

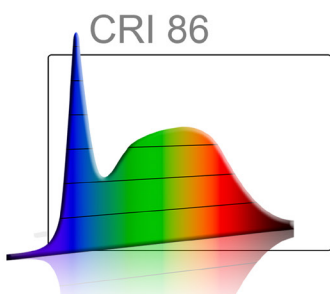
# **KELDAN**

Advanced Lighting Technology

Underwater Video Light

## **VIDEO 24XR 45000lm CRI 86**

Operating Instructions



**READY FOR  
WIRELESS  
REMOTE CONTROL**



**For Professionals Who Know The Difference**

## BEFORE STARTING

- Read operating instructions.
- Keep O-ring clean and grease regularly.
- For storage charge the battery to 30-60%. Storing a fully charged or empty battery is detrimental to the battery's life in the long run.
- Discharge/charge battery at least every 6 months.
- Remove the battery from casing when storing the light.
- Charge the battery before every dive.

## TABLE OF CONTENTS

<b>Instructions .....</b>	<b>3</b>
1. Magnetic Control Ring .....	3
2. Operating Modes .....	3
3. Charge of the battery .....	3
4. Maintenance of battery .....	3
5. Battery protection circuit .....	3
6. Charge level indicator .....	4
7. Use in air.....	4
8. How to open the casing .....	4
9. Maintenance .....	4
10. Transport .....	5
11. Storage.....	5
12. Warranty .....	5
13. Liability .....	5
<b>Safety Instructions .....</b>	<b>5</b>
<b>Spectral Power Distribution .....</b>	<b>6</b>
<b>Beam Angle .....</b>	<b>6</b>
<b>Technical Data .....</b>	<b>7</b>

# INSTRUCTIONS

## 1. MAGNETIC CONTROL RING

Attention, the black ring controls the operating mode of the light with a magnetic field. Do not place your compass close to the black control ring (keep a minimum distance of 10cm or 4”).

## 2. OPERATING MODES

### Normal Mode : LOW .... HIGH

- 9 logarithmic Power Levels

### Remote Control Mode: “R”

- This is the Mode to control the XR light with the RC1 Remote Control

Basic Workflow to connect XR Light(s) to the RC1 Remote Control:

1. Switch the RC1 remote control to PAIR mode.
2. Switch the Video 24XR light to remote mode “R”, now pairing is possible during the next 10 seconds.
3. Turn the brightness knob on the RC1 remote control. (Use the channel you want the light to be paired to).
4. The light confirms a successful pairing with short flashes.



## 3. CHARGE OF THE BATTERY

Only use the supplied Li-Ion charger to charge the battery. For best results, the battery should be charged at room temperature. Avoid charging when batteries are still hot after use. Let them cool down before charging.



**Important:** If battery state of health falls below 75%, always use the included 16.8V to 16.6V Adapter cable when charging.

## 4. MAINTENANCE OF BATTERY

It is not recommended to discharge the battery after each dive. Complete discharge after every use may reduce life time of battery. We recommend the following service procedures:

- For storage remove battery from casing.
- Discharge and recharge the battery at least once every 6 months.
- Avoid deep discharge of the battery pack.
- Store battery with approximately a 30-60% partial charge in a dry and cool place.
- Charge fully before each dive.
- The storage of a fully discharged battery may cause permanent damage to the battery.



## 5. BATTERY PROTECTION CIRCUIT

The integrated protection circuit protects the battery from overload, overcharge and deep discharge.

## 6. CHARGE LEVEL INDICATOR

The charge level monitor circuit shows the available energy by taking into account charge and discharge currents. The three digit numerical display shows the remaining run time in minutes at the actual power setting or the remaining charge time in minutes. The LED bar with the green LED is a relative display

which tells you the actual charge level like a fuel gauge.

## 7. USE IN AIR

The video light can also be used outside water but at low power level only. If the light gets too hot, the over temperature protection will be activated and the power will be reduced automatically to avoid overheating.

## 8. HOW TO OPEN THE CASING

Remove excess water from the outside before opening. Point the light slightly upward while opening to avoid water from entering the housing.

Friction of the O-ring seal (and therefore force needed to open the cap) increases over storage time. After long and deep dives the friction might increase too. To avoid high friction, regularly grease the O-ring.

## 9. MAINTENANCE

After each use rinse well with fresh water. Do not allow water to dry on glass to avoid water marks especially when diving in high mineral content brackish water. Rinse the black magnetic switch ring by rotating 3-5 times to dislodge salt or sand on inner portion.

Care should be taken to avoid scratching of the O-ring seals. Keep seals clean of sand, hair, cloth fibers or similar materials at all times. O-rings of the battery screw cap should be regularly inspected and cleaned. Occasionally apply small amounts of silicone grease for lubrication. If not treated, the O-ring will fail to provide proper sealing causing the light to malfunction.

- Do not use sharp tools to remove the O-ring.
- Never use a battery which appears damaged.
- In case of a damaged lamp, contact your nearest KELDAN® dealer.
- Do not remove front glass cover (high operating voltage).
- O-rings need to be replaced by KELDAN® or an authorized dealer every 5 years.

## 10. TRANSPORT



**IMPORTANT:** The total capacity of the battery pack exceeds the maximum capacity for Li-Ion battery allowed on airplanes! Therefore the battery need to be disassembled for safe transport on airplanes. After disassembling you can carry safely three single batterypacks, each one will be below the maximum capacity limit.

The three batteries of a battery tray should always kept together as a set and should not be mixed with batteries from another battery tray. This will ensure maximum lifetime of the batteries. If batteries show degraded capacity and need to be replaced they should be replaced all three together at once.

## 11. STORAGE

Store the battery tray outside of the housing of the light in a cool and dry place. Maintain battery pack according to our

recommendations.

## 12. WARRANTY

The light carries a two-year warranty after purchase (proof of purchase date required). The warranty is limited to material defects which occur when correctly handling the product. The warranty does not cover the battery.

KELDAN® warranty coverage is void for defects as a result of improper use.


## 13. LIABILITY

KELDAN® declines all responsibility for damages arising from any improper use of the VIDEO 24XR 45000lm CRI 86 light or as incurred by a third person.

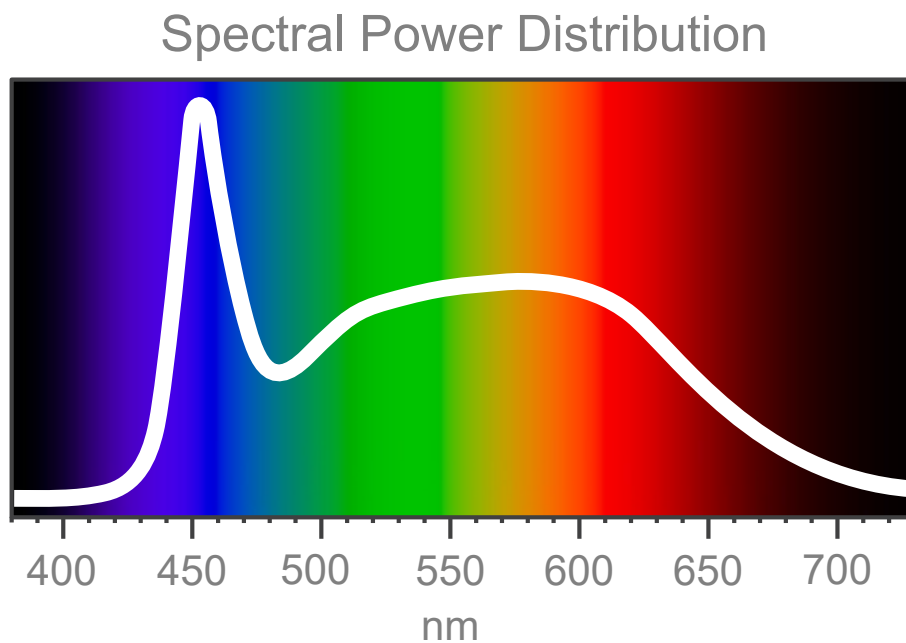
# SAFETY INSTRUCTIONS

**The VIDEO 24XR 45000lm CRI 86 light produces an extremely powerful and intense light.**

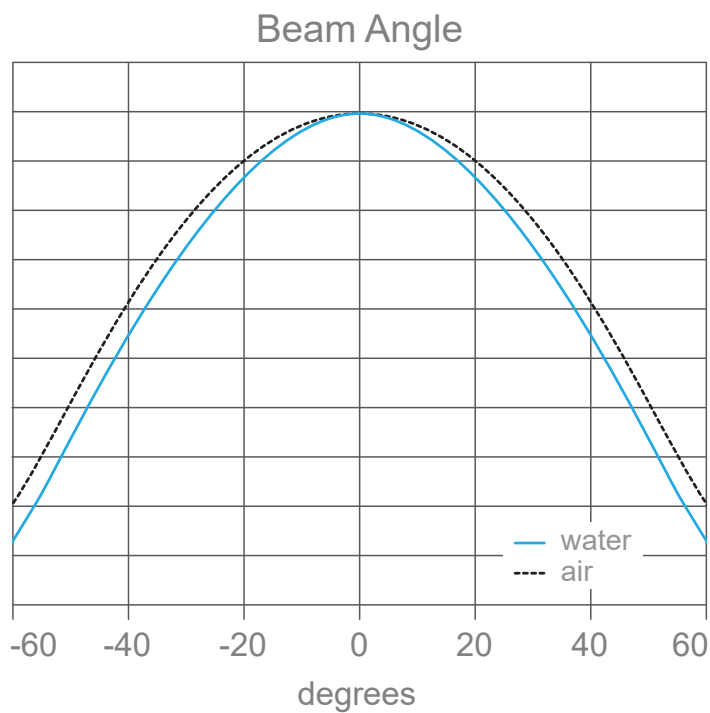
- Never point directly at a person at close distance.
- Never stare directly into the light.

RISK GROUP 2	
	CAUTION. Possibly hazardous optical radiation emitted from this product. Do not stare at operating lamp. May be harmful to the eye.

## SPECTRAL POWER DISTRIBUTION



## BEAM ANGLE



## TECHNICAL DATA

Article #	1737
Battery (Li-Ion)	14,4V / 297Wh (3x99Wh)
Charging time	3-4 hours
Diameter / Length	11,5 / 42 cm
Weight (in water)	2,9 (0,65) kg
Maximum depth	200 m
Color temperature	5600 K
Color rendering index	86 CRI (Ra)
Beam angle in water at 50% intensity	85°
Beam angle in water at 25% intensity	110°

## POWER SETTINGS

Luminus Flux	Candle Power	Burn Time	Electrical Power
45'000 lumen	22'000 candela	40 min	360 watts
26'000 lumen	13'000 candela	75 min	210 watts
15'000 lumen	7500 candela	140 min	110 watts
8600 lumen	4400 candela	250 min	70 watts
5000 lumen	2400 candela	400 min	40 watts
2900 lumen	1500 candela	600 min	30 watts
1700 lumen	900 candela	900 min	20 watts
1000 lumen	500 candela	1200 min	15 watts
550 lumen	250 candela	1600 min	11 watts



# KELDAN<sup>+</sup>

Advanced Lighting Technology

KELDAN GmbH  
Industriestrasse 37a  
2555 Brügg  
Switzerland

Tel: ++41 32 333 16 28

[www.keldanlights.com](http://www.keldanlights.com)  
[contactus@keldanlights.com](mailto:contactus@keldanlights.com)



KELDAN® is a registered trademark of KELDAN GmbH.

Subject to change without notice, February 2023.

Expedition Combessa IV by Laurent Ballesta:  
Rig for bullet time effect shooting with 32 GoPro cameras.

