

# CareTaker Plus and Custom Versions Software Release Notes

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## About This Document

This document describes the functional changes in software versions 4.0 and 3.0 for CareTaker *Plus* and Custom Version control panels. This document also describes how to install the 4.0 microprocessor chip and EEPROM chip.

Keep this document with your *CareTaker Plus and Custom Versions Installation Manual* (46-504).

**Note:** CareTaker *Plus* panels with software version 4.0 and the new EEPROM report to the CS-4000 as a Security Pro 4000 panel, and not as a CareTaker *Plus*.

## Software Version 4.0

This section describes the functional changes in software version 4.0.

### Repeater Support

Software version 4.0 provides complete support for the Learn Mode Sensor Repeater (60-615). The Learn Mode Sensor Repeater receives signals from Learn Mode sensors and retransmits them to the panel. The repeater is ideal for the following applications:

- Large installations where distant sensors perform poorly in sensor test.
- Learn Mode systems experiencing sensor supervisory problems.

**Note:** The Learn Mode Sensor Repeater retransmits sensor signals only, and not signals from another repeater.

For complete information about the Learn Mode Sensor Repeater, see the *Learn Mode Sensor Repeater Installation Instructions* (46-849).

## Software Version 3.0

This section describes the functional changes in software 3.0, which are also supported in version 4.0.

## 40 Sensor Zones

Version 3.0 software provides systems with the availability of up to 40 sensor zones.

Table 1 describes the central station reporting codes for sensor zones 33 through 40, when using the 4/2 reporting format.

**Table 1. 4/2 Format Report Codes**

Sensor #	Alarm	Trouble	Cancel
33	33	E3	71
34	34	E4	72
35	35	E5	73
36	36	E6	74
37	37	E7	75
38	38	E8	76
39	3B	EB	7B
40	3C	EC	7C

**Note:** If the system ever supports more than 32 zones, the Alpha Touchpad must also be upgraded to support the additional zones. Replace the original Alpha Touchpad with a new Alpha Touchpad (60-248-SEC) to support zones 33-40.

## New PMODE 1

PMODE 1 alternates between the primary (PHO1) and secondary (PHO2) phone numbers for central station reporting as follows:

- If three attempts to PHO1 fail, the panel switches to PHO2.
- If three attempts to PHO2 fail, the panel switches to PHO1.
- If five more attempts fail on PHO1, the panel switches to PHO2.
- Five more attempts are made to PHO2.

PMODE 1 works with both the ITI and 4/2 reporting formats.

**Note:** The CS-4000 must have software version 5.1 installed for correct PMODE 1 operation.

## Individual Light Control for X-10 Lamp Modules

X-10 Lamp Modules (13-204) can have unit numbers set from 1 through 9 and can be controlled individually, using an alphanumeric or a wireless touchpad.

**Note:** Individual light control cannot be done using a TouchTone telephone.

The following describes all light control functions:

- Lamp modules with unit numbers set from 1 through 9 can be turned on or off individually by entering **BYPASS + n** (where n = 1 - 9).

**Note:** The unit number must be entered within 3 seconds after pressing the **BYPASS** button.

- All lamp modules, regardless of unit number setting, turn on during alarms.
- All lamp modules with unit numbers set at 1 turn on during entry/exit delays.
- All lamp modules, regardless of unit number setting, can be toggled on and off by entering **BYPASS + BYPASS**, **COMMAND + 0** or **CODE + 0** from a system touchpad, or by entering **\* + CODE + 0** from a TouchTone phone.

## New Keychain Touchpad Support

Keychain Touchpads are 2- or 4-button, wireless devices used for arming, disarming, light control, and panic alarms (see Figure 1).

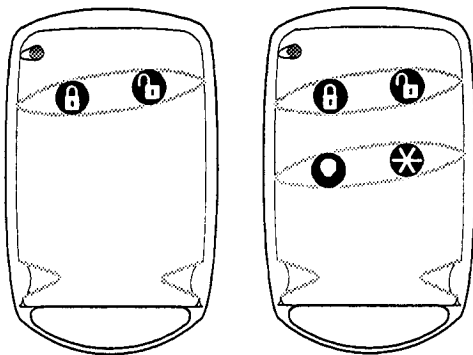


Figure 1. 2-Button and 4-Button Keychain Touchpads

The following describes Keychain Touchpad programming and operation:

### Keychain Touchpad Programming

- Keychain Touchpads are learned into the panel as sensors or wireless touchpads.

- Each learned Keychain Touchpad uses one of the available 40 sensor numbers or one of the four wireless touchpad numbers. For example, if six Keychain Touchpads are learned as sensors, the maximum usable sensor numbers remaining is 34.
- Keychain Touchpads learned as sensors are programmed into unsupervised groups (since they don't send supervisory signals) that determine how the panel responds when the arm and disarm buttons are pressed at the same time.
- Like sensors, Keychain Touchpads learned as sensors can be bypassed or deleted. This helps prevent lost or stolen Keychain Touchpads from operating the system.
- Keychain Touchpads learned as sensors use the sensor number as the user number for central station reports that include a user number.
- All Keychain Touchpads learned as touchpads report to the central station as user number 41.

## 2-Button Keychain Touchpad Operation

- 1) Disarm Button - The panel disarms to level 1.
- 2) Arm Button - With optional feature number F25 off:
  - the panel attempts arming from level 1 to level 2
  - the panel attempts arming from level 2 to level 3
  - if protesting, the panel responds as if **BYPASS** was pressed

With optional feature number F25 on:

- the panel arms directly to level 3, with no delay
  - if protesting, the panel responds as if **BYPASS** was pressed
- 3) Arm and Disarm Buttons Together - The panel responds with an alarm condition as follows:
    - Keychain Touchpads learned as sensors generate an alarm based on the sensor group in which they are learned
    - Keychain Touchpads learned as wireless touchpads generate a police panic alarm (upper sensor number 81)

**Note:** The Arm and Disarm buttons must be pressed and held for at least 2 seconds to initiate the alarm conditions described.

## 4-Button Keychain Touchpad Operation

- 1) Disarm Button - The panel disarms to level 1.
- 2) Arm Button - With optional feature number F25 off:
  - the panel attempts arming from level 1 to level 2
  - the panel attempts arming from level 2 to level 3
  - if protesting, the panel responds as if **BYPASS** was pressed

With optional feature number F25 on:

- the panel arms directly to level 3, with no delay
  - if protesting, the panel responds as if BYPASS was pressed
- 3) Arm and Disarm Buttons Together - The panel responds with an alarm condition as follows:
- Keychain Touchpads learned as sensors generate an alarm based on the sensor group in which they are learned
  - Keychain Touchpads learned as wireless touchpads generate a police panic alarm (upper sensor number 81)
- 4) Lights Button - The panel responds as follows:
- briefly pressing the button toggles all lights controlled by X-10 Lamp Modules on or off
  - pressing and holding the button for at least 3 seconds forces all lights controlled by X-10 Lamp Modules to flash on and off at 1-second intervals. Lights stop flashing when another touchpad button is pressed or when the arming level is changed.
- 5) Star Button - With optional feature number 32 off:
- pressing the button toggles the Energy Saver on and off

With optional feature number 32 on:

- pressing the button places the panel in No Delay mode after the system is armed
- 6) Lights and Star Buttons Together - The panel responds with an auxiliary (S82) alarm.

## New Optional Feature Numbers F25 and F32

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The following describes how optional feature numbers F25 and F32 affect Keychain Touchpad operation.

### F25 - Keychain Touchpad Arming

This setting determines how the panel responds when arming the system with a 2- or 4-Button Keychain Touchpad.

When F25 is off:

- if the panel is in level 1, pressing the arm button arms the panel to level 2
- if the panel is in level 2, pressing the arm button arms the panel to level 3
- if protesting, the panel responds as if BYPASS was pressed

When F25 is on:

- the panel arms directly to level 3, with no delay
- if protesting, the panel responds as if BYPASS was pressed

### F32 - Energy Saver/No Delay

This setting determines how the panel responds when the 4-Button Keychain Touchpad star (\*) button is pressed.

When F32 is off:

- the button toggles the Energy Saver Module (ESM) on and off.

When F32 is on:

- pressing the button during the exit delay (including extended and twice extended), places the panel into No Delay mode, after arming the system.

### New Sensor Group 32

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The addition of group 32 allows a Keychain Touchpad to control an on-site device when a Hardwire Output Module (HOM) is a part of the system. The group characteristics are identical to group 28, except that group 32 is unsupervised.

### Disarm Protest

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Protest beeps sound when a user disarms the system with a Keychain Touchpad or wireless touchpad, if there was an alarm during the armed period (including level 1) and sirens have timed out (are silent).

This alerts users that an alarm occurred while they were away and that it may not be safe to enter the premises.

To stop the protest beeps, the disarm command must be entered a second time.

### Dealer Sensor Test

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During a Dealer Sensor Test, sirens can sound up to 8 beeps from tripped sensors within good panel receiving range, even if they are tripped only briefly (such as a quick press on panic buttons, instead of pressing and holding the buttons).

Earlier software versions responded with less than 8 siren beeps when sensors were tripped briefly.

**Note:** Since the time between beeps may vary, wait at least 4 seconds before tripping another sensor.

### Local Phone Access

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Pressing the \* button on an on-site phone within 5 seconds of lifting the phone off hook disconnects outside parties. However, after 5 seconds, outside parties are kept on the line while the user accesses the panel.

This helps prevent the panel from disconnecting regular phone conversations when the "System, hello" voice message occurs.

## Group 24 Siren Response

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Bypassed sensors in group 24 (Local Instant Auxiliary) no longer prevent sirens from turning off when another group 24 sensor opens and closes during the same armed period.

## Auto Forced Armed Alarm Cancel Reports

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Alarms that occur when the panel is Auto Forced Armed (upper sensor number 87) no longer send a cancel report to the central station after the panel arms itself.

The cancel report is sent when the panel is disarmed.

## Disarming with the Panel Cover Removed

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When upper sensor number 92 (CPU Tamper) is off, the panel can be disarmed if an alarm occurs and the panel cover is removed.

Earlier software versions required that the cover be replaced, before the panel accepted the disarm command with upper sensor number 92 off.

**Note:** Since disarming to level 1 with the panel cover removed places the panel in the program mode automatically, the cover should be replaced immediately after disarming to level 1.

## Protest Beeps Caused by Multiple Open Sensors

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Protest beeps do not stop when attempting to arm the system with two or more sensors open. All sensors must be restored or closed before the protest beeps stop.

## Exterior Siren Auxiliary Alarm Response

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Exterior sirens are totally silent when an auxiliary alarm occurs and optional feature number F02 (Exterior Siren Delay) is off.

Earlier software versions caused a 'chirp' every 10 seconds over exterior sirens when F02 was off.

## Deleting Wireless Touchpads with Low Battery from Panel Memory

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The panel clears low battery information from memory when wireless touchpads with a low battery are deleted from panel memory.

Earlier software versions saved the low battery information in memory indefinitely, unless the battery was replaced and the touchpad was used for operating the system, or when panel memory was cleared.

## Accidental Off-Site Access

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If on-site phones are answered (taken off hook) after two rings, the panel ignores the ring - pause - ring sequence and does not answer a call that may come within 40 seconds of the first call's second ring.

Earlier software versions allowed the panel to answer the second call, which resulted in the calling party hearing the voice message "System, hello."

## Central Station Reporting for Systems with an Interrogator

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If the panel is in the process of reporting to a CS-4000 Central Station Receiver and a new alarm occurs, the panel is forced to call the CS-4000 a second time with the new Interrogator state.

This is necessary, since Interrogator information is sent at the beginning of each CS-4000 communication.

## No Activity Time Reset

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- Turning the lights on or off resets the No Activity Time (upper sensor number 79).

Earlier software versions did not reset the No Activity Time if the lights were turned on or off.

- On-site telephones taken off-hook no longer reset the No Activity Time. This also prevents answering machines from resetting the No Activity Time when the machine picks up the line.

## Installing the 4.0 Software and EEPROM Chips

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This section describes how to remove the existing panel software and EEPROM chips and install the new 4.0 software EEPROM chips.

## Documenting Current Panel Programming

Before installing the new software and EEPROM chips, you must document the current panel programming.

To record current panel programming:

- Refer to your account records for a description of the panel's current programming configuration.
- or-- Connect to a CS-4000 and record a description of the entire panel programming configuration.

## Replacing the Software and EEPROM Chips

- 1) Remove the panel cover and turn off the panel power switch (see A in Figure 2).
- 2) Unplug the AC power transformer (see B in Figure 2).
- 3) Disconnect the panel backup battery positive (+ or red) lead (see C in Figure 2).
- 4) Using a small pocket screwdriver or chip extractor, carefully remove the existing microprocessor and EEPROM chips from their circuit board sockets (see D and E in Figure 2).



**Warning:** You must be free of static electricity when handling electronic components. Discharge yourself of static electricity by touching a grounded bare metal surface, or wear a grounding strap.

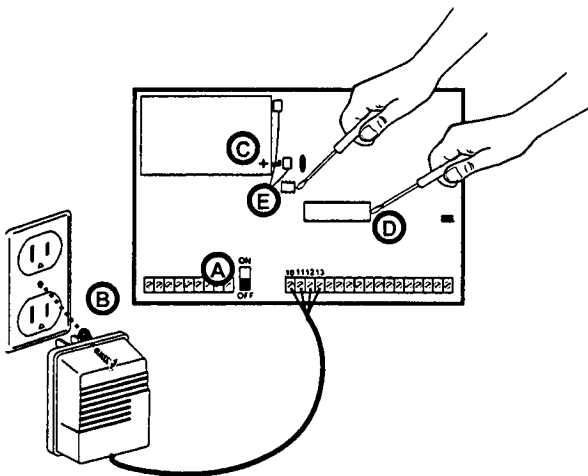


Figure 2. Removing the Existing Chips

- 5) Carefully remove the 4.0 chip from the antistatic bag.
- 6) Align the chip pins (for inserting the chip into the socket) by pressing each side of the pins against a flat surface, such as a table top.

**Warning:** Use a nonmetallic, nonconducting surface; otherwise, static electricity may damage the chip.

- 7) Making sure the notched end of the chip is positioned toward the panel power LED, insert the chip pins into the socket on the circuit board.
- 8) Press the chip firmly into the socket.
- 9) Check that each pin is seated into place, and not bent or outside of the socket.
- 10) Remove the EEPROM chip from the antistatic bag.
- 11) Align the pins using the same method as described for the software chip.
- 12) Making sure the notched end of the chip is positioned toward the panel power LED, insert the chip pins into the socket on the circuit board.
- 13) Press the chip firmly into the socket.
- 14) Reconnect the panel backup battery positive lead.
- 15) Plug in the AC power transformer into the outlet.
- 16) Turn on the panel power switch.

## Reprogramming the Panel

Now that you have replaced both the software and EEPROM chips, you must reprogram the entire panel programming configuration.

To reprogram the panel programming:

- 1) Clear panel memory, as described in the programming section of the *CareTaker Plus Reference Manual* (46-504).
- 2) Reprogram all panel settings, referring to your documentation of the preupgrade panel configuration and the programming section of your *CareTaker Plus and Custom Versions Reference Manual* (46-504). Some settings must be reprogrammed from the CS-4000.

## Testing

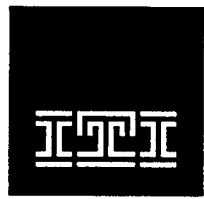
Test the system as described in the testing section of your *CareTaker Plus and Custom Versions Installation Manual* (46-504).

## Notices

This device complies with FCC Rules Part 15. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference that may be received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by Interactive Technologies, Inc. can void the user's authority to operate the equipment.



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