

EXPOSURE

LIGHTS MAX²

www.exposurelights.com



YOU NOW
OWN
THE NIGHT

2009 Owner's Manual

Features

- CFD Cable Free Design
- Super LED light source
- Memory free Li-ion batteries
- Hardwired batteries
- Smart Port Technology
- "Smart" recharging
- "PiggyBack" plug in battery option
- Remote switch available
- RedEye rear light available
- RedEye Micro light available
- One size fits all QR bracket
- Fuel gauge battery life indicator
- Light mode indicator
- Long burn times
- Reserve fuel tank
- Collimated lenses
- Dual beam optics (DBO)
- Lightweight
- Forged alloy quick release bracket
- Thermal protection circuit
- Fully weatherproof
- CNC machined aluminium bodywork
- Anodised finish
- Laser graphics & rider info
- Soft-shell packaging
- British designed & made
- 2 year standard warranty
- Versatile & multisport



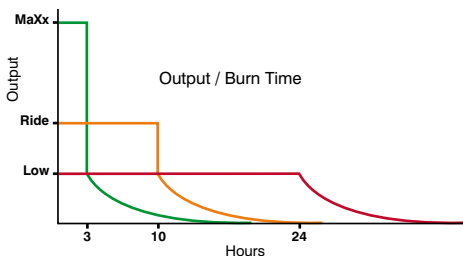
CFD
Cable Free Design

SPT
SMART
PORT
TECHNOLOGY

EXPOSURE LIGHTS SPECIFICATION

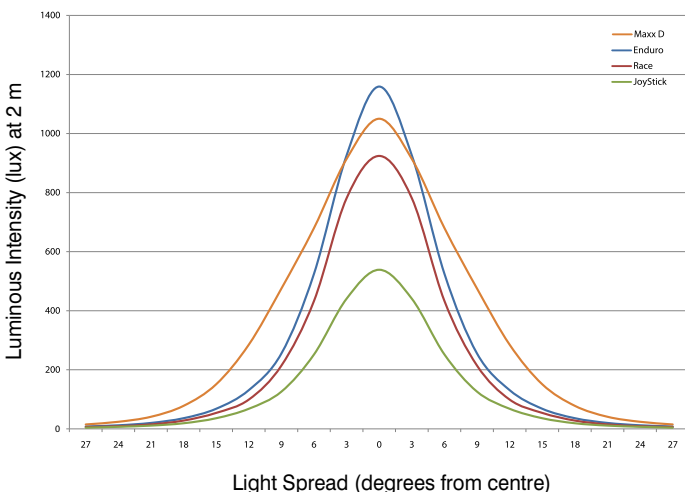
	LED's	LED Output	Battery mAh	Mode - Hours	Flash	Weight grms
				MaXx Ride Low		
Joystick	1	240	2350	3 10 24	Days!	76
Race	2	480	4700	3 10 24	Days!	190
Enduro	3	720	7050	3 10 24	Days!	230
MaXx-D	4	960	9400	3 10 24	Days!	298

Recommended Operating Temperature Range: -15C / + 40C



Exposure Lights use collimated design Lens technology with Dual Beam Optics. These high-tech resin lenses are specifically designed to optimise light collection from each LED. Dual Beam Optics means you get a great delivery of light from each Lens that includes “flood” and “spot” beam

More LEDs = more power and same great beam pattern for the Joystick, Race and Enduro. The new MaXx-D light has a totally new multi-DBO lens which delivers not only more raw light but also a wider volume of light too. The effect is incredible and superb for all types of activity in the dark. Test ride lights at your nearest stockist to see for yourself.



Please read all instructions before using your EXPOSURE LIGHT

EXPOSURE LIGHTS - the lightest high output production sports lights. Designed for high performance applications, EXPOSURE LIGHTS combine the latest LED technology with a powerful Lithium Ion battery. Before using, please familiarise yourself with this manual, so that you understand how to operate and care for your EXPOSURE LIGHT.

Warning

EXPOSURE LIGHTS are a very powerful lighting system. Always use care when operating. Do not look directly into the light. This may cause serious injury. Do not shine directly at others.

EXPOSURE LIGHTS/USE accepts no liability for any injuries or other damages arising from the use of this product.

Important Information

EXPOSURE LIGHTS are very weatherproof (under normal conditions). DO NOT SUBMERGE UNDER WATER. If water does get into the unit do not use, and contact the place of purchase.

Do not attempt to disassemble the light unit. This will invalidate your warranty.

Do not attempt to use any other chargers or batteries with the unit. This will cause damage and may be dangerous.

Long periods of non-use will lower the voltage of the battery. Please follow the charging instructions and top-up the charge monthly when not in use.

Warranty

Please register your EXPOSURE LIGHTS to activate this additional warranty. Fill in the form at the back of this manual or register online at www.exposurelights.com. IMPORTANT: keep your proof of purchase.

EXPOSURE LIGHTS will give a 2-year warranty to the original owner for the light unit & charger. This warranty covers material or workmanship defects. Accidental damage and neglect are not covered by warranty. Modifications or improper use also void the warranty.

The EXPOSURE LED's are covered by our lifetime warranty, in accordance with proper use.

Registered warranties are only valid from date of purchase, and to the original owner (proof of purchase may be required).

Register your EXPOSURE LIGHT at www.exposurelights.com or fill in the form at the back of this manual and mail to USE Ltd.

Box Contents

Please ensure that the following contents are included with your purchase. If any of the items are missing please contact your place of purchase.

RACE MaXx², ENDURO MaXx² & MaXx-D



JOYSTICK MaXx² – with helmet bracket



JOYSTICK MaXx² – quick release handlebar bracket

For 2009 models the Joystick is supplied with either the Helmet Bracket or the Quick Release handlebar bracket and QR Clip. Additional brackets are available from your place of purchase as accessories.



How to Mount the EXPOSURE Race & Enduro MaXx² models to the bar

- Mounting to a 31.8mm bar - Peel off backing of the rubber protection strips and attach the pads to the inside of the clamp. Attach the bracket to the bar. Tighten the clamp with a 4mm hex key. (Maximum 2.5Nm) **DO NOT OVER TIGHTEN!**
- Mounting to a 25.4 or 26mm bar - Clip the bracket spacer over your bar, attach the bracket over the spacer and tighten the clamp with a 4mm hex key. (Maximum 6Nm) **DO NOT OVER TIGHTEN!**



- Attach the cleat to the light unit using the provided bolt.



- Locate the cleat into the V section of the bracket - the sprung loaded pin will depress as it is pushed into place.



- To adjust the angle of the light beam release the cleat bolt. A hole in the bracket enables access to the bolt head. Use a 4mm hex key to adjust the light and tighten the bolt securely (Maximum 2.5Nm)



- To release the light from the bracket push away and down on the red button and gently pull back the light with your hand. This is a simple one-hand operation.

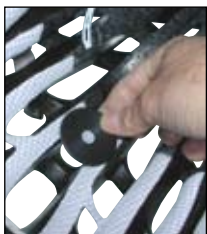
- Warning - Make sure that brake and gear cables cannot catch on or interfere with the light or the bracket or release button.
- Warning: Racers beware - check number boards do not interfere with bracket button.

How to Mount the EXPOSURE Joystick MaXx².

Helmet mounted

The highly acclaimed Joystick helmet bracket works as a ball joint. Follow these instructions for set up and position the light for riding. The clamp is made up of three parts: Lower clamp disc, upper clamp with ball joint socket and a nylon clamp bolt.

- Put the shorter plastic bolt through the lower clamp disc and align with a selected vent on the inside of your helmet.



- Place the upper clamp through the top of the vent to meet the bolt.
- Tighten the bolt. Take care not to damage your helmet.

Use the shorter bolt first and if not long enough then go to the longer bolt. Do not use the long bolt on thinner section helmets, as this will stop the ball joint working or possibly pop it out.

- Clip the Joystick body into the top part of the clamp
- The Joystick can be adjusted by rotating the ball joint when holding the light and is easy to do when you are riding to get the best position.

If you are worried about losing your Joystick in a crash or when riding under low objects then we suggest you attach a lanyard through the holes provided at the back of the light unit and loop the lanyard through a vent in your helmet or round the handlebar if using it there.

Handlebar mounted

The new Joystick QR Clip now allows you to mount your Joystick to the same Quick Release bracket as used by the rest of the light range.



Simply press the Joystick into the QR clip with the point of the clip towards the front of the light



Now engage the clip and light into the QR bracket as previously shown for other models.

EXPOSURE LIGHTS/USE accepts no liability for any injuries or other damages to person or equipment arising from the use of the clamps.

LIGHT OPERATION

Function Button

Located on the back of the light unit is the function button. This operates the light unit and informs you of the mode setting and the battery power status.



When the light is on and function button is pressed, the colour of the button for the first two seconds informs you which mode has been selected. Thereafter the colour of the button is your fuel gauge.

Mode Function

- To turn on the light, double click the button; the light is now operating in the brightest MaXx mode.
- To switch between the constant settings, press the button once.
- To activate the flashing mode, press and hold the button for 1 flash (approx 1 second) and release. The flashing mode can be activated from any of the constant modes. To return to the MaXx mode, press the button once.
- To turn off the light, press and hold the button down. After 2 flashes (approx 2 seconds) the light will turn off. The function button will rapid flash red as the circuit board shuts down.

The colour of the function button will show which light mode you are in for the first two seconds after the button is pressed.

Green (MaXx) – Amber (Ride) – Red (Low).



Fuel Gauge Function

After two seconds the function button becomes the fuel gauge. The colour of the button now indicates the approximate percentage of battery power left.

Button	Battery
Green	100% - 50%
Amber	50% - 25%
Red	25% - 5%
Red Flash	5% - Empty

When the battery has only 5% charge remaining in whichever mode, the light will automatically switch to the low setting. Modes available are restricted to Ride and Low. The function button will flash red. Light output will slowly dim over 3 hours and this is the extended burn time on reserve power.

SMART CHARGING MaXx² LIGHT

Before riding with your Exposure MaXx2 light please charge it fully. Follow the recharging instructions below.

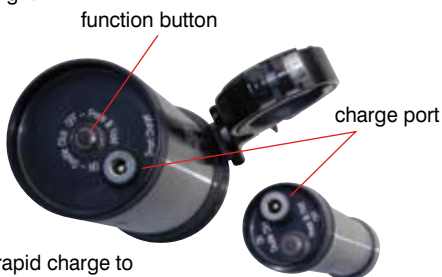
Use only genuine Exposure Lights chargers. International socket chargers are available, also in-car charger.

EXPOSURE LIGHTS use the highest quality Lithium Ion batteries, which have no charge memory. This allows them to be recharged at any point during the discharge cycle. Burn times will not be affected by multiple re-charging.

RE-CHARGING INSTRUCTIONS

- Ensure the light unit is turned off.
- Plug the MaXx Smart Charger into the wall socket and switch on the wall socket. The LED on the charger will show green (operational).
- Insert the charger connection plug into the charge port, located on the back of the light. The charger LED will show red when the light unit is charging.

The function button on the light will continuously flash green to inform you that the charger is connected and functioning.



From empty the light unit will rapid charge to approximately 90% capacity - at this point the LED on the charger will go from red to green.

To 100% charge the light leave the charger plugged in and turned on for a further 1 to 4 hours depending on the model (see below). You can leave the light on charge for longer if you like and it will not be a problem. Just like your mobile phone.

	Charge Capacity	
	Rapid (red)	Trickle (green)
	90%	Final 10%
Joystick	3 Hrs	1 Hrs
Race	6 Hrs	2 Hrs
Enduro	9 Hrs	3 Hrs
MaXx-D	12 Hrs	4 Hrs

Long periods of non-use will lower the voltage of the battery. If the unit is being stored for long periods, please ensure the battery is periodically charged. We suggest once per month.

All the Exposure MaXx models use the same Smart chargers.

PIGGYBACK BATTERY

An outstanding feature of the MaXx range is the ability to extend burn times with Piggyback batteries.

Piggyback batteries are available as single or triple cells and are supplied with velcro attachment strap and fitting block. They can be mounted under the stem, to the helmet, on the light unit itself (walking) or carried in your pocket or backpack.



Piggyback batteries give you peace of mind for safety and security by extending your burn times.

If plugged in when the light unit is fully charged, all the light modes are available. If the internal battery is below 50% charge then only Ride and Low settings will be available. The Piggyback battery works by recharging the light as you use it.

When the Piggyback battery is plugged in the fuel gauge will not be operative; the function button will only flash green as when charging.

BURN TIMES (hours approx) WITH PIGGYBACK BATTERY

	Mode	CFD	1 Cell	3 Cell
Joystick	MaXx	3	6	12
	Ride	10	20	40
	Low	24	48	96
Race	MaXx	3	4.5	7.5
	Ride	10	15	25
	Low	24	36	60
Enduro	MaXx	3	4	6
	Ride	10	13.3	20
	Low	24	32	48
MaXx-D	MaXx	3	3.75	5.25
	Ride	10	12.5	17.5
	Low	24	30	42

Remote Recharging

When the light is switched off and the Piggyback battery is plugged in it will pass charge into the light unit. The cells will average out the available power between the light unit and the Piggyback battery.



REMOTE SWITCH

New for 2009 Exposure lights come with Smart Port Technology. This is the option to run various accessories from the Power Port such as the Remote Switch.

Available to purchase as an accessory, the remote switch simply plugs into the power port on the back of the light unit. Using the Velcro strap supplied, attach the Switch to your handlebar near the grip or where you want it. You can now turn the light on/off and switch between modes as normal, without having to touch the light itself. The Function and Fuel Gauge indicators on the button remain operative when using the Remote Switch.

Use the Remote Switch for easier switching in the dark, especially when wearing winter gloves, taking advantage of the larger button on the Remote Switch.

Dip your lights. Just as cars dip their headlights for oncoming traffic and cyclists, we recommend that Exposure Light users respect others in the same way. On the road or on the bike path our lights are so bright in MaXx mode that it is recommended to “dip” down to Low light mode when someone is coming towards you. With the Remote Switch this can be easily and quickly done with two clicks of the button. One more click and you are back up to MaXx mode. Be seen but also respect others and be safe in the dark.

Warning: Do not plug in the Remote Switch when with the Power Port active as the light will not function. You will need to switch off, switch on and then plug in the Remote Switch.





REDEYE REAR LIGHT

New for 2009 Exposure lights come with Smart Port Technology. There is the option to run various accessories from the Power Port such as the RedEye rear light or the RedEye Micro light. These are available to purchase from your Exposure dealer.

If you are a cyclist using the Exposure Light you will be aware of how important it is to be seen from behind as well as from the front to remain safe from other road users. A feature of Smart Port Technology is to activate the Charge Port to become a Power Port and to power the new RedEye rear lights.

To activate Power Port: When the light unit is off, press and hold the function button for 5 seconds. The main LEDs will rapid flash to indicate you have now powered up the port.

You can not operate the RedEye without turning on the main light unit as well. Turn on the light unit in the normal way with double click. Again a rapid flash shows as the light turns on. This indicates you now have the light on with the Power Port activated.

Now plug in RedEye or RedEye Micro and you will get a bright, constant output of red light from the accessory.

With Power Port activated you can use all the front LED light modes as normal. When you turn off the light unit it will reset itself and you will need to repeat the switch-on procedure to activate the Power Port again. You cannot run two Smart Port Technology accessories at the same time. You choose either Charge the Light, or Piggyback Battery, or Remote Switch or RedEye lights.



RedEye rear light: Encased in a tough CNC machined aluminium body and fully waterproof, the RedEye is possibly the brightest rear light on the market. It uses the same 240Lumen P4 LED as the Joystick MaXx-2 but in red. Because it's so bright it is designed to run at approximately one third of MaXx setting. Burn times will be slightly reduced on your front light when running the RedEye. See web for details.

The RedEye is Velcro attached to helmets, seat posts or racks where you like and is provided with power cable to reach from post to handlebars. Excess cable is wound round the light body.

Be clearly seen from the rear both Day and Night. RedEye comes highly recommended to road cyclists even in daylight hours. It is so bright you can easily be seen with this accessory.

REDEYE MICRO

RedEye Micro: Designed as a affordable plug-in rear light for the Joystick the Micro is a must have accessory for all Joystick MaXx2 owners. Activate the Power Port as described on page 12 and plug in the RedEye Micro directly. The LED is angled so rotate to angle down to allow for helmet position when riding. There is minimal drain on burn time for main light when using RedEye Micro.



SPARES AND ACCESSORIES

See your dealer for additional accessories to enhance your night time experience.

EXPRS	REMOTE SWITCH with cable
EXPRE	REDEYE rear light with cable
EXPREMIC	REDEYE MICRO red rear plug-in LED
EXPQRBK	QR Handlebar bracket 25.4-31.8mm
EXPMHMJ	HELMET-MOUNT for JOYSTICK MaXx
EXPMHBJQRCLIP	HANDLEBAR QR CLIP JOYSTICK MaXx
EXPMHBJQRSET	HANDLEBAR QR SET for JOYSTICK MaXx
EXPMAXXHEAD	HEADBAND for JOYSTICK MaXx
EXPPB1	PIGGY BACK BATTERY - Single Cell
EXPPB3	PIGGY BACK BATTERY - Triple Cell
EXP/CHARGER/CAR	MaXx IN-CAR SMART CHARGER
EXP/CHARGER/UK	MaXx SMART CHARGER UK3pin
EXP/CHARGER/EURO	MaXx SMART CHARGER EURO2pin
EXP/CHARGER/US	MaXx SMART CHARGER US2pin
EXP/CHARGER/ASIA	MaXx SMART CHARGER ASIA2pin

In-Car Charger



QR Bracket with clip



Piggy Back Batteries



EU Charger



MAINTENANCE

Inspect and test your EXPOSURE light before every outing.

Keep your EXPOSURE light clean, and the lenses free of debris. The collimated lenses are made of hi-tec plastic but can be scratched. Be careful when cleaning any mud or dirt from the lens. Never use a high pressure spray or hose on your EXPOSURE light. Do not use harsh abrasive or corrosive materials to clean your EXPOSURE light.

Follow all charging instructions. If the unit is being stored for long periods, please ensure the battery is periodically charged fully. We suggest once every month. The same applies to Piggyback batteries.

THERMAL PROTECTION CIRCUIT

EXPOSURE LIGHTS are equipped with a thermal protection circuit. If the unit detects that it is getting too warm, it will dip to next lowest setting and then back to your chosen setting when temperature is correct. This is to protect the circuitry inside the unit, as well as the LED's. It is not normal for this to ever happen at night when air temperature is low. It may happen if running the light unit on MaXx inside a warm room.

We design them. We make them. We are here to help.

If you are experiencing any problems with your Exposure Light or accessories please contact us directly at:

Tel: Exposure/USE +44 (0)1798 344477

e-mail: info@exposurelights.com

Alternatively contact your Exposure Dealer/Distributor - check web for details www.exposurelights.com

Troubleshooting

Problems	Possible Cause	Remedy
LEDS do not light up / unit does not appear to turn on	Over discharged battery	Follow charging procedure
Battery not charging	Power socket not on	Check charger connections
Short burn times	New battery	Discharge & recharge light 3 times
	Heavily used battery	Contact Exposure Lights/USE
	Extremely cold temp.	Keep battery/light warm

EXPOSURE WARRANTY

Quick and simple - register your EXPOSURE LIGHTS at
www.exposurelights.com

If this is not possible please fill in the form below and return it to
Exposure Lights at USE.

Name: _____

E Mail: _____

Address: _____

City/Town: _____

County / State: _____

Country: _____

Post / Zip Code _____

Model Purchased:

MaXx-D Enduro MaXx² Race MaXx² Joystick MaXx²

Serial Number: _____

Date of Purchase: ____ / ____ / ____

Dealer _____

Contact Details

EXPOSURE LIGHTS

ULTIMATE SPORTS ENGINEERING

Units 6 & 7 Hampers Common Ind. Est.

Petworth, West Sussex, GU28 9NR, UK

info@exposurelights.com

www.exposurelights.com

Exposure Lights are
designed
and made by:



use1.com

Ultimate Sports Engineering Limited
Petworth, West Sussex GU28 9NR England UK
Tel: +44(0) 1798 344477 Fax: +44(0) 1798 344499
info@exposurelights.com or info@use1.co.uk

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