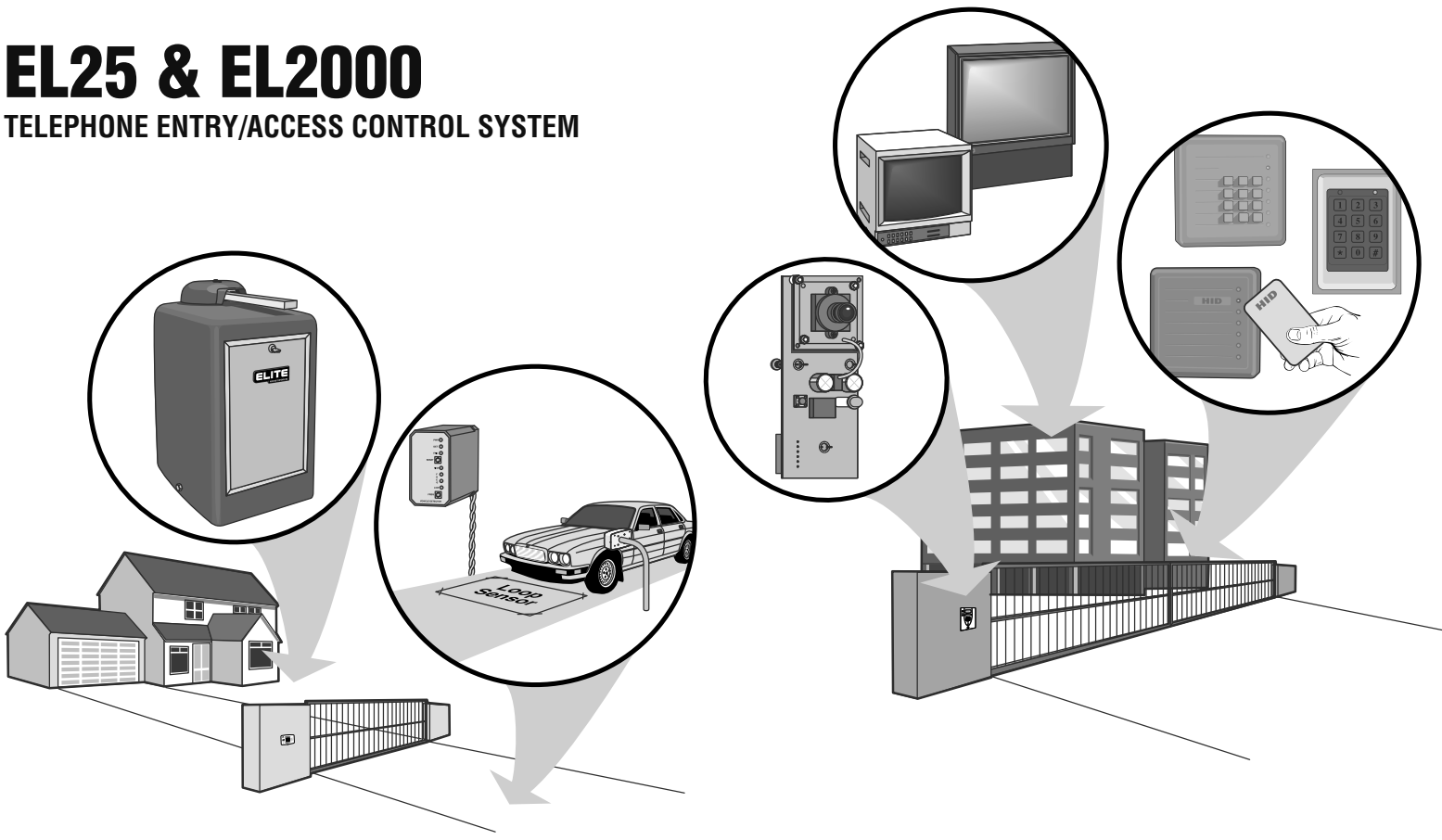


EL25 & EL2000

TELEPHONE ENTRY/ACCESS CONTROL SYSTEM



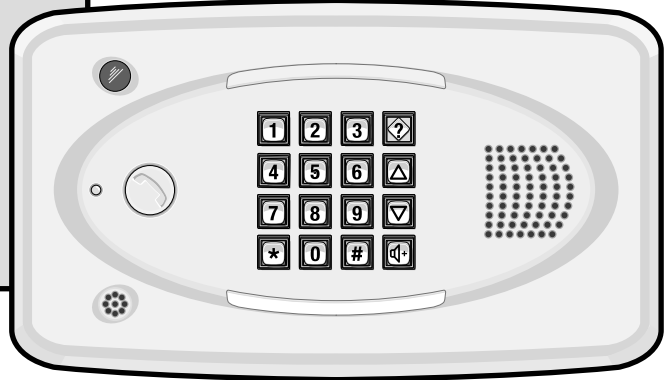
RESIDENTIAL AND COMMERCIAL TELEPHONE ENTRY SYSTEMS WITH EXPANDED CAPACITY AND ENHANCED VERSATILITY

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.



EL2000

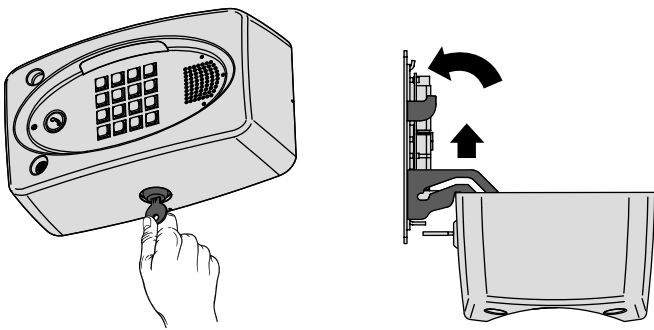


EL25

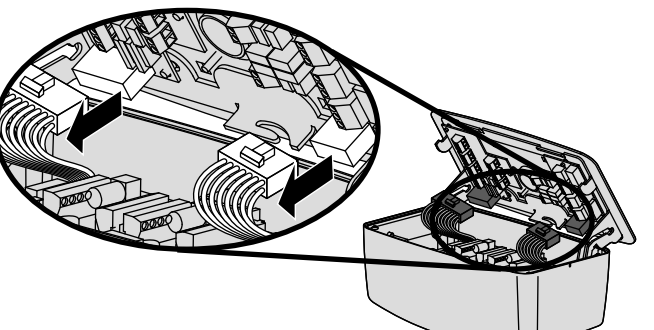
Installation

EL25

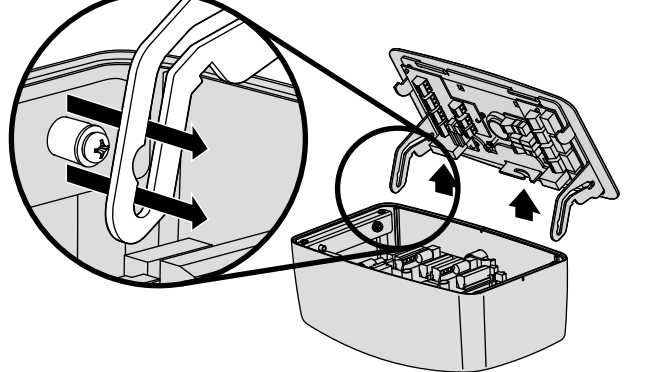
- 1** The EL25 is for surface mount applications only. Unlock the unit and open cover. Carefully lift mounting plate up then slide out on hinges.



- 2** Unplug the two main harnesses.

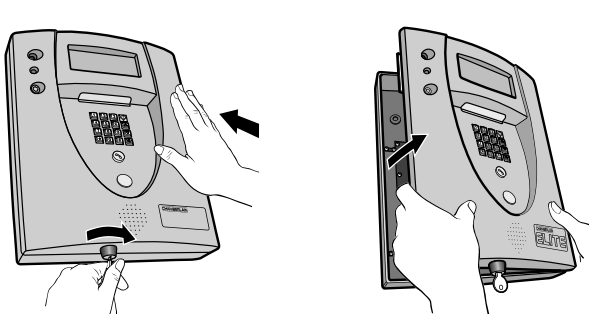


- 3** Line up notch with screw and push hinge out. Remove the mounting plate from the cover.

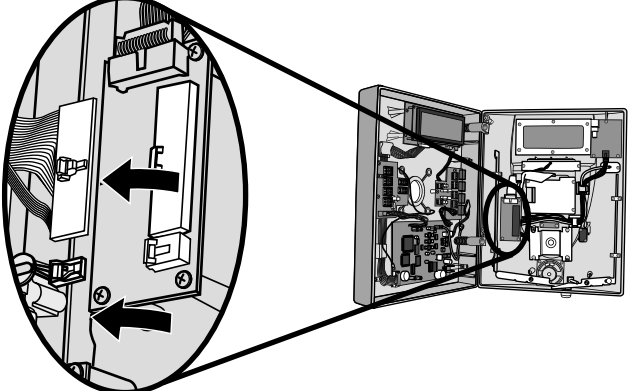


EL2000

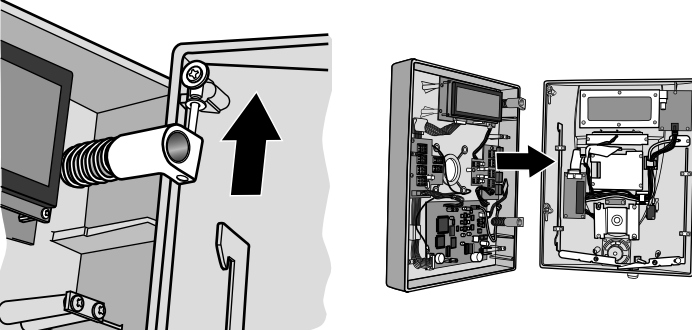
- 1** The EL2000 is for surface and recessed mount only. Apply pressure to the right-side of the unit. While maintaining pressure, turn key clockwise and open the cover.



- 2** Unplug the two main harnesses. (Optional)

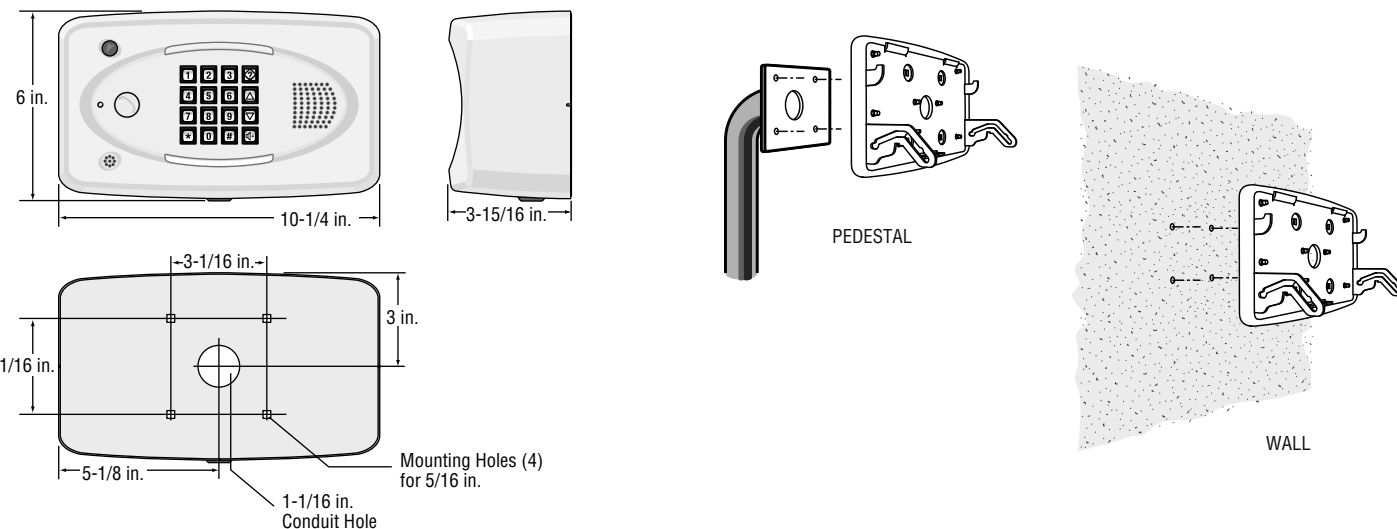


- 3** Slide cover out of hinges to remove. (Optional)



EL25

- 4** Mount to a wall or pedestal.

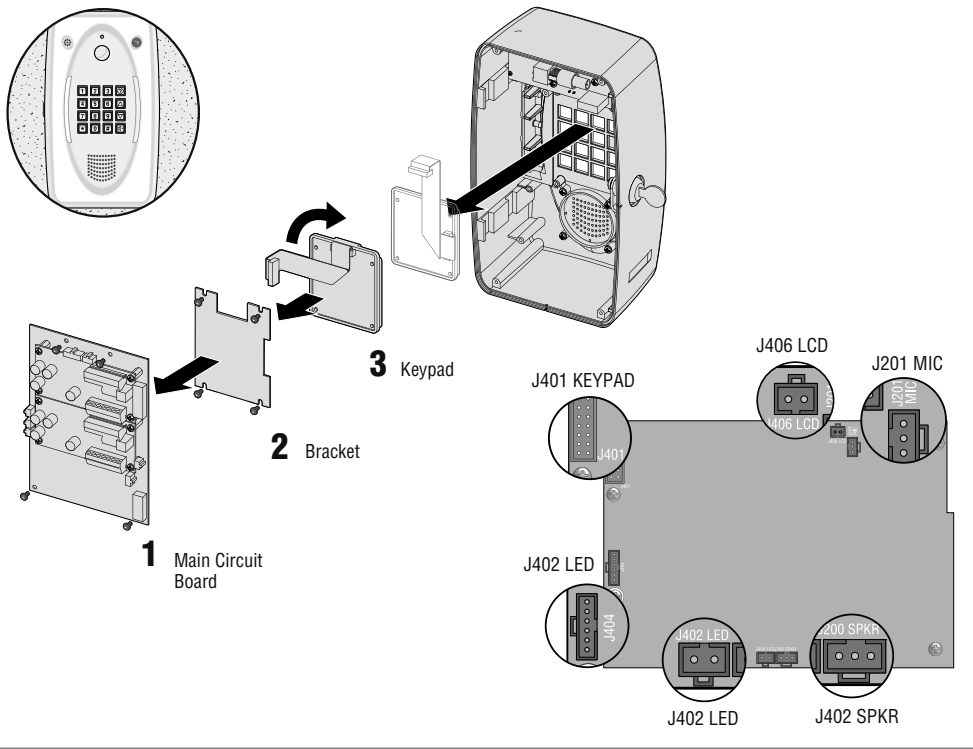


OPTIONAL

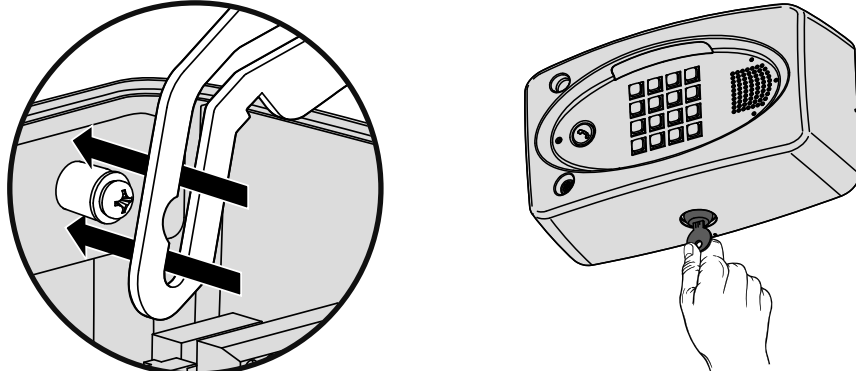
VERTICAL MOUNTING

Rotate the keypad for vertical mounting:

- 1 Disconnect all plugs from the main circuit board. Remove board (See control board connections below).
- 2 Remove bracket (4 screws).
- 3 Rotate keypad 90° clockwise. Bracket notch lines up with ribbon cable on the keypad.
- 4 Reverse the sequence to reassemble the unit.
- 5 Reconnect all plugs to the control board.

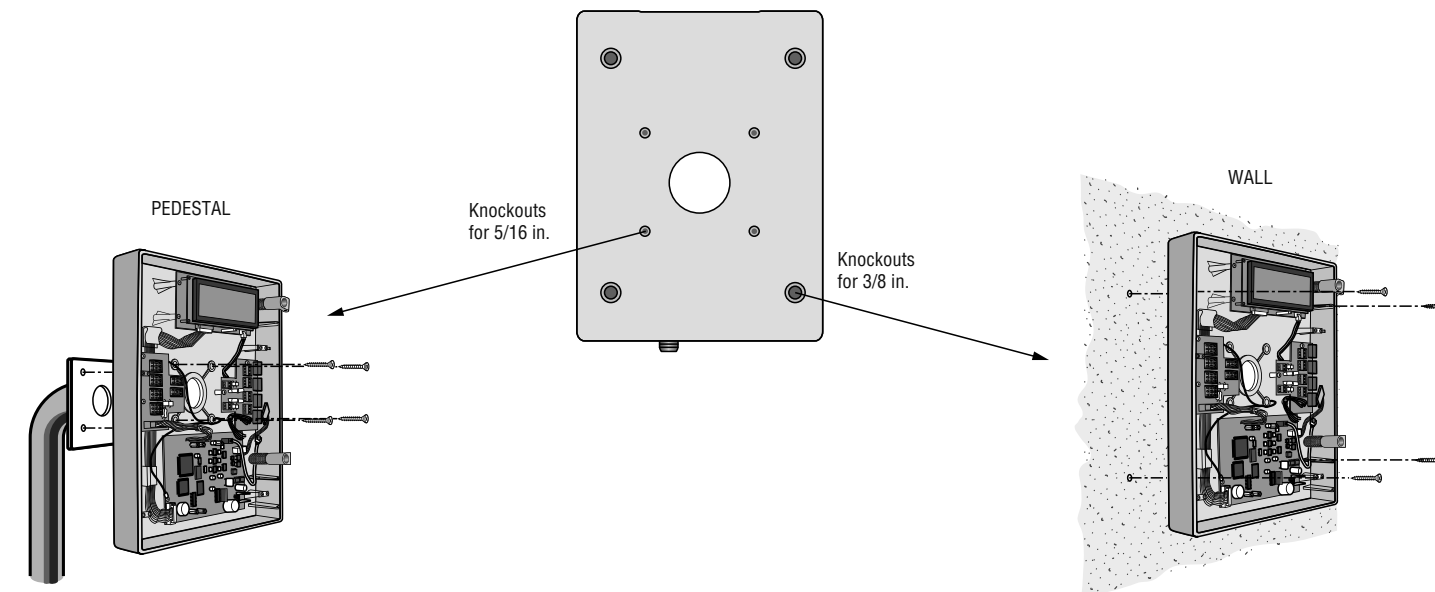
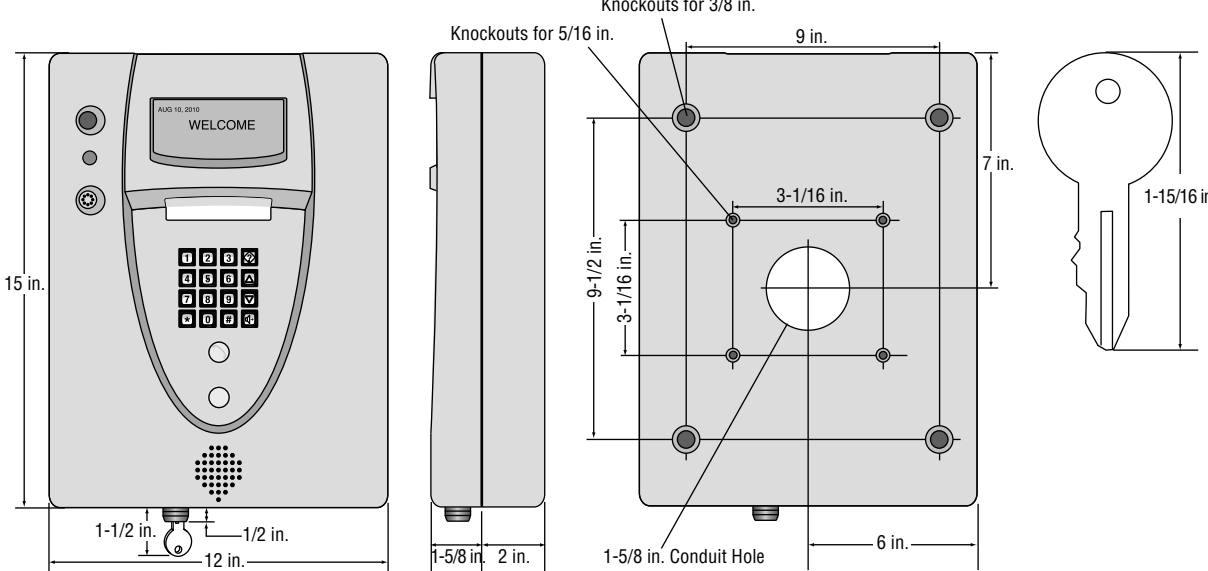


- 5** Lock the unit. Do not pinch wires when closing and locking the unit.

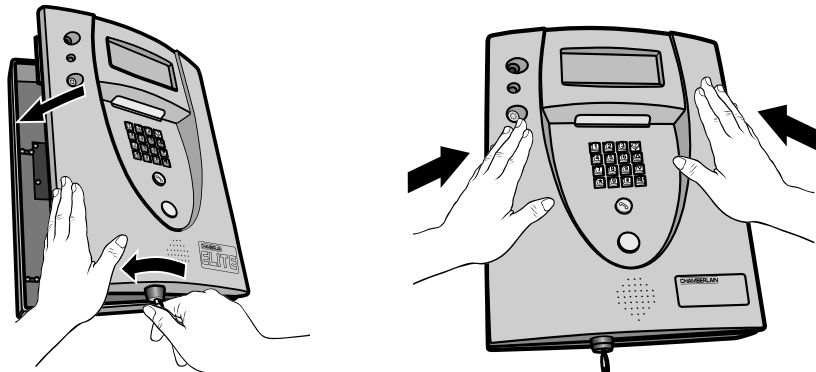


EL2000

- 4** Mount to a wall or pedestal. Knock out the desired mounting plugs using punch.



- 5** Turn the key counter-clockwise to the locked position. Close the cover. Apply pressure to left-side until you hear a "click" sound. Apply pressure to right-side of unit until you hear a "click" sound.



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.

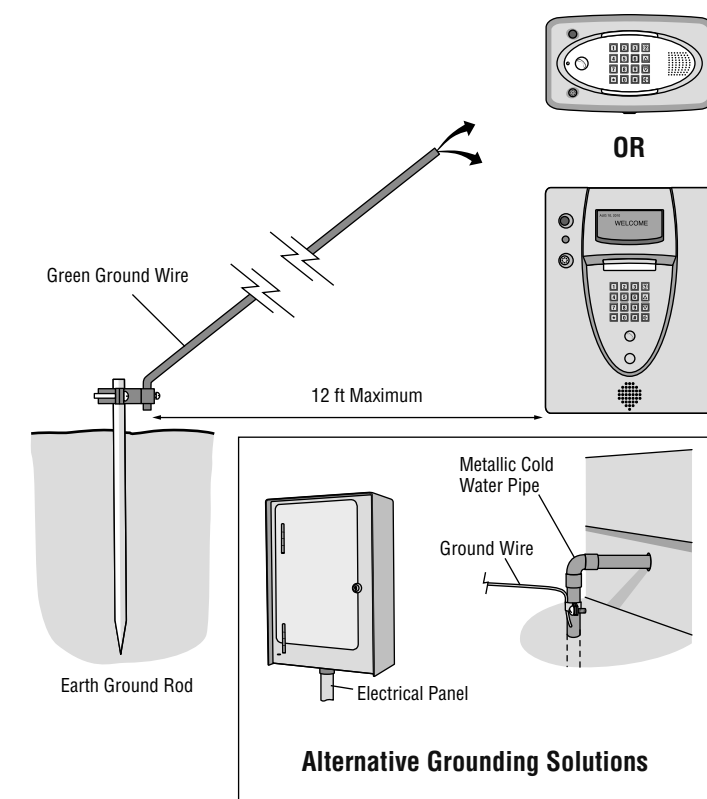
GROUND THE UNIT

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.



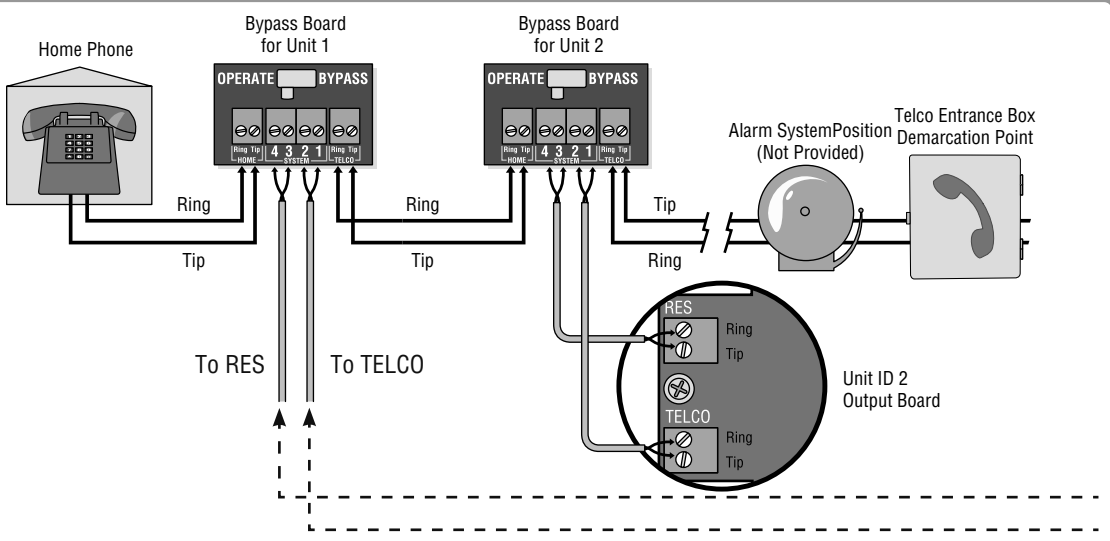
CONNECTING TO THE TELCO LINE

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.

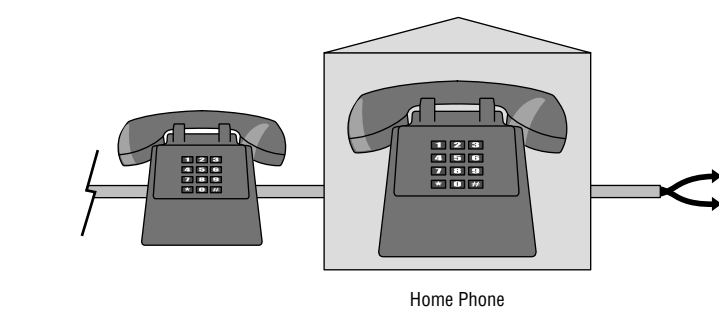


STAND ALONE SYSTEM

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.

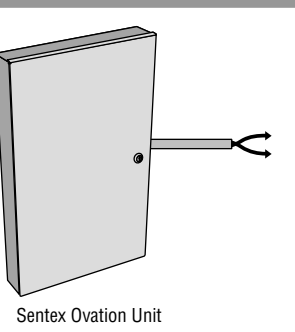
Only disable the Telco mode of the unit farthest away from the house. See "Disable Telco Mode" in the Keypad Programming manual.

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



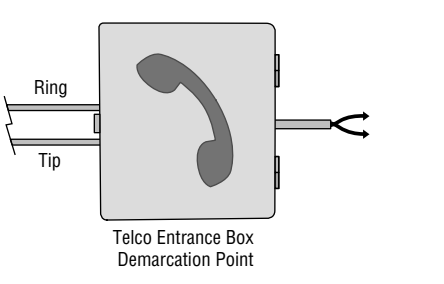
CONNECTING TO AN NPBI SYSTEM

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.

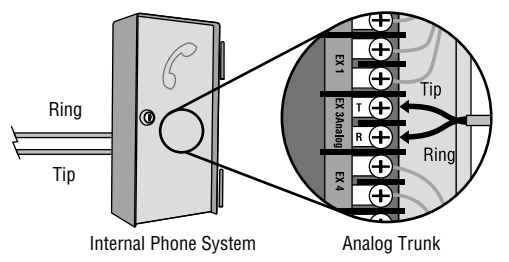


CONNECTING TO AN INTERNAL PHONE SYSTEM

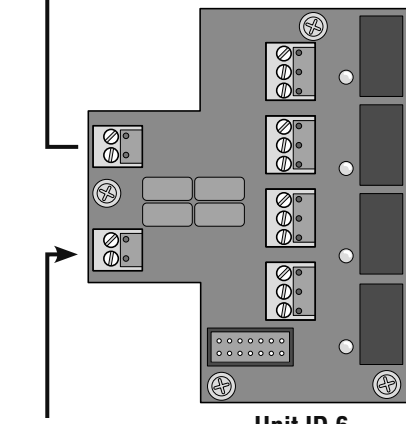
The units can be wired to any analog trunk in an internal home phone system.

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.

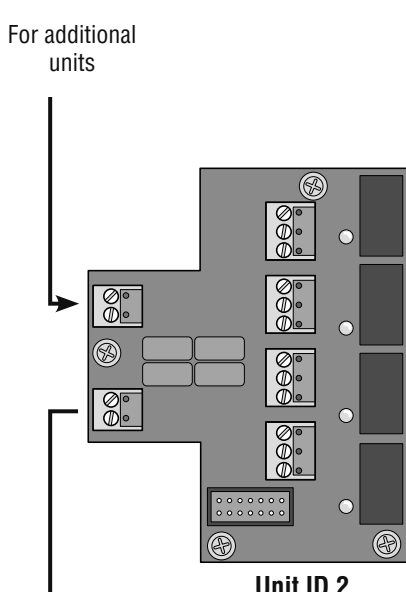


To next unit (Unit ID 5 then Unit ID 4 etc.)



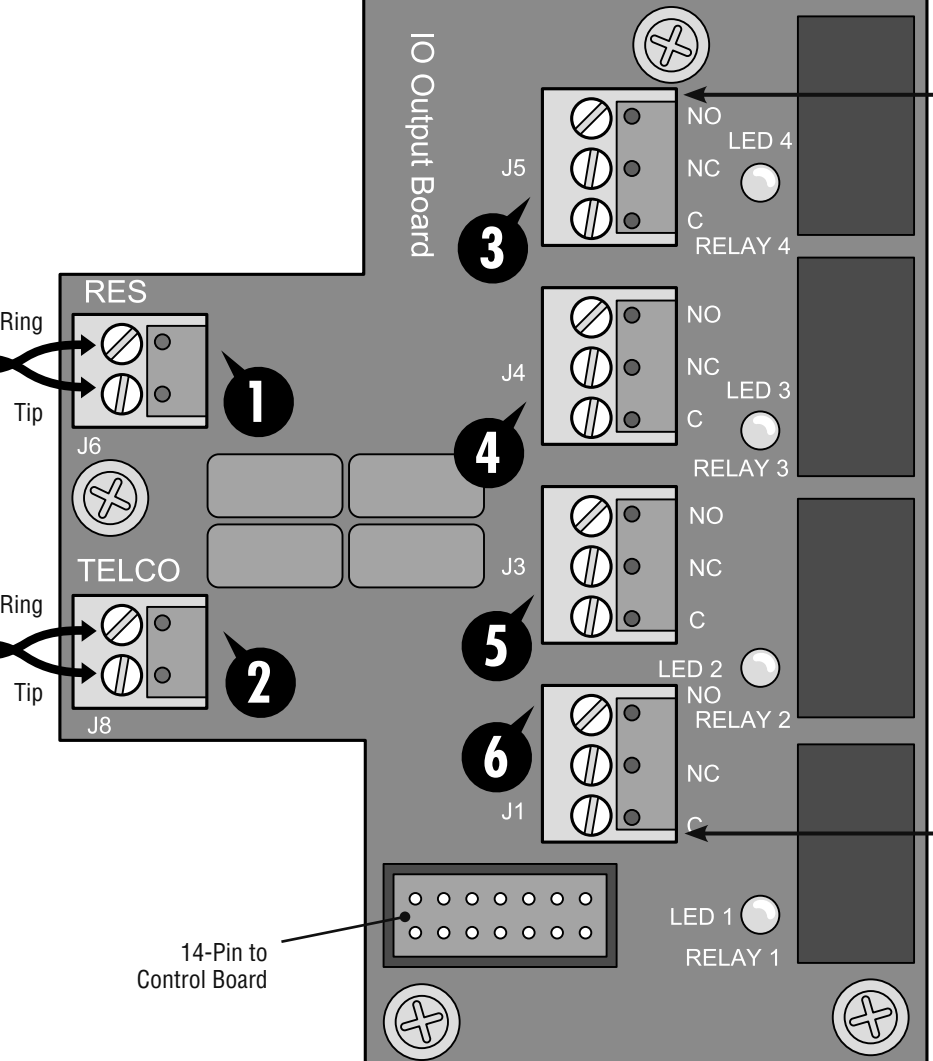
For additional units

Use 18-24 AWG 2 twisted pair



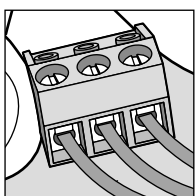
To next unit (Unit ID 3, then Unit ID 4, etc.)

Output Board



TERMINAL BLOCK CONNECTIONS

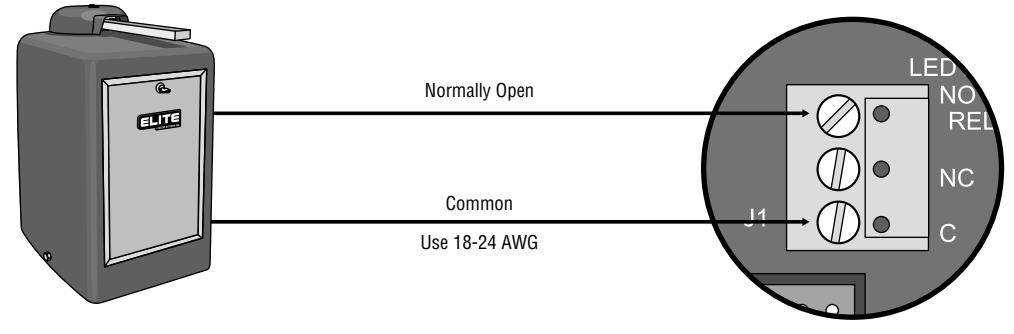
- 1 Resident - Tip/Ring
- 2 Telco - Tip/Ring
- 3 Relay 4, NO, NC, COM
- 4 Relay 3, NO, NC, COM
- 5 Relay 2, NO, NC, COM
- 6 Relay 1, NO, NC, COM



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.



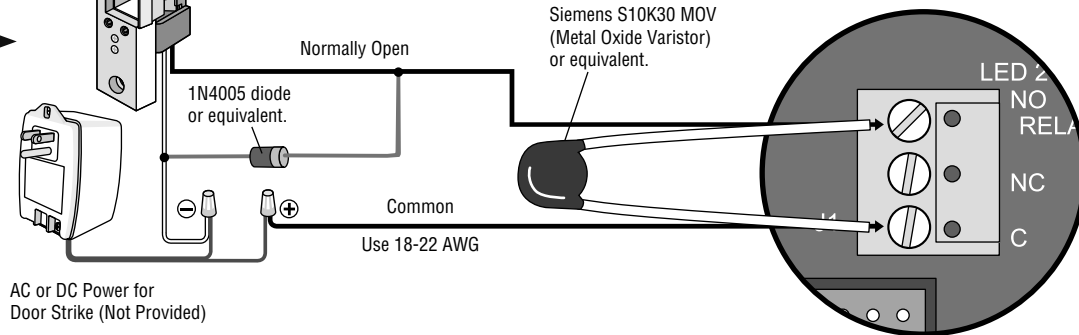
CONNECTING TO A DOOR STRIKE LOCK

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.



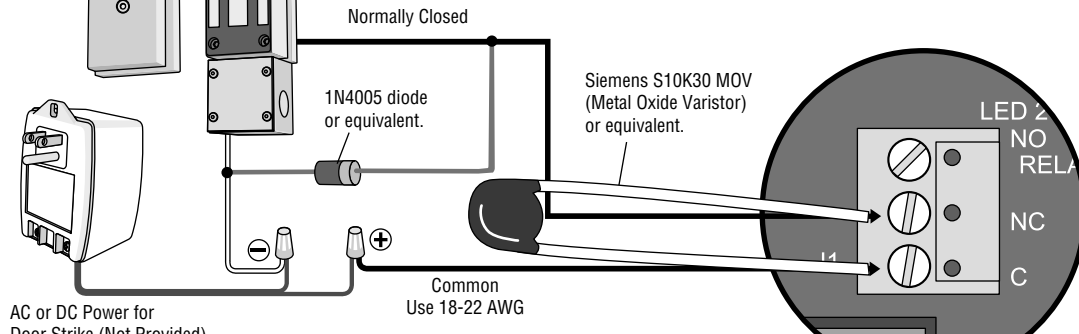
CONNECTING A MAGLOCK

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)

CONNECTING A KEY SWITCH/PIR/REX

Any auxiliary opening device such as a key switch or PIR (Passive Infrared Device), or an REX (Exit Request Button) that provides normally open contact closure can be hooked up to the Door Input terminals.

CONNECTING A DOOR SENSING DEVICE

The units can monitor the position of up to four doors/gates and may react to a change in their status with one of the relays (not set as a control relay). For example, if a door is forced open or is held open after its relay deactivates, the unit will record the breach in its transactions and can perform the following actions:

- Energize a relay to activate an alarm device such as a siren, light or CCTV camera.
- Main use is to terminate strike time early.

NOTE: Door sensing device should provide contact closure when door is closed.

Additional sensing devices can be connected to any of the 4 Door Stat inputs.

Input Board

Diagram showing terminal block connections for Exit Request, Door Status, and various relays (J1-J7) for POSTAL, AUTO, and IO Input Board.

CONNECTING A POSTAL LOCK SWITCH (EL25 ONLY)

The post office requires installation of a postal lock if postal carriers do not have access to a controlled area. Contact the local post office and arrange for them to install the postal lock while you are on site. The postal lock requires a switch to activate one of the four relays (Configurable with programming number 69, in the Keypad Programming manual).

NOTE: In the EL2000 models, the postal lock switch is pre-wired.

CONNECTING THE AUTOCALL FEATURE

Using the AutoCall feature, the unit will automatically call the main residence phone when a driveway sensor is activated (any device that provides a contact closure). For example, when a visitor drives over a loop sensor that is connected to the AutoCall feature, the unit will call the main residence phone automatically so the visitor can speak to the resident without pressing the call button on the unit.

CONNECTING POWER TO THE UNIT

The 110 Vac outlet must be dedicated to the unit only to be sure the unit is properly grounded. This outlet should be wired back to its own 10 Amp minimum circuit breaker. This will prevent two problems:

- Other equipment cannot introduce spikes, noise, surges or dips into the power circuit.
- The system's operation will not be affected if any other equipment develops a short circuit across the power line.

Connect the transformer into a 110 Vac outlet after all connections have been made. Any other type of outlet will cause damage to the system.

Control Board

TYPE	BOARD	EL25	EL2000	NAME	DESCRIPTION
1	LED	D300	X	X	PWR LED
2	Connector	J405	X	X	20-Pin Connector to IO Input Board
3	Connector	J500		X	LCD PWR
4	Connector	J406	X	X	EL25 = LED BOTTOM KEYPAD EL2000 = LED keypad
5	Connector	J201	X	X	MIC
6	Connector	J403	X	X	Connector to the output board. The output board contains the resident, Telco and dry contact relays.
7	Connector	J401	X	X	KEYPAD
8	LED	D2	X	X	Local Mode
9	LED	D102	X	X	RES DAA OFF HOOK
10	LED	D153	X	X	TELCO DAA OFF HOOK
11	Connector	J301	X	X	Direct Connect (Serial Port)
12	Connector	J404	X	X	LED Power Supply
13	Connector	J407	X	X	Module Device (3,4)
14	Connector	J400	X	X	Module Device (1,2)
15	Connector	J300		X	LCD Data
16	Connector	BT300	X	X	Battery
17	Switch	SW300	X	X	OV/UV Reset
18	LED	D513	X	X	Over-Voltage (OV)
19	LED	D514	X	X	Under-Voltage (UV)
20	Connector	J402	X		LED TOP KEYPAD
21	Connector	J200	X	X	Main Speaker
22	Switch	SW500	X	X	Soft Reboot

Troubleshooting

WIRING	Check for correct length and AWG of wires. Check that wires are correctly inserted into the terminal blocks (not loose, no two sharing the same position). Check board markings for correct terminal block placements. Make sure high voltage and Telco wires do not share the same conduit. Use metal conduit. Do not use PVC.
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 <i>Connecting To The Telco Line</i> . Is bypass board switch set to OPERATE? Using an alarm system? See <i>Connecting To The Telco Line</i> . Using an alarm system on multiple unit configuration? See <i>Connecting To The Telco Line</i> .
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.

Repair Parts

EL25

PART DESCRIPTION	PART NO.
1 Silver Cover	93D341
2 Nickel Cover	93D341-1
3 Mist Gray Cover	93D341-2
4 Camera Lens Black	108B81
5 Camera Lens Clear	108B81-1
6 Call Button Activator, Silver	101A159
7 Call Button Activator, Nickel	101A159-1
8 Call Button Activator, Mist Gray	101A159-2
9 Call Button E-Ring	158A94
10 Call Button Spring	177A166
11 Gasket	84B81-1
12 Lock	2B809
13 Key	EL25KEY
14 Speaker	2B639

EL2000

PART DESCRIPTION	PART NO.
11 LED Assembly	2B721
12 Microphone Assembly	2B692
13 Key Pad Gasket	84C87
14 Keypad	180D236
15 Main Board	2B735
16 Output Board	2B737
17 Input Board	2B736
18 Silver Mounting Plate	2C607
19 Nickel Mounting Plate	2C607-1
20 Mist Gray Mounting Plate	2C607-2
21 20-Pin Cable	2B705
22 14-Pin Cable	2B704
23 Call Button Board	2B731
24 Direct Connect Cable	2B747

PART DESCRIPTION	PART NO.
1 Assembly Display and Display Board	41B989
2 Display Cables Kit	41B990
3 Key Pad Gasket	2B737
4 Input Board	2B736
5 Main Board	2B735
6 20-Pin Cable	2B705
7 14-Pin Cable	2B704
8 Housing, Black	41B991
9 Housing Assembly, Gray	41B992
10 Housing Assembly, Nickel	41B993
11 Door Interconnect Cables Kit	41B994
12 Speaker	2B639
13 Call Button Board	41B995
14 Postal Lock Switch	41B996

PART DESCRIPTION	PART NO.
13 Interconnect Board	41B997
14 Lock and Keys	41B999
15 Replacement Key	41B12
16 Keypad	180D236
17 Keypad Gasket	84C87
18 Microphone Assembly	2B692
19 Entry LED Board	41B998
20 Keypad Light Board	41B773-1
21 Camera Lens, Black	108B81
22 Camera Lens, Clear	108B81-1
23 Gasket and Display Window (Clear)	41B1000
24 Gasket and Display Window (Black)	41B1001
25 Faceplate Black, No Window	41B1002
26 Faceplate Gray, No Window	41B1003
27 Faceplate Nickel, No Window	41B1004

Accessories

EL25 Camera Kits

- EL25BW/CAMKIT (Black & White Camera)
- EL25DVR/CAMKIT (Low Lux DVR Color Camera)
- EL25CAMKIT (Color Camera)

EL2000 Camera Kits

- EL2000BW/CAMKIT (Black & White Camera)
- EL2000DVR/CAMKIT (Low Lux DVR Color Camera)
- EL2000CAMKIT (Color Camera)

Other Accessories:

- Wiegand Module Kit W0M0DKT
- RF Module Kit RFM0DKT (390 MHz), RFM0DKT3 (315 MHz)
- Heater Kit ELHTRKT (EL2000 ONLY)
- Wiegand Remote Keypad ESSW0KSG
- Wiegand Remote Keypad/Prox Combo HDW0KPR0
- Versa XS Software VERSWR20

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

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