

Linear ACCESS

MEGACODE®

AP-3

Wireless Access Control Receiver

Installation Instructions



Linear®

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INTRODUCTION

The AP-3 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-3 is used to control a door strike, barrier gate, automatic gate or automatic door operator.

The AP-3 contains a high-gain UHF receiver which uses an external antenna to pick up signals from up to 250 feet away. Up to 339 Linear MegaCode® Format transmitters and one Model MGT safety edge transmitter can easily be programmed into the AP-3's memory. The AP-3 will retain its memory, even without power.

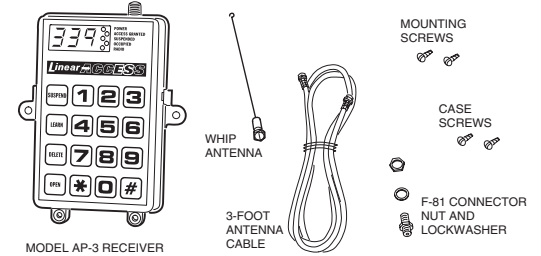
Two dry contact relay outputs are standard. One relay is the ACCESS RELAY, which triggers for two seconds each time a programmed transmitter is activated. This relay output connects to the pushbutton or radio input of the access device. The second relay is the OBSTACLE RELAY, which triggers for two seconds when an obstacle signal is sent from a Model MGT safety edge transmitter. This relay output connects to the obstacle input of the access device with an external pushbutton or keyswitch.

The AP-3 can be powered from 12-24 Volts AC or DC. The Form C relay outputs can switch up to 1 Amp each. An EARTH GROUND terminal is provided as an optional connection for maximum lightning and static protection.

Five special utility functions can be displayed by pressing the pound (#) key then the

digits 1-5. The utility functions display the status of the obstacle transmitter, the number of empty programming locations, the total number of transmitters programmed, first available programming location and firmware version number.

The AP-3 can fully supervise the MGT safety edge transmitter. The system monitors the MGT transmitter for hourly status reports, tamper signals and low battery signals. A beep will sound every 5 seconds if a fault occurs and the trouble source can be displayed by pressing pound (#)-1. For a trouble indication, a transmitter must be activated twice to trigger the ACCESS RELAY if a supervisory condition exists on the MGT transmitter.



SAFETY WARNINGS



WARNING

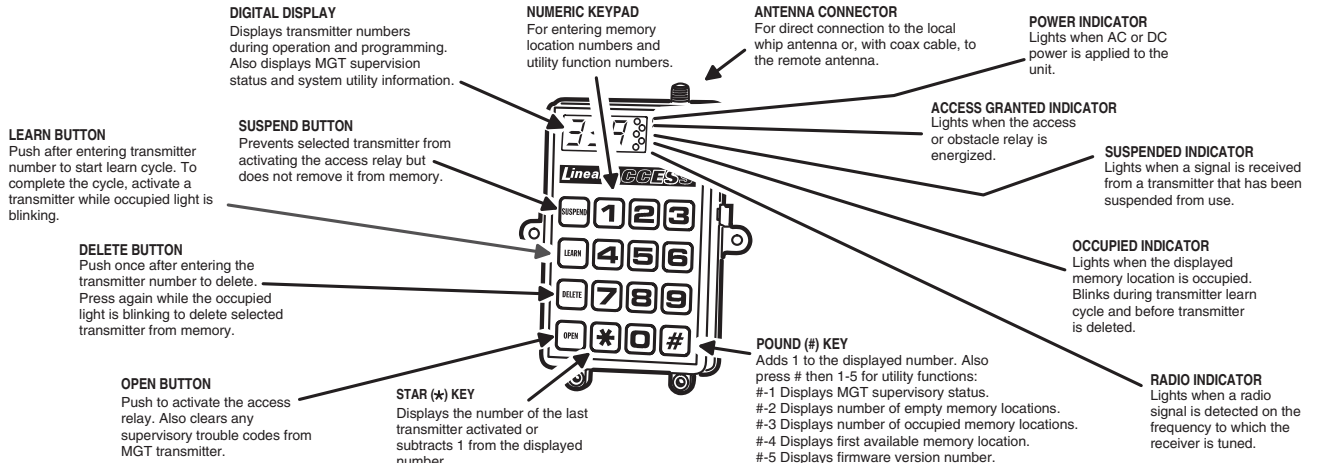
MOVING DOOR OR GATE CAN CAUSE SERIOUS INJURY OR DEATH



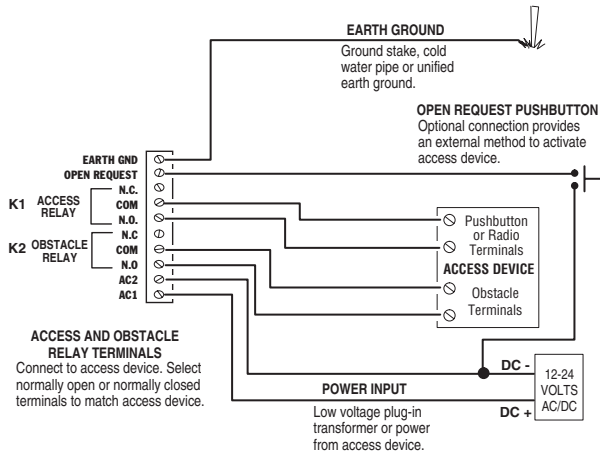
STAY CLEAR OF MOVING PARTS IF UNIT IS MOUNTED INSIDE DOOR OR GATE OPERATOR!

LEARNING OR DELETING TRANSMITTERS IN THIS UNIT MAY CAUSE OPERATION OF DOOR/GATE MOTOR. STAY CLEAR OF DOOR/GATE OR DISCONNECT RELAY WIRES WHEN LEARNING OR DELETING TRANSMITTERS.

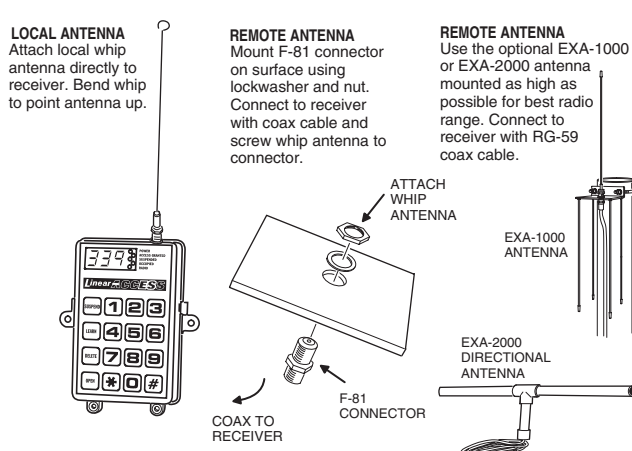
AP-3 FEATURES



ELECTRICAL CONNECTIONS

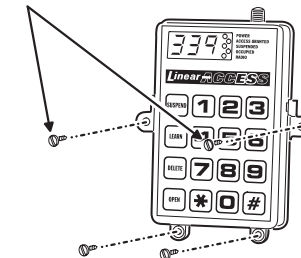


ANTENNA INSTALLATION



RECEIVER INSTALLATION

MOUNT RECEIVER USING THE TWO SCREWS PROVIDED



SECURE CASE CLOSED USING THE TWO SCREWS PROVIDED

1. Mount receiver in an area protected from the elements.
2. If using the local whip antenna, the higher the receiver is mounted, the better the radio range will be.
3. Optionally, mount the receiver in a metal cabinet and use an external antenna.

LEARNING TRANSMITTERS

2 **3** ENTER THE NUMBER (1 TO 339) OF AN EMPTY MEMORY LOCATION

LEARN PRESS **LEARN** BUTTON

OCCUPIED LIGHT WILL BLINK FOR 20 SECONDS IF MEMORY LOCATION IS EMPTY

ACTIVATE THE TRANSMITTER WHILE **OCCUPIED** LIGHT IS BLINKING

OCCUPIED LIGHT WILL LIGHT STEADY WHEN TRANSMITTER IS LEARNED

DELETING TRANSMITTERS

2 **3** ENTER THE NUMBER (1 TO 339) OF THE MEMORY LOCATION TO CLEAR

DELETE PRESS **DELETE** BUTTON

OCCUPIED LIGHT WILL BLINK FOR 2 SECONDS IF MEMORY LOCATION IS OCCUPIED

DELETE PRESS **DELETE** AGAIN WHILE **OCCUPIED** LIGHT IS BLINKING TO ERASE TRANSMITTER FROM MEMORY

OCCUPIED LIGHT WILL GO OUT WHEN TRANSMITTER HAS BEEN DELETED

SUSPENDING TRANSMITTERS

2 **3** ENTER THE NUMBER (1 TO 339) OF AN OCCUPIED MEMORY LOCATION

OCCUPIED LIGHT WILL LIGHT STEADY FOR 2 SECONDS IF MEMORY LOCATION IS OCCUPIED

SUSPEND PRESS **SUSPEND** BUTTON

SUSPENDED AND **OCCUPIED** LIGHTS WILL LIGHT STEADY WHEN THE TRANSMITTER HAS BEEN SUSPENDED

NOTE: TO "UNSUSPEND" THE TRANSMITTER, ENTER SUSPENDED TRANSMITTER NUMBER AND PRESS SUSPEND.

LEARNING MGT TRANSMITTERS

9 **9** **9** ENTER MEMORY LOCATION NUMBER 999 TO LEARN MGT SUPERVISED OBSTACLE TRANSMITTER

LEARN PRESS **LEARN** BUTTON

OCCUPIED LIGHT WILL BLINK FOR 2 SECONDS IF MEMORY LOCATION IS EMPTY

ACTIVATE THE MGT TRANSMITTER WHILE **OCCUPIED** LIGHT IS BLINKING

OCCUPIED LIGHT WILL LIGHT STEADY WHEN TRANSMITTER IS LEARNED

MGT TRANSMITTER SUPERVISION

**1** IF RECEIVER IS BEEPING EVERY FIVE SECONDS, PRESS #-1 TO DISPLAY THE MGT SUPERVISORY CODES (MULTIPLE CODES CAN BE DISPLAYED)

"L" INDICATES A LOW MGT TRANSMITTER BATTERY

"F" INDICATES AN MGT TAMPER OR LOOP FAULT CONDITION

"S" INDICATES THAT HOURLY STATUS REPORTS HAVE NOT BEEN RECEIVED FROM THE MGT FOR FOUR HOURS

OPEN AFTER SERVICING FAULT, PRESS **OPEN** TO SILENCE BEEPER AND RESET THE RECEIVER DISPLAYS

NOTE: IF SUPERVISION SOUNDER IS NOT REQUIRED, SUSPEND MGT TRANSMITTER (#999). SUPERVISION CODES CAN STILL BE DISPLAYED. THIS WILL ALSO DISABLE THE REQUIREMENT OF PRESSING A TRANSMITTER TWICE TO TRIGGER THE ACCESS RELAY DURING A SUPERVISORY CONDITION.

SYSTEM TESTING

ACTIVATE A LEARNED TRANSMITTER AND VERIFY THAT THE ACCESS DEVICE OPERATES

IF MGT OBSTACLE TRANSMITTER IS USED, RUN ACCESS DEVICE AND TRIGGER OBSTACLE SENSOR. VERIFY THAT ACCESS DEVICE REVERSES

IF AN OPEN REQUEST PUSHBUTTON IS INSTALLED, PRESS IT AND VERIFY THAT THE ACCESS DEVICE OPERATES

KEY UTILITIES

THESE HANDY UTILITY FUNCTIONS CAN SPEED SYSTEM PROGRAMMING AND MAINTENANCE

**1** DISPLAYS THE MGT SUPERVISORY CODES

**2** DISPLAYS THE NUMBER OF EMPTY MEMORY LOCATIONS

**3** DISPLAYS THE NUMBER OF OCCUPIED MEMORY LOCATIONS

**4** DISPLAYS THE FIRST AVAILABLE EMPTY MEMORY LOCATION

**5** DISPLAYS THE VERSION NUMBER OF THE AP-3 FIRMWARE

***** WHEN DISPLAY IS BLANK, DISPLAYS THE NUMBER OF THE LAST TRANSMITTER ACTIVATED, OR SUBTRACTS 1 FROM THE DISPLAYED NUMBER

WHEN DISPLAY IS BLANK, PRESS # BEFORE PRESSING UTILITY FUNCTION NUMBER, OR ADDS 1 TO A DISPLAYED NUMBER

SPECIFICATIONS

Size: 4.5" W x 6.0" H x 1.5" D

Supply Voltage: 12-24 Volts AC or DC

Operating Current: 250 mA Maximum

Operating Temperature Range: -22° to +158° F (-30° to +70° C)

Sensitivity: -94 dBm Minimum

Bandwidth (3 db): 4 MHz Typical

Frequency: 318 MHz

Relay Contact Rating: 1 AMP @ 24 Volts AC or DC

LINEAR LIMITED WARRANTY

This Linear product is warranted against defects in material and workmanship for twelve (12) months. The Warranty Expiration Date is labeled on the product. **This warranty extends only to wholesale customers** who buy direct from Linear or through Linear's normal distribution channels. **Linear does not warrant this product to consumers.** Consumers should inquire from their selling dealer as to the nature of the dealer's warranty, if any. **There are no obligations or liabilities on the part of Linear corporation for consequential damages arising out of or in connection with use or performance of this product or other indirect damages with respect to loss of property, revenue, or profit, or cost of removal, installation, or reinstatement.** All implied warranties, including implied warranties for merchantability and implied warranties for fitness, are valid only until Warranty Expiration Date as labeled on the product. **This Linear Corporation Warranty is in lieu of all other warranties express or implied.** For warranty service on Linear equipment return product, at sender's expense to:

All products returned for warranty service require a Return Product Authorization Number (RPA#). Contact Linear Technical Services at 1-800-421-1587 for an RPA# and other important details.

IMPORTANT !!!

Linear radio controls provide a reliable communications link and fill an important need in portable wireless signaling. However, there are some limitations which must be observed.

- * For U.S. installations only: The radios are required to comply with FCC Rules and Regulations as Part 15 devices. As such, they have limited transmitter power and therefore limited range.
- * A receiver cannot respond to more than one transmitted signal at a time and may be blocked by radio signals that occur on or near their operating frequencies, regardless of code settings.
- * Changes or modifications to the device may void FCC compliance.
- * Infrequently used radio links should be tested regularly to protect against undetected interference or fault.
- * A general knowledge of radio and its vagaries should be gained prior to acting as a wholesale distributor or dealer, and these facts should be communicated to the ultimate users.