

## ⚠ Important Installation Information

- When shipped, the remote is in Setup Mode to facilitate creation of a motor network.
- When network creation is finished and ready for the end user, you must exit Setup Mode on the remote.
- For best RF performance, the antenna on the motor should maintain as much separation from a conductive surface as possible.

## Glossary

**Hub Motor** - Special designation for the first motor powered up. All commands to additional motors are routed through the Hub motor.

**Jog Once** - Motor moves a short distance in one direction.

**Jog Twice** - Motor moves a short distance in two directions.

**Remote** - The RF transceiver used to set up and operate motors.

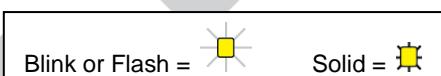
**Asleep** - The default state of a remote is "asleep" — no LEDs are lit. "Wake Up" remote: press and release the UP or DOWN button.

**Group** - A collection of up to four motors controlled by Group 1, 2, 3, or 4 on an Arc transceiver or Group 1 on a Step transceiver.

**LED** - Light-emitting diode. Both the remote and the motor head have LEDs in three colors.

**Blink** - A single on/off of an LED.

**Flash** - LED turns on and off continuously.



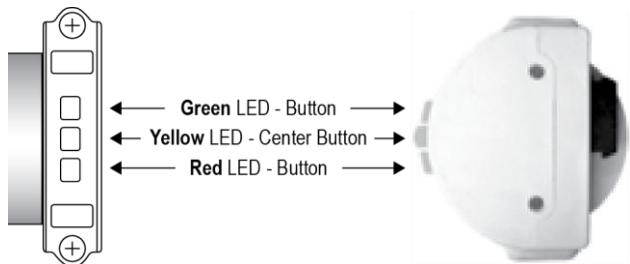
## M40/50RF Motor

The M40/50RF motor is equipped with radio frequency technology and has three buttons with internal LEDs that provide visual feedback during setup and operation.

**Green LED** – Button operates the motor in one direction.

**Yellow LED** – Center Button is used for motor administration.

**Red LED** – Button operates the motor in the other direction.



## SUITE Remote

The SUITE Remote is equipped with radio frequency technology for wireless control of all ESI RF-enabled motors.

- The SUITE Step remote controls one group of up to four motors.
- The SUITE Arc remote controls four groups of up to four motors each, for a total of sixteen motors.

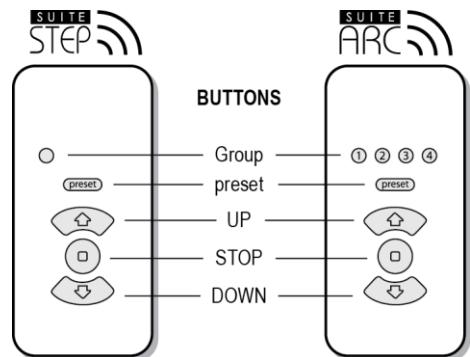
### Wake Up the Remote

The remote must be "awake" to send or receive commands.

To wake up a remote that is "asleep" (no LEDs are lit):

- Press and release the UP or DOWN button.

**NOTE:** When no buttons are pressed, the remote goes to sleep after 10 seconds while in User Mode, or after 60 seconds while in Setup Mode.



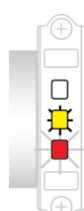
## Single Motor (Hub) and Remote

**IMPORTANT:** Prior to motor network setup, install batteries into the SUITE Remote and wait for the LEDs to go out ("asleep").

### 1 Create the Hub Motor — Power up one factory default motor which automatically establishes it as the Hub.<sup>1</sup>

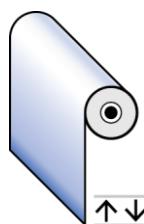
#### (a) Connect AC power to the motor.

- On motor, Yellow LED is solid and Red LED is flashing (indicates end limits are not set).<sup>2</sup>



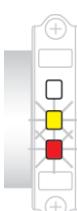
#### (b) Wait until motor jogs twice.

- Could take up to 3 minutes.



#### (c) Motor is now the Hub motor.

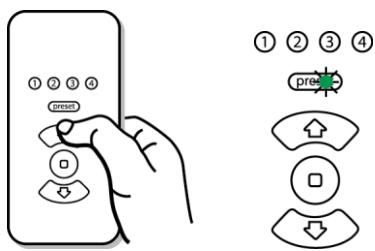
- Yellow LED begins flashing for 60 seconds (indicates Network Invite Mode).<sup>3</sup>



## 2 Join the Remote to the Hub Motor

### (a) "Wake up" the remote if no LEDs are lit (asleep).

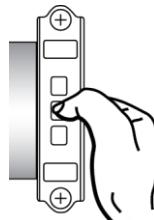
- Press and release the UP or DOWN button.
- Green "preset" LED is solid (Network Search Mode).<sup>4</sup>



### (b) Put Hub motor into Network Invite Mode.

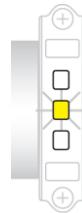
NOTE: if the Yellow LED on the motor is flashing, Skip to Step 2 (d).

- Press and release the Center button once.



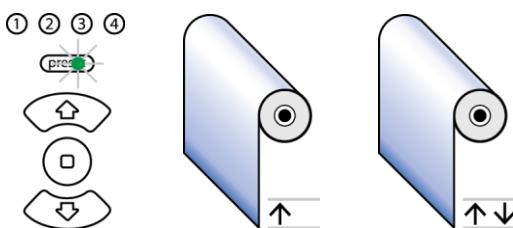
### (c) On the Hub motor.

- Yellow LED flashes for 60 seconds to indicate new devices may join.



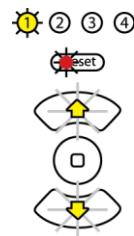
### (d) Remote automatically joins the Hub and forms a network.

- Green "preset" LED blinks once, and Hub motor jogs once, then jogs twice.



### (e) Remote is in Setup Mode.

- Red LED under "preset" is solid, and Yellow LED under Group 1 is solid.
- The UP and DOWN buttons are flashing (indicates no end limits are set).

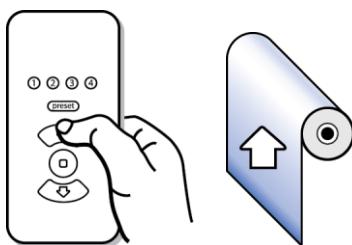


## 3 Toggle Motor Direction — Check the motor travel direction using the remote.

### (a) Verify travel direction.

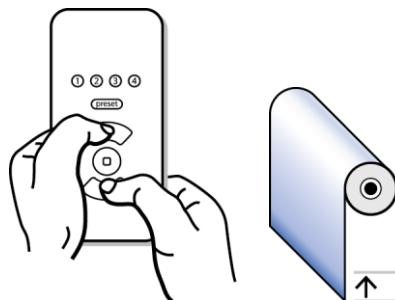
- Press the UP or DOWN button.

If the shade moves as expected, skip to Step 4.



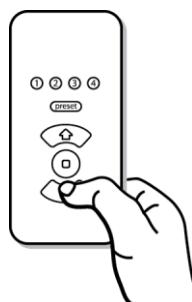
### (b) Toggle the motor direction.

- Simultaneously press and hold the UP and DOWN buttons for 5 seconds until the motor jogs once.
- Motor direction is now reversed.



### (c) Verify the direction change.

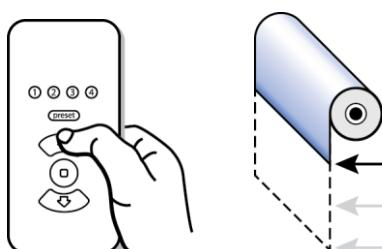
- Press the UP or DOWN button.



## 4 Set Limits

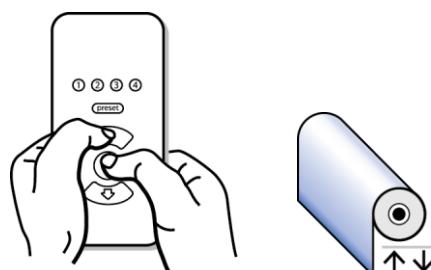
### (a) Adjust shade to Upper limit position.

- Press and hold the UP button.



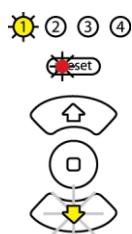
### (b) Set the Upper end limit.

- Simultaneously press and hold STOP and UP until motor jogs twice (approximately 2 seconds).



### (c) Upper end limit is set.

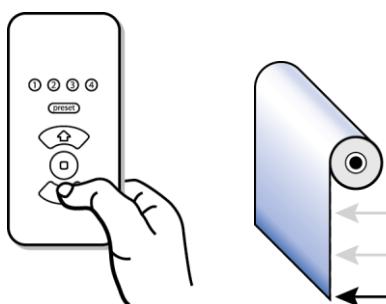
- Yellow LED on UP button turns off.



## 4 Set Limits (continued)

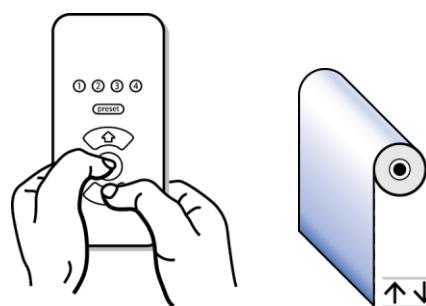
### (d) Adjust shade to Lower limit position.

- Press and hold the DOWN button.



### (e) Set the Lower end limit.

- Simultaneously press and hold STOP and DOWN until motor jogs twice (approximately 2 seconds).



### (f) Lower end limit is set.

- Yellow LED on DOWN button turns off.

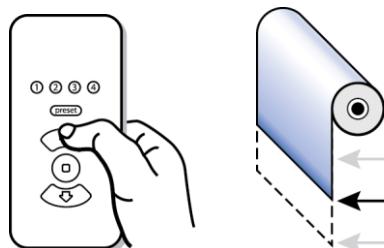


## 5 Set "preset" (OPTIONAL)

### (a) Adjust shade to desired "preset" position.

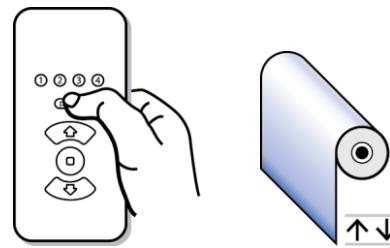
NOTE: Both end limits must be set prior to setting a "preset" position.

- Press and hold the UP (or DOWN) button.



### (b) Set the "preset."

- Press and hold "preset" until motor jogs twice (approximately 5 seconds) then release.



## 6 Adjust Limits / Clear Limits

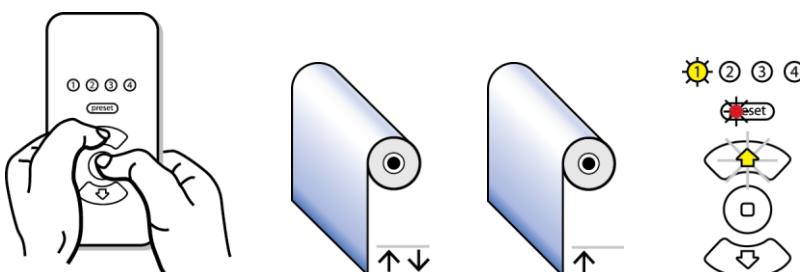
### (a) Adjust the Upper or Lower end limits.

NOTE: To set an end limit outside of a current end limit, you must clear that end limit first.

*Clear Upper Limit:*

- Simultaneously press and hold STOP and UP until motor jogs twice, then jogs once (approximately 5 seconds), then release.
- The UP button flashes to show its limit is cleared.

*Clear Lower Limit:* repeat the above two instructions using the DOWN button (instead of UP).



### (b) Set the new Upper or Lower end limit.

- UPPER: see Step 4 (a), (b), (c).
- LOWER: see Step 4 (d), (e), (f).

### (c) Adjust the "preset" limit.

NOTE: A "preset" cannot be cleared using the remote, only readjusted.

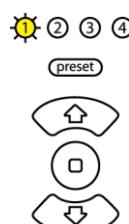
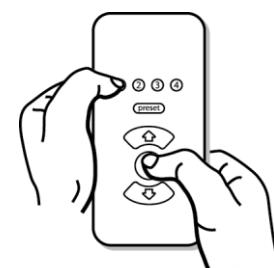
- Follow the instructions in Step 5.

## 7 Finish the Installation

NOTE: If this is a single motor installation, complete Step 7 now, otherwise continue with Step 8 for a multiple motor installation.

### (a) On the remote, you must exit Setup Mode and put the remote into User Mode after the installation is complete.

- Hold "1" and briefly press and release STOP.
- Red LED under "preset" turns off (remote is now in User Mode).



## Add Additional Motors

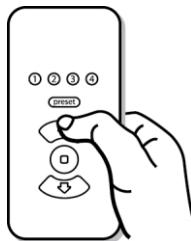
### 8 Join Additional Motors to the Network

Add up to 4 motors when using a SUITE Step remote. Add up to 16 motors when using a SUITE Arc remote.

**IMPORTANT:** Install the next motor but DO NOT apply power yet. Be sure the remote is in Setup Mode.

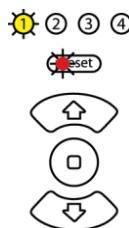
**(a) "Wake up" the remote if no LEDs are lit (asleep).**

- Press and release the UP or DOWN button.



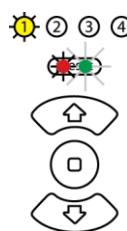
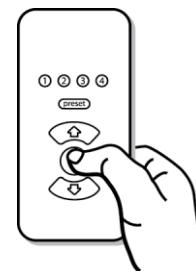
**(b) Setup Mode on the remote.**

- Red LED under "preset" is solid.
- Yellow LED under Group 1 is solid.



**(c) Start network invite.**

- Press and release the STOP button.
- Green LED under "preset" flashes for up to 60 seconds while the remote looks for devices to join.



**(d) Connect AC power to the next motor.**

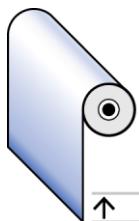
- Yellow LED is solid and Red LED is flashing (indicates end limits are not set).



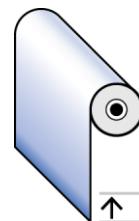
**(e) Within a few seconds, the next motor joins the network.**

- Next motor jogs once.
- Hub motor jogs once.

Next motor:

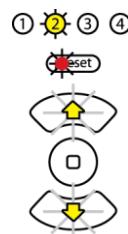


Hub motor:



**(f) On the remote:**

- Red LED under "preset" is solid.
- Yellow LED under Group 2 is solid if it is the 2nd motor ("3" if it is the 3rd motor and so on).
- The UP and DOWN buttons are flashing (indicates no end limits are set).



### 9 Toggle Motor Direction — Set Limits — Adjust Limits / Clear Limits

**(a) Make sure the correct Group Number is selected on the remote: ② for the 2nd motor, ③ for the 3rd motor, and so on.**

- See Steps 3, 4, 5, and 6.

**(b) Repeat Steps 8 and 9 for each new motor until all motors are installed.**

### 10 Motor Group Number Assignment — Move a motor to a different Group (SUITE Arc remote only).

Each Group button on a remote can be assigned up to four motors. The SUITE Step remote (one Group button) can control up to four motors. The SUITE Arc remote (four Group buttons) can control up to 16 motors.

**SUITE Arc remote**

As motors are installed (powered up) into a network, they populate into the Group Number table in sequential order. Motor #1 becomes the first motor in Group 1, Motor #2 becomes the first motor in Group 2 and so on.

Group Number			
1	2	3	4
Motor #			
1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16

Continuing, Motor #5 becomes the second motor in Group 1.

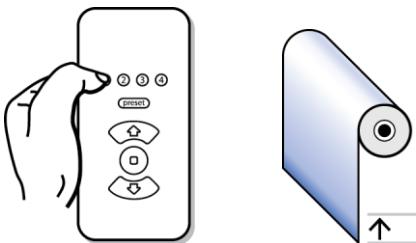
## 10 Motor Group Number Assignment (continued)

### (a) Select a motor in a group.

- Press a Group Number button repeatedly to cycle through motors in that group. For example, press the Group 1 button two times to select the second motor in that group.
- Selected motor jogs once.

NOTE: The Hub motor will always jog twice when selected.

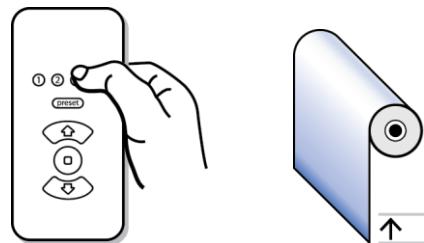
If a Group is full on the remote (4 motors), you cannot move a motor into it.



### (b) Change a motor's group number assignment.

- Press and hold the new Group Number button, for example, Group 3, for approximately 5 seconds until the selected motor jogs once (if the selected motor is the Hub motor, it will jog twice).
- The motor has now moved into the first available position within the new group.

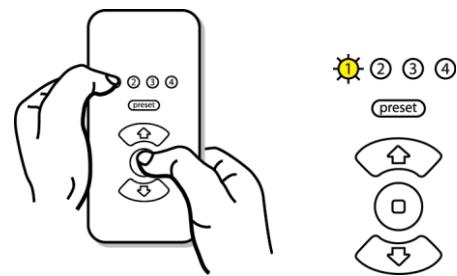
NOTE: In Setup Mode, only one motor can be selected at a time. In User Mode, one or more groups of motors can be selected.



## 11 Finish the Installation

### (a) On the remote, you must exit Setup Mode and put the remote into "User Mode" after the installation is complete.

- Hold "1" and briefly press and release STOP.
- Red LED under "preset" turns off (remote is now in User Mode).

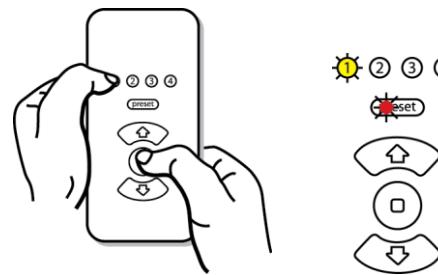


### Enter SETUP MODE (remote)

Enter Setup Mode for network configuration.

NOTE: Remote must be awake and must be in User Mode.

- Simultaneously press and hold "1" and STOP for 5 seconds.
- Red LED under "preset" turns solid, and Yellow LED under Group 1 turns solid.

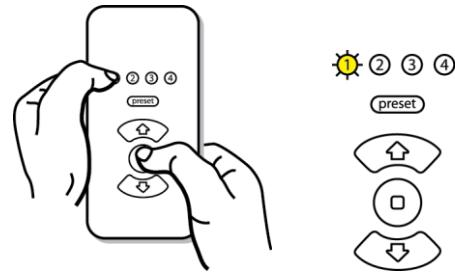


### Exit SETUP MODE (remote)

Exit Setup Mode and put the remote into User Mode.

NOTE: Remote must be awake.

- Hold "1" and briefly press and release STOP.
- Red LED under "preset" turns off.

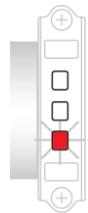
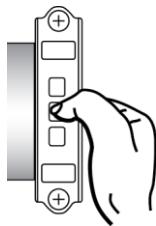


## Reset Motor to Factory DEFAULT — Complete both steps for a full reset.

### 1. Clear Limits

- (a) Press and hold the Center button for 10 seconds.
- (b) Red LED starts flashing.

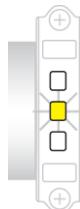
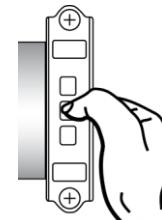
End limits are now cleared.



### 2. Clear Network Information

- (a) Press the Center button 3 times within 1 second.
- (b) All motor LEDs turn off for 5 seconds, then the Yellow LED flashes for 60 seconds to indicate new devices may join (Network Invite Mode).
- (c) Motor will join an existing network or become a Hub motor if no network is detected.

**NOTE:** If you clear the Network Information on the Hub motor, you will lose the ability to administer the network; however, you can still control the remaining motors in the network. To re-create a network, you **must** Reset the remote, then start over, beginning with Step 1 "Create the Hub Motor."



## Reset Remote to Factory DEFAULT

### Reboot / Reset

NOTE: Remote must be awake and in Setup Mode to perform a reboot\* or reset.

- A "reboot" retains all network and device information and the remote rejoins the network.
- A "reset" clears all network and device information (factory default).

- Press and hold "preset" and STOP — after 2 seconds, UP and DOWN turn on solid.
- To REBOOT: Release "preset" and STOP when the UP and DOWN LEDs are on solid. The remote enters Setup Mode immediately after rebooting.
- To RESET: Release "preset" and STOP after the UP and DOWN LEDs go out (about 5 seconds). The remote enters Network Search Mode immediately after resetting.

\* A reboot functions the same as if the batteries were removed, then reinstalled or replaced. A reboot is typically used if the remote has communication errors or operational errors with the network.

### Battery Installation

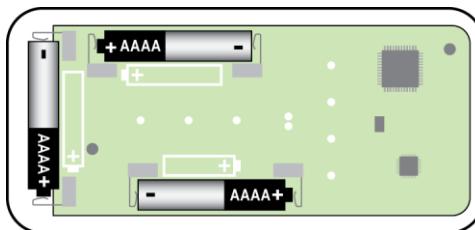
#### Required:

- three AAAA batteries.
- screwdriver to remove the back cover.

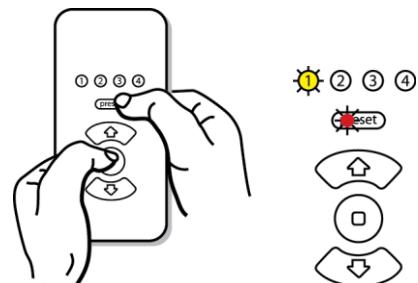
#### Install the Batteries:

- Remove the remote's back cover.
- Install fresh batteries with the plus (+) side oriented as shown by the illustrations on the circuit board.
- Replace the back cover.

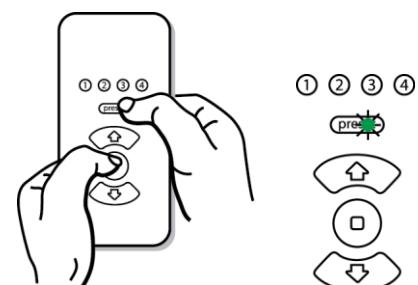
Remote, with back cover removed.



### REBOOT (goes into Setup Mode):



### RESET (goes into Network Search Mode):



## Delete a Motor from the Network

Delete a motor's network information and remove the motor from the network.

NOTE: Remote must be awake and in Setup Mode.

On the motor:

- Press the Center button 3 times within 1 second.
- Unplug the motor during the 5 seconds that the motor LEDs are off (prevents the motor from joining other devices after Network Information is cleared).

## TROUBLESHOOTING

Problem	Reason	Solution
Installation steps did not work.		Reset both the motor and the remote to factory defaults and start again.
Non-Hub motor does not respond to commands from the remote, such as UP or DOWN, when its Group Number is selected.	Non-Hub motor may not have joined the network.	<ol style="list-style-type: none"> <li>With the remote in Setup Mode and awake:           <ul style="list-style-type: none"> <li>Press the STOP button.</li> <li>Green LED under "preset" starts flashing for up to 60 seconds.</li> </ul> </li> <li>Clear the non-Hub motor's network information:           <ul style="list-style-type: none"> <li>Press the Center button 3 times within 1 second.</li> <li>Yellow LED on motor starts flashing after a 5 second delay.</li> <li>Non-Hub motor will jog once when it joins the network.</li> </ul> </li> </ol>
Red LED under "preset" button on remote, in Setup Mode, blinks twice when a motor is selected.	Communication error between remote and motor.	<p>Delete the motor from the network, then re-add the motor.</p> <ul style="list-style-type: none"> <li>Follow the instructions on how to "Delete a Motor from the Network."</li> <li>If you want to re-add the motor to the network, follow the instructions on how to "Join Additional Motors to the Network."</li> </ul>
Cannot add new motors or cannot administer existing motors (adjust limits, and so on).	Hub motor is offline or out of RF range.	<ol style="list-style-type: none"> <li>Make sure motor antennas are not touching a conductive surface.</li> <li>Unplug all motors except the Hub motor.</li> <li>Reset Hub motor to the factory default and leave power on. Wait for the Hub motor to jog twice, which could take up to 3 minutes.</li> <li>Reset remote to factory default. Remote enters Network Search Mode.</li> <li>Remote automatically joins the Hub and enters Setup Mode.</li> </ol>
Motor does not respond to motor head button presses or to commands from the remote.	Motor has no power or is potentially defective.	<ol style="list-style-type: none"> <li>Make sure motor has AC power.</li> <li>On the motor head, if you see a Red double blink (blink blink ... blink blink ...), then the motor is defective. Use a different motor.</li> </ol>
Remote is in Setup Mode and will not control a motor added to the network.	If several motors were added and deleted from the network, the remote's memory locations may be full.	<p>Delete any uncontrollable motors from the network to free up memory locations on the remote.</p> <ul style="list-style-type: none"> <li>Follow the instructions on how to "Delete a Motor from the Network."</li> </ul>

## ENDNOTES

<sup>1</sup> A Hub motor is the gatekeeper to a network. Any new motor has the ability to become a Hub motor when first powered up. A factory default motor has all limit and network information cleared.

<sup>2</sup> On power up, a motor first gives a series of blinks to show the firmware version (not described in this document).

<sup>3</sup> Network Invite Mode is a 60 second time frame when a motor or remote is looking for other devices to join the network.

<sup>4</sup> Network Search Mode is a 30 second time frame when a remote looks for other devices to join when no network is present.

## Technical Information — SUITE Remote

- Batteries: 3 AAAA
- Operating Frequency: RF 2.4 GHz

## Radio Frequency FCC Compliance

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

## Disclaimer

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