

**Linear** ACCESS<sup>®</sup>

## **Access Control Keypads**

**A wide range of choices for building  
single entry point systems.**



**New Models!**

**New Features!**

# With so many keypads, Linear makes it easy to build single entry point systems.



Linear's digital keyless entry systems are designed for single entry point access control applications. These keypads are typically used to activate automatic gates, electric door strikes, magnetic door locks, and solenoid locks. Access is granted to authorized personnel by entering an assigned code on the keypad.

Each keypad features courtesy lighting that illuminates the keypad during use (not available on the AK-31). The lighting is provided by long-life solid state white LEDs (except on the AK-11 and the AKR-1, which have incandescent lighting with an automotive grade bulb). The duration of the courtesy lighting is programmable.

## STANDARD FEATURES

- All programming is done at the keypad, no separate programmer is required
- Up to 480 programmable keypad entry codes
- Entry codes can be one to six digits long
- Four independent outputs (two relay and two solid-state)
- Output actions (timed or latch-on/latch-off toggle) programmable for each entry code independently
- Two status indicators to signal access, lockout, and aid in programming; one indicator is dual-color
- Tactile audible feedback ensures complete key presses
- Internal sounder has two selectable volume levels



## EXTENDED FEATURES

Each keypad model contains several extended features to customize the installation, and to provide detection of abnormal conditions for triggering security systems or activating other auxiliary devices.

**The SENSE input:** If programmed for "door sense," wiring the input to a door switch detects forced entry or door ajar conditions. If programmed for "inhibit", the input can be wired to service switch or timer to disable the main relay.

**The FORCED ENTRY output:** Activates if the door sense input detects that the door or gate was forced opened without authorized access being granted.

**The DOOR AJAR output:** Activates if the door or gate remains open for longer than 60 seconds after access is granted.

**The KEYPAD LOCKOUT output:** Activates when the keypad is "locked out" after too many incorrect entry code attempts.

**The KEYPAD ACTIVE output:** Activates when any keypad keys are pressed.

**The ALARM SHUNT output:** Allows shunting door or gate alarm contacts during authorized access.

**The REQUEST-TO-EXIT input:** Can be wired to an exit station pushbutton for codeless activation of the main relay, auxiliary relay, or either solid state output.

Other programmable features include: timed anti-passback to disable an entry code for a programmed time after use; auto-relock releases the main relay as soon as the door shuts; internal beeper can activate selectively for keystrokes and activation of each output.

The EEPROM memory retains all entry codes, programming, and all output toggle states (except on AK-2 & AKR-1) after power outages.

## SPECIFICATIONS

### MECHANICAL

AK-11:	4.00" W x 5.50" H x 3.00" D (101.6 W x 139.7 H x 76.2 D mm)
AK-2, AK-21W, AK-31:	3.00" W x 5.00" H x 3.00" D (76.2 W x 127 H x 76.2 D mm)
AKR-1	4.00" W x 7.00" H x 3.00" D (101.6 W x 177.8 H x 76.2 D mm)

### ELECTRICAL

Voltage:	12-24 Volts AC or DC (AC Supply must be isolated from access device)
Current:	
AK-11, AKR-1	10 mA typical, 150 mA maximum
AK-2, AK-21W, AK-31	30 mA typical, 150 mA maximum
Outputs:	
Main Relay:	Form "C" 5 Amps @ 28 Volts maximum
Auxiliary Relay:	Form "C" 1 Amp @ 28 Volts maximum
Solid State Outputs:	Short-to-common 100 mA @ 24 VDC maximum

### ENVIRONMENTAL

Temperature:	-22°F to +149°F (-30°C to +65°C)
Humidity:	5% to 95% non-condensing

## AK-11



### Exterior Surface Mount Keypad

- Rugged, cast aluminum enclosure
- Neoprene gasket seals out moisture
- For outdoor or indoor mounting on a wall or pedestal
- Key lock secures the keypad to mounting backplate
- Courtesy light illuminates the keypad when a key is pressed

## AK-2



### Interior Flush Mount Keypad With Interchangeable Bezels

- Attractive styling with interchangeable bezels: architectural bronze, white, almond, and satin chrome
- Brilliant white LED courtesy lights illuminate keys
- Rugged metal keys made to last
- Easy mounting in a single gang J-box
- Tamper-proof hex screws secure keypad to mounting backplate

## AK-21W



*Shown wet for effect*

### Exterior Flush Mount Keypad

- Weather-resistant design
- Clear plastic boot covers internal electronics
- Neoprene gasket seals out moisture
- Brilliant white LED courtesy lights illuminate keys
- Die-cast metal housing and keys
- Easy mounting in a single gang J-box
- Tamper-proof hex screws secure keypad to mounting backplate

## AK-31



### Interior Low Profile Flush Mount Keypad

- Lower cost interior keypad.
- Low profile design blends into wall
- Die-cast metal keys.
- Easy mounting in a single gang J-box

## AKR-1



### Exterior Surface Mount Keypad with Built-in MegaCode<sup>®</sup> Radio Receiver

- Built-in 318 MHz radio receiver for wireless transmitters
- Rugged, cast aluminum enclosure
- Neoprene gasket seals out moisture
- For outdoor or indoor mounting on a wall or pedestal
- Key lock secures the keypad to mounting backplate
- Courtesy light illuminates the keypad when a key is pressed
- Compatible with Linear's MGT gate safety edge transmitter

# With keypads, transmitters, and controllers, Linear makes it easy to build wireless entry system packages.



## From activation to operation, the solution to your entry requirements is all available from Linear

Since 1961, Linear's name has been synonymous with wireless remote controls and entry devices for activating all manner of access equipment.

With each passing decade, we've added more product lines and more capabilities. Access control, from telephone entry to stand-alone keypads. Garage door operators, belt and chain models, in a variety of horsepower choices, all in installer-friendly designs. Gate operators, for swing, slide, and barrier gates in a complete range of residential, commercial, and industrial applications. Commercial door operators jackshaft and drawbar, for roll-up and high-lift doors. Add in a field network known for dedicated customer support and your best entry systems resource is all available from Linear.

- Ideal for apartments, office buildings, commercial parking, gated communities, and industrial sites
- Secure alternative to traditional keypads (no hard wiring for intruders or vandals to short out)

Create wireless entry system packages using Linear's AP-5 Multi-purpose Wireless Access Controller with one or more MDKP Wireless Keypads and portable MegaCode transmitters.

The MDKP transmits a unique MegaCode signal for each 1-6 digit entry code entered at the keypad. The built-in radio transmitter sends a signal to the AP-5 controller to request access. The MDKP can be illuminated with the built-in courtesy light for use at night or in dark areas. The surface mount keypad can be wall or a pedestal mounted.

The AP-5 is designed for a broad range of access control applications. Its wireless design and small size make it easily adaptable for a variety of access control requirements. Typically, the AP-5 is used to control one or two door strikes, barrier gates, automatic gates, or door operators.

The AP-5 contains a high-gain superheterodyne UHF receiver which uses an external antenna to pick up signals from up to 500 feet away. Up to 480 Linear MegaCode transmitters or 238 MDKP keypad entry codes, and six Model MGT gate safety edge transmitters can be programmed into the AP-5's memory.

### MDKP FEATURES

- 1-6 digit keypad entry codes
- Long-life lithium battery
- Rugged cast aluminum housing
- Built-in courtesy light

### AP-5 FEATURES

- Easy to program and use
- Easy to add or suspend transmitters and entry codes
- Compatible with up to six MGT gate safety edge transmitters



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