Apollo PRO Portable Light Tower

Manual

VERSION	MODIFICATIONS
1.0	First edition

Table of Contents

1 General Information

1.1 Marking concept for hazards and hints

Hazard

Hazardous situation which will cause serious injury or even death if it is not prevented.

Caution

Hazardous situation which could cause slight to moderate injury if it is not prevented.

Hint

Indicates information which does not concern personal injury, e.g. hints in respect of material damage.

Protective measures

Increase safety by applying a protective measure.

1.2 Responsibilities of the operator

- Make sure that this document is always kept in a safe place in a legible form together with the product.
- Read these instructions carefully before first start-up of the product.
- This product has been developed and produced exclusively for the use indicated in these documents. Every other use, which is not mentioned explicitly, could affect the intactness of the product and/or could constitute a source of danger.
- The manufacturer rejects any liability for damage which has been caused by incorrect or non-intended use of the product.
- In countries, which do not belong to the European Community, the national legal reference regulations as well as the standards and regulations applicable in these countries have to be observed for warranty of a corresponding safety level.
- The installation has to be carried out according to the applicable regulations.
- The manufacturer assumes no liability for inexpert execution of installation as well as deformations which may occur during operation.
- The electric power supply has to be switched off before executing any action on the installation.
- Exclusively original parts of the manufacturer shall be used for maintenance. Maintenance work may be carried out by qualified staff only.
- All procedures which are not explicitly mentioned by the manufacturer in the instructions are not permitted.
- The packing material must not be stored within the reach of children as it could be a potential source of danger.

2 Introduction

Apollo PRO is intended for temporary illumination. Apollo PRO is designed to protect the operator as much as possible and all-important safety functions are clearly labelled. It is however a requirement that the operator understands the limitations of this equipment by reading this manual.

Hint

Operation shall always be carried out by authorized, skilled personnel. Read this carefully before operation to avoid personal injury or void warranty.

2.1 Safety

ALWAYS deploy the stabilizing legs, secure their locking and make sure light tower is firmly secured to the ground and stands level before the armature and mast is raised.

ALWAYS make sure the area above the light tower is open and clear of overhead wires and obstructions.
ALWAYS lower the mast when not in use, or if high winds or electrical storms are expected in the area.
ALWAYS use electrical connections with protective earth and ground fault switch.
ALWAYS keep area around the light tower clear of people while raising and lowering the mast.
ALWAYS wear helmet and correct PPE gear when operating mast.

NEVER hold on to the armature or mast sections when raising the mast.
NEVER deploy and operate a light tower in strong winds
NEVER operate a light tower in need of repair.
NEVER operate a light tower while tired, distracted, or under the influence of drugs or alcohol.
NEVER put any extra weight/equipment on mast or armature.
NEVER use chemical substances or high-pressure water to clean/rinse light tower. Use garden hose pressure only.

AVOID looking directly into the light source.

Hint

The manufacturer is not responsible of any damage to things or persons, resulting as consequence of inobservance of safety norms.

2.2 Storage

No additional measures are required for storage. Regarding packaging, pay attention to protection against damage.

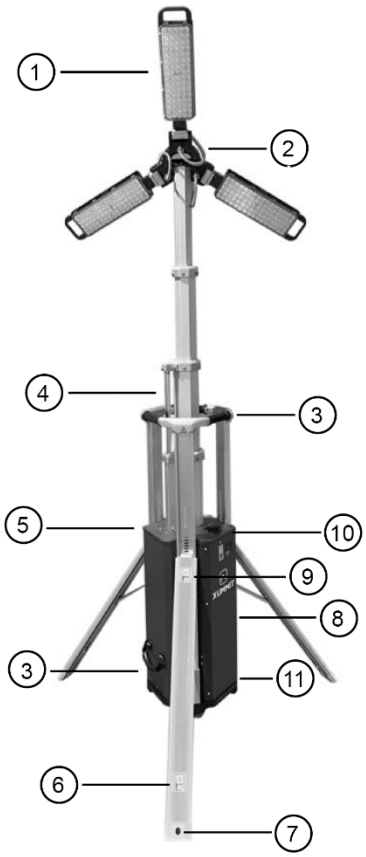
2.3 Disposal

This product must not be thrown in the garbage.

In accordance with official local and national regulations, this product is to be recycled appropriately.

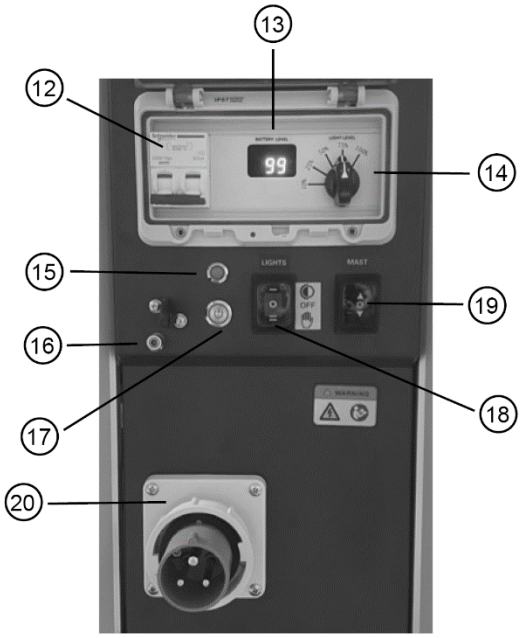
European directive 2012/19/EU; waste electrical and electronic equipment (WEEE).

3 Components overview



1. LED Lights
2. Top Arm
3. Handles
4. Electric Mast
5. Control Panel (see below for details)
6. Stabilizer Release Latch
7. Stabilizer Stake Holes
8. Battery Compartment
9. Stabilizer Return Latch
10. Light Sensor
11. Puncture Proof Wheels (not shown in image)

3.1 Control panel



12. AC Circuit Breaker
13. Battery Display
14. Brightness Selector
15. AC Power Indicator
16. Ground Terminal
17. Battery Power
18. Light Mode
19. Mast Control
20. AC Power Inlet

Hint

Power inlet plugs may vary depending on territory

4 Operation instructions

4.1 Handling and transport

Apollo PRO is designed for single person moving and deployment and two persons lifting.

4.2 Preliminary check

Before every usage, the operator must check the mast, top arm, base, electrical wires and sockets for damage. Any damage found on these items requires immediate service. Do not proceed with operations until fault is removed.

4.3 Grounding

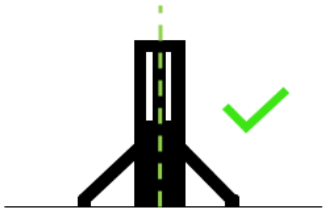
For operators' safety, the AC inlet is grounded. If the incoming power supply is not grounded, the grounding of the machine always needs to be done. Always perform grounding operations in compliance with local/international regulations.

4.4 Positioning

Position the mast on a stable, flat surface. Angle the unit with the front facing the area you intend to illuminate.

4.5 Stabilizing light tower

Lift "release" latch to drop each stabilizer to the ground



Lift the unit so each stabilizer is secure, and the tower stands level to the ground before proceeding

Stake stabilizer legs to ground in strong winds

⚠ **Hazard**

Do not raise the mast if all stabilizers are not correctly deployed.

4.6 Powering up

Battery Power

Press and hold battery power button to activate system

Mains Power

1. Connect to mains power source
2. Switch circuit breaker ON

4.7 Light head configuration

Important!

1. Before raising the mast, press red safety button and slide out transport chain to unlock mast

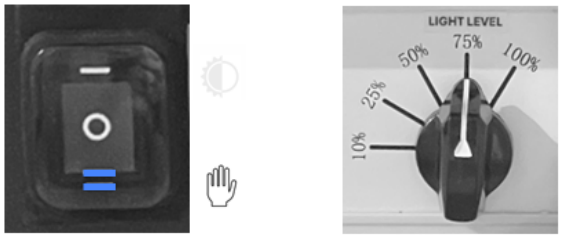
2. Press and hold **UP** arrow. Mast automatically stops at head adjustment height

3. Lift and tilt light heads to the required light beam direction

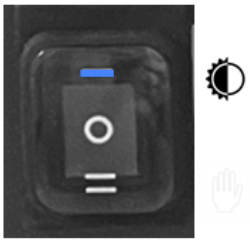
4.8 Raise mast

- After completing light head configuration steps, press and hold the **UP** arrow to raise mast to required height.
- **Beware of overhead obstructions**
- Mast will automatically stop at **MAX** height (3.8m)

4.9 Turn on and control lights



To control lights manually select “ ”
Select brightness setting (10%, 25%, 50%, 75%, 100%)



Daylight sensor mode, select, “ “
Brightness will be controlled by sensor

4.10 Charging Battery

- The battery will automatically enter charging mode when the unit is connected to AC power.
- Charging is indicated by the green light on the battery’s State of Charge (SOC) display.

Charging Times	230 VAC	110 VAC
0 to 80%	3.5 hrs	6 hrs
0 to 100%	4.5 hrs	10 hrs

at 25°C ambient temperature

- Maximum light output is limited to 80% while charging.
- If no battery is installed, the display will show "---".
- Refer to the Technical Specifications section for operating and charging temperature ranges.

Charging indicator

Battery Run Times

Output %	Run time
100%	4 hrs
75%	6 hrs
50%	8 hrs
25%	16 hrs
10%	40 hrs

Run times are based on 25ºC ambient temperature and may vary depending on environmental conditions.

4.11 Exchanging Battery

1. Turn the unit off then open battery compartment

2. Disconnect battery power plug

3. Remove battery for external charging

- Repeat the process in reverse with replacement battery

4.12 Stopping

- Press Light Mode Switch to **OFF**
- Hold the mast button **DOWN** until the mast automatically stops at head adjustment height
- Fold the light heads down to transport position. Use light head handles as lights may be hot from operation
- Hold the mast button **DOWN** until the mast is fully encased in the chassis. Mast motor will automatically stop
- **In Battery Mode:** Turn off battery power button
- **In AC Mode:** Switch off main breaker and disconnect power
- Insert the transport lock
- Lift each stabilizer **RETURN** latch and return stabilizers to transport position

Stabilizer RETURN latchpower plug

4.13 Technical Specification

Model	
Series	Apollo PRO
Model No.	BLT-300
Performance	
Illuminated surface	980 m^2
System Power	300 W
Luminous Flux	48‘000 lm
Lumens/W	160
Color temperature (CCT)	5‘000 K
Electrical	
Operating Voltage	220-240 VAC 100-120 VAC (optional)
Power Factor	>0.95
Electrical Class	Class 1
Protection	Over Voltage, Over Temperature, Over Discharge, short circuit
Dimmable	Yes
Input Plug	CEE 230V 16A 2P+E

Environmental	
Ambient Operating Temp. range	-10°C to +45°C
Storage Temp. range	-40°C to +80°C
Charging Temp. range	0°C to +45°C
Working Altitude	<2‘000 m
Shock resistance	IK09
Protection category	IP65 lighting, IP54 chassis
Noise Emissions	<15 dB
Physical	
Fully extended height	3.8 meters
Elevation system	Electric
Mobility	By hand / crane / forklift
Dimensions (min.)	340x385x1088 mm
Dimensions (max.)	1303x1129x3810 mm
Wind Resistance	30 m/s
Housing Finish	UV stabilized powder coating
Weight	38 kg tower only, 47 kg with battery

Specifications may vary depending on territory and are subject to change without notice.

5 Maintenance

Maintenance operations shall be carried out on the light tower when at rest. Ordinary and/or extraordinary maintenance shall always be carried out by authorized, skilled personnel. Maintenance personnel shall be equipped with proper Personal Protective Equipment (PPE).

Period of inactivity

If the light tower is not used for more than 3 months:
Upon powering the machine on again, a visual inspection must be conducted on the following components:

- Electric connections
- Floodlights
- Steel cables
- Serrations of the telescopic mast

Any damage found on these items requires immediate service. **Do not proceed with operations until the fault is resolved.**

Battery Consideration:
If the light tower has been inactive for more than 3 months, it is important to **check the battery level before use.**

- **Charging:** Charge the battery if the charge level is **below 20%** to ensure optimal performance during operation.
- **Low Battery Alert:** If the battery is critically low, the system will **automatically enter a low-power state.** Ensure the battery is adequately charged before operating the light tower.
- **Long Term Storage:** If storing the battery for more than 3 months, store it at a range of 50% to 70% capacity to prolong battery life.

6 Trouble shooting

Error Codes

Errors are indicated on the control panel display showing "E" followed by error code.
If multiple errors are detected the display will show the error codes cyclically along with normal data.

Monitored Systems: Light sensor, battery, charger, electric mast and communication errors.

Situation	Error Codes	Possible Causes	Solution
Charger Errors	E01 to E08	Connection issues, overheating	Verify that the charger is not charging outside the temperature range. Check the battery is connected. If issue persists, contact distributor.
Battery Errors	E11 to E15	Communication issues, over/under voltage	Check the battery connections and cables for damage or corrosion. Verify that the battery is not discharging outside the temperature range. If the issue persists, consider replacing the battery
Mast Motor Errors	E16 to E18	Over current, sensor faults	Check for any blockage or mechanical resistance in the motor or mast actuator. Switch off circuit breaker and disconnect battery, wait 20 seconds and switch on again. If issue persists, contact distributor.
Light Sensor Error	E21	Faulty or obstructed sensor	Inspect the light sensor for physical damage or obstruction. Clean the sensor to ensure it is not covered by dirt or debris. If the issue persists, replace the sensor.
No Battery installed	E25	No battery detected when AC Power is on	Ensure the battery is correctly installed and connected. If the error persists, check for issues with the battery terminals or the battery itself. If de battery is faulty, replace it.

Sound Prompts

- **Lift Limit:** Buzzer beeps when reaching limit positions.
- **Power-on/Shutdown Prompt:** Single beep for power on/off.
- **Warning Prompt:** Short, repeated beep for warnings
- (e.g., motor failure).
- **Fault Protection:** Continuous beeping for faults like motor overcurrent.

If emergency lowering is required due to power loss or other conditions:

1. Turn the unit **off**.
2. Lay the tower on its side.
3. Remove the two hex screws securing the actuator to the second mast section neck.
4. Lower the mast completely.
5. Reinstall the actuator hex screws.

7 Disposal and Recycling

After end of the lifetime this machine shall be disposed according to the national rules. It's recommended that it is disposed by waste management companies certified according to ISO 14001.

The ISO 14001 defines global valid criteria for efficient environmental management system.

All energies from the machine are to be cut off.
Clean the machine from hazardous environment deposits.

Basically, any machine should be divided into the follow waste classes:

Any kind of fluids should be separated in container and labelled accordingly. Other, Light metal, bronze. steel, synthetic material, electronic components, and so on.

The driver contains raw material that should be recycled to preserve energy and natural resources. The package material is environmentally compatible and recyclable. All metal parts can be recycled. The plastic parts can either be recycled or burned under controlled circumstances, according to local regulations. Most recyclable parts are marked with recycling marks.

If recycling is not feasible, all parts excluding electrolytic capacitors can be landfilled. The DC capacitors contain electrolyte which is classified as hazardous waste within the EU. They must be removed and handled according to local regulations.

Hint

There are several certified waste management companies which takes the complete machine.

Machine waste	Disposal
QI (e.g. Lubrication all)	The differed kind of all is considered to be special waste, and must be disposed of through a certified company
Spare Parts	Spare parts from the machine need to separate according to the materials. Afterwards handover to a certified company.
Complete Machine	There are several certified waste management companies which takes the complete machine, deconstructed and recycle the raw materials.

Battery Disposal (WEEE Declaration)

The battery included with this machine is marked with the symbol of a crossed-out dustbin, in accordance with the applicable EU WEEE (Waste Electrical and Electronic Equipment) directive. This symbol indicates that the battery must not be disposed of with general household waste.

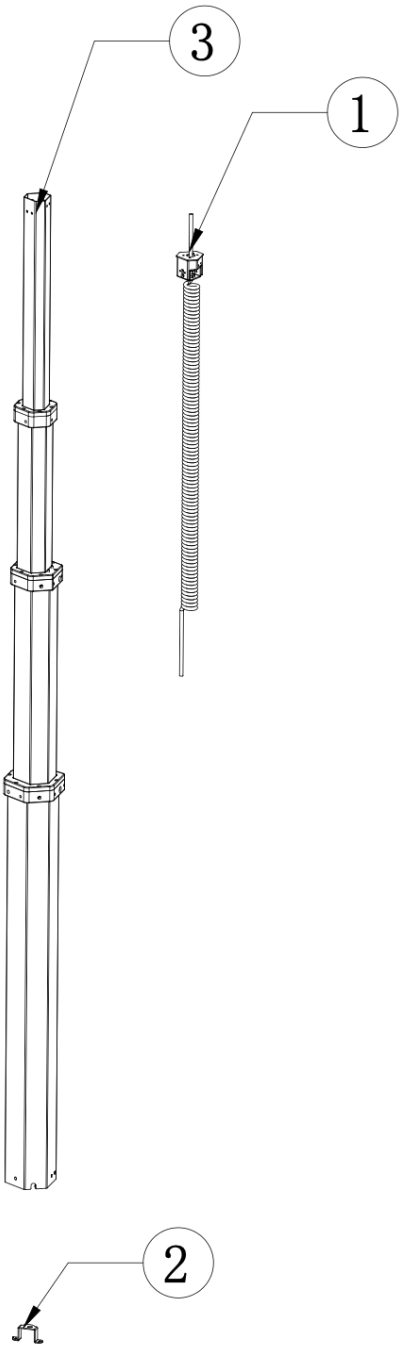
At the end of its useful life:

- Fully discharge the battery as far as possible.
- Remove it from the light tower and deliver it to an authorized battery collection or recycling point.
- Do not incinerate, crush, or disassemble the battery.
- Improper disposal or storage may result in health risks, environmental pollution, fire, or explosions.

All disposal activities must follow national and local regulations. Certified waste management companies (preferably ISO 14001 certified) are recommended for handling and recycling of lithium-based batteries.

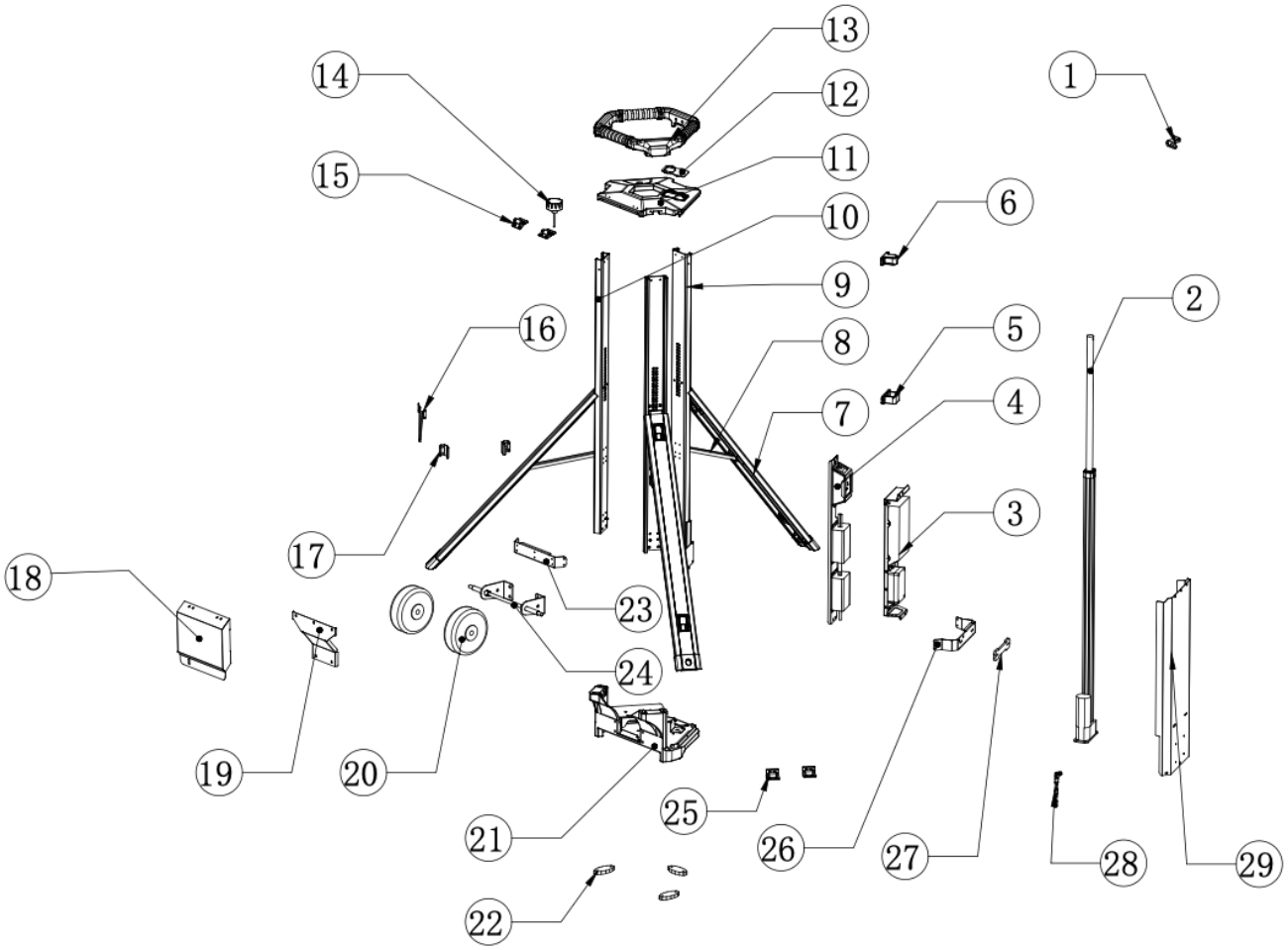
8 Spare Parts

Mast



Serial	Part No.	Description
1	216000623	Spring cable assembly
2	216000624	Spring cable fixing plate
3	216000629	Mast assembly

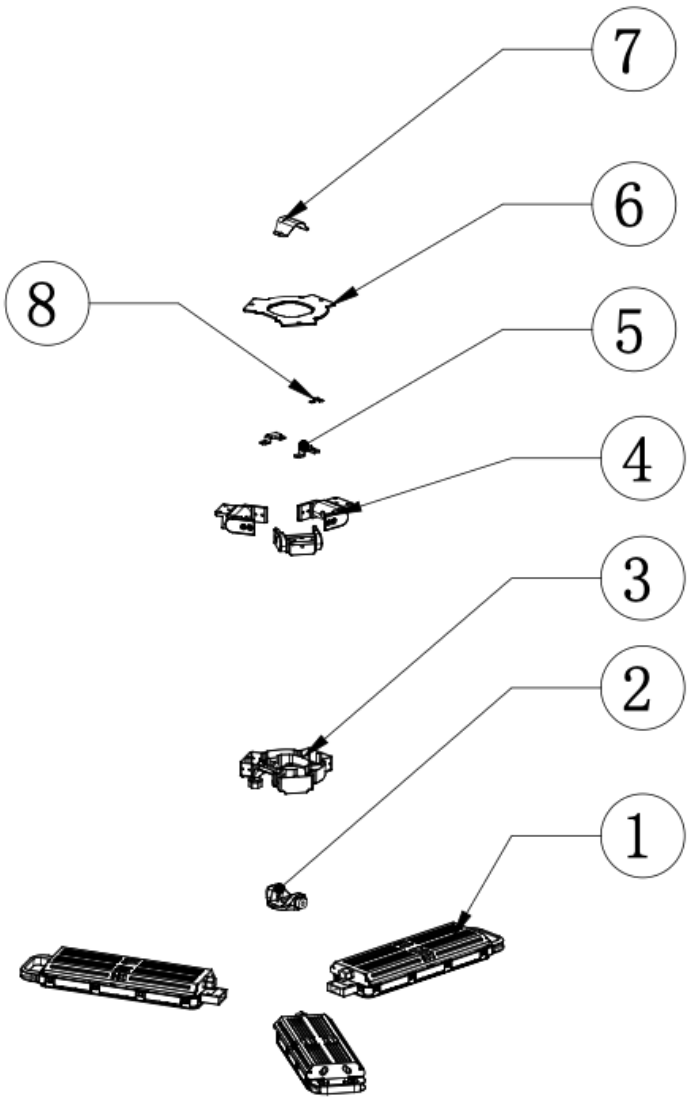
Chassis



Serial	Part No	Description
1	216000628	Chain locking part
2	216000630	Lead-screw assembly
3	216000658	Driver and holder assembly
4	216000634	Control module and holder assembly
5	216000631	Lead-screw middle holder
6	216000632	Lead-screw top holder
7	216000625	Outer sliding foot assembly
8	216000626	Inner sliding foot assembly
9	216000647	Rear column assembly
10	216000648	Front column assembly
11	216000645	Middle cover plate
12	216000633	Middle cover patch
13	216000627	Top frame assembly
14	323030092	Daylight sensor
15	300000418	Damping hinge 1.4

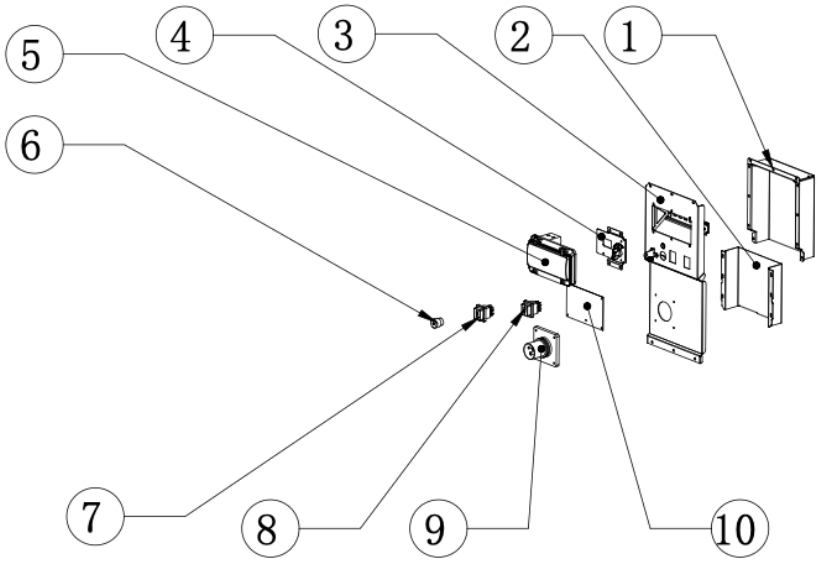
Serial	Part No	Description
16	300000421	Door limit hinge
17	3000004SQ	Battery column limit plate
18	3000503AE	Front panel cover
19	216000637	Front lower cover plate
20	216000654	Bottom wheel assembly
21	216000649	Base assembly
22	216000652	Base pad
23	216000646	Front and rear handle fixing plate
24	216000653	Bottom wheel shaft assembly
25	300000417	Damping hinge 1.8
26	216000635	Double side handle fixing plate
27	216000655	Plastic handle assembly
28	216000628	Steel chain
29	216000639	Right side cover

Light Heads



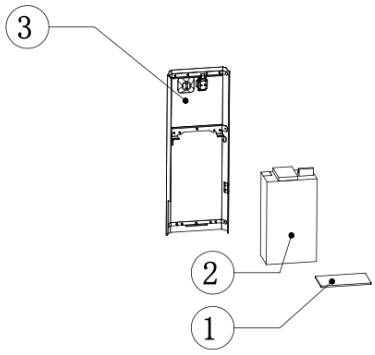
Serial	Part No.	Description
1	216000640	LED lamp assembly
2	216000643	Lamp head fixing assembly
3	30702069M	Lamp base lower plate
4	216000419	Lamp hinge
5	216000642	Lamp rotating arm fixing block
6	216000644	Lamp base top cover
7	216000641	Cable cover
8	216000657	Cable fixing block

Main Control Panel



Serial	Part No.	Description
1	216000650	Main control front cover
2	216000636	Main control lower cover
3	216000651	Main control front panel assembly
4	216000656	Dimming control module
5	300000140	Switch panel cover
6	300000419	On/off switch
7	2120530159	LED light switch
8	300000250	Mast up-down button
9	310000071	EU CEE male socket
10	2120530156	Control panel base plate

Battery Chamber



Serial	Part No.	Description
1	339140624	Battery rubber gasket
2	216000566	1.2 KWH battery unit
3	216000638	Battery door assembly

9 Electrical Diagram

10 Service

10.1 Service addresses

GIFAS ELECTRIC GmbH
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10.2 Imprint

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