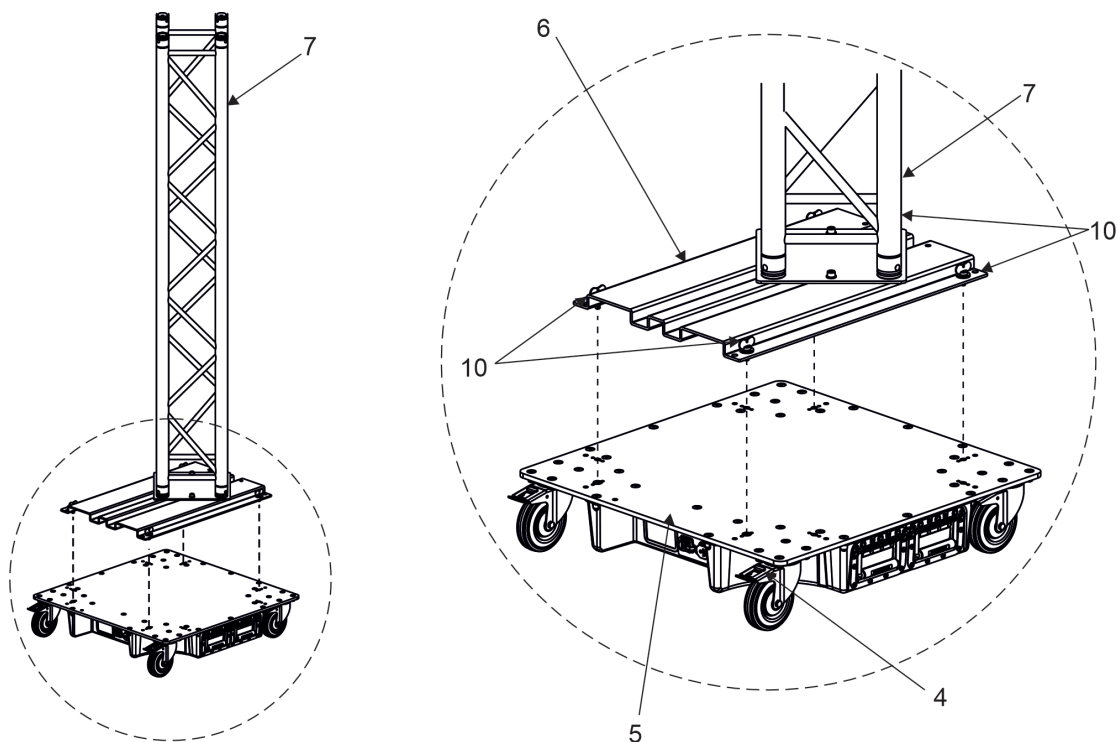


Multiple fixture installation.

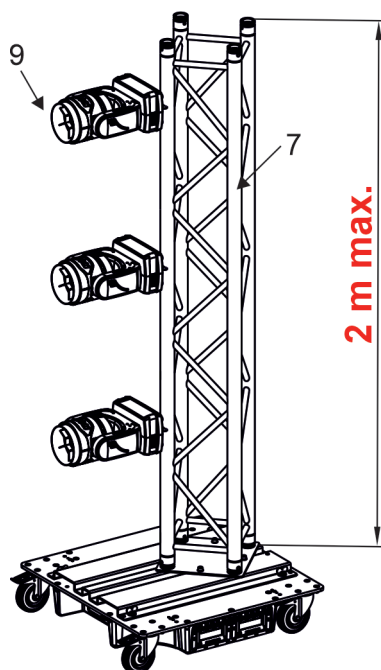
1. Fasten the truss mounting bracket (6) on the truss (7) by means of four screws M10 (8) with nuts (9) and washers. The truss mounting bracket (6) must be oriented relative to the truss (7) as shown on the picture below.



2. Secure the PowerDolly from moving by means of four wheel brakes (4).
3. Place the truss (7) with truss mounting bracket (6) installed on the top cover (5) of the PowerDolly and tighten the four quick-lock fasteners (10) fully clockwise.



4. Check that truss (7) is fastened to the PowerDolly securely and install fixtures (9) on the truss



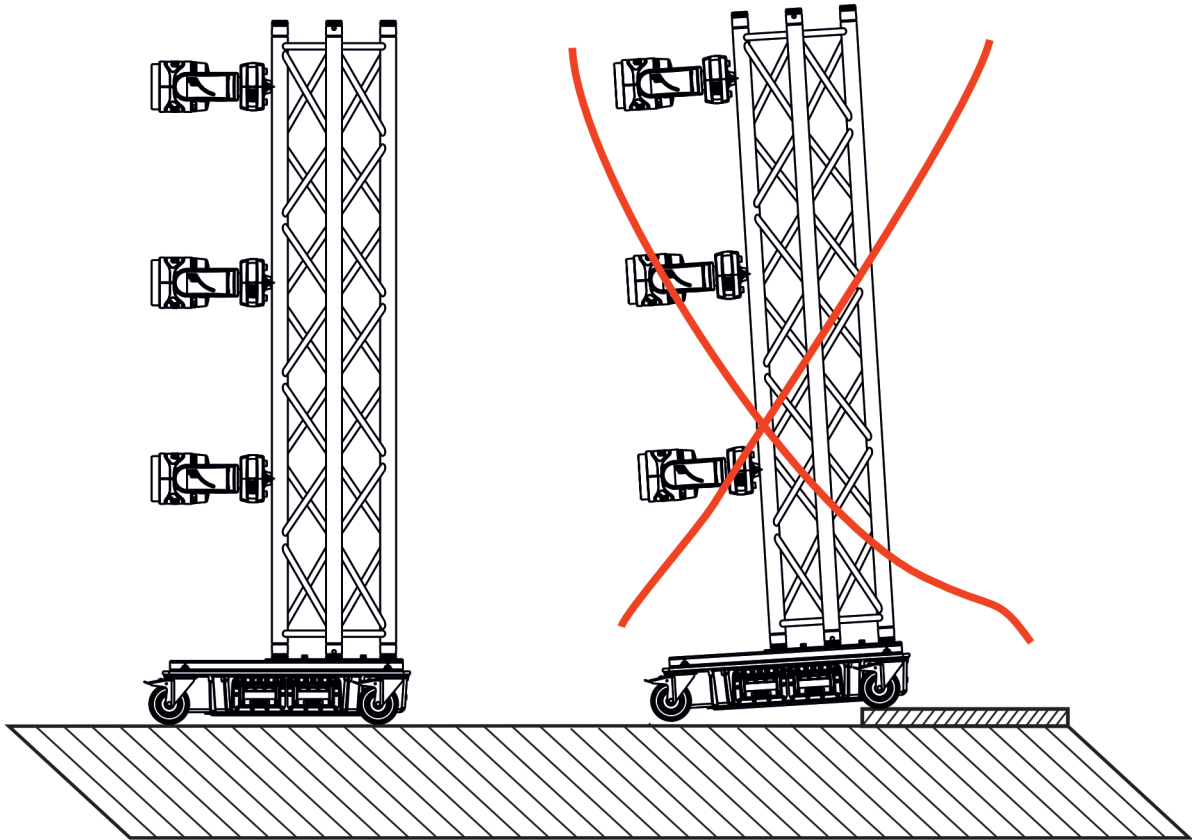
5. Make sure the PowerDolly with fixtures on the truss is stable and does not tend to tip over.

Do not move the PowerDolly when the truss with fixtures is installed on it.

Do not use a forklift truck when the truss is installed on the PowerDolly.

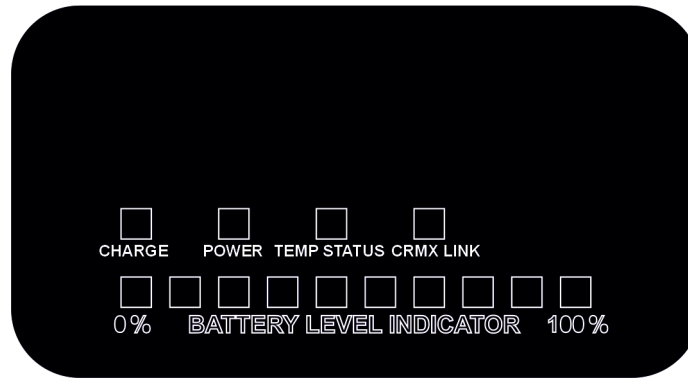
Test the stability of the PowerDolly with truss and fixtures before using it in show.

The PowerDolly must be placed on the flat horizontal ground without inclination.



4.LED indicator

The level of battery charging/discharging is indicated on the LED indicator.



LEDs status description:

CHARGE – battery charging (Power Input)

Purpose: the LED indicates if the battery is connected to the power source (e.g. 230 V)

- Green colour (LED is permanently on): Power source is connected, battery is being charged.
- LED is turned off: power source is disconnected.

POWER – power supply for a device (Power Output)

Purpose: the LED indicates if a device (e.g. Robe light) is powered by the battery.

- Orange (LED is permanently on): A device is powered by the battery.
- LED is turned off: No power supply from the battery.

TEMP STATUS – temperature status

Purpose: the LED indicates temperature status of the battery.

- LED is turned off: Temperature is OK.
- Orange (blinking): High temperature – recommendation to decrease power output or cool the PowerDolly.
- Red (blinking): critical temperature – there is a risk of overheating. The PowerDolly disconnects device from the battery.

CRMX LINK

Purpose: the LED indicates connection status of Wireless DMX.

- LED is turned off: The PowerDolly is not connected to the wireless DMX.
- White (LED is permanently on): The PowerDolly is connected to the wireless DMX.
- White (LED is blinking): linking is in process.

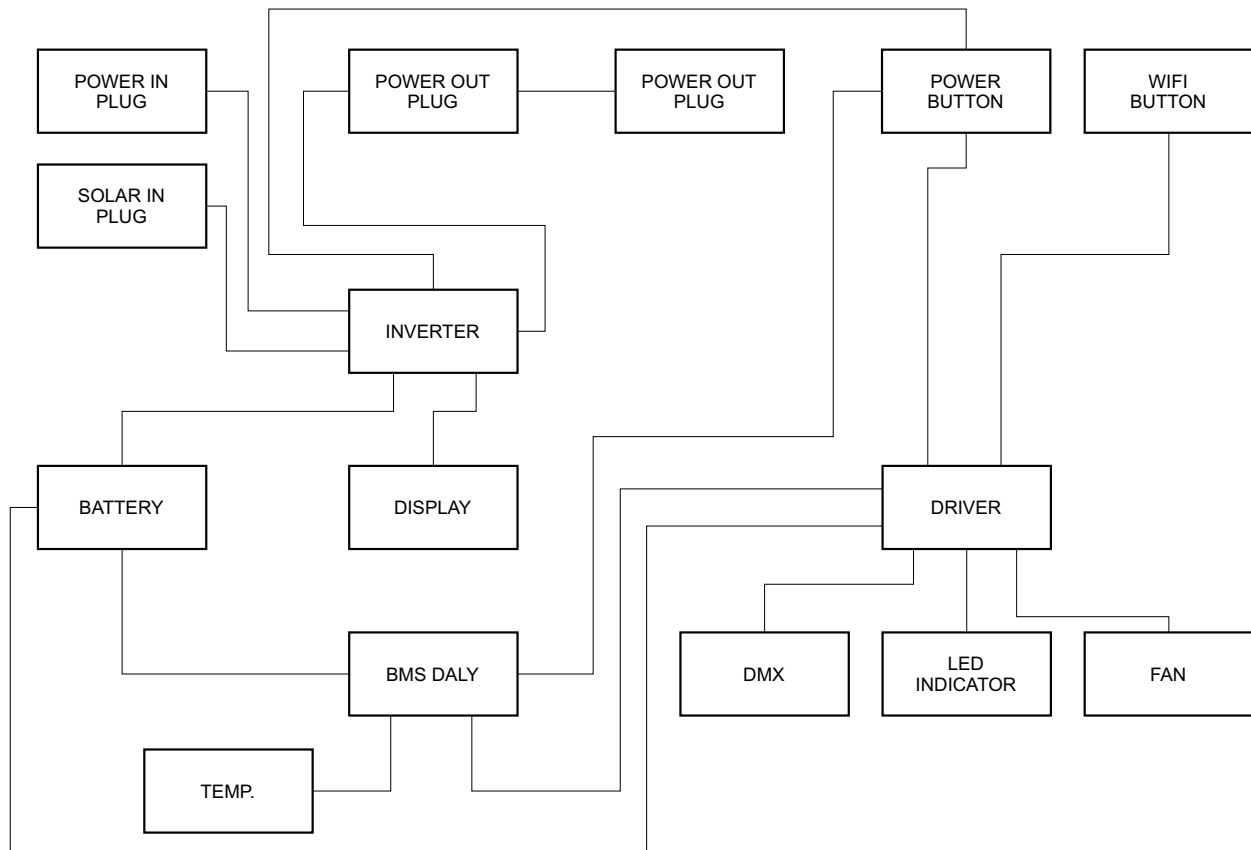
BATTERY LEVEL INDICATOR

Purpose: 10 blue LEDs indicate level of charging in 10% steps (from left to right).

Number of LEDs on	Level of charging
1	0–10 %
2	11-20 %
3	21-30 %
4	31-40 %
5	41-50 %
6	51-60 %
7	61-70 %
8	71-80 %
9	81-90 %
10	91-100 %

Blinking: Indicates charging in real time (when the battery is being charged and the battery level is e.g. 15%, 1st LED is permanently on, 2nd LED is blinking. When the battery is being discharged, there is no blinking.

5. PowerDolly block diagram



POWER IN PLUG - power supply from mains 220-240V AC/50Hz (CE), 100-120V AC/60Hz (US)

SOLAR IN PLUG - power supply from solar panels

POWER OUT PLUG - power output (2x Power connector IP67 PowerCon True1)

POWER BUTTON - activates 2 x POWER OUT and charging the BATTERY

WIFI BUTTON - unlinks the PowerDolly from wireless DMX signal.

INVERTER - converts the variable direct current (DC) output of photovoltaic solar panels into a utility frequency alternating current (AC) that which feeds both power outputs.

BATTERY - LiFePO4 batteries for storage of electrical energy.

DISPLAY - control LCD display inside the PowerDolly with 4 function keys. It displays the operation status and input/output power information.

DRIVER - controls battery charge level, inside cooling fans, LEDs indicators and another systems.

DMX - control system for wireless DMX.

LED INDICATOR - indication LEDs on the front panel of the PowerDolly.

FAN - Three fans inside the Power Dolly ensure a suitable operating temperature for the batteries and control electronics.

BMS DALY - DALY Battery Management Sytem ensures that battery systems operate at peak performance while mitigating the risks of over-current, over-discharge protection, short circuit protection, and temperature control.

TEMP- temperature sensors. The PowerDolly is equipped with two temperature sensors placed in the battery compartment and in the cable harness leading from the battery compartment.

6. Maintenance

DANGER !

***Do not do maintenance in a damp environment (e.g. rain, snowfall)!
Always disconnect the device from mains before starting any maintenance work.***

Warning

Disconnecting the PowerDolly from mains does not reduce the risk of electric shock when you remove top cover of the product.

The frequency of cleaning depends on the environment in which the fixture operates: damp, smoky or particularly dirty environments can cause greater accumulation of dirt on the PowerDolly housing.

For cleaning, a soft lint-free cloth dampened with a solution of water and a mild detergent is recommended, under no circumstances should alcohol, solvents or abrasives be used!

If you need any spare parts, please order genuine parts from your local Robe distributor.

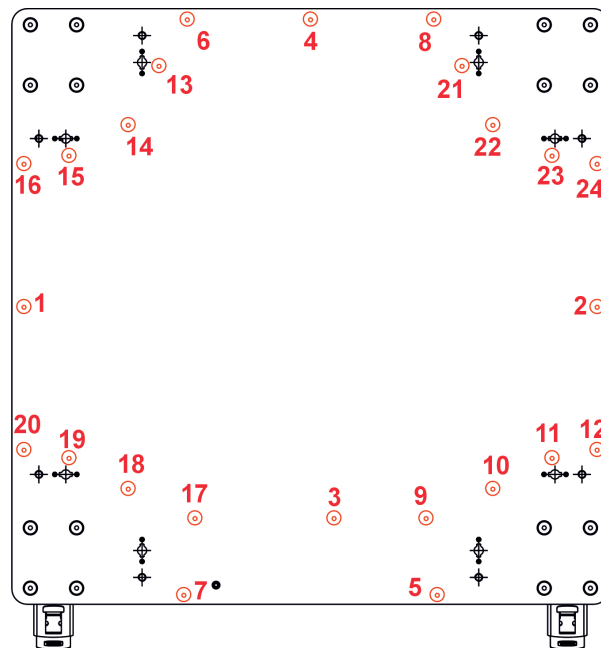
Replacing the fuse.

Before replacing the fuse, disconnect the PowerDolly from mains.

1. Using a flat-blade screwdriver, unscrew (anti-clockwise) the metal cover of the fuse compartment from the front panel of the device.
2. Unscrew the fuse holder (anti-clockwise) and remove the blown fuse from the fuse holder.
3. Place a good fuse (only the same type and rating) into the fuse holder and screw the fuseholder back.
4. Screw the metal cover of the fuse compartment back to the front panel, use a tightening torque 2.5Nm.

PowerDolly top cover torque.

Keep value of torque as stated on the picture below otherwise leakage issues can occur!



Screws must be tightened
in the order 1-->24

24 x countersunk head screw M8x22
Tightening torque*: 2.5 Nm

* Tighten all screws in two steps:

Step 1 - use tightening torque 0.5Nm (pre-tightening)

Step 2- use tightening torque 2.5Nm (final tightening)

Carefully check the gasket for signs of deformities or damages and if it is correctly placed before screwing the top cover of the PowerDolly.

Do not forget to connect grounding wire between chassis and top cover.

7. Technical specifications

Electrical Specification

AC production:

Total output power: 2.000W

Battery capacity: 5.000 WH (LiFePO4)

Operation:

Input Voltage: 220-240V AC/50Hz (CE), 100-120V AC/60Hz (US)

Max charging power: 3.600 W (on 16A socket)

Recharge time: <4h (90%)

Discharging temperature: -10°C/+40°C (20°C - 30°C recommended)

Charging Temperature: 0°C /+40°C (20°C - 30°C recommended)

Battery life cycles: 3500

Fuse: 15 A (EU), 20A (US)

Battery runtime:

Usage time at 300W: >16 h

Usage time at 500W: 10 h

Usage time at 1000W: 5 h

Usage time at 2000W: 2.5 h

Solar Panels:

Max PV power: 1.600 W

MPP voltage range: 10 VDC – 145 VDC

Max input voltage: 145 VDC

Max current PV: 20 A

Control and Programming

Built-in LCD display for input and output voltage indication, frequency, load percentage, PV voltage and current, working mode, fixture status

Wireless CRMX™ technology from Lumen Radio

Battery status:

Battery Level indication

Battery Temperature indication

Connectors:

AC Output: 2x Power connector IP67 PowerCon True1

AC Input: Power connector IP67 PowerCon True1

DC input (SOLAR): BD-24-2

DMX and RDM data out: IP67 Locking 5-pin XLR connector

Thermal Specification

Maximum ambient operating temperature: 40°C (104°F)

Maximum surface temperature: 60°C (140°F)

Minimum ambient operating temperature:

-10°C (14°F) - discharging mode

0°C (32°F) - charging mode

Noise Levels

Sound pressure level:

20 dB(A) at 1 m (inverter mode)

30 dB(A) at 1 m (charger mode)

Sound power level:

26 db(A) (inverted mode)

36 db(A) (charger mode)

Mechanical Specification

IP rating: IP65

IK Rating: IK07

Weight: 80 kg

Load capacity: 200 kg

Fixation option: Wheels brakes

Rigging

Mounting positions: Floor standing

Mounting points:

8 x M12 mounting points for universal and custom bracket

8 x 1/4-turn locking points for fixture mounting bracket or truss mounting bracket

Included Items

1 x User Manual

1 x Power cable including powerCON TRUE1 In connector

1 x Daisy Chain powerCON TRUE1 In/Out, EU or US, 0.9 m, outdoor

Optional Accessories

Fixture mounting bracket (P/N 10981314)

Truss mounting bracket (P/N 10981314)

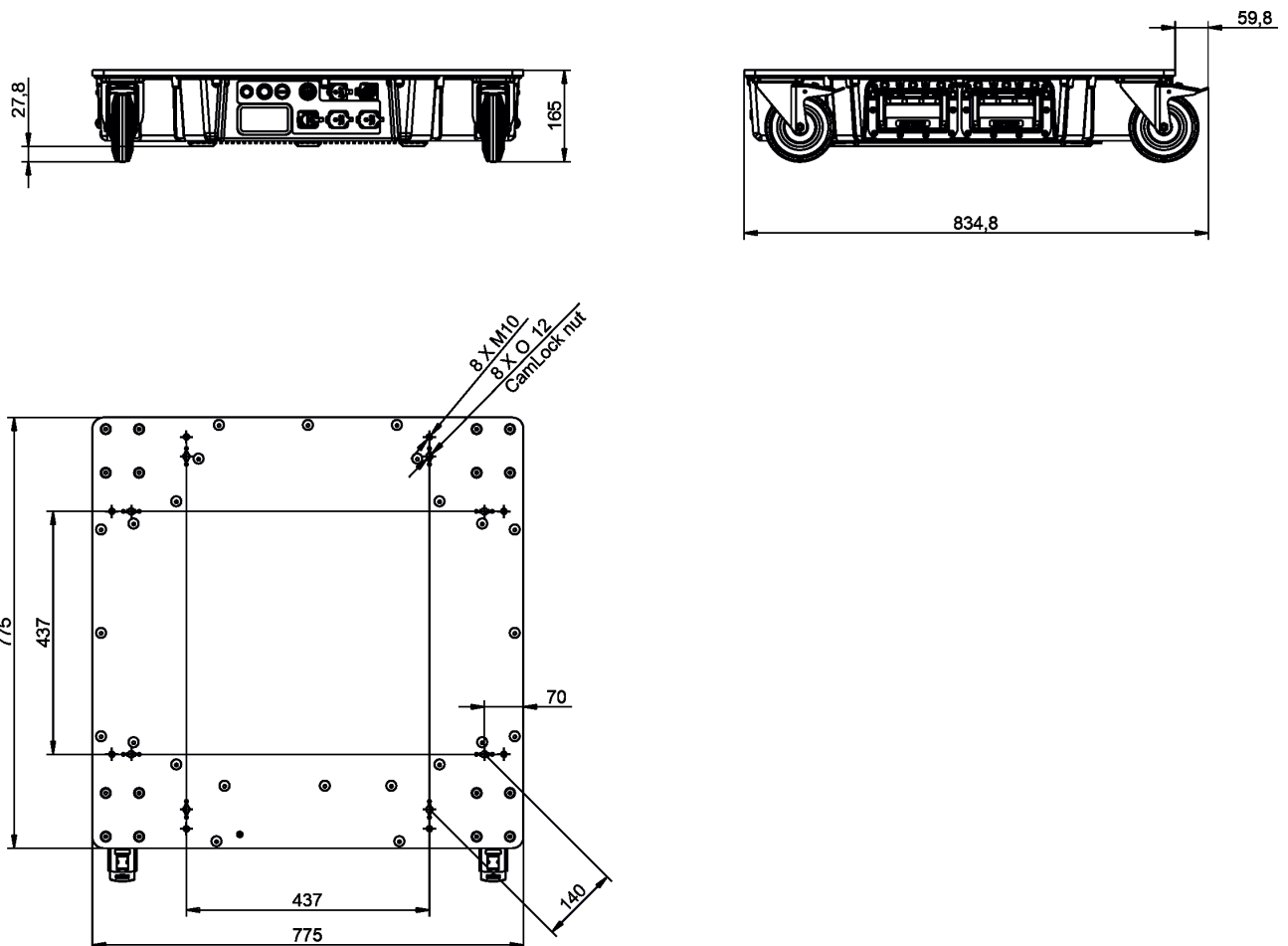
Single Top Loader Case

Offroad wheels

RDM model ID

0x0162

Dimensions (mm)



8. Disposing of the product

To preserve the environment please dispose or recycle this product at the end of its life according to the local regulations and codes.

9. ChangeLog

This section summarizes changes in the user manual.

Version of the manual	Date of issue	Description of changes

October 30, 2025

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Specifications are subject to change without notice.

Made in ROBE Lighting s.r.o., Palackého 416, 757 01 Valašské Meziříčí, Czech Republic