Sonesse® 50 RS485
LT50 RS485
Installation guide
1. INTRODUCTION

The Sonesse® 50 motor range can motorise all tubular applications: Roller shades, Roman shades, Projection screens, ...

The Sonesse® 50 is designed to ensure quiet operations.

The Sonesse® 50 RS485 & LT50 RS485 are digital AC motors, compatible with RS485* solutions (*physical layer).

The Sonesse® 50 RS485 & LT50 RS485 motors are designed to be connected on a BUS Line RS485.

Somfy hereby declares that this product conforms to the essential requirements and other relevant provisions of Directive 1999/5/CE. A Declaration of Conformity is available at www.somfy.com/ce. Usable in EU, CH and NO. Images are not contractually binding.

2. SAFETY

2.1. Safety and responsibility

• This Somfy product must be installed by a professional installer of motorisation and home automation, for whom these instructions are intended.

• Before installation, check that this product is compatible with the associated controls and accessories (crown, wheel brackets).

• These instructions describe how to install, set and use this product.

• Moreover, the installer must comply with current standards and legislation in the country in which the product is being installed, and inform his customers of the operating and maintenance conditions for the product.

• Any use outside the application scope specified by Somfy is not approved. Such use, or any failure to comply with the instructions given herein will invalidate the warranty, and Somfy refuses to accept liability.

Subject to technical modifications.
2.2. Specific safety advice

In addition to the safety instructions described in this guide, be sure to also observe the instructions set out in the attached document "Safety instructions to follow and keep".

1) Switch off the mains supply of the shade before performing any service operation in the vicinity.

To avoid damaging the product:
2) Never immerse it in liquid!
3) Avoid impacts!
4) Do not drop it!
5) Never drill holes in it!
6) Avoid moving the shade if ice has formed on it.

3. INSTALLATION

3.1. Motor preparation

1) Fit the crown (a) and drive wheel (b) to the motor.
2) Measure the length (L) between the end of the drive wheel and the head end.

3.2. Tube preparation

1) Cut the tube to the required length.
2) Deburr the tube and remove the debris.
3) For smooth roller tubes, cut a notch with the following measurements:
   e = 4 mm / 0.16 In   h = 28 mm / 1.1 In
3.3. Motor/tube assembly

1) Slide the motor into the tube. For smooth roller tubes, position the notch previously cut on the crown.
2) Fix the tube to the drive wheel with 4 self-tapping screws with a diameter of 5 mm or 4 steel pop rivets with a diameter of 4.8 mm located at L - 15 mm ± 3 mm.

⚠️ Warning: The screws or pop rivets must only be attached to the drive wheel and not to the motor.

3.4. Mounting the motorized tube on the brackets

If necessary, screw the bracket interface on the motor head.
1) Mount the motorized tube on the end bracket (c).
2) Mount the motorized tube on the motor bracket (d). Fit the stop ring (e).

4. WIRING

4.1. Power wiring

1) Cut off the mains power supply.
2) Connect the motor according to the information in the table below:

<table>
<thead>
<tr>
<th>RANGE</th>
<th>Neutral</th>
<th>Live</th>
<th>Earth</th>
</tr>
</thead>
<tbody>
<tr>
<td>230V-50Hz</td>
<td>Blue</td>
<td>Brown</td>
<td>Yellow/Green</td>
</tr>
<tr>
<td>220V-60Hz</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>120V-60Hz</td>
<td>White</td>
<td>Black</td>
<td>Green</td>
</tr>
<tr>
<td>100V-50/60Hz</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4.2. Data wiring

Connect the data cable to the motor according to the information in the tables below:

⚠️ Between the RS485 data wire and the RS485 product, the cable length should not exceed 10m.

1) Data cable RJ9/RJ45

- 1: + RS485
- 2: - RS485
- 3: Power out *
- 4: GND

* Power out specification: 7.5V / 30 mA max

2) Data cable RJ9/RJ9

- 1: + RS485
- 2: - RS485
- 3: Power out *
- 4: GND

- 5: Not used
- 6: Not used
- 7: Not used
- 8: GND
5. COMMISSIONING

To set the motor, use the RS485 SETTING TOOL ref:9017142A

Connect the RS485 SETTING TOOL to the motor switch on and follow the instruction on the RS485 SETTING TOOL.

**Select the preset position (1 to 16) with the ▲ ◀ buttons.**
6. OPERATION

To control the motor, please refer to the installation instruction of the used control.

7. TROUBLESHOOTING

8.1. Questions on the Sonesse® 50 RS485 or LT50 RS485?

The motor doesn’t work:
Verify:
• The wiring of the motor.
• The power supply specifications.
• The compatibility of the control.
• The heat generated (wait for the cooling of the motor).

The equipment stops too soon:
Verify:
• The operation of end-limits during the motor rotation.
• The crown is properly fitted to the tube.
• The end-limits of the motor are properly adjusted.
• That the blind is within the recommended weight limit.

The equipment is noisy:
Verify:
• The wheel and the crown are well adapted to the used tube.
• The mechanical plays between motor, accessories, tube and end cap are minimized.
• The wheel is properly fixed to the tube.
• The equipment is not constrained between the brackets.
• The length of the notch is adapted to the motor crown or to the used crown.
• Debris, screws or other are not in your tube.
• The power supply specifications.
• The temperature of the environment is in conformity with the operating temperature.
### 8. TECHNICAL DATA

<table>
<thead>
<tr>
<th></th>
<th>230V-50Hz</th>
<th>120V-60Hz</th>
<th>100V-50/60Hz</th>
<th>220V-60Hz</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Power supply</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Operating temperature</strong></td>
<td></td>
<td>LT50 &amp; Sonesse 50 ≥ 4Nm : -20°C to +70°C</td>
<td>Sonesse 50 ≤ 4Nm : 0°C to +60°C</td>
<td></td>
</tr>
<tr>
<td><strong>Protection rating</strong></td>
<td></td>
<td>LT50 &amp; Sonesse 50 ≥ 4Nm : IP 44</td>
<td>Sonesse 50 ≤ 4Nm : IP31</td>
<td></td>
</tr>
<tr>
<td><strong>Safety level</strong></td>
<td></td>
<td></td>
<td>Class I</td>
<td></td>
</tr>
<tr>
<td><strong>Connector</strong></td>
<td></td>
<td></td>
<td>RJ9</td>
<td></td>
</tr>
</tbody>
</table>

Damaged electric products and batteries should not be disposed of with normal household waste. Make sure to drop them in specially provided containers or at an authorized organization that will ensure they are recycled.
Somfy Worldwide

Argentina:
Somfy Argentina
Tel: +55 11 (0) 4737-3700

Australia:
Somfy PTY LTD
Tel: +61 (0) 8845 7200

Austria:
Somfy GesmbH
Tel: +43 (0) 662 / 62 53 08 - 0

Belgium:
Somfy Belux
Tel: +32 (0) 2 712 07 70

Brasil:
Somfy Brasil Ltda
Tel: +55 11 3569-3560

Canada:
Somfy ULC
Tel: +1 (0) 905 564 6446

China:
Somfy China Co. Ltd
Tel: +8621 (0) 6280 9660

Croatia:
Somfy Predstavništvo
Tel: +385 (0) 51 502 640

Cyprus:
Somfy Middle East
Tel: +357(0) 25 34 55 40

Czech Republic:
Somfy, spol. s.r.o.
Tel: +420 296 372 486-7

Denmark:
Somfy Nordic Danmark
Tel: +45 65 32 57 93

Export:
Somfy Export
Tel: +33 (0) 4 50 96 70 76
Tel: +33 (0) 4 50 96 75 53

Finland:
Somfy Nordic AB Finland
Tel: +358 (0)9 57 130 230
Fax: +358 (0)9 57 130 231

France:
Somfy France
Tel: +33 (0) 820 374 374

Germany:
Somfy GmbH
Tel: +49 (0) 7472 930 0

Greece:
SOMFY HELLEAS S.A.
Tel: +30 210 6146768

Hong Kong:
Somfy Co. Ltd
Tel: +852 (0) 2523 6339

Hungary:
Somfy Kft
Tel: +36 1814 5120

Indonesia:
Somfy Jakarta
Tel: +62 (0) 21 719 3620

Iran:
Somfy Iran
Tel: +98-217-7951036

Italy:
Somfy Italia s.r.l
Tel: +39-024847181

Japan:
SOMFY KK
Tel: +81 (0) 45 481 6800

Jordan:
Somfy Jordan
Tel: +962-6-5824165

Kingdom of Saudi Arabia:
Somfy Saudi Riyadh:
Tel: +966 1 47 23 020
Jeddah:
Tel: +966 2 69 83 353

Kuwait:
Somfy Kuwait
Tel: +965 4348906

Lebanon:
Somfy Lebanon
Tel: +961 (0) 1 391 224

Malaysia:
Somfy Malaysia
Tel: +60 (0) 3 228 74743

Mexico:
Somfy Mexico SA de CV
Tel: 52 (55) 4777 7770

Morocco:
Somfy Maroc
Tel: +212-22443500

Netherlands:
Somfy BV
Tel: +31 (0) 23 455 44 00

Norway:
Somfy Nordic Norge
Tel: +47 41 57 66 39

Poland:
Somfy SP Z.O.O.
Tel: +48 (22) 50 95 300

Portugal:
Somfy Portugal
Tel: +351 (0) 229 36 840

Romania:
Somfy SRL
Tel: +40 (0) 368 - 444 081

Russia:
Somfy LLC.
Tel: +7 495 781 47 72

Serbia:
SOMFY Predstavništvo
Tel: 00381 (0)25 841 510

Singapore:
Somfy PTE Ltd
Tel: +65 (0) 6383 3855

Slovak Republic:
Somfy, spol. s r.o.
Tel: +421 337 718 638
Tel: +421 905 455 259

South Korea:
Somfy JOO
Tel: +82 (0) 2594 4331

Spain:
Somfy España SA
Tel: +34 (0) 934 800 900

Sweden:
Somfy Nordic AB
Tel: +46 (0) 40 16 59 00

Switzerland:
Somfy Ltd.
Tel: +41 (0) 44 838 40 30

Syria:
Somfy Syria
Tel: +963-9-55580700

Taiwan:
Somfy Development and Taiwan Branch
Tel: +866 (0) 2 8509 8934

United Arab Emirates:
Somfy Gulf Jebel Ali Free Zone
Tel: +971 (0) 4 88 32 808

United Kingdom:
Somfy Limited
Tel: +44 (0) 113 391 3030

United States:
Somfy Systems
Tel: +1 (0) 609 395 1300

Somfy SAS, capital 20,000,000 Euros. RCS Annecy 303 970 230 - 04/2013