Part # CEPLUS

Slide Switch No Longer Needed

Now with Automatic Alarm Recognition
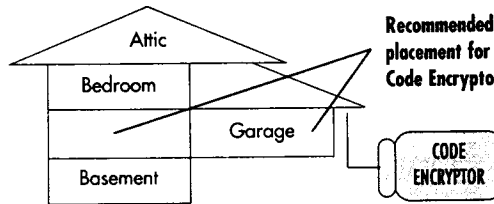
Channel 3 Relay Panic

Installation Manual
Street Smart Security
Other New Features Inside

Code Encryptor Plus

Location of the control module is the most important factor in range and reliability of your Code Encryptor. Select a location that is as centrally located as possible. Keep in mind that your customer will want to control the operation of the garage door from the driveway, and will also expect the use of the remote for On/Off in the area of entry and exit.

```
        Attic
     Bedroom                    Recommended
                                placement for
                 Garage         Code Encryptor
     Basement              CODE
                           ENCRYPTOR
```

NOTE: If using any other wireless system, install the Code Encryptor in the Garage to avoid possible RF interference.

For optimal reception, make sure the antenna is extended in the highest possible position and away from other electrical wiring.

If you are using the Code Encryptor to operate the garage door, mount the receiver in the garage and run power. Ground and alarm wires to the panel. You can also mount the receiver at the alarm panel if it is not too far from the garage door. Ideally, the Code Encryptor should be mounted near the entry keypad, which is typically near the entry/exit point of the house. **DO NOT MOUNT THE CONTROL MODULE IN THE ALARM PANEL.** 1

Wiring Diagram

Yellow	Data Out: Ademco & DSC 550, 1550, 2525, 2550, 3000
Green	Data In: Ademco & DSC 550, 1550, 2525, 2550, 3000
Gray	(-) Channel 3 Output
Red/White	Channel 2 Output (Garage Door Pushbutton)
White	Channel 2 Common (Garage Door Pushbutton)
Brown	Channel 1 Common (Keyswitch arm/disarm)
Brown/White	Channel 1 Output N/O (Keyswitch arm/disarm)
Blue/Green	Channel 1 N/C
Red	+12VDC
Black	(-) Ground
Purple	2VDC LED status output Ademco Vista 5 & DSC 550 only

Button 1 → Button 1
Button 2 → Button 2
Button 3 → Button 3
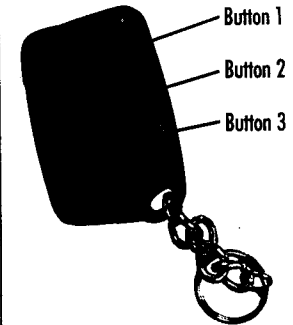
Button 1   Alarm ON/OFF STAY**
Button 2   Garage Door OPEN/CLOSE
Button 3   PANIC OUTPUT
           (Hold for 3 seconds)

**Press and hold for 3 seconds to activate "STAY" mode for most panels

2

What Alarm System are You Using?

Choose the security system that the Code Encryptor is to be installed with:

1) Radionics, Caddx, F.B.I.I, DSC 832, Napco, Moose, C & K, and other alarms that offer a keyswitch Arm/Disarm as a "Zone Definition."
   GO TO PAGE 4

2) Ademco DSC 550, 1550, 2525, 2550, 3000
   GO TO PAGE 6

3) DSC 1575
   GO TO PAGE 5

NOTE: If you are using a Napco, Caddx, FBI, Moose/Sentrol or Apex you should evaluate the CE2Y (Yellow Box) and the CE2R (Red Box) features since they will provide arming in the Away, Stay (Bypass), Disarm and Panic modes using NO ZONES. For more information on these products call (888) 768-2846 toll free Monday-Friday 7:00am- 5:00pm PST.
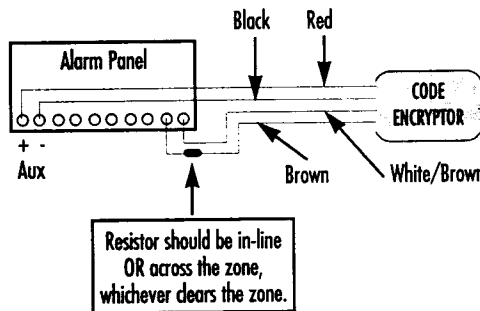
3

Installation for Keyswitch Arming
(i.e., Caddx, Radionics, F.B.I.I., DSC 832, Napco, etc.)

Red   Aux +
Black   Aux -
Brown/White Zone programmed for keyswitch arming
Brown   Common adjacent to zone

Do not use the Green or Yellow Wires

NOTE: For most Napco panels, you must use Zone 5 as the keyswitch arm/disarm zone.

```
                    Black   Red
   Alarm Panel              CODE
                           ENCRYPTOR
  + -
  Aux         Brown    White/Brown
```

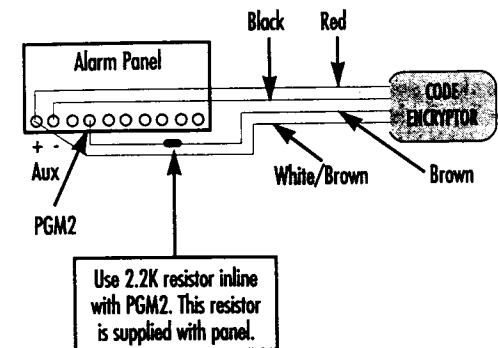Resistor should be in-line OR across the zone, whichever clears the zone.

Connect Red and Black to Aux Negative and Positive.

Connect Brown and White/Brown to the zone programmed for a N/O momentary keyswitch arming. Use the Blue/Green and Brown wires for N/C keyswitch applications. 4

Installation for Keyswitch Arming on DSC 1575

Red   Aux +
Black   Aux -
Brown/White Aux +
Brown   PGM 2 with 2.2K resistor in series

```
                         Black   Red
   Alarm Panel                    CODE
                                  ENCRYPTOR
  + -
  Aux          White/Brown   Brown
  PGM2
```

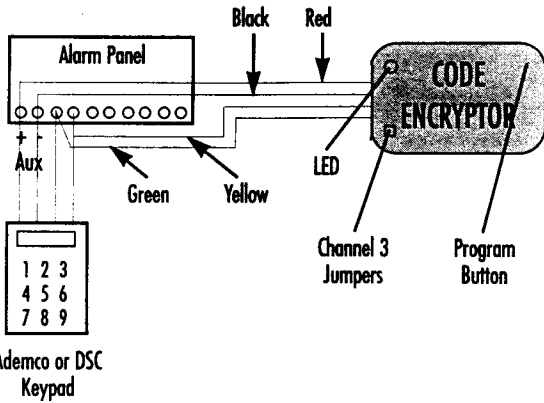Use 2.2K resistor inline with PGM2. This resistor is supplied with panel.

Programming the DSC 1575

Refer to the DSC 1575 Installation Manual for instructions on programming PGM2 for momentary keyswitch arming.
GO TO PAGE 5 (PROGRAMMING FOR KEYSWITCH ARMING) 5

Installation for Ademco and DSC 550, 1550, 2525, 2550, 3000

Red	Aux +
Black	Aux -
Yellow	Data Out
Green	Data In

Alarm Panel

Black   Red

CODE ENCRYPTOR

Aux
Green   Yellow   LED

1 2 3
4 5 6
7 8 9

Ademco or DSC Keypad

Channel 3 Jumpers   Program Button

Wiring and Auto Recognition

COMPLETE STEPS 1-8

Step 1) Unplug the receiver from the wire harness.

Step 2) Wire the Red, Black, Yellow and Green to the keypad.

RED	Connect to Keypad Red or Aux (+)
BLACK	Connect to Keypad Black or Aux (-)
GREEN	Connect to Keypad Green
YELLOW	Connect to Keypad Yellow

NOTE: You can make these connections at the panel or at the keypad itself. If you place the Code Encryptor Plus in the garage or any other location away from the panel you may choose to wire the Code Encryptor Plus directly to the keypad.

Step 3) Make sure the alarm panel is powered up and operating.

Step 4) While watching the LED light on the Control module, plug the receiver into the Code Encryptor Plus harness.

Step 5) The LED will blink 1 time on power up, after 2 seconds COUNT the flashes that you see. The corresponding flashes will indicate which panel the Code Encryptor Plus has detected.

Automatic Recognition Continued:

Number of Flashes	Alarm Panel detected by the CE Plus
1	Relay Mode
2	Ademco Non Addressable - Vista 10, 20, 30, 4110, 4120
3	DSC 1255, 2525, 2550, 3000
4	Vista 5
5	Ademco Addressable
6	DSC 550

Mandatory Programming

Programming a User Code is mandatory when using the Code Encryptor Plus. This gives the Code Encryptor microprocessor a User Code to arm and disarm the panel.

Step 6) Verify that the four-digit code you plan to teach the Code Encryptor Plus is a valid four-digit user code. Example: From the keypad use that four-digit code to arm the panel. If the panel arms, that is a good code. If it does not, program that user code into the alarm panel. – The Code Encryptor Plus uses that four-digit code to arm and disarm the panel, thus that code must be valid.*

Step 7) Press and HOLD the program button on the receiver. The light will come ON and stay ON for three seconds then turn OFF. Once the light turns off, RELEASE the program button, the light will begin to flash rapidly.

Step 8) Using the keypad, slowly and firmly enter the four-digit user code. After the fourth entry the LED will stop flashing. This code has now been entered into the Code Encryptor's non-volatile memory. The Code Encryptor will remember this user code in the event of a power failure. To change to a new user code, repeat steps 7 and 8 above.

*NOTE: We recommend using a user code that the customer cannot change. If the user code that is programmed into the CE Module is changed, the Code Encryptor Plus will not disarm the alarm panel.
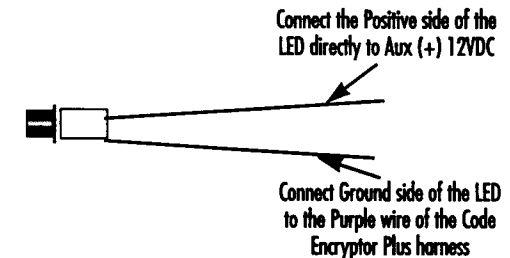
Mandatory Programming Continued

Press and Release button #1	Alarm "Away"
Press and Release button #1	Alarm "Disarm"
Press and Hold for 3 seconds	Alarm "Stay" or "Bypass"

NOTE: The Code Encryptor Plus will arm in the AWAY mode even if you are outside the house. You do not have to arm the alarm before you exit. We do however recommend that you Arm the alarm system within sight of the status LED or keypad to verify that the alarm has received and responded to your remote request.

The Code Encryptor Plus on the following panels self enroll themselves as a specific keypad address code.
• Ademco addressable   Address #3
DO NOT USE ANY OF THESE ADDRESS CODES IF YOU ARE USING ONE OF THE ABOVE PANELS. EXAMPLE: If you are using an Ademco Addressable, no keypads can use address #3 since the CE Plus will automatically enroll itself as address #3.

LED wiring for Ademco Vista 5 and DSC 550 ONLY

Connect the Positive side of the LED directly to Aux (+) 12VDC

Connect Ground side of the LED to the Purple wire of the Code Encryptor Plus harness

Troubleshooting

1) For troubleshooting problems using an alarm panel programmed for keyswitch arm/disarm
   GO TO PAGE 19

2) For troubleshooting problems using an Ademco 4110, 4120 or Vista 10, 20, 30
   GO TO PAGE 20

3) For troubleshooting problems using a DSC 1550, 2525, 2550, 3000
   GO TO PAGE 21

4) For general troubleshooting problems (i.e., remotes, range, etc.)
   GO TO PAGE 22

Troubleshooting Problems for Alarm Panels with Keyswitch Arm/Disarm

When I press Button 1, I hear the relay clicking but nothing happens.

1. Ensure the alarm panel is programmed for keyswitch arm/disarm.

2. Ensure the Code Encryptor is connected to the zone you programmed.

3. Ensure the resistor is connected (series or parallel) to the zone.

When I press Button 1, I do not hear the relay clicking.

1. Ensure the Code Encryptor is in the keyswitch mode (GO TO PAGE 4 - Steps 1 through 6).

2. Ensure the remote is programmed to the Code Encryptor's memory (GO TO PAGE 15).

Troubleshooting Problems for Ademco 4110, 4120 and Vista 10, 20, 30

When I press Button 1, I hear the relay clicking but nothing happens.

1. Ensure the alarm panel is programmed for Ademco alarm (GO TO PAGE 6).

The Code Encryptor will not learn the User Code from the keypad.

1. If you are using a 5881 or 4285, ensure the Code Encryptor is programmed *before* adding or programming these devices.

2. Ensure the green and yellow wires are connected properly.

3. Ensure the alarm keypad is programmed to the default address 31.

The Code Encryptor is programmed for Ademco, but does not arm/disarm.

1. Ensure you have completed the mandatory User Code programming.

2. Ensure the User Code you entered is a **VALID** User Code.

Troubleshooting Problems for DSC 1550, 2525, 2550, 3000

When I press Button 1, I hear the relay clicking but nothing happens.

1. The Code Encryptor is not programmed for DSC alarm panel (GO TO PAGE 6).

The Code Encryptor will not learn the User Code from the keypad.

1. Ensure you enter the User Code slowly and firmly.

2. Ensure the green and yellow wires are connected properly.

The Code Encryptor is programmed for DSC, but does not arm/disarm.

1. Ensure you have completed the mandatory User Code programming (GO TO PAGE 9).

2. Ensure the User Code you entered is a **VALID** User Code.

3. If you are using a DSC 1575 or Power 832, refer to programming for alarms using keyswitch arm/disarm (GO TO PAGE 4).

Troubleshooting for General Problems

Code Encryptor does not seem to do anything when I press any remote button.

1. Check power and ground.

2. Verify the remote is learned into the Code Encryptor's memory (GO TO PAGE 15).

3. Ensure that the remote battery is good.

The Code Encryptor arms the alarm panel, but does not panic.

1. Ensure you are holding Button 3 for approximately three seconds.

I can't seem to add more remotes to the Code Encryptor.

1. Delete all remotes from memory and add remotes back in one at a time (GO TO PAGE 15).

The remote does not seem to get very good range.

1. Ensure the Code Encryptor is mounted as high as possible.

2. Do not mount the Code Encryptor inside the metal alarm panel enclosure.

3. Extended the antenna, in a straight line, to the highest possible position. Do not coil or bundle the antenna.

Specifications

RECEIVER
- 12VDC Power Input
- Channels 1 and 2 relays onboard (2 Amp)
- Channel 3 Selectable Output: 12VDC 500 ma (-) transistor output. This output can be reconfigured from a pulsed output to a latching, 75 second timed or 150 second timed output.

Frequency: 303 Mhz   *Stand by Power Consumption:* 20 ma
Temperature Range: -5 F to 160 F Indoor use only.

REMOTE CONTROL
Battery: 12VDC Mini (Part #GP23A)   *Range:* 100-150+ feet
        Replace battery at least once a year.

CHANNEL 3 OUTPUT
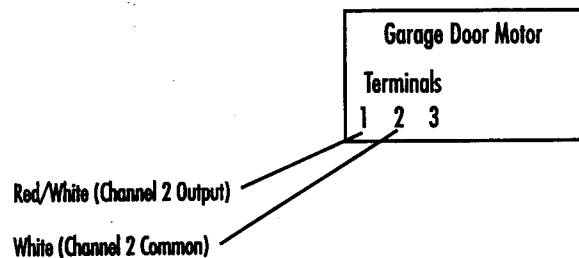|	
Both jumpers in (default)	Momentary output
Jumper closest to the harness removed	Latching (on/off) output
Jumper farthest from the harness removed	75 second timed output
Both jumpers out	150 second timed output

STREET SMART TECHNICAL can be reached:
Monday-Friday 9am-5pm PST at
(888) 768-2846 OR Fax (619) 513-9352

Garage Door Interface

All garage doors have a wall mounted push button that activates the door via a two-wire connection. Make your connection at the push button switch or at the garage door motor where these two wires terminate. The Code Encryptor will interface with this connection by attaching the Red/White and White wires from the Code Encryptor to these two wires. If you choose to connect to the motor, trace the wires from the push button to the motor to determine the proper connection point. Most garage doors (except MOM Crusader models) use terminals #1 and #2. For MOM Crusader models, use terminals #2 and #3.
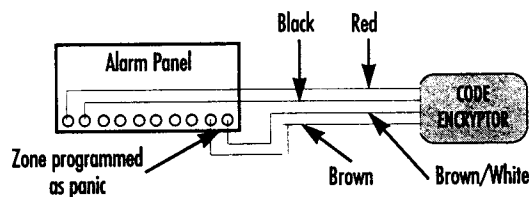
```
+----------------------------+
|    Garage Door Motor       |
|                            |
|    Terminals               |
|    1  2  3                 |
+----------------------------+
```

Red/White (Channel 2 Output)

White (Channel 2 Common)

GO TO PAGE 13 (PANIC MODE SETUP)

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To Install the Code Encryptor with Panic Mode

• Select a free hardwired zone and program it for "Panic" audible or silent, whichever you prefer. Programming instructions are found in the "Zone Definition" section of the alarm panel installation instructions.

• Follow the diagram below for connecting the relay to the zone to trigger a panic mode.

Pressing Button 3 (smallest button) for 3 seconds will cause the relay to energize and trigger the zone
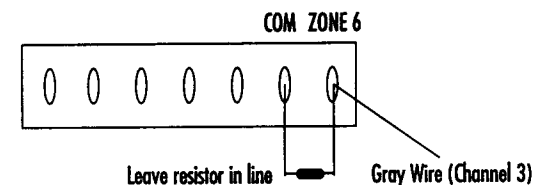
```
                              Black   Red
+---------------------+         |      |
|    Alarm Panel      |         v      v       +---------+
|                     |                        |  CODE   |
| (o o o o o o o o o) |                        |ENCRYPTOR|
+---------------------+                        +---------+
  Zone programmed                    Brown        Brown/White
  as panic
```

Channel 3 wires offer N/O and N/C contacts.
Utilize the wires to open or close the zone based on your installation.

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Optional Panic Mode Set-Up

To install the Code Encryptor with panic mode, select a free zone and program it for Panic. Programming instructions are found in the "Zone Definitions" section of the alarm installation manual. After the alarm panel and Code Encryptor have been powered up, attach the Gray wire to the zone programmed for panic. Pressing Button 3 (smallest button) for **3 SECONDS** will cause the alarm to panic.

NOTE: If this wire is connected before the Code Encryptor is powered up, a signal may inadvertently be sent to the alarm panel causing triggering the panic mode on the zone you selected.

```
              COM  ZONE 6
+------------------------------+
|                              |
| 0  0  0  0  0  0   0         |
+------------------------------+

Leave resistor in line         Gray Wire (Channel 3)
```

Example: Zone 6 programmed for Panic.

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To Add or Delete Remotes

TO ADD A NEW REMOTE
To add a remote to your Code Encryptor **PRESS AND RELEASE** the program button on the receiver. The light on the receiver will come **ON**. Immediately **PRESS** Button 1 (largest button) on the new remote control **THREE TIMES**. The light on the receiver should go **OFF**, indicating the remote has been learned. If the light on the receiver stays **ON**, the remote has not been learned. Remove and replace the harness, and follow these instructions again.

TO DELETE ALL REMOTES
To delete a lost or stolen remote from the Code Encryptor, you must purge the memory. This will delete all the current remotes in the non-volatile memory. You will then have to add ALL the remotes back into memory. To purge the memory, **PRESS AND HOLD** the program button, the light will come **ON** for four seconds, then go **OFF**, and finally it will go **ON** again, indicating that all the remotes have been purged. Release the program button and follow the instructions above (To Add a New Remote).

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Optional Channel 3 Output

Occasionally, you may want to use Channel 3 for control of optional accessories (i.e., Malibu lighting, sprinklers, X-10 automation). The Code Encryptor provides the ability to reconfigure Channel 3 to a variety of popular outputs using the onboard jumpers. Output/jumper configuration is as follows:

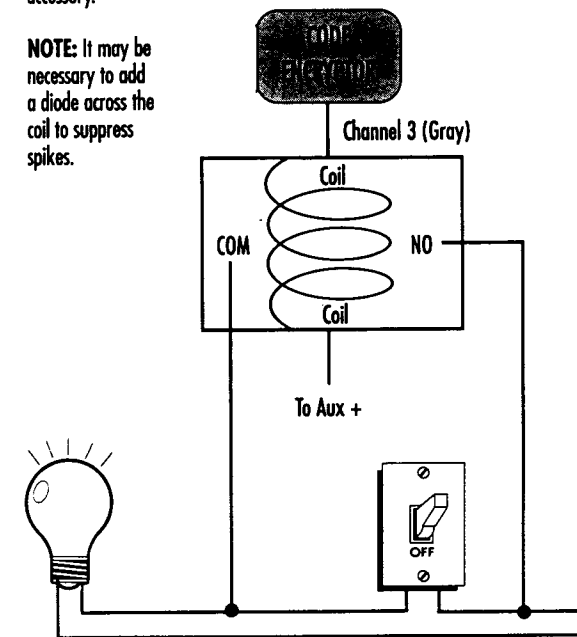|	
Both jumpers in (default)	Momentary output
Jumper closest to the harness removed	Latching (on/off) output
Jumper farthest from the harness removed	75 second timed output
Both jumpers out	150 second timed output

This output is a 12VDC/500 ma (-) transistor output. In most cases it will be necessary to add a 12VDC relay to this output in order to control high current accessories. Refer to page 17 (CHANNEL 3 RELAY WIRING) for assistance.

NOTE: When using the gray wire with a Powerflash module, it is not necessary to add a relay. Connect the gray wire to the (-) side of the Powerflash module and provide 12VDC to the (+) side.

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Channel 3 Relay Wiring

Typical installation using a relay to switch power on and off to a low voltage accessory.

NOTE: It may be necessary to add a diode across the coil to suppress spikes.

```
            +-----------+
            | CODE      |
            | ENCRYPTOR |
            +-----------+
                        Channel 3 (Gray)
         +--------------------+
         |      Coil          |
         |                    |
    COM  |                    |  NO
         |      Coil          |
         +--------------------+

                  To Aux +

     light bulb            switch OFF
```

17