

# Adagio<sup>PRO</sup>

English..... Page 2

- 
-  RGB
  -  Cool white
  -  Warm white
  -  Blue
  -  Tunable white

# OWNER'S MANUAL

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## Technical specifications

Lamp Type	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	7000K	600 lm
PLP100-WH	Sun White 100 mm	10-14 VAC	30 W	7000K	2600 lm
PLP170-WH	Sun White 170 mm	10-14 VAC	60 W	7000K	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
PLP050-TW	Tunable white 50 mm	10-14 VAC	10 W	3000-6500K	500 lm
PLP100-TW	Tunable white 100 mm	10-14 VAC	45 W	3000-6500K	2150 lm
PLP170-TW	Tunable white 170 mm	10-14 VAC	75 W	3000-6500K	4250 lm



For operation only with a safety isolation transformer



IEC Protection Class III

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

Operation on DC voltages is NOT allowed

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

Maximum water temperature: **+40°C**

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

Ingress protection rate:

Power factor: **> 0,90**

Lamps have to be kept  
out of ice zones  
**IP68**  
measured at 3m  
max depth = 3m

## Remarks

The luminaire is maintenance free

If the luminaire needs to be replaced, it needs to be completely removed from the water

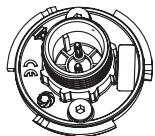


If the external flexible cable or cord of this luminaire is damaged, it shall be exclusively replaced by the manufacturer or his service agent or a similar qualified person in order to avoid hazard

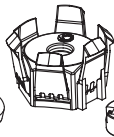


*Adagio<sup>PRO</sup> Pool lamps must be completely submerged into water during operation. Fixing the lamps with adhesives or silicone kit into a niche is not allowed. Not following these instructions, will void warranty.*

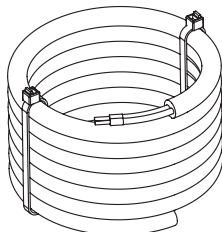
## Box contents



ADAGIO<sup>PRO</sup>  
Lamp (50,100  
or 170 mm)



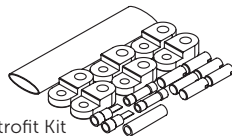
Connection Kit  
ADAGIO<sup>PRO</sup>  
( 513-0152 or 513-0219 )



4m Cable



Manual



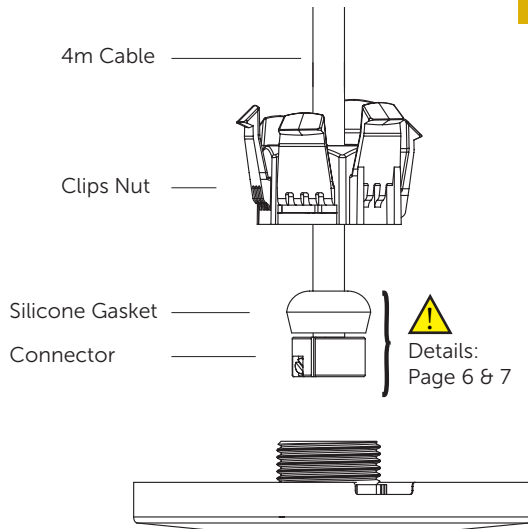
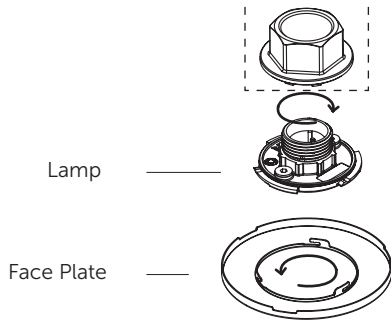
Retrofit Kit  
(only for 170mm models)

## Installation instructions

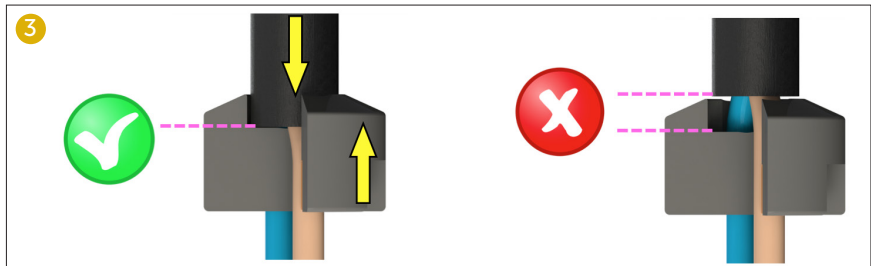
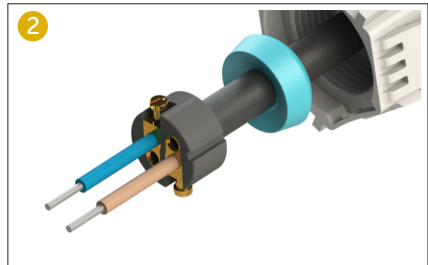
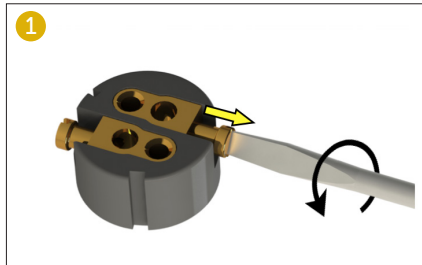
### mounting the connector

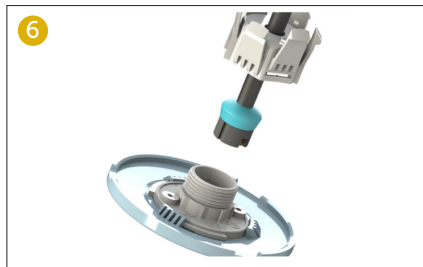
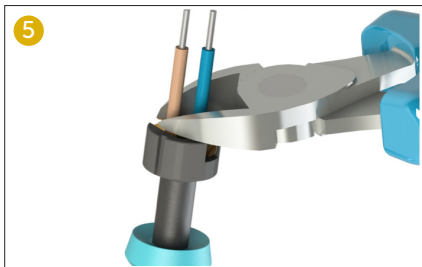
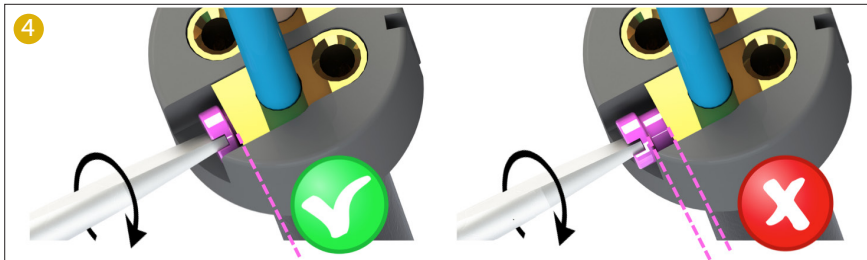
### mounting face plate

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



## Connector installation

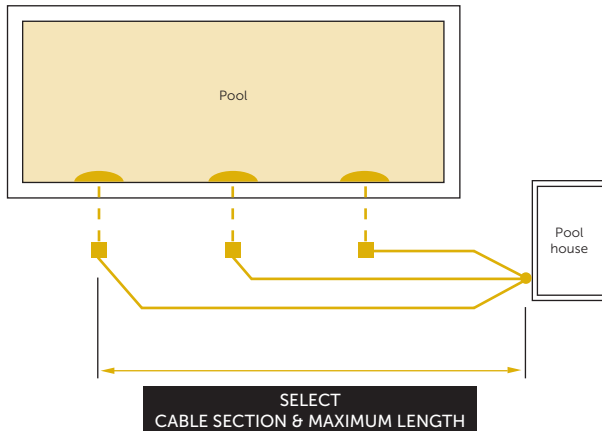




## Wiring instructions Setup 1

### For new installations

Each lamp is connected to the transformer by a separate cable




- - - - 4m cable included in lamp package
- Separate cable ( not included )



Always use a toroidal transformer



### SELECT CABLE SECTION & MAXIMUM LENGTH

LAMP TYPE	1,5mm <sup>2</sup>	2,5mm <sup>2</sup>	4,0mm <sup>2</sup>	6,0mm <sup>2</sup>	10mm <sup>2</sup>	VA TRANSFORMER (12VAC)*	
	 PLP050-WH						
	 PLP050-WW	122m	204m	326m	490m	820m	8 VA
	 PLP050-BL						
	 PLP050-RGB / TW	79m	132m	212m	318m	530m	12 VA
	 PLP100-WH						
	 PLP100-WW	26m	43m	69m	104m	173m	32 VA
	 PLP100-BL						
	 PLP100-RGB / TW	15m	25m	41m	61m	100m	48 VA
	 PLP170-WH						
	 PLP170-WW	11m	19m	30m	46m	75m	66 VA
	 PLP170-BL						
	 PLP170-RGB / TW	8m	14m	23m	35m	57m	80 VA

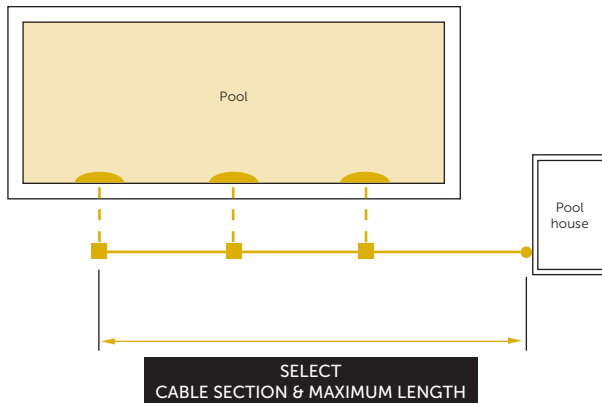
**STABLE OPERATION OF THE POOL LIGHTS IS ONLY GUARANTEED WHEN THE INSTALLED CABLE CROSS SECTION MATCHES OR EXCEEDS THE ADVISED VALUES IN THE ABOVE TABLE**

\* 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

### For existing or other installations

All lamps are connected to the transformer via 1 cable

















- 4m cable included in lamp package
- Separate cable ( not included )



This setup is not preferred for installations where a PLP-REM(-300) is used

**SELECT  
CABLE SECTION & MAXIMUM LENGTH**

LAMP TYPE	QTY	2,5mm <sup>2</sup>	4,0mm <sup>2</sup>	6,0mm <sup>2</sup>	10mm <sup>2</sup>	VA TRANSFORMER (12VAC)			
	PLP050-WH	1	204m	326m	490m	820m	8		
		2	102m	163m	245m	410m	16		
		PLP050-WW	3	68m	108m	163m	273m	24	
		PLP050-BL	4	51m	81m	122m	205m	32	
		PLP050-RGB / TW	1	132m	212m	318m	530m	12	
			2	66m	106m	159m	265m	24	
			3	44m	70m	106m	176m	36	
			4	33m	53m	79m	132m	48	
		PLP100-WH	1	43m	69m	104m	173m	32	
			2	21m	34m	52m	86m	64	
			PLP100-WW	3	14m	23m	34m	57m	96
			PLP100-BL	4	10m	17m	26m	43m	128
		PLP100-RGB / TW	1	25m	41m	61m	100m	48	
			2	12m	20m	30m	50m	96	
			3	8m	13m	20m	33m	144	
			4	6m	10m	15m	25m	192	
		PLP170-WH	1	19m	30m	46m	75m	66	
			2	9m	15m	23m	37m	132	
			PLP170-WW	3	6m	10m	15m	25m	198
			PLP170-BL	4	-	6m	11m	18m	264
		PLP170-RGB / TW	1	14m	23m	35m	57m	80	
			2	7m	11m	17m	28m	160	
			3	-	7m	11m	19m	240	
			4	-	5m	8m	14m	320	

**STABLE OPERATION OF THE POOL LIGHTS IS ONLY GUARANTEED WHEN THE INSTALLED CABLE CROSS SECTION MATCHES OR EXCEEDS THE ADVISED VALUES IN THE ABOVE TABLE**

## Wiring remarks

### For installations with PLP-REM & PLP-REM-300

Third party equipment such as frequency inverters and electric motors can generate excessive noise on the 230VAC / 400VAC power line.

This noise might be injected into the adjacent 12VAC power line and disturb the power line communication towards the Adagio<sup>Pro</sup> RGB lights.

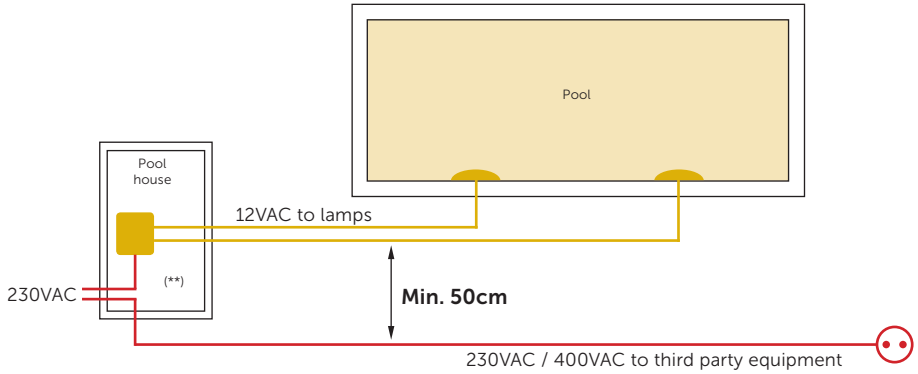
To prevent this, please take care of the following:



**Keep 230VAC / 400VAC power line cables at least 50cm separated over their full length from the 12VAC power line towards any RGB lights**



**Do not mix 12VAC and 230VAC / 400VAC power line cables into the same cable trays**



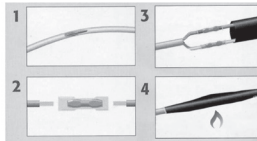
**(\*\*) Do not mix 12VAC and 230VAC / 400VAC power line cables into the same cable trays**

## Retrofit in PAR56 niche (only PLP170)

1

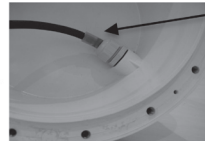


2



If old cable is re-used

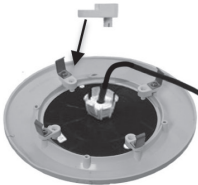
OR



Silicone tube

If new (thinner) cable is used

3



## Color programs



### RGB LAMPS

#### 7 fixed colours

1 DEEP BLUE SEA  
Saturated blue

2 DAYLIGHT BLUE  
Light blue

3 SUNSET  
Orange red

4 LOVE IS IN THE AIR  
Red

5 FOREST SPRING  
Green

6 THINK PINK  
Pink

7 SUNSHINE  
Yellow

#### 4 dynamic colors

8 JUNGLE BEACH  
Saturated blue  
Light blue  
Azur blue  
Mid blue  
Light blue  
(slowly changing)

9 VOODOO  
Red - Wine red -  
Purple - Bordeaux  
(slowly changing)

10 DISCO  
Lila - pink - peach -  
light yellow  
light green  
light blue  
(quickly changing)

11 PARTY  
Blue - azur blue -  
green - green/red -  
red - blue - lila -  
light pink - peach -  
yellow - light green -  
light blue - lila  
(quickly changing)

#### 3 white tones

12 WARM WHITE  
3000K

13 NEUTRAL WHITE  
6000K

14 SUN WHITE  
10.500K



### TW LAMPS

#### 7 white tints

1 3200K

2 3800K

3 5400K

4 7300K

5 14800K

6 LIGHT BLUE

7 BLUE

\* all color programs are dimmable if PLP-REM or PLP-REM-300 are used (in PLC mode)

## Synchronizing & color changing (for RGB and TW lamps only)

### Manual synchronization

1. Switch ON the 12 VAC line voltage and make sure that all lamps light up.
2. Switch OFF the 12 VAC line voltage and wait for at least 20 sec.
3. Switch ON and switch OFF
4. Switch ON and switch OFF
5. Switch ON
6. The lamps should now all be on color program 1  
for RGB lamps: fixed blue light (Deep blue Sea)  
for TW lamps: 3200K

### Changing colors

Quickly turn the lamps OFF and back ON

The lamp will jump to the next color program ( 1 --> 14 )

### Memorizing the last color

Turn the lamp OFF for MINIMUM 20 seconds

The last chosen color has now been memorized

The use of **PLP-REM** or **PLP-REM-300** control units enables extended features like automatic synchronisation, dimming and DMX / RS485 control



## Troubleshooting

### PROBLEM

- The pool light is flickering

### SOLUTION

1. Switch the lamps ON  
For RGB lamps: select the Sun White color program
2. Remove the lamp from the water, unscrew the clips nut, pull back the gasket and the black cable jacket, so you can reach the brass contacts inside the connector block (do not remove the connector block)
3. Measure the voltage at the lamp terminals (while the lamp is still ON)
4. 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. 8-13)

- 
- 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.16