

## INSTALLATION

**APPLICATION REQUIREMENTS:** Available to all commercial door operators using the Logic 4 control board.

### **WARNING**

To avoid **SERIOUS** personal **INJURY** or **DEATH** from electrocution, **DISCONNECT** electrical power to operator **BEFORE** proceeding.

### REMOVE EXISTING BOARD

1. Disconnect power to operator.
  2. Remove all wires from the existing board:
    - Control Wiring Terminal Block
    - System Wiring Connector (P6)
    - Motor Wires from Relay (K3)
- NOTE:** Remember location of all wiring connections for reinstallation.
3. Remove the coaxial cable from the board F connector.
  4. Remove any installed option cards from their corresponding slots from the board.
  5. Remove the board from its four mounting posts.

### WIRING POWER AND CONNECTION SETTINGS

Before matching any connection settings, make sure the power supply is the correct voltage, phase, frequency, and amperage compatible with your operator.

1. Remove the new board from the protective bag.
2. Match settings from existing board to the new board:
  - 1-Phase and 3-Phase Jumper  
**For 3-Phase Operators Only:** DO NOT move the 3-Phase jumper until installation and specified instructions following Step 8 are completed.
  - Motor Direction Jumper
  - Selector Dial

**NOTE:** The following information is stored within the firmware and will need to be re-programmed if the firmware is upgraded with the board:

- All Remote Controls (On Board Receiver Only)
- Timer-to-Close
- Maximum Run Timer
- Maintenance Alert System
- Up and Down Mid Stops
- Pre-Warning Timer when the TLSCARD option card is used
- Dynamic Brake for models N4/N4X only when AUXCARD is used.

### INSTALL NEW BOARD

1. Place the new board into the operator. Position the board onto mounting posts pressing firmly to ensure posts are completely through mounting holes.
2. Reconnect the coaxial cable to the board F connector.
3. Reconnect the motor wires to relay K3 on the board. Polarity does not matter for these connections. Simply insure that the wires are not over-stretched to make the connection.
4. Reconnect the main motor control harness connector to the board P6 connector.
5. Reconnect all wires to the main board control wiring terminal block.
6. Install all option cards into the slots on the board.
7. Make sure the electrical box is clear of all debris and tools.
8. Reconnect power to the operator and verify operation.

### 3-PHASE OPERATORS ONLY

**NOTE:** DO NOT activate the operator until the following steps have been completed:

1. Turn the SELECTOR DIAL to PROG (programming).
2. Move the PHASE jumper from the 1-Phase position to the 3-Phase position.
3. Return the SELECTOR DIAL to desired mode of operation.

Refer to pages 3-10 for programming and settings as necessary.

### **SPECIAL PROGRAMMING IS REQUIRED FOR N4/N4X MODELS USING AN AUXCARD. THIS SETS THE DYNAMIC BRAKE FOR THE MOTOR. FOLLOW THESE INSTRUCTIONS PRIOR TO RUNNING THE OPERATOR.**

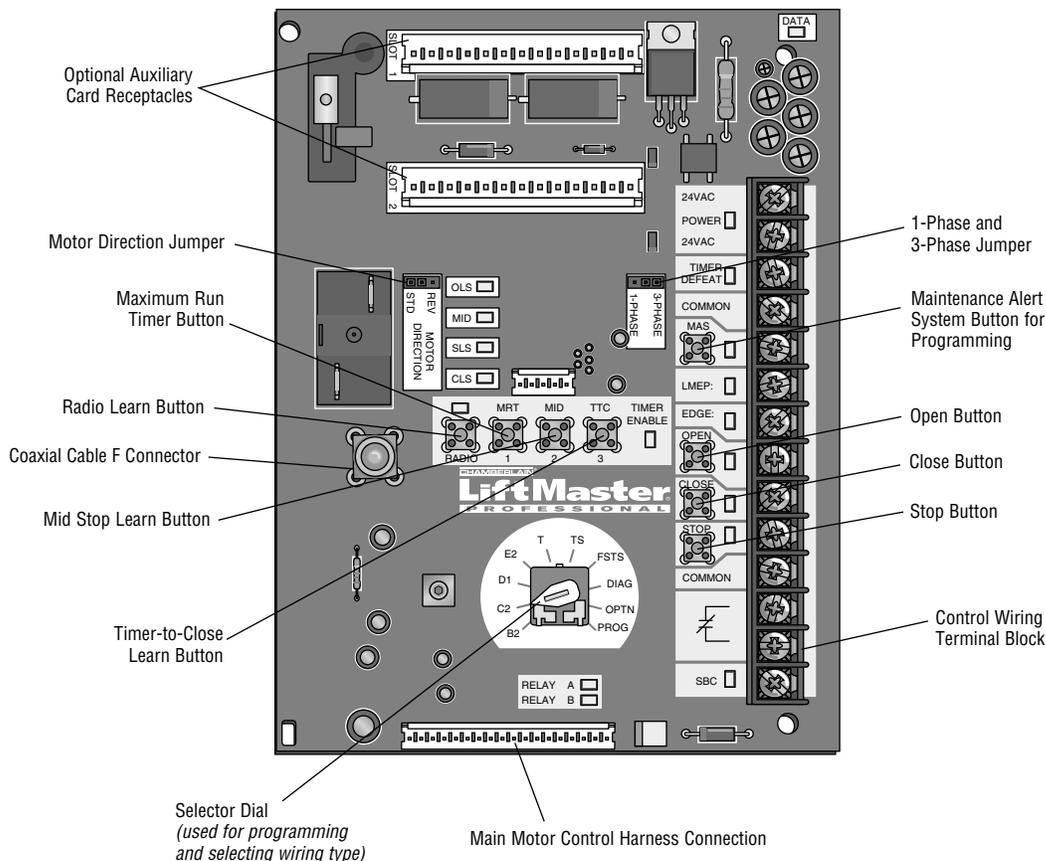
1. Turn the SELECTOR DIAL to OPTN.
2. Press and release the MAS button.
3. Press and release the MID button. The MAS LED will blink 6 times.
4. Turn SELECTOR DIAL back to desired wiring type.

# PROGRAMMING

## INTRODUCTION TO PROGRAMMING

Many programmable functions require that a LiftMaster Entrapment Protection (LMEP) device be installed in order to function. Refer to the *Entrapment Protection* section.

## LOGIC BOARD OVERVIEW



## LOGIC BOARD LED OVERVIEW

**NOTE:** Before programming the logic board, set the operator's open and close limits. LED's on the logic board are provided to assist setting the limits. As each limit is activated the corresponding LED will light up. The abbreviations are Open Limit Switch (OLS), Close Limit Switch (CLS) and Sensing Limit Switch (SLS). Refer to your owner's manual for limit switch adjustment instructions.

WHEN POWER IS APPLIED TO THE OPERATOR, THE FOLLOWING LED'S WILL ILLUMINATE: STOP, CLOSE, OPEN, LMEP, 24 Vac, RADIO, DATA, TIMER ENABLE, OLS MID, SLS, CLS, and MAS. Once the power up process is completed (approximately 2-3 seconds) only the appropriate LED's will continue to be lit (i.e., STOP, 24 Vdc, limit LED(s) if limit(s) is activated).

**NOTE:** When the power up process is over, the MAS LED will blink a code indicating the version of firmware. If the SELECTOR DIAL is in the DIAG, OPTN, or PROG position, the MAS will not provide this code. After the code has been provided the MAS LED will go out.

## LOGIC BOARD PUSH BUTTONS (OPEN, CLOSE, STOP)

Open, Close and Stop buttons are mounted directly on the logic board. Thus, making it easy to program as well as have door control at the electrical box.

**Either the stop control or a jumper MUST be wired between terminals 4 and 5 for the on logic board push buttons to function.**

## DETERMINE AND SET WIRING TYPE

Read the descriptions of the different wiring types to determine which setting will be correct for each application. Once the wiring type is determined, set the selector dial accordingly.

### LIFTMASTER MONITORED ENTRAPMENT PROTECTION (LMEP) DEVICE IS REQUIRED

A LiftMaster Entrapment Protection (LMEP) device is **required** for the following wiring types.

**B2** Momentary contact to open, close and stop, plus wiring for sensing device to reverse and auxiliary devices to open and close with open override. Programmable mid stop available with this wiring type. **Compatible with 3-Button Station, 1-Button Station, 1 and 3-Button Remote Control.**

### TS (TIMER SECURE)

This mode will attempt to close the door from any position except when fully closed, or when a safety input is present. The stop button will not disable the Timer-to-Close at any position. To disable the Timer-to-Close in this mode, installation of a defeat switch is required (see wiring diagram).

Momentary contact to open, close, and stop with open override and Timer-to-Close. Every device that causes door to open, including a reversing device, activates the Timer-to-Close. Auxiliary controls can be connected to open input to activate the Timer-to-Close. If the timer has been activated, the open button and radio control can recycle the timer. The Timer-to-Close will function from the programmable mid stop with this wiring type. **Compatible with 3-Button Station, 1-Button Station and 1 and 3-Button Remote Control.**

**NOTE:** A Programmable "Car Dealer Mode" available.

**T** Momentary contact to open, close, and stop, with open override and Timer-to-Close. Every device that causes the door to open, except any safety edge input device, activates the Timer-to-Close. Auxiliary controls can be connected to open input to activate the Timer-to-Close. If the Timer-to-Close has been activated, the open button and radio control can recycle the timer. The stop button will deactivate the timer until the next command input. The Timer-to-Close will function from the programmable mid stop with this wiring type. **Compatible with 3-Button Station, 1-Button Station and 1 and 3-Button Remote Control.**

**NOTE:** Programmable "Car Dealer Mode" available.

**FSTS** Momentary button contact for open, close and stop programming. User set mid stop. User set Timer-to-Close. The single button station opens the door to the full open limit bypassing the mid stop and activates the Timer-to-Close, putting the operator in TS mode until the door reaches the down limit, or is stopped in travel. At which time the operator enters the B2 mode.

**Compatible with 3-Button Station, 1-Button Station, 1 and 3-Button Remote Control.** A 1-Button remote control in FSTS mode will open only with the Timer-to-Close, bypassing a programmed mid stop. The Timer-to-Close will reset and reverse when closing.

### LIFTMASTER MONITORED ENTRAPMENT PROTECTION (LMEP) DEVICE IS RECOMMENDED

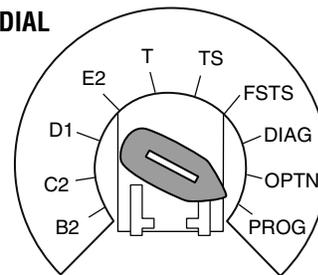
A LiftMaster Entrapment Protection (LMEP) device is recommended for the following wiring types.

**C2** Momentary contact to open and stop with constant pressure to close, open override plus wiring for sensing device to reverse. Programmable mid stop available with this wiring type. **Compatible with 3-Button Station and 1-Button Station.**

**E2** Momentary contact to open with override and constant pressure to close. Release of close button will cause door to reverse (roll-back feature) plus wiring for sensing device to reverse. **Compatible with 3-Button Station.**

**D1** Constant pressure to open and close with wiring for sensing device to stop. **Compatible with 2 or 3-Button Station.**

### SELECTOR DIAL



### IMPORTANT NOTES:

1. External interlocks may be used with all functional modes.
2. Auxiliary devices are any devices that have only dry contacts. Examples: photocell, loop detector, pneumatic or electrical treadles, radio controls, one button stations, pull cords, etc.
3. Open override means that the door may be reversed while closing by activating an opening device without the need to use the stop button first.
4. When the door is in a stopped position other than fully closed, and a safety input is activated (LMEP or EDGE), the Restricted Close (RC) feature will allow a close command when the close button is pressed and held. The operator will begin closing after 5 seconds. If the close button is released the door will stop. When in E2 mode, the door will move to the fully open position.

## PROGRAMMING REMOTE CONTROLS

### WARNING

To prevent possible SEVERE INJURY or DEATH:

- Install a LiftMaster Monitored Entrapment Protection (LMEP) device.
- NEVER permit children to operate or play with door control push buttons or remote controls.

- Activate door ONLY when it can be seen clearly, is properly adjusted and there are no obstructions to door travel.
- ALWAYS keep door in sight until completely closed. NEVER permit anyone to cross the path of closing door.

Built in 3-Channel, 315 MHz radio receiver allows you to add as many as 23 Security+® remotes or DIP switch remote controls

**NOTE:** The following programming requires a LiftMaster Monitored Entrapment Protection (LMEP) device.

NOTICE: To comply with FCC and/or Industry Canada (IC) rules, adjustment or modifications of this receiver and/or transmitter are prohibited, except for changing the code setting or replacing the battery. THERE ARE NO OTHER USER SERVICEABLE PARTS.

Tested to Comply with FCC Standards FOR HOME OR OFFICE USE. 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.

### STANDARD REMOTE CONTROL

1. To enter programming press and release the RADIO button on the logic board (RADIO LED will light).
2. Press and hold the remote control button until the RADIO LED flashes rapidly, then release remote control button. The RADIO LED will then remain on solid after releasing the button. Repeat to add additional remote control(s).
3. Press and release the RADIO button to complete the programming. The programming mode is exited if no activity is performed within 30 seconds.

### SINGLE BUTTON REMOTE CONTROL PROGRAMMED AS A SINGLE BUTTON CONTROL (SBC)

This function programs a remote control as a wireless single button control. This function will work in the following modes:

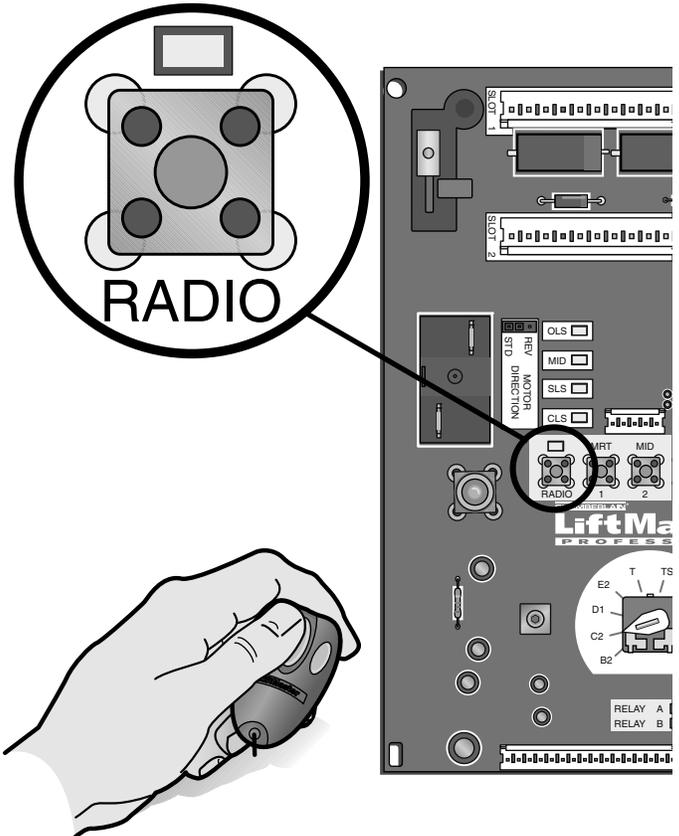
In B2 mode, operation is OPEN/STOP/CLOSE/REVERSE/STOP.

In T and TS modes, operation is OPEN/STOP/CLOSE/REVERSE/STOP and Timer-to-Close start/refresh. **NOTE:** If Car Dealer mode is enabled, SBC will be open only stopping at the Open Mid-Stop.

In FSTS mode, operation is OPEN with Timer-to-Close start/refresh only, bypassing a programmed Open Mid Stop.

1. Press and release the RADIO button on the logic board (RADIO LED will light).
2. Press and release the SBC externally wired button or TIMER on the logic board (RADIO LED flashes rapidly and then remains on solid).
3. Press and hold the remote control button until the RADIO LED flashes rapidly. The RADIO LED will then remain on solid after releasing.
4. Press and release the RADIO button on the logic board (RADIO LED flashes rapidly and then turns off). The programming mode is exited if no activity is performed within 30 seconds.

**NOTE:** Single button remote control is not supported with D1 and E2 wiring modes. C2 mode will only open and stop while opening.



### ERASING REMOTE CONTROLS

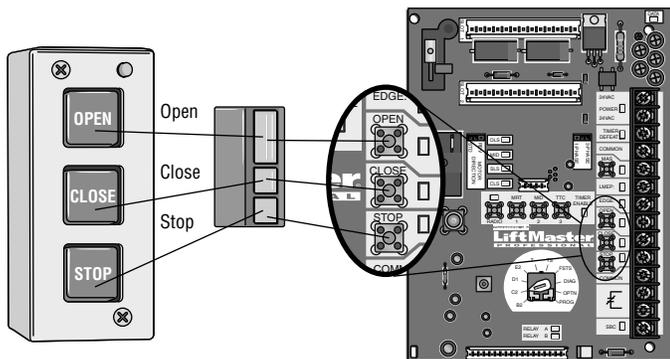
Press and hold the RADIO button on the logic board until the RADIO LED flashes rapidly (approximately 5 seconds). All remote controls will be erased.

## PROGRAMMING REMOTE CONTROLS

**NOTE:** The following programming requires a LiftMaster Monitored Entrapment Protection (LMEP) device.

Your 315 MHz Security+® or DIP switch remote control can be programmed to operate as a 3-button wireless control station: the large button will open the door, the middle button will close the door, and the third button will stop the door's movement. You may set up this feature as follows:

1. To enter programming press and release the RADIO button on the logic board (the RADIO LED will light).
2. To program the OPEN button to a remote control press and release the OPEN button on the logic board. The RADIO LED will flash and then stay on solid. Then press the corresponding button on the remote control. The RADIO LED on the logic board will flash, this confirms that the remote control has been programmed. (By programming the remote you use 1 channel of the 23 channels on the radio receiver.)
3. To program the CLOSE button to a remote control press and release the CLOSE button on the logic board. The RADIO LED will flash and then stay on solid. Then press the corresponding button on the remote control. The RADIO LED on the logic board will flash, this confirms that the remote control has been programmed. (By programming the remote you use 1 channel of the 23 channels on the radio receiver.)
4. To program the STOP button to a remote control press and release the STOP button on the logic board. The RADIO LED will flash and then stay on solid. Then press the corresponding button on the remote control. The RADIO LED on the logic board will flash, this confirms that the remote control has been programmed. (By programming the remote you use 1 channel of the 23 channels on the radio receiver.)
5. After learning remote controls press the RADIO button on the logic board (RADIO LED will turn off). **NOTE:** If no activity within 30 seconds the radio will automatically exit programming mode.



## REMOTE CONTROL PROGRAMMING FEATURE

### Program Remote Controls from the 3-Button Control Station (3BCS).

This feature allows the user to add additional remote controls from the 3BCS. By default the remote control learn option is off.

**NOTE:** Requires access to the operator electrical box to enable or disable this feature.

#### To turn this feature on:

1. Turn the SELECTOR DIAL to PROG.
2. Press and release the RADIO button. The RADIO LED will be lit.
3. Press and release the MID button. The RADIO LED will flash quickly 6 times.
4. Press and release the RADIO button. The RADIO LED will turn off.
5. Return the SELECTOR DIAL to the desired wiring type.

#### To add remote controls from the 3BCS:

1. With the door in the fully closed position (close limit activated), press and hold STOP.
2. While holding STOP, press and hold CLOSE.
3. While holding STOP and CLOSE, press and hold OPEN.
4. Release all three buttons once the MAS LED has lit.
5. Learn a remote control by one of the following methods:
  - a. Programming a **standard single button/single function remote control**, push and hold the remote control button until the MAS LED goes out. Repeat steps 1 through 4 to add additional remote controls.
  - b. Programming a **3-button/three function remote control** (OPEN/CLOSE/STOP), first push the button on the 3BCS (Example: OPEN) and then press and hold the button on the remote control (example: large button) that you want to correspond with the selected (example: OPEN) command until the MAS LED flashes and goes out. Repeat steps 1 through 4 to add additional buttons (CLOSE AND STOP).

#### To turn this feature off:

1. Turn the SELECTOR DIAL to PROG.
2. Press and release the RADIO button. The RADIO LED will be lit.
3. Press and release the MRT button. The RADIO LED will flash quickly 3 times.
4. Press and release RADIO button. The RADIO LED will turn off.
5. Return SELECTOR DIAL to desired wiring type.

**NOTE:** Restoring the operator to Factory Default (see **RESETTING FACTORY DEFAULTS**) will also disable this feature. The remote controls will still be learned.

## MAINTENANCE ALERT SYSTEM (MAS)

**Feature:** An internal cycle counter will activate a flashing LED on the 3-button station when the preset number of cycles or months has elapsed (whichever occurs first). Setting this feature is optional. By default this feature will never activate. Logic 4 operators incorporate a self diagnostic feature built into the MAS LED. In addition to indicating when routine maintenance is due, the MAS LED can be used to troubleshoot some problems with the operator.

**Benefit:** The Maintenance Alert System (MAS) assists the installing dealer in setting up a routine maintenance program. Once programmed, the MAS notifies the end user (with a flashing LED on the 3-button station) when a preset number of cycles/months has elapsed and scheduled maintenance is due.

### To Program:

1. Close the door.
2. Turn the SELECTOR DIAL to PROGRAM.
3. Press and release the MAS SET button.
4. Press the STOP button once to clear the MAS memory.
5. Press the OPEN button once for every 5,000 cycles increments. Press the CLOSE button once for every 3 month increments.
6. Press and release the MAS button to complete the programming. The logic board LED will flash back the programmed settings. The OPEN LED will flash once for every 5,000 cycles. The CLOSE LED will flash once for every 3 months.
7. Turn the SELECTOR DIAL back to the desired wiring type.

**NOTE:** If MAS LED flashes 2 or more flashes in a row followed by a pause, an operator error has occurred.

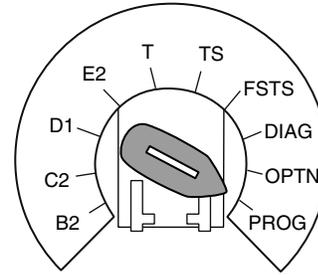
**Example:** A door is installed with 30,000 cycle springs and has an annual service contract. To set the MAS, turn SELECTOR DIAL to PROGRAM, press MAS button, press the STOP button to clear the memory and then press the OPEN button 6 times (30,000 cycles) and CLOSE 4 times (12 months). Press the MAS again to complete the programming. Turn the SELECTOR DIAL back to desired wiring type.

**Special Notes about MAS:** A 5th wire must be run to the control station to activate the MAS LED. The MAS LED on the logic board is always enabled. When the operator is serviced after the MAS LED has started to flash, repeat the setup procedure to program in the number or cycles desired until the next service visit OR press and hold the MAS button for 5 seconds in the PROGRAM mode to reset the MAS with its current programmed value. To disable the MAS, follow the programming procedure above and press the STOP button to reset the counter to zero. Every time the operator leaves the close limit is counted as one cycle.

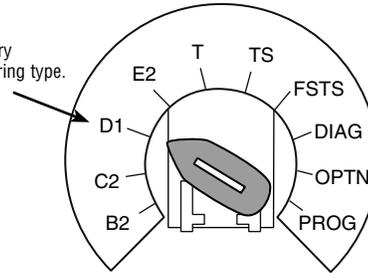
To view how many cycles are programmed into the MAS, set the SELECTOR DIAL to DIAGNOSTIC and press the MAS button. The OPEN button LED will flash once for every 5,000 cycle increment programmed and the CLOSE button LED will flash once for every 3 month increment programmed.

To view how many cycles have elapsed since the last time the MAS was programmed, set the SELECTOR DIAL to DIAGNOSTIC and press the MAS button. Press the OPEN button; the OPEN LED will flash once for every 5,000 cycles that has elapsed. Press the CLOSE button; the CLOSE LED will flash once for every (3) months that has elapsed. Press the MAS button to exit. Turn the SELECTOR DIAL back to desired wiring type.

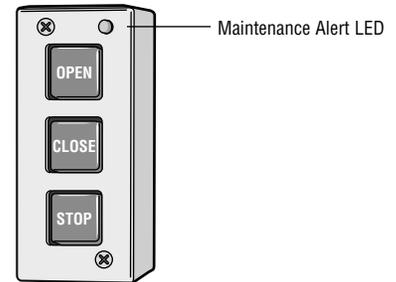
### SELECTOR DIAL



Operation will vary depending on wiring type.



### 3-BUTTON STATION



Press This	To Get This
<b>OPEN</b>	Adds 5,000 cycles to Maintenance Alert System Activation Counter.
<b>CLOSE</b>	Adds 3 Months to Maintenance Alert System Activation Timer.
<b>STOP</b>	Clears memory, sets Maintenance Alert System Activation Counter to 0 cycles and 0 months.

## OPEN MID STOP

**Feature:** The Mid Stop feature is to open the door to a preset point prior to the fully open position.

**Benefit:** The door opens to a midpoint between open and close reducing heating and cooling costs. The door will not cycle fully, providing longer door and operator life.

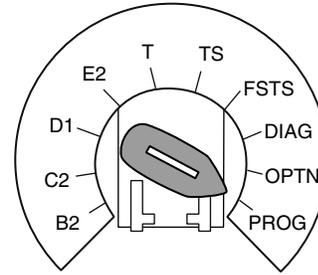
### To Program:

1. Close the door.
2. Turn SELECTOR DIAL to PROGRAM.
3. Press and release the MID button on logic board.
4. Press the OPEN button, wait until the door reaches the desired mid stop height, then press and release the STOP button.
5. Press and release the MID button to complete programming.
6. Turn SELECTOR DIAL back to desired wiring type.

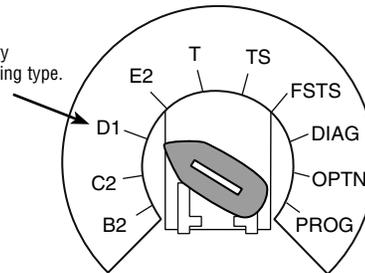
**NOTE:** A momentary open command will open the door fully from the Mid Stop position. Once at the Mid Stop, photoelectric sensors and other safety devices will not open the door beyond the mid stop position, except in E2 mode. The Timer-to-Close will work from the Mid Stop.

To clear the Mid Stop set the SELECTOR DIAL to PROG and press and hold the MID button for 5 seconds. The MID LED will flash rapidly and turn off once the Mid Stop has been cleared. Turn SELECTOR DIAL back to desired wiring type.

### SELECTOR DIAL



Operation will vary depending on wiring type.



## ⚠ WARNING

To prevent possible SEVERE INJURY or DEATH:

- Install a LiftMaster Monitored Entrapment Protection (LMEP) device.
- NEVER permit children to operate or play with door control push buttons or remote controls.

- Activate door ONLY when it can be seen clearly, is properly adjusted and there are no obstructions to door travel.
- ALWAYS keep door in sight until completely closed. NEVER permit anyone to cross path of closing door.

## TIMER-TO-CLOSE

**Feature:** Timer automatically closes door after preset time. All safety devices must be unobstructed.

**Benefit:** The door will automatically close after preset amount of time. Great for apartment buildings, fire stations and other applications where the end user wants the door to close automatically after a specified amount of time.

**Requirements:** Must have at least one LiftMaster Monitored Entrapment Protection (LMEP) device installed (refer to owner's manual). Wiring type must be set to TS, T or FSTS.

### TO PROGRAM MANUALLY (METHOD 1):

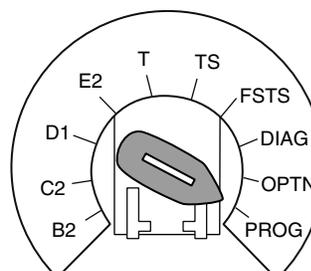
1. Close the door.
2. Turn the SELECTOR DIAL to PROGRAM.
3. Press and release the TIMER button on the logic board.
4. Press and release the STOP button to clear the timer.
5. Press and release the OPEN button for every second the operator should wait before attempting to close the door. Press and release the CLOSE button for every 15 seconds the operator should wait before closing the door.

6. Press and release the TIMER button to complete programming. The OPEN/CLOSE button LED's will flash to confirm the timer setting. The OPEN LED will flash once for every second programmed and the CLOSE LED will flash once for every 15 seconds programmed.

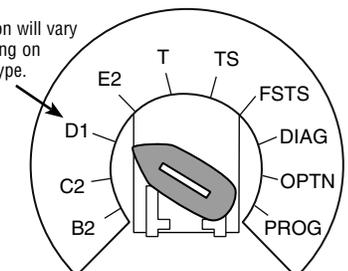
7. Turn the SELECTOR DIAL to desired timer wiring type (TS, T or FSTS).

**Example:** To close the door after 70 seconds. Turn SELECTOR DIAL to PROGRAM, press and release the TIMER button, press and release the STOP button to clear the timer, press and release the CLOSE button four times for 60 seconds and press and release the OPEN button 10 times for 10 seconds. Press the TIMER button to finish programming the timer. Turn SELECTOR DIAL to desired timer wiring type. (TS, T, FSTS).

### SELECTOR DIAL



Operation will vary depending on wiring type.



## TIMER-TO-CLOSE

### PROGRAM TIMER-TO-CLOSE BY EXAMPLE (Method 2):

#### TO PROGRAM:

1. Close the door.
2. Turn the SELECTOR DIAL to PROGRAM.
3. Press and hold TIMER button for 5 seconds until OPEN and OLS flashes then release.
4. Press and release the OPEN button and wait for the door to reach full open or mid stop position.
5. Wait for desired amount of time to pass. (An internal stop watch starts counting when the door stops moving.)
6. Press and release the TIMER button, CLOSE button or STOP button to stop the timer. (TIMER SET LED will turn on.)
7. Turn the SELECTOR DIAL to the desired wiring type (T, TS, FSTS).

**NOTE:** To read back the Timer-to-Close setting, turn the SELECTOR DIAL to DIAGNOSTIC and press the TIMER button. The OPEN LED will flash once for every second programmed and the CLOSE LED will flash once for every 15 seconds programmed.

To deactivate the timer from the open position press the STOP button. The timer will be reactivated on the next operation command. To deactivate the timer for more than one cycle, attach a switch to 11 and 12 (Common and Timer Defeat).

**Reminders:** FSTS wiring mode allows the Timer-to-Close to be activated by the Single Button Control (terminal 1) only. T wiring mode allows the door to attempt to close only one time for safety purposes.

## CAR DEALER MODE

**Feature:** The car dealer mode uses the SBC (Single Button Control input) to bring the door from a closed position to the programmed Open Mid-Stop position and keep it at that location even with multiple inputs.

**Benefit:** Provides energy cost savings by limiting the door opening height.

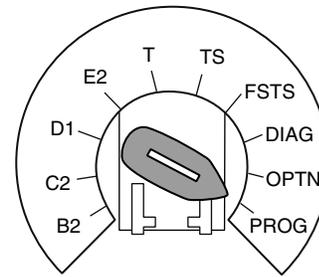
**Requirements:** This feature works in conjunction with the programmable Timer-to-Close feature. To enable this feature you must first connect a treadle, photoelectric sensor or loop detector accessory to the SBC input and must have at least one LiftMaster Monitored Entrapment Protection (LMEP) device installed. Wiring type must be set to TS or T.

#### TO PROGRAM:

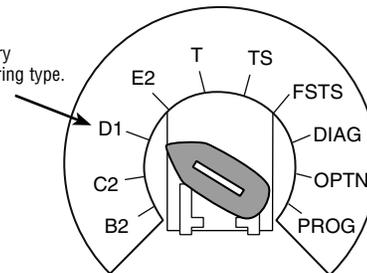
1. Start with the door in the closed position.
2. Turn the SELECTOR DIAL to PROG.
3. Push the TIMER button and release (Green Timer LED will be lit).
4. Push the MID button and release. This turns on the Car Dealer Mode. (The GREEN TIMER LED will flash 6 times indicating the Car Dealer Mode is turned on.)
5. Push the TIMER button and release.
6. Turn the SELECTOR DIAL to the desired wiring type (TS or T).

**NOTE:** To disable the Dealer Mode follow steps 2 and 3, then press the MRT button and release. (The GREEN TIMER LED will flash 3 times indicating that the Car Dealer Mode is off.)

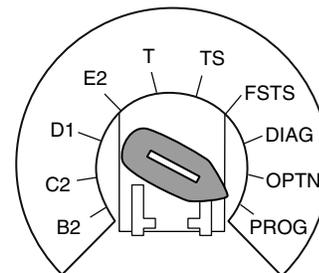
### SELECTOR DIAL



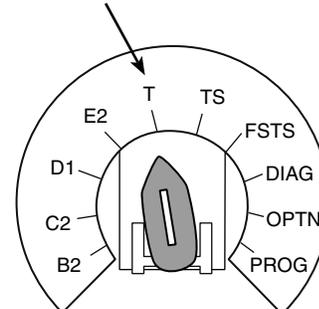
Operation will vary depending on wiring type.



### SELECTOR DIAL



Operation will vary depending on wiring type.



## MAXIMUM RUN TIMER (MRT)

**Feature:** The operator can learn the time it takes to open or close the door plus and an additional 10 seconds.

**Benefit:** If the operator does not meet its open or close limit within the set time it will stop, limiting damage to the door and operator.

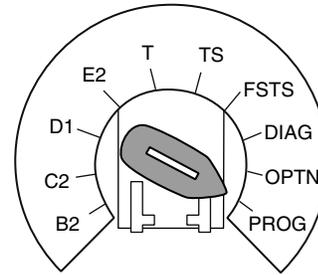
### TO PROGRAM:

**NOTE:** The default setting for the MRT is 90 seconds. In the event the application requires the MRT be manually learned for a longer duration follow steps below.

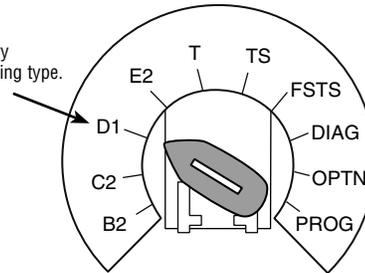
1. Start with the door in the closed position.
2. Set the SELECTOR DIAL to PROGRAM.
3. Press and release the MRT button on logic board.
4. Press the OPEN button and wait for the door to reach the full open limit.
5. Once the door has reached the open position, programming is complete.
6. Turn dial to desired wiring type.

**NOTE:** To reset MRT only, turn SELECTOR DIAL to PROGRAM and press and hold the MRT button until the MAS led flashes rapidly.

### SELECTOR DIAL



Operation will vary depending on wiring type.



## RESETTING FACTORY DEFAULTS - CLEARING MEMORY

To reset most of the user installed settings back to factory defaults:

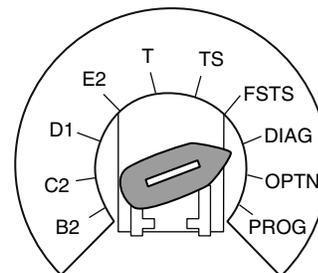
1. Turn the SELECTOR DIAL to DIAGNOSTIC.
2. Press and hold the STOP button for 5 seconds. The MAS LED will flash momentarily when the factory defaults have been restored.
3. Return the SELECTOR DIAL to the desired wiring type.

### Factory Defaults:

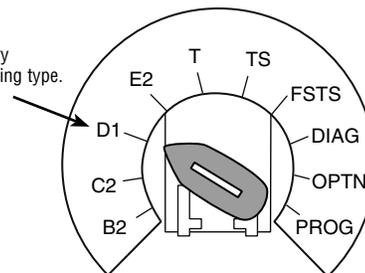
- a. Timer-to-Close = 0 seconds
- b. The Mid Stop is deactivated
- c. The Maintenance Alert System is deactivated
- d. The Maximum Run Timer is set to 90 seconds
- e. Car Dealer Mode is deactivated
- f. The remote controls will still be learned.
- g. Remote control programming via the 3-button station
- h. The LiftMaster Monitored Entrapment Protection (LMEP) device will be unprogrammed.

**NOTE:** Life of Operator feature (Odometer/Cycle Counter) and programmed remote controls are not cleared.

### SELECTOR DIAL



Operation will vary depending on wiring type.



# MAINTENANCE

## **WARNING**

To avoid **SERIOUS** personal **INJURY** or **DEATH** from electrocution, **DISCONNECT** electrical power to operator **BEFORE** performing **ANY** maintenance.

### MAINTENANCE SCHEDULE

For use with Maintenance Alert System.

Check at the intervals listed in the following chart:

ITEM	PROCEDURE	EVERY MONTH	EVERY 3 MONTHS OR 5,000 CYCLES	EVERY 6 MONTHS OR 10,000 CYCLES	EVERY 12 MONTHS OR 20,000 CYCLES
Drive Chain	Check for excessive slack. Check and adjust as required. Lubricate.		●		
Sprockets	Check set screw tightness.		●●		◆
Clutch	Check and adjust as required.			●	◆
Belt	Check condition and tension.			●	◆
Fasteners	Check and tighten as required.			●	◆
Manual Disconnect	Check and operate.			●	◆
Bearings and Shafts	Check for wear and lubricate		●●		
Safety Reversing Sensors	Check alignment and functionality.	●			

● **Use SAE 30 Oil (Never use grease or silicone spray).**

- Do not lubricate motor. Motor bearings are rated for continuous operation.
- Do not lubricate clutch or V-belt.
- ◆ **Repeat ALL procedures.**
- Inspect and service whenever a malfunction is observed or suspected.

### HOW TO ORDER REPAIR PARTS

OUR LARGE SERVICE ORGANIZATION SPANS AMERICA

Installation and service information are available.

Call our TOLL FREE number:

**1-800-528-2806**

**www.liftmaster.com**

### LIFE OF OPERATOR FEATURE (ODOMETER/CYCLE COUNTER)

The operator is equipped with an odometer to show how many months and cycles the operator has performed from the time it was installed. This feature can help determine how long the operator has been in service.

1. Start with the door in the closed position.
2. Turn the SELECTOR DIAL to DIAG (diagnostic mode).
3. Press and release the MAS button on the logic board.
4. Press and release the MRT button on the logic board.
5. The open and close lights will flash. OPEN for every 5,000 cycles and CLOSE for every 3 months.
6. Return the SELECTOR DIAL to the desired wiring type.

**NOTE:** If the operator has not reached 5,000 cycles or 3 months, there will be no indications.



