

# LED OR-LIGHTS LED EXAMINATION LIGHTS

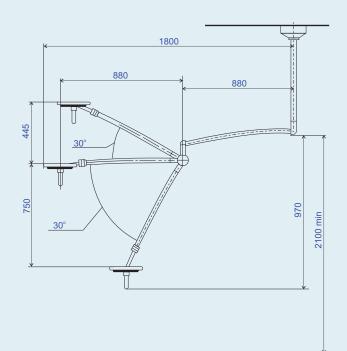


## **EXAMINATION LIGHT EMALED® 200D**



The ceiling mounted examination light EMALED 200D enables a perfect illumination during medical interventions. The vertically adjustable and horizontal rotatable spring arm allows to adjust the light head in desired position.

Illumination (at 1 m)	50.000 lx
Lighting intensity	30 - 100 %
Diameter of lightning field D10	140 mm
Operating distance	70 – 140 cm
Colour temperature	4.500 K
Colour rendering index	95 Ra
Life expectancy of LEDs	50.000 hrs
Diameter of light head	240 mm
Number of LEDs	7
Main voltage	230 V
Frequency	50 – 60 Hz
Power consumption	10 VA
Weight of lighting element	1,0 kg
Weight of complete system	12 kg





- Natural colour rendering
- Barely noticeable heating of the light head
- No moveable parts in the light head
- Low maintenance requirements
- Adjustable illumination in three steps
- Powder coated aluminum case
- Two autoclavable handles are included (additional handles can be ordered any time)



## EXAMINATION LIGHT EMALED® 200F AND EMALED® 200M



The mobile examination light EMALED 200M with a battery back-up can be used without power connection up to 24 hours. The high illumination and excellent lightning quality makes this mobile surgical light a good allrounder in multiple fields. The examination light EMALED 200F is the mobile version of the 200 series. Its mobility allows to use this light in several rooms.



### **TECHNICAL DETAILS**

	EMALED 200F	EMALED 200M
Illumination (at 1 m)	50.000 lx	50.000 lx
Lighting intensity	30 - 100 %	30 - 100 %
Diameter of lightning field D10	140 mm	140 mm
Operating distance	70 – 140 cm	70 – 140 cm
Colour temperature	4.500 K	4.500 K
Colour rendering index	95 Ra	95 Ra
Life expectancy of LEDs	50.000 hrs	50.000 hrs
Diameter of light head	240 mm	240 mm
Number of LEDs	7	7
Main voltage	230 V	230 V
Frequency	50 – 60 Hz	50 – 60 Hz
Power consumption	10 VA	10 VA
Weight of lighting element	1,0 kg	1,0 kg
Weight of complete system	20 kg	37 kg



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Barely noticeable heating of the light head

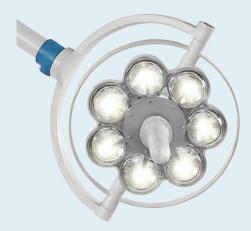
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- No moveable parts in the light head
- Low maintenance requirements
- Adjustable illumination in three steps
- Powder coated aluminum case
- Two autoclavable handles are included (additional handles can be ordered any time)

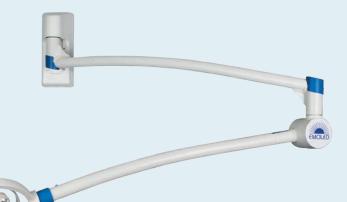
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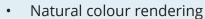
## **EXAMINATION LIGHT EMALED® 200W**



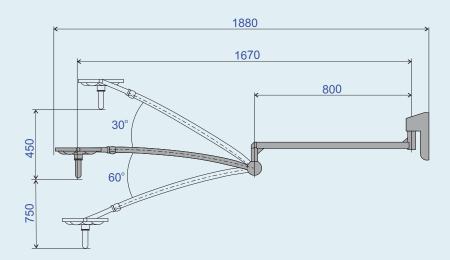
The examination light EMALED 200W is the wall mounted version of the 200 series. It features high mobility and good positioning of the light head during medical interventions and can be used for various purposes.



Illumination (at 1 m)	50.000 lx
Lighting intensity	30 - 100 %
Diameter of lightning field D10	140 mm
Operating distance	70 – 140 cm
Colour temperature	4.500 K
Colour rendering index	95 Ra
Life expectancy of LEDs	50.000 hrs
Diameter of light head	240 mm
Number of LEDs	7
Main voltage	230 V
Frequency	50 – 60 Hz
Power consumption	10 VA
Weight of lighting element	1,0 kg
Weight of complete system	10 kg



- Barely noticeable heating of the light head
- No moveable parts in the light head
- Low maintenance requirements
- Adjustable illumination in three steps
- Powder coated aluminum case
  - Two autoclavable handles are included (additional handles can be ordered any time)

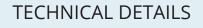




## SURGICAL LIGHT EMALED® 300D OR EMALED® 300D+



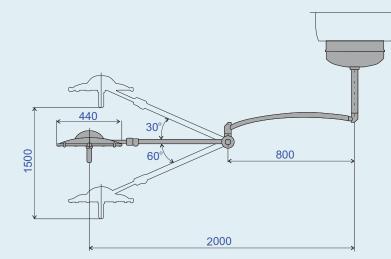
The surgical light EMALED 300D or EMALED 300D+ grants a high light quality and optimal illumination for diagnostical examinations and surgical interventions. The 4-step focusing via the control panel with LCD display enables to adapt the light field as needed.



	EMALED 300D	EMALED 300D+
Illumination (at 1 m)	100.000 lx	up to 140.000 lx
Lighting intensity	10 - 100 %	10 - 100 %
Focusable diameter of lightning field D10	150 - 300 mm	150 - 300 mm
Operating distance	70 – 140 cm	70 – 140 cm
Colour temperature	4.500 K	4.500 K
Colour rendering index	95 Ra	95 Ra
Life expectancy of LEDs	50.000 hrs	50.000 hrs
Diameter of light head	440 mm	440 mm
Number of LEDs	42	42
Main voltage	230 V	230 V
Frequency	50 – 60 Hz	50 – 60 Hz
Power consumption	24 VA	24 VA
Height adjustment	1.500 mm	1.500 mm
Weight of lighting element	4,0 kg	4,0 kg
Weight of complete system	ca. 30 kg	ca. 30 kg







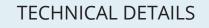
- Natural colour rendering
- Barely noticeable heating of the light head
- No moveable parts in the light head
- Low maintenance requirements
- Adjustable illumination in 10 steps
- Powder coated aluminum case
- High flexibility: 360° rotation horizontal
- Two autoclavable handles are included (additional handles can be ordered any time)
- 4-step focusing via the control panel with LCD display
- Optionally: cardanic system



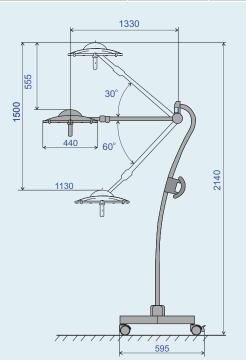
## SURGICAL LIGHT EMALED® 300F OR EMALED® 300F+



This mobile surgical light EMALED 300F or EMA-LED 300F+ has a great flexibility and can be used in multiple examination and operating rooms. The high illumination and wide focusable light field makes it possible to perform examinations as well as small surgical interventions.



	EMALED 300F	EMALED 300F+
Illumination (at 1 m)	100.000 lx	up to 140.000 lx
Lighting intensity	10 - 100 %	10 - 100 %
focusable diameter of lightning field D10	150 - 300 mm	150 - 300 mm
Operating distance	70 – 140 cm	70 – 140 cm
Colour temperature	4.500 K	4.500 K
Colour rendering index	95 Ra	95 Ra
Life expectancy of LEDs	50.000 hrs	50.000 hrs
Diameter of light head	440 mm	440 mm
Number of LEDs	42	42
Main voltage	230 V	230 V
Frequency	50 – 60 Hz	50 – 60 Hz
Power consumption	24 VA	24 VA
weight of lighting element	4,0 kg	4,0 kg
weight of complete system	30 kg	30 kg

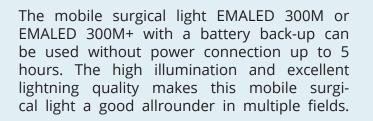


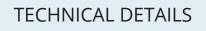


- Natural colour rendering
- Barely noticeable heating of the light head
- No moveable parts in the light head
- Low maintenance requirements
- Adjustable illumination in 10 steps
- Powder coated aluminum case
- Two autoclavable handles are included (additional handles can be ordered any time)
- 4-step focusing via the control panel with LCD display
- Optionally: cardanic system

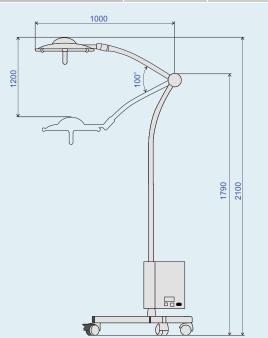


## SURGICAL LIGHT EMALED® 300M OR EMALED® 300M+





	EMALED 300M	EMALED 300M+
Illumination (at 1 m)	100.000 lx	up to 140.000 lx
Lighting intensity	10 - 100 %	10 - 100 %
Focusable diameter of lightning field D10	150 - 300 mm	150 - 300 mm
Operating distance	70 – 140 cm	70 – 140 cm
Colour temperature	4.500 K	4.500 K
Colour rendering index	95 Ra	95 Ra
Life expectancy of LED's	50.000 hrs	50.000 hrs
Diameter of light head	440 mm	440 mm
Number of LEDs	42	42
Main voltage	230 V	230 V
Frequency	50 – 60 Hz	50 – 60 Hz
Power consumption	24 VA	24 VA
Weight of lighting element	4,0 kg	4,0 kg
Weight of complete system	45 kg	45 kg





- Natural colour rendering
- Barely noticeable heating of the ligth head
- Integrated battery back-up for 5 hour network indepenent use
- No moveable parts in the light head
- Low maintenance requirements
- Adjustable illumination in 10 steps
- Powder coated aluminum case
- Two autoclavable handles are included (additional handles can be ordered any time)
- 4-step focusing via the control panel with LCD display
- Optionally: cardanic system



## SURGICAL LIGHT EMALED® 300W OR EMALED® 300W+

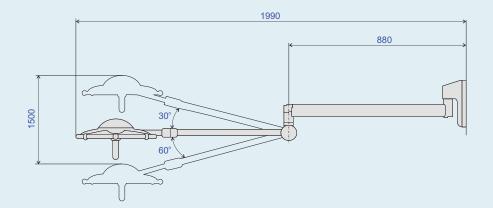


The multifunctional wall mounted surgical light EMALED 300W or EMALED 300W+ grants a great flexibility, smooth movement and is a great help in examination rooms as well as in operating rooms.



	EMALED 300W	EMALED 300W+
Illumination (at 1 m)	100.000 lx	up to 140.000 lx
Lighting intensity	10 - 100 %	10 - 100 %
Focusable diameter of lightning field D10	150 - 300 mm	150 - 300 mm
Operating distance	70 – 140 cm	70 – 140 cm
Colour temperature	4.500 K	4.500 K
Colour rendering index	95 Ra	95 Ra
Life expectancy of LED's	50.000 hrs	50.000 hrs
Diameter of light head	440 mm	440 mm
Number of LEDs	42	42
Main voltage	230 V	230 V
Frequency	50 – 60 Hz	50 – 60 Hz
Power consumption	24 VA	24 VA
Weight of lighting element	4,0 kg	4,0 kg
Weight of complete system	12 kg	12 kg

- Natural colour rendering
- Barely noticeable heating of the light head
- No moveable parts in the light head
- Low maintenance requirements
- Adjustable illumination in 10 steps
- Powder coated aluminum case
- Two autoclavable handles are included (additional handles can be ordered any time)
- 4-step focusing via the control panel with LCD display
- Optionally: cardanic system







## SURGICAL LIGHT EMALED® 500



This light head EMALED 500 with a light head diameter of 650 mm and its flat and unique design, is compatible with laminar flow ceilings. This surgical light grants best light quality, a large light field and is therefore suitable also for big surgical interventions.

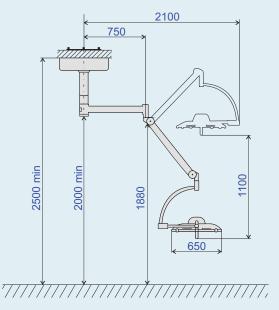


- Natural colour rendering grants a great light quality
- Barely noticeable heating of the light head
- No movable parts in the light head
- Low maintenance requirements
- Adjustable illumination in 10 steps
- Powder coated aluminium case
- Two autoclavable handles are included (additional handles can be ordered any time)
- High flexibility: 360° rotation horizontal
- 4-step focusing via the control panel with LCD display
- Endoscopic mode
- Macro mode

#### Optional available:

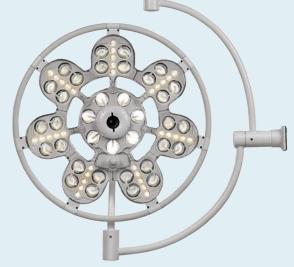
- Remote control (also for double dome lights)
- Emergency power back-up (for up to 4hrs network independent use)
- Full HD camera
- Laser pointer
- Variable colour temperature: 3500, 4000, 4500 K

Illumination (at 1 m)	120.000 lx
Lighting intensity	10 - 100 %
Focusable diameter of lightning field D10	185 - 350 mm
Operating distance	70 – 140 cm
Colour temperature	4.500 K
Colour rendering index	95 Ra
Life expectancy of LED's	50.000 hrs
Diameter of light head	650 mm
Number of LEDs	70
Main voltage	100 – 240 V / 24 V
Frequency	50 – 60 Hz
Power consumption	60 VA
Weight of lighting element	9,5 kg
Weight of complete system	80 kg





# SURGICAL LIGHT EMALED® 560

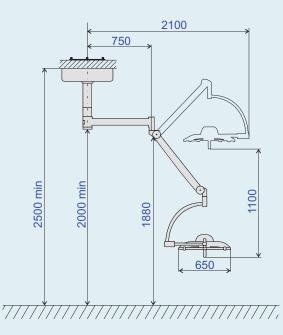


This light head EMALED 560 is optically identical with the EMALED 500 light head, but grants the highest possible illumination (160.000lx) and can therefore satisfy even the highest requirements.



### TECHNICAL DETAILS

Illumination (at 1 m)	160.000 lx
Lighting intensity	10 - 100 %
Focusable diameter of lightning field D10	185 - 350 mm
Operating distance	70 – 140 cm
Colour temperature	4.500 K
Colour rendering index	95 Ra
Life expectancy of LED's	50.000 hrs
Diameter of light head	650 mm
Number of LEDs	70
Main voltage	100 – 240 V / 24 V
Frequency	50 – 60 Hz
Power consumption	60 VA
Weight of lighting element	9,5 kg
Weight of complete system	80 kg



- Natural colour rendering grants a great light quality
- Barely noticeable heating of the light head
- No movable parts in the light head
- Low maintenance requirements
- Adjustable illumination in 10 steps
- Powder coated aluminium case
- Two autoclavable handles are included (additional handles can be ordered any time)
- High flexibility: 360° rotation horizontal
- 4-step focusing via the control panel with LCD display
- Endoscopic mode
- Macro mode

#### Optional available:

- Remote control (also for double dome lights)
- Emergency power back-up (for up to 4hrs network independent use)
- Full HD camera
- Laser pointer
- Variable colour temperature: 3500, 4000, 4500 K



## SURGICAL LIGHT EMALED® 560/300 or EMALED® 500/300

Two moveable and vertically adjustable spring arms make it possible to site the light heads in every desired position. The cardanic system (at both light heads) grants an even higher flexibility.



- Natural colour rendering grants a great light quality
- Barely noticeable heating of the light head
- No movable parts in the light head
- Low maintenance requirements
- Adjustable illumination in 10 steps
- Powder coated aluminium case
- Two autoclavable handles are included (additional handles can be ordered any time)
- High flexibility: 360° rotation horizontal
- 4-step focusing via the control panel with LCD display
- Endoscopic mode
- Macro mode

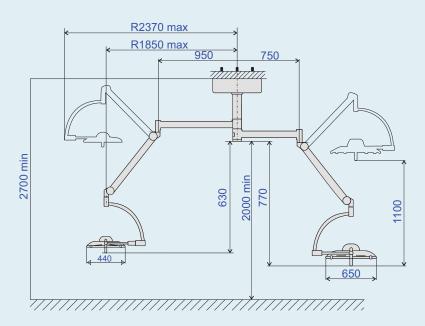
Optional available:

- Remote control (also for double dome lights)
- Emergency power back-up (for up to 4hrs network independent use)
- Full HD camera
- Laser pointer
- Variable colour temperature: 3500, 4000, 4500 K

## TECHNICAL DETAILS

	EMALED 560	EMALED 500	EMALED 300
Illumination (at 1 m)	160.000 lx	120.000 lx	100.000 lx
Lighting intensity	10 – 100 %	10 – 100 %	10 – 100 %
Focusable diameter of lightning field D10	185 - 350 mm	185 - 350 mm	150 - 300 mm
Operating distance	70 – 140 cm	70 – 140 cm	70 – 140 cm
Colour temperature	4.500 K	4.500 K	4.500 K
Colour rendering index	95 Ra	95 Ra	95 Ra
Life expectancy of LED's	50.000 hrs	50.000 hrs	50.000 hrs
Diameter of light head	650 mm	650 mm	440 mm
Number of LEDs	70	70	42
Main voltage	100 – 240 V	100 – 240 V	
Frequency	47 - 63 Hz	47 - 63 Hz	47 – 63 Hz
Power consumption	60 VA	60 VA	24 VA
Weight of lighting element	9,5 kg	9,5 kg	4,0 kg
Weight of complete system	100 kg	100 kg	

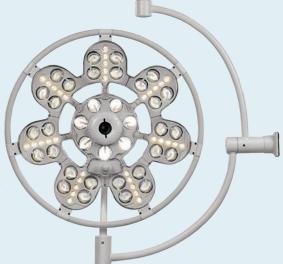
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## SURGICAL LIGHT EMALED® 560/560 or EMALED® 500/500 or EMALED® 560/500



This combination of light heads grants the highest possible illumination, the largest lightning field and is suitable for any kind of surgical intervention. Even long lasting interventions will be no problem, thanks to the low head release of the light heads.

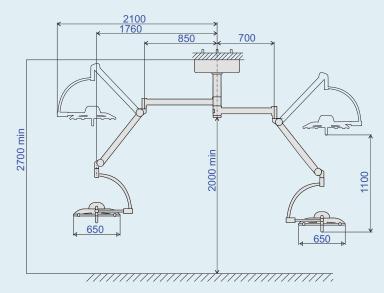


- Natural colour rendering grants a great light quality
- Barely noticeable heating of the light head
- No movable parts in the light head
- Low maintenance requirements
- Adjustable illumination in 10 steps
- Powder coated aluminium case
- Two autoclavable handles are included (additional handles can be ordered any time)
- High flexibility: 360° rotation horizontal
- 4-step focusing via the control panel with LCD display
- Endoscopic mode
- Macro mode

#### Optional available:

- Remote control (also for double dome lights)
- Emergency power back-up (for up to 4hrs network independent use)
- Full HD camera
- Laser pointer
- Variable colour temperature: 3500, 4000, 4500 K

	EMALED 560	EMALED 500
Illumination (at 1 m)	160.000 lx	120.000 lx
Lighting intensity	10 – 100 %	10 - 100 %
Focusable diameter of lightning field D10	185 - 350 mm	185 - 350 mm
Operating distance	70 – 140 cm	70 – 140 cm
Colour temperature	4.500 K	4.500 K
Colour rendering index	95 Ra	95 Ra
Life expectancy of LED's	50.000 hrs	50.000 hrs
Diameter of light head	650 mm	650 mm
Number of LEDs	70	70
Main voltage	100 – 240 V	100 – 240 V
Frequency	47 - 63 Hz	47 - 63 Hz
Power consumption	60 VA	60 VA
Weight of lighting element	9,5 kg	9,5 kg
Weight of complete system	110 kg	110 kg





## SUSPENSION SYSTEMS

#### We offer high quality pendant systems. We can offer flexible solutions for all of your demands.

### VALIA®



### **ACROBAT**<sup>®</sup>



#### SLIM LINE®



### **VIDEO CAMERA AND MONITORS**



For our EMALED 500 and EMALED 560 series we can additional offer video systems with medical monitors.

### Full-HD camera (V)

The central positioning of the camera in the light head ensures distortion-free recordings of the procedure and ensures the best possible film quality.

#### **Technical details**

Image sensor	1/3-type CMOS (Progressive Scan)
Effective number of pixels	Approx. 4,080,000 pixels
AE (Auto exposure mode)	Auto, Manual, Priority mode (shutter/iris)
Lens	10x optical zoom f=3.3 mm (wide) to 33.0 mm (tele) F1.8 to F3.4
Zoom movement speed	1.4 sec
Focusing system	Auto, Manual, One push, AF sensitivity



### Full-HD monitors (M)

training room.

The full HD monitors (available 19 - 47 inch) are particular manufactured for the medical sector and can display the surgical interventions with best quality and color rendering.

We're pleased to offer specific solutions for signal transmitting for your demand. E.g. we're prepared to display the surgery live on a different monitor in a seperate







### Control panel with LCD-display

The endoscopy light, depth illumination light and laser pointer (optionally available) can easily be controlled via the control panel with LCD-display.





#### Remote control

Optionally, adjustments can be carried out by a wireless control unit, which can be mounted to the wall. In addition to the lighting-parameters and focusing the unit stores settings for certain light-related circumstances in its memory.



### Autoclavable handle

Two detachable and autoclavable handles come along with each light head. Additional handles are available upon request.

Our sterile handle covers are an easy and cheap alternative for the daily sterilization.





# **OR-/ EXAMINATION LIGHTS**

#### **OR-Lights:**

#### EMALED<sup>®</sup> 560

Illumination: 160.000 lx

#### Variants:

EMALED 560 EMALED 560 M EMALED 560 V EMALED 560 VM

#### Combination:

EMALED 560/500 EMALED 560/500 M EMALED 560/500 V EMALED 560/500 VM EMALED 560/560 EMALED 560/560 M EMALED 560/560 V EMALED 560/560 VM EMALED 560/300 EMALED 560/300 M EMALED 560/300 V EMALED 560/300 VM EMALED 560/560/560 EMALED 560/500/500 EMALED 560/560/300 EMALED 560/500/300 EMALED 560/560/560 V EMALED 560/560/560 VM EMALED 560/560/300 V EMALED 560/560/300 VM

#### EMALED® 500

Illumination: 120.000 lx

Variants: EMALED 500 EMALED 500 M EMALED 500 V EMALED 500 VM

#### Combination:

EMALED 500/500 EMALED 500/500 W EMALED 500/500 V EMALED 500/500 VM EMALED 500/300 EMALED 500/300 V EMALED 500/300 VM EMALED 500/300 VM



#### EMALED® 300 / 300+

Illumination: 100.000 lx / up to140.000 lx

#### Variants:

EMALED 300D: for ceiling mounting EMALED 300W: for wall mounting EMALED 300F: mobile floor light EMALED 300M: mobile light with battery for 5 hours of operation without main power connection

Combination: EMALED 300/300

#### **Examination Lights:**

#### **EMALED® 200**

Illumination: 50.000 lx

#### Variants:

EMALED 200D: for ceiling mounting EMALED 200W: for wall mounting EMALED 200F: mobile floor light EMALED 200M: mobile light with battery for 24 hours of operation without main power connection

#### Technical details of light heads

	200	300 / 300+	500	560
Illumination level	50.000 lx	100.000 lx / up to140.000 lx	120.000 lx	160.000 lx
Color Temperatur	4.500 K	4.500 K	4.500 K	4.500 K
Color Rendering Index	95 Ra	95 Ra	95 Ra	95 Ra
Power supply	230 V	230 V	100 - 240 V	100 - 240 V
Operating Voltage	24 V DC	24 V DC	24 V DC	24 V DC
Focus	fixed	adjustable (on control panel)	adjustable (on control panel)	adjustable (on control panel)
Dimming	30 - 100%	10 - 100%	10 - 100%	10 - 100%
Number of LEDs	7	42	70	70
Weight	1,0 kg	4,0 kg	9,5 kg	9,5 kg
Rated Input	10 VA	24 VA	60 VA	60 VA
Service life of LEDs	50.000 hrs	50.000 hrs	50.000 hrs	50.000 h
Operating	Control panel on light head	Control panel with LCD-dis- play on light head	Control panel with LCD-display on light head, optional remonte control	Control panel with LCD-display on light head, optional remonte control