



USER MANUAL LS-A2MS FLASHLIGHT

LS-A2MS is a firefighter chest-mounted flashlight featuring dual warm-spectrum light sources, a waterproof metal housing with a phosphorescent silicone cover, and an integrated motion alarm.

ANSI / NEMA FL1 SPECIFICATIONS									
MODES	TURBO			MEDIUM			ECO		
RUNTIME*	Spot LED	Flood LED	Both	Spot LED	Flood LED	Both	Spot LED	Flood LED	Both
	3 h	3 h	1 h	28 h	28 h	14 h	125 h	125 h	80 h
OPTICS	Fresnel lens and reflector								
CAPABILITY	20 W (max)								
LIGHT OUTPUT	1014 lm (max)								
DISTANCE	740 m (max)								
INTENSITY	136 757 cd (max)								
COLOR TEMPERATURE	3100 K (±10%)								
BEAM ANGLE	min – 2.4°, max – 68.2°								
IMPACT RESISTANCE	1 m								
WATERPROOF	IP 67, underwater 1 m								
MATERIAL	Aircraft-grade aluminum (Avial)								
BATTERY TYPE	2 Li-ion batteries 18650, 2 Li-ion batteries 26650 or 6 batteries AAA								
SWITCH	3 spot-buttons on the head of the flashlight								
SIZE AND WEIGHT	161 mm x 72 mm x 58 mm, head diameter 65 mm, weight 431 g								
ACCESSORIES	Battery cassettes, battery tubes, leather strap, spare silicone O-rings								

*Measured with 26650 (5000 mAh) rechargeable batteries

MOUNTING

The LS-A2MS flashlight is specially designed for use by rescue workers and firefighters. It features a retaining clip and an eyelet on the housing for secure attachment to turnout gear.

- Insert the flashlight clip into the pocket flap or pocket of the turnout gear.
- If the turnout gear features an attachment loop or D-ring, the flashlight can be additionally secured by connecting a carabiner through the gear's loop and the flashlight's eyelet.
- If the RT-500 retractor is included in the kit, install it onto the turnout gear's D-ring or attachment strap according to the strap installation instructions.



OPERATING

The flashlight has 2 light sources that can operate independently or simultaneously. Each source can operate in one of three output modes: **Turbo**, **Medium**, or **Eco**.

- The top light source is controlled by **the top button**.
- The bottom light source is controlled by **the side button**.
- To turn the flashlight **ON** or **OFF**: Press and release the button.
- To change **the output mode**: Press and hold the button for 2 seconds.

Note: In Turbo mode, the flashlight generates significant heat. This heating is normal.

PROGRAMMING MODE

By default, the output mode cycle sequence is: **Turbo** → **Medium** → **Eco**. To extend runtime, you can change the sequence to: **Medium** → **Turbo** → **Eco**. You can also enable an automatic switch to Eco mode when the batteries are low.

To configure these settings:

1. **Remove the batteries** from the flashlight.
2. **Press and hold** the top button.
3. **While holding the button**, insert any single battery (you do not need to screw the cap on fully, simply pressing it against the body is enough). The indicators will begin to flash, signaling that the flashlight has entered programming mode. You may now release the button.
4. **To select the mode sequence**, press and release the side button. The indicator colors signify the cycle order:

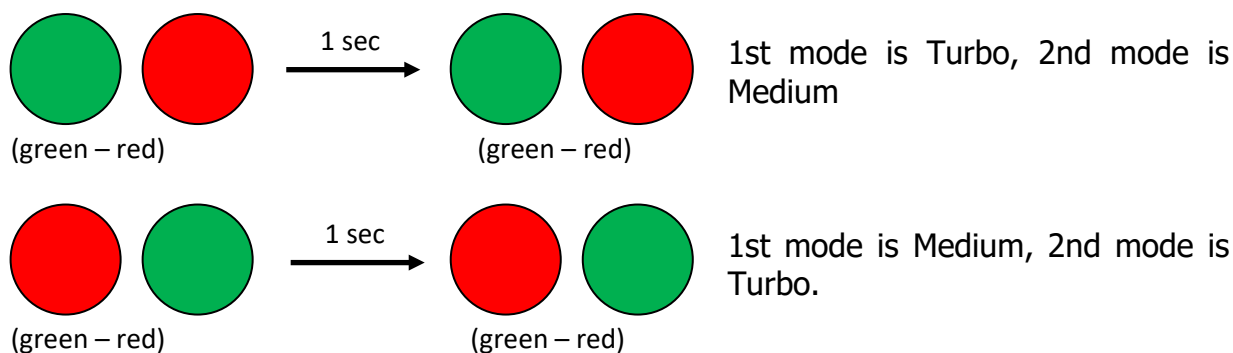


Fig. 1

5. **To toggle the automatic step-down** to Low mode **press and hold the top button**. The indicator will flash green 3 times:

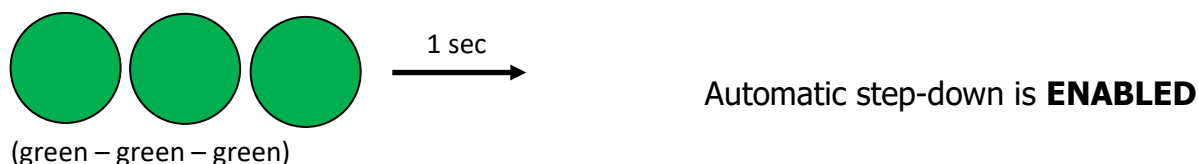


Fig. 2

Press and hold the side button. The indicator will flash red 3 times:



Fig. 3

After selection, the button will continue to show the mode sequence (as per Fig. 1). You can then release the button.

6. **To exit programming mode**, remove the battery.

COLOR INDICATION

The LS-A2MS features a battery level and output mode indicator located on the power buttons.

- **Turbo mode**: Solid indicator light
- **Medium mode**: Single flash
- **Eco mode**: Double flash

As the battery depletes, the indicator color changes in the following order: Green → Orange → Red → Flashing Red.

INTEGRATED MOTION ALARM (PASS)

The flashlight features an integrated motion alarm with a dedicated control button:

- **To turn the alarm ON**: Press and release the button.
- **To turn the alarm OFF**: Double-press and release the button.

If the flashlight remains completely motionless for more than 30 seconds (customizable), the device emits a 15-second pre-alarm, followed by a 95 dB main alarm at 3-second intervals (customizable).

Low Battery: The alarm emits a warning signal every 30 seconds if the battery level becomes critically low.

Overheating: If the housing temperature exceeds a specific threshold, the alarm emits a double warning signal every 5 seconds (temperature monitoring is disabled by default).

You can enable the overheat alert, adjust the motion alarm activation threshold, and change the alarm interval.

To customize the motion alarm:

1. **Remove the batteries** from the flashlight.
2. **Press and hold** the motion alarm control button.
3. **While holding the button**, insert any single battery (you do not need to screw the cap on fully, simply pressing it against the body is enough). The alarm button will light up green, signaling that the flashlight has entered programming mode. You may now release the button.
4. Set the required parameters according to the table below:



Alarm Button color indicates the parameter currently selected for configuration. Press the alarm button to select the next parameter.



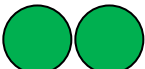
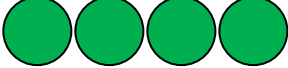
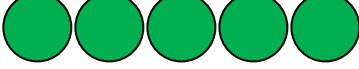
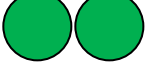
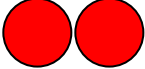
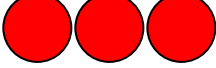
Top and side buttons indicate the value of the selected parameter (both buttons always display identical patterns/colors). Press the top button to select the next value. Press the side button to select the previous value.

Previous value



Next value



Selected Parameter:	Parameter Value Indication (Top and side Buttons):	Parameter value
 (alarm button is green) Motionless duration	 (2 green flashes every 2 sec)	20 sec
	 (3 green flashes every 2 sec)	30 sec
	 (4 green flashes every 2 sec)	40 sec
	 (5 green flashes every 2 sec)	50 sec
 (alarm button is red) Overheat Alert Temperature	 (1 red flash every 2 sec)	Off
	 (1 green flash every 2 sec)	60°
	 (2 green flashes every 2 sec)	70°
	 (3 green flashes every 2 sec)	80°
	 (4 green flashes every 2 sec)	90°
 (alarm button is orange) Alarm Signal Interval	 (1 red flash every 2 sec)	1 sec
	 (2 red flashes every 2 sec)	2 sec
	 (3 red flashes every 2 sec)	3 sec
	 (solid green)	No pause

5. **To exit programming mode**, remove the battery.

POWER SUPPLY

The flashlight is compatible with any of the power sources listed below. Please note that the positive terminal (plus) of the battery must face towards the flashlight head.

Remove the plastic tubes from the flashlight housing to use the following batteries:

- 26650 Li-ion battery (2 pcs)



Insert the plastic tubes into the flashlight housing to use the following batteries:

- 18650 Li-ion battery (2 pcs)



Insert the plastic tubes and the battery carriers to use the following batteries:

- AAA batteries (6 pcs)
- AAA NiCd or NiMH rechargeable batteries (6 pcs)



CHARGER

The charger is powered from line supply of 100 to 240 V. Empty 5000 mAh batteries can be recharged in about 7 hours. During charging, the indicators flash in a red-yellow-green sequence. The green light of the indicators on the buttons is a signal of completion of charging process.



WARNINGS

- Always follow the instructions from this manual.
- Do not reverse battery polarity.
- Do not simultaneously use different power sources i.e. old ones with new ones, charged with discharged. Do not simultaneously use different types of batteries, as the element with less capacity can be damaged.
- Use only the standard battery charger to charge the battery.
- Do not modify or recast the flashlight and its components as it may deprive you of the warranty.
- Do not allow water or any other liquid to leak into the flashlight.
- Do not aim a switched-on flashlight at people's or animals' eyes – it can cause temporary blindness.
- Do not allow children to use the flashlight without your assistance.

The producer will not be liable for any harm done to the user if it was caused by improper use of the product.

RULES OF TRANSPORTATION AND STORAGE

- Products can be transported by any transportation mode provided that they are protected from mechanical damage and the effects of atmospheric precipitation.
- Packed or loose products should be stored in closed, dry, heated spaces, under conditions that exclude oil-product and corrosive impact, at a distance no less than 1 m away from heating elements.
- Do not store the flashlight for more than 6 months without recharging the batteries. After 6 months of storage, recharge the batteries.

WARRANTY

We provide free warranty for 12 months. The manufacturer guarantees proper operating of the flashlight during warranty period in case of compliance with the rules of storage and operation. The product has a service life of at least 24 months from the date of putting into operation.

Guarantee does not extend to damage during:

1. Improper usage.
2. Attempts to modify or repair the flashlight by nonqualified specialists.
3. Longtime application in chlorinated or polluted water, or other liquids (other than water).
4. High temperatures ($>150^{\circ}\text{C}$) and chemicals' exposure (including the exposure of liquid from defected batteries).
5. Usage of low-quality batteries.

Country of origin: Russian Federation