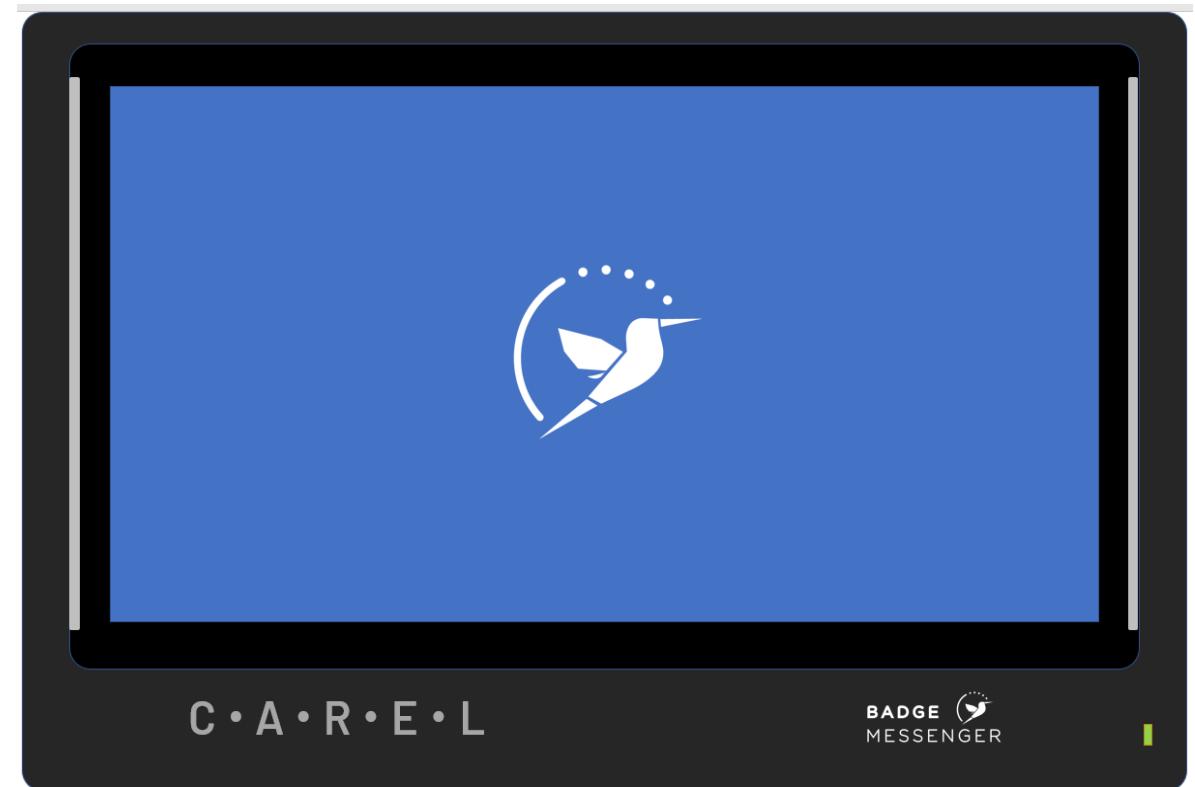


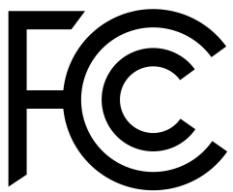
The Badge Messenger System: Warnings and Notices.

The Badge Messenger system is designed to support your current Crisis Management and Safety protocol. As such, if the use of public address systems is currently part of your Crisis protocol, you should continue to use it in conjunction with the Badge Messenger system. Each Messenger has both a haptic feedback (vibrator motor), and a high-brightness LED as sensory alerts. These however are not always enough and the reliance on these alone for notification should not be part of the emergency protocol. The Messenger is designed to transmit and receive with a minimum of auditory disruption for the normal classroom yet be easily felt and heard with repeated haptic stimulation. With usage, the associated protocol can be adapted to take advantage of the operation of the Messenger.



C.A.R.E.L. Command Center
Model SRX





FCC Compliance Statement

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

(1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

CAUTION: The grantee is not responsible for any changes or modifications not expressly approved by the party responsible for compliance. Such modifications could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This equipment complies with the FCC radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Warranty

The CAREL is covered for defects in workmanship or parts failure for a period of 12-months from date of purchase. Badge Messenger will at its sole discretion, replace or repair any defective device covered within the warranty period. Warranty will not cover damage due to misuse, abuse, water damage, tamper, or disassembly. The use of unauthorized accessories may also void your warranty. Please see the precautions (1.2) and the safety instructions (1.3) for further information regarding the safe operation of the CAREL.

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Introduction

1.1 Acknowledgement

Thank you for choosing Badge Messenger as a tool for improving your communication protocol. The CAREL is an integral part of the system and should give years of pleasant service. Please review the safety and precautionary portions of this manual to ensure a long and useful life. Please see the statement on the back cover regarding the proper integration of Badge Messenger into your school's protocol.

1.2 Precautions

- Please keep this equipment dry and avoid placing CAREL near heat sources.
- Place the CAREL on a level surface and protect from accidental tipping.
- Do not subject the unit to strong impacts or vibration.
- When stationary, always keep the CAREL plugged in . for remote usage, reconnect once finished by replacing charger cable thru the kickstand and fully inserting it into the power port.
- Do not place the charger cable under the kickstand as this creates an unstable effect on the unit.
- Do not use metal objects on the display screen.
- Use the supplied cleaning cloth to clean the screen. Apply light pressure to avoid scratching. Alcohol or solvent based products will damage the surface of the unit and could remove the printed text.
- ALWAYS use the wrist lanyard when operating portably, this reduces the risk of dropping the unit and damaging it.

1.3 Safety Instructions

- The CAREL is a tablet-based device that has separate radios (LoRa) for the transmission/reception of data. Please provide a metal free pathway to the gateway for best results.. It is advised to place this device over 8" away from other objects, people, or equipment for best performance.

1.4 Abbreviations / Terms

- C.A.R.E.L = Communicate – Alert – Respond – Evaluate – Learn
- MCF = Master Configuration File

Description of Features

2.0 Introduction to CAREL

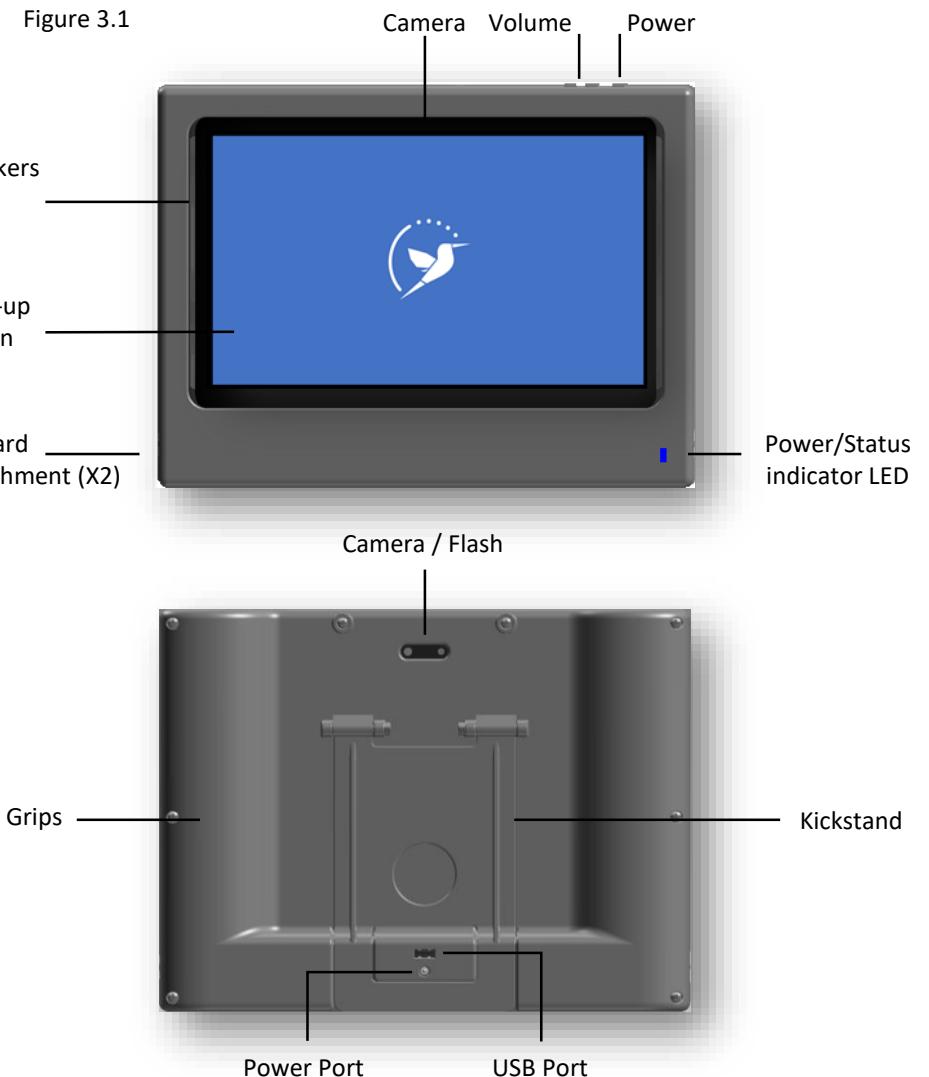
The CAREL Mobile Command Center is the communication hub for the Badge Messenger system. The CAREL consists of a tablet style interface and a set of specific radios for the LoRa protocol. These are fixed at the factory and are non-configurable by the end user. The following instructions will cover all aspects of operation. Please follow all safety instructions to ensure the safe and enjoyable operation of your CAREL.

2.1 Contents included

1. CAREL Display Unit.
2. Power Adaptor.
3. USB Transfer Drive (transferring files to/from the CAREL).
4. Transfer Drive extension Cable.
5. USB-A to USB-Micro Cable (for programming Messengers).
6. USB-A to Network connector. (for programming Gateway).
7. Wrist lanyard.
8. Screen Cleaning cloth.
9. Instruction Manual.

2.2 External Case Features (figure 3.1)

- Power / Volume buttons are located atop the unit.
- Front / Back Camera
- Power / Status Indicator
- Speakers
- Power port
- USB Port
- Kick Stand
- Lanyard (not shown)
- Textures Hand Grips



3.0 Set-up

1. Remove CAREL from box and inspect contents for any damage.
2. Remove clear protective sheet from the screen.
3. Plug in power adaptor to 120V Wall Outlet and in to the CAREL charge port (taking care to route the cable through the kickstand, not under).
4. Swing out kick stand and place on a stable surface. Note: whenever reconnecting the CAREL to the power connector, collapse the kickstand then connect the power connector. This ensures that the power plug goes into the connector, not the recessed screw pocket!)

3.1 Hardware

1. Remove CAREL from box and inspect contents for any damage.
2. Remove clear protective sheet from the screen.
3. Plug in power adaptor to 120V Wall Outlet and in to the CAREL charge port (taking care to route the cable through the kickstand, not under).
4. Swing out kick stand and place on a stable surface. Note: whenever reconnecting the CAREL to the power connector, collapse the kickstand then connect the power connector. This ensures that the power plug goes into the connector, not the recessed screw pocket!)

3.2 Power

Power on: Press and hold down the power button until screen displays the Badge Messenger splash screen (approx.. 15 sec.) Start-up will take several minuets. The Power indicator will show Blue when connected to AC power. A green LED indicates CAREL is operating on an internal battery. A Red LED indicates that the internal battery for the radio is low and needs to be re-connected to AC power. The screen has a separate power indicator for the tablet. The start up screen needs to be swiped to engage the icons for set-up and usage.

Power off: Press and hold down the power button until screen displays “Power Off”. Select to power down. The LED will go off after several seconds after the screen.

3.3 CAREL Set-up / Gateway

First time you power up, the CAREL, the screen will present a “Set-up” icon. Selecting this starts the initial set-up of your equipment.

* Please note, all subsequent power up screens will display the Badge Messenger Icon for normal operation.

Gateway Set up:

1. Unpack, inspect and attach the antenna. White for the Wi-F-, and black for the LoRa.
2. Mount the Gateway (see instructions supplied with the gateway)
3. Connect power and wait several minuets for the device to initialize.

Gateway Pairing:

1. Connect Ethernet cable to Gateway and to network adaptor.
2. Insert usb connector to the CAREL
3. With the Gateway running, Press the “Gateway set-up” icon.

Channel selection:

1. Press the “SCAN Channel Mask” button.
2. Allow the CAREL approximately 60 minuets to scan the environment and select the best frequency range to operate in and for programming your messengers.
3. The CAREL will indicate when the process is complete.
4. Press “Exit Setup”

Default Settings: Time

1. Admin. > General Settings > Set Time
2. Set hours, Minuets, and AM/PM
3. Press “Complete”.

3.4 Screen nomenclature

- **Badge Messenger Icon:** Pressing the hummingbird icon is the Shortcut to “Operations” page. (fig.3.2)
- **Menu:** Selecting this drop-down menu, you access all CAREL functions.
- **Mode:** This area of the screen displays the current state of the CAREL interface. Touching this area activates “FULL SCREEN” and resets any zoom screen function.
- **School Name / Screen refresh:** Touching this area refreshes the screen.
- **Time & Date:** Displays Network Time and Date on CAREL and all messengers.
- **Sound On or Off:** Switches between sound, or silent operation. (fig. 3.1)
- **Instant Lock Down:** Displays a “Yes” or “Cancel” menu to activate a Lockdown.
- **Display all Records:** Checking this box displays all requests within a given timeframe.
- **Name:** Requestors name on Messenger.
- **Location:** The default location stored in the Messenger. (Fig. 3.3)
- **Request Type:** This shows the Request type needed by the Messenger.
- **Start:** Shows the arrival start time of the request.
- **Assigned:** Displays the assigned time once activated.
- **Resolved:** Indicates the time once the request is resolved
- **Elapsed:** This is total time displayed from the start to finish of a request.

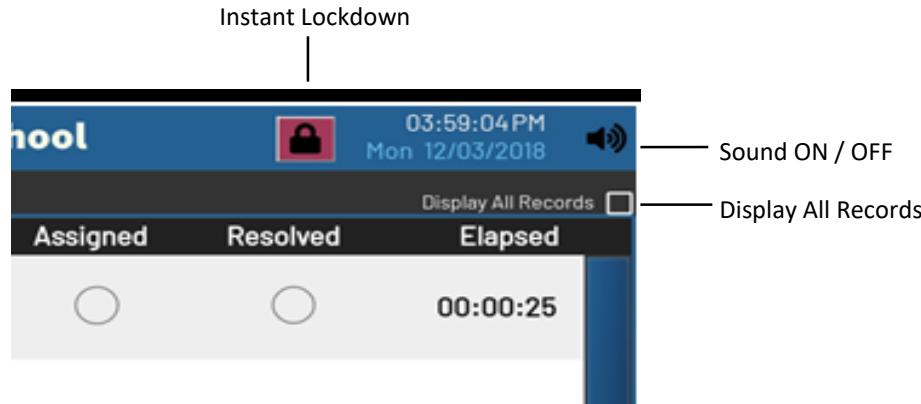


Fig. 3.3 A

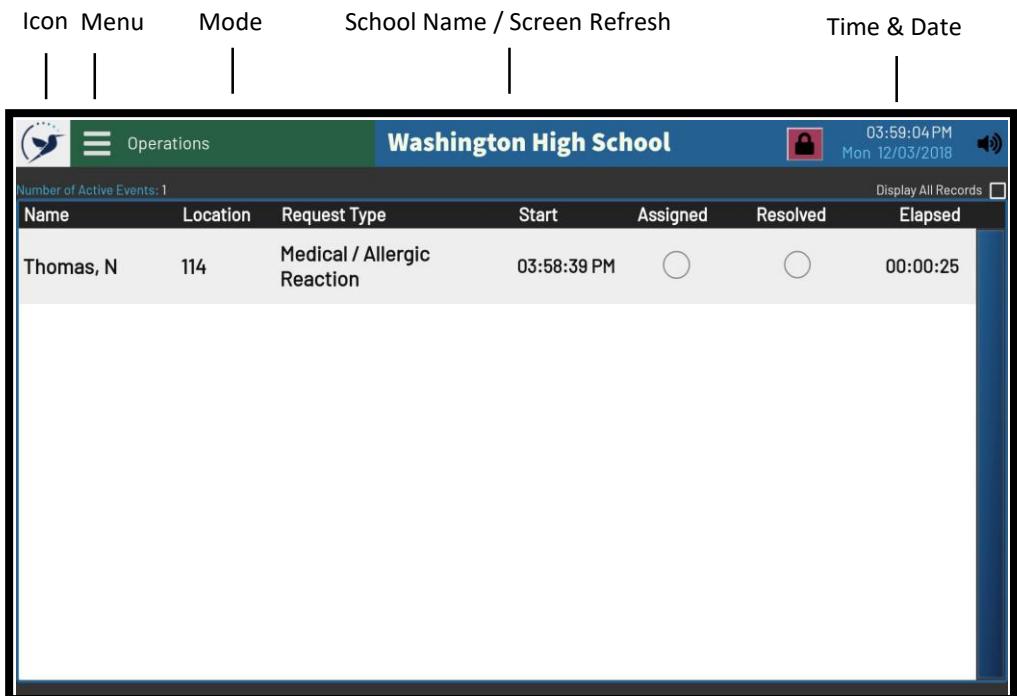


Fig. 3.2

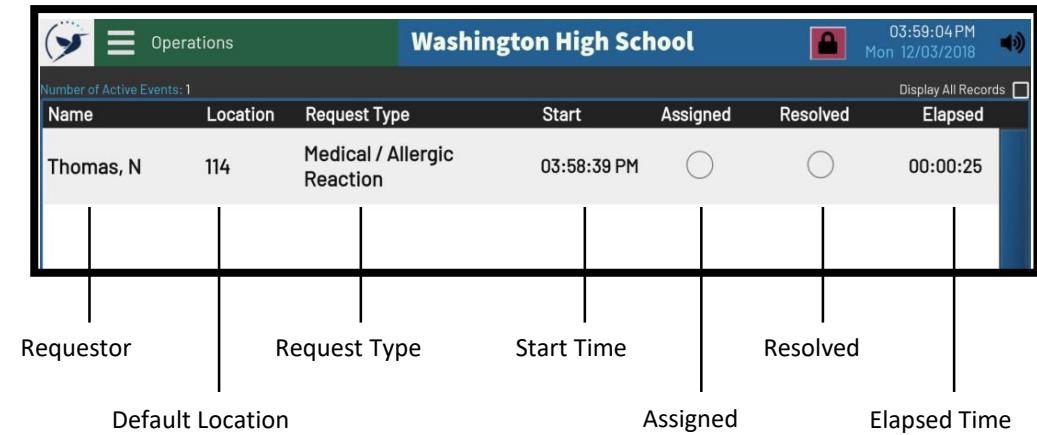


Fig. 3.3

4.0 Operations

4.1 Downloading (adding) a Master Configuration File to the CAREL

The following section will explain how to transfer a master configuration file from your customer portal via your computer to your CAREL

Downloading the MCF from the Computer to the Transfer Drive.

1. Connect Transfer Drive to computer via USB port.
2. Go to portal.badgemessenger.com and log in.
3. From your portal, Click “Generate MCF” and save to computer desktop.
4. Copy MCF to the Transfer Drive.
5. After the transfer is complete, Select “Finish and Exit”.

Installing the MCF from the Transfer Drive to the CAREL.

Menu > Administration > Load Master Config file

Connect Transfer Drive to CAREL via USB cable.

1. Select “OK to Upload”
2. After the upload, Select “Finished” to Exit.

4.2 Uploading (backup) Master Configuration File

This shows how to backup a CAREL MCF for archival or recovery purposes.

Backing-up a Master Configuration File from CAREL to the Transfer Drive.

Menu > Administration > MCF > Export

1. Connect Transfer Drive to CAREL via USB cable.
2. Select “OK to Export”
3. Select “Finished” to Exit.

4.3 Adding Messengers to the System.

Adding Messengers to your CAREL, is a simple process of attaching the messenger and powering up.

Menu > Administration > Assign Messenger

1. Attach the Powered Down Messenger to the USB cable.
2. Press and hold the NO button to Power up the Messenger.
3. Select Recipient from the drop-down list. If not issuing, select “Unassigned”
4. Enter last 5-digits of the serial number into the keyboard, press enter.
5. Messenger will automatically program.
6. When complete, remove.
7. For additional Messengers, repeat.
8. When finished, exit the screen.

**NOTE: Messengers must be fully charged prior to this process.*

4.4 Assigning Messengers

The assigning of messengers should be done only after the master configuration file is loaded in to your CAREL. A Messenger in the system can only be assigned to a single person at any given time. No person can have two Messengers at the same time. Assigning a Messenger to a person will also program that unit to their preferences.

Menu > Administration > Update Messenger

1. Connect Powered Down Messenger to CAREL with USB cable.
2. Select name from drop down list. *Note: only available persons will be highlighted.*
3. Power up Messenger.
4. Messenger will automatically program.
5. When finished, Disconnect.
6. Repeat steps 1-3 for additional units.
7. When finished, exit the screen.

4.5 Adding Repeaters to your CAREL System

Adding a repeater is recommended for facilities that cannot be serviced by the CAREL alone. Please see instructions on “Adding Repeaters” within the instruction Manual included with your new Repeater. An average grade school is usually served well by one repeater. Larger schools with

5.0 Requests

All incoming requests from messengers are delivered to the CAREL. These requests can be handled by the operator, or the person making the request.

5.1 Managing Incoming Requests (without an Emergency Event)

- “Help”, “Maintenance”, “Medical” and “Security” are all presented in the same style (figure 5.1). The information consists of the Requestor (name of the person making the request), default location, type of request, and time of the request. Also included in the request line is a place to “Assign” and “Resolve” the request.
- Once a request appears on the screen, a chime will sound alerting you to a new request from a Messenger. Once help is dispatched, pressing the “Assigned” circle will time stamp the event, and replacing the circle on the screen. The Messenger display screen will also update, indicating help is on the way.
- Likewise, once the issue is resolved, pressing the “Resolved” circle will closeout the request process and time stamp that process too. Both the “Self-Assign”, and a “Self-Resolve” can be performed by the Messenger should that be the natural outcome of the request. Self assignment and self resolution will update the CAREL display screen in the same manner.
- The Operation of a request during an Emergency Event is handled differently so as not to interrupt a crisis situation data display. This is covered in section **6.0 Emergency Events**.

5.2 Forwarding a request

- It can be useful to re-transmit a request from a messenger directly to an individual. This action is performed by going to the upper left corner of the CAREL operations Page, selecting the “Forward Request” drop-down menu. Selecting a type of request and a recipient, and pair them together. This allows for a “request type” e.g. Maintenance” to also appear on the messenger of the selected individual assigned for this purpose. Only one person can be assigned to any one type, however, the same person can receive other types of requests. The CAREL will record the event as normal and simply push a notice text to the selected person.

Operations		Washington High School				03:59:04 PM		Mon 12/03/2018		Display All Records	
Number of Active Events: 1											
Name	Location	Request Type	Start	Assigned	Resolved	Elapsed					
Thomas, N	114	Medical / Allergic Reaction	03:58:39 PM	<input type="radio"/>	<input type="radio"/>	00:00:25					

Requestor Request Type Start Time Resolved
Default Location Assigned Elapsed Time

Figure 5.1

5.3 Sending a Notice

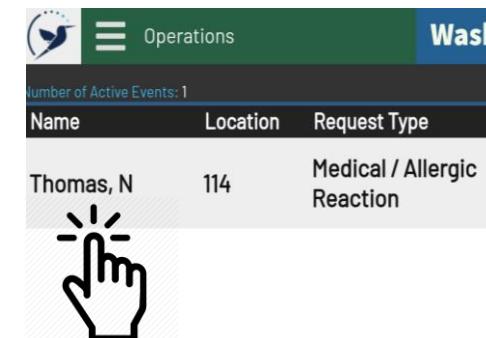
- Sending a notice is performed from the “Send Notice” in the Menu. Notices may also be sent from any dialogue box generated by selecting a person's name anywhere on the operations page or an Emergency Event page.

Menu > Send Notice

- A dialogue box will appear asking for the person to receive the notice, and a second drop-down for the message to be sent.
- Once these are populated, click “Send”.
- A “Notice Sent” and clicking OK, closes out the event.

Request line

- Touch the name of the person you wish to notice.
- A dialogue box will appear asking for the message to be sent.
- Once these are populated, click “Send”.
- A “Notice Sent” and clicking OK, closes out the event.



6.0 Emergency events

The CAREL can be configured to accommodate as many different Emergency / Crisis style events as you may require. The Lockdown is unique in that the “Lockdown” icon is ever present and ready for use. All other events / drills are accessed through the Menu.

CAREL Initiated Lockdown Event can be started in two different ways. First is with the LOCKDOWN Icon located on the “Operations” screen. The second, is using the Menu selection.

6.1 CAREL initiated events

Lockdown Icon:

By pressing the Lockdown Icon, you...

1. Press the “Lock Button”
2. Confirm choice.
3. Enter the Lockdown screen and event.

Menu > Emergency Event > Lockdown

1. Select Lockdown
2. Confirm choice and enter the Lockdown screen and event.
3. Pressing the green “Start” button starts the process

*Detailed Messenger instructions are available on the Badge messenger website.

All other Drill / Events are accessed through the Menu as shown above. The step sequence will always be the same and the Messengers will respond accordingly. A Third way to activate a school wide Lockdown is with the Messenger itself. By pressing and holding the Security and Medical together for 3 seconds, will launch a lockdown. The individual who called for the lockdown will follow the same procedure as all other messengers.

Lockdown and Check-in Screen Phase 1

Launching an event will produce this screen (Fig. 6.1) with all names present and active. As Messengers are activated, the first circle will indicate either a Yes, or a No button press. The Green indicate a “I’m Aware and complying” condition. The Red circle signifies that “I’m Aware and I am out of position. The Red circle response cannot be

Initial LOCKDOWN Screen (no one is checked in yet)

The screenshot shows the 'Emergency Events' screen for 'Washington High School'. At the top, it says 'Active Emergency Event: Lockdown'. Below this, there are three buttons: 'Start' (green), 'All Clear' (blue), and 'Close' (grey). The time is 04:23:55 PM and the elapsed time is NaN:nA. The list of students is as follows:

○○○○ Anderson, L	○○○○ Brown, D	○○○○ Clark, Y	○○○○ Davis, G
○○○○ Garcia, H	○○○○ Gonzalez, W	○○○○ Harris, X	○○○○ Hernandez, O
○○○○ Jackson, R	○○○○ Johnson, B	○○○○ Jones, E	○○○○ Lee, V
○○○○ Lewis, Z	○○○○ Lopez, U	○○○○ Martin, Q	○○○○ Martinez, K
○○○○ Miller, F	○○○○ Moore, P	○○○○ Rodriguez, I	○○○○ Smith, A
○○○○ Taylor, M	○○○○ Thomas, N	○○○○ Thompson, S	○○○○ White, T
○○○○ Williams, C	○○○○ Wilson, J		

LOCKDOWN Check in (First Messenger Button Press)

The screenshot shows the 'LOCKDOWN Check in (First Messenger Button Press)' screen. The time is 04:23:55 PM. It displays the '*** Active Emergency Event ***' message and a list of students with their current status:

✗○○○ Brown, D	✓○○○ Clark, Y
✓○○○ Gonzalez, W	✓○○○ Harris, X
✗○○○ Johnson, B	✓○○○ Jones, E
✓○○○ Lopez, U	✓○○○ Martin, Q
✓○○○ Moore, P	✓○○○ Rodriguez, I
✓○○○ Thomas, N	✓○○○ Thompson, S
✓○○○ Wilson, J	

Are You Safe? (Second Messenger Button Press) Phase 2

This is the screen for the second button press for the event. This shows the condition of each Messenger as to them being in position or not in position and working to improve their condition. Green circle and check mark is in position. Red circle and X, is out of position. The Red Circle is a status that can be updated as the condition improves.

All Clear Check in (Third Messenger Button Press) Phase 3

Like the first button press, this lets the CAREL know that you are aware of the event change status. The All Clear informs all messengers to return to the classroom. This is always a Green YES button press.

Returned (Fourth Messenger Button Press) Phase 4

After the safe return of all staff and students the Messenger user presses the Yes button for the fourth stage of the event. This will show up as a Green circle. If there is difficulty in completing the return, then the NO button will be pressed, and a Red circle will appear as a request for assistance.

Detailed Review of Event (Sample)

A details button press, will break-out all users and the reaction times to each step as the event progressed. This is useful in reaction time to start and phase completion, identifying ways to improve.

Name	Time #1	Time #2	Time #3	Time #4
Anderson, L	04:24:42 PM	04:25:50 PM	04:26:50 PM	04:27:33 PM
Brown, D	04:24:43 PM	04:25:51 PM	04:26:50 PM	04:27:35 PM
Clark, Y	04:24:44 PM	04:25:46 PM	04:26:49 PM	04:27:34 PM
Davis, G	04:24:41 PM	04:25:44 PM	04:26:48 PM	04:27:29 PM

Roll Call of all assigned Messengers

7.0 Roll Call

When selecting the Roll Call screen, all staff members are displayed, both active and non-active. The active are illuminated and have the status dot highlighted green, and the inactive are greyed out with a red status dot. This process also time stamps the event for review. With the aid of the selector dropdown, you can select to display "Present", "Missing" and "All". The status is updated every 15 minutes from the messenger. It also will update with any button press. This process runs in the background and never needs maintenance. The active messengers are the only ones that are involved with the Emergency Event screen at the time of activation. Should a messenger become active during an event, the CAREL will automatically add it to the event. To view the current state of

7.1 Automatic Roll Call

Menu > Roll Call

1. The Roll Call will appear.
2. Select the data set you wish to view. Selecting a display option, All, Missing, or Present
3. Touching a name will hyperlink to the profile attached to that name.

7.2 Push Roll Call

Menu > Roll Call

1. Touching the "Push Roll Call"
2. The CAREL will conduct a multicast of all messengers. The process time varies based on number of messengers.
3. Screen will update.

NOTE: all communications will occupy a certain amount processing time that might tie-up the access for messenger requests. Please limit these types of activity to a minimum.

Administration Options

This section will cover, Emergency event management, Messenger management, User management, Request sub-menu options, Notice option management, Event option management, User category management, Reports, General settings.

8.1 New Messenger set-up

Menu > Administration > New Messenger Set-Up

1. Power down Messenger
2. Connect to USB Cable. Power up Messenger.
3. Enter last 5 numbers of the Messengers serial number. Select name from drop-down list.
4. Press "GO" on "Transfer Settings to Messenger".

8.2 Messenger Management

Menu > Administration > Messenger Management

1. Selecting the + will allow you to add a new messenger.
2. Selecting the pencil will allow you to alter the record.
3. Selecting the x will allow you to delete a current record.

8.3 User Management

Menu > Administration > User Management

1. Selecting the + will allow you to add a new messenger.
2. Selecting the pencil will allow you to alter the record.
3. Selecting the x will allow you to delete a current record.
4. Selecting the 4-squares icon gives access to changing the sub-menu choices.
5. Selecting the picture icon will allow you add a photo.

8.4 Request Sub-menu Management

Menu > Administration > Request Sub-menu Options

Changes to the availability of an option and its priority. This change will not remove the option residing on previously configured Messengers. This change will apply to Messengers issued going forward.

1. Selecting the + will allow you to add a new Option
2. Selecting the pencil will allow you to alter an Option.
3. Selecting the x will allow you to delete a current Option.

8.5 Notice Options Management

Menu > Administration > Notices

Changes to the availability of an option. This change will not remove the option residing on previously configured Messengers. This change will apply to Messengers issued going forward.

1. Selecting the + will allow you to add a new Options
2. Selecting the pencil will allow you to alter an Option.
3. Selecting the x will allow you to delete a current Option.

8.6 User Category Management

Menu > Administration > User Category Management

1. Selecting the + will allow you to add a new Category
2. Selecting the pencil will allow you to alter a Category
3. Selecting the x will allow you to delete a current Category.

8.7 Reports

Menu > Administration > Reports

Selecting Badge Holder, Event type, start/stop dates, reports can be generated to view based on activity and inputs.

8.8 General Settings

Menu > Administration > General Settings

1. Organization Information: Enter Organizations Name
2. Remote Access: allows remote service access.
3. Request Forwarding: Allows one Messenger per category to receive requests.
4. Software Options: Config options to allow Messengers access to Lockdown options.
5. Network Setup: Permits connection of CAREL to network LAN via Wi-Fi.
6. Utilities: Forces manual shutdown of LoRa radios.
7. Panic Button Assignment.

8.9 Master Configuration File

Menu > Administration > Master Configuration File

1. Select “**Load MCF file**”
2. Insert Transfer Drive with MCF
3. Press the “File Load” button, select Yes.
4. Select OK
5. Select “**Export MCF file**”
6. Insert Transfer Drive with MCF
7. Press the “Export MCF” button, select Yes.
8. Select OK

8.10 System backup

Menu > Administration > System backup

User data attached to the messenger is available here. Attaching a photo, name, the default location, Status, Nickname, and selecting the sub-menu choices associated with this Messenger.

1. Insert Transfer Drive into the USB port.
2. Press here to start backup.
3. backup Complete, remove transfer drive.