

USER MANUAL

SAFETY HELMET LAMP:

ReS-3 LeD 3.7 V LM1

ReS-4 LeD 3.7 V LM2

and CHARGER FOR THE BATTERY PACK OF THE LAMP

CAUTION!



Before using or maintaining this device, make sure to read and understand all safety information in this user manual.



RESIN has implemented and maintains a quality management system

in accordance with DIN EN ISO 9001:2015
certified by TÜV NORD CERT



Technical specifications:

- * Light source: 1 x LED Cree XM-L2 emitter, 13° lens
- * Brightness: approx. 500 lm
- * LED life: approx. 20 000 h
- * Power supply: 3.7 V DC
- * Battery pack capacity: 6000 mAh = approx. 6 h of continuous operation
- * Material: Aluminium + plastic + rubber

Intended use:

The *ReS-3;4 LeD* lamp is designed for use during abrasive blasting in chambers and outdoors. **It lights up the working area for better working comfort and service quality. It reduces abrasive, compressed air and utility consumption for better and faster service.** It is integrated with the safety helmet. The light source is located above the visor, and the battery pack is placed in a pocket sewn into the safety apron so that the weight of the battery rests on the worker's body. The LED technology used in the lamp considerably extends the life of the light source and improves its resistance to shocks and impacts.

Warning!

- **The lamp can only work with the dedicated battery pack.**
- **Do not look directly at the light source.**
- **Do not submerge the lamp in water.**
- **Do not use any optical components within the light cone to focus the light beams (e.g. magnifying glass, etc.).**
- **Do not expose the battery pack to direct sunlight.**
- **Always follow the manual.**
- **Due to the system used to cool the light source, the breathing air delivered to the supplied-air helmet must be CLEAN (filtered). Do not supply helmets with air directly from the compressor without suitable breathing air treatment filters. See user manual for the Supplied-Air Respirator System (Helmet).**

Use instructions:

1. Check if the rubber shield with the protective lens is correctly installed before each use.
2. Pull the power cord of the lamp through the hole in the pocket of the safety apron.
3. Connect the lamp to the battery pack using the connector.
4. Press the ON/OFF button on the pack to switch the lamp on.
5. When the pack is discharged, connect the assembly to the TS-1012C or APC 300 charger.

Connecting the battery pack to the TS-1012C charger:

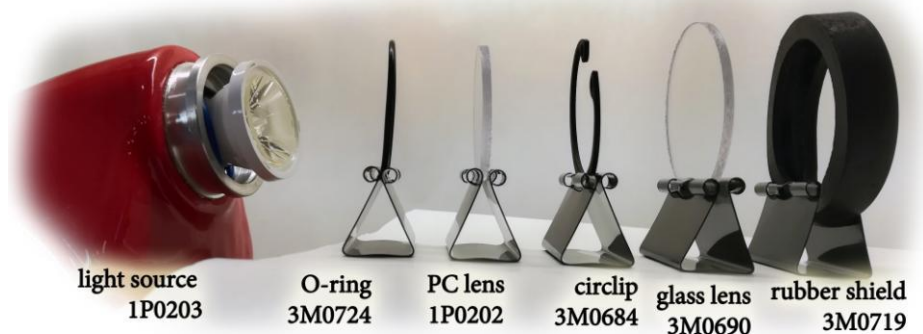
- a. Connect the connector of the charger cable to the battery pack.
- b. Press the ON/OFF button until the LED on the charger lights up (in green).
- c. After making sure that the pack has been correctly connected to the charger, plug the charger into a 100–240 V AC network (the LED will turn red to indicate that charging has started).
- d. Battery charging takes up to 3.5 h. After it is charged, the LED will turn from red to green.
- e. Unplug the charger from the network. Press the ON/OFF button on the battery pack and wait until the LED goes off. Disconnect the charger from the battery pack.
- f. The pack is now ready to be used.

Connecting the battery pack to the APC 300 charger:

- a. Connect the connector of the charger cable to the battery pack.
- b. Press the ON/OFF button until the LED on the charger lights up (in red).
- c. After making sure that the pack has been correctly connected to the charger, plug the charger into a 220–240 V AC network (charging will start).
- d. Battery charging takes up to 6 h.

After charging the pack, unplug the charger from the network (the red LED on the charger ONLY indicates that the battery pack has been correctly connected). Press the ON/OFF button on the battery pack. Disconnect the charger from the battery pack.

- a. The pack is now ready to be used.
1. Cloudiness of the lens does not significantly reduce brightness, but it should be replaced after up to 4 hours of operation.
2. After finishing work, switch the lamp off and disconnect it from the battery pack.



Maintenance:

Lamp enclosure components can become cloudy (lens) or damaged (rubber shield) during use, and they should be regularly replaced with new parts when their condition noticeably deteriorates so as to enable correct lamp operation.



Fig. 1



Fig. 2

Replacing the protective lens

- 1 – Remove the rubber shield from the lamp including the lens.
- 2 – Change the protective lens – *Fig. 1*
- 3 – Fit the replaced lens and the rubber shield onto the lamp – *Fig. 2*

Battery pack:

The battery pack consists of high-quality 3.7-V 3000-mAh Li-ion cells. It has an integrated ON/OFF switch and a power IN/OUT socket. When the pack is discharged, connect the assembly to the charger. Leave the pack on to start charging. See manual: *Use instructions*. Depending on the remaining capacity of the battery, it should be charged for up to 3.5 h (TS-1012C charger); it should be charged for up to 6 h (APC 300 charger).

CAUTION! DO NOT EXPOSE TO DIRECT SUNLIGHT AND HIGH TEMPERATURE. THIS MAY CAUSE EXPLOSION, IMPAIR THE PROPERTIES OF THE CELLS OR DAMAGE THE PACK!

After-sales service

If you find that the product is faulty after purchasing it, contact the seller. Follow the instructions in the enclosed user manual when using the product. Complaints will not be admitted if you alter the product or if you fail to comply with the instructions in this user manual.

Technical specifications of the TS-1012C charger:

Power supply	100–240 V AC 50–60 Hz
Output current	2000 mA
Output voltage	4.2 V DC
Operating conditions	temperature: -30°C to 60°C
Dimensions (LxWxH)	75 x 42 x 29 [mm]

Technical specifications of the APC 300 charger:

Power supply	220–240 V AC 50–60 Hz
Output current	300 mA
Output voltage	4.8 V DC
Operating conditions	temperature: -30°C to 60°C
Dimensions (LxWxH)	48 x 62 x 31 [mm]

The warranty does not cover the following:

- Natural wear and tear of active product components during normal use.
- Routine maintenance of the product (e.g. cleaning, replacement of wear parts during normal use, etc.).
- Faults caused by external factors (e.g. weather conditions, unsuitable use, etc.).
- Mechanical damage caused by falls, impacts, etc.
- Damage caused by incorrect handling of the product, using unsuitable accessories or tools, etc.
- The warranty does not cover the light sources. The light source is only covered by a 30-day warranty.

The owner of the product is responsible for mechanical damage of the product caused by incorrect protection during transport.

The manufacturer reserves the right to make changes in the user manual, and it is not liable for printing errors.

NOTE

1. Do not put waste or unnecessary electrical and electronic equipment in a waste bin. When you purchase new electrical or electronic equipment at a store, you can leave e-scrap at the seller's if the type and quantity of the purchased equipment correspond to the type and quantity of discarded equipment.
2. **The sign of the crossed-out wheellie bin indicates that the device must not be put in the trash but should be transferred to a collecting point for electrical and electronic equipment.**
3. Segregate e-waste by putting it in designated containers.
4. By correctly disposing of the device, you contribute to the protection of the environment and health. Incorrect disposal poses a threat to the environment and health.
5. For more information on recycling, contact the city office or sanitation department.



List of replaceable components of the *ReS-3 LeD 3.7 V LM1 DC*
lamp INDEX: OTWS0070

<i>Item</i>	<i>Name</i>	<i>Symbol</i>	<i>Index</i>
1	Aluminium housing	-	-
2	Rubber shield	3M0719	
3	Ø40 glass lens	3M0690	
4	2-mm Ø32 polycarbonate lens	1P0202	
5	30x1.5 O-ring	3M0724	
6	SB-32/CFH-32 ring (circlip)	3M0684	
7	Light source	1P0203	
9	2.5 terminal strip	3M0694	
14	SP1310/P2-6 WT connector	3M0676	

List of replaceable components of the *ReS-4 LeD 3.7 V LM2 DC* lamp
INDEX: OTWS0076

<i>Item</i>	<i>Name</i>	<i>Symbol</i>	<i>Index</i>
1	Aluminium housing	-	-
2	Rubber shield	3M0719	
3	Ø40 glass lens	3M0690	
4	2-mm Ø32 polycarbonate lens	1P0202	
5	30x1.5 O-ring	3M0724	
6	SB-32/CFH-32 ring (circlip)	3M0684	
7	Light source	1P0203	
9	2.5 terminal strip	3M0694	
14	SP1310/P2-6 WT connector	3M0676	

Battery pack
INDEX: OTWS0071

<i>Item</i>	<i>Name</i>	<i>Symbol</i>	<i>Index</i>
1	Battery pack	OTWS0071	-

Battery pack charger
INDEX: OTWS0075

<i>Item</i>	<i>Name</i>	<i>Symbol</i>	<i>Index</i>
1	TS-1012C charger	OTWS0075	-

Battery pack charger
INDEX: OTWS0072

<i>Item</i>	<i>Name</i>	<i>Symbol</i>	<i>Index</i>
1	APC 300 charger	OTWS0072	-

Power cord assembly
INDEX: 1P0207

<i>Item</i>	<i>Name</i>	<i>Symbol</i>	<i>Index</i>
1	Power cord assembly	1P0207	-