

Ultra thin LED lamp for Pool & Spa OWNER'S MANUAL

Adagio^{PRO}



-  Color
-  Cool white
-  Warm white
-  Blue

**Your ADAGIO^{PRO} Pool-light is an
advanced underwater luminaire with
high quality LEDs**

Spectravision[™]
lighting

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Technical specifications

Reference	Description	Voltage	Power	Nom. Tc	Lumen
PLP050-RGB	RGB color 50 mm	10-14 VAC	10 W	n.a.	400 lm
PLP100-RGB	RGB color 100 mm	10-14 VAC	45 W	n.a.	1700 lm
PLP170-RGB	RGB color 170 mm	10-14 VAC	75 W	n.a.	3000 lm
PLP050-WH	Sun White 50 mm	10-14 VAC	6 W	5000K	600 lm
PLP100-WH	Sun White 100 mm	10-14 VAC	30 W	5000K	2600 lm
PLP170-WH	Sun White 170 mm	10-14 VAC	60 W	5000K	5500 lm
PLP050-WW	Warm White 50 mm	10-14 VAC	6 W	3300K	540 lm
PLP100-WW	Warm White 100 mm	10-14 VAC	30 W	3300K	2350 lm
PLP170-WW	Warm White 170 mm	10-14 VAC	60 W	3300K	4950 lm
PLP050-BL	Blue fixed 50 mm	10-14 VAC	6 W	n.a.	165 lm
PLP100-BL	Blue fixed 100 mm	10-14 VAC	25 W	n.a.	470 lm
PLP170-BL	Blue fixed 170 mm	10-14 VAC	60 W	n.a.	1450 lm

Electrical specifications



For operation only with a safety isolation transformer

Minimum input voltage: **10 VAC 50/60 Hz**
(at lamp terminals)

Nominal input voltage: **12 VAC 50/60 Hz**
(at lamp terminals)

Maximum input voltage: **14 VAC 50/60 Hz**
(at lamp terminals)

Power factor: **> 0,90**

Environmental specifications

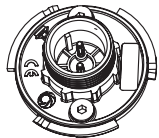
Maximum water temperature: **+40°C**
Lamps have to be kept out of ice zones

Ingress protection rate: IP68 (measured at 1m)

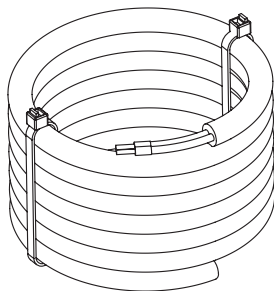


Adagio^{pro} Pool lamps must be completely submerged into water during operation. Not doing so, will void warranty.

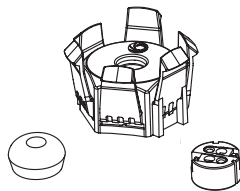
Box contents



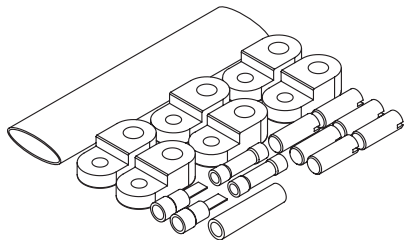
ADAGIO^{PRO} Lamp
(50,100 or 170 mm)



4m Cable



Connection Kit
ADAGIO^{PRO}
(513-0152)



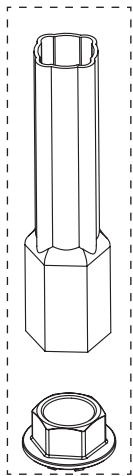
Retrofit Kit
(only for 170mm models)



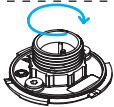
Manual

mounting face plate

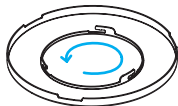
Contact your local distributor for
Toolset: 513-0151
(not included)



Lamp



Face Plate



Installation instructions

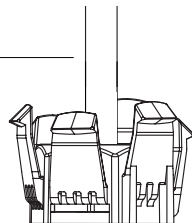
mounting the connector

4m Cable

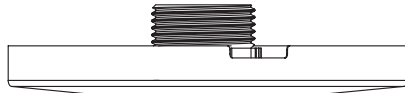
Clips Nut

Silicone Gasket

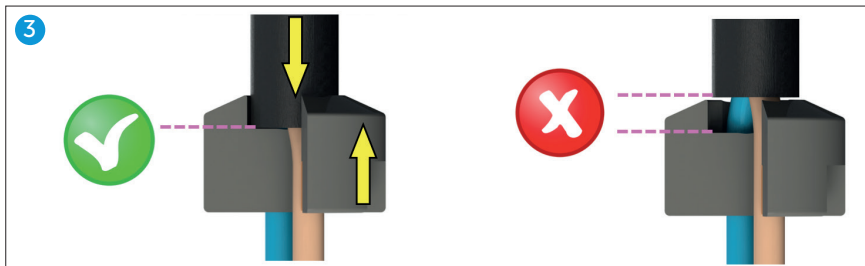
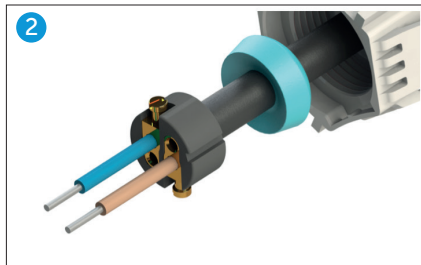
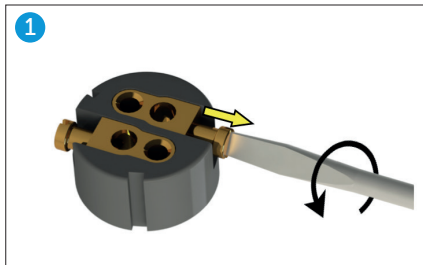
Connector

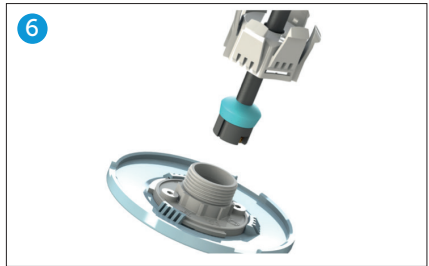
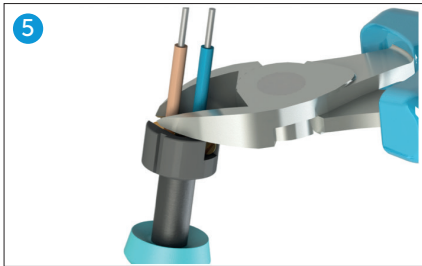
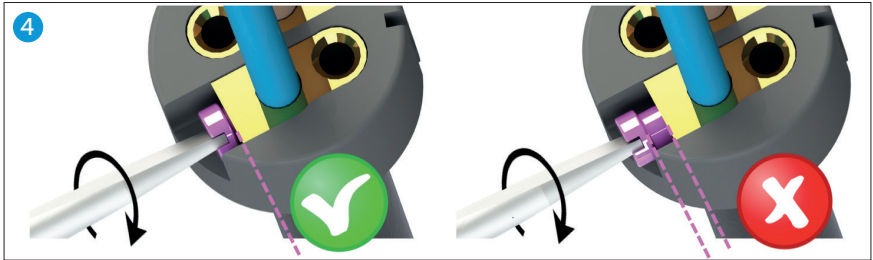


Details:
Page 6 & 7



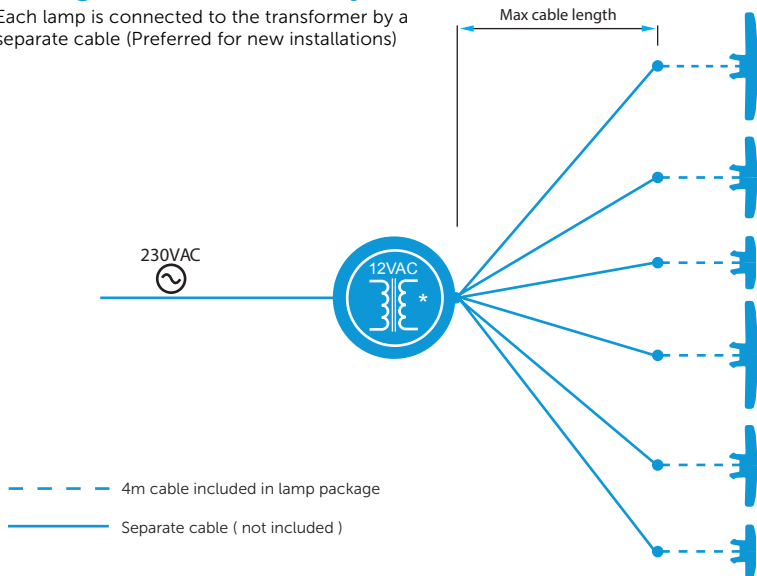
Connector installation





Wiring instructions Setup 1

Each lamp is connected to the transformer by a separate cable (Preferred for new installations)



*Toroidal transformer is strongly advised because of better efficiency

MAX CABLE LENGTH BY CABLE CROSS SECTION

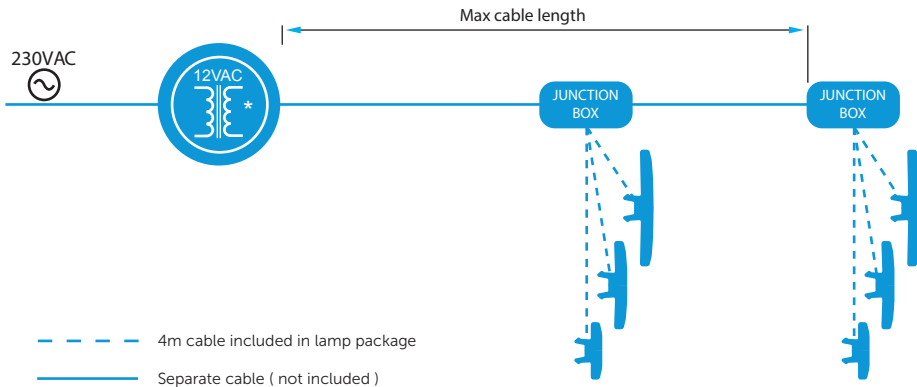
LAMP TYPE	1,5 mm ²	2,5 mm ²	4,0 mm ²	6,0mm ²	VA TRANSFORMER (12VAC)*
PLP050-WH PLP050-WW PLP050- BL	77m	129m	207m	311m	16
PLP100-WH PLP100-WW PLP100-BL	21m	35m	57m	85m	56
PLP170-WH (-LC) PLP170-WW (-LC) PLP170-BL	4m	7m	11m	16m	147
PLP50-RGB	62m	103m	165m	248m	12
PLP100-RGB	12m	20m	33m	50m	48
PLP170-RGB (-LC)	6m	10m	16m	25m	82

MAXIMUM AND STABLE LIGHT OUTPUT IS ONLY GUARANTEED WHEN THE INSTALLED CABLE CROSS SECTION MATCHES OR EXCEEDS THE ADVISED VALUES IN THE ABOVE TABLE

* The transformer VA rating must be greater or equal to the sum of VA ratings of all connected lamps. These cable lengths are calculated with worst case voltage drops in the electrical wiring.

Wiring instructions Setup 2

All lamps are connected to the transformer via 1 cable



*Toroidal transformer is strongly advised because of better efficiency

LAMP TYPE	QTY lamps	MAX CABLE LENGTH BY CABLE CROSS SECTION				VA
		2,5mm ²	4,0mm ²	6,0mm ²	10,0mm ²	TRANSFORMER (12VAC)*
PLP050-WH	1	129m	207m	311m	519m	16
PLP050-WW	2	64m	103m	155m	259m	32
PLP050-BL	3	43m	69m	103m	173m	48
	4	32m	51m	77m	129m	64
PLP100-WH	1	35m	57m	85m	142m	56
PLP100-WW	2	17m	28m	42m	71m	112
PLP100-BL	3	11m	19m	28m	47m	168
	4	8m	14m	21m	35m	224
PLP170-WH (-LC)	1	7m	11m	16m	28m	147
PLP170-WW (-LC)	2	n.a.	5m	8m	14m	294
PLP170-BL	3	n.a.	n.a.	5m	9m	441
	4	n.a.	n.a.	n.a.	7m	588
PLP50-RGB	1	103m	165m	248m	414m	12
	2	51m	82m	124m	207m	24
	3	34m	55m	82m	138m	36
	4	25m	40m	62m	103m	48
PLP100-RGB	1	20m	33m	50m	80m	48
	2	10m	16m	25m	40m	96
	3	n.a.	11m	16m	26m	144
	4	n.a.	8m	12m	20m	192
PLP170-RGB (-LC)	1	10m	16m	25m	42m	82
	2	n.a.	8m	12m	21m	164
	3	n.a.	5m	8m	14m	246
	4	n.a.	n.a.	6m	10m	328

MAXIMUM AND STABLE LIGHT OUTPUT IS ONLY GUARANTEED WHEN THE INSTALLED CABLE CROSS SECTION MATCHES OR EXCEEDS THE ADVISED VALUES IN THE ABOVE TABLE

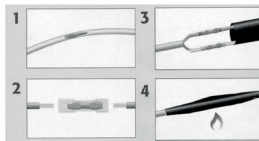
* The transformer VA rating must be greater or equal to the sum of VA ratings of all connected lamps.
These cable lengths are calculated with worst case voltage drops in the electrical wiring.

Retrofit in PAR56 niche (only PLP170)

1

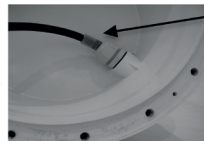


2



If old cable is re-used

OR



Silicone tube

If new (thinner) cable is used

3



14 Color programs (only for RGB lamps)

PROGRAM 1 to 7

7 fixed colours

- DEEP BLUE SEA **1**
Saturated blue
- DAYLIGHT BLUE **2**
Light blue
- SUNSET **3**
Orange red
- LOVE IS IN THE AIR **4**
Red
- FOREST SPRING **5**
Green
- THINK PINK **6**
Pink
- SUNSHINE **7**
Yellow

PROGRAM 8 to 11

4 dynamic colors

- JUNGLE, BEACH **8**
Saturated blue
Light blue, Azur blue
Mid blue, Light blue
(slowly changing)
- VOODOO **9**
Red, Wine red
Purple, Bordeaux
(slowly changing)
- DISCO **10**
Lila, pink, peach,
light yellow,
light green, light blue
(quickly changing)
- PARTY **11**
Blue, azure blue,
green, green/red,
red, red/blue, lila,
light pink, peach,
yellow, light green,
light blue, lila
(slowly changing)

PROGRAM 12 to 14

3 white tones

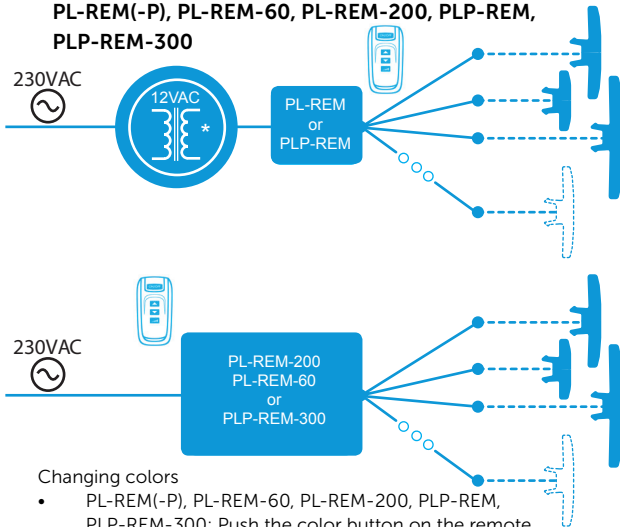
- WARM WHITE **12**
Warm white
- NEUTRAL WHITE **13**
Neutral white
- SUN WHITE **14**
Cool white

Dimmable: only with
intelligently controlled
RGB lamps (see p.15)

Synchronizing & color changing

Option 1: Classic ON/OFF control

Only in combination with the following devices:
PL-REM(-P), PL-REM-60, PL-REM-200, PLP-REM,
PLP-REM-300



Changing colors

- PL-REM(-P), PL-REM-60, PL-REM-200, PLP-REM, PLP-REM-300: Push the color button on the remote
- Simple ON/OFF wall switch: Turn switch OFF/ON a specific number of times

Manual synchronization procedure

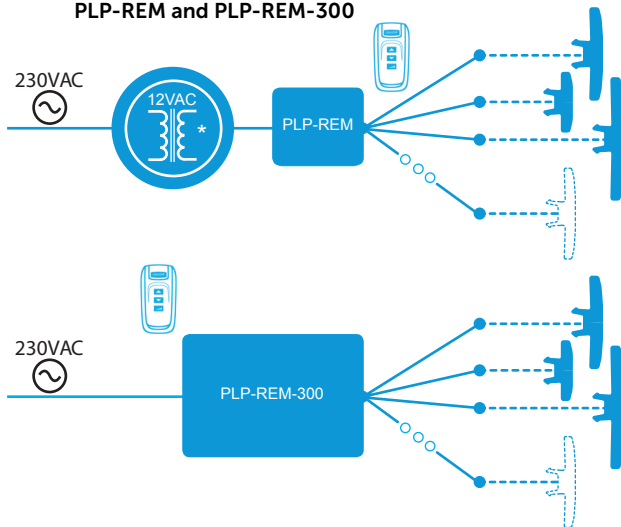
1. Switch ON the 12 VAC line voltage and make sure that all lamps light up. Each lamp can be in a different program now.
2. Switch OFF the 12 VAC line voltage and wait for at least 20 sec.
3. Switch ON the 12 VAC line voltage and switch OFF
4. Switch ON the 12 VAC line voltage and switch OFF
5. Switch ON the 12 VAC line voltage and switch OFF
6. Switch ON the 12 VAC line voltage and switch OFF
7. The lamps should all be on the "Deep Blue Sea", program 1 showing fixed blue light.

After synchronization all lamps will run the same color program of choice. To make synchronization possible, all lamps should be connected to the same power line. (12 VAC)

Synchronizing & color changing Option 2: Intelligent PLC control

Only in combination with the following devices:

PLP-REM and PLP-REM-300



- When the intelligent PLP-REM or PLP-REM-300 are used, the RGB lamps are automatically synchronized
- All the color programs and white tones are dimmable

Troubleshooting

PROBLEM

- The pool light is flickering

SOLUTION

1. Switch the lamps ON
For RGB lamps: select the Sun White color program
2. Measure the voltage at the lamp terminals
3. The voltage at the lamp should be at least 10VAC 50/60hz.
If the measured line voltage is below 10VAC:
 - A. Check the output voltage at the transformer terminals.
This voltage should be between 12VAC and 14VAC.
Verify that the used transformer VA rating is sufficient for powering all connected lamps
 - B. If the transformer output voltage is ok, then install a thicker cable between the transformer and the lamp.
(wiring instructions p. 8-11)

-
- Several pool lights in the pool show different color programs

Make sure that all lamps are connected to the same 12VAC power line. Execute the synchronization as explained on p.14 (only for classic ON/OFF control)

EC Declarations of Conformity

We, the undersigned,

Manufacturer: **Propushion Systems bvba**
Address, City: **Dooren 72, Merchtem BE-1785**
Country: **Belgium**

Declaration the following apparatus:

Product name:	LED underwater Light
Model name:	ADAGIO PRO
Used as:	PLP050-RGB, PLP050-WH, PLP050-WW, PLP100-RGB, PLP100-WH, PLP100-WW PLP170-RGB, PLP170-WH(-LC), PLP170-WW(-LC), PLP050-BL, PLP100-BL, PLP170-BL

Product description: **White and color LED lightings for swimming pools and similar applications.**

Conform with the essential requirements of the follow standards & directives:

CE directives

EU 1194/2012	ECO Design
EC 1907/2006	REACH
2011/65/EU	RoHS
2004/108/EC	Electromagnetic Compatibility (EMC)
2012/19/EU	WEEE waste electronic equipment

Conformity with the following harmonised norms:

EN60598-1	General requirements and tests
EN60598-2-18	Luminaire Part 2: Luminaires for swimming pools & similar applications
EN55015	Emission
EN61457	Immunity
EN61000-3-2/3	Harmonics
EN50419	WEEE marking
EN 50581:2012	RoHS2

I hereby declare that the equipment above named has been designed to comply with the relevant sections of above referenced specifications. The unit complies with all applicable Essential Requirements of the Directives.

CE

Name: **Marc Lamberts**
Position: **GM**
Place: **Brussegem, Belgium**
Date: **09/12/2015**



Contact details

Propulsion Systems bvba
Dooren 72
1785 Merchtem, Belgium

Tel +32 2 461 02 53
Fax +32 2 706 59 60

www.propulsionsystems.be
info@propulsionsystems.be



Spectravision™
lighting



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