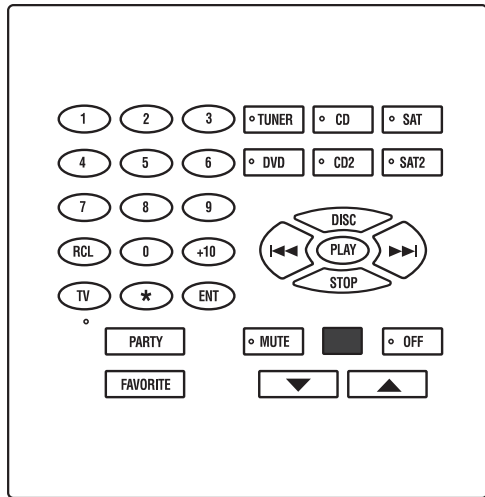
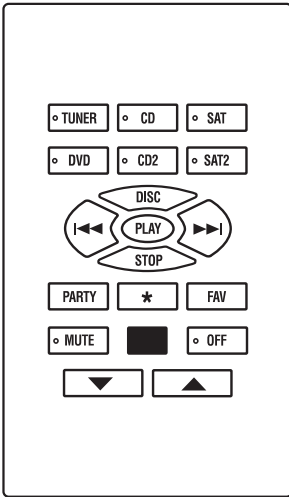


Z.200/201/250

200 Series Z-PADS INSTALLATION MANUAL



ELAN

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Introduction

200 Series Z•PADs are intelligent IR-learning keypads that provide user-friendly control of up to 12 Audio/Video components. When used in ELAN S6, S12, Z• or HD systems, these Z•PADs also give you control over the wide array of features these multi-source multi-zone systems offer. In addition, 200 Series Z•PADs may be used in any Stand-Alone application. The Z•200 is a single-gang in-wall keypad that features basic source control buttons in addition to all the buttons necessary for ELAN system control. The Z•200 is also available in a double-gang format with a blank Decora® opening that allows installation of a volume control next to the keypad (Model Z•201).

The Z•250 is a double-gang keypad that adds the convenience of a direct-access numeric keypad and additional one-button sequences.

All three models (Z•200, Z•201 and Z•250) accept the ELAN IR Tube: a screw-in, quick-connect IR receiver that allows the homeowner to control the entire system from a handheld remote control. The Z•250 also accommodates the ELAN Z•025 Speaker Relay/Audio Detect Module, which enables automatic speaker switching and muting in multiple rooms. Each Z•PAD features a screwless, snap-on wall plate that makes for an attractive on-wall appearance.

All 200 Series keypads ship with extra source-select buttons, plus additional function buttons, that allow you to customize the layout for each system. Also included is a snap-insert to protect the faceplate during installation/removal.

Note: Please see VIA!®TOOLS Help file for information about programming Z•PADS.

Installation

Rough-In Boxes

Z•200s mount in most 18 cu. in. single-gang plastic J-boxes. Z•201s and Z•250s will mount in most 32 cu. in. boxes. When installing a Z•201, some retrofit boxes may require that the small plastic 'lips' on the upper and lower right side of the box be trimmed off. The following rough-in boxes have been confirmed to work with 200 Series Z•PADs:

- | | | |
|--|--|---|
| <ul style="list-style-type: none"> • 1-Gang-New Construction
Carlton® A58381D 16.0 cu. in.
Carlton® B118A 18.0 cu. in.
Carlton® BH122A 22.0 cu. in.
Slater® S1-22-RU 22.5 cu. in.
Raco® 670 16.5 cu. in. | <ul style="list-style-type: none"> • 1-Gang-Retro
Carlton® B114R 14.0 cu. in.
Carlton® B120R 20.0 cu. in.
Slater® S1-18-W 18.0 cu. in. | <ul style="list-style-type: none"> • 2-Gang-New Construction
Carlton® BH235A 31.5 cu. in.
Raco® 8683/683 30.3 cu. in. (metal) • 2-Gang-Retro
Slater® S2-32-W 32.0 cu. in. |
|--|--|---|

Note: Please verify the internal interior dimension requirements before specifying or installing J-boxes!

Dimensions:

Z•200 (plastic face plate) 2 3/4" W x 4 11/16" H x 1/4" D off wall
 Z•201/Z•250 (plastic face plate) 4 9/16" W x 4 11/16" H x 1/4" D off wall
 In-Wall depth from front of drywall, including IR tube and/or Z025: 1 7/8"

Keypads should be mounted at the same height as the light switches in the home. In order to avoid Electro-Magnetic Interference (EMI), do not mount keypads close to light dimmers. Leave at least one stud-bay open between keypads and dimmers (leave more space if multiple dimmers are present). Do not mount keypads outdoors! Corrosion will damage them. **ELAN does not warrant 200 Series keypads for outdoor use.** Also, when installing keypads with IR receivers, avoid installing them in areas that will receive direct sunlight. Sunlight can flood the IR receiver and make the system inoperative.

Mud Rings

200 Series keypads DO NOT FIT IN STANDARD METAL MUD RINGS. Plastic retro-fit mud rings may be modified to accommodate 200 Series keypads by trimming off the plastic tabs.

'Tile Rings', available from most electrical distributors, are commonly used to trim out tile wall boxes where the four corners need to be perfectly square around the tile. These are very similar in function to metal mud rings. Two types, manufactured by Thomas & Betts (TNB), have been tested and confirmed as compatible with 200 Series keypads: TNB, Steel City® 52-C-49-1/2 (1/2"D, 1-Gang) and TNB Steel City® 52-C-52-1/2 (1/2"D, 2-Gang).

Plastic 'Square Covers', which are similar to Tile Rings (but constructed of plastic), will also work. Two that have been confirmed to work with 200 Series keypads are: Carlon® Square Cover A410 1/2"D 1-Gang and Carlon® Square Cover A420 1/2"D 2-Gang.

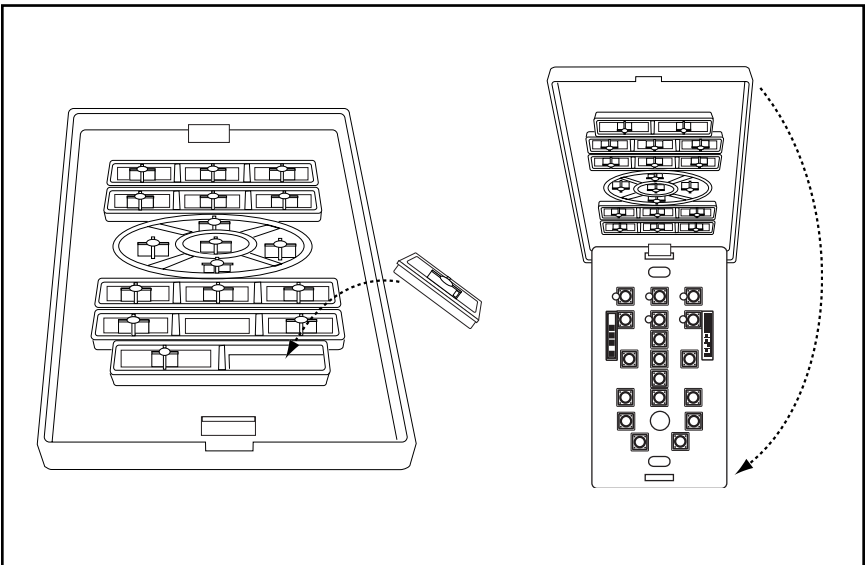
Note: Do not over-tighten screws when mounting ZPADs in a rough-in box or ring. This may cause the metal plate to bow inwards, resulting in the face plate not locking properly to the notches in metal plate. The face plate could inadvertently fall off if this occurs.

Custom Keycaps

Additional keycaps ship with 200 Series keypads in order to customize them to the homeowner's specifications.

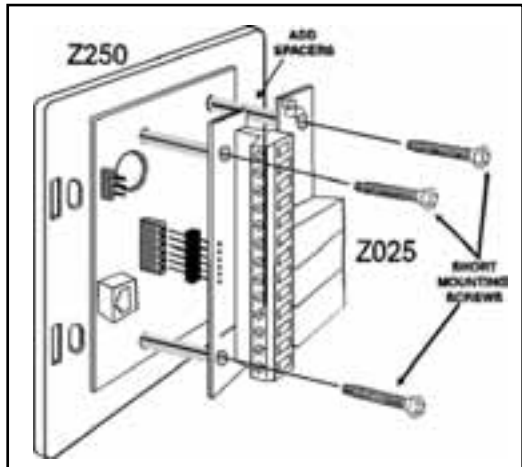
Use the following method to change keycaps:

1. Using a flat-head screwdriver, carefully remove the screwless face plate by inserting the head of the screwdriver into the slots located at the bottom of the keypad and gently prying upwards.
2. Keycaps are removed and inserted from the back of the face plate. Small indents keep the keycaps in place, making it easy to reassemble.
3. To replace the face plate, insert the top of the face plate into the metal front plate first, then carefully snap back into place.



Connecting a Z•025 Speaker Relay/Audio Detect Module to a Z•250

1. Remove the Z•025's connector. This provides easier access to the mounting holes.
2. Place the Z•250 face-down on a flat surface.
3. Align the 6-pin connector on the back of the Z•025 with the 6-pin jack located on the back of the Z•250 and carefully push the pins down into the jack.
4. Insert the three nylon spacers (included with the Z•025) between the Z•250 and the Z•025 and align them with the three mounting holes.
5. Insert the three short mounting screws through the three mounting holes on the Z•025.



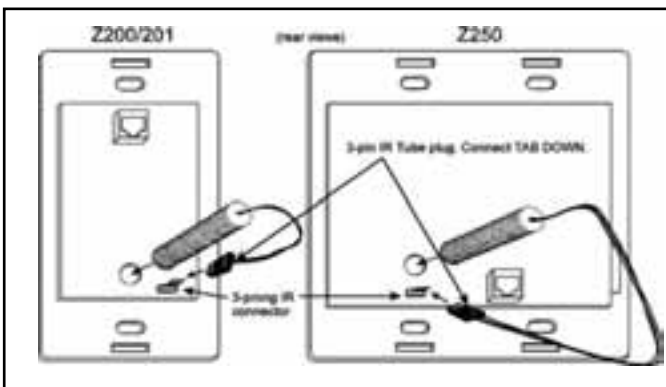
Note: The Z•025 ships with two sets of screws. The longer screws are for mounting the Z•025 to a Z•100 keypad.

6. Hand-tighten the screws two to three turns only. DO NOT OVERTIGHTEN. DO NOT MACHINE TIGHTEN. DOING SO CAN COMPRESS THE SPACERS AND CAUSE THE PC BOARDS TO BEND OR CRACK.

Please see the **Z•025 Installation Manual** for complete instructions on how to connect and configure a Z•025.

Connecting an IR Tube

1. Make sure that the keypad is not connected to the system.
2. Remove the screwless faceplate from the keypad.
3. Screw the IR Tube into the pre-threaded hole on the Z•200, Z•201 and Z•250 until it is flush with the metal front plate of the keypad. If the IR tube extends past the metal front plate of the keypad you will encounter problems replacing the faceplate.
4. Connect the IR Tube plug to the 3-pin connector on the keypad, making sure to line up the arrows on the plug and the connector.



Note: Make sure the IR Tube plug is connected Tab DOWN to the 3-prong jack. The arrows located on the 3-prong connector and on the Tab side of the IR Tube plug should line up.

Wiring

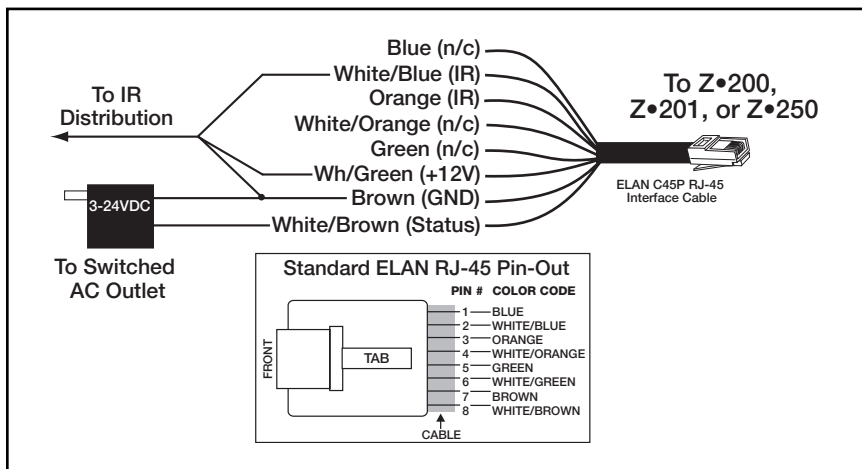
All 200 Series keypads have RJ45 jacks on the back to allow for easy connection. Run Cat-5 wire from the head-end location to each 200 Series keypad location. ELAN recommends the use of C45P RJ-45 interface cables when installing keypads. The RJ-45 pinout for each ELAN multi-room controller is included in the manual for that particular product.

Use of wire other than Cat-5 may produce undesired results (IR bandwidth can be narrowed or interference may occur). If using a Z•025 Speaker Relay/Audio Detect Module (w/ Z•250 ONLY), be sure to run all speaker wires through the keypad location (see the **Z•025 Installation Manual** for more details).

Note: Maximum keypad wire run is 500 feet.

Stand-Alone RJ-45 Pinout

When installing a 200 Series keypad in a system that does not contain an ELAN multi-room controller (stand-alone system), connect **IR** (Wh/Blue), **+12VDC** (Wh/Green), and **GND** (Brown) to an IR distribution block or +12 VDC power supply and IR emitters. If using the Status feature to detect system status, also connect **Status** (Wh/Brown) and **GND (Brown)** to a 3-24 VDC power supply to a switched AC outlet (such as a switched outlet on an A/V Receiver). The drawing below shows the RJ-45 color code and pinout for stand-alone applications.



Note: Please consult your ELAN multi-room controller Installation Manual for specific keypad connection details.

Programming

Although all Z•PADS come pre-programmed with ELAN default codes, it is necessary to program them in order to achieve full functionality. IR commands must be downloaded to each keypad from VIA!®TOOLS setup software for each source that will be controlled. Functionality will vary, depending on the needs of the homeowner. Consult the table on p. 5 for specific ELAN system commands.

Note: Keypads being installed into S12 systems MUST be programmed prior to use. Please see VIA!TOOLS Help file for detailed information about programming Z•PADS.

System Commands

The following table shows each system-level button and the ELAN default commands that are associated with that button. Any button that is not listed in the table is a normal button and can be programmed with a single IR code or a seven-step sequence.

Note: Please see VIA!®TOOLS Help file for information about programming Z•PADS.

Z•200/250 BUTTON	FUNCTION
Source 1-6	Selects Sources 1-6/Initiates Source-Select Sequence
OFF	Press once for Zone OFF. Press twice for System OFF.
MUTE	Zone MUTE ON/OFF toggle.
FAV	Source-Specific Sequence, one per source
PARTY	Global Sequence
*	Used to access secondary function for each button
*Source 1-6	Selects sources 7-12/Initiates Source-Select Sequence
*VOLUME UP	Whole-House Music ON
*VOLUME DN	Whole-House Music OFF
*MUTE	Do-Not-Disturb ON/OFF toggle
*FAV	Global Sequence
*PARTY	Global Sequence
*1 (Z•250 Only)	Bass UP (Z, S12, and HD only)
*4 (Z•250 Only)	Bass DOWN (Z, S12, and HD only)
*2 (Z•250 Only)	Treble UP (Z, S12, and HD only)
*5 (Z•250 Only)	Treble DOWN (Z and HD only)
*3 (Z•250 Only)	Loudness Contour ON/OFF toggle (Z only)
*6 (Z•250 Only)	Spatial Enhancement ON/OFF toggle (Z only)
*0 (Z•250 Only)	EQ Flat (Z, S12, and HD only)
*7 (Z•250 Only)	Global Sequence
*8 (Z•250 Only)	Global Sequence
*9 (Z•250 Only)	Global Sequence

Note:

The |<< and >>| buttons on the Z•200/201/250 correspond to the CNTL DOWN and CNTL UP buttons on the Z•100. The +10 button on the Z•200/201/250 corresponds to the FM/AM button on the Z•100. All other buttons match one-for-one.

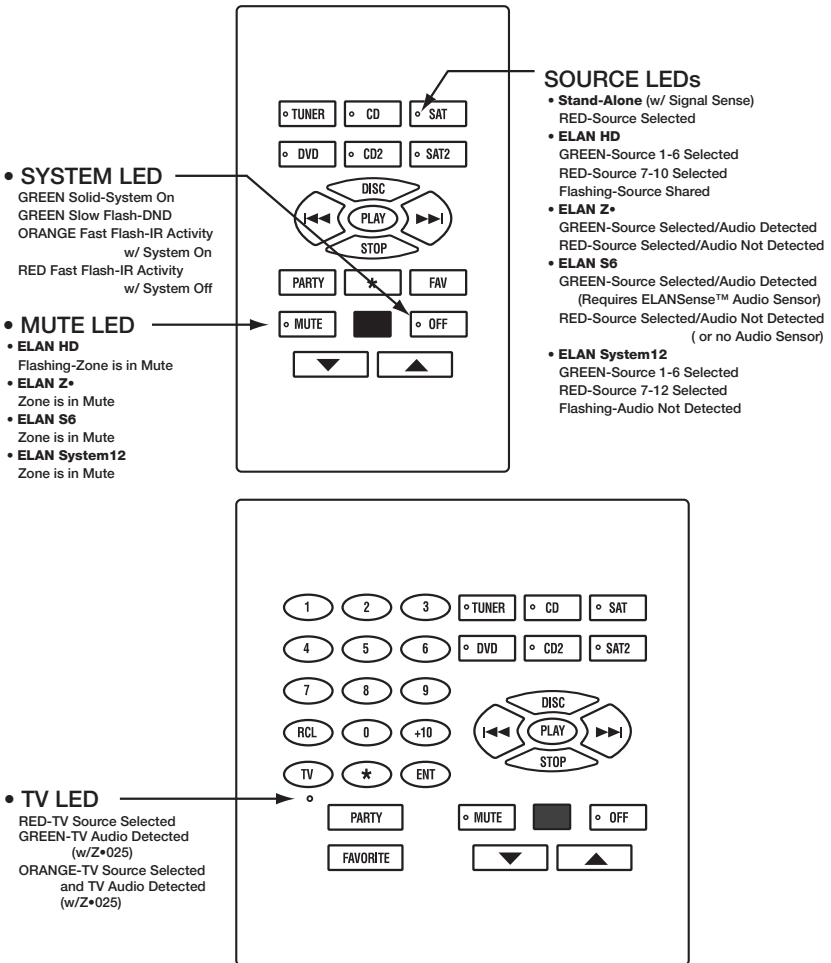
Status LEDs

Each 200 Series keypad has multi-colored LEDs that indicate various conditions of system status. The LEDs behave somewhat differently depending on what type of system (S12, Stand-Alone, etc.) is being controlled. Status LEDs are a function of VIA!TOOLS programming and dipswitch settings. A keypad will not show correct status indications if the dipswitches are in the wrong position. The diagram below shows the Status LED behavior for each system type. Please see **Dipswitch Settings** on p. 7.

The system types include:


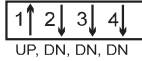


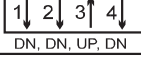
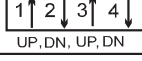
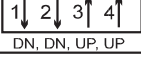
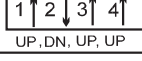
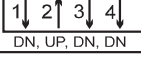
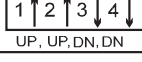
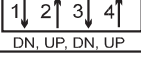
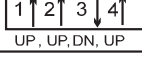
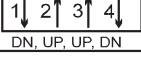
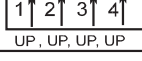
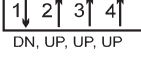
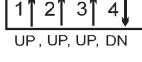
- **Stand-Alone** (w/ Signal Sense)
- **Stand-Alone** (w/out Signal Sense)
- **ELAN HD**
- **ELAN Z•**
- **ELAN S6**
- **ELAN System12**

Note: Please see VIA!TOOLS Help file for detailed information about programming Z•PADS.



Dipswitch Settings

Each possible application has specific dipswitch settings that will allow the LEDs on the front of the keypad to display various status activities. The table below shows the dipswitch setting for each system type.

Application	Dipswitch Setting	Application	Dipswitch Setting
Stand-Alone +12V Signal Sense Disabled	 DN, DN, DN, DN	Z•System Zone 7	 UP, DN, DN, DN
Stand-Alone +12V Signal Sense Enabled	 DN, DN, DN, UP	Z•System Zone 8	 UP, DN, DN, UP
Z•System/S6 Zone 1	 DN, DN, UP, DN	Z•System Zone 9	 UP, DN, UP, DN
Z•System/S6 Zone 2	 DN, DN, UP, UP	Z•System Zone 10	 UP, DN, UP, UP
Z•System/S6 Zone 3	 DN, UP, DN, DN	Z•System Zone 11	 UP, UP, DN, DN
Z•System/S6 Zone 4	 DN, UP, DN, UP	Z•System Zone 12	 UP, UP, DN, UP
Z•System/S6 Zone 5	 DN, UP, UP, DN	HD System	 UP, UP, UP, UP
Z•System/S6 Zone 6	 DN, UP, UP, UP	System12	 UP, UP, UP, DN

Limited Warranty

ELAN HOME SYSTEMS, L.L.C (ELAN) warrants Z•200, Z•201, and Z•250 keypads to be free from defects in materials and workmanship for two (2) years from date of purchase. If within the warranty period purchaser discovers such item was not as warranted above and promptly notifies ELAN in writing, ELAN shall repair or replace the items at the company's option. This warranty shall not apply (a) to equipment not manufactured by ELAN, (b) to equipment which shall have been installed by other than an authorized ELAN installer, (c) to installed equipment which is not installed to ELAN's specifications, (d) to equipment which shall have been repaired or altered by others than ELAN, (e) to equipment which shall have been subjected to negligence, accident, or damage by circumstances beyond ELAN's control, including, but not limited to, lightning, flood, electrical surge, tornado, earthquake, or any other catastrophic events beyond ELAN's control, or to improper operation, maintenance or storage, or to other than normal use of service. With respect to equipment sold by, but not manufactured by ELAN, the warranty obligations of ELAN shall in all respects conform and be limited to the warranty actually extended to ELAN by its supplier. The foregoing warranties do not cover reimbursement for labor, transportation, removal, installation, or other expenses which may be incurred in connection with repair or replacement. Except as may be expressly provided and authorized in writing by ELAN, ELAN shall not be subject to any other obligations or liabilities whatsoever with respect to equipment manufactured by ELAN or services rendered by ELAN.

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ATTENTION: TO OUR VALUED CONSUMERS

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