

# CONTROLLERS

## AccessKey Digital Keypad Entry System Model AK-1



- Self-contained keyless entry system ideal for airports, hospitals, warehouses, office buildings, parking lots, and many other commercial facilities.
- Rugged, cast aluminum enclosure for indoor or outdoor mounting on a wall or pedestal.
- Four independent outputs and timers: two form C relays and two solid-state open collector outputs.
- Up to 480 programmable input codes of one to six digits each for activating either or both relays.
- Two LED indicators show system status.
- Key operating features include: door sense input; inhibit input; request-to-enter input; alarm shunt output; timed anti-passback; and keypad lockout.
- Down light illuminates whenever keypad is used.
- Tactile and audible feedback when keys are pressed.
- Keylock secures keypad to mounting backplate.

Linear's AccessKey digital keypad entry system is an excellent way to control access at a single entry point for facilities with up to 480 users. Each user is assigned a personal identification number (PIN) — keypad entry of a valid one-to-six-digit code activates either or both of AccessKey's relays, which in turn, performs an action, such as releasing a door strike/magnetic lock or triggering a gate operator.

AccessKey is engineered for extended service, indoors or outdoors, in tough, commercial environments. The keypad is housed in a rugged, cast aluminum enclosure that can be mounted to a pedestal or bolted directly to a wall. A keylock secures it to its mounting backplate. Its die-cast keys feature bright, durable, easy-to-read, yellow graphics.

Operation of AccessKey is simple. Pressing any key activates a down light that stays lit for two minutes. Additional verification of key presses is provided by both audible and tactile feedback. If the user presses a wrong key, the \* key can be used to reset and start over. When a valid 1-6 digit PIN is entered, AccessKey's power LED

indicator turns from red to green and the programmed relay activates for the programmed time. Too many incorrect PIN entries will cause a lockout condition indicated by a separate yellow LED. A security feature called "anti-passback" prevents use of the same code twice before a programmed time period elapses.

The system features four independent outputs with four independent timers. Output #1 is a 5 Amp Form "C" relay with N.O./N.C. contacts @ 24 Volts maximum. Output #2 is a 1 Amp Form "C" relay with N.O./N.C. contacts @ 24 Volts maximum. Outputs #3 and #4 are solid-state open collector outputs, short-to-common, 100 mA @ 30 Vdc maximum, which can be used to activate a variety of indicators or sounders.

Many input/output programming options are available. For instance, AccessKey's door sense/inhibit input offers a choice: if programmed for "door sense," it causes a switch on the door to detect forced entry or door ajar situations; if programmed for "inhibit," it can be wired to a service switch or automatic timer that will disable relay #1 as required. The system also has a request-to-enter input that can be wired to a pushbutton or fire access keyswitch to provide "codeless" entry for authorized personnel.

When AccessKey grants access, its alarm shunt output is activated. It can be wired to shunt alarm contacts on the door or gate to prevent triggering of an alarm when



authorized access occurs.

The system's two solid-state outputs can switch 100 mA to common and are programmable to signal forced entry, door ajar, lockout, alarm circuit shunting, request-to-enter, and keypad active conditions.

Other operating features programmable from the system's keypad include: system reset key or keys (\* or \* 9 #); entry code length (1 to 6 digits); adding a new PIN; erasing a single PIN; erasing all PINs; changing master programming code; on-time for each of the four outputs; beep sounds on key presses; beep sounds during each of the four outputs; keypad lockout on specified number of incorrect PIN attempts (from 2 to 7); and anti-passback time period (from 1 to 4 minutes or no anti-passback protection).

AccessKey is powered from a 12-24 Vac or Vdc source. Its power can be obtained from the access device or a separate power supply. AccessKey uses EEPROM memory, so all entry codes and programming are retained, even without power.

## General Specifications

### MECHANICAL

**Dimensions:** 4.00 in W x 5.50 in H x 3.00 in D (101.6 x 139.7 x 76.2 mm)

### ELECTRICAL

**Voltage:** 12-24 Volts ac or dc (ac supply must be transformer isolated)

**Current:** 10 mA typical, 150 mA maximum

**Outputs:** Relay #1, Form "C" 5 Amps @ 24 Volts maximum; Relay #2, Form "C" 1 Amp @ 24 Volts maximum; solid-state outputs (Outputs #3 and #4), short-to-common 100 mA @ 30 Vdc maximum

### ENVIRONMENTAL

**Temperature:** -20°F to +130°F (-29°C to +54°C)

**Humidity:** 5% to 95% non-condensing

