KPX-34-ERM3

Encoded Keyless Entry® Access Control System

INSTALLATION & INSTRUCTION MANUAL

ESSEX ELECTRONICS INCORPORATED

KPX-34-ERM3 Encoded Keyless Entry®
Access Control System

Document Information
IOMKPX34ERM Installation/Operations Manual for the KPX-34-
ERM3 Keypad with Encoded Relay Module (ERM) - July 2006.
*This documentation is also applicable to prior revisions except
where noted.*

Trademarks
Keyless Entry® is a registered trademark of Essex Electronics, Inc.
ProxCard® II ("card") is a registered trademark of HID Corporation.

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Introduction

■ Overview – The KPX-34-ERM3 Series

The Essex KPX-34-ERM3
Encoded Keyless Entry® Access
Control System is an extremely
versatile, 500 user code, keyless
entry system that combines an
Essex Piezoelectric Keypad with
HID Proximity and an Encoded
Relay Module (ERM).

■ 3x4 Keypad & Prox Reader
(left) with ERM (upper right)

K-Prox with ERM

■ Part Numbers

3x4 Keypad with ERM

KPX-34B-ERM3	Brass Finished* Bezel
KPX-34S-ERM3	Stainless Steel Bezel
KPX-34K-ERM3	Black Bezel

*Bezel is brass in appearance. Actual bezel is PVD-coated stainless
steel.

■ Specifications

Input Voltage:		12 to 24V AC/DC
Standby Current Draw:		120mA with illumination (incl. Keypad) 90mA w/o illumination (incl. Keypad)
Outputs:		3 SPDT Relays rated 6A at 120VAC
Keypad Switch Life:		>1 Billion Cycles
Keypad Operating Environment:		-40°C to +70°C (-40°F to +160°F), 100% Relative Humidity
3x4 Keypad:	Dimensions-	5-1/8"H x 3-3/8"W x 7/16"D (13 x 8.6 x 1.1 cm)
	Weight-	16 oz (454 g)
Prox Reader:	Dimensions-	7-1/4"H x 3-5/8"W x 1-3/16"D (18.4 x 9.2 x 3.0 cm)
	Weight-	10.3 oz (292 g)
3x4 Keypad & Prox Reader:	Dimensions-	7-1/4"H x 3-5/8"W x 1-1/2"D (18.4 x 9.2 x 3.8 cm)
	Weight-	26.3 oz (745 g)
ERM:	Dimensions-	5-1/2"H x 7-1/2"W x 2-1/2"D (14 x 19.1 x 6.4 cm)
	Weight-	16 oz (454 g)
LED's:		1 Red, 1 Green
Communication:		COM Port (Serial)*

*The ERM contains a serial interface to connect a computer for programming (see page 13) and reading codes or to a printer for real-time print-out of activities. A serial cable or serial to USB cable is required and not included.

■ ERM Configuration

Input Requirements

The ERM accepts 12 - 24V AC/DC. An optional battery charging module and rechargeable gel cells are available to keep the system operational for up to 50 hours during a power interruption. System and Keypad current draw (max) is as follows:

- Standby: 120mA
- During Operation: 230mA

Output Capabilities

Main Relay
The Main Relay will activate either a Fail-Safe or a Fail-Secure (Non Fail-Safe) electronic locking device or other equipment. It may also be configured as a dry contact relay output to control a gate operator or garage door opener (Set Door Open Time to 1 second). The main output is programmable from 01 to 99 seconds with optional timed or manual latching.

Output A
A Relay Contact output that can be programmed for one of the following:

1. CCTV or Light Controller - First key press or ProxCard® II ("card") presentation to the K-Prox label area triggers a Timed Output (1 to 99 seconds).

2. Auxiliary Output - Manual Control or Timed Output (1 to 99 seconds).

3. Second Door - Users can be assigned to open a 2nd door.

4. Doorbell - Press # at the Keypad to trigger a 1 second output for a doorbell (not included).

Output B

A Relay Contact output that can be programmed for one of the following:

1. CCTV or Light Controller - First key press or card presentation to the K-Prox label area triggers a Timed Output (1 to 99 seconds).

2. Auxiliary Output - Manual Control or Timed Output (1 to 99 seconds).

3. Third Door - Users can be assigned to open a 3rd door.

4. Internal Alarm System - Detect Break-in, Door-ajar & Tamper.

5. Doorbell - Press # at the Keypad to trigger a 1 second output for a doorbell (not included).

■ Keypad Connector Diagram

CONFIGURATION PINS- "CONFIG"

VOLTAGE SELECT
(Do NOT apply voltage)
12-24V (default)- Jumper on one pin only

YELLOW- Anti Tailgate/Internal Alarm (Do NOT apply voltage)

GRAY*

BLACK*- Ground

SHIELD*

ORANGE*

RED*- Input Voltage

VIOLET*

GREEN*

*Connect to ERM inputs.
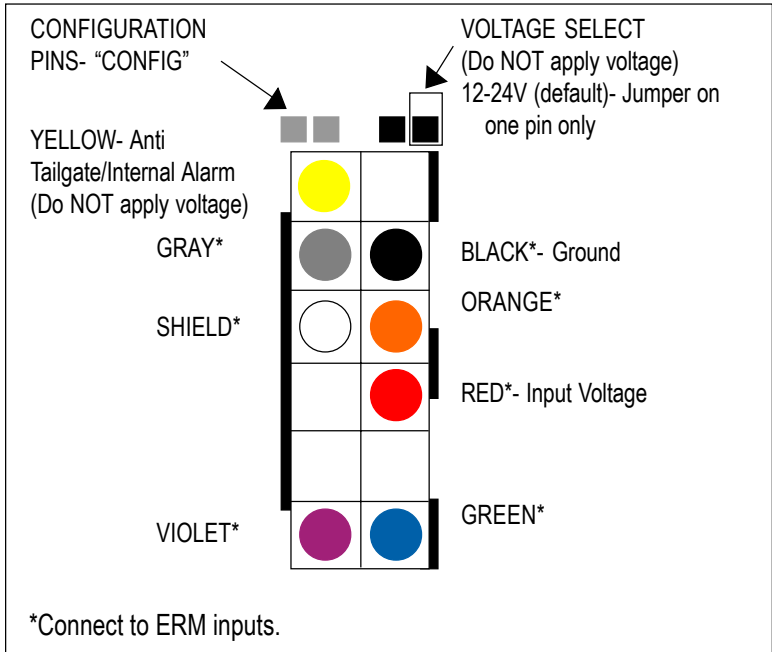
The 5 wire harness connects the Keypad to the Prox Reader.

YELLOW- Anti Tailgate
If not used, this must be connected to BLACK. By adding a door monitor switch between YELLOW and BLACK, the door will relock immediately after opening. If Output B is set up as Internal Alarm, this switch will trigger the alarm if the door is opened without a code or if the door is left open longer than the Door Ajar Time setting.

RED, BLACK, GREEN, VIOLET, GRAY, ORANGE and SHIELD-
These wires all connect to the ERM module.

Security Level - Enabled

If SECURITY LEVEL is enabled in Set up (page 20):

When the CLOCK terminal on the ERM circuit is connected to ground (through time clock or other switch contacts), users who are "non-exempt" and were assigned both a code and card can use either to enter. Those who were assigned only a card or a code can also enter.

When the input is NOT grounded, only non-exempt users assigned both a code and a card can enter by using both.

In other words, "grounded" is low level security; only one form of ID is needed. "Not grounded" is high level security; two forms of ID are needed.

Security Level - Disabled

If SECURITY LEVEL is disabled:

Whether the CLOCK terminal is connected to ground or not grounded, "non-exempt" users with both a card and a code can get in by using both. All other non-exempt users are locked out.

When programming Individual Users (page 21), assigning the Exempt from Security Level User Authorization Code (7#) exempts a User from the security level. All "exempt" users can get in with either a code or a card no matter what the security level is set for.

■ K-Prox Configuration

Voltage Selection

The factory default setting for the Keypad and Prox Reader voltage is 12-24VDC. Verify that the jumpers are removed or placed over only one pin. Do not set either for 5V.

Keypad Output Selection

Once the voltage jumper is verified or correctly set:

1. Remove power.

2. Jumper the two pins above the connector labeled "CONFIG."

3. Apply appropriate power. (You should hear 4 beeps and the RED LED will flash and the GREEN LED will be solid).

4. Now that the Keypad is in configuration mode, enter 98 followed by #. You should hear 3 beeps indicating successful configuration. If you hear a long error beep, re-enter 98 followed by #. To change the audible beep, proceed as follows. Otherwise, go to Step 5.

    To change the audible beep, enter

Code	Audible Beep
201 #	Normal Beep (factory default)
200 #	Short Click (quieter)

5. Remove power.

6. Remove configuration jumper.

7. Re-apply power.

8. Press PROGRAM button in the ERM to establish the encoded connection. This will put the system into setup mode.

9. Press * * to exit.

> **IMPORTANT**: Once the configuration is selected, you must remove power, remove the configuration jumper and then re-apply power in order to complete the configuration procedure. Note: If the configuration jumper is not removed, the LED's will flash and the Keypad will beep continuously.

Keypad Reset

In certain cases you may want to erase all user codes and restore system defaults. To perform this procedure:

> **CAUTION**: This procedure completely erases the memory and restores factory defaults! Once the memory is cleared, all programmed User Codes are erased and factory default settings are restored.

1. Remove power.

2. Jumper the two pins above the connector labeled "CONFIG."

3. Apply appropriate power. (You should hear 4 beeps and the RED LED will flash and the GREEN LED will be solid).

4. Once the Keypad is in configuration mode, enter 0099#. The Keypad will beep twice and both LEDS will flash for approximately 10 seconds. (During this time, the Keypad will appear dead. Do NOT remove power!)

5. Enter 98 followed by #. You should hear 3 beeps indicating successful configuration. If you hear a long error beep, re-enter 98 followed by #. To change the audible beep, proceed as follows. Otherwise, go to Step 6.

   To change the audible beep, enter the code as follows:

Code	Audible Beep
201 #	Normal Beep (factory default)
200 #	Short Click (quieter)

6. Remove power.

7. Remove configuration jumper.

8. Re-apply power.

9. Press PROGRAM button in the ERM to establish the encoded connection. This will put the system into setup mode.

10. Press * * to exit.

Normal System Operation

When the system is first powered up (or when communication is broken between the Keypad and the ERM3 module), the PROGRAM button in the ERM must be pressed to establish the encoded connection. This also puts the system into setup mode. To end setup, press * * to exit. Or, the system will automatically exit programming if no entries are made for 30 seconds.

■ Keypad LED Status Indicators

- ■ A flashing green LED indicates that the door is unlocked (momentarily).
- ■ A solid green LED indicates that the door is unlocked (latched).
- ■ A solid red LED indicates that the door is locked.

Depending on how the System Options are configured, User Commands are used to operate Manual Latching. The User Commands are trailing digits entered after an authorized user code followed by # (enter) or card. The ability to use these User Commands depends on authorizations assigned to each User (see page 13 or pages 21-22).

As the Main Output activates, the green LED will flash for 5 seconds. While the green LED is flashing, enter one (or more) of the following User Commands:

0 # to Latch the Door Closed (Main Relay, 2nd Door or 3rd Door)
1 # to Latch the Door Open (Main Relay, 2nd Door or 3rd Door)
2 # to Turn Output A OFF (2nd Output as Aux.)
3 # to Turn Output A ON (2nd Output as Aux.)
4 # to Turn Output B OFF (3rd Output as Aux.)
5 # to Turn Output B ON (3rd Output as Aux.)

■ Tamper Alarm

An audible Tamper Alarm sounds when four incorrect code entries are made. After 30 seconds, the unit returns to standby mode.

■ Encoded Relay Module LED Status Indicators

Mode	Green	Red
Normal Operation	On	Off
Lockup Mode	On	Flashing
Setup Mode	Flashing	Off
Connection Problems	Off	On

■ Operation Notes

Pressing the PROGRAM button on the Encoded Relay Module (ERM) sets a new Encode Code (EC) between the ERM and the Keypad and puts the Keypad into Programming Mode. If no further programming is required, press * * to exit.

If the ERM receives more than three (3) invalid EC's in a row, the unit will go into LockUp Mode. Once in LockUp Mode, the unit is essentially shut down and can only be restored to normal operation by pressing the PROGRAM button.

Upon communication loss or LockUp, all relays are released and the Main Door latching is cleared if set. The Remote Bypass will not work and the Keypad will be forced to Hi Security mode if enabled. If communication is lost for more than 2 seconds, the unit goes into LockUp Mode and can only be restored to Normal Operation by pressing the PROGRAM button.

If communication is lost with the ERM or the ERM is in LockUp Mode, the Keypad will indicate the problem by flashing the Red LED very fast.

Since the Encode Code (EC) is only sent at the beginning of a Latch Open sequence, this is the only time the unit knows if the EC's match. Upon a power up, both units will communicate with each other and the second and third relays, remote bypass and clock input will work normally. Upon the first attempt to send an ERM packet with a non- matching EC, the device will be put into the LockUp mode, and from that point, until a new EC is programmed, the unit will essentially be shut down.

Pressing the PROGRAM button while the unit has lost communication can cause the EC to be erased and will require an EC setup upon re-establishing communication. For this reason, it is recommended that the Keypad and the ERM be powered by the same power supply so they are both powered up and down at the same time.

When using Output B relay as an Alarm, and since the output is on to indicate a Non-Alarm status, a loss of communication or invalid EC will always create an alarm indication.

Using the KPX-34-ERM3 with a PC

■ Connecting the KPX-34-ERM3 to a PC

Connect the ERM to a PC using a serial cable (not included) through the Serial COM Port. (The KPX-34-ERM3 is set for 9600 baud.) A serial to USB cable may also be used (not included).

■ Installing the CD-ROM

Install the "Essex EZKey Software" program from the enclosed CD. The files will default to C:\Program Files\Essex\EZKey unless otherwise re-directed.

■ Using Essex EZKey Programmer

Program Code

Click "Set Up" and select appropriate options and COM Port. Click "OK." Enter the Keypad Master Code (DEFAULT 1,2,3) at the bottom. In setup, default setting is "Program Keypad Only Mode". This must be changed to "Program Keypad / Prox Mode".

1. To add a code, double-click an empty line or click and fill in the blanks. You can leave either the code or the card number blank if only one form of ID is desired. See Security Levels on page 6.

2. To delete, highlight the code line and click .

3. To change user options / authorizations, double-click the code line.

When finished, save the code chart file in either protected or unprotected format and upload to the KPX-34-ERM3. If programming has been done at the Keypad, you can download from the Keypad to a blank code chart (names are not stored in the Keypad so they will be blank) or MERGE the Keypad information with an existing code chart. If there are conflicts (e.g., two User Number 1's), you will be asked to select a resolution. Once complete, you will need to save the chart and upload to the

Keypad to make sure they both agree. NOTE: If you save the Keypad file with password protection, do not lose or forget the password. It cannot be recovered.

Temporary Code

You can program one temporary code that will be good for up to 99 hours 59 minutes.

Configuration

You can GET the configuration that is in the Keypad or make your own, then SET it into the Keypad.

■ Essex EZKey Logger Software

Running this log will record all actions of the KPX-34-ERM3. You can also print up to the last 500 transactions. The date and times are taken from the computer, not the KPX-34-ERM3. The logger will only record transactions when the ERM is connected to a computer which is running the EZKey Logger software.

Set up

If BIND is blank, the log will only list the User Number along with the action. If you BIND to an existing Keypad Program File (see previous section), the user name will also be listed.

Select "Options" and "COM Port."

Alarms

Loss of power- reported when power is restored.

Tamper Alarm- 4 incorrect code entries

Loss of communication between Keypad and ERM (Keypad removed or broken connection).

Programming the KPX-34-ERM3 with the Keypad

To set up and program the system using the Keypad, proceed as follows. The System Setup can only be modified if you know the Master Code. When the system is initially set up, the default system settings should be reviewed prior to other programming.

1. Enter ***** **3**
2. Enter the Master Code followed by **#**
   Example: ***** **3** **1** **2** **3** **#**
   This opens programming and causes:

Red LED	Green LED
Fast Flash	Solid

3. Proceed to one of the following eight programming options:

   ### ■ Changing the Master Code (Default: 1,2,3)
   a. Enter **1** **#**
   b. Enter the New Master Code followed by **#**
   c. Return to Step 3 or enter ***** ***** to exit programming.

Keypad Status After Step Completion			
Step	Beep	Red LED	Green LED
a	Double	Fast Flash	Slow Flash
b	Triple	Fast Flash	Solid

   Note: If you forget the Master Code, locate and press the PROGRAM button on the ERM board. This will take you to Step 3 of Programming System Setup. Once you enter setup mode, you have 30 seconds to begin the program sequence.

■ Setting the Main Door Open Time (Default: 5 Seconds)

a. Enter **2 #**

b. Enter the desired Door Open Time (1-99 seconds), followed by **#**
    Example: **2 # 1 5 #** (15 sec. Door Open Time)

c. Return to Setp 3 or enter *** *** to exit programming.

Keypad Status After Step Completion			
Step	Beep	Red LED	Green LED
a	Double	Slow Flash	Slow Flash
b	Triple	Slow Flash	Solid

■ Setting Latching Option (Default: Off)

a. Enter **3 #**

b. Select the desired latching option:

    Off- **0 #**

    Manual- **9 9 #**

    Timed- Enter the desired time interval in hours (1-98), followed
    by **#**.

    Example: **3 # 8 #** (Sets timed latching for 8 hrs)

c. Return to Step 3 or enter *** *** to exit programming.

Keypad Status After Step Completion			
Step	Beep	Red LED	Green LED
a	Double	Slow Flash	Slow Flash
b	Triple	Slow Flash	Solid

■ Configuring Output A (Default: Aux #1)

a. Enter **4 #**

b. Select one of the following:

    ### ■ CCTV / External Light

    1) Enter **1 #**

2) Enter the desired On Time (1-99 seconds), followed by **#**
   Example: **4 # 1 # 1 5 #**
   (Sets CCTV/Light Option for 15 seconds)

■ **Auxiliary Device #1**

1) Enter **2 #**
2) Enter the momentary output time (1-99 seconds), followed by **#** ; **-or-** Enter **0** to set the auxiliary device for Manual Operation (ON/OFF), followed by **#**
   Example: **4 # 2 # 0 #**
   (Sets Auxiliary Device with Manual Operation)

■ **Second Door**

1) Enter **3 #**
2) Enter the desired Door Open Time (1-99 seconds), followed by **#**
3) Select the desired latching method:
   Off- **0 #**
   Manual- **9 9 #**
   Timed- Enter the desired time interval in hours (1-98), followed by **#**
   Example: **4 # 3 # 5 # 9 9 #**
   (Sets Second Door with 5 second Door Open Time and Manual Latching)

■ **Doorbell**

1) Enter **4 #**

c. Return to Step 3 or enter *** *** to exit programming.

Keypad Status After Step Completion			
Step	Beep	Red LED	Green LED
a	Double	Slow Flash	Slow Flash
1)	Double	Slow Flash	Fast Flash
2)	Triple	Slow Flash	Solid

■ **Configuring Output B (Default: CCTV)**

a.   Enter **5 #**

b.   Select one of the following:

■ **CCTV / External Light**

1)   Enter **1 #**

2)   Enter the desired On Time (1-99 seconds), followed by **#**
     Example: **5 # 1 # 1 5 #**
     (Sets CCTV/Light Option for 15 seconds)

■ **Auxiliary Device #2**

1)   Enter **2 #**

2)   Enter the momentary output time (1-99 seconds), followed by
     #; **-or-** Enter **0** to set the auxiliary device for Manual
     Operation (ON/OFF), followed by **#**
     Example: **5 # 2 # 0 #**
     (Sets Auxiliary Device with Manual Operation)

■ **Third Door**

1)   Enter **3 #**

2)   Enter the desired Door Open Time (1-99 seconds), followed
     by **#**

3)   Select the desired latching method:
     Off- **0 #**
     Manual- **9 9 #**
     Timed- Enter the desired time interval in hours (1-98),
     followed by **#**
     Example: **5 # 3 # 5 # 9 9 #**
     (Sets Second Door with 5 second Door Open Time and
     Manual Latching)

■ **Doorbell**

1)   Enter **4 #**

■ **Internal Alarm**
1) Enter **5 #**
2) Enter the desired Door Ajar Time (1-99 seconds), followed by **#**
   Example: **5 # 5 # 1 0 #**
   (Sets Internal Door with 10 second Door Ajar Time)

■ Master Code Door Unlock Option (Default: Allow)
a. Enter **6 #**
b. Enter **0 #** to prevent the master code from unlocking the door.
c. Enter **1 #** to allow the master code to unlock the door.
d. Return to Step 3 or enter *** *** to exit programming.

■ Security Level (Default: Disabled)
a. Enter **7 #**
b. Enter **0 #** to Disable. Security Level is always Hi.
c. Enter **1 #** to Enable. Clock grounded is Low Security. Clock not grounded is Hi Security. See page 6 for Security Level function.
d. Return to Step 3 or enter *** *** to exit programming.

■ Baud Rate (if using Keypad with Encoded Relay Module)
a. Enter **8 #**
b. Enter **0 #** to set Baud Rate to 2400 if connected to a printer
c. Enter **1 #** to set Baud Rate to 9600 if connected to a PC (default)

4. Enter *** *** to complete the sequence and reset the system to normal operation.

Note:

If using a printer or Hyper-terminal, **0 #** will print Setup Configuration

■ Programming Individual Users

Authorized users (master code or any user authorized to program) can program users directly from the Keypad. Each Individual User can be assigned various authorizations. Review System Setup before programming individual users.

1. Enter * 1
2. Enter the Master Code followed by #
   Example: * 1 1 2 3 #
   This opens programming and causes:

Red LED	Green LED
Slow Flash	Solid

3. Proceed to one of the following seven programming options:

   ### ■ Adding a New User
   a. Enter 1 #
   b. Enter the User ID (1 to 500) followed by #
   c. Enter the User Code/PIN (3-8 digits), followed by # (enter 0 # if no code is assigned)
   d. Present card or enter 0 # if no card is assigned
   e. Enter the desired User Authorization Code, followed by # (Repeat for additional authorizations or skip to Step f for no authorizations.)

Code	User Authorization
1	Latching Authorization
2	Program or Delete Users Authorization
3	Output A Authorization (see notes)
4	2nd Door (see notes)
5	Output B Authorization (see notes)
6	3rd Door (see notes)
7	Exempt from Security Level restrictions (see notes)

f.   Once all desired User Authorizations have been assigned, enter #
    to complete programming for this User.

g.   To program an additional User, return to Step b.

h.   If no more Users are to be added, enter * * and return to Step 3,
    or if you have completed all User Programming, enter * * a
    second time to complete programming sequence and reset
    system to normal operation.

Keypad Status After Step Completion

Step	Beep	Red LED	Green LED
a	Double	Slow Flash	Slow Flash
b	Double	Slow Flash	Fast Flash
c	Quad	Slow Flash	Fast Flash
d	Double	Slow Flash	Fast Flash
e	Double	Slow Flash	Fast Flash
f	Triple	Slow Flash	Slow Flash

Notes on Adding New Users:

■ Auxiliary Device or 2nd or 3rd Door authorization depends on configuration of the A and B Outputs. See System Setup on pages 3-4.

■ If either Output is configured for 2nd or 3rd Door operation and a user is given 4# or 6# Authorization, their User Code will activate the configured output, not the Main Relay.

■ Security Level restriction requires an external time clock or keyswitch. This allows you to restrict access to Users who are not exempt. See Clock Input on pages 6.

■ Modify a User by User ID

a. Enter **2 #**

b. Enter the User ID (1 to 500) for the User to be modified, followed by **#**

c. To change this User's Code, enter the New User Code followed by **#** (enter **0 #** if no code is assigned). To keep this User's Code, enter **#**.

d. Present card, or enter **0 #** if no card is assigned, or enter **#** to keep current card.

e. Then, enter the desired User Authorization, followed by **#**. (Repeat for additional authorizations or skip to Step f for no authorizations.)

Code	User Authorization
1	Latching Authorization
2	Program or Delete Users Authorization
3	Output A Authorization (see notes)
4	2nd Door (see notes)
5	Output B Authorization (see notes)
6	3rd Door (see notes)
7	Exempt from Security Level restrictions (see notes)

f. Enter **#** to complete programming for this User.

g. To modify an additional User, return to Step b.

h. If no more Users are to be modified, enter *** *** and return to Step 3, or if you have completed all User Programming, enter *** *** a second time to complete programming sequence and reset system to normal operation.

■ Modify a User by User Code

a. Enter **3 #**

b. Enter the User Code for the User you wish to modify, followed by **#**

c. To change this User's Code, enter the New User Code followed by **#** (enter **0 #** if no code is assigned). To keep this User's Code, enter **#**.

d. Present card, or enter **0 #** if no card is assigned, or enter **#** to keep current card.

e. Then, enter the desired User Authorization, followed by **#**. (Repeat for additional authorizations or skip to Step f for no authorizations.)

Code	User Authorization
1	Latching Authorization
2	Program or Delete Users Authorization
3	Output A Authorization (see notes)
4	2nd Door (see notes)
5	Output B Authorization (see notes)
6	3rd Door (see notes)
7	Exempt from Security Level restrictions (see notes)

f. Enter **#** to complete programming for this User.

g. To modify an additional User, return to Step b.

h. If no more Users are to be modified, enter *** *** and return to Step 3 or if you have completed all User Programming, enter *** *** a second time to complete programming sequence and reset system to normal operation.

Note on Modifying Users:

■ Once you have begun to modify a User, previously programmed authorizations are deleted for this User.

■ **Modifying a User with a Card**

a. Enter **4   #**

b. Present card

c. To change this User's Code, enter the New User Code followed by **#** (enter **0 #** if no code is assigned). To keep this User's Code, enter **#**.

d. Present card, or enter **0 #** if no card is assigned, or enter **#** to keep current card.

e. Then, enter the desired User Authorization, followed by **#**. (Repeat for additional authorizations or skip to Step f for no authorizations.)

Code	**User Authorization**
1	Latching Authorization
2	Program or Delete Users Authorization
3	Output A Authorization (see notes)
4	2nd Door (see notes)
5	Output B Authorization (see notes)
6	3rd Door (see notes)
7	Exempt from Security Level restrictions (see notes)

f. Enter **#** to complete programming for this User.

g. To modify an additional User, return to Step b.

h. If no more Users are to be modified, enter *** *** and return to Step 3 or if you have completed all User Programming, enter *** *** a second time to complete programming sequence and reset system to normal operation.

■ Deleting a User by User ID

a. Enter **5 #**

b. Enter the User ID (1 to 500) for the User to be deleted, followed by **#**

c. To delete an additional User, return to Step b.

d. If no more Users are to be deleted, enter *** *** and return to Step 3, or if you have completed all User Programming, enter *** *** a second time to complete programming sequence and reset system to normal operation.

■ Deleting a User by User Code

a. Enter **6** **#**
b. Enter the User Code to be deleted, followed by **#**
c. To delete an additional User, return to Step b.
d. If no more Users are to be deleted, enter *** *** and return to Step 3, or if you have completed all User Programming, enter *** *** a second time to complete programming sequence and reset system to normal operation.

■ Deleting a User with a Card

a. Enter **7** **#**
b. Present card
c. To delete an additional User, return to Step b.
d. If no more Users are to be deleted, enter *** *** and return to Step 3, or if you have completed all User Programming, enter *** *** a second time to complete programming sequence and reset system to normal operation.

■ Adding a Temporary User

a. Enter **8** **#**
b. Enter the User Code / PIN (3-8 digits), followed by **#**
c. Enter the desired Temporary access Time (1-99 hours), followed by **#**
d. For Security Level Exemption, enter **0** for No or **1** for Yes, followed by **#**
e. You are now back to Step 3 (page 21).

■ Deleting a Temporary User

a. Enter **9** **#**
b. You are now back to Step 3 (page 21).

4. Enter *** *** to complete the sequence and reset the system to normal operation.

Notes:

If using a printer or Hyper-terminal, **0 #** will print all User ID's, Codes and Authorizations.

Once an authorized user completes steps 1 & 2 to open the memory, any combination of adding, modifying or deleting Users can be performed without having to re-enter Steps 1 & 2 each time. However, if more than 30 seconds elapse between each step during programming, the system will reset and you will have to start from Step 1.
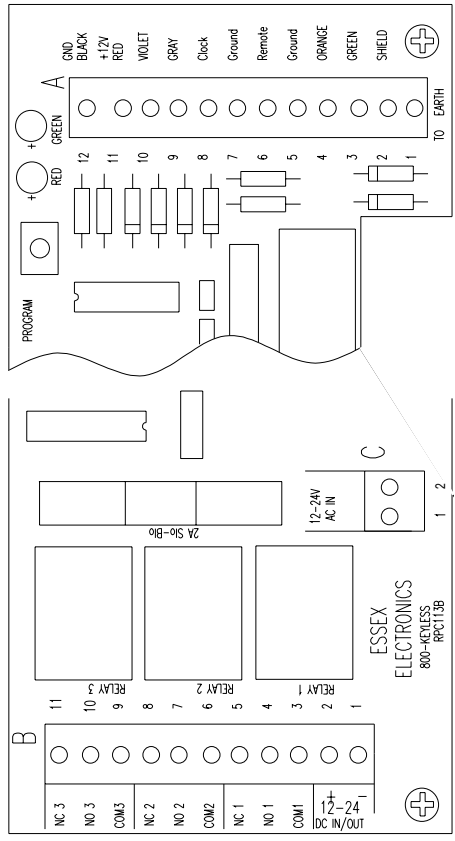
KPX-34-ERM3 Series Diagrams

■ ERM Circuit Board

Terminals 2, 3, 4, 9, 10, 11, 12 to the keypad.

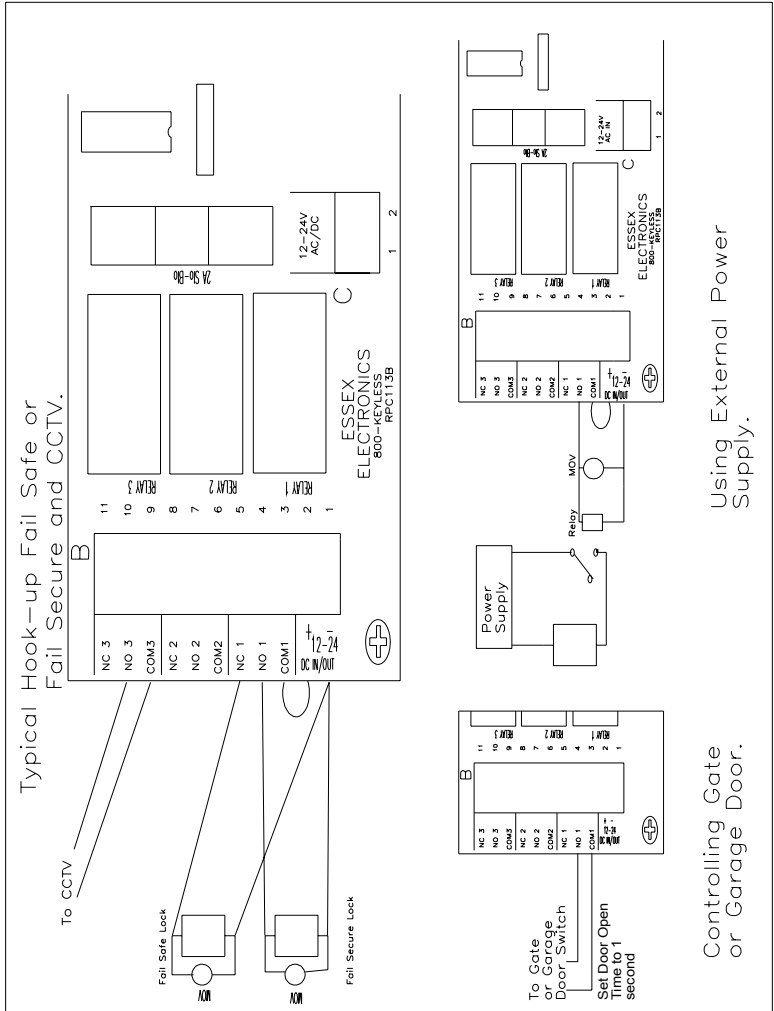Terminals 7, 8 to Clock or keyswitch contacts, if used.

Terminals 5, 6 to Remote Button Release, if used.

Door Monitor Switch between Yellow and Black, otherwise connect Yellow to Black.

■ Typical Hook-up Fail Safe or Fail Secure and CCTV Diagram

Notes

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•••Notes

Warranty & Repairs

■ Limited Lifetime Warranty
(effective date May 1, 2006)

Essex Electronics Inc. warrants that at the time of original purchase from Essex Electronics Inc., the products specified below are free from defects in workmanship and material. Subject to the conditions and limitations set forth below, Essex Electronics Inc. will, at its option, either repair or replace any part of its products that prove defective by reason of improper workmanship or materials. Repaired parts or replacement products will be provided by Essex Electronics Inc. on an exchange basis, and will be either new or refurbished to be functionally equivalent to new. Essex Electronics Inc. reserves the right to discontinue a product for any reason, without notice, at any time. If a product that has been discontinued proves defective and if Essex Electronics Inc. is unable to repair or replace the product, within the terms expressed in this Limited Lifetime Warranty, a substitute product may be provided at the Essex Electronics Inc.'s election, as a replacement for the original discontinued product.

This Limited Lifetime Warranty extends only to the original retail or wholesale Buyer and the original site of installation. It does not cover any damage to this product or parts thereof, if the product is installed in violation of the applicable codes or ordinances, or is not installed in accordance with our installation instructions. This warranty will only include the normal operating life of the LED's which will be 10 years from the date of the original sale. It does not cover any damage that results from accident, abuse, misuse, natural disaster, insufficient or excessive electrical supply, abnormal mechanical or environmental conditions, or any unauthorized disassembly, repair, or modification. This Limited Lifetime Warranty

also does not apply to any product on which the original identification or date of manufacture information has been altered, obliterated or removed. In no event shall Essex Electronics Inc. be liable for any damage to persons, property or area surrounding the installation site caused by any malfunction of the product manufactured by Essex Electronics Inc.

Essex Electronics Inc. will not pay, nor be responsible for, shipping, transportation or delivery charges, or other cost of removal of a defective product or installation of a replacement product. The original component replaced under this Limited Lifetime Warranty in any system shall become the property of Essex Electronics Inc., and as such will, at our request, be returned to our factory with transportation charges paid by the Buyer.

Limited Lifetime Warranty

The Essex Electronics Inc. products with a manufactured date of 5/1/06 to the present date that are covered by this Limited Lifetime Warranty are Keypads, Keyless Entry Access Control Systems and accessories.

Essex Electronics, Inc.'s liability and Buyer's remedy under this warranty is limited to the repair or replacement at Seller's election of the product, or parts thereof, returned to Essex Electronics Inc. at Buyer's expense and shown to Essex Electronics Inc.'s reasonable satisfaction to have been defective.

Notice of any defect must be sent to Essex Electronics, Inc., 1130 Mark Avenue, Carpinteria, California, 93013, USA and must include the date code of the unit, description of the defect and factory assigned Return Authorization #. Upon receipt of such notification, Essex will determine whether to repair or replace. We also reserve the right to have our representative make any inspection or repairs, or furnish replacements.

This warranty excludes Elevator and Vehicle Keyless Entry Access Control Systems. A separate warranty applies to Keyless Entry systems manufactured for these applications.

Disclaimer of Warranties: Limitation of Buyer's Remedies

Except for the repair or replacement at seller's option which is expressly set forth above, Essex Electronics Inc. extends no warranty of any kind, express or implied, and disclaims any implied warranty of merchantability or suitability for purpose for which sold, with respect to the keypads, keyless entry coded access system or accessories. Except for the limited repair or replacement specified above, under no circumstances will Essex Electronics Inc. be liable to buyer under or in connection with any manufacture or sale of any of the products set forth above under any tort, negligence, strict liability, contract or other legal or equitable theory, or for incidental or consequential damages, or buyer's cost of effecting insurance coverage.

The foregoing limited lifetime warranty expressed herein constitutes the sole and entire warranty with respect to the products set forth above and is in place of any and all other warranties, express or implied.

This warranty may not be expanded or extended by any oral representation, written sales information, advertising, drawings or otherwise. Essex Electronics Inc. is not responsible hereunder for incidental damage to person or property, or other incidental or consequential damages. The remedies of the buyer shall be limited to those provided in this limited lifetime warranty to the exclusion of any and all other remedies, including, without limitation, incidental or consequential damages.

This Limited Lifetime Warranty shall be governed by and interpreted in accordance with the California Uniform Commercial Code and by the procedural laws of the State of California. Any

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lawsuit or other action which arises out of, relates to, or is in connection with the manufacture or sale of the products set forth above shall be governed by California law, and the venue for any such action shall be the Superior Court of the State of California in and for Santa Barbara County, California.

■ Repair Policy

Should it be necessary for a component or a system to be returned for repair, it must be accompanied with an RA# (Return Authorization Number) issued by the factory. Please call 1-800-KEYLESS (800-539-5377) to obtain an RA#. All returns must be sent to the factory freight prepaid. Collect shipments will not be accepted at any time. Standard turnaround time is ten (10) working days from the date of receipt. Repaired components will be returned UPS Ground (or equivalent). Any other shipping requests or instructions will be at the customer's expense.

At the factory's discretion, warranty repairs will include repair or replacement, update and testing. Returns and repairs out of the warranty period or in warranty with damage not covered under warranty shall be subject to a repair charge. All non-warranty repair freight charges are paid for by the customer. Non-warranty repair charges are returned COD. (Factory Authorized Distributors are subject to standard terms).