Altus RTS and Orea RTS Motor
Programming and Limit Setting Instructions
(Note: Orea RTS motor was designed for cassette awnings only)

1 Factory Mode
In this mode the transmitter has not been assigned to communicate with the motor and the limits have not been set

1) To assign the transmitter to communicate with the motor's receiver, push the UP and DOWN buttons on the transmitter SIMULTANEOUSLY and release the buttons after the end product jogs briefly UP and DOWN indicating the transmitter can now operate the motor for programming. The motor will now operate in a momentary fashion.

UP
STOP
DOWN

2) Check direction of operation. The DOWN button must correspond to DOWN on the motor. In the case of an awning, It will open or extend the awning. If the direction is wrong, press the STOP button on the transmitter until the motor jogs briefly UP and DOWN (approx. 5 seconds) and then release. Verify that the direction has changed and now corresponds to the transmitters UP and DOWN buttons.

3) Adjust the end product to the up position. This is necessary to establish a reference starting point. Read the complete limit setting procedure before proceeding with setting the UP and DOWN limits.

4) Setting of the END LIMITS (always start at the upper reference point (UP limit). Note: an extension of 4″ is required as a starting point for the Orea RTS (cassette awning motor) only.

Orea motors only

① 4″
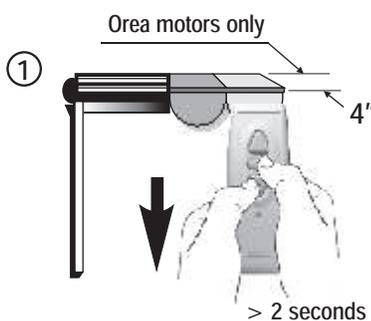
> 2 seconds

A. To set the DOWN limit, press the STOP and DOWN buttons for more than 2 seconds, until the product begins moving down (Fig. 1). Release the buttons once the product begins to move, and be prepared to stop it at its DOWN limit.

②

STOP

B. Press the STOP button to stop the motor when it reaches the desired down position (Fig. 2). The DOWN limit is now set.

If necessary, adjust the correct down position using the UP and DOWN buttons. Remember at this point the motor moves for only as long as you keep your finger on the button (momentary operation).

③
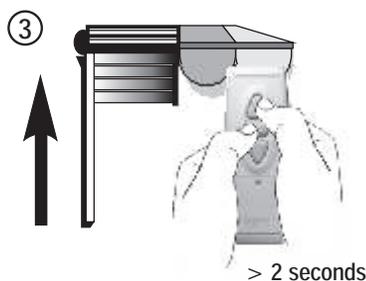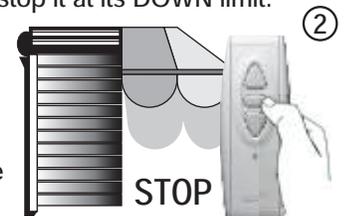
> 2 seconds

C. To set the UP limit, press and hold the STOP and UP buttons for more than 2 seconds, until the product begins to move up (Fig. 3). Release the buttons once the product begins to move. It will stop at its upper limit automatically. Adjust if necessary using the UP or DOWN buttons.

NOTE: It is not necessary to adjust the UP limit on an OREA RTS motor since it is automatically set once the cassette awning is completely closed.

④

D. To confirm these limit positions, press and hold the STOP button for more than 2 seconds, until the application jogs briefly UP/DOWN (Fig. 4), indicating the limits have been memorized by the motor. The setting of the end limits is now complete.

> 2 seconds

Altus RTS and Orea RTS Motor
Programming and Limit Setting Instructions
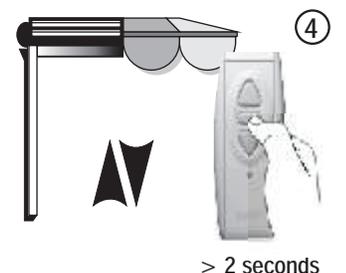
2 Installer Mode
In this mode the UP and DOWN limits have been set and can be readjusted if necessary as shown below.

1) Provide power to the motor. Press the UP, STOP or DOWN button (independently) on any RTS transmitter in order to take control of the motor. <u>Check that the motor is in INSTALLER MODE</u>. (Motor responds to transmitter in momentary fashion)

2) Recording the first Transmitter or Channel (On 4 channel transmitters, you should select the desired channel before pressing the programming button).
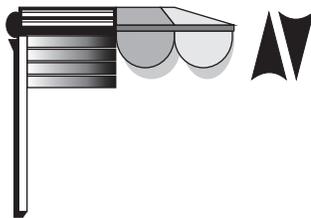
A. Press the programming button on the back of the RTS transmitter and release it when the end-product jogs briefly UP/DOWN indicating that the transmitter has been memorized into the motor

3) Readjusting the UP or DOWN limit after the transmitter has been programmed.

5 Seconds
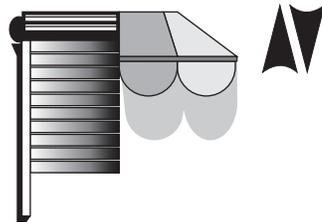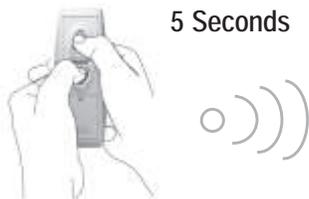
A. To readjust the down or awning extended limit, first bring the product all the way to its DOWN limit using the transmitter. The motor must reach the DOWN position on its own.

B. After the motor has stopped, press the UP and DOWN buttons simultaneously for 5 seconds or more until the product jogs briefly UP/DOWN indicating that the motor is in the "<u>END LIMIT SETTING STATE</u>".
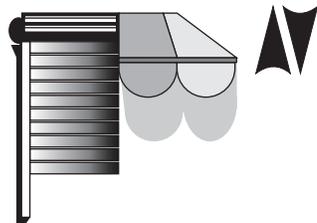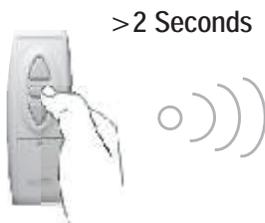
>2 Seconds

C. Now adjust the product to its new DOWN limit keeping in mind that the motor will respond to the transmitter in a momentary fashion.

D. Record the new DOWN limit by pressing the STOP button for 2 seconds or more until the product jogs briefly UP/DOWN indicating the change has been memorized in the motor.

   The new DOWN limit has been recorded.

E. Repeat the same procedure for the UP or retracted limit, if necessary. OREA RTS motors automatically adjust their UP limit and never need to be readjusted.

Altus RTS and Orea RTS Motor
Programming and Limit Setting Instructions

3 User Mode
In this mode the product is ready for operation by the end user.

One Intermediate Position (IP) can be programmed into the ALTUS/OREA RTS motor as shown below.

1) Recording the Intermediate Position (IP)

>5 Seconds

IP
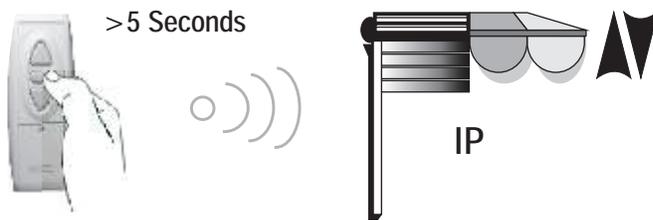
A. Using the UP or DOWN button on your transmitter bring the product to the desired intermediate position and press STOP.

B. Now press the STOP button again for 5 seconds or more until the end-product jogs briefly UP/DOWN indicating that the intermediate position has been memorized in the motor.

USING THE INTERMEDIATE POSITION
> <u>Manually</u>: Press the intermediate button (STOP button) when the motor is not in motion.
>
> <u>Automatically</u>: When the SOLIRIS RTS sensor reaches the set DAYLIGHT THRESHOLD, it gives a DOWN command. The end-product will move to the intermediate position only if the intermediate position has been programmed. Otherwise it will move to the DOWN limit.

TO DELETE THE INTERMEDIATE POSITION
> Reach the intermediate position. Then press on the STOP button and hold it (approx. 5 sec.) until the end-product jogs briefly. The IP has been deleted.

2) Add or Delete a transmitter/channel in the memory of the ALTUS/OREA RTS motor. The procedure is the same whether you're adding or deleting a channel. If the transmitter/channel has not been previously memorized it will be added instead of deleted.

>2 Seconds

Transmitter previously recorded
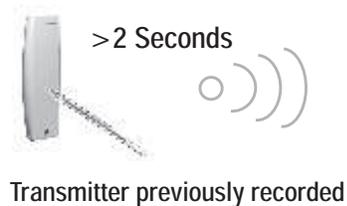
Activate the motor memory by pressing the programming button of the transmitter/channel already recorded in the motor's memory for more than 2 seconds.

Release it after the end-product jogs briefly UP/DOWN indicating that the motor is in PROGRAMMING STATE.
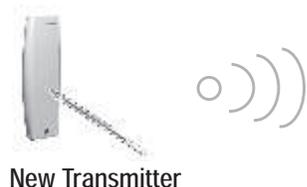
New Transmitter

Select the transmitter/channel you wish to memorize in the motor. Press briefly on the programming button of the new RTS control you wish to assign or delete.

Release it after the end-product jogs briefly UP/DOWN indicating that the transmitter has been memorized or deleted in the ALTUS/OREA RTS motor.

Repeat this procedure for each additional transmitter/channel you wish to add or delete. It is not possible to delete the transmitter/channel used to enter the programming state.

Altus RTS and Orea RTS Motor
Programming and Limit Setting Instructions

3) Resetting the motor's memory and recording a new
transmitter when the only transmitter is lost.

⚠ **NEW TRANSMITTER**

**A. Perform a double power cut in the following sequence:
   1. Power-off - 2 sec. minimum
   2. Power-on - 5 to 15 seconds
   3. Power-off - 2 sec. minimum
   4. Power-on
   The end product moves for 5 seconds in one direction,
   to indicate that the double power cut has been
   recorded.The motor is in a PROGRAMMING STATE
   for 2 minutes.

> 5 sec.
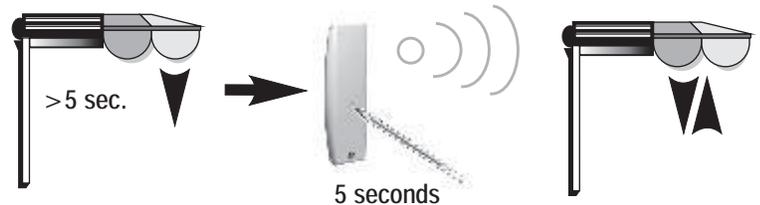
5 seconds

B. Recording a New Transmitter
   Press the programming button of the NEW RTS transmitter
   For 1 second max. Release it after the end-product jogs briefly
   UP/DOWN indicating that the transmitter has erased all previous
   transmitters and recorded the NEW one.

C. Restoring Factory mode with a New Transmitter
   Press and <u>HOLD</u> the programming button of the NEW RTS
   transmitter for more than 7 seconds. The end-product will jog
   briefly UP/DOWN twice. Once after 1 second and again after 7
   seconds. This indicates the ALTUS/OREA RTS motor has been
   completely cleared.

**RESETTING MOTORS BACK TO USER MODE

<u>WARNING:</u> This type of power cut affects all
the ALTUS RTS motors on the same power line.
To avoid resetting of non-concerned motors,
press briefly any button of their assigned
transmitter/channel (UP, STOP, or DOWN).
The non-concerned motors will return to USER
MODE.

---

4) Back to the factory configuration (to completely reset the ALTUS RTS motor memory)

**A.Perform a power cut in the following sequence:
   1. Power-off - 2 sec. minimum
   2. Power-on - 5 to 15 seconds
   3. Power-off - 2 sec. minimum
   4. Power-on
The end product moves for 5 seconds in one
direction, to indicate that the double power cut has
been recorded. The motor is in PROGRAMMING
STATE for 2 minutes.

⚠ **PREVIOUSLY RECORDED TRANSMITTER**

> 5 sec.
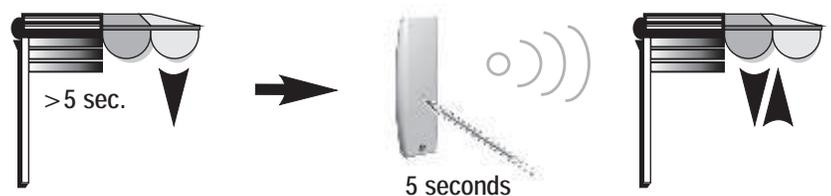
5 seconds

B. Restoring Factory Mode with a Previously Recorded Transmitter
   Press and <u>HOLD</u> the programming button of the NEW RTS
   transmitter for more than 7 seconds. The end-product will jog
   briefly UP/DOWN twice. Once after 1 second and again after 7
   seconds. This indicates the ALTUS/OREA RTS motor has been
   completely cleared.

SOMFY®

LT50/60

GROUND
NEUTRAL
Power LINE

DECORATOR PADDLE/
TOGGLE SWITCH

BROWN
RED
BLACK

GROUND
CONNECTED TO BOX

LT50/60 CMO

GROUND
NEUTRAL
Power LINE

DECORATOR PADDLE/
TOGGLE SWITCH

BROWN
RED
BLACK

GROUND
CONNECTED TO BOX

LT50 ALTUS RTS

GROUND
NEUTRAL
Power LINE

LT50 RTS CMO

GROUND
NEUTRAL
Power LINE

Incorrect
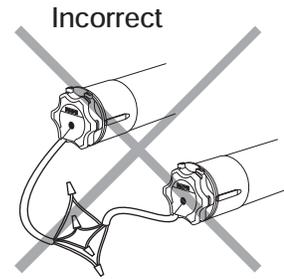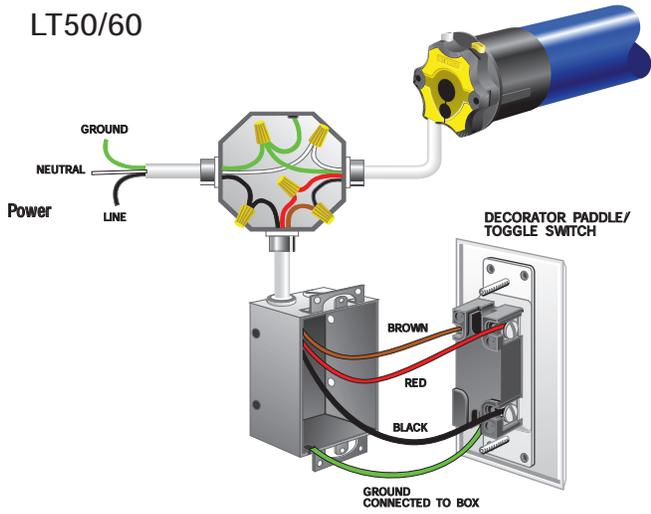
WARNING:
Do not wire two or more LT operators to
one single pole switch.
This will cause the motors to malfunction.

Incorrect
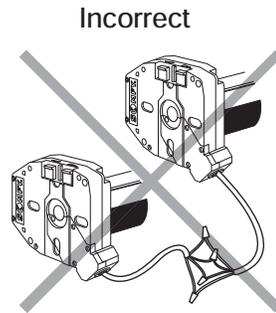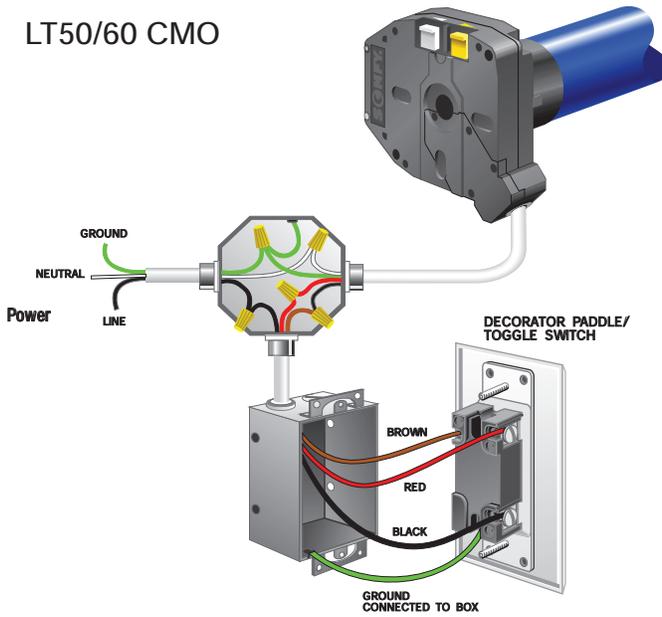
LT MOTOR WIRING COLOR CODE

120V AC	CODE
BLACK	WHITE PUSH-BUTTON
RED	YELLOW PUSH-BUTTON
WHITE	(C) COMMON
GREEN	(G) GROUND

Note: Only RTS and ILT motors can be
wired in parallel.
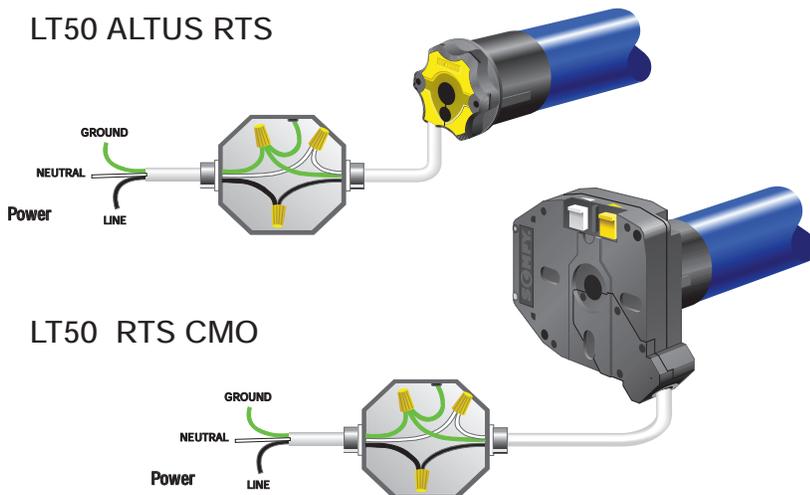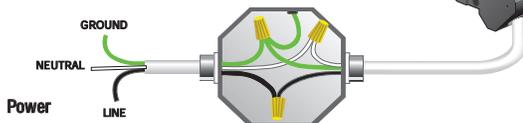
LT50 ALTUS RTS AND LT50 RTS CMO MOTOR WIRING COLOR CODE

120V AC	CODE
BLACK	(H) HOT
WHITE	(N) NEUTRAL
GREEN	(G) GROUND

Because of the type of motor (Asynchronous with built-in capacitor) and the built-in limit switches, it is important to follow two important recommendations to assure proper operation of the motorized systems - SOMFY Operators are not universal motors.

SYMBOLS			
M1	Microswitch	W2	Motor Winding
M2	Microswitch	TP	Thermal Protector
C	Capacitor	GND	Ground
W1	Motor Wiring		

The operator is connected to a 120V-60HZ power source through a single pole (or double pole), double throw, center off switch.

1. Do Not Wire SOMFY Operators in Parallel (Does not apply to RTS or ILT motors). Parallel Wiring Means: Several Operators are Wired to Only One Electrical Contact Per Direction of Rotation.
There will be constant feedback from one motor to another, so stopping points will not be stable and there is a risk of motor burn out.

Correct:
Correct wiring solution is to use a double pole, double throw, center off switch which would isolate both motors.

Incorrect:
Motor A stops at its limit in direction 2 before Motor B. Current in Motor B feeds back to motor A through capacitor C2 and microswitches M3 and M1. Both operators keep rotating in opposite directions at reduced power.

2. Do Not Control One SOMFY Operator from Several Locations Without Using Proper Controller.

Correct:
Possible problem: When switch (1) is turned on, the motor will begin running in direction 1. As it reaches its limit, the microswitch M1 will open. If, at the same moment in time switch (2) is turned on, the motor will operate in the opposite direction. This is why we recommend the use of momentary switches with the Multi-Switch Command (MSC).

Incorrect:
The microswitch M1 closes, shortcircuiting the capacitor which is loaded at its maximum voltage (180V). As a result the microswitch M1 is damaged.
Solution: Use relays to build priorities between controls sending opposite signals. Do not use a standard "light" switch as a motor control.

NOTE: SOMFY Control Systems are designed to comply with these two basic criteria and assure reliable operation of motorized systems. Non-compliance to these two basic principles voids the SOMFY warranty.

CORRECT

INCORRECT

CORRECT

INCORRECT