

Operation and Maintenance Manual

MOD. FILED

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1. - INTRODUCTION

We would like to thank you for the trust you have placed in **ORDISI, S.A.** when you purchased a lamp from the **FLH-2 LED** series. Your lamp model **FLH-2 LED**, has specially designed for a recognition, for any medical specialty, but mainly in places where a total absence of calorific radiation is required, conserving very good quality of light.

Please read this manual carefully in order to ensure many years of trouble free use. If you have any requires about your lamp, please contact your nearest ORDISI distributor or contact our head office directly:

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2. - SYMBOLS AND ANNOTATIONS USED IN THE PRODUCT / PACKAGING

SYMBOL	MEANING
SN	SERIAL NUMBER
REF	PRODUCT NAME
	MANUFACTURER
C€	CE MARK
\mathbb{A}	YEAR OF MANUFACTURING
A	RECYCLE
Ţ i	SEE USER MANUAL
\triangle	CAUTION
<u> </u>	GROUNDING
	RANGE OF STORAGE AND TRANSPORT TEMPERATURE
MD	MEDICAL DEVICE





3. - MANUFACTURER'S LIABILITIES

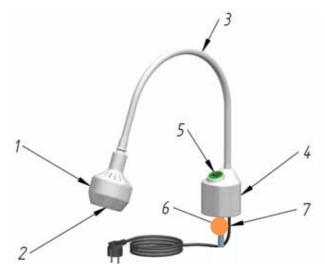
ORDISI, S.A. is responsible to whatever is related to the equipment safety, reliability and operation but only if:

- Installation is carried out in strict accordance with this manual.
- The readjustment or repair operations are carried out by persons and/or representative companies authorized by ORDISI, S.A.
- The electrical installation of the corresponding premises complies with the C.E.I. (U.N.E.) and with the Low Voltage Regulation.
- The equipment is operated in accordance with the instructions in this manual.
- The accessories and consumables that must be replaced periodically are original accessories and consumables and/or approved and authorized by ORDISI, S.A.

4. - PARTS DESCRIPTION

The parts of the FLH-2 series lamps are listed below. The type of anchorage (No. 6) varies according to the model: moveable, table, wall or rail.

- 1. Headlight
- 2. LED
- 3. Flexible arm
- 4. Body of the lamp
- 5. Switch
- 6. Type of anchorage
- 7. Network cable
- 8. Vertical arm
- 9. Moveable base
- 10. Table stand
- 11. Wall support
- 12. Rail support





Picture 1. Type of anchorage.

5. - INSTALLATION

5.1. - UNPACKING

If upon receiving the equipment you notice that its packaging is deteriorated, check that the device has not been affected. If so, notify the sender immediately.



5.2. - MOUNTING

5.2.1. - MOUNTING THE LAMP

To assemble the lamp, follow the instructions below:

• FLH-2 Moveable:

- 1. Unscrew the screw and the washer from the end of the vertical arm (No.8).
- 2. Insert the vertical arm in the base (No.9) and fix it with the washer and the screw underneath.
- 3. Insert the cap of the lamp body into the vertical arm tube (No.8) and fix it with the fixing screw.

FLH-2 Wall:

- 1. Drill the wall following the template supplied by Ordisi.
- 2. Fix the wall bracket (No. 11) to the wall using the three plugs and three screws supplied by Ordisi.
- 3. Insert the lamp into the hole on the wall support (No. 11).

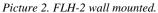
FLH-2 Table:

- 1. Fix the support to the table.
- 2. Insert the lamp into the hole in the table stand.

FLH-2 Rail:

1. Fix the lamp to the rail using the special rail support.







Picture 3 FLH-2 with table stand.



Picture 4. FLH-2 with rail support.

5.2.2. - ELECTRICAL INSTALATION

The electrical installation of the room where the equipment will be used must comply with the UNE (CEI) standards, as well as with the Low Voltage Regulation. The base of the plug where the equipment is connected must be suitable for plugs according to UNE 20.315 and / or DIN 49.441 with 4'8 mm terminals and lateral grounding.

WARNING: To avoid the risk of electric shock, this equipment must only be connected to a mains supply with a protective earth connection.

5.3. - START-UP OF THE LAMP

- 1. Make sure that the lamp is plugged into the electrical network.
- 2. Turn on the lamp using the switch.
- 3. If it is a manual switch, activate the switch. If it is a switch with a motion sensor, move your hand over the sensor from one side to the other.
- 4. To change the position of the lamp, use the flexible arm. Carry out movements gently, avoiding sudden movements.
- 5. In the event that you are in possession of a moveable version, when moving the lamp, always do so by means of the vertical bar No.8.



6. The equipment must be positioned in such a way that it is easy to access the plug to disconnect the equipment from the network.

5.4. - USER RECOMENDATIONS

Move the lamp gently, avoiding sudden movements.

If the lamp is not being used, switch off the lamp because, in addition to wasting energy uselessly, the life of the bulb is considerably shortened, and the dome is unnecessarily overheated.

This equipment is designed for use in a hospital, so its use is reserved for specialized medical personnel. However, no special training is required for its use.

6. - CLEANING

Before carrying out any operation, make sure that the lamp is off.

The lamp must be cleaned regularly with a cloth moistened with water, taking care that it does not penetrate the interior of the dome. For persistent stains; blood, disinfectants, etc. you can use a little neutral soap.

Dry the lamp well before using it. If liquids have penetrated inside, the precise time must be waited until they evaporate.

7. - MAINTENANCE

The electrical diagrams can be requested by the maintenance services to help them in their work. Please, if necessary, contact your distributor and provide him with the model and serial number so that he can provide you with these diagrams.

IMPORTANT: Before carrying out any repair/maintenance operation on the lamp, you must first make sure that the equipment is isolated from the electrical network. To do this, the plug of the lamp must be unplugged from the mains socket.

7.1. - PERIODIC VERIFICATIONS

Periodically, following the Hospital Protocol, Maintenance services must perform the following verifications:

- Verify the general operation of the lamp.
- Check the continuity of the grounding, and its correct connection.
- Check the general condition (cleaning, Etc.).

7.2. - CHANGING THE LIGHT SOURCE

Follow the instructions below to change the light source:

- 1. Disconnect the mains cable and wait for the light bulb to cool down.
- 2. Unscrew the three dome screws and separate the two casings.
- 3. Replace the bulb with another with the same characteristics.
- 4. Close the housing again by screwing in the three screws again.

7.3. - CHANGING THE POWER CORD

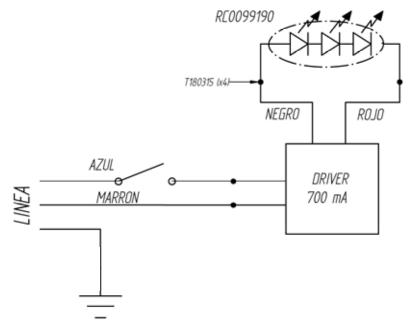


The change of the power cable is an operation that must be performed by authorized personnel with electrical knowledge.

- 1. Make sure that the equipment is disconnected from the electrical network. Open the casing at the bottom, removing the 4 screws.
- 2. Remove the clamp that holds the network cable.
- 3. Disconnect all terminals.
- 4. Change the network cable. The replacement cable must be original supplied by ORDISI
- 5. Replace the clamp that holds the cable.
- 6. Close the housing of the light body with the 4 screws.

The network cable connection is shown in the following figure:





Picture 6. Electric connection

8.- ENVIRONMENTAL CONDITIONS

OPERATION				
	Min.	Max.		
Temperature	10°C	30°C		
Humidity	30%	75%		
STORAGE				
	Min.	Max.		
Temperature	-10°C	50°C		
Humidity	20%	90%		

9.- WASTE

The FLH-2 lamp does not contain any dangerous products. Components must be properly recycled at the end of their useful life.

Electrical materials must be recycled according to the appropriate procedure. All other materials must be disposed of according to the materials they contain.

10. - TECHNICAL CHARACTERISTICS

Electrical connection 90-240V, 50-60Hz Light intensity to 50 cm 40.000 lux (\pm 10%) Light intensity to 100 cm 10.000 lux (\pm 10%)

Light source LED CRI 96

Colour Temperature 5000 °K (± 5%)

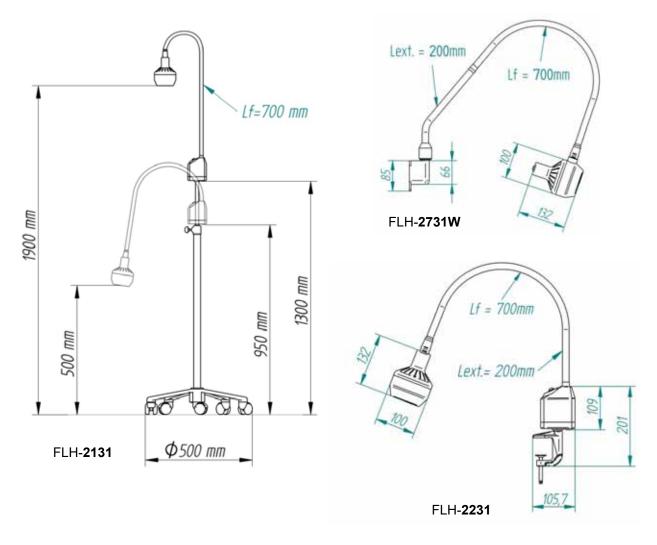
Power 8W / 22 VA

Average LEDs Lifetime 60.000h

Field diameter at 1m Ø12 cm

Colour RAL 9002





Picture 7. Dimensions FLH-2 LED series lamps

MODELS	Moveable	Desk	Wall	Rail
LED (std) manual switch	FLH21 31	FLH22 31	FLH 2331	FLH 2431
LED (std) touchless	FLH21 35	FLH22 35	FLH 2335	FLH 2435
LED L manual switch	FLH21 31L	FLH22 31L	FLH 2331L	FLH 2431L
LED L touchless	FLH21 35L	FLH22 35L	FLH 2335L	FLH 2435L
LED LC special	-	-	FLH 2731W	FLH 2731

11.- WEIGHTS

MODEL		WEIGHT
FLH-2131/35 N	MOVEABLE LAMP	6 kg
FLH-2231/35 [DESK LAMP	2,5 kg
FLH-2331/35 \	WALL LAMP	2 kg
FLH-2431/35	RAIL LAMP	1,7 kg
FLH-2731	SPECIAL WALL / RAIL LAMP	1,85 kg



12.- PLANO DE DESPIECE / EXPLODED VIEW

