

ADEMCO VISTA-20P Series / VISTA-15P Series Security Systems

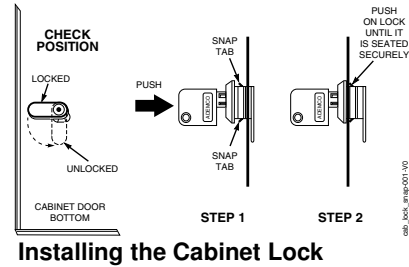
Quick Installation Guide

FOR DOCUMENTATION AND ONLINE SUPPORT: <http://www.security.honeywell.com/hsc/resources/MyWebTech> (see instructions K5305-1V7 or higher)

These instructions apply to the following Honeywell security systems:
 ADEMCO VISTA-20P, VISTA-20PSIA, VISTA-20PCN, VISTA-15P, VISTA-15PSIA, VISTA-15PCN
 Features and procedures apply to all, except where differences are noted.
 VISTA-20PSIA and VISTA-15PSIA are certified SIA-compliant controls that meet SIA specifications for False Alarm Reduction.

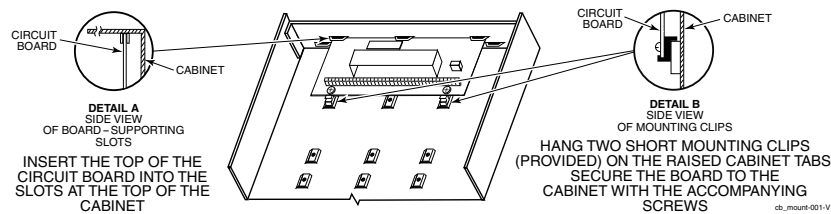
Mount the Control.

1. Mount the control cabinet to a sturdy wall in a clean, dry area, which is not readily accessible to the general public, using fasteners or anchors (not supplied) with the four cabinet mounting holes.
2. Remove cabinet door, then remove the lock knockout from the door. Insert the key into the lock
3. Position the lock in the hole, making certain that the latch will make contact with the latch bracket when the door is closed. When correctly positioned, push the lock until the snap tabs hold it securely.
 The cabinet can be secured without a lock by using 2 screws in the cover's edge.
4. Before installing the cabinet's contents, remove the cabinet knockouts needed for wiring entry.



Installing the Cabinet Lock

5. Mount the PC Board. Refer to the diagram below. If mounting an RF Receiver inside the cabinet, remove the receiver board from its case, then insert the top of the board into the slots at the top of the cabinet. Install the control board below the receiver board using the clips and screws provided. Insert grounding lugs into the left-hand terminals of the antenna blocks and secure them with the screws provided. Insert the receiver's antennas into the blocks' right-hand terminals, and tighten the screws.



Mounting the PC Board

Connect the Transformer & Battery.

1321 Transformer (1321CN in Canada)

- Do not plug the transformer into the AC outlet until all wiring connections to the control are complete. As a safety precaution, always power down the control when making such connections.

1361X10 Transformer

(required if using Powerline Carrier devices)

1. Splice one end of a 3-conductor cable to the wire ends of the SA4120XM-1 cable.
2. Connect the SA4120XM-1 cable plug to the 8-pin connector on the control.
3. Connect the other end of the 3-conductor cable to the 1361X10 Transformer.

Canadian Installations: For Powerline Carrier Devices, use the PSC04 X-10 Interface and trigger pins.

Battery Connections

- After all connections to the control are completed and **after AC power has been applied**, connect the red and black flying leads on the control board to the battery.
- IMPORTANT:** This control will not power-up on battery alone (AC power must be applied). However, once the system is powered up, it will operate on battery if AC is lost.

UL For UL installations and Residential fire installations, refer to the chart below for the correct battery size required to meet the mandatory standby time.

CALIFORNIA STATE FIRE MARSHAL (CSFM) AND UL RESIDENTIAL FIRE

24-HOUR BATTERY BACKUP REQUIREMENTS

The California State Fire Marshal and UL have regulations which require that all residential fire alarm control panels must be provided with a backup battery which has sufficient capacity to operate the panel and its attached peripheral devices for 24 hours in the intended standby condition, followed by at least 4 minutes in the intended fire alarm signaling condition. This control panel can meet these requirements without using a supplementary power supply, provided that the panel's auxiliary power and bell output currents are limited as listed below.

OUTPUT LIMITATIONS AND REQUIRED BATTERIES

OUTPUT CURRENT LIMITS	BATTERY INFORMATION
Current Total	Battery Capacity
600mA maximum total of auxiliary power plus bell output currents	Recommended Battery (Yuasa Model No.)
Max. Aux. Current	NP4-12 (or ADEMCO 467)
45mA	NP7-12
160mA	NP4-12 (two) ‡
200mA	NP7-12 (two) ‡
425mA	NP4-12
500mA	NP7-12
	17.2AH

‡ **NOTE:** Use two batteries, connected in parallel. Obtain an Ademco Battery Harness Kit SA5140-1. (Both batteries will fit inside the cabinet.)

Connect Devices, Zones, Sounder, and Phone Line.

Refer to the Wiring Diagram on the reverse side for connection information. **NOTE:** This system uses a range of reserved addresses for each type of device.

1. Connect keypads and other addressable devices to the ECP terminals 4-7.

Refer to the wiring chart below for wire sizes and maximum wire run lengths.

Wire Size	TOTAL CURRENT OF ALL DEVICES CONNECTED TO A SINGLE WIRE RUN				
	50 mA or less	100 mA	300 mA	500 mA	600 mA
#22	900ft (274m)	450ft (137m)	150ft (46m)	90ft (27m)	75ft (23m)
#20	1400ft (427m)	700ft (213m)	240ft (73m)	140ft (43m)	120ft (37m)
#18	1500ft (457m)	1100ft (335m)	350ft (107m)	220ft (67m)	170ft (52m)
#16	1500ft (457m)	1500ft (457m)	550ft (168m)	350ft (107m)	270ft (82m)

The length of all wire runs for both partitions combined must not exceed 1500 feet (457m) when unshielded quad conductor cable is used (750 feet if shielded cable is used).

Standard Keypads (6150 / 6160 series)

- Keypad addresses range from address 16-23. Set each keypad's address accordingly.
- NOTE:** Address 16 is reserved for the first keypad and is always enabled in the control.
- Use data fields *190-*196 to enable keypads and set their sounding options.

Expander Modules (4219, 4229)

- Connect desired field wiring to the module's zone terminals.
- Expander module addresses range from 07-11. Set each module's DIP address accordingly.
- Use *56 Menu mode to program zone characteristics.

Touchscreen Keypads (6270 / 6271 series, 8132 series; V20P = up to 4; V15P = up to 2)

- Use of touchscreen keypads is independent from and in addition to the eight (8) standard keypads.
- Set each touchscreen's address accordingly (1, 2, 5, 6; see table on back) and enable in field *189.
- Make sure the auxiliary current drain is within the control's limitation. Otherwise **use an external power supply** to power the touchscreen keypads.

RF Receiver (5881, 5883, RF Keypad)

- 5881L / 5882L = up to 8 RF zones; 5881M / 5882M / 6150RF = up to 16 RF zones
 - 5881H / 5882H / 5883 / 6160RF = up to system maximum RF zones
 - Set the receiver's address to 00 using the module's DIP switches.
 - If using wireless keypads, set field *24 RF House ID Code appropriately.
- If receiver is mounted remotely, note the following:
- Do not locate the receiver or transmitters on or near metal objects. This will decrease range and/or block transmissions.
 - Do not locate the RF receiver in an area of high RF interference (indicated by frequent or prolonged lighting of the receiver's LED; random flicker is OK).
 - Do not locate RF receiver closer than 10 feet from any keypads.

Program the Control.

Refer to the Programming Guide to program the control.

(The control can also be programmed via the Compass Downloader.)

1. Enter Programming Mode: installer code + 8-0-0.
2. Change the default Installer Code using field *20.
3. Enter the appropriate central station phone numbers and account numbers.
4. Program the system data field options as desired.
4. Use the various menu modes to program zones, relay outputs, descriptors, etc.
5. If AVS system is installed, use the appropriate AVS Quick Program Command.
6. Program Schedules (if used): Master code + [#] + 64
7. Enable RF button keyfobs (if used) and assign to user numbers accordingly.
8. Show the Master user how to change the default Master code:
 master code + [8] + 0-2 + new code + new code again

Test the System.

Sniffer Mode Test: To verify that all transmitters have been properly programmed, disarm all partitions.

1. From a keypad in partition 1, enter Installer code + [#] + 3. All programmed transmitters are displayed.
2. Fault all transmitters in turn. The display clears each transmitter as a signal is received.
3. Exit Sniffer mode: Installer code + 1 (OFF). Mode does not automatically expire; you must exit manually.

System Test

1. Disarm the system and close all protected windows, doors, etc.
2. Enter the Installer code + [5] (TEST), then press 0 = walk. (Option 1 = Dial checks phone line integrity.)
3. Listen. The external sounder should sound for about 1 second then turn off.
4. Fault all zones in turn and listen for three beeps from the keypad. ID of each faulted point should appear on the keypad display. The display clears when the zone is restored.
5. Test all smoke and CO detectors following the manufacturer's instructions and check the display.
6. When all zones have been checked and are intact (closed), there should be no zone identification numbers displayed on the keypad.
7. Exit test mode: security code + [1] (OFF).

Major Features and Capacities

Feature	VISTA-20P	VISTA-15P
Partitions	2 plus common area	not partitioned
Zones	48 plus 16 keyfob zones for total of 64 zones: • 8 hardwired zones (1-8) • Up to 40 additional wired zones (9-48) using up to 5 4219/4229 modules • Up to 40 wireless zones (5800 series; zones 9-48) • 4 configurable zone types	32 zones plus 8 keyfob zones for total of 40 zones: • 6 hardwired zones (1-6) • Up to 16 additional wired zones (9-24) using up to 2 4219/4229 modules • Up to 26 wireless zones (5800 series; zones 9-34) • 2 configurable zone types
Security Codes	48	32
Schedules	32	8
Keypad macros	4	2
Event Logging	100	50
Paging	4	2
Keypads	8	8
Touch Screen Devices	4	2
4219, 4229	5	2
4204	4	2
Output Relays / X-10 devices	16	8
On-Board Triggers	2	2
Output Functions	48	24

WARRANTY INFORMATION

For the latest warranty information, please go to:
www.honeywell.com/security/hsc/resources/wa



K5305-1QGV1 5/09 Rev. A



2 Corporate Center Drive, Suite 100
 P.O. Box 9040, Melville, NY 11747
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AC POWER AND BATTERY CONNECTION

TRANSFORMER

- CONNECT THE TRANSFORMER TO TERMINALS 1 AND 2. SEE WIRE RUN CHART.

USE CAUTION WHEN WIRING THE TRANSFORMER TO THE CONTROL TO GUARD AGAINST BLOWING THE TRANSFORMER FUSE (THE FUSE IS NON-REPLACEABLE).

TRANSFORMER WIRE RUNS

Distance from control	Wire Size
Up to 50 feet	# 20
50 - 100 feet	# 18
100 - 200 feet	# 16

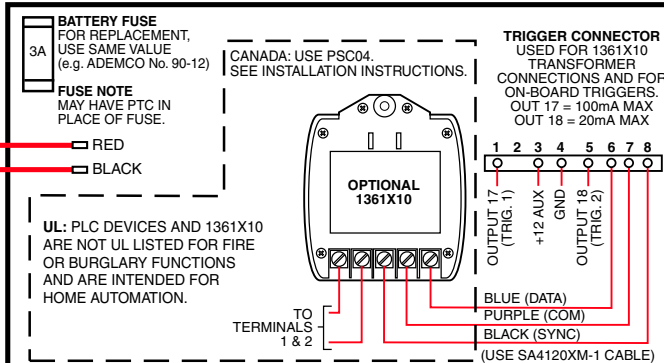
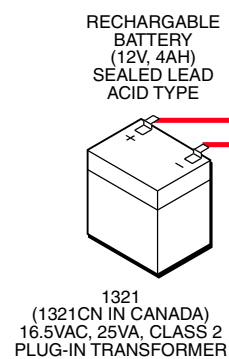
- AFTER ALL WIRING CONNECTIONS ARE COMPLETE, PLUG TRANSFORMER INTO A 110VAC UNSWITCHED OUTLET (24HR)
 - USE 1361X10 TRANSFORMER INTERFACE WHEN POWER LINE CARRIER DEVICES ARE BEING USED.

* "AC LOSS" DISPLAYED IF VOLTAGE FALLS BELOW 16.5VAC.

BATTERY

- PLACE THE 12-VOLT BACKUP BATTERY IN THE CABINET.
- AFTER ALL CONNECTIONS TO THE CONTROL ARE MADE AND AC POWER HAS BEEN APPLIED, CONNECT THE RED AND BLACK FLYING LEADS TO THE BATTERY.
 - CONNECT ONLY AFTER AC POWER HAS BEEN APPLIED.

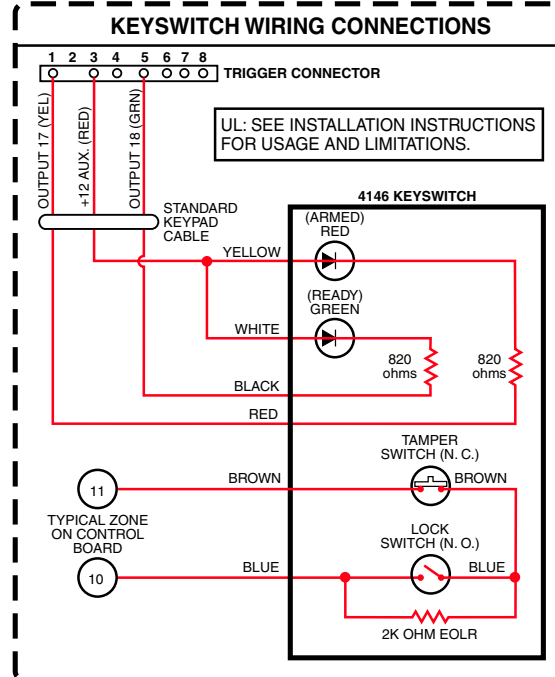
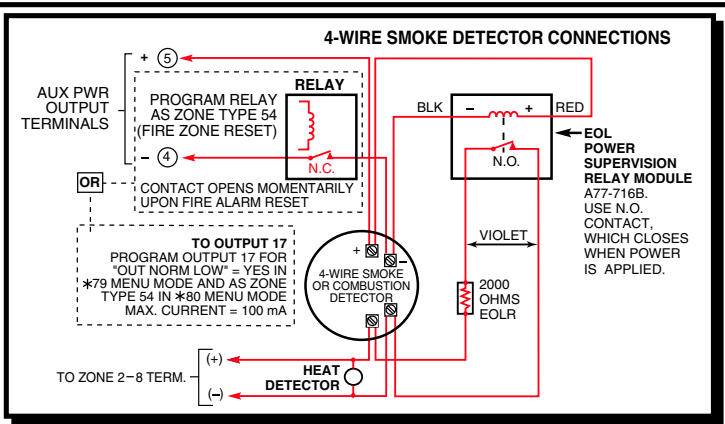
IMPORTANT: THE PANEL WILL NOT POWER UP INITIALLY ON BATTERY POWER ONLY. YOU MUST PLUG THE TRANSFORMER IN FIRST, AND THEN CONNECT THE BATTERY.



ECP AUX POWER OUTPUT

10.5-13.8VDC 600mA MAX. (500mA MAX. FOR UL INSTALLATIONS)

RED JUMPER CUT FOR BELL SUPERVISION. ALSO, CONNECT 2000 OHM RESISTOR DIRECTLY ACROSS SOUNDER AND ENABLE FIELD 9*

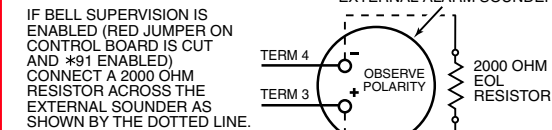


SOUNDER CONNECTION

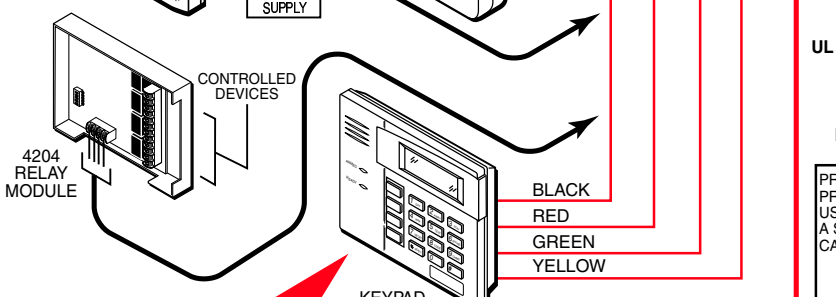
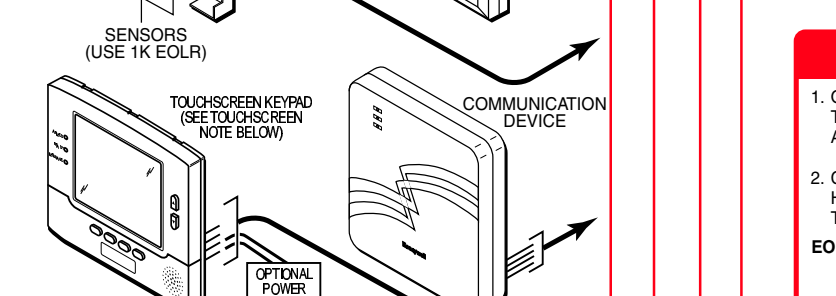
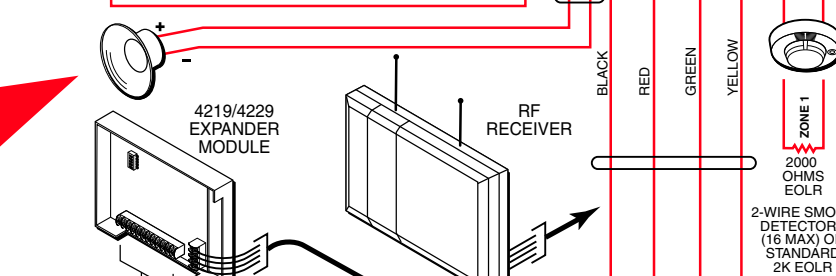
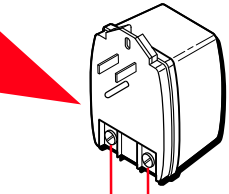
- CONNECT SOUNDER TO BELL TERMINALS 3 (+) AND 4 (-).
- SOUNDER ACTIVATES UPON ALARM EVENT.
- ALARM OUTPUT: 10.5-13.8VDC, 2A MAX. (600mA MAX. FOR UL USAGE, INCLUDING AUX POWER) STEADY FOR BURGLARY/PANIC, TEMPORAL PULSE SOUNDING FOR FIRE. UL: MUST BE A UL LISTED AUDIBLE SIGNAL APPLIANCE RATED FOR 10.2-13.8 VDC AND BE MOUNTED INDOORS.
- CAN USE ADEMCO No. 702 SIREN, OR 12V BELL.
- A BATTERY MUST BE INSTALLED BECAUSE THE BATTERY SUPPLIES THE CURRENT.

FOR SOUNDER SUPERVISION

UL: BELL SUPERVISION IS REQUIRED FOR FIRE ALARM INSTALLATIONS.



DO NOT CONNECT THE RESISTOR AT THE ALARM OUTPUT TERMINALS THEMSELVES!



KEYPADS AND ADDRESSABLE DEVICE CONNECTION

- CONNECT KEYPADS AND OTHER ADDRESSABLE DEVICES TO ECP TERMINALS 4-7. (SEE "SETTING KEYPAD ADDRESS BOX TO SET KEYPAD ADDRESSES.")

TOUCHSCREEN NOTE: TOUCHSCREEN KEYPADS MAY REQUIRE AN EXTERNAL POWER SUPPLY DUE TO AUX POWER LIMITATIONS.

- SET EACH MODULE'S ADDRESS ACCORDINGLY:

DEVICE	ADDRESS	DEVICE	ADDRESS
KEYPADS	16 - 23	5800TM	28 (PART. 1 ONLY)
4219, 4229	07 - 11	COMM DEVICE	03
4204	12 - 15	4286	04
RF RECEIVER	00	TOUCH SCREENS	V15P: 1, 2 V20P: 1, 2, 5, 6

HARDWIRE ZONE CONNECTION

- OPEN CIRCUIT DEVICES CONNECT IN PARALLEL ACROSS THE LOOP; FOR EOLR ZONES, CONNECT THE EOLR ACROSS THE LOOP WIRES AT THE LAST DEVICE.
- CLOSED CIRCUIT DEVICES CONNECT IN SERIES IN THE HIGH (+) SIDE OF THE LOOP; FOR EOLR ZONES, CONNECT THE EOLR IN SERIES FOLLOWING THE LAST DEVICE.

EOLR NOTE:

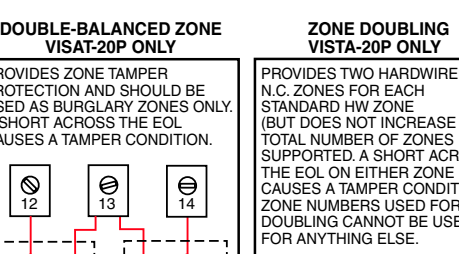
IF THE EOLR IS NOT AT THE END OF THE LOOP, THE ZONE IS NOT PROPERLY SUPERVISED AND THE SYSTEM MAY NOT RESPOND TO AN "OPEN" ON THE ZONE.

UL NOTE:

FOR UL COMMERCIAL BURGLARY ALARM INSTALLATIONS, USE EOLR ZONES.

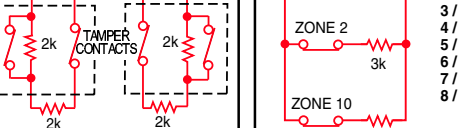
DOUBLE-BALANCED ZONE VISAT-20P ONLY

PROVIDES ZONE TAMPER PROTECTION AND SHOULD BE USED AS BURGLARY ZONES ONLY. A SHORT ACROSS THE EOL CAUSES A TAMPER CONDITION.

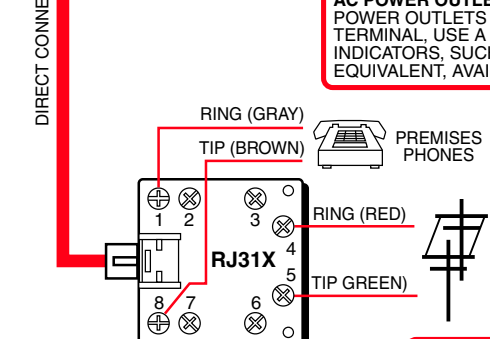


ZONE DOUBLING VISTA-20P ONLY

PROVIDES TWO HARDWIRED N.C. ZONES FOR EACH STANDARD HW ZONE (BUT DOES NOT INCREASE TOTAL NUMBER OF ZONES SUPPORTED. A SHORT ACROSS THE EOL ON EITHER ZONE CAUSES A TAMPER CONDITION. ZONE NUMBERS USED FOR DOUBLING CANNOT BE USED FOR ANYTHING ELSE.



DO NOT USE DOUBLE-BALANCED ZONES OR ZONE DOUBLING FOR FIRE ZONES.



PHONE CONNECTION

- CONNECT PHONE LINE DIRECT CONNECT CABLE WIRES TO TERMINALS 21-24 AS SHOWN. WIRE COLORS REPRESENT THE COLORS OF THE CABLE TO THE RJ31X JACK.
- CONNECT INCOMING PHONE LINE AND HANDSET WIRING TO THE MAIN TERMINAL BLOCK (VIA AN RJ31X JACK, CA38A IN CANADA) AS SHOWN.

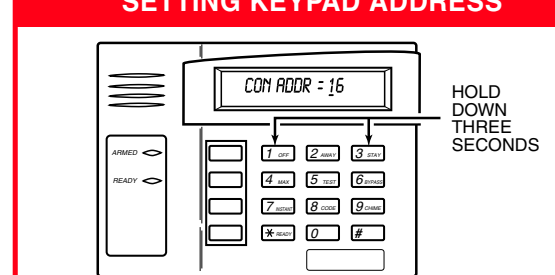
EARTH GROUND CONNECTION

THIS CONTROL DOES NOT NORMALLY NEED AN EARTH GROUND. IF DESIRED FOR ADDITIONAL PROTECTION, CONNECT TERMINAL 25 TO A GOOD EARTH GROUND. EXAMPLES OF GOOD EARTH GROUNDS:

METAL COLD WATER PIPE: USE A NON-CORROSIVE METAL STRAP (COPPER IS RECOMMENDED) FIRMLY SECURED TO THE PIPE TO WHICH THE GROUND LEAD IS ELECTRICALLY CONNECTED AND SECURED.

AC POWER OUTLET GROUND: AVAILABLE FROM 3-PRONG, 120VAC POWER OUTLETS ONLY. TO TEST THE INTEGRITY OF THE GROUND TERMINAL, USE A 3-WIRE CIRCUIT TESTER WITH NEON LAMP INDICATORS, SUCH AS THE UL LISTED IDEAL MODEL 61-035, OR EQUIVALENT, AVAILABLE AT MOST ELECTRICAL SUPPLY STORES.

SETTING KEYPAD ADDRESS



- POWER UP THE KEYPAD. WITHIN 60 SECONDS OF POWER-UP, PRESS AND HOLD DOWN THE [1] & [3] KEYS AT THE SAME TIME FOR 3 SECONDS.
- ENTER THE PROPER "TENS" DIGIT OF THE KEYPAD'S ADDRESS, THEN ENTER THE PROPER "ONES" DIGIT OF THE KEYPAD'S ADDRESS.

NOTE: FIRST KEYPAD IS ADDRESS 16

- PRESS [*] TO SAVE THE DISPLAYED ADDRESS AND EXIT ADDRESS MODE.