LT50/60 CMO and LT50 RTS CMO
Programming and Limit Setting Instructions

For initial programming, provide power only to the motor being programmed.
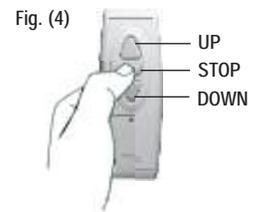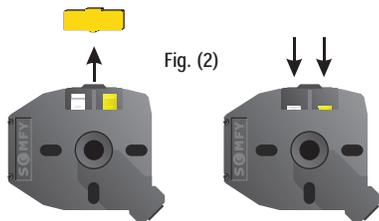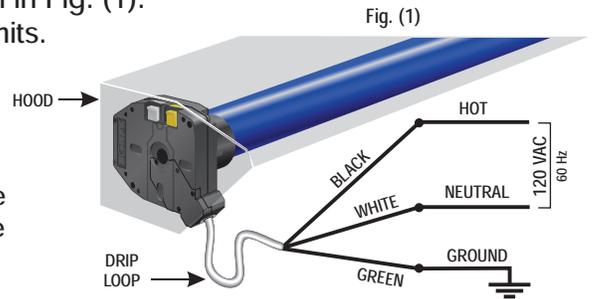For awning installations, an awning hood is strongly recommended and a drip loop should be formed to prevent water from entering the head of the motor as shown in Fig. (1).
Follow the steps below to program the motor and set the limits.

Fig. (1)

1) Provide power to the motor.
Remove cap as shown in Fig. (2) and depress both limit switch buttons until they lock in the down position.
To assign the transmitter to communicate with the motor, push the UP and DOWN buttons on the transmitter simultaneously until the motor jogs briefly up and down then release. See Fig. (3).

HOOD

HOT

BLACK

WHITE   NEUTRAL

120 VAC 60 Hz

DRIP LOOP

GREEN   GROUND

Fig. (2)   Fig   Fig. (4)

UP
STOP
DOWN

2) Check the direction of operation.
The DOWN button should correspond with the down direction of the end product (for awnings DOWN extends the awning).
If the direction is wrong, press the STOP button on the transmitter as shown in Fig. (4) until the motor jogs. Check the direction again to make sure it is correct.

3) Setting the UP and DOWN limits
Press the UP button of the transmitter until the end product reaches the required UP position, then stop it.
Unlock the UP limit switch on the motor head by pressing and releasing it. The UP limit is now set.
Repeat the above operation to set the DOWN limit.

White Button

Yellow Button
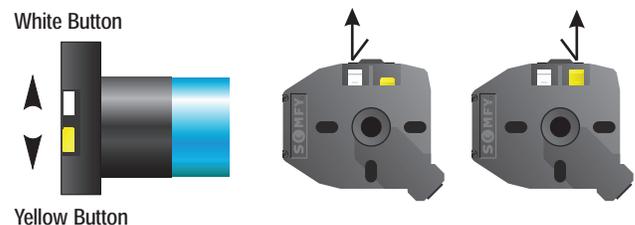
4) Recording the settings on your transmitter
Press the programming button on the back of the transmitter and release when the product jogs briefly UP and DOWN.
The transmitter is now memorized into the motor.
Note: On 4 channel transmitters, verify the desired channel selection before pressing the programming button.

Programming Button

5) Setting the intermediate position
Upper Intermediate Position: Bring the product to its upper limit. Press the STOP and DOWN buttons simultaneously then release. When the product reaches the desired intermediate position, press the STOP button. Make adjustments if needed. Press the STOP button again until the motor jogs then release.
Lower Intermediate Position: Bring the product to its lower limit. Press the STOP and UP buttons simultaneously then release. When the product reaches the desired intermediate position, press the STOP button. Make adjustments if needed. Press the STOP button again until the motor jogs then release.
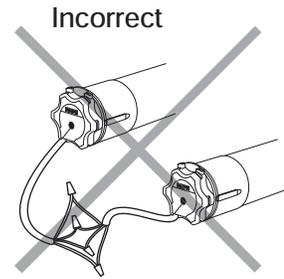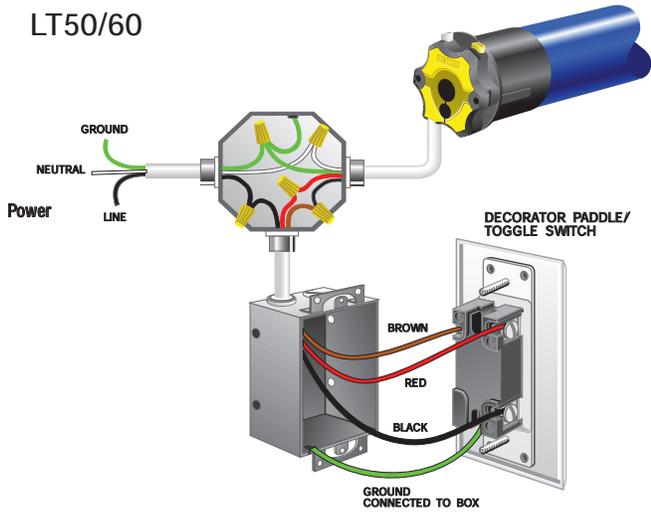
6) Adding and deleting a transmitter or transmitter channel
To Add a transmitter/channel, press the programming button of an already recorded one until the motor jogs.
Select the transmitter/channel to add and press the programming button until the motor jogs.
To Delete a transmitter/channel, press the programming button of an already recorded one until the motor jogs.
Select the transmitter/channel to delete and press the programming button until it jogs.

Note: These instructions are for reference only. For more detailed instructions please refer to the installation instructions packaged with the motor or at www.somfysystems.com under "Technical Documentation".

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

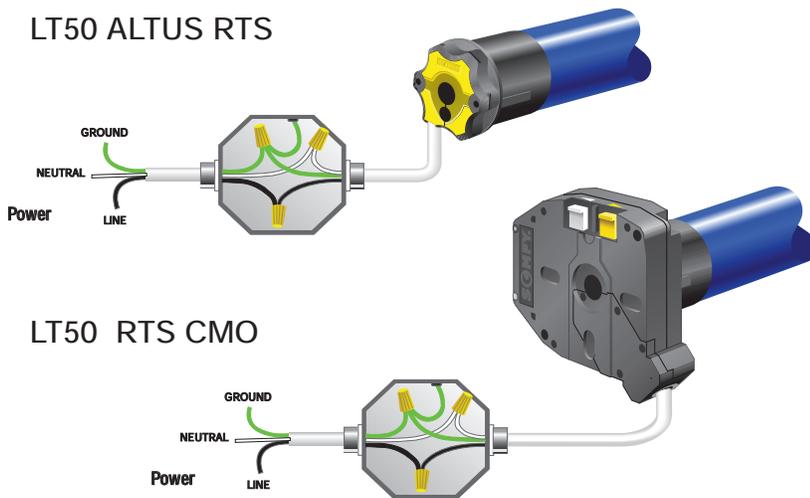## LT50 RTS CMO

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
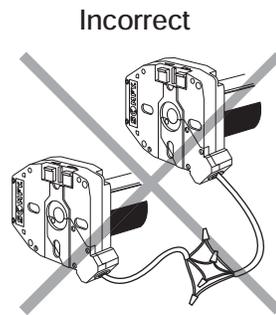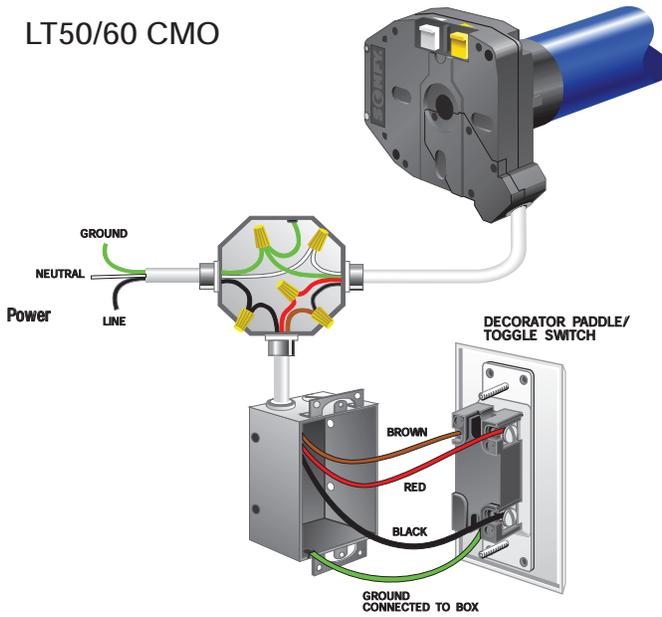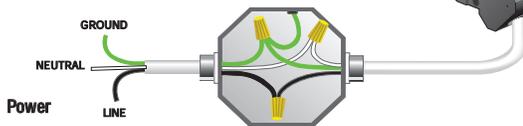
LT MOTOR WIRING COLOR CODE

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

HOT   120V - 60Hz   **NEUTRAL**

CORRECT

HOT   120V - 60Hz   **NEUTRAL**

INCORRECT

HOT   120V - 60Hz   **NEUTRAL**

CORRECT

HOT   120V - 60Hz   **NEUTRAL**

INCORRECT

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.