



The STIFF/ARM device provides extra security to an entry door. It's unlike any other device. The STIFF/ARM device does not need to be permanently installed and can be easily moved to be used elsewhere.

The STIFF/ARM device is controlled by the STIFF/ARM application using Bluetooth Low Energy (BLE) communications. BLE signals can reliably connect over a distance of 15-20 feet. Certain permissions are required to allow the STIFF/ARM application to use BLE communications. The User will be prompted if these are not enabled.

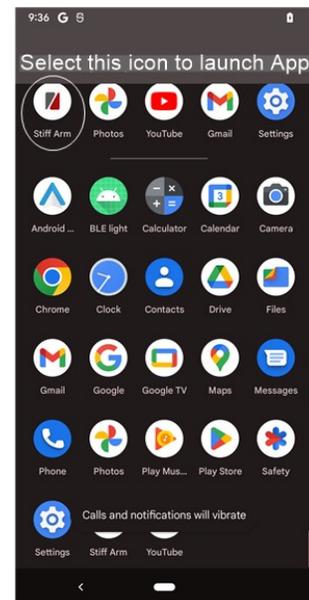
The STIFF/ARM device includes a myriad of features available through the STIFF/ARM application including a personalized user interface, a customizable alarm that sounds when the device is rattled, a battery life indicator, an activity log, and a portal to manage keys.<sup>1</sup>

Security is a critical. So, the STIFF/ARM application requires the 6-digit Short Code (supplied by the User when the account is first created) to make any account changes. Key information is stored locally on the User's phone and linked to a password-protected cloud-based database.<sup>2</sup>

The STIFF/ARM User Guide shows how to use the STIFF/ARM application and to get the most out of your STIFF/ARM device.

### LAUNCH STIFF/ARM APPLICATION

The STIFF/ARM application is launched by clicking on the icon shown.  The icon may be anywhere on the app screen which is accessed by swiping up on the phone screen.



<sup>1</sup> Not all of these features are available in the first release

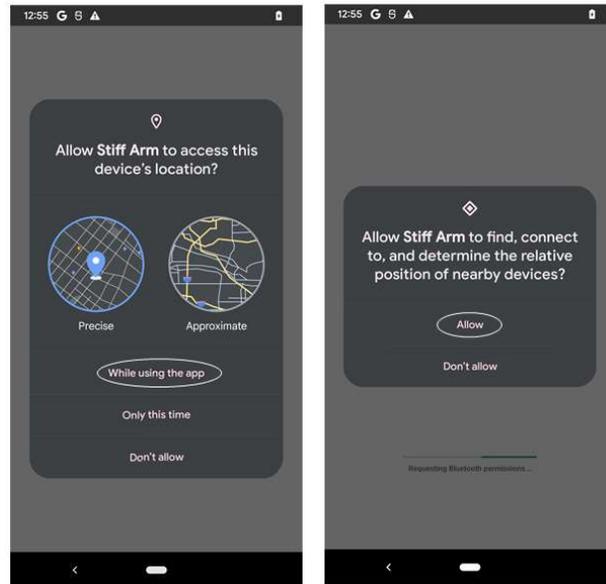
<sup>2</sup> The cloud database is not set up at the moment

## REQUEST PERMISSIONS

Immediately after installing and launching the STIFF/ARM application, the User will be asked for permission to use Bluetooth Services and location services. These services are needed to allow BLE communications.

In the first screen, below the prompt **Allow Stiff Arm to Access this device's location?** select **While using the App**.

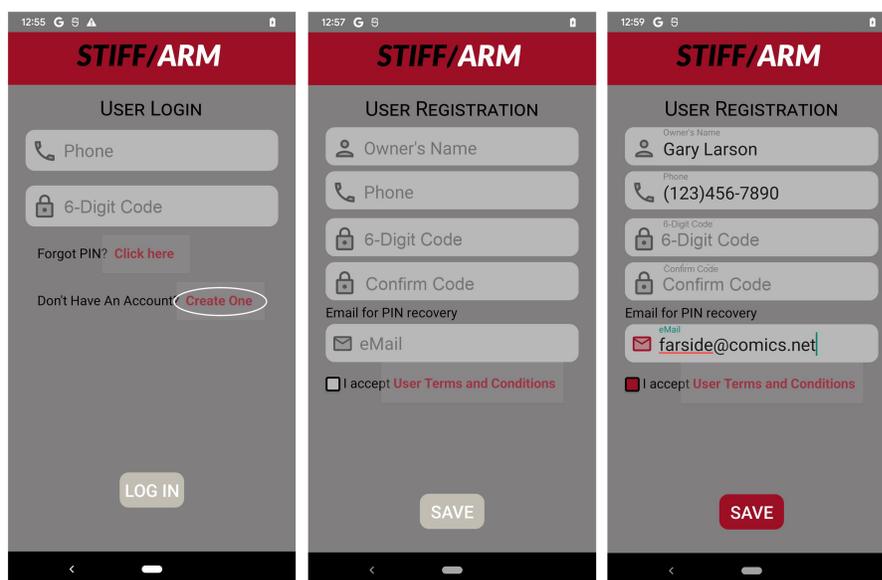
In the subsequent screen, in response to the prompt **Allow Stiff Arm to find, connect to, and determine the relative position of nearby devices?** press **Allow**.



## CREATE ACCOUNT

After launching the STIFF/ARM application for the first time, the User will be prompted to Login. The User should select **Create Account** next to the **Don't Have an Account?** prompt. This will load the second screen – the User Registration form.

The User should enter their personal information here. The phone number should be the phone number associated with the mobile device. The 6-digit Short Code is for security and is used to verify any database changes. The email is to be used if the User forgets their Code so it may be recovered. After the User Registration form has been successfully completed, the Save button **Save** at the bottom on the page will turn red and be activated.

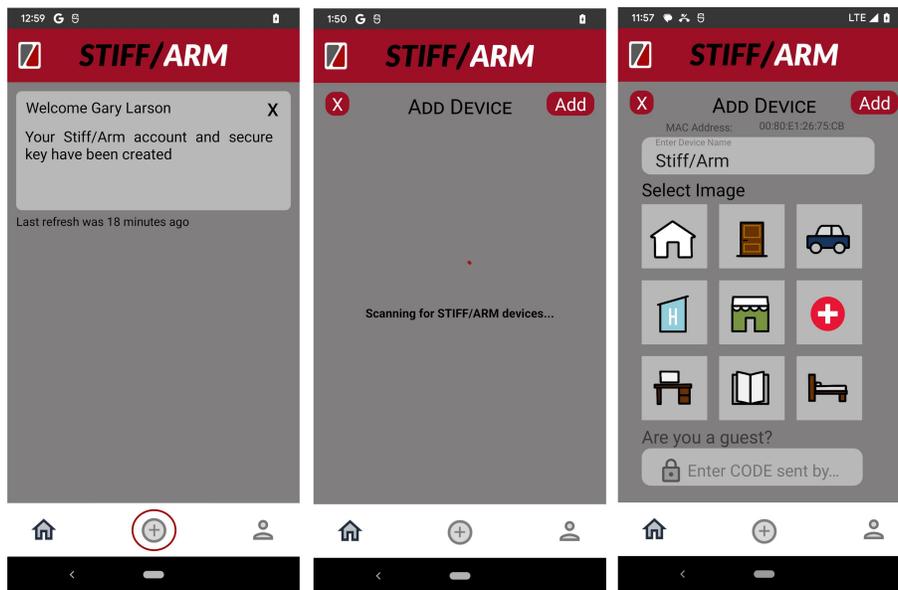


## ADD DEVICE

After an account is created, the STIFF/ARM application will transition to the Home screen. A welcome message confirms the new account is ready.

Let's now add a device to your account so that it can be controlled. Start by clicking on the bottom navigation button that looks like a plus sign (+). It's circled in red. The STIFF/ARM application will now scan for advertising devices with the name "STIFF". After scanning, the Add Device screen will show the closest STIFF/ARM device and its MAC address. At this point, the User can personalize the STIFF/ARM device by entering a name and selecting an image from the set. The outline of the selected icon will turn red.

Press the Add button **Add** in the upper right corner of the screen to complete the process.



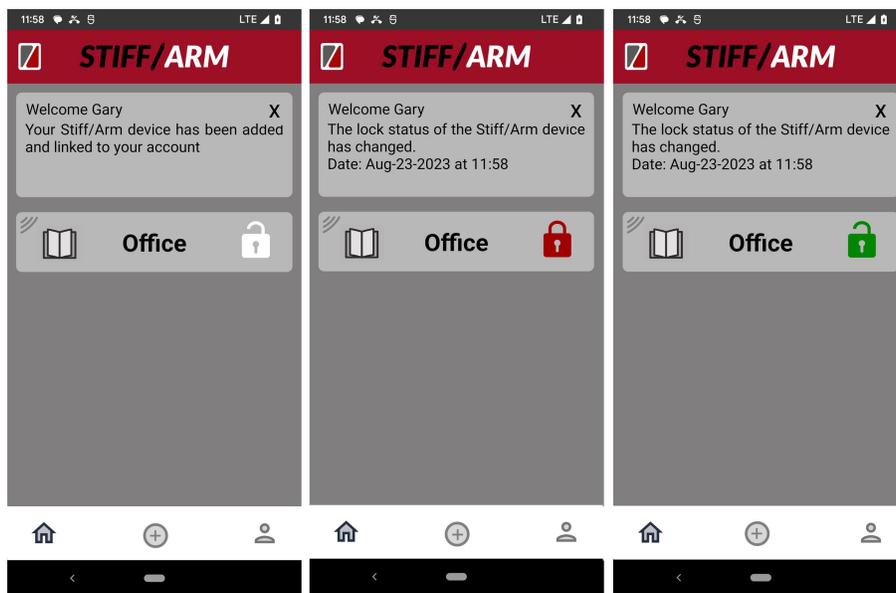
At the bottom of the screen is a prompt for the Guest Code. This can be ignored during the initial set-up of the STIFF/ARM device. It's used to receive and activate a Guest key. More on this in the Manage Keys section.

## CONTROL THE DEVICE – LOCK/UNLOCK

After a device is added, the STIFF/ARM application will transition back to the Home screen. A message confirms that a new device has been added and linked to the account. The newly-added STIFF/ARM device appears in a widget with its name, image, and a lock icon.

It's now time to control the STIFF/ARM device. Initially, the lock icon associated with the STIFF/ARM device will be unknown (white).  Pressing the lock icon will direct the STIFF/ARM device to move to the lock position. The lock icon vibrates and flashes as instructions are transmitted over the BLE link. The actuator within the STIFF/ARM device extends and the color of the lock icon transitions to red. 

Pressing the lock icon again repeats the operation, retracts the actuator, and toggles the lock icon to the green. 



The location icon button  is used to view information about the STIFF/ARM device. More on this in the next section.

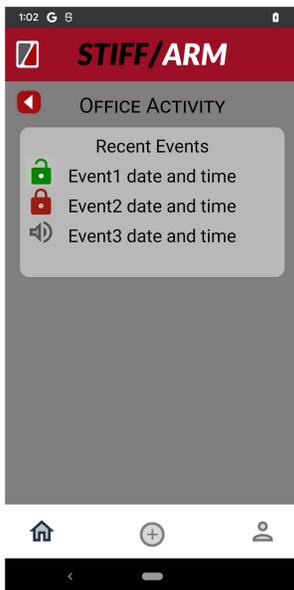
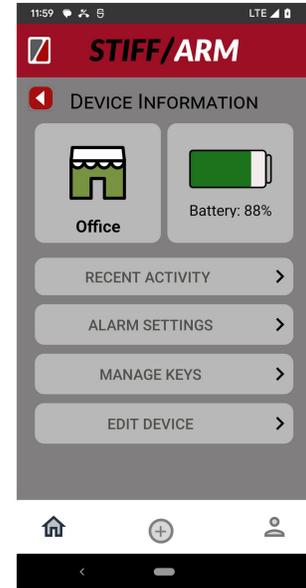
## DEVICE INFORMATION

The location icon button provides a path to view additional information about and allow customization of the STIFF/ARM device. Pressing the location icon button  transitions the view to the Device Information screen.

The Device Information screen shows two tiles. The first tile on the left shows the name and image of the selected STIFF/ARM device. The second tile on the right shows the battery level for the STIFF/ARM device.

Underneath these two tiles are four buttons.

The User can return to the Home screen by pressing the return arrow  in the upper left of the screen or the Home button  in the bottom navigation bar.



## RECENT ACTIVITY

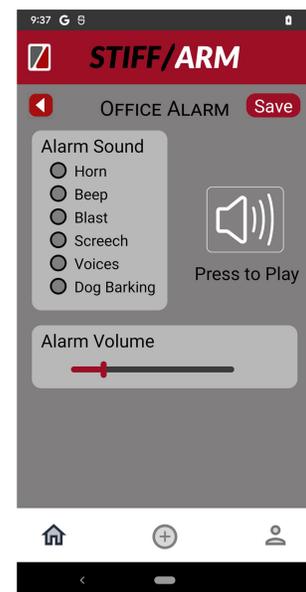
The STIFF/ARM application allows the User to review the recent activity of the selected STIFF/ARM device. It displays the most recent events as shown.

## ALARM SETTINGS

The STIFF/ARM application allows the alarm to be customized to the User. It offers six options for the sound and adjusts the volume from 0 to 10.

Press the speaker play button  to test the alarm. Use the Save button  in the upper right corner of the Alarm screen to send the alarm configuration to the STIFF/ARM device.

The User can return to the Device Information screen (i.e. the previous screen) by pressing the return arrow  in the upper left of the screen. The User can jump back to the Home screen  to control the STIFF/ARM device by using



the Home button in the bottom navigation bar.

### EDIT DEVICE

Changes can be made to the device tile by pressing the Edit Device button in the Device Information screen. The Edit Device screen loads the current device name and image.

The User can change the device name or select a different image. Selecting a different image moves the red outline.

To save the new name and/or image, simply press the Save button **Save** in the upper right corner of the screen. If you decide not to make any changes, press the return button  the upper left of the screen (to return to the Device Information screen) or the Home button  in the bottom navigation bar (to return to the Home screen).



The Delete Device button **Delete Device** at the bottom of the screen is used to remove the device from the database. This in turn will remove this STIFF/ARM device from the Home screen. The operation should not be used unless experiencing trouble with the BLE communications link between the STIFF/ARM application and the STIFF/ARM device or there is no longer a need to control the STIFF/ARM device.

The STIFF/ARM device will need to be reset<sup>3</sup> and added back if/when the User ever wants to see and control this device again.

### USER PROFILE

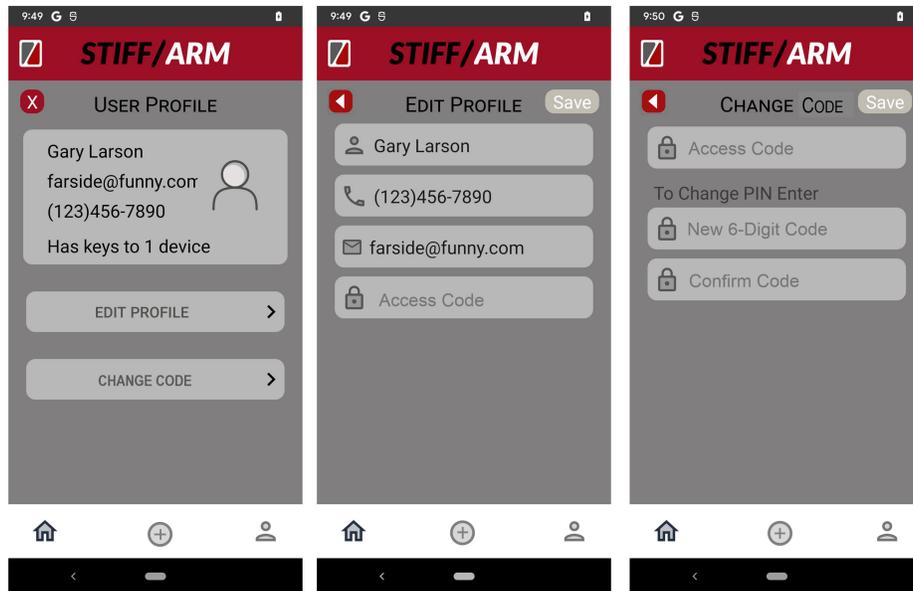
The STIFF/ARM application stores the User profile locally and in a cloud-based database.<sup>4</sup> To view or make changes to the User profile, press the person icon  in the bottom navigation bar. This will show the following screen.

From this screen, the User can Edit Profile or Change Code. Selecting the Edit Profile button transitions to a new screen where the Owner's name, phone number, or email can be altered. Selecting the Change Code button transitions to a new screen where the 6-digit Short Code can be modified.

The current 6-digit Short Code must be entered and verified to make any changes to the User Profile data and/or the Short Code. An extra layer of security has been added – the Save button **Save** in the upper right corner (of both the Edit Profile and the Change Code screens) becomes active (color transitions from grey to red) only after the current 6-digit Short Code is entered.

<sup>3</sup> Reset at the STIFF/ARM device using paperclip or similar object

<sup>4</sup> The cloud-based database is not active at this time



If you decide not to make any changes, press the return button  in the upper left of the screen (to return to the User Profile screen) or the Home button  in the bottom navigation bar (to return to the Home screen).

## MANAGE KEYS

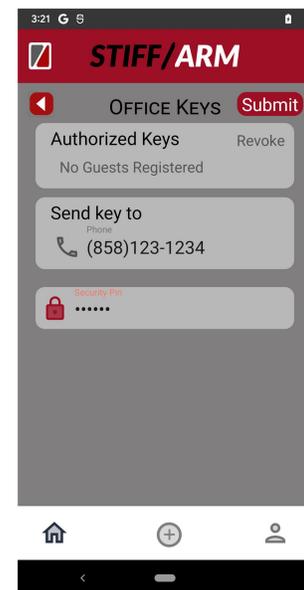
The STIFF/ARM application allows the Owner<sup>5</sup> to grant access to Guests who can then control the STIFF/ARM device. A Guest has limited control and can only lock/unlock the STIFF/ARM device or activate/turn off the alarm.

The Manage Keys screen is only accessed from the Device Information screen. And, it can only be accessed by the Owner of the selected STIFF/ARM device. To send a key to a Guest, the Owner needs to provide their 6-digit Short Code. Once the Code is verified, a SMS text message will be sent to the Guest. The Guest will receive the message with a random 6-digit Guest Code that they will enter during the Add Device sequence. Here's an example of the SMS text message:

*A Guest Key has been sent to you by Gary Larson. Use the code 542871 in the Stiff/Arm app to activate the Guest Key.*

The Guest then enters the Code in the text box below the prompt **Are you a Guest?** located in the Add Device screen<sup>6</sup>. Access will only be granted with the correct Guest Code.

The Manage Keys screen allows the Owner to send a key to a Guest or to revoke a key previously sent to a Guest. To add a Guest, the Owner simply supplies the Guest's



<sup>5</sup> The Owner is the user who initially sets up the STIFF/ARM device. That is, the first user to Add Device.

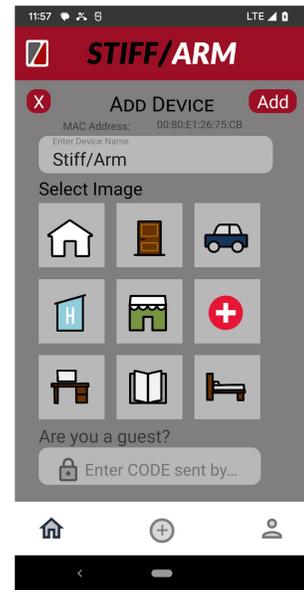
<sup>6</sup> The Guest must be within the STIFF/ARM device's range of BLE communications

phone number in the **Send key to** text box. (Up to five Guests are supported.) To disable a Guest key, the Owner needs to click the Revoke button next to their phone number. (The button will turn red to indicate that Guest has been selected.)

Once the 6-digit Short Code has been entered, the submit button **Submit** becomes active (color transitions from grey to red). The Code is then verified before any action is completed. The User is allowed three chances to submit the correct Code before the STIFF/ARM application returns them back to the Home screen.

A Guest will need to select Add Device **+** from the bottom navigation bar before they can access it. This requires them to have the STIFF/ARM application<sup>7</sup> running and within the range of the STIFF/ARM device. After scanning, the STIFF/ARM application will display the Add Device screen. The Guest can customize the way the device appears on their Home screen here. The Guest will also need to supply the Guest Code they received by SMS text message to complete the set-up of this STIFF/ARM device on their mobile phone. Enter it below the prompt **Are you a Guest?**

The set-up of the STIFF/ARM device will fail without the correct Guest Code.



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<sup>7</sup> This implies they have set up an account and granted the needed permissions

## ERROR CODES

The STIFF/ARM application displays a message widget on the Home Screen. This widget may provide error information if your STIFF/ARM device is not functioning properly. These codes are explained below.