LT50 RA Star Head

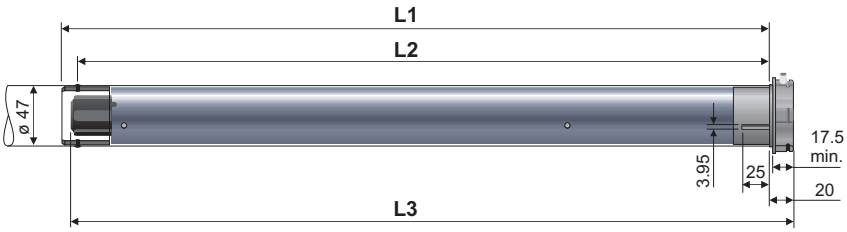
504S2	1030006	**515A2**	1039024	**530R2**	1045026
506S2	1032023	**515S2**	1039027	**535A2**	1047013
510S2	1037036	**520R2**	1041026	**540R2**	1049042
		525A2	1043024	**550R2**	1051019

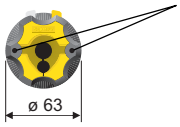
Offers control via power switching

Technical features

Voltage Supply	AC
Index Protection Rating	IP 44
Limit Switch Type	Rapid Adjustment RA
Limit Switch Capacity	46 Turns

Temperature Working Range	14°F to 140°F (-10°C to 60°C)
Insulation Class	Class 1 for 120V





2 mounting holes for self tapping screws.
Dia. 5 mm (cat #9670013)
Depth 13 mm
Spaced 1.89" (48 mm) apart

Performances

	504S2	506S2	510S2	510R2	515A2	515S2	520R2	525A2	530R2	535A2	540R2	550R2
Torque	4 Nm	6 Nm	10 Nm	10 Nm	15 Nm	15 Nm	20 Nm	25 Nm	30 Nm	35 Nm	40 Nm	50 Nm
Nominal Voltage	120V/60Hz											
Rated Current	.7A	.95A	1.3A	.7A	1.1A	1.8A	1.1A	1.6A	1.5A	2.1A	1.8A	2.1A
Speed	38 rpm	38 rpm	38 rpm	14 rpm	20 rpm	38 rpm	14 rpm	20 rpm	14 rpm	20 rpm	14 rpm	14 rpm
Thermal Protection	5 minutes											

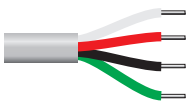
Dimensions

	504S2	506S2	510S2	510R2	515A2	515S2	520R2	525A2	530R2	535A2	540R2	550R2
L1	19.88 in (505 mm)	20.67 in (525 mm)	21.85 in (555 mm)	19.88 in (505 mm)	20.67 in (525 mm)	23.82 in (605 mm)	20.67 in (525 mm)	21.85 in (555 mm)	21.85 in (555 mm)	23.82 in (605 mm)	23.82 in (605 mm)	23.82 in (605 mm)
L2	19.29 in (490 mm)	20.10 in (510 mm)	21.26 in (540 mm)	19.29 in (490 mm)	20.10 in (510 mm)	23.23 in (590 mm)	20.10 in (510 mm)	21.26 in (540 mm)	21.26 in (540 mm)	23.23 in (590 mm)	23.23 in (590 mm)	23.23 in (590 mm)
L3	20.20 in (513 mm)	20.98 in (533 mm)	22.17 in (563 mm)	20.20 in (513 mm)	20.98 in (533 mm)	24.13 in (613 mm)	20.98 in (533 mm)	22.17 in (563 mm)	22.17 in (563 mm)	24.13 in (613 mm)	24.13 in (613 mm)	24.13 in (613 mm)
Cable Length	6.5 ft (2m)											

Optional cables available in 6ft, 12ft, 24ft.

Type of cable

Wired
120 V / 60 Hz
4 conductor cable



white = neutral
red = direction 1
black = direction 2
green = ground

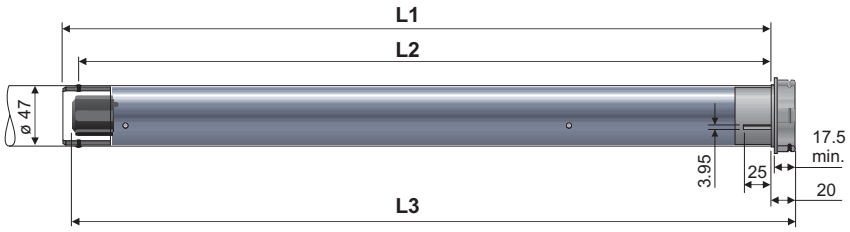
LT50 Altus® RTS Star Head

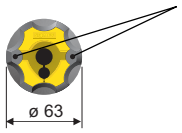
506S2	1032500	**535A2**	1037509
510S2	1037501	**540R2**	1037510
525A2	1043287	**550R2**	1037511
530R2	1037507		

Radio Technology Somfy® (RTS) allows for wireless radio control of motorized window coverings via the RTS family of controls.

Technical features

Voltage Supply	AC
Index Protection Rating	IP 44
Limit Switch Type	Electronic RTS
Limit Switch Capacity	250 Turns
Temperature Working Range	14°F to 104°F (-10°C to 40°C)
Insulation Class	Class 1 for 120V
Antenna	Integrated into power cord. Must be at least 12 inches and must not come in contact with metal





2 mounting holes for self tapping screws.
Dia. 5 mm (cat #9670013)
Depth 13 mm
Spaced 1.89" (48 mm) apart

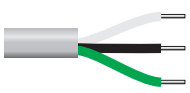
Performances	**506S2**	**510S2**	**525A2**	**530R2**	**535A2**	**540R2**	**550R2**
Torque	6 Nm	10 Nm	25 Nm	30 Nm	35 Nm	40 Nm	50 Nm
Nominal Voltage	120V/60Hz						
Rated Current	1.1A	1.3A	1.6A	1.5A	2.1A	1.8A	2.1A
Speed	38 rpm	38 rpm	20 rpm	14 rpm	20 rpm	14 rpm	14 rpm
Thermal Protection	5 minutes						
Radio Frequency	433.42 MHz	433.42 MHz	433.42 MHz	433.42 MHz	433.42 MHz	433.42 MHz	433.42 MHz

Dimensions	**506S2**	**510S2**	**525A2**	**530R2**	**535A2**	**540R2**	**550R2**
L1	23.82 in (605 mm)	25.79 in (655 mm)	25.79 in (655 mm)	25.79 in (655 mm)	26.57 in (605 mm)	26.57 in (605 mm)	26.57 in (605 mm)
L2	23.23 in (590 mm)	25.20 in (640 mm)	25.20 in (640 mm)	25.20 in (640 mm)	25.98 in (660 mm)	25.98 in (660 mm)	25.98 in (660 mm)
L3	24.13 in (613 mm)	26.10 in (663 mm)	26.10 in (663 mm)	26.10 in (663 mm)	26.89 in (683 mm)	26.89 in (683 mm)	26.89 in (683 mm)
Cable Length	6.5 ft (2 m)	6.5 ft (2 m)	12.3 ft (3.75 m)	6.5 ft (2 m)	12.3 ft (3.75 m)	6.5 ft (2 m)	6.5 ft (2 m)

Optional cables with NEMA plugs available in 3ft, 6ft, 12ft, 18ft, 24ft.

Type of cable

RTS
120 V / 60 Hz
3 conductor cable



white = neutral
black = hot
green = ground

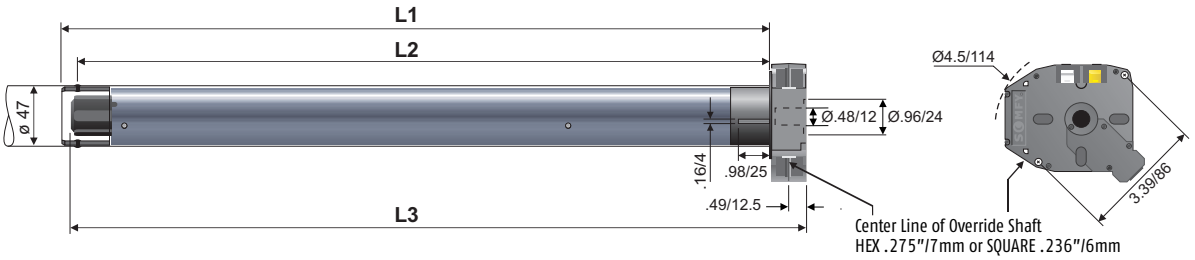
LT50 RTS CMO

525A2 CMO	1043020	**540R2 CMO**	1049013
530R2 CMO	1045014	**550R2 CMO**	1051012
535A2 CMO	1047010		

Radio Technology Somfy® (RTS) allows for wireless radio control of motorized window coverings via the RTS family of controls.

Technical features

Voltage Supply	AC
Index Protection Rating	IP 44
Limit Switch Type	Rapid Adjustment RA and Electronic Receiver Integrated in motor tube
Limit Switch Capacity	34 Turns
Temperature Working Range	14°F to 104°F (-10°C to 40°C)
Insulation Class	Class 1 for 120V
Antenna	Integrated into power cord. Must be at least 12 inches and must not come in contact with metal



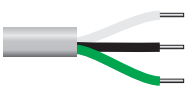
Performances	525A2 CMO	530R2 CMO	535A2 CMO	540R2 CMO	550R2 CMO
Torque	25 Nm	30 Nm	35 Nm	40 Nm	50 Nm
Nominal Voltage	120V/60Hz				
Rated Current	1.6A	1.5A	2.1A	1.8A	2.1A
Speed	20 rpm	14 rpm	20 rpm	14 rpm	14 rpm
Thermal Protection	5 minutes				
Radio Frequency	433.42 MHz				

Dimensions	525A2 CMO	530R2 CMO	535A2 CMO	540R2 CMO	550R2 CMO
L1	30.47 in (605 mm)	30.47 in (605 mm)	30.47 in (605 mm)	30.47 in (605 mm)	30.47 in (605 mm)
L2	29.88 in (590 mm)	29.88 in (590 mm)	29.88 in (590 mm)	29.88 in (590 mm)	29.88 in (590 mm)
L3	30.98 in (610 mm)	30.98 in (610 mm)	30.98 in (610 mm)	30.98 in (610 mm)	30.98 in (610 mm)
Cable Length	12ft (3.6 m)	6ft (1.8 m)	12ft (3.6 m)	6ft (1.8 m)	6ft (1.8 m)

Optional cables with NEMA plugs available in 6ft, 12ft, 18ft, 24ft.

Type of cable

RTS
120 V / 60 Hz
3 conductor cable



white = neutral
black = hot
green = ground

LT50 RA CMO

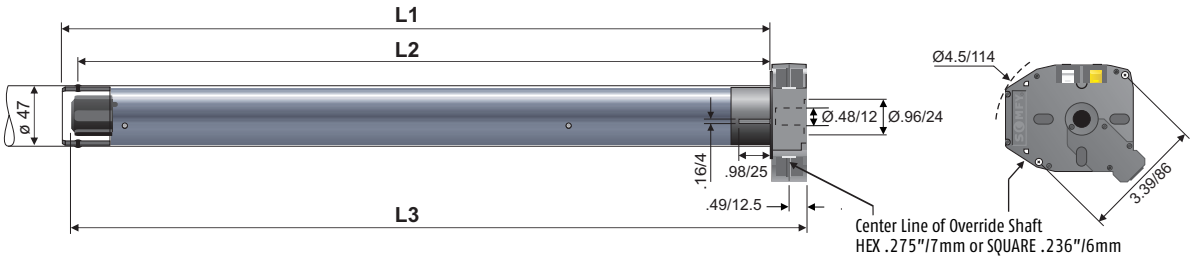
525A2 CMO	1043010	**540R2 CMO**	1049026
530R2 CMO	1045017	**550R2 CMO**	1051014
535A2 CMO	1047006		

Offers control via power switching

Technical features

Voltage Supply	AC
Index Protection Rating	IP 44
Limit Switch Type	Rapid Adjustment (RA) (includes manual override)
Limit Switch Capacity	34 Turns

Temperature Working Range	14°F to 104°F (-10°C to 40°C)
Insulation Class	Class 1 for 120V



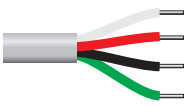
Performances	525A2 CMO	530R2 CMO	535A2 CMO	540R2 CMO	550R2 CMO
Torque	25 Nm	30 Nm	35 Nm	40 Nm	50 Nm
Nominal Voltage	120V/60Hz				
Rated Current	1.6A	1.5A	2.1A	1.8A	2.1A
Speed	20 rpm	14 rpm	20 rpm	14 rpm	14 rpm
Thermal Protection	5 minutes				

Dimensions	525A2 CMO	530R2 CMO	535A2 CMO	540R2 CMO	550R2 CMO
L1	23.39 in (594 mm)	23.39 in (594 mm)	26.14 in (664 mm)	26.14 in (664 mm)	26.14 in (664 mm)
L2	22.80 in (579 mm)	22.80 in (579 mm)	25.55 in (649 mm)	25.55 in (649 mm)	25.55 in (649 mm)
L3	23.90 in (607 mm)	23.90 in (607 mm)	26.65 in (677 mm)	26.65 in (677 mm)	26.65 in (677 mm)
Cable Length	6ft (1.8 m)				

Optional cables available in 6ft, 12ft, 24ft.

Type of cable

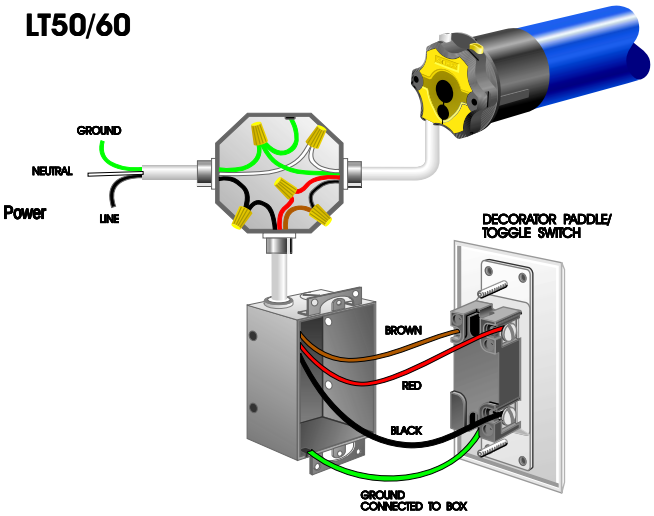
Wired
120 V / 60 Hz
4 conductor cable



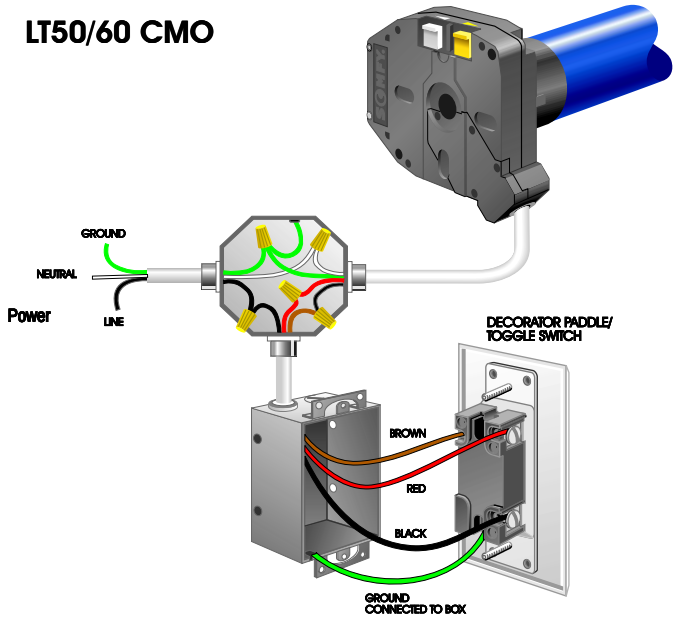
white = neutral
red = direction 1
black = direction 2
green = ground

Operator Wiring Instructions

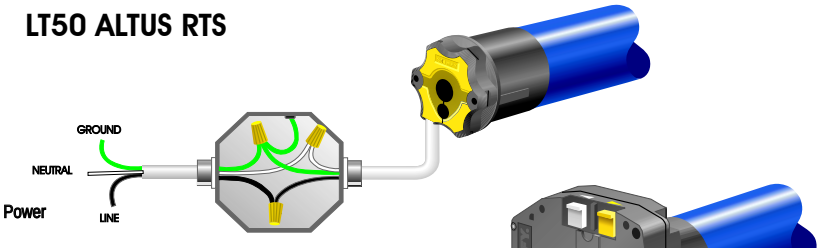
LT50/60



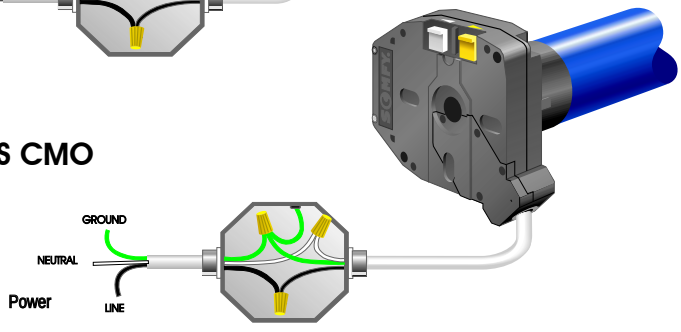
LT50/60 CMO



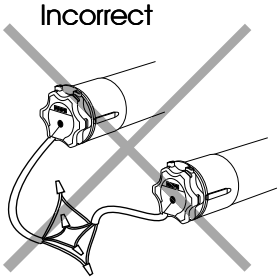
LT50 ALTUS RTS



LT50 RTS CMO

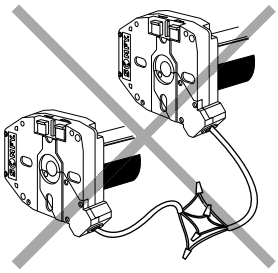


Incorrect



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

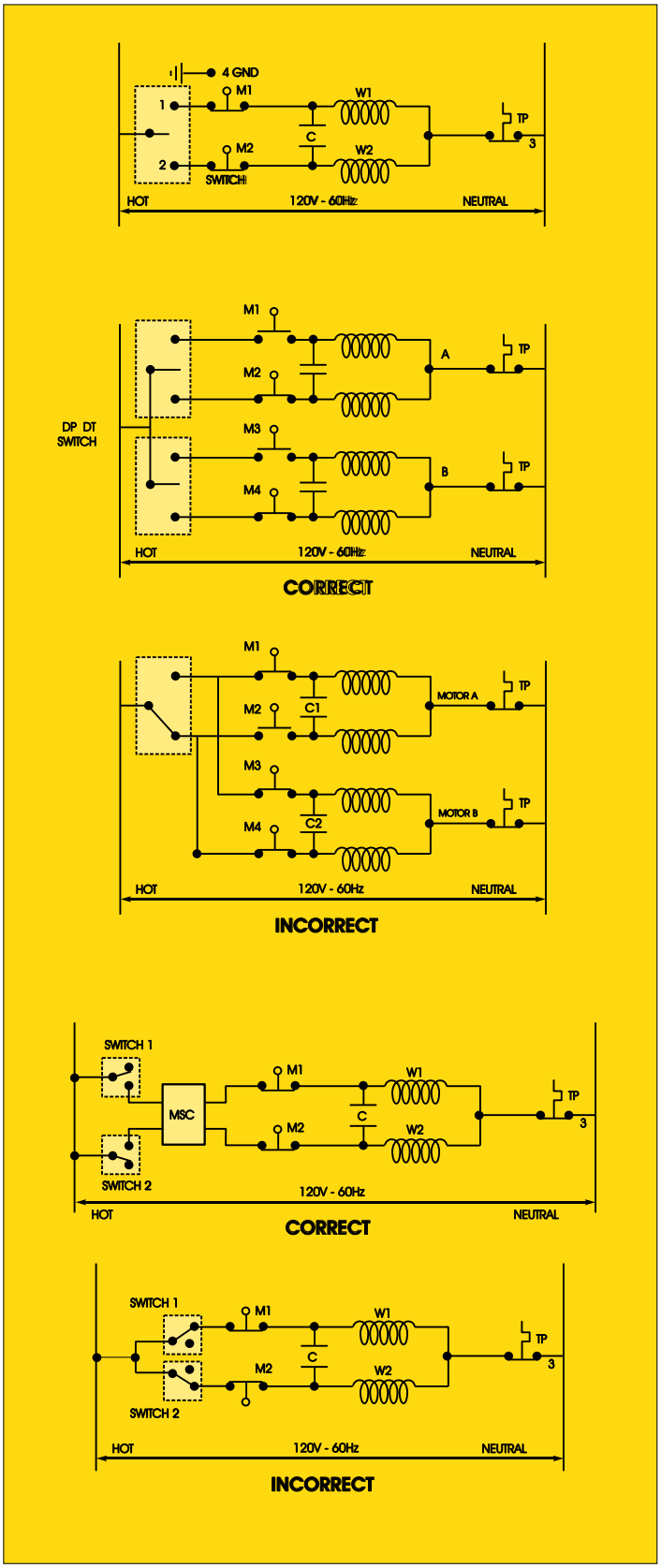
120V AC	CODE
BLACK	WHITE PUSH-BUT TON
RED	YELL OW PUSH-BUT TON
WHITE	(C) COMMON
GREEN	(G) GROUND

Note: Only RTS and IL T 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

Operator Wiring Considerations



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 P arallel (Does not apply to RTS or IL T motors). P arallel 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 .

Installation Instructions

LS40, LT50/60, LT50 RH

LT50/60 and LT50RH

Stop Position 1

Depending upon type of installation

Position 2

LS40

Stop Position 1

Depending upon type of installation

Stop Position 2

Stop position 2

- Bring end product into stop position 2 (direction of rotation 2)
- Release the limit switch adjustment button that lies in the direction of rotation 2 by pressing it down again. Stop position is now set.

Always attach protective cap over limit switch adjustment buttons.

NOTE: It is important to note that SOMFY motors are weatherproof, but NOT WATERPROOF and therefore the motor head should not be exposed to direct rainfall.

Test Run 2

Allow the motor to run in both directions, until it shuts off in the stop positions. Because of the built-in thermal protection feature, the motor may shut off automatically after running without interruption for an extended period of time. Please wait until the motor has cooled off and is ready for operation again (approximately 10-15 minutes).

Changing a Set Stop Position...

- Press the limit switch adjustment button that lies in the direction of rotation.
- Bring the end product into the desired stop positon.
- Release the limit switch adjustment button by pressing it down again.

Adjustment of Upper and Lower Positions for the LS40 Motor

- Connect the motor tester cable (Cat. No. 6020086) to the motor cable, match the wire colors and connect to power.
- Identify the UP recessed limit screw by finding the arrow on the motor head which points in the direction that retracts (rolls up) the system.
- Turn the power on to ensure that the switch is operating properly (UP-raises, DOWN-lowers). If not, turn the power off and simply reverse the black and red motor leads.
- Flip the tester cable switch in the UP direction. If the system stops before its UP limit, turn the UP screw to "+" until necessary. If the system does not stop at its UP limit, flip the tester cable switch off and turn the UP screw to "-". Repeat this until correct setting is achieved.

NOTE: 7 Turns of Hex Screws equals 1 turn of roller tube.

- Flip the tester cable switch in DOWN direction. If the system stops before its DOWN limit, turn the DOWN limit screw to "+". If not, flip the tester cable switch off and turn the DOWN limit screw to "-". Repeat this until correct setting is achieved.

NOTE: Recessed thumbscrews can accomodate a flat head screwdriver, SOMFY's Allen wrench or Flexible limit switch adjuster.