

**Campus Guardian Emergency Locator (CEL)
Software Manual**

V2.3

TABLE OF CONTENTS

INTRODUCTION	3
INSTALLATION OF CEL SOFTWARE.....	3
USING CAMPUS GUARDIAN EMERGENCY LOCATOR (CEL)	4
Sanyo SCP-7050 Sample Handset	6
Starting Campus Guardian Emergency Locator (CEL).....	8
Getting a Valid Location.....	8
CEL Status	9
Status Indicators.....	10
CEL Status Screens.....	11
Running CEL	13
Bringing CEL to the Foreground.....	15
Options.....	16
Location Determination	17
Limitations of the Technology and Service.....	17
Alarm Notifications.....	18
Emergency Calls (Call to 911 or Call to Public Safety).....	18
Calling Details	19
Call to Public Safety Generates an Alarm.....	20
PANIC Buttons	21
Emergency Dialing for PANIC Button Alarms.....	21

Introduction

This document describes the configuration and operation of the Campus Guardian Emergency Locator (CEL) software on a cellular phone. You are encouraged to become thoroughly familiar with your cell phone operation by studying the operating manual provided by the carrier and cell phone manufacturer prior to configuring and operating the CEL software.

CEL is available for use by persons affiliated with a university where Campus Guardian is deployed and who have a current, active subscription to the service. The service is not available on all cell phones or cell carriers. In particular, the service relies on GPS receivers for precise locations and the cell phone must have a GPS receiver available to the CEL software in order to provide the services described in this document. The purpose of CEL is to provide a means for a person on a supported campus to quickly notify Public Safety of an emergency requiring assistance and to provide additional information, such as current location (when available) to expedite this assistance.

Installation of CEL Software

During the subscription process (see www.campusguardian.com for more information on subscribing), questions are asked to determine the type of cell phone on which the software will be run, the cell carrier with which the phone is registered, the phone number of that phone, the name of the user, the user's e-mail address, the university and campus where it will be used and a campus ID. Together, this information is used to configure and select the software that will be downloaded. A link is sent to the specified cell phone and to the user's e-mail that may be used to download the software. Accessing the specified web page from the phone will start the software downloading process, if approved by the cell phone user.

After the software is downloaded to the phone, the user is then asked a series of questions before the software is allowed to run. These will vary by carrier and phone, but may include:

- What should be done with this software?
 - Choose Run to proceed
- If CEL is permitted to use software extensions.
 - Choose Always Allow to allow CEL to run and to avoid having to answer this question each time CEL is run
- If CEL is permitted to access the GPS location information.
 - Choose Always Allow to allow CEL to acquire location information and to avoid having to answer this question each time CEL requests a location
- If the user accepts the Campus Guardian terms of use
 - Choose Accept to proceed (button below the bottom right corner of the display)
- If CEL is permitted to access the network.
 - Choose Always Allow to allow CEL to communicate with the Public Safety Emergency Management Server over the Internet and to avoid having to answer this question each time CEL is run

The answers to software extensions, use of the network and use of the GPS receiver can be answered using any of the following:

- Allow This Time – Permits a one-time use, but will ask again each time the program attempts to use the feature.
- Always Allow – Permits every time the program needs to use the feature. (RECOMMENDED)
- Allow until Exit – Permits use until the program exits. Restarting the program will ask the question(s) again.
- Never Allow – Does not permit use. CEL cannot provide the features described in this document unless all requested permissions are granted.

The Terms of Use Acceptance screen will display the following:

Acceptance

Network charges may apply.

You agree to the terms of use at www.campusguardian.com. You use Campus Guardian at your own choice and risk. Your acceptance applies to all future use of this service; this notice will not be shown again once you accept.

In the event of a cell phone failure or if unable to start and operate the cell phone software, please contact Campus Guardian Corporation at 401-423-3954. You may also request assistance via email at support@campuguardian.com

Using Campus Guardian Emergency Locator (CEL)

This section will discuss how the CEL software is used, including starting it, monitoring its status and triggering an alarm.

The term alarm will be used in this document to refer to the notification provided to the university’s Public Safety officers when an emergency condition is indicated by a CEL user via one of three mechanisms:

- Pressing either PANIC button
- Dialing 911 while CEL is in the foreground
- Dialing the campus emergency number while CEL is in the foreground

Details of each of these mechanisms will be discussed, below.

Alarms can only be produced and transmitted to Public Safety when the following are all true:

- The phone is on-campus or may be on campus. A phone “may be” on campus when it is at the edge of a defined campus region or when a GPS location is not currently available. The “on-campus” regions are defined by Public Safety.
- CEL software is running in the foreground (the CEL menu is displayed on the cell phone screen as in **Error! Reference source not found.**).

- CEL is able to communicate with the Public Safety server (have cell reception and data communications), which is indicated in the status field as “C+”.

In addition, your location information can only be provided if GPS location information is available, which depends on reception of signals from multiple GPS satellites.

CEL can be used when off-campus, but it will only open the dialing dialog with 911 selected. It will *not* notify Public Safety, since Public Safety cannot respond to off-campus events.

Note: Public Safety has defined what areas are considered “On-campus” by CEL and may extend beyond campus property to include other areas where Security can assist. Please contact Public Safety for this information.

Sanyo SCP-7050 Sample Handset

The examples in this manual show CEL software operating on a Sanyo SCP-7050 cell phone. Some screens may appear slightly differently on other phones. Some operations, such as opening the Applications (or equivalent) menu and selecting items in lists may differ. Please consult your handset documentation for details of how these work on your phone.



Figure 1: Sanyo 7050 Front View



Figure 2: Sanyo SCP-7050 Open

Figure 3 shows a close-up of the keypad for the Sanyo SCP-7050 and labels the buttons referenced in this document.

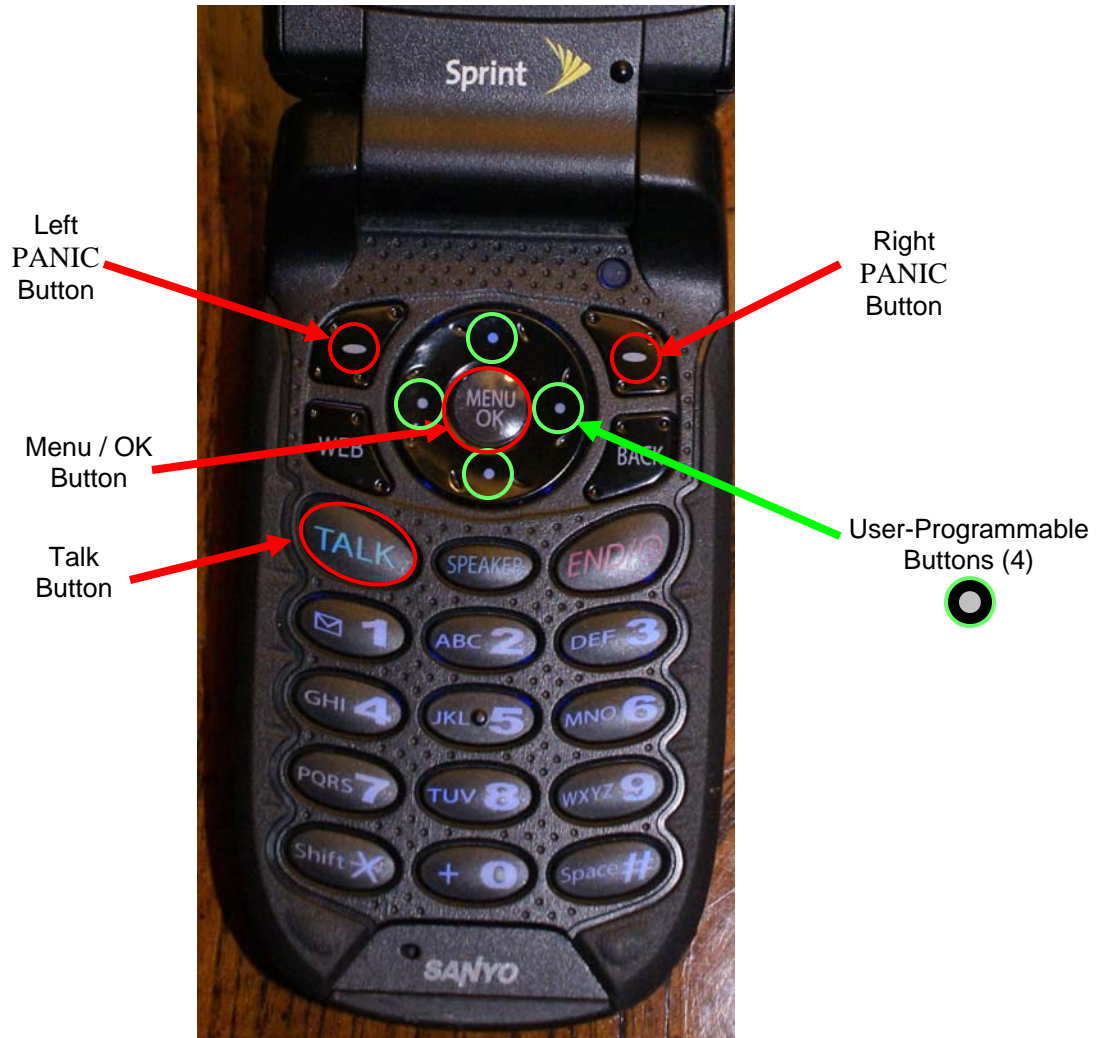


Figure 3: Sanyo 7050 Keypad

Starting Campus Guardian Emergency Locator (CEL)

Campus Guardian Emergency Locator (CEL) software is started from the phone's *Applications* folder, which can be located by pressing the Menu/OK Button, moving to the My Content icon, pressing OK, then moving to the Applications item and pressing OK. For detailed instructions, see [Running CEL](#). To make this easier and quicker, you may choose to program one of the programmable buttons on the phone to run the program whenever that button is pressed. Please consult your cell phone vendor's manual for instructions on how to program a button to run CEL.

When the program starts, it must do two things:

1. Open a communications channel to the security server computer.
2. Start the GPS receiver. This is a radio inside the phone that can receive signals from satellites and use them to determine the phone's location.

When started for the first time, CEL connects to the campus Emergency Management System server, a computer operated by Public Safety, and *activates* your subscription. This just verifies that this cell phone is registered with this school and has an active subscription. No location information is provided during this process. Some configuration information is provided to the CEL software in order to bypass the activation process on future connections. Once validated, the connection status in the status line at the top of the CEL menu shows "C+."

If validation fails, an Activation Error message will appear. This may be due to:

- a communication error
- this phone is not associated with an active subscription that is registered at the University
- the University records do not indicate a current association of the registered user with the University
- the version of the software on the phone is out of date and must be updated
- the phone was not configured properly, such as denying permission to use the network



For assistance with CEL, you must contact Campus Guardian Corporation. Campus Guardian Corporation support may be reached at 401-423-3954 or via email at support@campuguardian.com. Additional help is available at www.campusguardian.com.

Getting a Valid Location

Since it can take from thirty seconds to three minutes for the GPS receiver to identify which satellites are overhead and produce accurate location information, it is best to start the software before it is needed in order to allow the phone to determine its location. Additionally, it may not

be possible to receive GPS satellite signals inside some buildings and it may be necessary to go outside before a location can be determined. Starting the software and waiting for the status line to become green will ensure that CEL is ready to report location information immediately if an alarm is activated.

If it is not possible or convenient to start the software and allow it time to determine its location before leaving a secure environment, it may be best to start the CEL software when the phone is first turned on. CEL can run “in the background”, that is, when the CEL menu is not displayed on the screen, but CEL is listed in the Applications Manager as running. Although the program cannot interact with the display or the keypad when in the background, most phones permit CEL to acquire current position information when it is running in the background. Although location information is requested from the GPS receiver when CEL is running, it is not transmitted unless the user has activated an alarm via this phone. Upon exiting from the application, all stored locations are lost. CEL must be brought to the foreground in order to activate an alarm and, unless placing a voice call to 911 or Public Safety, should remain in the foreground when an alarm is active in order to ensure that no other application interferes with position updates that CEL sends while an alarm is active.

WARNING: Other software that uses the GPS receiver to determine location, such as navigation software, may interfere with CEL and should not be used when CEL is running.

CEL Status

When the CEL menu is visible on the phone’s display, CEL is “in the foreground”, as shown in **Error! Reference source not found.** CEL must be running in the foreground in order to generate alarms. When in the foreground, there will be a status line at the top of the screen that is a solid color (the green bar in **Error! Reference source not found.**), with “CEL” on the left side and 6 characters on the right side that indicate:

1. the availability of the Connection to the security server computer,
2. the availability of current Location information, and
3. whether the phone is On campus

If the CEL software is running and some other activity takes control of the phone, such as a phone call or message, or if the phone is folded closed, the CEL program will be moved to the background. It is still running, but cannot “see” any numbers that are dialed, cannot display anything on the screen and may not be able to communicate with the Public Safety server. On some phones, this is described as being “suspended.”

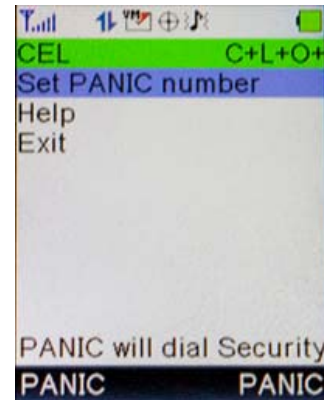


Figure 4: CEL in the Foreground

When CEL is running in the background, it can be brought back to the foreground by selecting CEL from the Application Manager’s list or the phone’s “Suspended Apps” folder. If you have programmed a button to start the software, pressing that button from the main screen will bring

the application back to the foreground. Please consult your phone vendor’s documentation to determine how to access background or suspended applications on your phone.

Status Indicators

When CEL is started or brought to the foreground, a menu of options will be provided. At the top of the screen is a status line that describes the current status of CEL. There are three types of location information:

1. Connection (C)
2. Location Accuracy (L)
3. On-campus status (O)

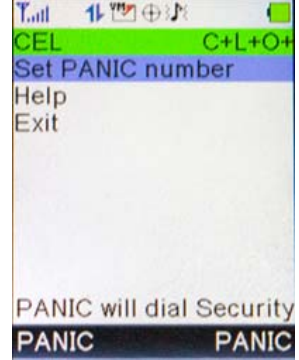
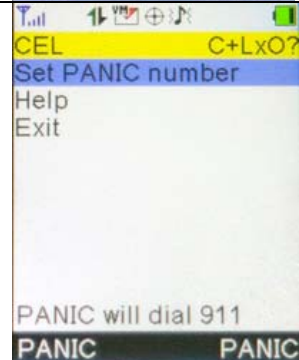
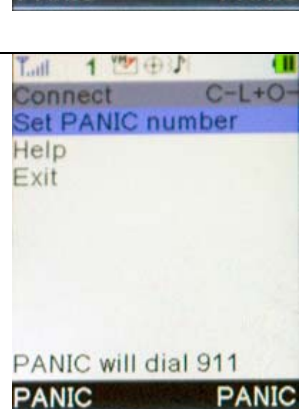
Each letter is followed by a character that indicates the status. The possible values and their meanings are:

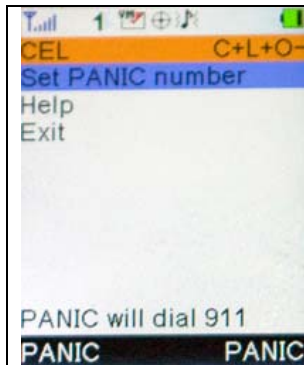
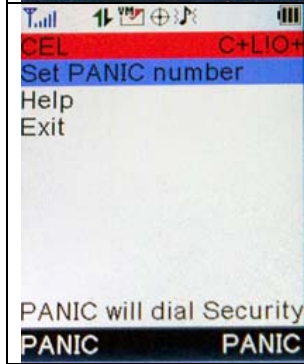
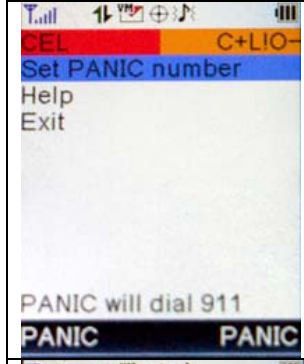
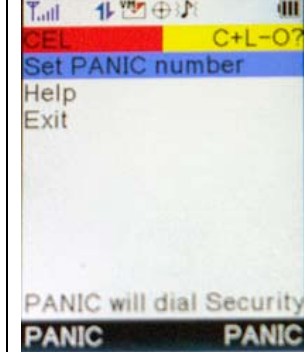
C	+	indicates that there is a good connection to the Public Safety server
	– or _	Either a steady – or alternating between – and _ indicates trying to connect
	X	Indicates connection failed
L	+	The plus sign (+) indicates that there was a recent location determined using the GPS receiver
	!	Locations are being sent to the Public Safety server.
	– or _	Either a steady – or Alternating between – and _ indicates waiting for the GPS to establish a location
	x	Indicates that the GPS receiver is running, but cannot determine the phone’s location CEL does not yet have valid location information. If an alarm is generated, no location information will be provided. The only recourse for Public Safety is to call you. However, CEL will continue attempting to get your location and will provide it to Public Safety as soon as one is available.
O	+	The plus sign (+) indicates that CEL has determined that the phone’s current location is within the region monitored by Public Safety. The emergency number presented when a PANIC button is pushed will be the number selected by you and currently shown at the bottom of the screen (Public Safety or 911).
	–	The minus sign (–) indicates that CEL has determined that the phone is currently outside of the region monitored by Public Safety. The emergency number presented when a PANIC button is pushed will be 911.
	?x	A ? indicates that your location is unknown. The emergency number presented when a PANIC button is pushed will be 911.

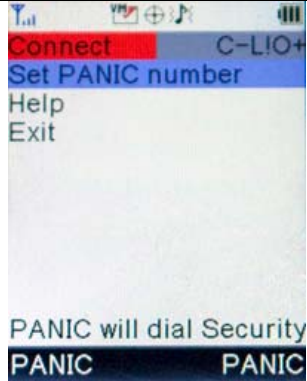

To assist in rapidly recognizing status, the status bar changes colors.

Note: Some displays must be viewed directly from the front in order to see the correct color; tilting the display and viewing from the bottom or top may change the apparent color.

CEL Status Screens

	<p>The status bar will turn GREEN if CEL is running normally, with a recently verified connection to the server, a validated user, a recent GPS data and this location is within the campus monitored region.</p>
	<p>The status bar will turn YELLOW if CEL is connected, but does not have a current valid location from the GPS receiver. In this case, it is possible to generate alarms, but location information will not be available until the GPS receiver begins producing location data.</p> <p>If the GPS receiver was operating prior to the alarm, historical location data will be provided to Public Safety to attempt to approximate the actual location.</p>
	<p>The status bar will be Blue/Gray if there is no active connection to the server. In this case, it is not possible to generate alarms.</p>

	<p>The status bar will turn ORANGE if CEL has determined that your current location is outside of the area in which Public Safety responds.</p> <p>PANIC will not send an alarm to Public Safety.</p>
	<p>The status bar will turn RED if you have activated an alarm, CEL has determined that you are on campus and Public Safety has been alerted.</p>
	<p>The status bar will divide and turn RED on the left of the screen if you have activated an alarm and ORANGE on the right of the screen if CEL determined that your current location is now outside of the area in which Public Safety responds. Public Safety has been alerted.</p>
	<p>The status bar will divide and turn RED on the left of the screen if you have activated an alarm and YELLOW on the right of the screen if CEL is connected, but the location data from the GPS receiver is not yet valid. CEL has <i>not</i> determined if you are on campus, but Public Safety has been alerted.</p>

	<p>The status bar will divide and turn RED on the left of the screen if you have activated an alarm and Blue/Gray on the right of the screen if there is no active connection to the server. CEL has determined that are you are on campus and Public Safety has been alerted, although location updates cannot be sent until a connection is reestablished.</p>
	<p>If a login attempt fails, the message "Login Failed" appears, highlighted in red. A login attempt could fail if:</p> <ul style="list-style-type: none"> • there is a communications error, such as when there is no cell signal • you are not currently registered as a valid CEL user at the University. This only happens if the phone had been registered previously so that the software had been activated on the phone, but the registration ID is no longer valid. • the version of software on the phone was changed improperly • the phone was not configured properly <p>You may retry connecting. Contact Support if the problem persists.</p>

Running CEL

Use the following procedure on Sanyo phones to launch CEL:

1. Press the Menu/OK button on the left side of the arrow keys.



2. Move to select My Content. Press Menu/OK.



3. Choose Applications, then push the Menu/OK button.

Note: Do not choose Application Mgr.



4. Locate CEL, then press the Menu/OK button.



5. CEL will open to the Options menu.

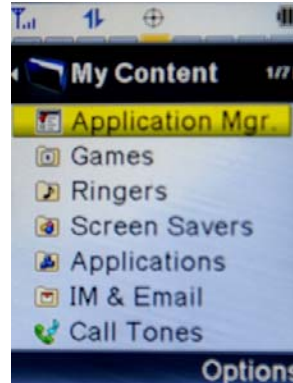
Bringing CEL to the Foreground

Use the following procedure on Sanyo phones to bring CEL to the foreground when it is operating in the background (“suspended”):

1. Press the Menu/OK button.



2. Select Application Manager.



3. Select CEL from the list of Running Apps, then press Menu/OK.



4. CEL will open to the Options menu.

Alternatively, a user-programmable button may be programmed to start and resume CEL.

Options

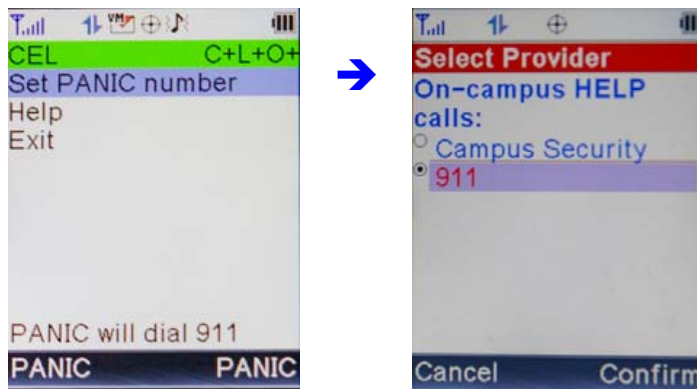
When CEL is started or is brought to the foreground, it presents three options:

- Set PANIC number
- Help
- Exit

Set PANIC Number

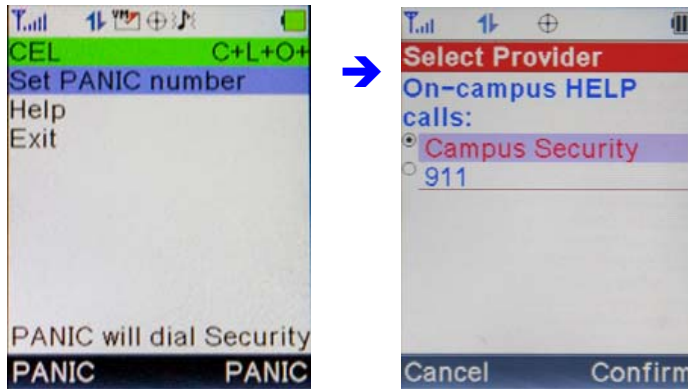
Opens a dialog to choose which number to use as the emergency number when on campus. The options are 911 and the Public Safety emergency number.

If the current selection is “PANIC will dial 911”, the screens will look like:



Select the Campus Security option button to switch to calling Public Safety when a PANIC button is pressed.

If the current selection is “PANIC will dial Security”, the screens will look like:



Select the 911 option button to switch to calling 911 when a PANIC button is pressed. The current selection is always displayed at the bottom of the menu screen.

Help

Presents the following text:

For help, see our web page:

<http://www.campusguardian.com/support/>

or email us at:

support@campusguardian.com

Exit

“Exit” stops execution of the CEL software or other running software. You are asked to verify that the software is to be shut down.

Location Determination

It may take up to three minutes for the GPS (Global Positioning System) receiver to provide accurate location information when it is first started, so it is advisable to start CEL in advance of when it will be needed. The status line at the top of the CEL menu will be green and the L near the right of the status line will be followed by a plus (+) sign when the GPS location information is available.

Limitations of the Technology and Service

No cell phone, GPS, Internet, telecommunications service, computer network, computer system or any computer software is immune from errors, outages, inaccuracies or complete failure.

The systems used to provide your CEL service may not be available or usable for any number of reasons and there are many circumstances under which the system or systems

running CEL will not function and CEL will be unavailable or will not work for you. These include, but are not limited to (1) your wireless provider's system is unavailable; (2) your cell phone is in a location where there is no access or impaired or inadequate access to your cellular network, GPS or any other telecommunications services used by your cell phone; (3) the Internet is not accessible to you, your cell phone or to your wireless provider; (4) GPS location information shown on your phone screen or used by CEL could be delayed, inaccurate, interrupted or disrupted due to atmospheric, environmental and geographic conditions, inaccurate ephemeris data or other factors associated with use of satellites and satellite data, cell site location and information or other network conditions; or (5) your phone or a required component of your phone may fail.

Alarm Notifications

When you are "on-campus" as defined by the *monitored regions*, CEL is able to send alarm notifications to campus security. The *monitored regions* are limited to areas that campus security patrols. They may extend beyond the school's property and may include routes traveled between sections of campus, off-campus housing and common gathering locations of students. When off-campus, an alarm will not be generated at Public Safety and the auto-dialer will select 911.

The status line at the top of the phone's display indicates if on-campus procedures will be used. If the letter O near the right of the status line is followed by a plus (+) sign, the on-campus procedures will be used. Also, the status line will only be green when on-campus. The status line will change to Orange and the O will be followed by a minus sign (-) when off-campus.

There are three types of alarm notification, each with slightly different characteristics:

1. Press either "PANIC" button
2. Call to 911 (dialed from keypad)
3. Call to campus security emergency number (dialed from keypad)

When an alarm is activated, your ID, alarm type, time and location are displayed in the alarm notification at Public Safety. The alarm will remain active until Public Safety terminates it, even if you leave the monitored regions.

Important: Data communications on the Sanyo 7050 cell phone, such as those used to transmit alarm information, are interrupted anytime there is a voice call, including incoming calls. This is a limitation imposed by some phones. On most phones, CEL is able to automatically reconnect as soon as data communications are restored after the voice call ends.

Emergency Calls (Call to 911 or Call to Public Safety)

When CEL is in the foreground (the CEL menu is displayed), it is able to monitor the keypad. If any numeric key is pressed, it will be stored and displayed at the bottom of the screen (where the PANIC button labels appear). When the number is complete, press the "Menu/OK" button.

If the number is 911 or the Public Safety phone number and you are on campus, an alarm notification is sent immediately to Public Safety. The number is then displayed in a dialing window. Pressing the “Talk” button will actually place the call.

Calling Details

You may make calls to any number while CEL is active. The number is simply entered as usual; however the number will appear in the bottom line of the display, as shown in Figure 5. It is then necessary to press the “OK” button to select this number. It will then appear in a dialing dialog, where it normally appears when dialing a call, as shown in Figure 6. It is then necessary to press “Call” in order to place the call.

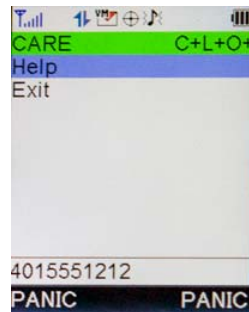


Figure 5: Dialed Number

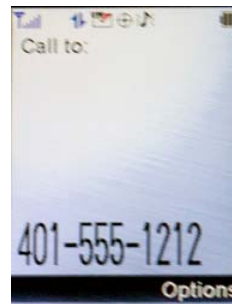


Figure 6: Dialing Dialog

Before pressing “Menu/OK”, it is possible to cancel out of the dialing process without placing CEL in the background (by pressing End). However, pressing “Menu/OK” places CEL in the background and switches to normal phone operation. Anything that occurs after this point is not visible to CEL. For example, incorrectly dialing 9115 then pressing “Menu/OK”, then correcting the number to 911 will not generate an alarm, even if the number is corrected before pressing the “Talk” button, since CEL can no longer “see” the number.

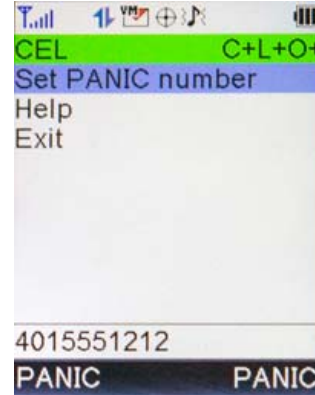
However, if the number is changed while at the bottom of the screen (prior to the pressing “Menu/OK”), the changes will be recognized by CEL.

When you dial 911, your phone will enter “Emergency Mode”. Please consult your phone’s operating manual to determine how it will behave in this mode before operating the CEL software.

Call to Public Safety Generates an Alarm

Use the following procedure on Sanyo phones to automatically send an alarm to Public Safety (other phones may use different buttons to start a call or show slightly different messages):

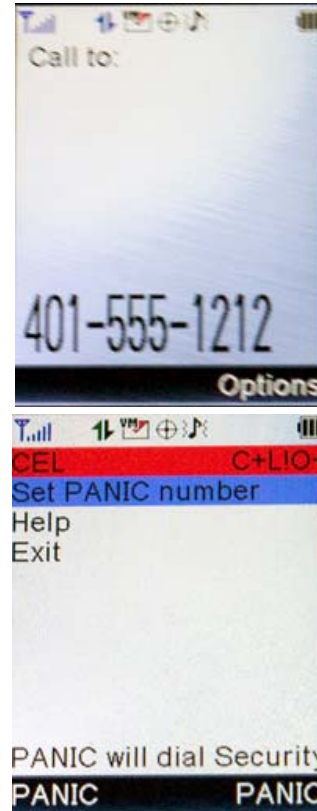
1. Start a call from the CEL screen. You will see the number at the bottom of the screen above the PANIC button labels.



2. Press the Menu/OK button on the left side of the arrow keys. If this is the preprogrammed emergency number for Public Safety or you have dialed 911, CEL will generate an alarm to Public Safety.
3. This dialog box will appear briefly. If you want to speak with Public Safety, you must press either the Talk or Speaker button on the Sanyo phone.



- A dialog box will then show the number being called.



- If you do not wish to place the call, press the “Back” button on the Sanyo keypad to return to this screen without placing the call. If a call is placed and is ended, the status bar will turn **RED**, will show if CEL has determined you are on campus and that Public Safety has been alerted.

When a call is placed, CEL’s ability to communicate with Public Safety may be lost for the duration of the call (phone-dependent behavior). This is a limitation imposed by some phones. However, on some phones, CEL can keep the GPS active and can record locations on the phone. On most phones, the software will be able to continue to attempt to reestablish communications. If the call ends, the software will reestablish the connection, immediately transmit any locations that were recorded while in the background and verify the alarm status. On those phones that do not permit collecting locations in the background, location updates will resume when the software is brought manually back to the foreground. If the alarm is still active, CEL will resume reporting locations at 15-20 second intervals. The alarm will remain active until Public Safety terminates it, even if you leave the monitored region.

PANIC Buttons

When CEL is in the foreground, the two programmable buttons just below the display will be labeled “PANIC”. Pressing either button while they are labeled “PANIC” will generate an immediate alarm notification and begin sending location updates. Also, see “Emergency Dialing for PANIC button Alarms”, below.

Emergency Dialing for PANIC Button Alarms

Pressing a PANIC button will pre-dial the emergency number previously selected. The number may be set to 911 for on-campus or off-campus calls, or to the Public Safety emergency number for on-campus calls. When a PANIC button is pressed, the number will

appear on the screen, but it will not actually place the call. It is necessary to press the Menu/OK button to accept the number, then press the “Talk” button to place the call. The Menu/OK button is in the center of the arrow keys.

Once the call has been placed, location updates can no longer be transmitted on some phones until the call ends.