

Disclaimer

JELLY

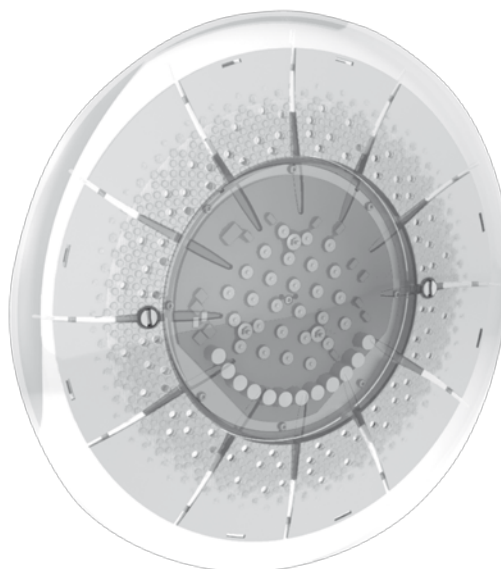
english



Our commitment: excellence

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1. Product specifications and technical characteristics



PROYECTOR JELLY

¡LED no es igual a LED!

- The LED JELLY Projector presents a whole new concept of light that is fully integrated in your pool area. The new Led Jelly features a unique design, which is the result of collaboration between AstralPool and Guigiaro.
- JELLY Projectors are available for any type of pool (concrete, pre-manufactured or wall panels), and they are ideal for pools already equipped with Astral-pool niches. Available in different varieties: white or coloured light; with a closure system or with or without inserts; with or without a niche.
- Its greatest advantage is its high efficiency, in other words, its high performance in relation to the energy consumption, its long useful life (a useful life that is 100 times greater than a conventional lamp) and mucho lower consumption as well as easy installation. All of this, while featuring the latest AstralPool and Guigiaro design which perfectly integrates into the pool.
- LED is not the same as LED!
- There are different types of LED: those with high luminosity (High Power LED) and those with low luminosity (5mm). The LEDs used in all AstralPool projects are Luxeon High Power LEDs (1W and 3W).
- 5 year guarantee.
- The JELLY projector uses Luxeon Rebel LEDs. The entire AstralPool line of projectors manufactured by Sacopa is recognized by Philips Lumileds.



CODE	DESCRIPTION
43438	JELLY lamp with white light LEDs for NF niche
43439	JELLY lamp with RGB LEDs for NF niche
43579	JELLY lamp with white light LEDs for STD niche
43580	JELLY lamp with RGB LEDs for STD niche

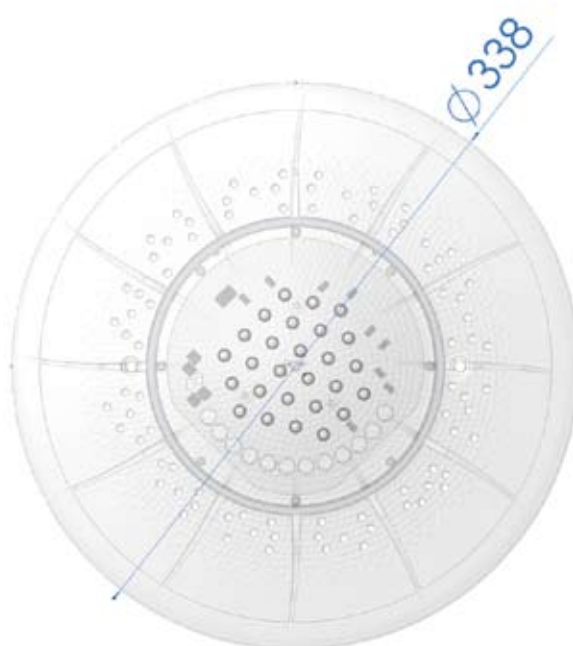
1.1. Table of technical characteristics

	JELLY - RGB (Colours)	JELLY - White
Code	43439 - 43580	43438 - 43579
Voltage	12 VAC	
Frequency	50 Hz	
Power consumed	60 W max	
Initial luminous flux	1116 lumens 1215 lumens	
Maintenance of luminous flux	70% of the initial flux after 50.000 hours of use 30% of the initial flux after 100.000 hours of use	
Colour temperature	-	5500 K
Type of LED used	Luxeon Rebel (Philips)	Luxeon Rebel (Philips)
Number of LEDs	27 LEDs (9 red, 9 green, 9 blue)	27 white LEDs
Maximum number of colours	12	-
Maximum number of programmes	8	-
Control solutions	NC pushbutton, receiver-modulator, remote control and DMX (professional lighting control)	
IP protection level	IP 68 (underwater resistance)	
Number of electric connection cables	2	
Lens material	Copolyester	
Protection against overheating	Yes by means of a PTC probe built into the electronic circuit	

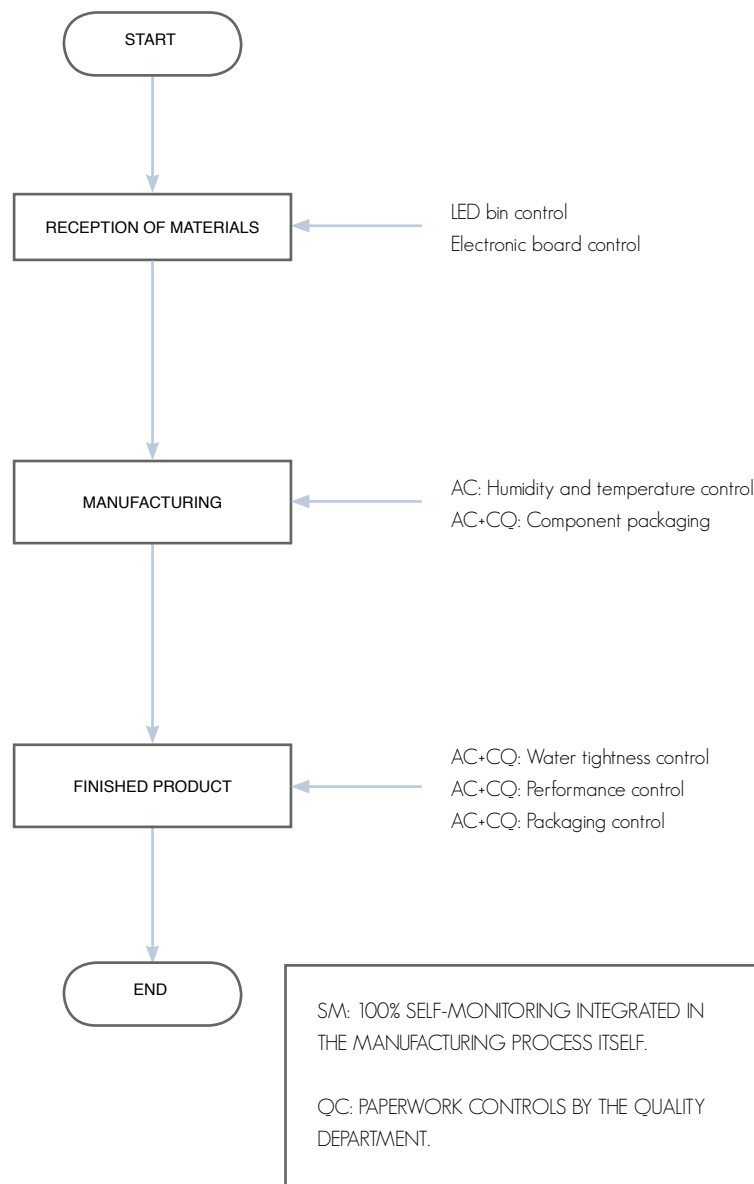
1.2. Packaging

CODE	UNITS PER PACKAGE	PACKAGE MEASUREMENTS (cm)	VOLUME OF PACKAGE (m³)	UNITS PER PALLET	PALLET MEASUREMENTS (cm)	PLANT UNITS	PLANTS
43438	1	39x48,5x16	0,0302	48	100x120x150	6	8
43439	1	39x48,5x16	0,0302	48	100x120x150	6	8
43579	1	39x48,5x16	0,0302	48	100x120x150	6	8
43580	1	39x48,5x16	0,0302	48	100x120x150	6	8

1.3. General Measurements



2. Check list of quality controls passed



3. Certificates available for the product, production process and systems implemented in production



ISO 9001:2000



ISO 14001:2004



EMAS

EC DECLARATION OF CONFORMITY

SACOPA. SAU.

LED UNDERWATER PROJECTOR, codes 43438 , 43439, 43579, 43580

The products listed above fulfil the requirements of:

- The Electromagnetic Compatibility Directive 89/336/CEE.
- The Low Voltage Equipment Directive 2006/95/CEE.
- European Standards EN 60598-1, EN 60598-2-18, EN 60825-1 and all of their modifications.

Signature / Title

SACOPA, S.A.U.
Pol. Ind. Poliger SUD – Sector I, s/n
17854 SANT JAUME DE LLIERCA
SPAIN

St. Jaume de Llierca,
1 January of 2009



MANAGER

ROHS CERTIFICATION

SACOPA

SACOPA, S.A.U.
Pol. Ind. Políger Sud – Sector I
17854 Sant Jaume de Llierca
(Girona) Spain
Tel. (+34) 972 287 272
Fax (+34) 972 287 221
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CERTIFICATION

That the Jelly projector fabricated by Sacopa, SAU, are affected and they comply with the European directives 2002/95/EC (RoHS) and consequently they do not contain substances of prohibited use or in quantities superior to the established limitations.

Likewise, as manufacturer, Sacopa has adopted the preventive measures demanded by these directives so that these articles are easy to dismount, to repair and its components are easy to recycle at the end of the service life of the product and includes the symbols and instructions for the final user so that can carry out the actions indicated by the producer and proceed to the correct management of this waste

Sant Jaume de Llierca (Girona-Spain), January of 2009.



Manager

SACOPA, S.A.U.

SACOPA, S.A.U. is a company registered in the Spanish Register of Companies (R.C.) with number 17854, in the city of Sant Jaume de Llierca (Girona), Spain.



LUXEON CERTIFICATION

LUXEON LIGHTING NETWORK

Certified Luxeon Luminaire Manufacturer

SACOPA, S.A.U.

*Meets the criteria set forth by Lumileds for the proper design,
manufacturing and support of Luxeon based luminaires.*

A handwritten signature in black ink, appearing to read "Denny V.", written over a horizontal line. Below the signature, the text "VP of Business Management" is printed in a small, italicized font.

4. Jelly projector guarantee

GENERAL ASPECTS

1.1 In accordance with these provisions, and current law, the seller guarantees that the Product that corresponds to this guarantee shows no compliance deficiency at the time of delivery.

1.2 The JELLY Product Guarantee Period is three (3) years. The LED (Light Emitting Diode) guarantee is five (5) years. These guarantee periods shall begin at the time of delivery to the end client.

1.3 This Certificate of Guarantee shall be applicable in all countries.

1.4 If the Product were to show a compliance deficiency and the buyer notifies the seller within the Guarantee Period, the Product must be repaired or replaced at the seller's own cost where considered to be appropriate, unless it is impossible or disproportionate.

1.5 If the Product cannot be repaired or replaced, the buyer will be able to receive a proportional reduction in the price or, if the compliance deficiency is sufficiently significant, the sales contract will be terminated.

1.6 Our guarantee covers the repair or replacement of defective parts at our factory. Unless otherwise established by law, the costs of returning and re-sending the defective materials shall be paid by the manufacturer. The parts that are replaced or repaired in virtue of this guarantee will not result in any extension of the guarantee on the original Product; if appropriate, they will have their own guarantee.

1.7 In order for this guarantee to be effective, the buyer must provide proof of the date the Product was purchased and delivered, duly stamped and completed.

1.8 If more than six months has passed since the Product was delivered to the buyer, and said buyer were to claim a compliance deficiency, the buyer must prove the origin and existence of the alleged defect.

1.9 This Certificate of Guarantee does not restrict or infringe on the consumers' rights in accordance with national standards as dictated by law.

SPECIAL CONDITIONS

2.1 This guarantee covers the following products and families: Jelly Projector (3 year guarantee). LED "Light Emitting Diode" Diodes (5 year guarantee).

2.2 These products will not be covered by the guarantee if in the installation electric leakage is detected in any product in contact with the water of the installation.

2.3 In order for this guarantee to be effective, the buyer must strictly follow the Manufacturer's instructions included in the documentation that accompanies the Product, as applicable according to the Product line and model.

LIMITATIONS

3.1 This guarantee will only be applicable in those sales made to consumers, with “consumers” understood as people who acquire the Product without the intention of using it in the scope of their professional activity.

3.2 The guarantee does not cover any normal wear and tear caused by the use of product. All pieces, components and/or expendable or consumable materials such as sand, etc. shall be covered as per the documentation accompanying the Product, where appropriate.

3.3 The guarantee does not cover the following cases in which the Product: (i) has been subject to incorrect treatment; (ii) has been inspected, repaired, maintained or handled by anyone not authorized by SACOPA; (iii) has been repaired or maintained with parts that are not original or (iv) has been installed or turned on or used in an improper way or used in inappropriate environments or conditions; (v) has not been operated under the nominal conditions specified in the technical documentation and with surges; (vi) has suffered any damage or malfunctions caused by impacts.

Inappropriate environments or conditions: the manufacturer hereby states that inappropriate environments or conditions include, but are not limited to, pool cleaning treatments that exceed the following conditions:

Pool treatment, chlorine (Cl): 2 ppm

Pool treatment, bromine (Br): 5 ppm

Pool treatment, salt electrolysis (Na Cl + Vcc): 6000 ppm (Vcc 24 V)

pH: 7,2

3.4 When the Product compliance deficiency is a result of improper installation or commissioning, this guarantee will only be applicable if this installation or commissioning is included in the Product sales agreement contract and it has been carried out by the seller, or under his/her responsibility.

3.5 This guarantee does not cover: (i) any Product malfunction that could have been prevented when consumable parts are maintained or changed as described in the instructions manual; (iii) any Product malfunction caused by a factor that could not have been predicted at a scientific/technical level when delivered to the end client; (iii) any Product malfunction caused by a natural disaster or other things of this nature (such as fire, earthquake, flooding, storms) or any other external factor such as abnormal voltage or electrical failures.

5. Characteristics and design Standards

This projector has been designed to be used totally underwater in fresh water pools. It is a class III electrical device with safety extra low voltage (12 V with alternate current).

The projector fulfils IP protection (resistance to dust penetration, to solid bodies and humidity) requirements with a nominal immersion depth of 2 m.

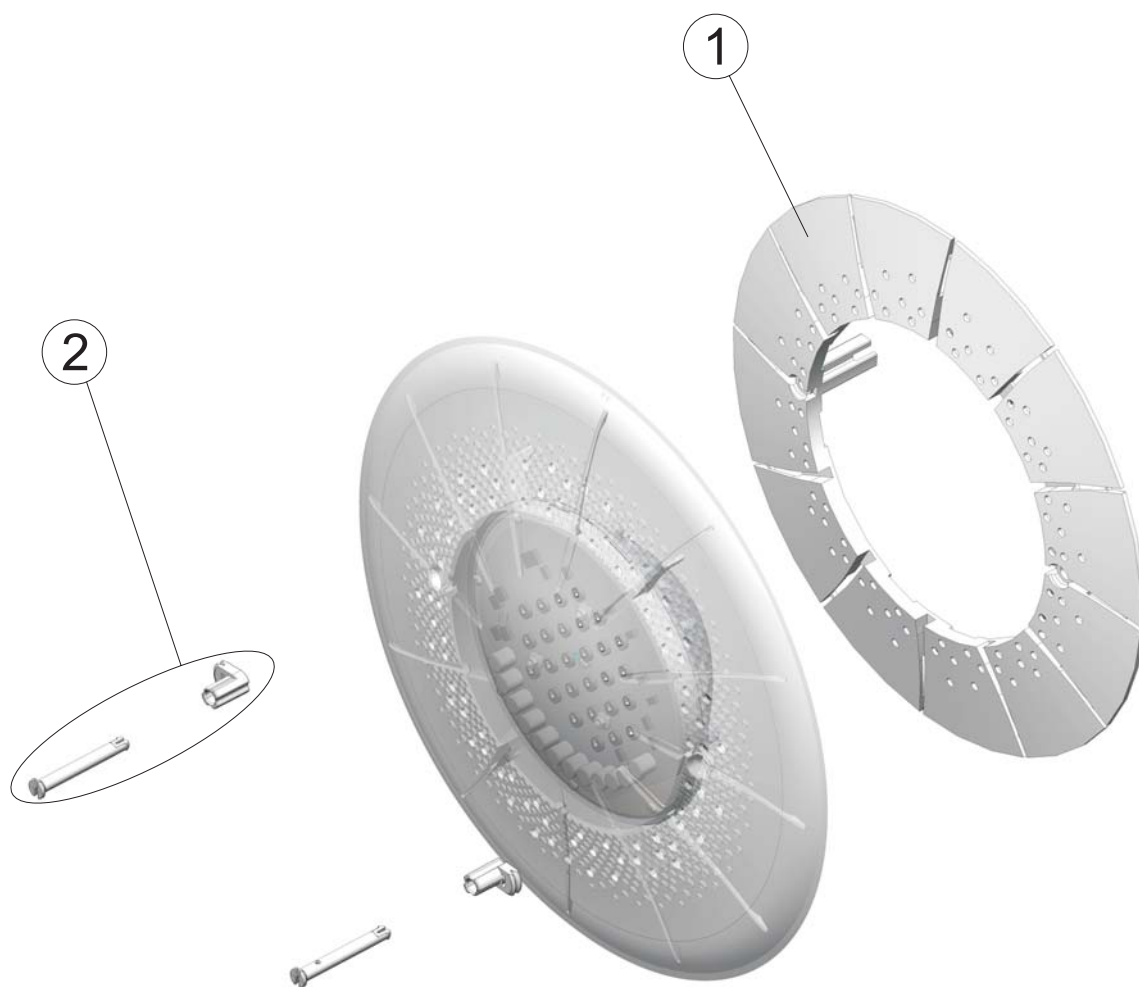
This projector complies with international luminary safety standards, especially standard EN 60598-2-18: LUMINARIES PART 2: PARTICULAR REQUIREMENTS SECTION 18 LUMINARIES FOR POOLS AND SIMILAR APPLICATIONS.

For proper installation, the projector socket must be equipped with a residual current protection mechanism with maximum intensity of 30 mA. The power transformer for these projectors must be a safety isolation transformer with separated coils.

On the inside, there is a PTC probe integrated into the electronic circuit for overheating protection. If it is turned on when not in the water and therefore is not cooled by the water, the project will overheat and its luminosity is immediately reduced in order to avoid being damaged.

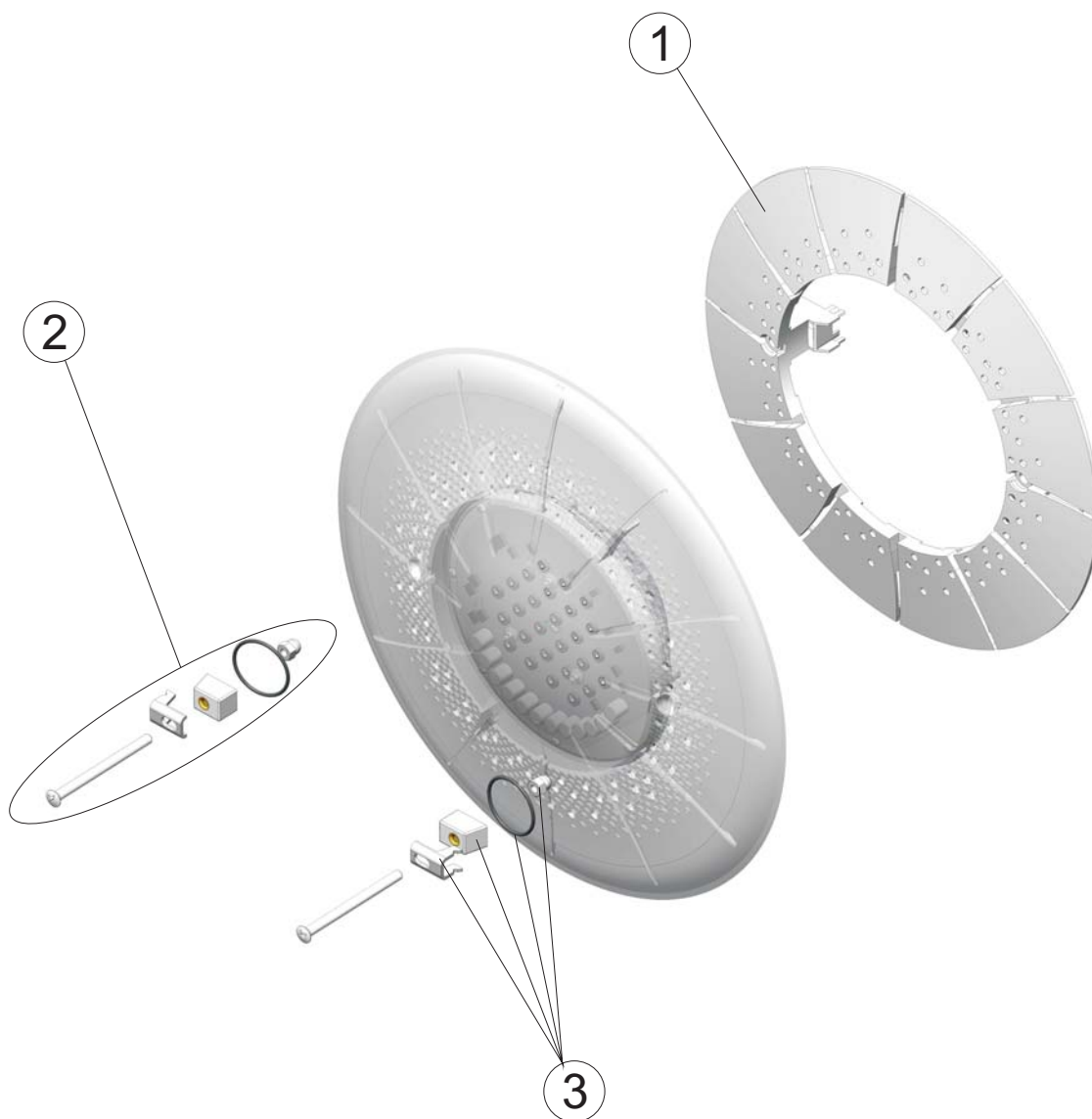
6. Exploded view

6.1. NF JELLY PROJECTOR



ID	CODE	DESCRIPTION
1	4403014901	Jelly NF rear faceplate
2	4403014902	Projector NF fastening set

6.2. STD JELLY PROJECTOR



ID	CODE	DESCRIPTION
1	4403015001	Jelly STD rear faceplate
2	4403015002	Projector lamp fastening
3	4403010307	Projector fastening set

7. Recommendations to keep in mind

7.1. PACKAGING

To take the Jelly out, open the box and you will find the following on the inside:

- Jelly Projector with 2.5 metres of cable
- DVD
- Instructions manual

To the left, you will find the DVD Jelly. Before handling in any way, it is best to read all the instructions that are mentioned in the instructions manual.

If you handle the Jelly, if you place the Jelly lens in direct contact with the floor, it is VERY IMPORTANT to put down some kind of protection to prevent it from getting scratched (a rag, towel...).



7.2. LOCATION

- To clearly light a pool, installing a projector every 20 m² of water surface is recommended. In particularly deep pools, a projector every 20 m² of water volume is necessary.
- In order to prevent glares, the projectors must be installed in the opposite direction of the house or normal pool view.
- If lighting is used in competition or training pools, the projectors must be installed on the sides in order to prevent the swimmers from seeing any glare.
- To avoid having to empty the pool when maintenance is needed, installing the projector in areas that are accessible from the upper edge of the pool is recommended.
- For installations where you wish to replace a conventional lamp with a LED projector by making use of the existing wiring, it is absolutely advisable to use resin underwater connections. The use of silicon to try to obtain water-tightness where the wires meet is not recommended. The lamp must not be handled under any circumstance as said handling would invalidate the guarantee.

The projector should be placed on the pool wall at approximately 400-700 mm from the surface of the water (Fig. 1).

The method for attaching the niche to the wall of the pool varies depending on whether it is a projector for a concrete pool or a pre-manufactured pool.

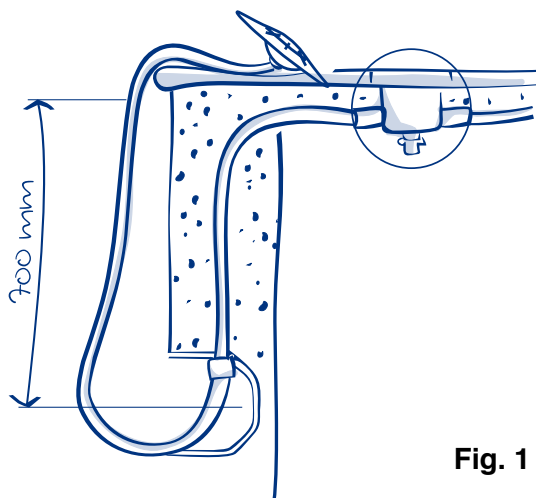


Fig. 1

8. Installation and use

NEW INSTALLATION

To install the Jelly projector in a newly-built pool, besides the Jelly projector, you must have a niche ensemble that is appropriate for your pool, depending on whether it is a concrete, pre-manufactured or panel pool.

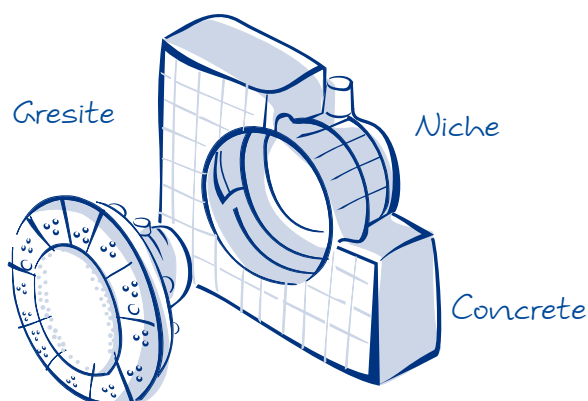
MODEL	NICHE
00349	STD concrete pool niche
00364	STD Pre-manufactured pool niche with inserts
28887	STD Pre-manufactured pool niche without inserts
23670	STD Panel pool niche without inserts
23671	STD Panel pool niche with inserts
37175	NF Concrete pool niche
37176	NF Pre-manufactured pool niche with inserts
37177	NF Pre-manufactured pool niche without inserts
37178	NF Panel pool niche with inserts
37179	NF Panel pool niche without inserts

NICHE PLACEMENT

Concrete pool

To place the projector in a concrete pool, you must make an area for the niche and place it in the pool wall.

Make sure the cable outlet on the niche remains on the top.



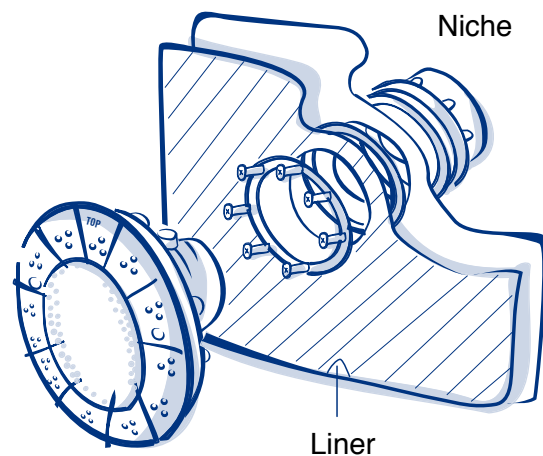
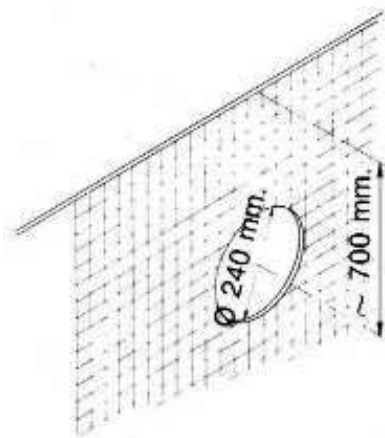
Pre-manufactured pool

To place a projector in a pre-manufactured pool, you must make a circular hole 240 mm in diameter.

Insert the niche and one of the adhesive joints on the outer side of the pool. Insert the other adhesive joint on the inner side and secure the three elements with the two DIN 7981 4.8x16 bolts. Make sure the cable outlet on the niche remains on the top.

Before placing the clamp on the inner side of the pool, you must make sure that the previously-inserted DIN 7981 4.8x16 bolt heads coincide with the hole reserved for them on the back of the clamp.

Secure the clamp to the pool wall using the bolts.

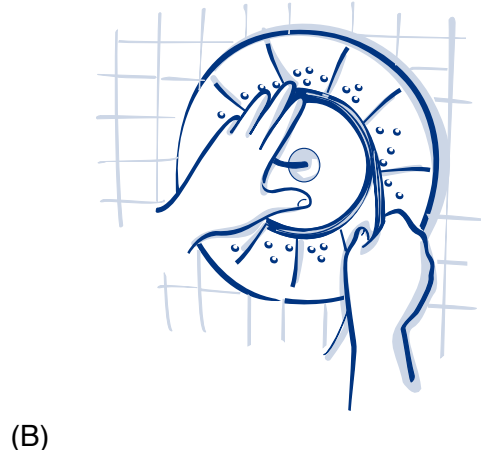
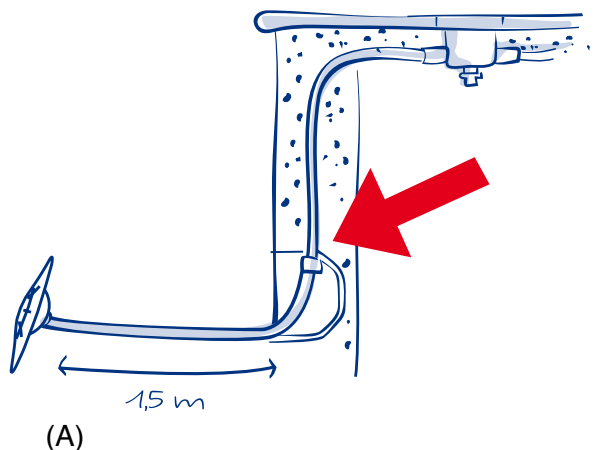


ASSEMBLY

Once the niche is installed (and the clamp in a pre-manufactured pool), you can then assemble the projector.

To connect the projector to the electrical mains, you must insert the cable through the gland nut (A). Tighten the gland nut until you are sure that when you pull the cable with your hand, it does not give.

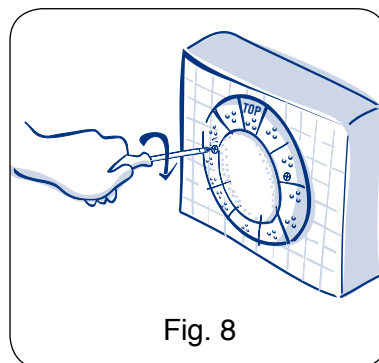
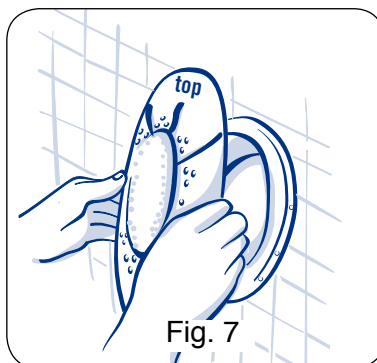
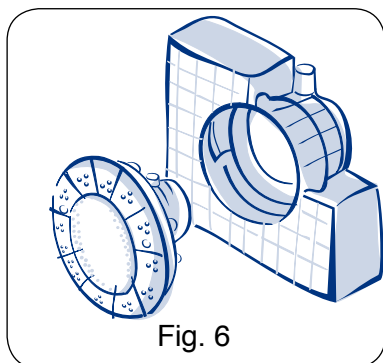
You must be careful to leave 1.5 m of rolled cable (B) in the projector niche to be able to pull the projector up to the edge of the pool in the event you must handle it.



Assembly in an STD niche:

Insert the Jelly projector in the niche (Fig. 6). To obtain proper pool illumination, it is important that the word TOP on the trim remains on top (Fig 7).

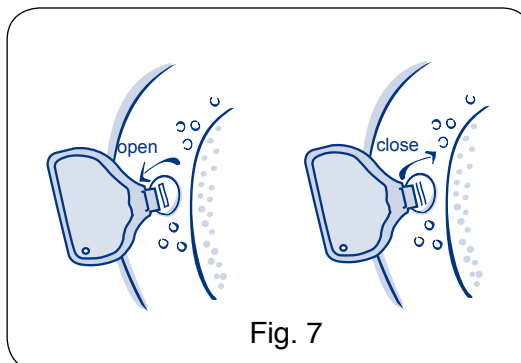
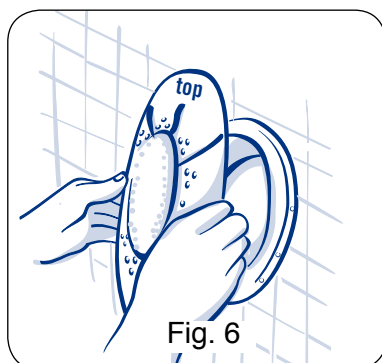
Screw the two M-6x80 bolts until the fixing clamp is anchored to the inside walls of the niche (Fig. 8).



Assembly in an NF niche:

Before inserting the Jelly projector in the niche (Fig. 6) check that the trim bolts are in the OPEN position, if so, insert the projector into the niche. To obtain proper pool illumination, it is important that the word TOP on the trim remains on top (Fig. 6).

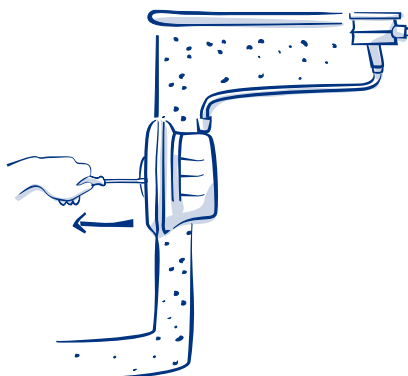
Turn the two bolts. The groove must remain in a vertical position (Fig. 7).



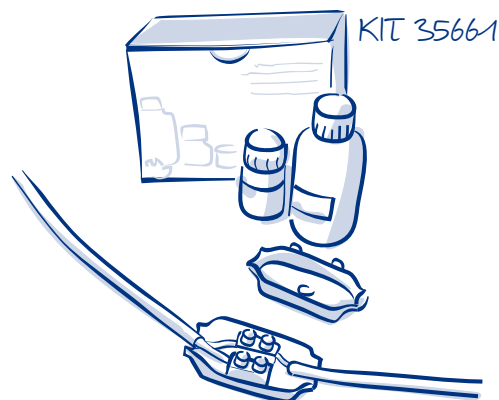
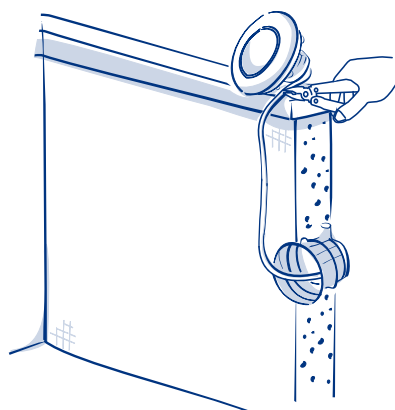
REPLACEMENT

If Standard, NF, Panel Protect, LumiPlus PAR56 or LumiPlus Standard series projectors are already installed in the pool, you only have to replace the power point.

In this case, you must take the projector out to the edge of the pool by loosening the 2 outside bolts on the trim until the mounting system gives enough to be able to separate the projector ensemble from the niche.



Cut the cable and make a connection with the new Jelly projector using an underwater connection system that guarantees absolute electrical water-tightness in order to prevent any possible damage. Astralpool recommends its underwater connection Kit - code 32803 or 35661, depending on the section of cable.



When the connection is made, you can then proceed with the Jelly Projector Assembly as described above.

CONTROL SYSTEMS FOR JELLY PROJECTORS

The LED projectors can be controlled by means of two different systems: with a push button that is normally closed or with the receptor and/or remote control.

In both cases, you must be sure that under no circumstance, the voltage the lamp receives is higher than 12 V.

The projector only works when underwater and attached to the vertical walls of the pool. The lamp is equipped with a thermal protection mechanism which, in the event of excess temperatures, it reduces the illumination level in order to avoid overheating.

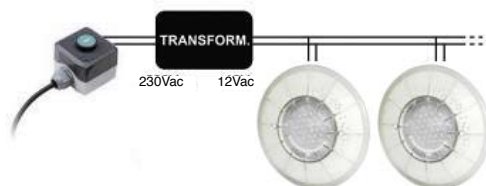
COLORPLUS ECO: PUSH BUTTON CONTROL

The system features **14 operational modes: 7 fixed colours and 7 different colour sequences**. With each short stroke, you can make a colour or sequence change. With a long stroke, you give the projector(s) a white colour.

Electrical connection diagram

The ColorPlus Eco system is composed of the projector(s), the transformer and the push button, which is normally close (NC).

The transformer must be large enough to supply 60VA per led lamp that is connected to it. For example, if you wish to control 5 lamps, you must connect them in parallel to a 300VA transformer minimum. The push button must be able to bear the power consumed by the number of projectors used in the installation.



Operational modes

The ColorPlus ECO ensemble allows you to create different lighting scenes inside the pool with two operational possibilities:

Fixed colour: Selection of a fixed colour among seven possible colours:

COLOR NUM.	% RED	% BLUE	% GREEN	COLOUR
1	100	100	100	White
2	100	0	0	Red
3	0	100	0	Blue
4	0	0	100	Green
5	100	100	0	Purple
6	0	100	100	Cyan
7	100	0	100	Yellow

Automatic colour sequence: Selection among seven colour sequence programmes. Each programme is defined by the time each colour is present and the duration of the transition from one colour to another as per the following table:

SEQUENCE	ORDER OF THE COLOURS						COLOUR TIMING (SEC.)	MIX TIMING (SEC.)
1	Red	Blue	Green	Purple	Cyan	Yellow	2	2
2	Red	Green	Cyan	Blue	Purple	Yellow	4	4
3	Purple	Cyan	Yellow	-	-	-	4	4
4	Red	Blue	Green	-	-	-	8	8
5	Purple	Cyan	Yellow	-	-	-	18	18
6	Yellow	Purple	Cyan	-	-	-	0,5	0,5
7	Green	Red	Blue	-	-	-	0,5	0,5

With each stroke, you can make a change in colour or sequence. The colour and sequence cycle is rotational. If for example, you have colour 5, you would obtain colour 6 with the following stroke; if you hit it again, you would obtain sequence 1. If you are in sequence 7, you would obtain colour 2 in the following stroke which corresponds to Red.

Colour 1 corresponds to white and is obtained by a long stroke.

COLORPLUS TOP: CONTROL THROUGH MODULATOR AND/OR REMOTE CONTROL

The system features **20 operational modes: 12 fixed colours and 8 different colour sequences**. Turning the lamps on and off, colour and sequence changes and a shut-off time are controlled by the Modulator.

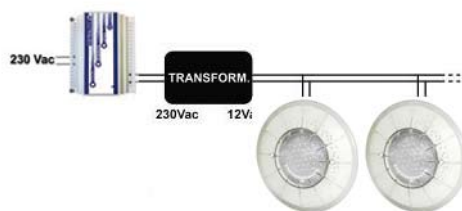
If you have a remote control, besides receiver-modulator functions, the remote control will allow you to activate and deactivate the presence of the colours that make up a sequence and select the shut-off time.

Electrical connection diagram

For proper installation, you need the Modulator, the transformer and the LED lamp. Optionally, this system can be controlled by Remote Control. For more information on operating the Modulator, see page 22, and page 25 includes information on the Remote Control.

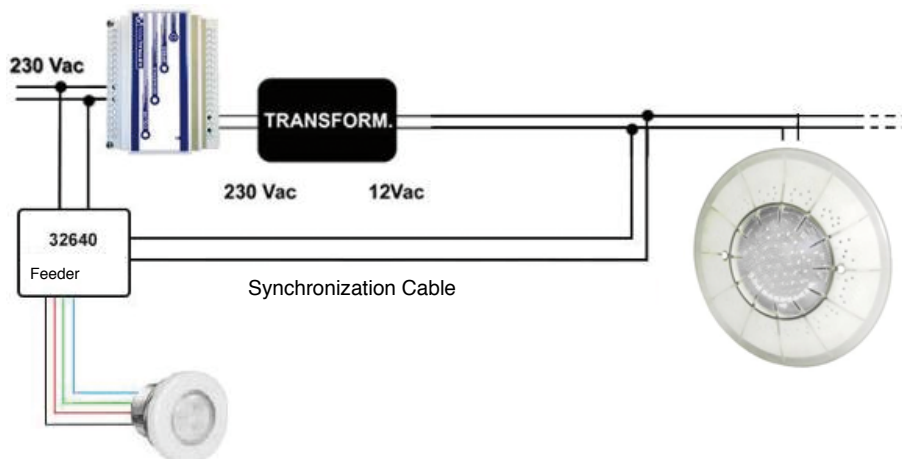
The Modulator connects to the 230 Vac electrical mains through the two terminals we indicate as RED and connects to the transformer primary (230 Vac) through the terminals indicated with TRF (see attached diagram).

The transformer must be large enough to supply 60VA per led lamp that is connected to it. For example, if you wish to control 5 lamps, you must connect them in parallel to a 300VA transformer minimum.



Each Modulator can control up to a maximum of 15 LEDs.

Diagram for Jelly Projectors with Mini and Micro projectors.



After making the electrical connection, operate as follows for the first commissioning:

- Provide power to the ensemble by activating the 230 Vac. at the Modulator inlet and it will automatically synchronize with the transformer. The green LED on the Modulator will blink every 2 sec. and the lamp will remain off.
- **Setting up the Remote Control**
 - Hold down the OFF key on the Modulator, the green LED will flash quickly indicating that it is in the Learning mode.
 - Turn on the Remote Control and press any key. If you have several Remote Controls, repeat the operation so that the Modulator registers all of them (maximum of eight).


MODULATOR (Code 27818)

Install the Modulator, protecting it from corrosive environments, outside of metal boxes and far from metal pipes.



OPERATION


Turning the projectors on


The projectors will turn on when you press any key. If you press the  key, the projectors turn on in the same state they were in before being turned off: fixed colour or a sequence of certain colours and times.

If you press the **COLOR** key, the projectors turn on with the last fixed colour that was used.

If you press **SEQUENCE** or **SPEED**, they turn on with the last sequence used.

Turning the projectors off

By hitting the  key, you can shut the projectors off. The state (colour or sequence) of the lamps will be saved in the memory so that when they are turned on again, they will be in the same colour or sequence they were in before being shut off.

A long stroke of the  key on the Modulator (regardless of whether the projector is on or off) puts the receiver in the "Link" state which allows you to register the Remote Control with a single stroke of any key on the Remote. (See section 3).

To select the colour

The **COLOR** key allows you to select 1 colour out of the 12 featured in the system. With each stroke, you can change the colour. When you get to the last colour and hit the key, you go back to the first.

These are the available colours:

1	Red	7	Violet
2	Green	8	Blue
3	Blue	9	Orange
4	Yellow	10	Magenta
5	Cyan	11	Dark green
6	Purple	12	White

To select a sequence

The **SEQUENCE** key allows you to select 1 sequence out of the 8 featured in the system. With each stroke, you can change the sequence. When you get to the last sequence and hit the key, you go back to the first. All the sequences are cyclical; when you get to the last colour, they begin again.

To select the sequence speed

The **SPEED** key allows you to select 1 sequence speed out of the 8 featured in the system. With each stroke, you can change the sequence speed. When you get to the last sequence and hit the key, you go back to the first.

These are the speeds (time in each colour) available:

ORDER	TIME SEC/COLOUR	CHANGE	ORDER	TIME SEC/COLOUR	CHANGE
1	0,33	Instant	5	32	Progressive
2	2,2	Instant	6	63	Progressive
3	4,3	Progressive	7	126	Progressive
4	8,4	Progressive	8	315	Progressive

N.B.: The Remote Control must remain off when you are using the Modulator push buttons.

LED indicator: By observing the operation of the green LED on the Modulator, you can determine the operational status of the lamp:

- Led turned off: There is no electrical power.
- Blinking every 2 sec. Lamp with LEDs shut off.
- Led remains on: Lamp in FIXED COLOUR or SEQUENCE mode.
- Slowly blinking: TIMER function activated.
- Quickly blinking: LINK function.
- Blinking for 2 sec. Reception of an order from the remote control.

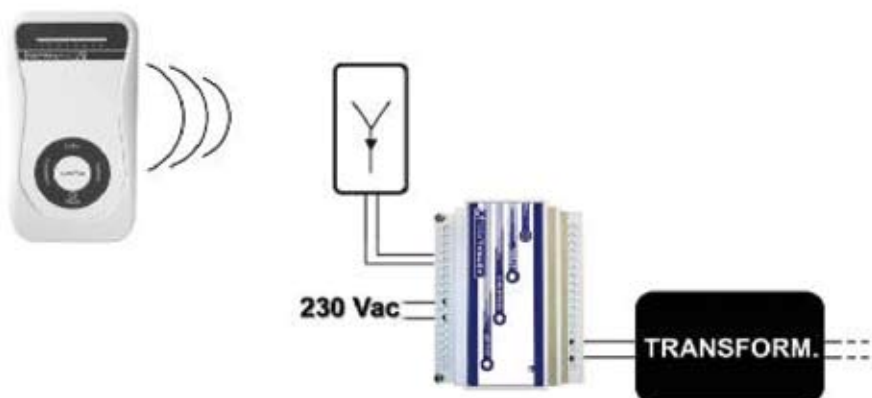
ANTENNA

The Modulator can be controlled by the LumiPlus Remote Control for greater user comfort.

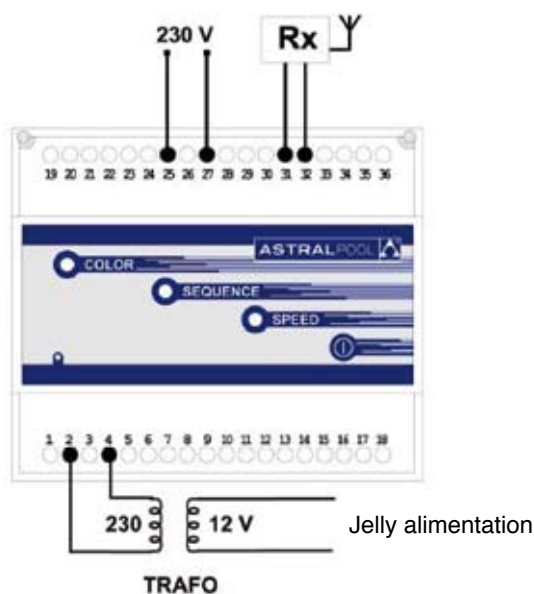
The Modulator includes an antenna to receive the signal from the Remote Control which can be installed anywhere as long as it is outside of corrosive environments, outside metal boxes and far from metal pipes or electrical cables that block the Radio Frequency signal from the Remote Control. The cable must be connected to the two n° 31 and 32 terminals on the Modulator.



An antenna will receive the signal from the Remote Control, transfer the signal to the Modulator, thereby achieving complete synchronization for the entire lighting system (see attached diagram).



Modulator - Antenna Connections:



LUMIPLUS REMOTE CONTROL (Code 41988)

Operating frequency:	433 MHz
Reach in an open field:	50 m.
Power:	10 mW
Battery:	23AE 12 Vdc battery.

DESCRIPTION

The Remote Control features 8 LEDs that indicate the status on the top and 4 push buttons on the bottom: **COLOR**, **SEQUENCE**, **SPEED** and **⓪ / SLEEP**.

These are the main functions of the remote control:

- Turn the projectors on/off.
- Select the colour: 12 fixed colours available.
- Select a sequence: 8 sequences available.
- Select the sequence speed: 8 speeds available for each sequence.
- Select a timed shut off: 8 sleep times available.



INSTALLATION

To be able to control the Jelly projector with the Remote Control, you must link it to the LumiPlus Modulator:

Linking the Remote Control and the Modulator:

- Hold down the **⓪** key (Off) on the Modulator, the green LED will flash quickly indicating that it is in the Learning mode.
- Press any of the other keys on the remote: **COLOR**, **SEQUENCE** or **SPEED**. If you have several Remote Controls, repeat the operation so that the Modulator responds to all of their orders (maximum of eight).

Unlinking the Remote Control and the Modulator:

- Hold down the **⓪** key on the Modulator, the green LED will flash quickly indicating that it is in the Learning mode.
- Press the **⓪** key again.

N.B.: the Remote Control orders prevail over those from the Modulator.

OPERATION

Turning the projectors on

The projectors will turn on when you press any key. If you press the **⓪** key, the projectors turn on in the same state they were in before being turned off: fixed colour or a sequence of certain colours and times.

If you press the **COLOR** key, the projectors turn on with the last fixed colour that was used.

If you press **SEQUENCE** or **SPEED**, they turn on with the last sequence used.

Turning the projectors off

By hitting the ①/ **SLEEP** key, you shut the projectors off. The state (colour or sequence) of the lamps will be saved in the memory so that when they are turned on again, they will be in the same colour or sequence they were in before being shut off.

Turning off the Remote Control

To save battery power, it turns off automatically after 15 sec. If the projectors are shut off with the Remote Control, it also turns off immediately.

To save battery power, the LEDs only remain on to indicate the duration of the colours when it is in sequence mode as that is information you could not get just by observing the projector colours.

To select the colour

The **COLOR** key allows you to select 1 colour out of the 12 featured in the system. With each stroke, you can change the colour. When you get to the last colour and hit the key, you go back to the first.

The colours available are the same ones as described above for the Modulator.

To select a sequence

The **SEQUENCE** key allows you to select 1 sequence out of the 8 featured in the system. With each stroke, you can change the sequence. When you get to the last sequence and hit the key, you go back to the first. All the sequences are cyclical; when you get to the last colour, they begin again.

To select the sequence speed

The **SPEED** key allows you to select 1 sequence speed out of the 8 featured in the system. With each stroke, you can change the sequence speed. When you get to the last sequence and hit the key, you go back to the first.

The speeds (time in each colour) available are the same ones as described above for the Modulator.

To select a timed shut off

The **SLEEP** key allows you to select 1 time out of the 8 featured in the system. **Hold the push button down** to select 1 out of the 8 sleep times; 1 of the 8 LEDs will light up on the remote control indicating how much time is left before the system shuts off:

ORDER	TIME	ORDER	TIME
1	5 min.	5	90 min.
2	15 min.	6	2 h
3	30 min.	7	4 h
4	60 min.	8	8 h

N.B.: The remote control orders prevail over those from the Modulator.

9. Maintenance

This projector does not need any kind of maintenance. If the projector is not working properly, please contact our customer service department.

Under no circumstance is manipulating the inside of the projector allowed. Any projector that has been manipulated will lose its guarantee.

If you wish to take the projector out of the pool, only personnel who hold the required qualifications for this kind of work should do it.

10. Safety warnings

- **People who are responsible for assembly must hold the required qualifications for this kind of work.**
- **You must avoid entering into contact with the electrical power.**
- **You must respect all regulations in effect for preventing accidents.**
- **To this respect, you must comply with the requirements of standards IEC 364-7-702: ELECTRICAL INSTALLATIONS IN BUILDINGS. SPECIAL INSTALLATIONS. POOLS.**
- **Any maintenance operation must be done when the projector is disconnected from mains.**
- **Do not handle with wet feet.**
- **The projector is designed FOR USE ONLY WHEN FULLY SUBMERGED IN FRESH WATER and it is designed TO ONLY OPERATE WITH A SAFETY TRANSFORMER.**

11. Possible problems

PROBLEM	POSSIBLE CAUSE	SOLUTION
The Jelly doesn't work	It is not connected to a 12 V AC electrical connection.	Connect it to a 12V AC safety transformer.
	An electronic transformer is being used.	Replace the transformer with a conventional safety one for pools.
The Jelly doesn't give off much light or blinks	An excessive power loss through the cable is possible.	For multi-voltage transformers, select an outlet with suitable voltage or compensate for the power loss with a larger section cable.
	The thermal protection mechanism has activated against overheating.	Check to be sure the projector cooling slots are free of any obstacles.
The Jelly can not be secured to the niche	The Jelly model chosen does not correspond to the niche.	Choose the appropriate Jelly model: • LED JELLY lamp with NF niche • LED JELLY lamp with STD niche
Several Jelly give off different colours	The projectors are not synchronized	Hold the push button down from 1 to 3 sec. and they will go white.
The Jelly does not change colour or sequence	The antenna is not linked to the Modulator	Set up the Remote Control with the Modulator as described on Page 25
	The antenna is not connected to the Modulator	Check the connection between the Antenna and the Modulator as described on Page 24

12. “DO AND DO NOT”

	DO	DO NOT
Transportation and storage	<p>Check the state of the packaging and accompanying information about stacking.</p> <p>Always transport inside the box.</p>	<p>Do not leave the box in bad weather conditions or in very humid warehouses.</p> <p>Do not drag and/or roll the box.</p> <p>Do not throw the box.</p>
Installation	<p>Install on vertical walls.</p> <p>Install between 0.4 and 0.7 m under the water.</p> <p>Always connect to 12V.</p> <p>Leave 1.5m of cable inside for any later handling.</p>	<p>Do not install in saltwater pools.</p> <p>Do not directly connect to 230V.</p> <p>Do not connect the cables by making electrical connections with just adhesive tape or a strip.</p>
Commissioning	<p>Check the proper operation of the colour and sequence changes that are set out in this document.</p> <p>Turn on the Jelly only when submerged.</p>	<p>Do not operate the Jelly outside the water.</p>
Care	<p>Clean the trim once a year with soap and water.</p>	<p>Do not use chemical products in high concentrations that could damage the Jelly components.</p> <p>Never clean the Jelly with dissolvent.</p>

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