

WireFree™ Solar Pack

Installation Instructions *for* WireFree™ 12 Volt Motors



B2 BUILD Version 1.3

Available at www.AV-Outlet.com

REF # 5066778



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1. Introduction

The Solar Pack is a group of components that work in unison as a long life energy source for Somfy 12 Volt WireFree™ motors.

Contents of the Pack include:

- (1) Solar Panel in Bezel
- (1) Battery Tube with NiMH Battery Installed
- (1) Wire Harness
- (1) Glass-Mount Adhesive
- (1) Alcohol wipe
- (1) Instructions

2. Safety

2.1 Safety and Responsibility

Before installing and using this product, please read the installation guide carefully.

It is recommended that Solar Pack be installed by a professional motor installer, for whom these instructions are intended. Care must be taken for both new and existing installations due to the physical mounting location of the motorized window covering - likely at the top of an interior window. Consequently, pay attention to your personal safety in regards to proper use of ladders. Care must also be taken to not drop hand tools or Solar Pack components from an extended height.

Any usage outside of applications defined by Somfy constitutes non-compliance, and is therefore not covered by the warranty. In this event, as for all usage not consistent with the instructions given herein, Somfy accepts no responsibility for harm or damage.

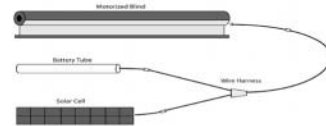
Never begin installing without first checking the compatibility of this product with the associated equipment and accessories.



2.2 Specific Safety Advice




- 1) Never pierce the solar panel or its bezel frame.
- 2) Never put anything onto the solar panel (risk of scratching or breakage), especially during installation.
- 3) Once installed, never subject the wire harness or other components to strain, pinching, or cutting caused by moving objects.
- 4) Dispose of electronic components and batteries in accordance with local laws. Do not incinerate.
- 5) Never immerse this product in liquid (s).
- 6) Avoid Impacts / Do Not Drop components.
- 7) Do Not Recharge the battery with any charger other than a Somfy WireFree™ Solar Pack Charger.

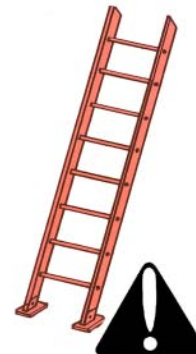
This Product is designed for indoor use only.



Note: This product is designed to meet the energy requirements of Somfy 12Volt WireFree Motor applications. DO NOT exceed the following:

- A. Maximum Torque and blind dimensions. See motor data sheets / instruction Manuals.
- B. Solar Pack Performance Tables (see Section 8).

Power Sources for 12 Volt WireFree™ Motors				
WireFree™ Motor	12 Volt	WireFree™ Battery Wand	WireFree™ Battery Tube	WireFree™ Solar Pack
Roll Up RTS		✓	✓	✓
Roll Up IR		✓	✓	✓
Cord Lift RTS		✓	✓	✓
Tilt RTS		✓	✓	✓
Tilt IR		✓	✓	✓



SECURE LADDER BEFORE USING.
CAREFUL OF FALLING OBJECTS !

3. Installation

3.1 Determine Location of Solar Panel

The solar panel must always be installed indoors, directly against the window glass so as to allow as much natural light as possible to reach the panel.



Caution! Never install the solar panel on any window glass allowing less than 65% light transmission (including Low E glass and/or window tinting), or obstructed by a window pane or bug screen. Always leave the photovoltaic cells unobstructed, do not put anything in front of them.

The three components which make up the WireFree™ Solar Pack must be installed on the same side as the WireFree™ motor.

Somfy recommends that all components be fitted systematically in order that all components may be connected to the wire harness easily, and that the wire harness does not interfere with the free movement of the interior window covering.

>Please Refer to the WireFree™ Solar Pack Performance Tables Section 8.0 to confirm proper usage per blind and window orientation.

3.2 Mounting the Solar Panel.



Caution! It is imperative that window hardware or framing does not collide with the solar panel!



Careful! Do not damage the wire harness cables during installation.

Determined the position of the solar panel (against window, within reach of wire harness) prior to application of 2-sided tape to insure proper adhesion the first time.

3.2.1 Glass Mounting Available at www.AV-Outlet.com



Caution: To insure a secure adhesive hold over a long period, prepare the inside window glass prior to mounting the solar panel.

Important! The VHB adhesive tape should *never* be touched directly with fingers or other contaminates) prior to adhesion.

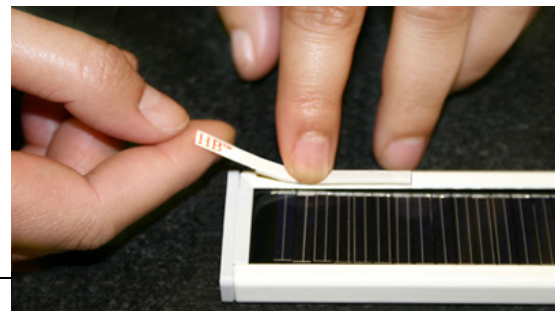
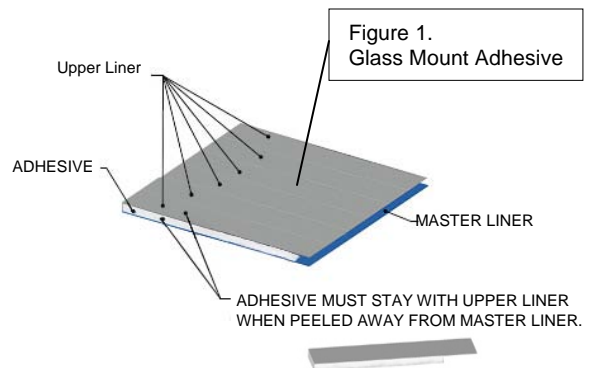
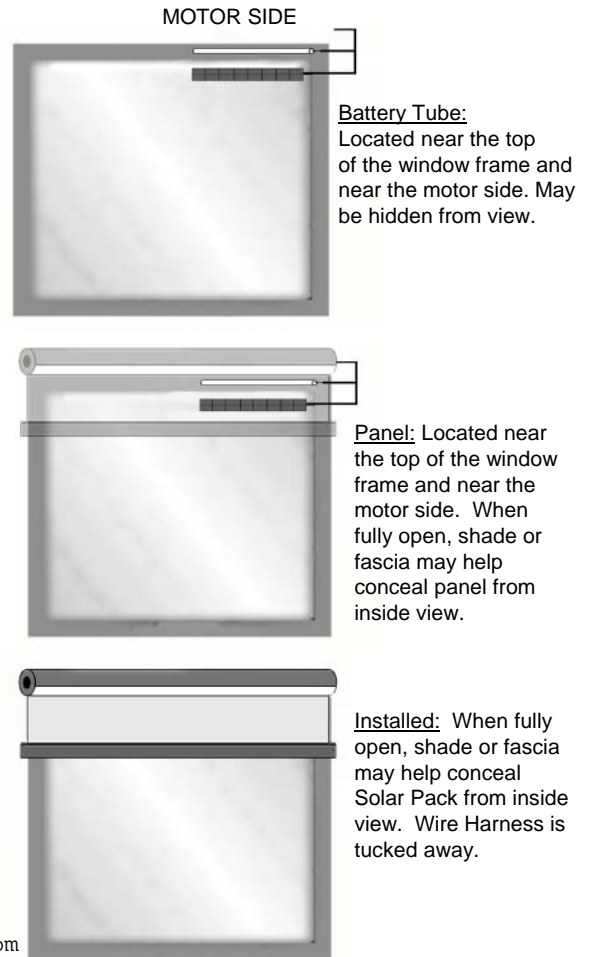
- 1) Clean solar panel bezel corners and window area with alcohol prep pad. Let dry for two minutes.
- 2) On a table, with the solar panel facing up, apply the 3M VHB 2-sided tape to four corners of the solar panel bezel.

Note: The VHB tape is precut for your convenience in between the top (facer) and bottom (backer) liners. With your fingers, lift off each precut adhesive piece so that it remains attached to the "facer" material – and the opposite side of the tape should then be released from the back liner. See Photo in Figure 1 and Figure 2.

- 3) Remove the "facers" of the applied VHB tape.

Position the bezel with solar panel facing to outdoors, then press entire panel with firm, even pressure into the glass for 10-15 seconds. The panel is now supported by the adhesive to glass bond but will require 24 hours of cure time to allow full strength characteristics. Do not disturb during this period.

Figure 2. Apply to all 4 corners



3.3 Battery State of Charge

The Battery is shipped from the factory inside the battery tube with a partial charge only.

3.31 Battery Preparation

Have a service professional fully charge the battery using the compatible Somfy Solar Pack Rapid Charger (REF#9015781 - Solar Pack Charger).



IMPORTANT! Refer to Solar Pack Wall Charger Instructions.

CAUTION ! Use of another battery charger is a safety hazard, is prohibited and voids the Somfy Warranty. Disconnect from AC wall receptacle upon completion of charge.

3.4 Battery Tube Install Location

Once conditioned with a pre-charge, the battery tube assembly can be secured and hidden from view either behind, inside or next to the window covering product hardware.

The battery tube is compatible with Somfy Mounting Clips designed for Shangri-La (REF# 9013266) & Silhouette (REF#9013264) window covering products.

For outside of head rail mounting, optional battery tube wall mounting clips are available (REF#9013263) for either vertical or horizontal positioning.

For blinds with box head rails, room may exist to place the battery inside the rail without interference.



CAUTION! If installing the battery vertically, always position it with the cable output upwards to reduce unrestrained wire from catching the shade.

4. Connections



CAUTION ! The wiring harness connecting the Solar Pack components must be protected from the movement of the motorized window covering.



CAUTION ! Do not change the configuration of this system to include different connectors.

- 1) Connect the wire harness to the motor.
- 2) Connect the solar panel to the wire harness
- 3) Connect the battery tube to the wire harness

5. Commissioning

5.1 Activation of Motor

If the Solar Pack is being installed as an upgrade to an existing Somfy WireFree™ motorized shade installation, there is no need to reprogram the motor.

If the Solar Pack is being installed with a new Somfy WireFree™ motor, follow the motor installation guide.

6. Product in Use

6.1 Normal Operation

After commissioning, the battery is trickle-charged by electrical energy generated by the solar panel. The energy is stored in the high capacity NiMH battery (acting like a reservoir) and the system provides uninterrupted service through many climatic seasons. It is normal for the battery to gain more energy in summer as compared to winter – the Solar Panel converts the intensity of light to energy upon availability.




Solar Pack Charger (REF# 9015781)
-sold separately.



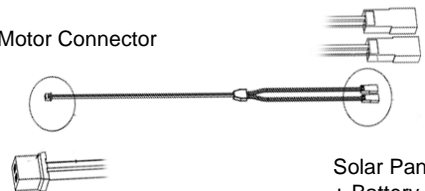
Pre-Charge label removed
prior to installation.



Vertical Battery Tube connector orientation

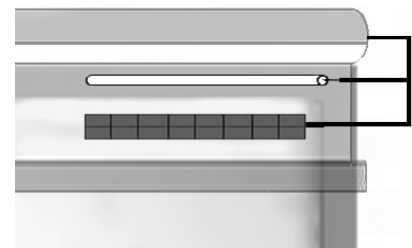
SOLAR PACK BATTERY TUBE MOUNTING CLIPS (OPTIONAL)		
WALL MOUNT CLIPS #9013263  Horizontal or Vertical Wall Mounting	Shangri La Mount Clips REF# 9013255  Headrail Mounting	Silhouette Mounting Clips REF# 9013264  Headrail Mounting

Motor Connector



Solar Panel
+ Battery Tube
Connectors

Available at www.AV-Outlet.com



Standard Installation Plan of Roll-Up Shade.

6.2 Excessive Energy Use






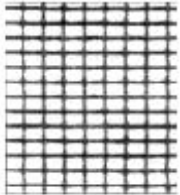
CAUTION ! If daily motor activations exceed recommended cycles per day as stated in the **Solar Pack Performance Chart**, the solar panel will not be able to “replenish” the battery as designed.





- > If the motorized shade does not operate due to an excessively diminished battery, the battery may require a full recharge by a Somfy Service provider.
- > If the battery no longer provides adequate power to operate your motor, a freshly charged replacement battery may be ordered from your Somfy dealer (REF#9015624) and there is no need to replace any other Solar Pack components.

7.0 Window Application Tables & Guidelines

WINDOW TYPE				
	SINGLE OR DOUBLE PANE OK	LIGHT TRANSMISSION 65% OR GREATER	WINDOW TINTING	INSIDE WINDOW ONLY

Available at www.AV-Outlet.com

AVOID				
	AWNINGS OR DEEP ROOF EAVES	WINDOW DIVIDERS OVERLAPPING SOLAR PANEL	VEGETATION BLOCKING LIGHT	BUG SCREENS

MOVING WINDOW				
	FIXED WINDOW	DOUBLE HUNG	SLIDING	CASEMENT
Concern	Clean Install	Caution: Avoid Panel Collision	Caution: Avoid Panel Collision	Caution: Panel Movement Will tug or tear Harness
Suggestions		Limit Screw in track	Limit Screw in Track	Cable tie near corner

STEPS TO DETERMINE YOUR SOLAR ZONE

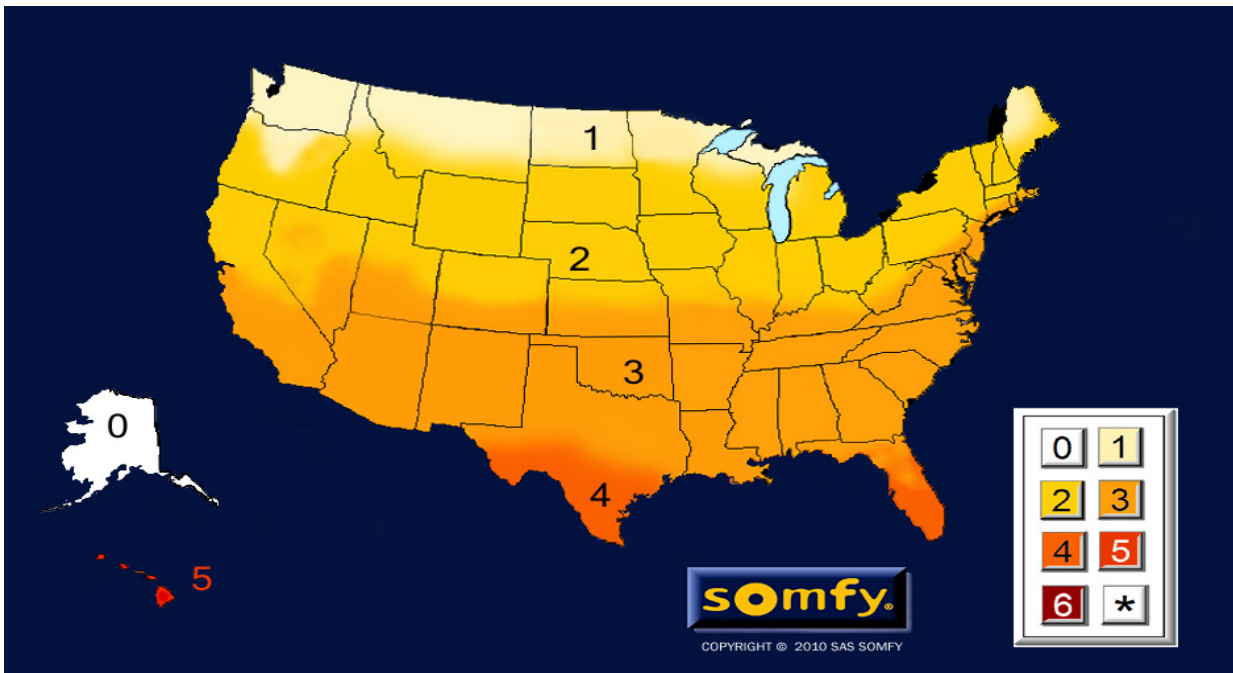
1. CHOOSE YOUR CITY OR REGION BASED ON MAP COLOR OR PROXIMITY TO CITY IN TABLES.


IF UNABLE TO DETERMINE SOLAR ZONE DUE TO BLENDING OR RESOLUTION, REFER TO CITY TABLES
2. IDENTIFY CORRESPONDING SOLAR ZONE # FROM THE MAP LEGEND.
3. DETERMINE WINDOW ORIENTATION (FACING OUT).
4. DETERMINE SHADE DROP
5. APPLY DATA TO CHART AND DETERMINE CYCLES PER DAY.

WIREFREE SOLAR PACK REPLACEMENT ENERGY CHART BASED ON CYCLES / DAY for ROLL-UP, CORD-LIFT & TILT					
Cycles per day for this orientation and shade size					World Region
Shade Length	North	West	East	South	
up to 5 feet	1	1	1	1	Zone 0
5 to 8 feet	N/A	N/A	N/A	N/A	
up to 5 feet	1	1	1	2	Zone 1
5 to 8 feet	N/A	1	N/A	1	
up to 5 feet	1	2	2	3	Zone 2
5 to 8 feet	N/A	1	1	1	
up to 5 feet	2	2	2	3	Zone 3
5 to 8 feet	1	1	1	2	
up to 5 feet	2	3	3	4	Zone 4
5 to 8 feet	1	2	1	2	
up to 5 feet	2	3	3	4	Zone 5
5 to 8 feet	1	2	1	2	
up to 5 feet	2	3	3	4	Zone 6
5 to 8 feet	1	2	2	3	

Definition: 1 CYCLE = 1 UP + 1 DOWN

Available at www.AV-Outlet.com



 **IMPORTANT: CITY SOLAR TABLES PROVIDE GREATER ACCURACY. WHEN CHOOSING A MAP AREA WHERE BLENDING OCCURS, REFER TO THE NEAREST REGIONAL CITY.**

