use and maintenance instructions manual
All information contained in this document was provided by the manufacturer of the components for this particular model. As a fabricator/distributor, Retractableawnings.com claims no liability with respect to these documents as we are not engineers and did not complete any of the information, engineering or calculations in this document.

All measurements in this document are metric. To convert from metric (meters, centimeters and millimeters) to imperial (feet and inches) visit this website: http://www.onlineconversion.com/length_common.htm
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1 Introduction
This manual is an integral part of the Palermo awning and has been written for users; it is of fundamental importance for using and maintaining the product properly. It is forbidden to remove, rewrite or in any way modify the pages and contents of this manual.
The manual must be kept in one piece and stored in an easily accessible location until the awning is disposed of.
If the manual is lost or destroyed, please ask your dealer for a new copy, specifying the main product data and where the new copy should be sent to.
The manufacturer reserves the right to update the product and relative manuals without being required to update existing products and manuals.
The manufacturer reserves all rights to this manual: it may not be fully or partly reproduced without written permission.
If the product is tampered with or modified without the manufacturer’s permission, the latter hereby declines all liability for any damage that may derive.

1.1 Symbols used in this manual
The WARNING symbol used in this manual is shown below.

INFORMATION AND PRECAUTIONS
Instructions and useful advice for using and preserving. Failure to act on these messages may impair the integrity and/or resistance of the product.

ATTENTION
OPERATOR HAZARD! These instructions and indications should be closely assessed and observed. Failure to act on these messages may be hazardous for people.

2 Safety
2.1 General safety information
- In the event of rain, wind or snow, fully close the awning. Danger of personal injury or damage to property.
- It is strictly forbidden to remove the safety devices installed on the awning (see Chap. 2.2 “Safety devices”).
- Powered awnings are opened and closed with a switch and/or a remote control unit: both these devices must be kept OUT OF REACH OF CHILDREN.
- Make sure no-one is standing near the awning while it is opening/closing.
- Do not place objects on the awning fabric.
- It is forbidden to hang from or hold on to the awning: risk of serious personal injury and damage to the awning.
- In case of doubt, consult your dealer BEFORE using the awning.
- Users may not perform unauthorised operations on the awning (see Chap. 3.2 “Foreseen use and conditions of use” and Chap. 6 “Maintenance”).
- If the product is tampered with or modified without the manufacturer’s permission, the latter hereby declines all liability for any damage that may derive.
- The user must promptly inform the dealer if faults and/or malfunctions are found on a safety device, or if any hazardous situations arise.
- All maintenance and cleaning operations must be performed with the mains power supply disconnected.
- Installation, initial start-up, adjustment and extraordinary maintenance operations may only be performed by suitably qualified specialised technical staff. Please contact Technical Assistance.

2.2 Safety devices
(OPTIONAL, only for powered awnings)
WIND SENSOR: in case of strong winds, the awning closes automatically. The cut-in level of the wind sensor (anemometer) is adjusted during initial start-up, as described in the Installation Manual.
Use and maintenance instructions

(OPTIONAL, only for powered awnings)
RAIN SENSOR: in case of heavy rain, the awning closes automatically. The cut-in level of the instrument used to measure the quantity of rainfall in a determined period of time (rain gauge) is adjusted during initial start-up, as described in the Installation Manual.

(OPTIONAL, only for powered awnings)
EMERGENCY MANOEUVRE: in the event of a blackout, the awning can be closed with an emergency crank.

2.3 · Residual risks
DANGER OF FINGERS/ARMS GETTING CAUGHT in the folding arms while the awning is closing and opening. The product must be installed at a minimum height of 2500 mm. If this is not possible for awnings installed with automatic devices (e.g.: wind sensor, rain sensor, etc.), the manufacturer is obliged to install an acoustic warning.

3 · Description of awning
The Palermo folding arm awning can be installed on either the wall and the ceiling and can either be manually operated or powered by a motor; in the latter case, a wind sensor (anemometer), rain sensor, dusk sensor and emergency manoeuvre can be installed on request.

3.1 · Components
The awning comprises a metal structure and a piece of fabric.
• Metal structure: this consists of a frame containing the various mechanisms for opening and closing the awning. It comprises a square bar (A - Fig. 1), a terminal bar (B - Fig. 1) and mechanised folding arms (C - Fig. 1) fitted with sheathed cables or a stainless steel chain.
• Fabric (D - Fig. 1): this covers and protects the awning.

The construction materials have been chosen to optimise resistance to wear deriving both from use and the weather.

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**FIG. 1**
3.2 · Foreseen use and conditions of use

This awning has been designed to offer protection from the sun and adjust the reflection of light in the area beneath it; the product may only be used to move the incorporated fabric up and down in order to reach its fully open and closed positions and, where applicable, intermediate positions. The awning may only be used for the above purpose, even if it is installed with a waterproof or PVC fabric. The awning may be used by non-professional adult operators.

⚠️ ATTENTION
IT IS FORBIDDEN to use the awning for any other purpose as the relative operating conditions could jeopardise personal safety.
IT IS FORBIDDEN to place objects on the awning and/or hang on to it.

The Manufacturer declines all liability for injury to persons or damage to property deriving from improper use. Failure to observe the conditions of use automatically invalidates any warranty granted by the Manufacturer.

⚠️ ATTENTION
IT IS FORBIDDEN to install powered awnings in explosive atmospheres.

⚠️ ATTENTION
In the event of rain, wind or snow, fully close the awning. Danger of personal injury or damage to property.

ℹ️ INFORMATION AND PRECAUTIONS
Operating the awning in icy weather will damage it!

The product may be installed at any height over 2500 mm from the ground; the opening/closing switch (only for powered awnings) must be fitted in a protected position at a minimum height of 1500 mm from the ground and in a perfectly safe area.

⚠️ ATTENTION
Fit a keyswitch if the awning is installed in sensitive buildings such as schools, colleges, hospitals, nursing homes, etc.
If the awning is installed with a remote control unit, it must be kept out of reach of children.

The remote control unit may also be fitted outdoors provided the circuit is protected to IP55. The installation area must be large enough to allow the awning to be properly used and opened to its full extent.

⚠️ ATTENTION
It is forbidden to install or place ladders or other objects in the operating area of the awning.

3.3 · Technical data

<table>
<thead>
<tr>
<th>Overall dimensions and weight (1 pair of arms)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Width (cm)</td>
</tr>
<tr>
<td>Projection (awning open) (cm)</td>
</tr>
<tr>
<td>Approx. weight (kg)</td>
</tr>
<tr>
<td>Blind roller Ø (mm)</td>
</tr>
</tbody>
</table>
3.4 · Label
Label (A), showing information about the manufacturer, is generally applied to the inside of the end-piece.
Label (B), listing the main product features and data, is generally delivered along with the sales documents.

4 · Transport and installation
4.1 · Transport
Handling and transport operations are performed by the Dealer and/or Manufacturer which undertake to transport the product in suitable packaging and keep it in perfect condition until it is delivered to the customer. Damage to the product caused by the awning being dismounted and handled/transported after installation is not covered by the warranty.
Dispose of and/or reuse the packaging according to the regulations in force in the country the product is installed in.

4.2 · Installation

**ATTENTION**
Assembly, installation and initial start-up operations may only be performed by suitably qualified specialised technical staff provided by the Dealer or the Manufacturer.

All the instructions and the main safety regulations for performing these operations are described in the “Assembly Manual” and the “Installation Manual”.
The position chosen by the user to install the product must be able to support the weight of the product and be large enough to allow the awning to open to its full extent (see “Installation Manual”).

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Wind resistance (at maximum dimensions)

| Class tested by TÜV according to EN 13561:2004 | 2 |
| Nominal test pressure \( p (N/m^2) \) \( \alpha=1 \) | 70 |
| Class according to the proposal of revision of § 4.4 of EN 13561:2004 | 3 |
| Dynamic pressure \( q (N/m^2) \) | 110 |
| Resistance to water pocket | 2 |

Motor (if installed)

| Type | see manual relative to the installed motor |
| Features | EC marked; approved for awnings |

For the features of the optional accessories, see Chap. 8 "Optional Accessories" and the relative instructions.
5 Use

⚠️ ATTENTION
Before using the awning, carefully read Chap. 2 “Safety” and Chap. 3.2 “Foreseen use and conditions of use”.

⚠️ ATTENTION
Make sure no-one is standing near the awning while it is opening/closing.

⚠️ ATTENTION
In the event of rain, wind or snow, fully close the awning. Danger of personal injury or damage to property.

- Only use the awning as sun protection and for the purposes indicated in Chap. 3.2 “Foreseen use” of this manual.
- It is strictly forbidden to climb onto or hang/place objects on the awning.
- If mould develops on the fabric, clean it as shown in Chap. 6.2 “Cleaning”.

⚠️ ATTENTION
Always open the awning from up to down and never vice-versa. Danger of breaking the folding arms and consequent risk of serious personal injury.

In the event of a malfunction, contact your dealer.

MANUAL AWNING
Open and close the awning using the supplied rod (A - Fig. 1) and crank (B - Fig. 1).

POWERED AWNING
Open and close the awning using the:
- SWITCH, installed near the awning in a position offering the user a full view of the awning. If the switch is installed outdoors, it must be suitably protected;
- portable or wall-mounted REMOTE CONTROL UNIT. The features and operation of these optional accessories are described in the attached manuals relative to the Motor, Automatic Devices and Controls.

6 Maintenance

⚠️ ATTENTION
Switch off the mains supply before carrying out any maintenance and cleaning operations.

Before operating the awning, carefully read Chap. 2 “Safety”.
Installation, initial start-up, adjustment and extraordinary maintenance operations may only be performed by suitably qualified specialised technical staff. Please contact Technical Assistance.
## 6.1 · Troubleshooting

**ATTENTION**

In case of faults or when troubleshooting, observe the safety regulations; in particular, danger of lethal electrocution when troubleshooting or repairing electrical faults. **ELECTRICAL MAINTENANCE MAY ONLY BE PERFORMED BY QUALIFIED STAFF.**

For any problems that are not indicated in the following table, please contact Technical Assistance.

### MANUAL AWNING

<table>
<thead>
<tr>
<th>PROBLEM</th>
<th>REASON</th>
<th>REMEDY</th>
</tr>
</thead>
<tbody>
<tr>
<td>The fabric does not roll up straight</td>
<td>Arms out of symmetry</td>
<td>Contact Technical Assistance</td>
</tr>
<tr>
<td></td>
<td>Fabric thickness not uniform</td>
<td>Fully rewind the fabric</td>
</tr>
</tbody>
</table>

### POWERED AWNING

#### Without electronic power unit

<table>
<thead>
<tr>
<th>PROBLEM</th>
<th>REASON</th>
<th>REMEDY</th>
</tr>
</thead>
<tbody>
<tr>
<td>The fabric does not roll up straight</td>
<td>Arms out of symmetry</td>
<td>Contact Technical Assistance</td>
</tr>
<tr>
<td></td>
<td>Fabric thickness not uniform</td>
<td>Fully rewind the fabric</td>
</tr>
<tr>
<td>The awning does not fully close</td>
<td>Travel stop incorrectly adjusted</td>
<td>Contact Technical Assistance</td>
</tr>
<tr>
<td>The awning does not fully open</td>
<td>Motor gear moves</td>
<td>Contact Technical Assistance</td>
</tr>
<tr>
<td>The motor is very noisy</td>
<td>Faulty wiring</td>
<td>Contact Technical Assistance</td>
</tr>
<tr>
<td></td>
<td>Faulty motor</td>
<td>Contact Technical Assistance</td>
</tr>
<tr>
<td>The motor stops after 4-5 minutes of continuous use</td>
<td>Motor overheating protection tripped</td>
<td>Let the motor cool down for a few minutes</td>
</tr>
</tbody>
</table>

#### With electronic power unit

<table>
<thead>
<tr>
<th>PROBLEM</th>
<th>REASON</th>
<th>REMEDY</th>
</tr>
</thead>
<tbody>
<tr>
<td>The awning does not move</td>
<td>Fuse blown</td>
<td>Contact Technical Assistance</td>
</tr>
<tr>
<td></td>
<td>Faulty wiring</td>
<td>Contact Technical Assistance</td>
</tr>
<tr>
<td>The awning moves jerkily (it opens for 50 cm and then stops, etc.).</td>
<td>Wind sensor faulty</td>
<td>Contact Technical Assistance</td>
</tr>
<tr>
<td>The awning does not close in strong winds.</td>
<td>Fuse blown</td>
<td>Contact Technical Assistance</td>
</tr>
<tr>
<td></td>
<td>Wind sensor faulty</td>
<td>Contact Technical Assistance</td>
</tr>
<tr>
<td>The awning does not close during heavy rain.</td>
<td>Fuse blown</td>
<td>Contact Technical Assistance</td>
</tr>
<tr>
<td></td>
<td>Rain sensor faulty</td>
<td>Contact Technical Assistance</td>
</tr>
<tr>
<td>With the remote control unit, the awning opens or closes by itself.</td>
<td>Battery flat</td>
<td>Replace the batteries in the remote control unit (see Control instructions)</td>
</tr>
</tbody>
</table>
6.2 • Cleaning

⚠️ **ATTENTION**

Switch off the mains supply before carrying out any maintenance and cleaning operations.

Keep the fabric clean to prevent the formation of mould caused by deposits of dust or other materials on the fabric; this can be done by vacuuming the dust or cleaning the fabric with a sponge or cloth and warm water. Dry the fabric afterwards.

Cleaning using ladders, trestles and the like may only be performed by specialist staff who must observe current safety legislation and use personal protective equipment such as safety harnesses and cables.

⚠️ **ATTENTION**

Do not use solvents - ammonia - hydrocarbons.

6.3 • Routine maintenance

⚠️ **ATTENTION**

Switch off the mains supply before carrying out any maintenance and cleaning operations.

If performed at the indicated frequencies, the following operations will keep the product in good condition.

**Twice a year, before and after summer**

Check the fabric for tears or broken stitching: in spring, before use in summer, and in autumn, before closing for winter.

**Once a year, before summer**

With the awning approximately half open, lubricate all moving parts with silicon oil:

- If installed, lubricate the chain, the joint (A - Fig. 1) and the shoulder (B - Fig. 2).
- Lubricate the cover on the part opposite the control (motor or crank-rod) (C - Fig. 2).

![FIG. 1](image1.png)

![FIG. 2](image2.png)
6.4 Extraordinary maintenance

Obligatory extraordinary maintenance must be booked with Technical Assistance every two years. If this is not done, the warranty will immediately cease to be valid.

⚠️ ATTENTION

All extraordinary maintenance operations must be performed by professionally qualified and trained staff. Contact Technical Assistance for a specialist.
To dismount all or part of the awning, consult the assembly, installation and start-up instructions.
The warranty will cease to be valid if unoriginal spare parts are used.

Spare parts must be requested from the dealer.

7 Dismounting and disposal

⚠️ ATTENTION

The awning must be dismounted by professionally qualified and trained staff. Contact Technical Assistance for a specialist.

Close the awning before starting.
Turn off the mains power supply and disconnect the circuit down-line from the switch. Disconnect the motor, tie the arms together, dismount the supports and remove the awning from the supports.

As the awning contains no hazardous materials, no special disposal precautions are required.
Observe the regulations in force at the moment of disposal.

8 Optional accessories

The Palermo folding arm awning be assembled with the following optional accessories on request:
• Anemometer: strong wind sensor (only if the awning is powered);
• Rain gauge: heavy rain sensor (only if the awning is powered);
• Twilight sensor: sun sensor (only if the awning is powered);
• Emergency manoeuvre: allows the awning to be closed in the event of a blackout (only if the awning is powered);
• Lights Kit;
• Hood;
• Box terminal bar: the utilisation of this optional lowers the product’s class;
• Crossing arms kit: the utilisation of this optional lowers the product’s class.

The features and operation of these optional accessories are described in the attached manuals relative to the Motor, Automatic Devices and Controls.
Installation instructions are given in the Installation Manual.
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