

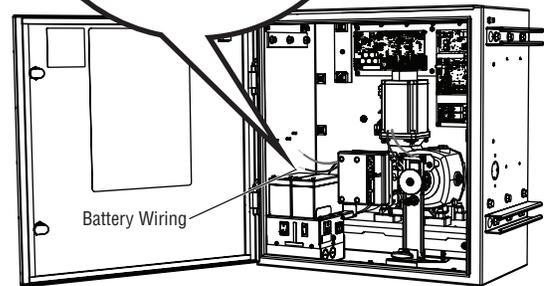
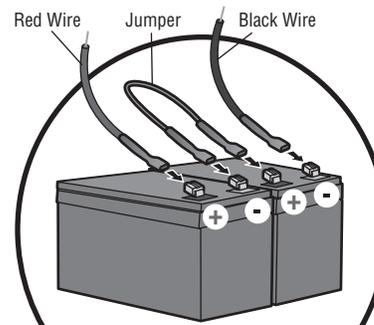
INSTALLATION

Step 6 Connect Batteries

7AH Batteries

The batteries are charged in the circuit by the integrated transformer.

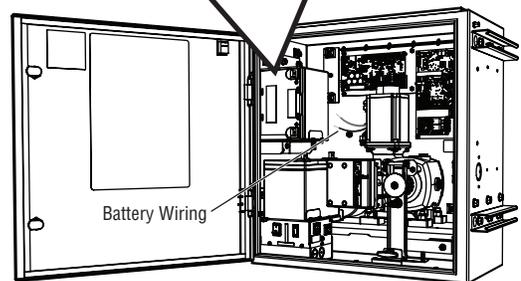
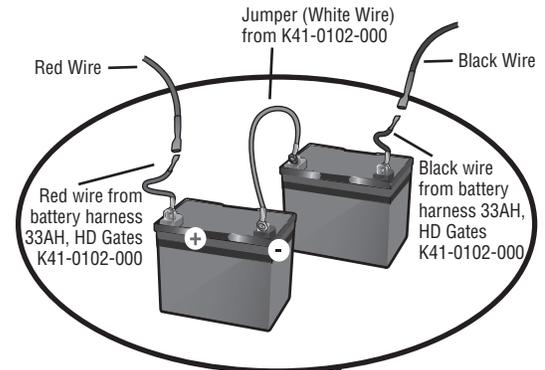
1. Turn the AC power switch to OFF.
2. Turn the battery switch OFF .
3. Connect a jumper between the positive(+) terminal of the battery to the negative terminal(-) of the other battery.
4. Connect the red battery wire from the operator to the positive(+) terminal of the battery.
5. Connect the black battery wire from the operator to the negative (-) terminal of the battery.
6. Turn the battery switch ON .
7. Turn the AC power switch to ON to restore AC power.



33AH Batteries

The batteries are charged in the circuit by the integrated transformer.
The 33AH application requires battery harness K41-0102-000, see *Accessories*.

1. Turn the AC power switch to OFF.
2. Turn the battery switch OFF.
3. Connect a jumper between the positive(+) terminal of the battery to the negative terminal(-) of the other battery.
4. Connect the (+) terminal of the battery to the red battery wire from the operator using the RED harness kit wire .
5. Connect the (-) terminal of the battery to the black battery wire from the operator using the BLACK harness kit wire.
6. Turn the battery switch ON .
7. Turn the AC power switch to ON to restore AC power.



INSTALLATION

Step 7 Dual gate setup-Wireless

There are two options for dual gate communication: wired or wireless. Follow the directions according to your application. Do not use wired and wireless communication simultaneously. Use only the same operator models in a dual gate setup. Wired dual gate applications will have a longer battery standby time than wireless applications.

Wireless setup

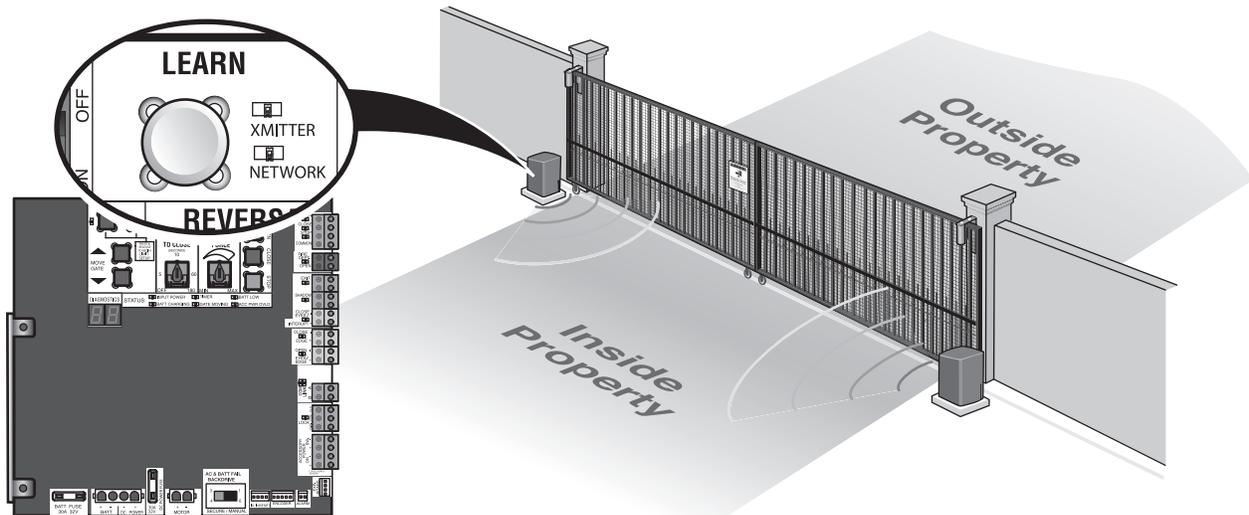
To activate the wireless feature:

1. Choose an operator to be the network primary operator. Program all wireless accessories to the primary operator except for any wireless entrapment protection devices required for the second operator. **NOTE:** We recommend that all accessories, except entrapment protection devices, and board configurations are set on the primary operator.
2. Press and release the LEARN button on the primary operator. The green XMITTER LED will light. **NOTE:** The operator will time out of programming mode after 180 seconds.
3. Press and release the LEARN button again on the primary operator. The yellow NETWORK LED will light.
4. Press and release the OPEN test button to assign this operator as network primary.
5. Press and release the LEARN button on the second operator. The green XMITTER LED will light.
6. Press and release the LEARN button again on the second operator. The yellow NETWORK LED will light.
7. Press and release the CLOSE test button to assign this operator as network second.

Both operators will beep and the yellow NETWORK LEDs will turn off indicating programming is successful.

To deactivate the wireless feature:

1. Press and release the LEARN button on either operator. The green XMITTER LED will light.
2. Press and release the LEARN button again on the same operator. The yellow NETWORK LED will light.
3. Press and hold the LEARN button for 5 seconds. The yellow NETWORK LED will blink (operator will beep) then turn off indicating successful deactivation.
4. Press and release SET OPEN and SET CLOSE buttons simultaneously. The yellow SET OPEN and SET CLOSE LEDs will light.
5. Press and release SET OPEN and SET CLOSE buttons simultaneously again. Both yellow LEDs will turn off and entrapment protection devices will be released.
6. Repeat the steps for the other operator.



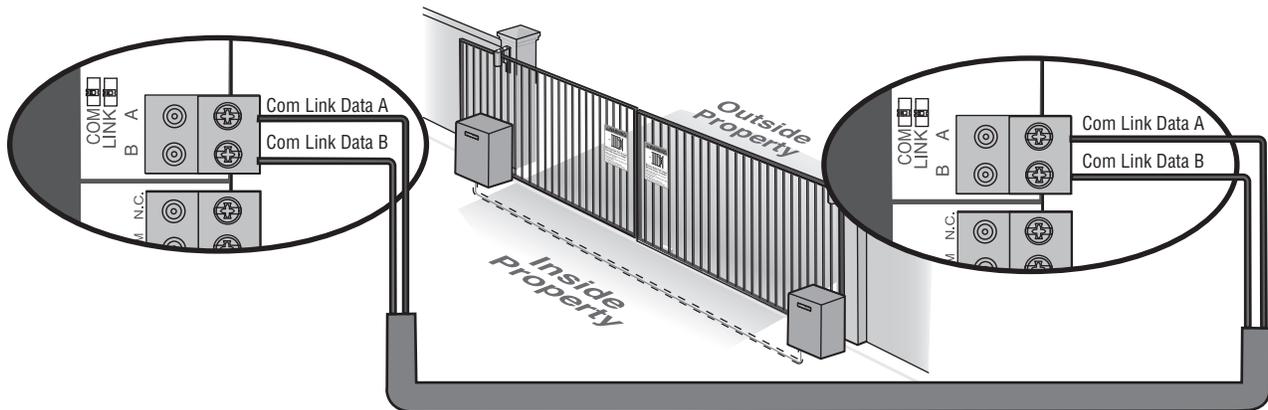
INSTALLATION

Wired setup

Use only the same operator models in a dual gate setup. Before digging, contact local underground utility locating companies. Use PVC conduit to prevent damage to cables.

1. Disconnect ALL power to the operator and turn OFF the battery and AC power switches.
2. Trench across driveway to bury the shielded twisted pair cable.
3. Connect the wires from the shielded twisted pair cable to the Com Link terminals on the primary gate operator control board. **NOTE:** We recommend that all accessories and board configurations are set on the primary operator.
4. Route the shielded twisted pair cable to the secondary gate operator's control board.
5. Connect the wires from the shielded twisted pair cable to the Com Link terminals on the secondary control board (Com Link A to Com Link A and Com Link B to Com Link B). Ground the shield of the cable to the chassis ground of one operator.
6. Connect ALL power to the operator and turn ON the battery and AC power switches.

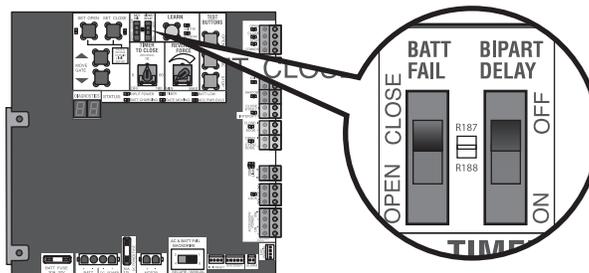
DUAL GATE WIRE TYPE (SHIELDED TWISTED PAIR CABLE)	
22AWG up to 200 feet (61 m)	18AWG - 200-1000 feet (61-305 m)
Wire must be rated at 30 Volt minimum	



Bipart delay/synchronized close

The BIPART DELAY switch is used only with dual gate applications and serves two functions:

- **BIPART DELAY**
Not applicable for slide gate applications.
- **SYNCHRONIZED CLOSE**
To synchronize the closing of the gates, set the BIPART DELAY switch to ON for both operators.



INSTALLATION

Step 8 Close and Secure the Door

Before securing the door, follow the instructions in the Adjustment section to adjust the limits, speed, and force.

1. Close the door.
2. Turn both latches 90 degrees.

Step 9 Install Warning Signs

Installers **MUST** install the UL required warning signs. The signs **MUST** be installed in plain view on **both sides** of each gate installed. Use the fastening holes in each corner to permanently secure the sign.



The basic installation is complete.

ADJUSTMENT

Limit, Speed, and Force Adjustment

⚠ WARNING

To reduce the risk of SEVERE INJURY or DEATH:

- Without a properly installed safety reversal system, persons (particularly small children) could be SERIOUSLY INJURED or KILLED by a moving gate.
- Too much force on gate will interfere with proper operation of safety reversal system.
- NEVER increase force beyond minimum amount required to move gate.
- NEVER use force adjustments to compensate for a binding or sticking gate.
- If one control (force, speed or travel limits) is adjusted, the other controls may also need adjustment.
- After ANY adjustments are made, the safety reversal system MUST be tested. Gate MUST reverse on contact with an object.
- Faster gate speed increases risk to pedestrians. Use minimum speed necessary to move gate.

Introduction

Your operator is designed with electronic controls to make travel limit and force adjustments easy. The adjustments allow you to program where the gate will stop in the open and close position. The electronic controls sense the amount of force required to open and close the gate.

The force is adjusted automatically when you program the limits but should be fine tuned using the REVERSAL FORCE dial on the control board (refer to Fine Tune the Force section) to compensate for environmental changes. The limit setup LEDs (located next to the SET OPEN and SET CLOSE buttons) indicate the status of the limits, refer to the table to the right.

The limits can be set using the control board (below) or a remote control (refer to Limit Setup with a Remote Control in the Appendix). Setting the limits with a remote control requires a 3-button remote control programmed to OPEN, CLOSE, and STOP.

NOTE: The TEST buttons on the control board will not work until the limits have been set and the required entrapment protection devices are installed.

Set the Initial Limits, Speed, and Force

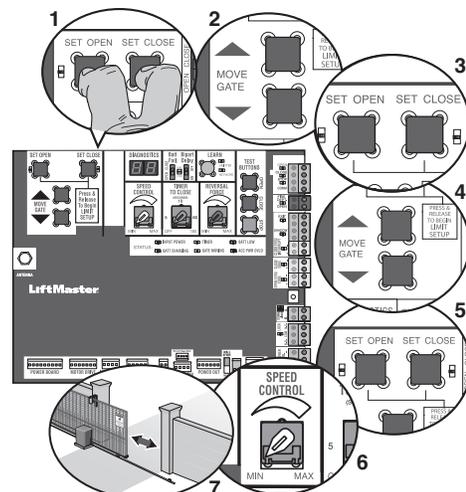
For dual gate applications the limits will have to be set for each operator. The gate MUST be attached to the operator before setting the limits and force.

For slide gate applications the open limit and closed limit MUST be set at least four feet apart.

- Press and release the SET OPEN and SET CLOSE buttons simultaneously to enter limit setting mode.
- Press and hold one of the MOVE GATE buttons to move the gate to the open or close limit.
- Press and release the SET CLOSE or SET OPEN button depending on which limit is being set.
- Press and hold one of the MOVE GATE button to move the gate to the other limit.
- Press and release the SET CLOSE or SET OPEN button depending on which limit is being set.
- Set the speed dial to the desired setting, see page 22. 0.5 ft/sec. min - 1 ft/sec. max.
- Cycle the gate open and close. This automatically sets the force.

When limits are set properly the operator will automatically exit limit setting mode.

SET OPEN LED	SET CLOSE LED	OPERATOR MODE	EXPLANATION
OFF	OFF	NORMAL MODE	Limits are set
BLINKING	BLINKING	LIMIT SETTING MODE	Limits are not set
BLINKING	ON	LIMIT SETTING MODE	Open limit is not set
ON	BLINKING	LIMIT SETTING MODE	Close limit is not set
ON	ON	LIMIT SETTING MODE	Limits are set



ADJUSTMENT

Speed Control

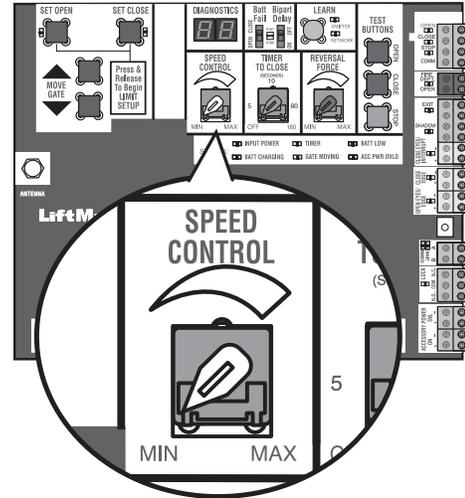
The SPEED CONTROL dial controls the speed of the operator. The dial is preset to minimum from the factory. Set the speed as low as possible for the intended application.

Gate operating speed: 0.5 ft./sec. - 1 ft./sec.

For dual gate setup, set the SPEED CONTROL dial on each operator to the same setting or make sure the gate that travels further is set faster than the other operator for the smoothest operation.

After any speed adjustment:

1. Cycle the gate open and close to automatically relearn the forces.
2. Perform the Obstruction Test, see page 23.



Fine Tune the Force

Once the initial limits have been set, the REVERSAL FORCE DIAL on the control board is used for fine tuning the force where wind or environmental changes may affect the gate travel. The REVERSAL FORCE DIAL is set to minimum at the factory.

Based on the length and weight of the gate it may be necessary to make additional force adjustments. The force setting should be high enough that the gate will not reverse by itself nor cause nuisance interruptions, but low enough to prevent serious injury to a person. The force setting is the same for both the open and close gate directions.

1. Open and close the gate with the TEST BUTTONS.
2. If the gate stops or reverses before reaching the fully open or closed position, increase the force by turning the force control slightly clockwise.
3. Perform the "Obstruction Test" after every limit, speed, and force setting adjustment see page 23.

Settings 1-3: Fixed force settings (gate will not adjust due to gate wear or temperature changes).

Settings 4-10: Automatically increase the force due to gate wear or temperature changes.

