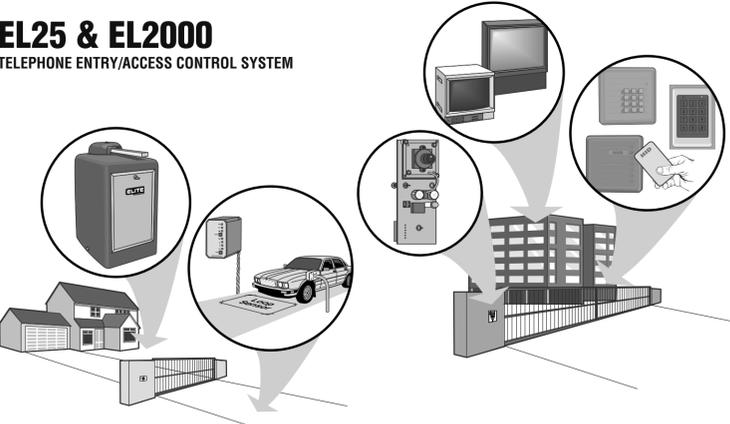


EL25 & EL2000
TELEPHONE ENTRY/ACCESS CONTROL SYSTEM



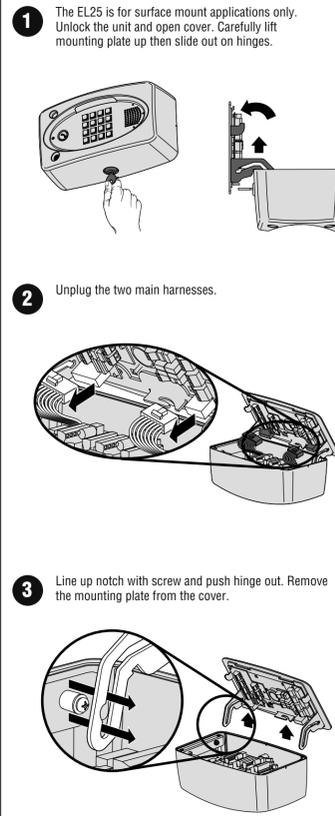
RESIDENTIAL AND COMMERCIAL TELEPHONE ENTRY SYSTEMS WITH EXPANDED CAPACITY AND ENHANCED VERSATILITY

Optional modules let you expand the system to fit your specific needs. The Wiegand output module lets you add card readers and/or remote keypads. Our RF module provides convenient access through gates or doors with Passport™ transmitters. Plus, the system is now designed to automatically detect the addition and location of each new plug-in module, making installation and programming faster and easier than ever before. These instructions are for general installation and setup. For more information including detailed wiring specs, download the guide at www.liftmaster.com.

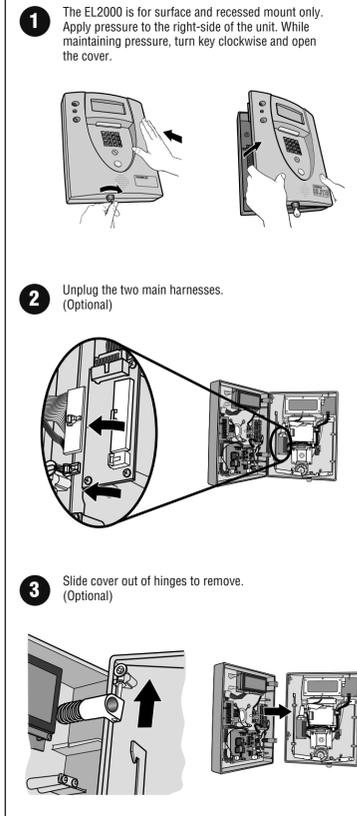


Installation

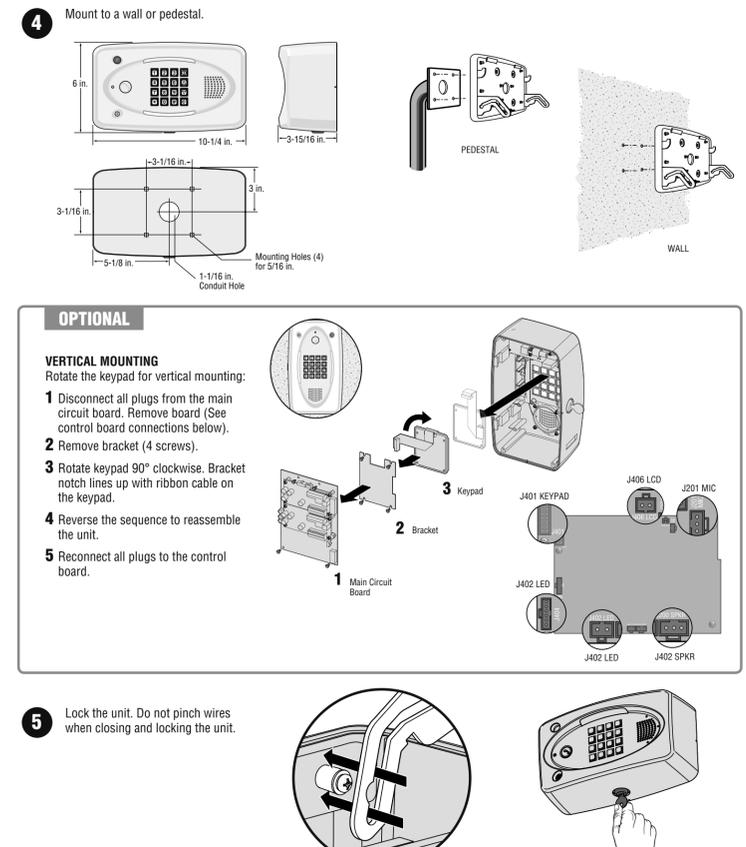
EL25



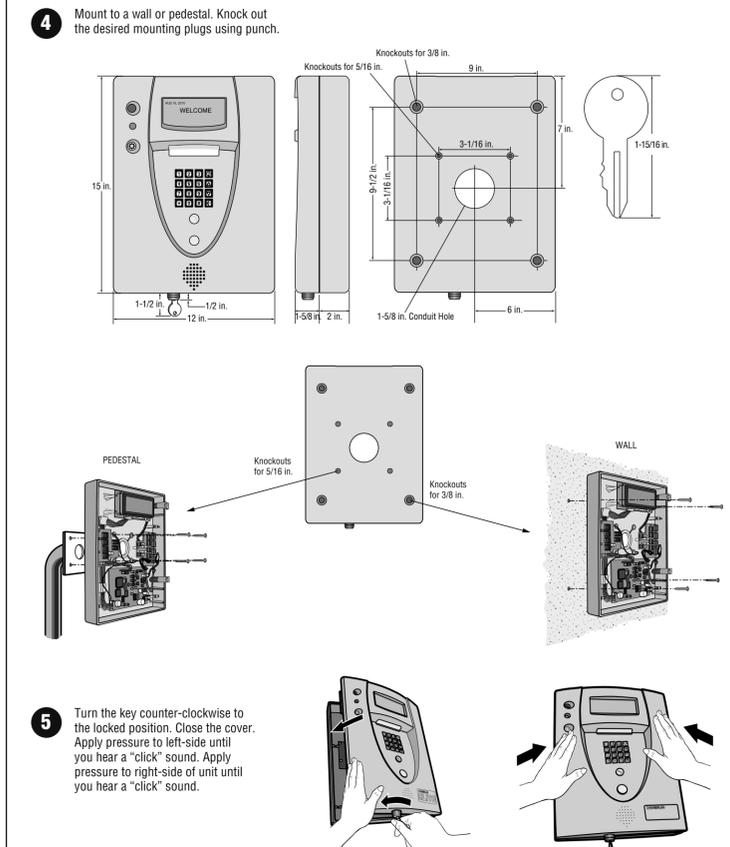
EL2000



EL25



EL2000



Wiring

WARNING

Disconnect power at the fuse box BEFORE proceeding. The unit MUST be properly grounded and connected in accordance with national and local electrical codes. **NOTE: The unit should be on a separate fused line of adequate capacity.**

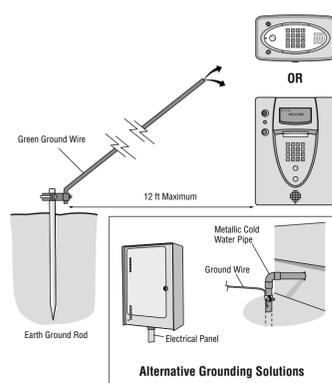
- A static discharge can damage circuit boards
- NEVER run telco wires and high voltage wires in the same conduit. The high voltage may interfere with the telco wires, possibly causing the system to malfunction.

CAUTION

- To AVOID damaging gas, power or other underground utility lines, contact underground utility locating companies BEFORE digging more than 18 inches (46 cm) deep.
- Contact the building inspector's office in the municipality where you plan to install the unit for correct grounding materials and installation procedures.
- Ensure that the system is grounded properly. The units contain a number of static sensitive components that can be damaged by static discharge.
- DO NOT ground the units to a pedestal post (gooseneck) if one is used.

GROUND THE UNIT
Install an earth ground rod no further than 12 feet from the unit and use a minimum of 12 gauge wire in most cases. The type and length of earth ground rods vary by region.

NOTE: Keep ground wire as straight as possible.
ALTERNATIVE GROUNDING SOLUTIONS
The unit may be grounded to a metallic or an existing electrical system within 12' of the unit.

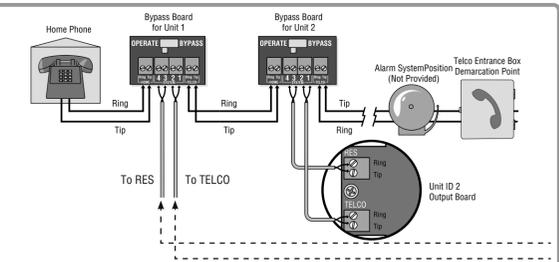


CONNECTING TO THE TELCO LINE

The bypass board allows the unit(s) to be disconnected without interrupting normal telephone operation. If the unit(s) will be used in conjunction with an alarm system, you must connect the telephone line to the alarm system first. If the units are not connected in this order, they will not operate properly. Up to 7 units can share the same phone line. You must program the unit id's for each unit wired in the series. See Keypad Programming manual. The bypass board (located inside the property) allows access to the phone in case the unit(s) fail.

NOTE: Installation where fiber optic phone lines are present may require additional modifications from your telephone provider. Contact your provider for more information.

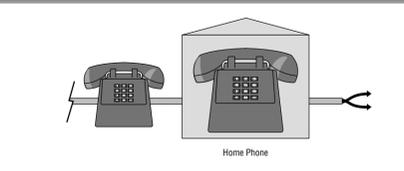
- When a unit is in use, the bypass switch must be set to the operate position.
- When a unit is disconnected, the bypass switch must be set to the bypass position.



STAND ALONE SYSTEM

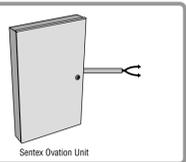
The unit can be a stand alone system that allows communication between the unit and a resident's phone. Connect a twisted wire (18-24 AWG) from the RES terminal block on the unit's output board, to the resident's phone. Up to 7 units can share the same phone line. You must program the unit id's for each unit wired in the series. See Keypad Programming manual. Only disable the Telco mode of the unit farthest away from the house. See "Disable Telco Mode" in the Keypad Programming manual.

NOTE: Ringer Equivalence Number (REN) of "5" maximum.



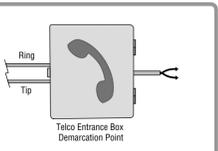
CONNECTING TO AN NPBI SYSTEM

Up to 7 units may be installed. You must program the unit id's for each unit wired in the series. See Keypad Programming manual.



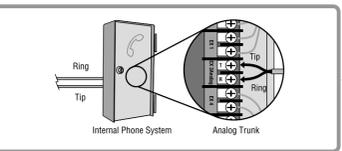
CONNECTING TO A DEDICATED TELCO LINE

Installation where fiber optic phone lines are present may require additional modifications from your telephone provider. Contact your provider for more information. Up to 7 units may be installed. You must program the unit id's for each unit wired in the series. See Keypad Programming manual.

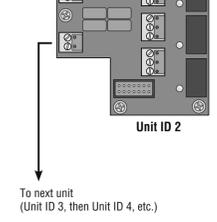
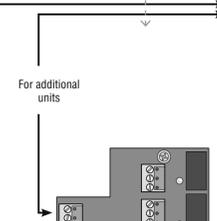
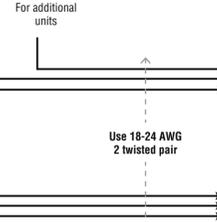
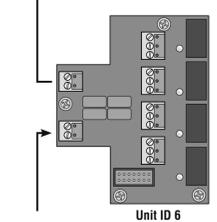


CONNECTING TO AN INTERNAL PHONE SYSTEM

The units can be wired to any analog trunk in an internal home phone system. Installation where fiber optic phone lines are present may require additional modifications from your telephone provider. Contact your provider for more information. Up to 7 units may be installed. You must program the unit id's for each unit wired in the series. See Keypad Programming manual.

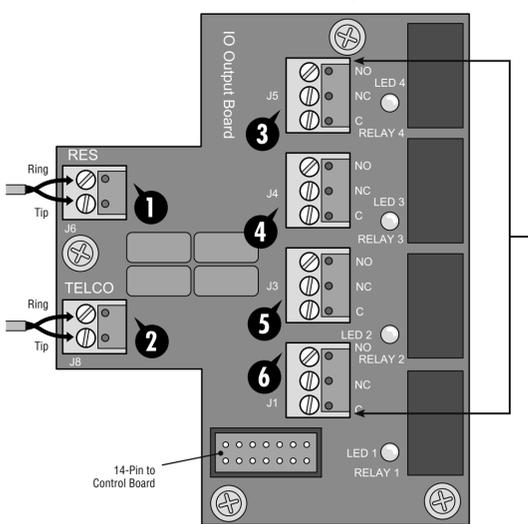


To next unit (Unit ID 5 then Unit ID 4, etc.)



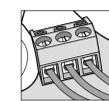
To next unit (Unit ID 3, then Unit ID 4, etc.)

Output Board



TERMINAL BLOCK CONNECTIONS

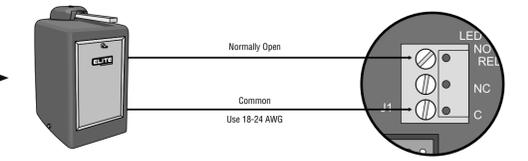
- Resident - Tip/Ring
- Telco - Tip/Ring
- Relay 4, NO, NC, COM
- Relay 3, NO, NC, COM
- Relay 2, NO, NC, COM
- Relay 1, NO, NC, COM



DO NOT overload the removable terminal block connectors. One wire per hole.

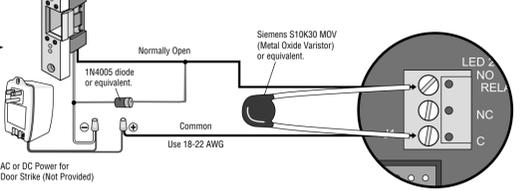
CONNECTING A GATE OPERATOR

Refer to the gate operator manual for proper relay strike time. Additional opening or exit devices can be connected to any of the 4 relays.



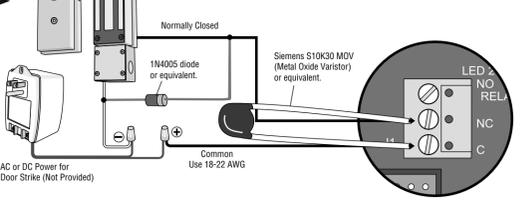
CONNECTING TO A DOOR STRIKE LOCK

The door strike can be connected to any of the 4 relays. **FOR AC POWER:** Install a Siemens S10K30 MOV (Metal Oxide Varistor) or equivalent. **FOR DC POWER:** Install a 1N4005 diode or equivalent. **DO NOT USE THE UNIT'S POWER SUPPLY FOR THE DOOR STRIKE.**

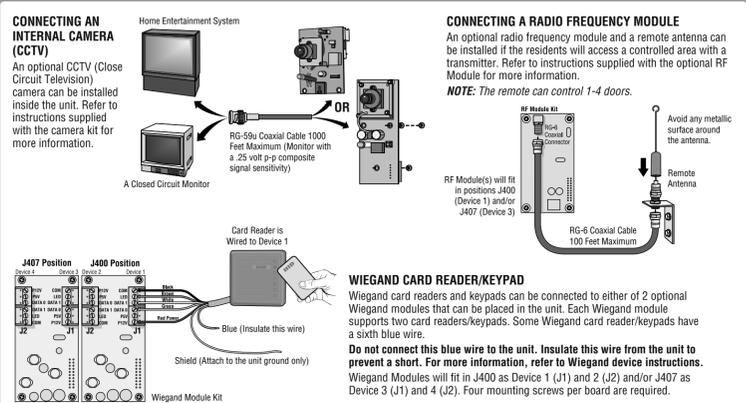
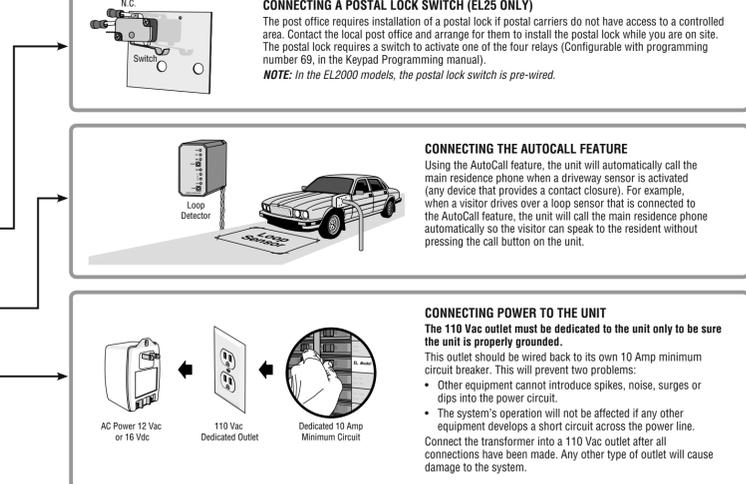
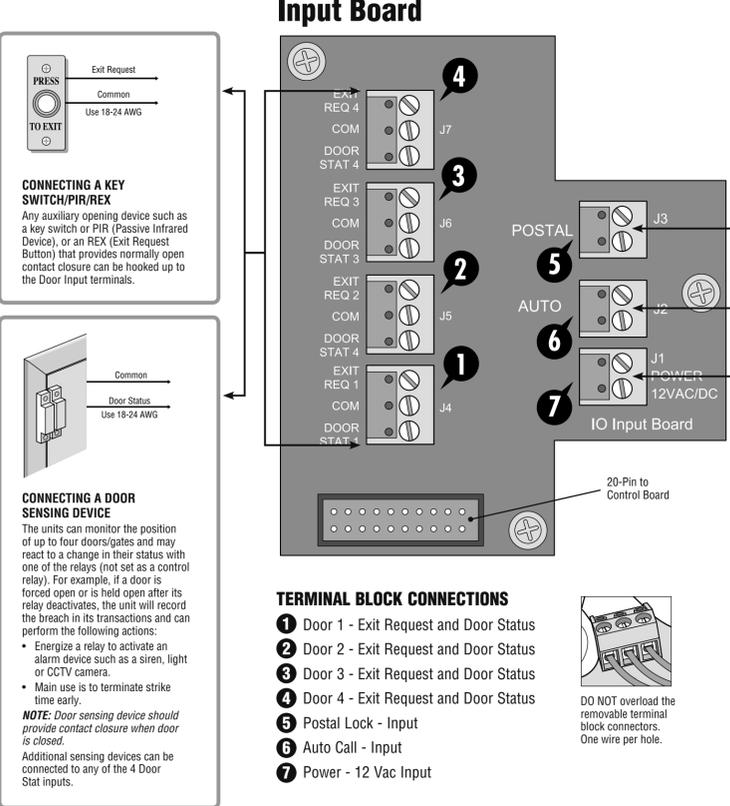


CONNECTING A MAGLOCK

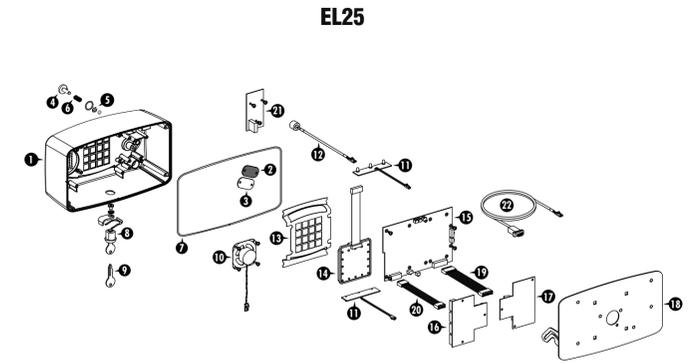
The maglock can be connected to any of the 4 relays. **FOR AC POWER:** Install a Siemens S10K30 MOV (Metal Oxide Varistor) or equivalent. **FOR DC POWER:** Install a 1N4005 diode or equivalent. **DO NOT USE THE UNIT'S POWER SUPPLY FOR THE MAGLOCK.**



Wiring (continued)



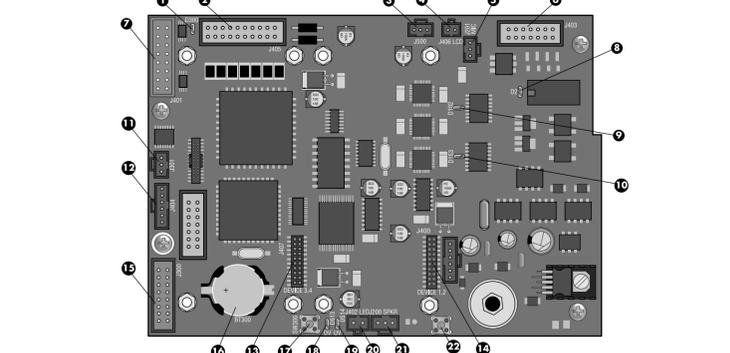
Repair Parts



PART DESCRIPTION	PART NO.	PART DESCRIPTION	PART NO.
1 Silver Cover	93D341	11 LED Assembly	2B721
Nickel Cover	93D341-1	12 Microphone Assembly	2B692
Mist Gray Cover	93D341-2	13 Key Pad Gasket	84C87
2 Camera Lens Black	108B81	14 Keypad	180D236
3 Camera Lens Clear	108B81-1	15 Main Board	2B735
4 Call Button Activator, Silver	101A159	16 Output Board	2B705
Call Button Activator, Nickel	101A159-1	17 Input Board	2B736
Call Button Activator, Mist Gray	101A159-2	18 Silver Mounting Plate	2C607
5 Call Button E-Ring	158A94	Nickel Mounting Plate	2C607-1
6 Call Button Spring	177A166	Mist Gray Mounting Plate	2C607-2
7 Gasket	84B81-1	19 20-Pin Cable	2B705
8 Lock	2B809	20 14-Pin Cable	2B704
9 Key	EL25KEY	21 Call Button Board	2B731
10 Speaker	2B639	22 Direct Connect Cable	2B747

PART DESCRIPTION	PART NO.	PART DESCRIPTION	PART NO.
1 Assembly Display and Display Board	41B989	13 Interconnect Board	41B997
2 Display Cables Kit	41B990	14 Lock and Keys	41B999
3 Output Board	2B737	15 Replacement Key	41B12
4 Input Board	2B736	16 Keypad	180D236
5 Main Board	2B735	17 Keypad Gasket	84C87
6 20-Pin Cable	2B705	18 Microphone Assembly	2B692
7 14-Pin Cable	2B704	19 Entry LED Board	41B998
8 Housing, Black	41B991	20 Keypad Light Board	41B773-1
Housing Assembly, Gray	41B992	21 Camera Lens, Black	108B81
Housing Assembly, Nickel	41B993	Camera Lens, Clear	108B81-1
9 Door Interconnect Cables Kit	41B994	22 Gasket and Display Window (Clear)	41B1000
10 Speaker	2B639	Gasket and Display Window (Black)	41B1001
11 Call Button Board	41B995	23 Faceplate Black, No Window	41B1002
12 Postal Lock Switch	41B996	Faceplate Gray, No Window	41B1003
		Faceplate Nickel, No Window	41B1004

Control Board

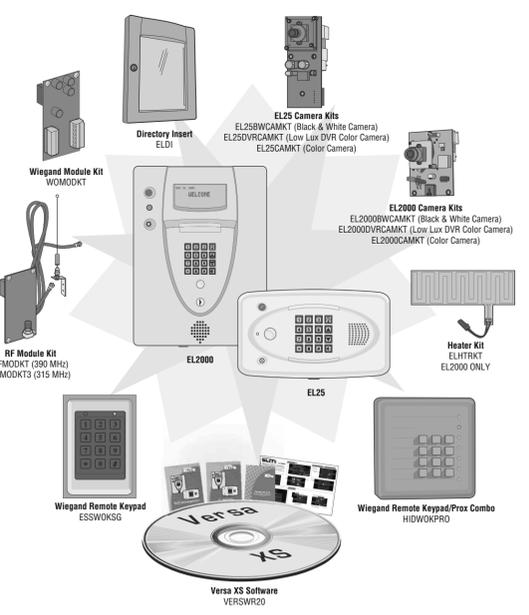


TYPE	BOARD	EL25	EL2000	NAME	DESCRIPTION
1	LED	D300	X	PWR LED	Indicates unit is receiving power.
2	Connector	J405	X	20-Pin Connector to IO Input Board	Connector to IO input board. The IO input board contains all REX inputs.
3	Connector	J500	X	LCD PWR	Provides power to LCD display.
4	Connector	J406	X	EL25 = LED BOTTOM KEYPAD EL2000 = LED keypad	For the EL25 provides power to bottom lighted LEDs for the main keypad. On the EL2000 this is the top lighted LEDs for main keypad.
5	Connector	J201	X	MIC	Microphone connector
6	Connector	J403	X	14-Pin Connector to Output Board	Connector to the output board. The output board contains the resident, Telco and dry contact relays.
7	Connector	J401	X	KEYPAD	Connector for the main keypad.
8	LED	D2	X	Local Mode	Unit supplying central office power to resident.
9	LED	D102	X	RES DAA OFF HOOK	Resident side of circuit is off hook.
10	LED	D153	X	TELCO DAA OFF HOOK	Telco side of circuit is off hook.
11	Connector	J301	X	Direct Connect (Serial Port)	Used for direct connect and hand-held programming and real time monitoring.
12	Connector	J404	X	LED Power Supply	
13	Connector	J407	X	Module Device (3,4)	Connect a module (Wiegand or RF) device here. The device address becomes 3 (RF or Wiegand-J1) or 4 (Wiegand-J2).
14	Connector	J400	X	Module Device (1,2)	Connect a module (Wiegand or RF) device here. The device address becomes 1 (RF or Wiegand-J1) or 2 (Wiegand-J2).
15	Connector	J300	X	LCD Data	Data wires for LCD display.
16	Connector	BT300	X	Battery	Battery used to back-up the unit's real time clock.
17	Switch	SW300	X	OV/UV Reset	Switch to turn off OV/UV LEDs. This button will turn off the OV/UV LEDs momentarily. If a poor power condition still exists then the OV or UV LEDs may turn on again.
18	LED	D513	X	Over-Voltage (OV)	Over-Voltage LED. Turns on when the unit detects an over voltage of 16.5 Vac or 22.2 Vdc at power block J1. Measure the voltage at power block J1 to confirm.
19	LED	D514	X	Under-Voltage (UV)	Under-Voltage LED. Turns on when the unit detects an under voltage of 9.5 Vac or 10.2 Vdc at power block J1. Measure the voltage at power block J1 to confirm.
20	Connector	J402	X	LED TOP KEYPAD	For the EL25, provides power to the top lighted LEDs for main keypad.
21	Connector	J200	X	Main Speaker	Main speaker
22	Switch	SW500	X	Soft Reboot	Reboots firmware without removing power.

Troubleshooting

WIRING	DESCRIPTION
NO POWER TO UNIT	Check power at source. Power must come from a dedicated 110 Vac outlet. The transformer's outlet should be wired to its own circuit breaker. Check SYS PWR LED indicators. If UV or OV are lit, press PWR MON RST button. If either of those two LEDs are still lit, check transformer and outlet.
DOOR STRIKES/MAGLOCKS/GATE OPERATOR NOT WORKING	Check power source. Strikes, Maglocks and Gate Operator must be powered independent from unit. Connect and test different Strike or Maglock. Make sure Strike or Maglock is not defective. Door Strike: Pin connections NO and COM at Relay terminal. Maglock: Pin connections NC and COM at Relay terminal. Gate Operator: Pin connections NO and COM at Relay terminal.
POSTAL LOCK OR AUTOCALL DEVICE NOT WORKING	Short IN and COM pin connections to verify functionality. If wiring is correct and device still does not work, contact technical support.
CARD READER NOT COMMUNICATING WITH UNIT	Make sure Wiegand is configured to a door (program step 60). Check Wiegand reader module connections. Connect and test a functioning reader. Make sure reader is not defective. Did you add the card(s) to the database while in programming mode? Check card format compatibility. The unit is only compatible with 26 and 30-Bit. Review the transactions using Versa XS, if applicable, and check whether card failed.
PHONE NOT FUNCTIONING WITH THE UNIT	Did you wire the bypass board correctly? See Connecting To The Telco Line. Is bypass board switch set to OPERATE? Using an alarm system? See Connecting To The Telco Line. Using an alarm system on multiple unit configuration? See Connecting To The Telco Line.
AUX OPEN/EXIT REQUEST DEVICE NOT WORKING	Short to verify functionality. Did you assign a relay to the REX? See the unit's programming manual. Check connections at Door # terminal(s). Wires to COM and EXT REQ # connection.
TRANSMITTER NOT WORKING	Did you use the correct coaxial cable? Is the remote antenna installed correctly? Is it outside of the unit's enclosure? Did you add the transmitter(s) to the database while in programming mode? Only Passport or Homelink transmitters can be used.

Accessories



FCC & DOC Requirements

FCC REQUIREMENTS
The units comply with Part 68 of the FCC Rules. The label affixed to this equipment contains, among other information, the FCC Registration Number and Ringer Equivalence Number (REN) for this equipment. You must, upon request, provide this information to your telephone company. The REN is useful to determine the quantity of devices you may connect to your telephone line and still have all of those devices ring when your telephone number is called. In most, but not all areas, the sum of the RENs of all devices connected to one line should not exceed five (5.0). To be certain of the number of devices you may connect to your line, as determined by the REN, you should contact your local telephone company. They will tell you what the maximum REN is for your calling area.

The following jacks must be ordered from the telephone company in order to interconnect this equipment with the public communication network: None.

If your unit causes harm to the telephone network, the Telephone Company may discontinue your service temporarily. If possible, they will notify you in advance. If advance notice is not practical, you will be notified as soon as possible. You will be informed of your right to file a complaint with the FCC.

Your Telephone Company may make changes in its facilities, equipment, operations or procedures that could affect the proper functioning of your equipment. If they do you will be notified, in advance, to give you an opportunity to maintain uninterrupted telephone service.

Connections to party lines are subject to state tariffs. Contact your local telephone company if you plan to use this equipment on party lines.

This equipment cannot be used on public coin service lines provided by the telephone company.

DOC REQUIREMENTS
NOTICE: The Canadian Department of Communications label identifies certified equipment. This certification means that the equipment meets certain telecommunications network protective, operational, and safety requirements. The Department does not guarantee the equipment will operate to the user's satisfaction.

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local Telecommunications Company. The equipment must also be installed using an acceptable method of connection. In some cases, the company's inside wiring associated with single line individual service may be extended by means of a certified connector assembly (telephone extension cord). The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations.

Repairs to certified equipment should be made by an authorized Canadian maintenance facility designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment.

Users should ensure for their own protection that the electrical ground connections of the power utility, telephone lines, and internal metallic water pipe unit, if present, are connected together. This precaution may be particularly important in rural areas.

CAUTION: Users should not attempt to make such connections themselves, but should contact the appropriate electric inspection authority, or electrician, as appropriate.

The Load Number (LN) assigned to each terminal device denotes the percentage of the total load to be connected to a telephone loop, which is used by the device, to prevent overloading. The termination on a loop may consist of any combination of devices subject only to the requirement that the total of the Load Numbers of all the devices does not exceed 100. The Load Number for EL Series Units is 3.

INSTALLATION AND SERVICE INFORMATION IS AS NEAR AS YOUR TELEPHONE

WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE FOLLOWING INFORMATION:

- PART NUMBER
- PART NAME
- MODEL NUMBER

1-800-528-2806

WWW.LIFTMASTER.COM