# RTS CMO Wiring Diagram and Limit Setting Instructions

POWER SUPPLY   120 VAC / 60 Hz

A. For installation by a qualified electrician in accordance with national and local electrical codes, and the following instructions.

B. Risk of electrical shock. Disconnect power before installing. Never wire energized components.

C. Only RTS motors can be wired in PARALLEL A means of disconnecting the power at each motor independently should be provided.

D. Power only needs to be supplied to the motor. The receiver is completely contained inside the motor tube.

E. Motor warranty is subjet to CANCELLATION if wiring recommendations are not followed.
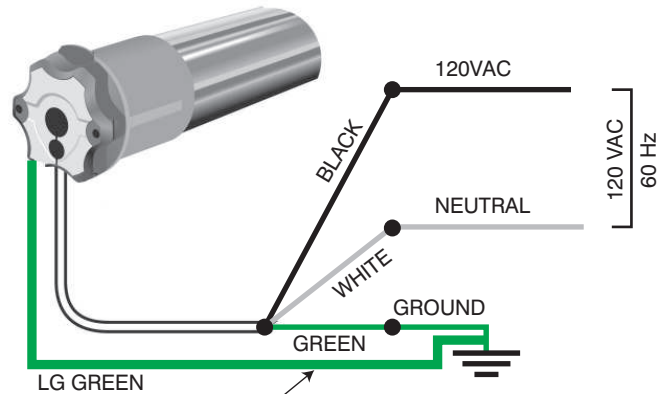
This extra ground wire is to ensure that the shutter is properly grounded to prevent electrical shock. Connect this wire to the same ground as the motor ground in the motor cable.

MOTOR WIRING COLOR CODE

COLOR	MOTOR LEADS
BLACK	120VAC
WHITE	NEUTRAL
GREEN	GROUND
LG GREEN	SHUTTER GROUND

INSTALLATION REQUIREMENTS

•   If the installation is made up of several RTS motors,only one RTS motor must be powered during the programming.

   All other motors must be disconnected. This will avoid interferences during the initial programming of each motor.

•   The mounting distance between the 2 motor heads should not be less than 19 inches between RTS motor heads, to avoid possible interference.

•   Use only factory approved radio controls and accessories.

•   In order to avoid water penetration, form a "drip loop" with the power cable.

•   **NOTE:** Our motors conform to IP44 requirements and as such must be protected against direct weather elements such as rain, sleet,…etc.

TRANSMITTERS

Pictured below are compatible transmitters for RTS (Radio Frequency Controlled) motors.

- A motors memory capacity is a maximum of 12 transmitters.

- Transmitter range is up to 65 feet (20 meters) from the motor.

- The master channel on a 4/5 channel transmitter can be used as an individual channel for a total of 5 channels, in lieu of a master control of all motors.
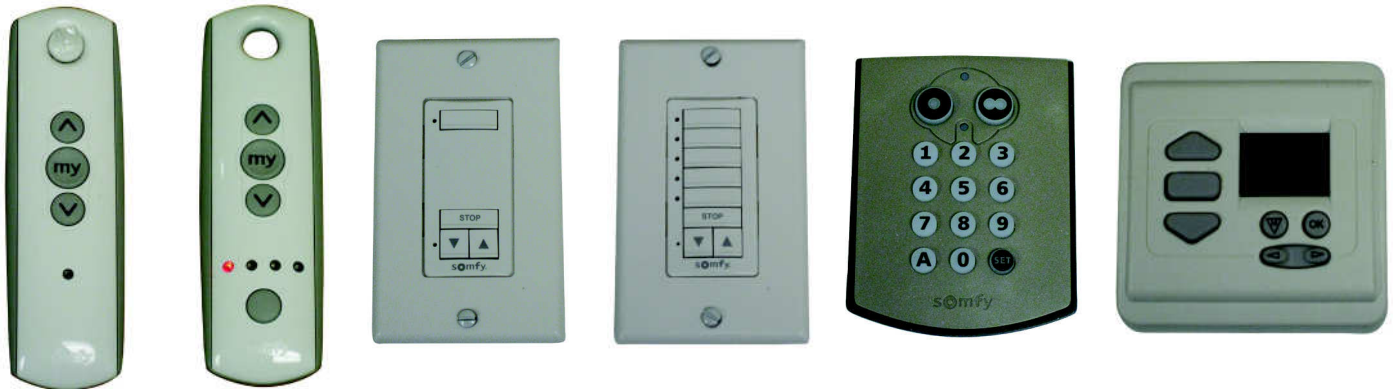
1 Channel Handheld	4/5 Channel Handheld	1 Channel Wall Mount	4/5 Channel Wall Mount	Digital Keypad	7 Day Timer

CAUTION:

- It is strongly recommended that you use an approved tester cable to set the motor limits, and ensure that the system is operating correctly before the final electrical connection is made.

- Be sure to take all necessary precautions to protect yourself from accidental electrical shock.

- Refer to the trouble shooting guide below for any problems encountered.
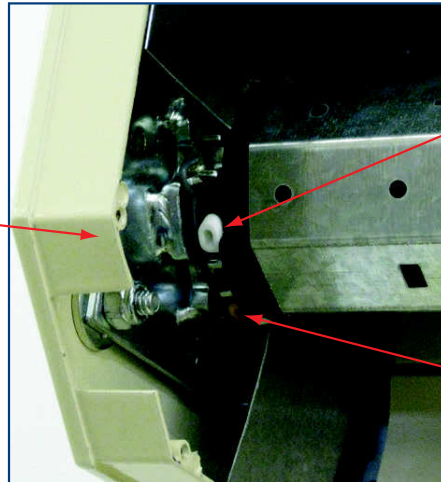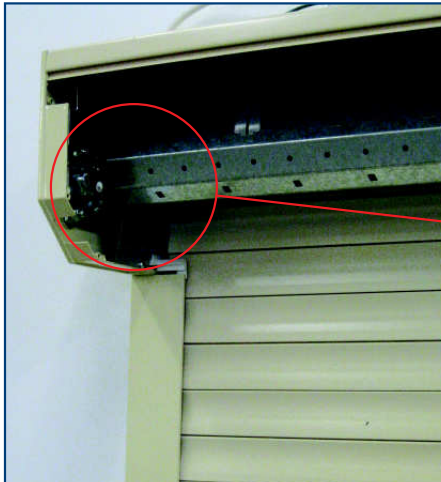
NOTE:

- **Two positions have to be set: the UP and DOWN positions where the motor will stop automatically.**

- The limit switches are found inside the front access hole of the end cap.

- Determine if the motor on your shutter is on the right hand or left hand side by observing which side the wire exits from.

UP Position

DOWN Position
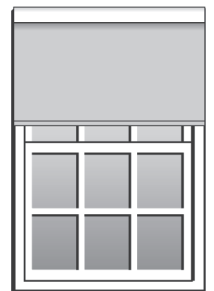
MOTOR ON <u>LEFT</u> SIDE OF SHUTTER

White Button controls the DOWN limit

Yellow Button controls the UP limit

PROGRAMMING MODE

Before you begin: Motors are shipped without limit settings and transmitter ID's. Steps 1 to 7 must be completed to ensure proper motor programming and functionality. Power should ONLY be connected to current motor being programmed. All other motors should be disconnected from their respective power while programming.

Step 1: Connect power
Connect 120V power to the motor to be programmed

Step 2:
Depress fully both the white and yellow buttons. They must stay 'IN'.

Step 3: Initiate programming
Press both $\wedge$ and $\vee$ **at the same time** until the motor jogs. A jog is a brief up and down motion. In **Programming Mode**, the shutter will move only when the $\wedge$ or $\vee$ is held. (Note: after every command, the motor will jog to confirm)

Step 4: Check directions
Press $\wedge$ or $\vee$. When pressing $\vee$: shutter should go down. To change direction press and hold (my) (Stop) until the shutter jogs.

Step 5: Set the top limit
Once the packaging foam has been removed from the shutter curtain use the $\wedge$ or $\vee$ button on the transmitter to move the shutter to the desired stop position when the shutter is open. Press the Yellow button on the end of the motor to allow it to come back out and set the top limit.

Step 6: Set the bottom limit
Use the $\vee$ button on the transmitter to move the shutter to the desired stop position when the shutter is closed. Press the white button on the end of the motor to allow it come back out and set the down limit.
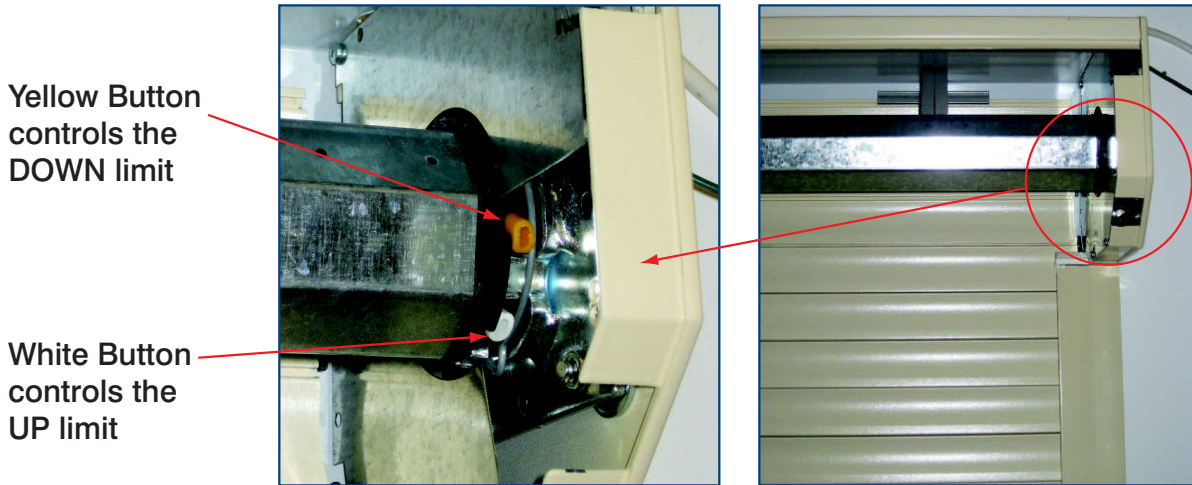
Programming Button

Step 7: Set user mode
Press and hold the programming button on the back of the transmitter until the shutter jogs. The shade is now in User Mode. In User Mode, the shade will operate with a brief press on $\wedge$ or $\vee$. Double check limit settings as a precaution.

MOTOR ON <u>RIGHT</u> SIDE OF SHUTTER

Yellow Button controls the DOWN limit

White Button controls the UP limit

PROGRAMMING MODE

Before you begin: Motors are shipped without limit settings and transmitter ID's. Steps 1 to 7 must be completed to ensure proper motor programming and functionality. Power should ONLY be connected to current motor being programmed. All other motors should be disconnected from their respective power while programming.

**Step 1: Connect power**
Connect 120V power to the motor to be programmed

Step 2:
Depress fully both the white and yellow buttons. They must stay 'IN'.

Step 3: Initiate programming
Press both ⌃ and ⌄ **at the same time** until the motor jogs. A jog is a brief up and down motion. In **Programming Mode**, the shutter will move only when the ⌃ or ⌄ is held.
(Note: after every command, the motor will jog to confirm)

Step 4: Check directions
Press ⌃ or ⌄. When pressing ⌄: shutter should go down. To change direction press and hold (my) (Stop) until the shutter jogs.

Step 5: Set the top limit
Once the packaging foam has been removed from the shutter curtain use the ⌃ or ⌄ button on the transmitter to move the shutter to the desired stop position when the shutter is open. Press the Yellow button on the end of the motor to allow it to come back out and set the top limit.

Step 6: Set the bottom limit
Use the ⌄ button on the transmitter to move the shutter to the desired stop position when the shutter is closed. Press the white button on the end of the motor to allow it come back out and set the down limit.

Programming Button

Step 7: Set user mode
Press and hold the programming button on the back of the transmitter until the shutter jogs. The shade is now in User Mode. In User Mode, the shade will operate with a brief press on ⌃ or ⌄ Double check limit settings as a precaution.

ADJUSTING LIMIT POSITIONS:

1. From the above instructions determine which limit button controls the limit that you want to change.
2. Depress the correct button to unset the current limit position.
3. Use the remote to move the shutter to the new limit position.
4. Press the correct limit button to allow it to come back out and reset the limit.

SETTING AN INTERMEDIATE (MIDDLE) STOP POSITION

Setting

Press the ⌃ or ⌄ to operate shutter. At the desired intermediate (preferred) position press ⓜ(Stop) to stop the shutter.

Once the desired intermediate position is reached, press and hold ⓜ(Stop) until the shutter jogs. The intermediate position is now added to memory.

Using

Send the shutter to the intermediate position by pressing ⓜ(Stop) from ANY shutter position.

Note: Shutter should be stationary prior to activating intermediate position function.

Note:

If shutter is actively moving (in-motion), ⓜ should be pressed twice.

To Delete: Activate shutter to intermediate position, then press and hold ⓜ(Stop) for 5 seconds. Shutter will jog to confirm deletion.

ADDING OR DELETING A TRANSMITTER OR CHANNEL

Programmed Transmitter

Programming Button

- To add or delete a remote, press the programming button on the back of an already programmed remote until the motor jogs. (On multi-channel transmitters, use the button below the red lights to select the correct channel **BEFORE** pressing the programming button or you will do all channels at once.)

- Next press the programming button on the back of the remote you wish to add or delete until the motor jogs.

  (**Note:** On multi-channel transmitters, use the button below the red lights to select the correct channel **BEFORE** pressing the programming buttons or you will add/delete all channels on the transmitter.)