SOLAR Pro II, 2.5W /5A (15.585.400)

Installation and Operating Instructions

A new SOLAR Pro II will arrive in "sleep mode". It needs to be activated by **pressing the P and T buttons** on the end of the panel. Press and hold these two buttons, at the same

time, for 5 seconds. The LEDs beside the P and T buttons will flash momentarily to indicate success.

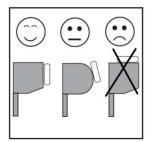
If the SOLAR Pro II panel has already been activated the RED LED will flash 5 times when the P button is pressed.

The instructions below detail the installation and use of the SOLAR Pro II from OZROII. The SOLAR Pro II contains a Li-Ion battery which is charged by the in-built solar panel. The SOLAR Pro II can only be operated remotely, using an Ozroll "E-Trans" transmitter. It is recommended that the SOLAR Pro II only be used with motors that have limit switches and is therefore <u>not to be used with the L10 motor</u>.

IMPORTANT

- To protect the panel wiring from the moving curtain a safety plate must be used with all SOLAR Pro II installations.
- Ensure that in the installed position the panel is not shaded and is facing towards the North. On average a minimum of one hour of
 direct sunshine per day is required to maintain the battery charge.
- The system will be deactivated at temperatures of > 65°C.
- Do not install the SOLAR Pro II in either vertical or flat orientations, as it may lead to water intrusion.





There are two buttons on the SOLAR Pro II panel:

The **P** button is used for **PAIRING** the panel to an E-Trans transmitter. The **T** button is used to **TEST** the level of charge in the battery.

If the T button is pressed the LED next to it will glow. It will be green if the battery charge is greater than 50% and yellow if it is less than 50%.

If the battery charge is very low the system will only drive the motor in one second bursts. This situation will remain until the battery charge is restored.

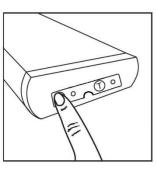
1) Pairing the E-Trans Transmitter and the SOLAR Pro II, by using the STOP button.

To pair the panel with an E-Trans transmitter:

- a) Press and hold the P button on the side of the panel for 8 seconds. The Red LED beside the P button will glow for 10 seconds and the system will then be in pairing mode during this time.
- b) Next, press the **STOP** button on the **E-Trans** transmitter within the 10 second pairing time frame.
- c) The Red LED will flash 2 times to indicate a successful pairing.
- d) Whenever an E-Trans signal is received by the SOLAR Pro II, it is indicated by the RED LED flashing twice. This is a good diagnostic tool to let you know the panel is receiving signals.
- e) To operate the motor press and hold the up or down button on the E-Trans transmitter for one second.

The transmitter and panel are now paired. This initial transmitter will become the MASTER transmitter and will be required to pair any further transmitters that may be required.

Keep the paired transmitters in a safe place. If ALL the paired transmitters are lost then new pairing of a replacement transmitter will be difficult.





2) Pairing of additional E-Trans Transmitter (if required), by using the STOP buttons.

Additional E-Trans transmitters can be paired with the SOLAR Pro II by repeating the above procedure. Up to 5 transmitters can be paired with one SOLAR Pro II unit.

- a) Press and hold the **P** button for 8 seconds. The red LED beside the P button will glow for 10 seconds and the system will be in pairing mode during this time.
- b) Press the **STOP** button on any E-Trans transmitter that has **already been paired** with the panel. This basically grants permission for an additional transmitter to be added.
- c) The Red LED will turn off for 1 second and then light again for 8 seconds.
- d) Press the **STOP** button on the **NEW** transmitter (that is to be added) during the 8 seconds.
- e) The Red LED will flash 2 times, and then go off. This is to indicate the additional transmitter is now paired.

3) Deleting ALL Transmitters, by using the DOWN button.

All the paired E-Trans transmitters can be deleted by following the steps below:

- a) Press and hold the **P** button for 8 seconds. The red LED beside the P button will glow for 10 seconds.
- b) Press the **DOWN** button on one of the paired transmitters.
- c) The Red LED will flash 2 times to indicate that all transmitters are deleted.

4) Deleting a SINGLE Transmitter, by using the UP button.

A single paired E-Trans transmitter can be deleted by following the steps below:

- a) Press and hold the **P** button for 8 seconds. The red LED beside the P button will glow for 10 seconds.
- b) Press the UP button on the paired transmitter to be deleted.
- c) The Red LED will flash 2 times to indicate that transmitter has been deleted. All other transmitters remain paired.

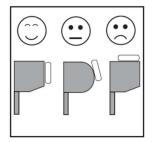
5) Installing the SOLAR Pro II.

Remove the black mounting clips from the rear of the SOLAR Pro II, and, using screws or rivets, attach them to the installation surface. This can be the front of the roller shutter head box, a nearby wall or roof (for good exposure to sunlight).

Ensure the panel is not shaded and is installed facing towards the North.

On average a minimum of one hour of direct sunshine per day is required to maintain charge.

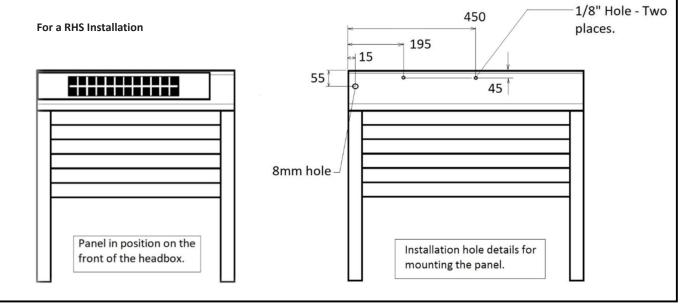
If mounted on the head box or wall it must be in a position that ensures that the SOLAR Pro II will receive at least one hour of direct sunlight per day. In these instances, the SOLAR Pro II should also be installed close to the edge or beside the head box, on the same side as the motor. The panel should be installed with the two buttons closest to the edge of the head box. This will enable easier routing of the wiring through the endplate to the motor. This positioning will also ensure that the wiring can be kept secure behind the safety plate.



For right hand side installation use the positions detailed in the sketch below to drill an 8mm hole for the motor loom, and two 1/8" holes for the rivets.

Rivet the two black clips into position, with the legs down and the smooth side of the clip facing inwards. Fix the rivets from the inside to minimize intrusion into the head box.

Use the mirror image of these dimensions for a left-hand installation.



6)	Connect the SOLAR Pro II to the motor.
	Tubular DC motors are usually supplied with a 2m cable. For installations where the SOLAR Pro II is close to the head box of the shutter then this 2m cable may be excessive. In this instance the cable will need to be cut and re-terminated using 4.5mm female spade terminals.
	Ensure enough cable is left to enable the removal of the SOLAR Pro II and/or the Front Plate of the shutter.
	If the SOLAR Pro II is to be installed away from the shutter, then the 2.5m Loom Extension (15.910.082) may be required.
	For a right-hand side installation (viewed from inside looking out): - connect the RED wire from the SOLAR Pro II to the RED wire from the motor.
	- connect the BLACK wire from the SOLAR Pro II to the BLACK wire from the motor.
	For a left-hand side installation (viewed from inside looking out): - connect the RED wire from the SOLAR Pro II to the BLACK wire from the motor. - connect the BLACK wire from the SOLAR Pro II to the RED wire from the motor.
	Ensure that good terminal connections are made by tugging on the two wires.
	If the cabling needs to pass the black mounting clips, then it can be routed through the groove behind the body of the black clip.
	Any spare cable can be pushed back into the head box in the area behind the safety plate.
7)	Attaching the SOLAR Pro II to the Mounting Clips.
	To mount the SOLAR Pro II, engage the legs of the clips in the bottom of the channel on the back of the panel and push up and back until the panel clicks into place.
	To remove the SOLAR Pro II from the clips, push the panel up to compress the legs of the clips. Then rotate the top of the panel away from the mounting surface.

8) Setting the FAVOURITE position.

The SOLAR Pro II has a programmable favourite shutter position which will allow the shutter to be opened to a favourite position at the touch of a button. When operating the Favourite position, the shutter will always travel to the down stop position so that it has a known starting point.

<u>Please note the favourite position is set by measuring the motor run time. If the battery is low on charge the motor will run slower and this may result in some variation of the favourite position.</u>

Note: There is a built in, default timing of 5 seconds for the Favourite position.

To set the Favourite position:

- 1) Fully close the shutter.
- 2) Press the P button on the panel for 8 seconds. The red LED will glow for 10 seconds.
- 3) Within the above time frame press the STOP button on the paired E-Trans unit. The red LED will go off, and then come back on.
- 4) When the red LED comes back on press and hold the T button on the panel. The curtain will operate. It will lift for as long as the T-button is pressed.
- 5) When the shutter reaches the desired favourite positon release the T button. The shutter will stop, and the Favourite position is set.
- 6) To open the shutter to the Favourite position, press the Star shaped icon on the black E-Trans button. The shutter will first close completely and then lift to the set favourite position.

9) TROUBLE SHOOTING

- Check that the RED LED flashes 5 times when the "P" button on the end of the SOLAR Pro II is pressed. If it does not the panel has not been activated or is dead flat. To activate the panel, press the P and T buttons. Press and hold these two buttons, at the same time, for 5 seconds. The LEDs beside the P and T buttons will flash momentarily to indicate success. If there is still no response put the panel in direct sunlight for 10 minutes and then try again.
- To check the battery charge level on an activated SOLAR Pro II, press the test or "T" button. The LED beside the "T" button should glow Yellow (less than 50% charge) or Green (greater than 50% charge).
- Does the red led on the end of the SOLAR Pro II do a double flash when a paired E-Trans button is pressed? This indicates that the pairing is good, and a signal has been received.
- Does the shutter move in the opposite direction to the buttons being pressed on the E-Trans transmitter? This is solved by swapping the connections made on the red and black wires connecting the SOLAR Pro II to the motor.
- The battery in this unit can only be charged by the solar panel. If the installed position of the unit does not allow enough sunlight to keep the battery charged it will eventually go flat. A very flat battery is indicated by the **shutter only operating in one second bursts**. If this occurs the unit will need to be removed from the installed position and placed directly in the sun.
- If the SOLAR Pro II has already been activated and the P and T buttons on the end of the panel are pressed and held for 5 seconds the two LEDs will come on for one second, and then the unit will go back into "sleep" mode. It will need to be re-activated before use.

10) POINTS TO NOTE

- The system will be deactivated at temperatures of > 65°C.
- The system will be deactivated at temperatures of < -10°C.
- Do not open or drill any part of the SOLAR Pro II This will void any warranty!
- Protect the SOLAR Pro II from water other than rain and snow.
- Do not expose the SOLAR Pro II to temperatures higher than 80°C.
- Protect the SOLAR Pro II from exposure to magnetic fields.
- Clean the solar panel regularly with a moist cloth.
- Do not dispose of the SOLAR Pro II in household refuse as it contains Li-Ion batteries.
- Any metal used in the construction of any walls between the SOLAR Pro II and the transmitter will reduce the strength and range of the radio signal.
- Walls and other obstacles will reduce the strength and range of the radio signal.
- Avoid shading by trees, buildings, eaves, balconies, pergolas, or nearby walls. Avoid partial shading as this will lead to insufficient charging.

11) QUICK START INSTRUCTIONS

- ACTIVATE THE PANEL
 - Ensure the panel is in the "active" state by pressing the P button and checking if the red LED flashes 5 times. If this does not happen the panel needs to be activated by pressing the P and T buttons on the end of the SOLAR PRO II.
 Press and hold these buttons, at the same time, for 5 seconds. The LEDs beside the P and T buttons will flash momentarily to indicate success.
- PAIR THE PANEL TO AN E-TRANS TRANSMITTER
 - To pair the panel with an E-Trans transmitter press and hold the P button on the side of the SOLAR Pro II for 8 seconds. The Red LED beside the P button will glow for 10 seconds and the system will be in pairing mode during this time.
 - Next, press the STOP button on the E-Trans transmitter within the 10 second pairing time frame. The Red LED will flash 2 times to indicate a successful pairing. Whenever an E-Trans signal is received by the SOLAR Pro II, it is indicated by the RED LED flashing twice.