

### STAR250<sup>™</sup> WIRELESS ACCESS CONTROL RECEIVER

#### SPECIFICATIONS

SUPPLY VOLTAGE: 12-24 VOLTS AC OR DC **OPERATING CURRENT: 250 mA MAXIMUM OPERATING TEMP RANGE: -40 TO +149F** 

FREQUENCY: 390 MHz

(-40 TO +65C)

### RELAY CONTACT RATING: 1 AMP @ 24 VOLTS AC OR DC

This device complies with FCC Rules Part 15 and IC Canada Rules and Regulations. 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.

Removable memory modules and RF module are included in this product. Jumper J2 must remain in the default position unless otherwise noted. THERE ARE NO OTHER SERVICEABLE PARTS.

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Patents Pending

# A WARNING

To prevent possible SERIOUS INJURY or DEATH from electrocution:

• Be sure power is not connected BEFORE installing the receiver. To prevent possible SERIOUS INJURY or DEATH from a moving gate or garage door:

- · ALWAYS keep remote controls out of reach of children. NEVER permit children to operate, or play with remote control transmitters.
- Activate gate or door ONLY when it can be seen clearly, is properly adjusted, and there are no obstructions to door travel.
- ALWAYS keep gate or garage door in sight until completely closed. NEVER permit anyone to cross path of moving gate or door.

# **MOUNTING INSTRUCTIONS FOR STAR250**

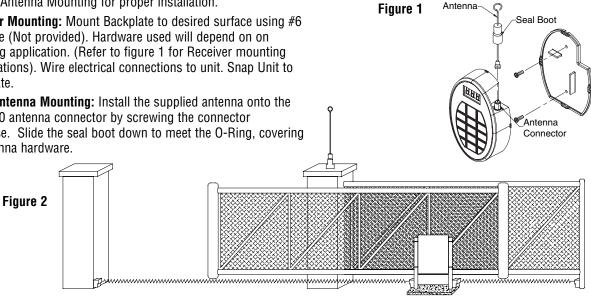
Location: Select a convienent location near your device to be controlled by the STAR250. For best performance, the STAR250 should be mounted in "Line-Of-Sight" with your intended transmitting location. Avoid mounting the STAR250 in or on metallic enclosures. If this is unavoidable, we recommend installing the antenna extension kit (86LM) for best results. See Remote Antenna Mounting for proper installation.

**Receiver Mounting:** Mount Backplate to desired surface using #6 hardware (Not provided). Hardware used will depend on on mounting application. (Refer to figure 1 for Receiver mounting hole locations). Wire electrical connections to unit. Snap Unit to Back Plate.

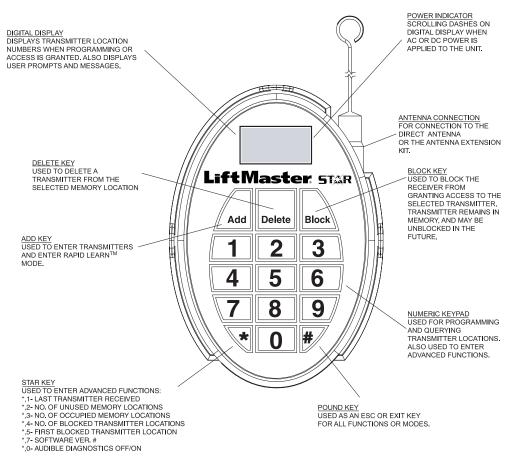
Direct Antenna Mounting: Install the supplied antenna onto the STAR250 antenna connector by screwing the connector clockwise. Slide the seal boot down to meet the O-Ring, covering the antenna hardware.

**Remote Antenna Mounting:** Use the optional 86LM antenna extension kit to mount the remote antenna as high and far from metal as possible for best radio range (Figure 2). Contact LiftMaster customer service at:

1-800-528-2806 to order the model 86LM.

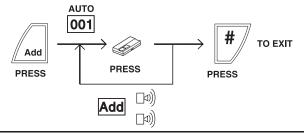


### **STAR250 FEATURES**

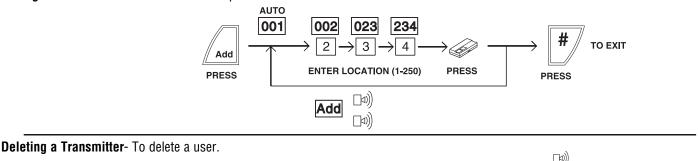


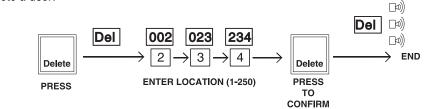
#### **PROGRAMMING THE STAR250**

Rapid Learn<sup>™</sup>- Add transmitter to next available location.



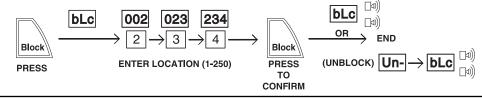
Adding Transmitter- Add transmitter to a specific location.



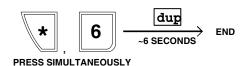


### PROGRAMMING THE STAR250 (CON'T)

Blocking (Unblocking) a Transmitter- To block or unblock a user.



Duplicating Memory- Allows user to back up learned transmitter memory into the provided backup memory module.

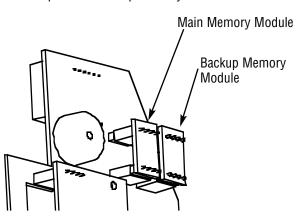


**NOTE:** To duplicate memory, plug memory module into back up slot and press \*,6. Once duplication is complete, remove the backup memory module and store in a separate location.

**Restoring Memory**- To restore memory, simply place the duplicate memory module from the backup memory location in the main memory position.

#### **ADVANCED FUNCTIONS**

Step 1. For advanced functions, press and hold the (\*) key and a number key at the same time to select the corresponding advanced function. (See table at right for available functions.) Press the '#' key to exit the function.



* 1	Memory location of last transmitter received. $^{\circledast}$
* 2	# of open transmitter locations.
* 3	# of locations occupied.
* 4	# of blocked transmitter locations.
* 5	First blocked transmitter location.
5	Next blocked location (Repeat to scroll).
* 6	Duplicate memory- See Duplicating memory.
* 7	Version #
#	Press to exit functions.
* 0	Audible diagnostics OFF/ON (LED will be displayed when OFF)

 $^{\circledast}$  If no transmitters are programmed into the STAR250, then (---) will be displayed

			then () will be	displayed.		
AUDIBLE DIAGNOSTICS Step 1. Activate Transmitter.	$\geqslant \rightarrow \qquad \begin{tabular}{c} \Box & \Box & \Box & D \end{tabular} \end{tabular} \geqslant & \Box & \Box & D \end{tabular} \end{tabular}$	Double Beep		is valid & learned into companied by transmitter loca	tion	
Step 2. Listen for beep.	· · · · · · · · · · · · · · · · · · ·		<b>w Beep</b> - Security+ Transmitter (Not learned in STAR250).			
(LED will be displayed when OFF)		□⊲)) Fast Beep-		Billion Code Transmitter (Not learned in STAR250).		
		Long Beep-	Blocked trar	nsmitter.		
		No Beep-	Transmitter	not working.		
EYPAD SOUND ALERTS					Datata	
□□□)) <b>Single Beep</b> - Key Presse	d.		D>>))	Triple Beep- Confirmation of	Delete.	
			[[4]]			
□⊲)) <b>Double Beep</b> - Confirmat □⊲)) or valid Add/Block input.	on of an accepte	ed Tx	_kn))	<b>Long Beep-</b> Blocked Tx, Erro Out of Range	r, or	
·			Display	Description	Beeper	
			OPn	Transmitter location is empty	no beep	

#### TRANSMITTER LOCATION QUERY

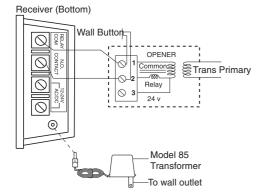
Step 1. Enter a transmitter location number (001-250) to view location status (See table to the right for possible status

Display	Description	Beeper
OPn	Transmitter location is empty	no beep
Occ	Transmitter location is occupied	no beep
bLc	Transmitter location is blocked	no beep
Out ⊡⊲∋))	Transmitter location is out of range (not between 1 & 250)	long beep

# TROUBLESHOOTING GUIDE

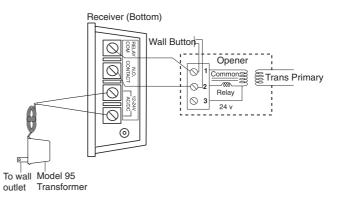
Problem	Probable Cause(s)	Solution(s)
No display	<ol> <li>Faulty/intermittent power connections to unit <b>Or</b></li> <li>No power to unit</li> </ol>	<ol> <li>Check power connnections to unit</li> <li>Supply power to unit</li> </ol>
No beep when transmitting	Audible diagnostics may have been turned OFF (right-most decimal point will be lit on the display)	Press "*" and "0" keys at the same time
Transmitter does not activate operator	<ol> <li>Transmitter not learned into system Or</li> <li>Transmitter is blocked Or</li> <li>Transmitter battery is dead</li> </ol>	<ol> <li>Add transmitter to memory</li> <li>Pay your rent</li> <li>Replace transmitter battery</li> </ol>
Transmitter won't learn into memory	<ol> <li>Memory may be full <b>Or</b></li> <li>Transmitter may not be a recognized Chamberlain transmitter <b>Or</b></li> <li>Transmitter battery is dead</li> </ol>	<ol> <li>Delete unused transmitters from memory</li> <li>Verify transmitter is listed in compatible transmitters section <b>Or</b></li> <li>Replace transmitter battery</li> </ol>
Unit does not function, [E 1] displayed	Main memory module missing or damaged	Replace main memory module
Duplication function does not work, [E 2] displayed	Backup memory module missing or damaged - If included	Replace backup memory module
Keypad does not respond, [E 3] displayed	Keypad has a stuck key	Cycle power. If unit exhibits this condition again after 2 minutes, contact Technical Service

## **ELECTRICAL CONNECTIONS FOR STAR250**



### STAR250 COMPATIBLE TRANSMITTERS

Billion Code Transmitters	Security+ Transmitters
81LM	91LM
82LM	92LM
83LM	96LM
84LM	970LM
Billion Code Keypads	971LM
66LM	972LM
466LM	973LM
Passport Transmitter	974LM
CPT4	Security+ Keypads
CPT1	67LM
CPT2	976LM
CPT3	
For highest level of security, we reco	mmend the Security+ transmitter fam



### **STAR250 OPTIONAL ACCESSORIES**

CGI Part Number	Description
71-65WTBOX	Watertight Box Field Install Kit
86LM	Antenna Extension Kit
85LM	24VAC transformer w/barrel connector
95LM	24VAC transformer w/screw terminals

HOW TO ORDER REPAIR PARTS OUR LARGE SERVICE ORGANIZATION SPANS AMERICA INSTALLATION AND SERVICE INFORMATION ARE AVAILABLE 6 DAYS A WEEK CALL OUR TOLL FREE NUMBER - 1-800-528-2806 MONDAY Through FRIDAY 5:00 a.m. TO 6:00 p.m. (MST) SATURDAY 7:00 a.m. TO 3:30 p.m. (MST) WWW.LIFTMASTER.COM