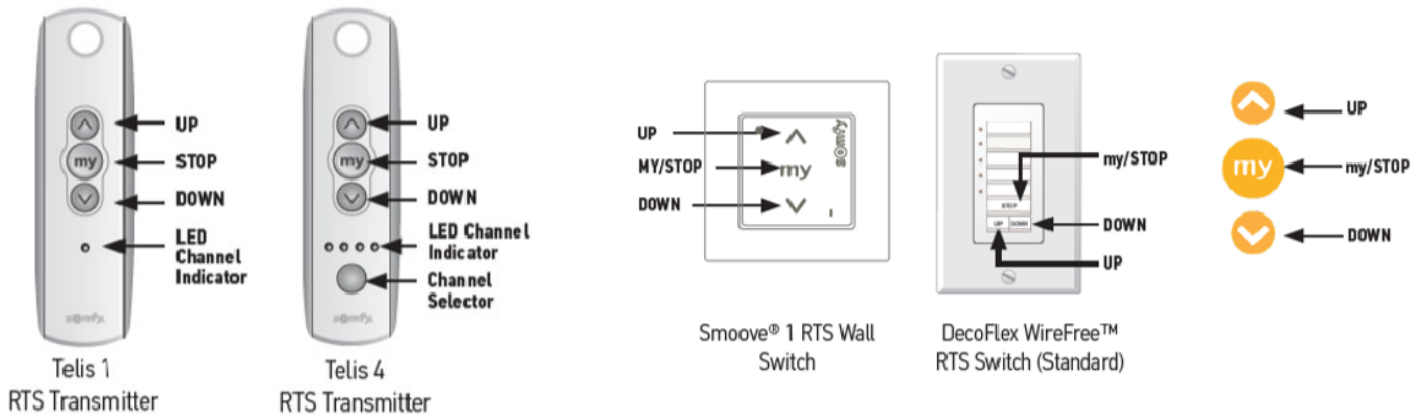
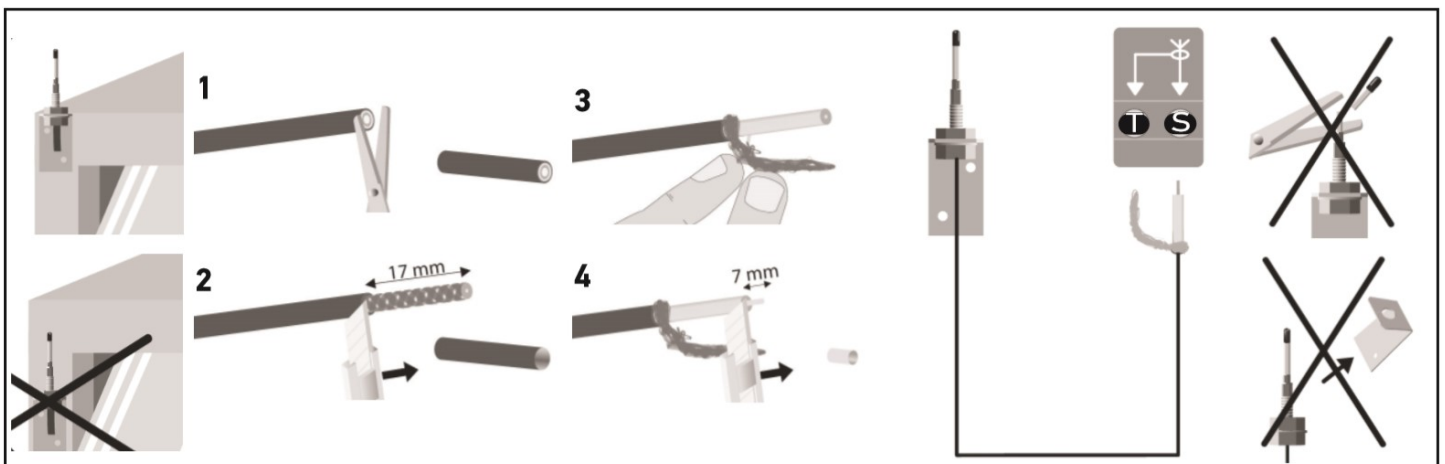


Electronic Control Quick Start Guide

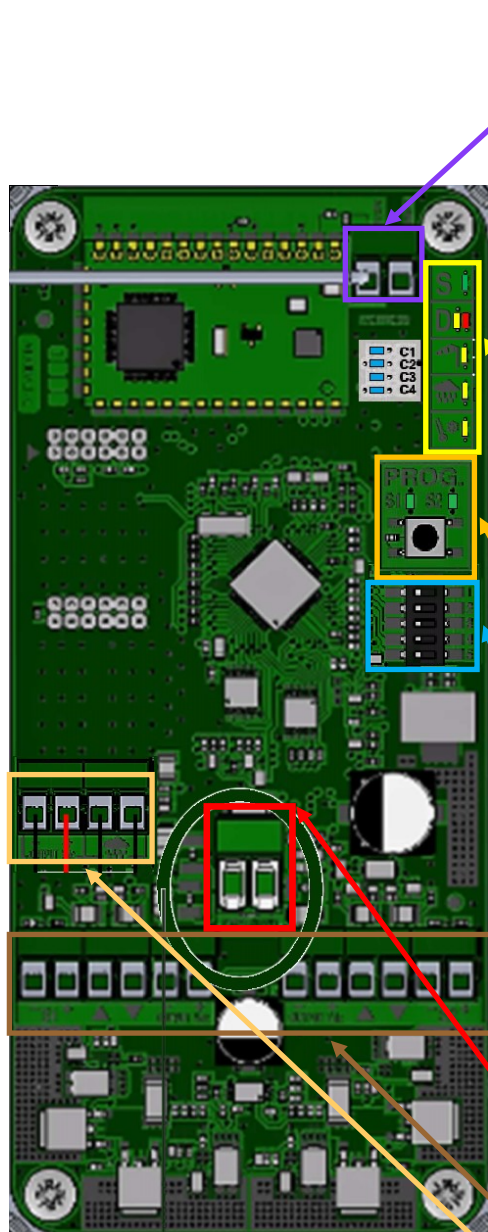
- The remote setups are as follows. Note that while they differ greatly in appearance, functionality is almost identical across the board.



- Below is the installation instruction extended range antenna. Note that the stock antenna must be removed prior to installing the extended range antenna.



Control Board Diagram



VIOLET: Antenna I/O

YELLOW: Function Indicator LEDs

- **S:** General Activity Indicator
- **D:** Board On-Board Diagnostics LEDs
- Wind: Activity Indicator
 - **ON** = Sensor has been triggered.
 - **FLASHING** = Sensor is waiting 15 minutes post-trigger, as preset by the manufacturer.
- Rain: Activity Indicator
 - **ON** = Sensor has been triggered.
 - **FLASHING** = Sensor is waiting 15 minutes post-trigger, as preset by the manufacturer.
- Snow: Activity Indicator
 - **ON** = Sensor has been triggered.
 - **FLASHING** = Sensor is waiting 15 minutes post-trigger, as preset by the manufacturer.

ORANGE: Program button and motor indicator LEDs

- The button is used to program motors or reset the board to factory defaults.
- The LEDs indicate which motor is being programmed.

BLUE: DIP Switches

- 1: Encoder for S1
- 2: Encoder for S2
- 4: Temperature Sensor Switch
- 5: Wind Sensor Switch

RED: Main 24v Input Connector

- Supplies board with 24 volts of DC power from the converter.

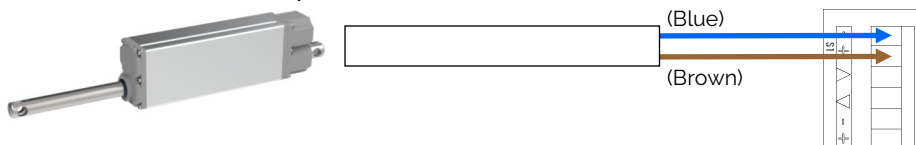
BROWN: Motor Connectors

CREAM: Wired Rain Sensor Connector

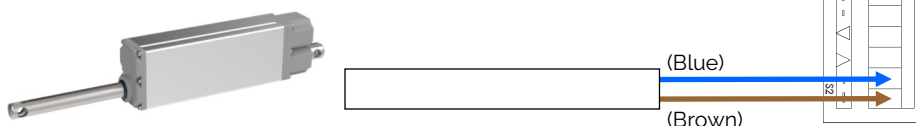
- What follows is a diagram portraying where to connect motor wires. There are markings on the board indicating where positive (+) and negative (-) terminals are.

*Please Note that only the blue and brown wires are used for this system.

S1



S2



Programming

- ⇒ NOTE: It is always easier to program motors before they are attached to the frame.
- ⇒ NOTE: Pick one remote to program and use as a master. Program everything to this one first.
- ⇒ NOTE: To simplify, only connect power to the board you are programming.
1. Press & hold "PROG" button on the board until both S1 and S2 LED flashes and the motor jogs back and forth.



2. Briefly press "PROG" button on the board to choose the desired output, S1 or S2, until the LED flashes.

- NOTE: So long as the yellow LEDs are flashing, you are still in Programming mode.



3. On the RTS control, select the desired channel by pressing the button at the bottom. The four LEDs on the bottom of the remote will indicate which channel is selected.

- ⇒ (1,2,3,4, all lights will flash for Zone 5, and this zone is used for the "All Zone" function. Wireless sensors are also to be programmed to this zone.)



4. On the RTS control, press "Up" and "Down" simultaneously until the motor jogs.

- To check for correct motor direction, press the "Up" button.

- ⇒ If the pergola louvers open, the rotation direction is correct.

- ⇒ If the pergola louvers close, press & hold the "My" button until the motor jogs. The rotation direction is corrected. Press the "Up" button to check once more.



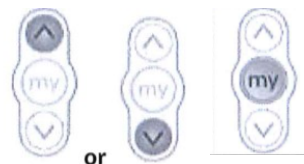
5. On the RTS control, briefly press "Up" and "Down" simultaneously.

- ⇒ IMPORTANT: DO NOT INTERRUPT THE MOVEMENT. The motor will find the end-limits automatically during a "Self learning phase".



6. Press the "Up" or "Down" button to reach the desired position for ice and snow. When the motor is in position, press & hold the "My" position until the motor jogs to confirm the settings.

- NOTE: This position must be set regardless of location of pergola installation.



7. Briefly press the Programming Button on the back of the RTS control. The motor jogs, and programming for the desired motor is complete.



8. Programming for the specified motor is complete. To program another motor on the same board, repeat the process from step one. To Program a second remote with the same system, or to program an "All" zone, refer to the next page.



Miscellaneous Programming

Programming an "All" Zone

1. Select one of the desired zones on the remote.



2. On the back of the remote, press and hold the Programming button until the motor jogs.



3. Select the zone one the remote that you want to designate as the "All" zone (Zone 5).



4. Press the Programming button briefly.



5. The first zone is programmed. Repeat the process for the other zones.

Copying Remotes

1. Select the appropriate zone on the remote you want to copy.



2. Press and hold the programming button on the back of the remote.



3. On the remote that requires programming, select the desired zone and briefly press the programming button on the back.



4. The zones have been copied. Repeat the process for the desired number of zones.

- *NOTE: If the "All" zone will not copy correctly, you will likely need to program the "All" zone as referred to above.

Factory Reset

1. Resetting the board to factory setting is an incredibly simple procedure, all you have to do is press and hold the PROG button for at least 10 seconds until all indicator LEDs flash and turn off. Unplug and plug in.



Rain Sensor Programming

⇒ NOTE: The sensor will need to sit in the sun and charge before programming.

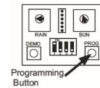
1. Select the zone on the remote that you want to program the sensor to. This will



2. Press and hold the "PROG" button on the back of the remote until the motors jog.



3. Press the "PROG" button on the back of the sensor briefly. If the motors jog, the sensor is now programmed.



4. The small blue and white dial on the back of the sensor is the module's sensitivity setting. This can be adjusted according to the customer's request.



Approx 9:00
Light Rain

5. These are DIP switch configurations for Rain and Sun settings. DIP switch #3 should be in the "ON" position in order for the sensor to close on rain for StruXure Systems.



Wind Sensor Programming

1. Select the zone on the remote that you want to program the sensor to. This will typically be the "ALL" zone.



2. Press and hold the "PROG" button on the back of the remote until the motors jog.



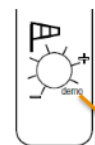
3. Press the "PROG" button on the back of the sensor briefly. If the motors jog, the sensor is now programmed.



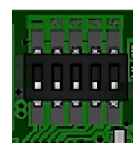
4. Sensor Sensitivity Settings

⇒ - = More sensitive

⇒ + = Less sensitive



5. When the wind sensor is activated, ALL louvers should close. If you need all the louvers to open for high wind protection, then change dip switch #5 on the board(s). You can set it to open or close, not both. Be sure to adjust the wind sensitivity on the underside of the wind sensor for your set direction. If several zones go in different directions, then you have incorrect wiring and/or programming issues.



Troubleshooting

There are certain circumstances in which the circuit board will not change programming modes from S1 to S2, and vice versa. The typical reason for this is a bad wiring connection where the cable plugs into the front of the motor, poor connection at the terminal block, or bad field wiring.

Check the plug at the front of the motor, you may want to remove and reinsert it. The plastic cover for the plug must be flat and flush with the housing. If it is bulging at all, the plug is not inserted correctly.

Check wire connections at the board in the terminal strip. Is it wired correctly? Is the insulation properly striped back off the wire?

Are there any breaks in the field wiring between the motor and the control board? Any kinks or scrapes causing a short or open circuit?

One quick test is to disconnect the motor wire from the terminal block at the board, directly apply 24vdc to the wire to actuate the motor. If the motor extends and retracts you should be able to program the control board.

Once you have checked these things and reconnected the wires in the terminal block, cycle the power off, then on again. Now you should be able to program and switch between S1 & S2

After having gone through a programming sequence, and you feel you are done, but can't get it to open or close, check to see if the programming light S1 or S2 is lit. If it is, you are still in the programming mode and have not finished properly.

You will need to kill the power to the board you are working on. Wait 10 seconds, then plug it back in.

Go through the programming sequence again following every step exactly. You can not skip a step.

You should now have it programmed and working correctly.