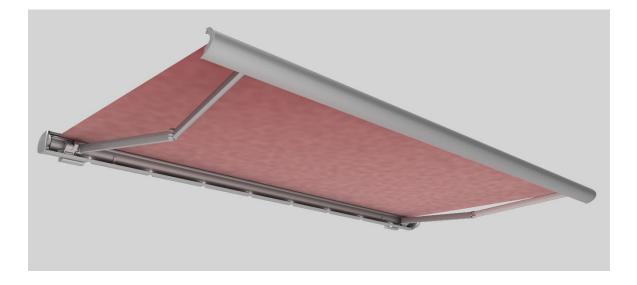
# Opal Design II / LED Maintenance Instructions and Directions for Use

# Folding arm awning with gear box drive or electric drive





#### Important guidelines for the end user.

Please read these instructions and observe their contents and warnings before commencing any assembly work.

# SBI Ltd (Sun Blinds Installations) www.sbiproducts.co.uk





#### Contents

1	Reading the Maintenance Instructions and Directions for Use	3
	<ul> <li>1.1 Warnings</li> <li>1.2 Tips and recommendations</li> <li>1.3 Illustrations</li> <li>1.4 Instructions requiring action</li> </ul>	3 3
2	Safety notes	
	2.1 Fundamental safety notes 2.1.1 Operation	4 4
	<ul><li>2.1.2 Use in winds</li><li>2.1.3 Explanation of wind resistance classes</li></ul>	5
	<ul><li>2.1.5 Use in ice and snow.</li><li>2.1.6 Obstacles.</li></ul>	6 6
	<ul><li>2.1.7 Automatic controls</li><li>2.1.8 Operation during loss of power</li></ul>	
	<ul><li>2.1.9 Checking and monitoring the awning</li><li>2.2 Note on the generation of noises (creaking) on the system in the event of temperature</li></ul>	
	changes!	
	2.4 Improper use	7
3	Product description	8
	<ul><li>3.1 Schematic diagram</li><li>3.2 Description of construction and function</li></ul>	
4	Cleaning (by the user)	9
	<ul><li>4.1 Please note! Stains forming on the fabric!</li><li>4.2 Please note! Mould and stains forming on the fabric!</li></ul>	
	4.3 Clean the powder-coated aluminium parts	9
	4.3.2 In non-saltwater areas	
5	Maintenance (at least once a year by a suitable specialist retailer).	.10
	5.1 Lubricate all moving parts 5.2 Spare parts	
6	Adjusting the inclination	.11
7	<b>Rectifying errors/malfunctions</b> (by a suitable specialist retailer) 7.1 Troubleshooting	
8	Conversions or retrofits	.12
9	Disassembly and disposal	.12
10	Noise level	.12

#### 1 Reading the Maintenance Instructions and Directions for Use

Read the Maintenance Instructions and Directions for Use before using the awning for the first time. For personal safety, it is important that these instructions are complied with. Non-compliance means the manufacturer does not carry any liability.

All instructions and directions for use supplied with the awning must be kept by the customer and passed on to the new owner if the awning is sold on.

#### 1.1 Warnings

The warnings differentiate between personal injury and damage to property. The signal word "Danger" is used for personal injury, and "Caution" for property damage.

Immediate danger to life and limb!
Immediate danger to product and environment!

#### **1.2** Tips and recommendations

Highlights tips and information that make for correct use of the product.

#### 1.3 Illustrations

Notes on item numbers can be found in the text in parentheses, e.g. (1).

#### 1.4 Instructions requiring action

Instructions requiring action are written in bold print. If the instruction requiring action consists of several individual steps, these have been numbered in the order in which they are to be carried out, e.g. :

1.	Clean the awning	
	1. Clean aluminium parts.	
	2. Clean the awning fabric.	

#### 2 Safety notes

#### 2.1 Fundamental safety notes

### DANGER

#### Personal injury

Risk of personal injury due to improper use of the awning. Please read and observe the safety notes contained in this section.

# 

#### Product and property damage

Risk of damage to the product and property due to improper use of the awning. Please read and observe the safety notes contained in this section.

#### 2.1.1 Operation

It must be assured that no children or people unable to properly assess the risks of improper or incorrect use should be able to operate the awning. Remote controls must be kept out of reach of children.

The installation and setting instructions supplied separately by the manufacturer of the motor, switches and controls must also be observed.

#### 2.1.2 Use in winds

The awning complies with the requirements of the wind resistance class shown on the CE declaration of conformity printed in the Assembly Instructions. The wind resistance class achieved after installation of the awning is heavily dependent on the type and number of fixings used as well as the installation surface involved.

The awning may only be used up to the wind resistance class specified by the company fitting the awning. This may deviate from the wind resistance class stated by the manufacturer.

#### 2.1.3 Explanation of wind resistance classes

Wind resistance class		0	1	2	3
Beaufort		< 3	4	5	6
Maximum wind speed	in km/h	19,0	28,0	38,0	49,0
	in m/s	5,4	7,9	10,7	13,8
	in mp/h	12,6	18,3	25,3	32,2

#### Wind resistance class 0



Wind resistance class 0 equates (in accordance with DIN EN 13561) either to a level of performance that is not required or has not been measured, or to a product that does not meet the requirements of Class 1. The awning must never be used in windy (wind strength 4) conditions.

#### Wind resistance class 1



The awning may only remain open until winds have reached force 4.

Definition acc. to the Beaufort scale: light breeze, light wind Wind moves small tree branches and twigs, lifts dust and loose paper

Wind speed 20-27 km/h = 5.5-7.4 m/s

#### Wind resistance class 2



The awning may only remain open until winds have reached force 5.

Definition acc. to the Beaufort scale: fresh breeze, fresh wind Small trees in leaf begin to sway; whitecaps form at sea. Wind speed 28-37 km/h = 7.5-10.4 m/s

#### Wind resistance class 3



The awning may only remain open until winds have reached force 6.

Definition acc. to Beaufort scale: strong breeze Larger tree branches move, umbrellas are hard to hold, telegraph masts whistle in the wind Wind speed 38-48 km/h = 10.5-13.4 m/s

Source: German Met Office (DWD) - Offenbach

#### 2.1.4 Use in rain

If the awning is pitched at less than  $25\% = 14^\circ$ , measured from a horizontal position, it must not be opened during rainfalls. There is a risk of water pooling in the awning fabric which could result in damage to the awning.

#### 2.1.5 Use in ice and snow

The awning must not be opened in snowfalls or when there is a risk of frost. There is a risk that the awning could be damaged.

The automatic controls must be switched off if there is a risk of frost.

#### 2.1.6 Obstacles

The space needed for the awning to open must always be kept clear. There is risk of people being trapped there.

#### 2.1.7 Automatic controls

An open awning must never be left unattended when open. The automatic controls may fail under extreme conditions (e.g. loss of power, defects, sudden storms). There is a risk that the awning could be damaged or crash down.

**Our recommendation:** if you vacate the area, switch the awning from automatic to manual control and leave the awning retracted.

If there is a risk of frost, the awning must be switched from automatic to manual control to prevent it from opening automatically. The unit must not be used in frosty conditions or if there is a risk of frost.

#### 2.1.8 Operation during loss of power

A motorised awning cannot close if there is no power. In very windy areas where losses in power are common, consider using a manual emergency device (not included with all models). The manual emergency device

must be installed at a height of no more than 1.80 metres. If there is a risk of frost, the awning must be switched from automatic to manual control to prevent it from opening automatically.

The unit must not be used in frosty conditions or if there is a risk of frost.

In an emergency, if the awning's built-in motor fails and a gale or storm is impending, the awning can be retracted using ropes or lashing belts as a makeshift solution. In this instance, wrap a rope or lashing belt around the centre joints of the awning arms and then tighten until the awning is securely closed. The folding arms must also be secured to the awning frame to prevent them from swinging out. Roll up the overhanging cloth and tie it to the awning. The aim here is to give the wind as little area to work with as possible.

#### 2.1.9 Checking and monitoring the awning

For personal safety, it is important that these safety notes are complied with and kept in a safe place.

- The performance of a product depends on how it is assembled and installed.
- Check the awning system for signs of wear or damage.
- On motorised systems, check the electrical cables and leads for damage.
- Do not use units that are in need of repair.
- Monitor the awning when it opens and retracts and keep people clear of the area until the awning has fully opened or retracted.
- The assembly work may only be performed by trained personnel.

#### Guidelines for units with automatic controls

• When performing maintenance or installation work on the covered area of the awning, disconnect the awning from the power supply.

# 2.2 Note on the generation of noises (creaking) on the system in the event of temperature changes!

i	<ul> <li>Noises which occur on the system after proper maintenance are unavoidable and are mostly due to the expansion of components due to the effect of heat.</li> <li>Have your system serviced regularly by the specialist company! The specialist company checks and maintains the fastening screws and (if present) the moving bearing points to minimise noise generation, especially in the case of temperature influences!</li> </ul>
---	--

#### 2.3 Intended use

Awnings are designed to open in order to shade exposed areas from undesired sun. Failure to use the awning as intended may result in severe danger.

Alterations, such as attaching items or conversions, not envisaged by weinor may only be carried out with the manufacturer's written consent.

Additional loads on the awning caused by hanging objects from it or by anchoring ropes may result in damage or cause the awning to fall and are therefore not permissible.

#### 2.4 Improper use

Only use original spare parts on the awning. Only use the awning as a sun protection device. Never affix/hang heavy objects to/from the awning. Never open the awning or allow it to be opened in winds stronger than wind class 2.

#### 3 Product description

3.1 Schematic diagram				
	6 5			
	Figure 1: Schematic diagram of Opal Design II/ Opal Design II LED			
	1 Wall bracket	4 Drop profile		
	2 Spring-tensionend arm	5 Support profile		
	3 Fabric	6 LED spotlight		

#### **3.2** Description of construction and function

The weinor Opal Design II/ Opal Design II LED is a cassette awning with a fabric that opens to protect against the sun. It can be tilted to an angle of between 5° and 40° as desired.

The weinor Opal Design II LED has integrated LED spotlights inside the cassette to create welcoming outdoor lighting. Space has been left at the openings on the housing for the LED spotlights to allow water to escape. The cables are suitably splash-protected.

Only high-quality, rust-free materials are used in the weinor Opal Design II. The profiles are made of extruded aluminium. All connecting parts, such as screws, are made of stainless steel.

#### 4 Cleaning (by the user)

# 

#### Personal injury

There is a risk of motorised awnings being activated unintentionally.

- Disconnect the awning from the power supply (e.g. by disconnecting the fuse) before doing any cleaning work.
- If awnings are operated by several users, a priority locking device must be activated (controlled interruption of the power supply from outside), making it impossible to open or retract the awning at all.

#### 4.1 Please note! Stains forming on the fabric!

Dirt blocks the water drain holes in the drop profile.

As a result, water pools along the drop profile. Deposits and rotting residues in this lead to stains forming on the fabric.

Remove dirt deposits in the water drain holes immediately to prevent stains from forming on the fabric!

#### 4.2 Please note! Mould and stains forming on the fabric!

If the awning fabric is retracted while still wet, mould and stains may form!

Only retract a wet awning in the event of an emergency (e.g. with the risk of a storm, frost or snowfall)!

#### Wet fabric must be dried out as quickly as possible when the awning is open!

#### 4.3 Clean the powder-coated aluminium parts

#### 4.3.1 Saltwater areas

## 

#### Product damage

In saltwater areas, there is a distinct possibility that salt may disperse or accumulate on the product.

# Wash off any salt deposits at regular intervals or as required, but no less than twice a year.

Recommendation: call in a specialist company to do the work for you. This is a good way to protect the aluminium parts and their surface from being corroded by salty water.

#### 4.3.2 In non-saltwater areas

Clean the aluminium parts at least once a year, and even more often if heavily soiled. To clean, use clean water and add a few drops of pH-neutral or very slightly alkaline detergent.

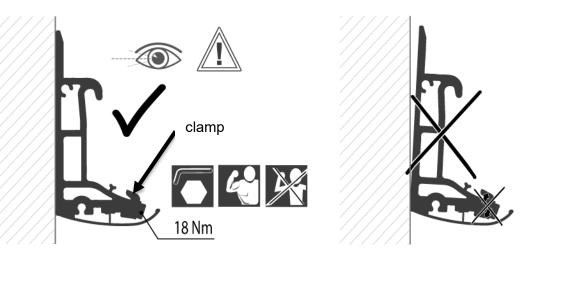
#### 5 Maintenance (at least once a year by a suitable specialist retailer)

## 

#### Personal injury

The safe and risk-free use of the awning can only be guaranteed if the product is checked and serviced on a regular basis.

- Observe the maintenance requirements and maintenance intervals.
- Inspect the awning at regular intervals for signs of wear and tear or damage to the awning fabric and frame.
- Check the awning at regular intervals for signs of damage to the cables.
- Do not use units in need of repair. Ensure people keep clear of any dangerous areas.
- Should you detect any damage, contact a specialist retailer or dealer or a suitable service company to carry out the repairs.
- Check regularly (once a year) that the bracket is mounted tightly on the wall (visual inspection by shaking the construction).
- Check regularly (once a year) that the clamp is firmly fixed.



Carry out maintenance and care tasks as required, once every spring, or whenever the awning has not been in use for a long time. Performing these tasks will extend the service life of your awning system. **Our recommendation:** call in a specialist company to carry out the necessary

**Our recommendation:** call in a specialist company to carry out the necessary maintenance and care work.

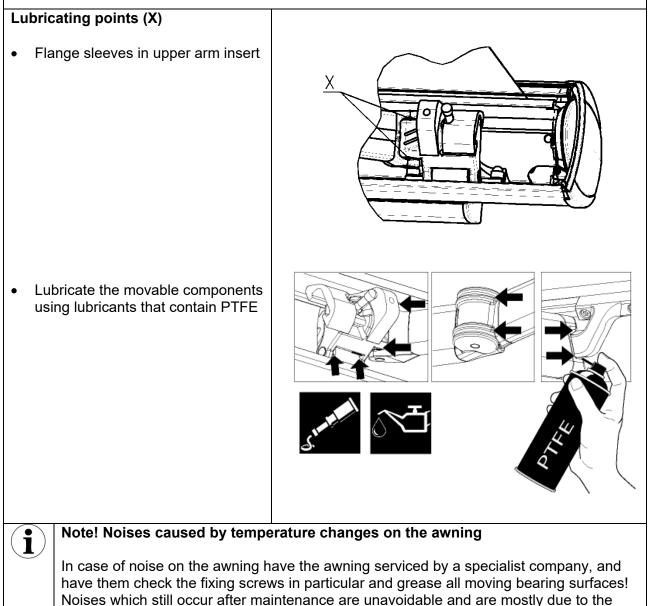
#### 5.1 Lubricate all moving parts

# 

#### Product damage

Use greases, sprays or liquids that contain elements of teflon, PTFE or comparable agents. For best effects, use a water- and dirt-repellent lubricant.

- ► The manufacturer's guidelines must be observed.
- Do not use lubricants that corrode plastics.



expansion of components due to the effect of heat.

#### 5.2 Spare parts

Only spare parts approved by weinor may be used:

#### 6 Adjusting the inclination

Permissible range of adjustment: Opal Design II 5° to 40°, with a projection >351 cm and pitch of 7° - 40°. We recommend setting all awnings to an angle of more than 5°. To adjust the angle of inclination, open the awning and slightly lift the arm in question to reduce the strain.

#### 7 Rectifying errors/malfunctions (by a suitable specialist retailer)

Our recommendation: defects should only be repaired by your specialist retailer or partner.

Please bear in mind that defects that are not repaired properly will compromise the safety of your awning system.

You should therefore call your specialist retailer or dealer immediately. Your specialist local retailer or dealer will gladly provide you with swift, qualified advice. To help you troubleshoot, a few errors are listed below.

Error	Cause	Remedy	
Motor not running	No power	Connect to the mains	
	Motor incorrectly connected	Connect to the mains     (authorised personnel only)	
	• Motor is too warm and has been shut down by the thermo protector	• Wait approx. 15 to 20 minutes until the motor has cooled down	
Squeaking	Bearing surfaces not     lubricated	Maintenance and care     (fitter)	

#### 7.1 Troubleshooting

#### 8 Conversions or retrofits

Your awning can only be converted or retrofitted to a limited extent.

The following conversions are possible:

- Replace fabric
- Wind support

Your awning can also be retrofitted with automatic controls, e. g. with sun and rain sensors. Contact your local dealer for more details, who will be happy to advise you.

#### 9 Disassembly and disposal

Although this product does not contain any materials which pose a risk or danger to the environment, the awning parts should nevertheless be disposed of properly. When dismantling and disposing of the awning, fully slacken or secure the tensioned parts (e.g. folding arms) to prevent them from opening or extending automatically. A suitably qualified company should be engaged to perform this task.

#### 10 Noise level

When installed, the awning's noise level has been measured at below 70 dB(A).

# SBI Ltd (Sun Blinds Installations) www.sbiproducts.co.uk