User's Guide

Audio version available at

Version 1.1
November 2014

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Introduction – Welcome to Functional Flatware

Team Zebra.Inc has brought to life The Functional Flatware Fork which is designed to accurately identify foods. The Functional Flatware business aims to help the visually impaired with their daily lives. As of now, the blind need help from others in order to identify the food they are eating. The Functional Flatware Fork as set out to reduce this dependency on others, to promote independency.
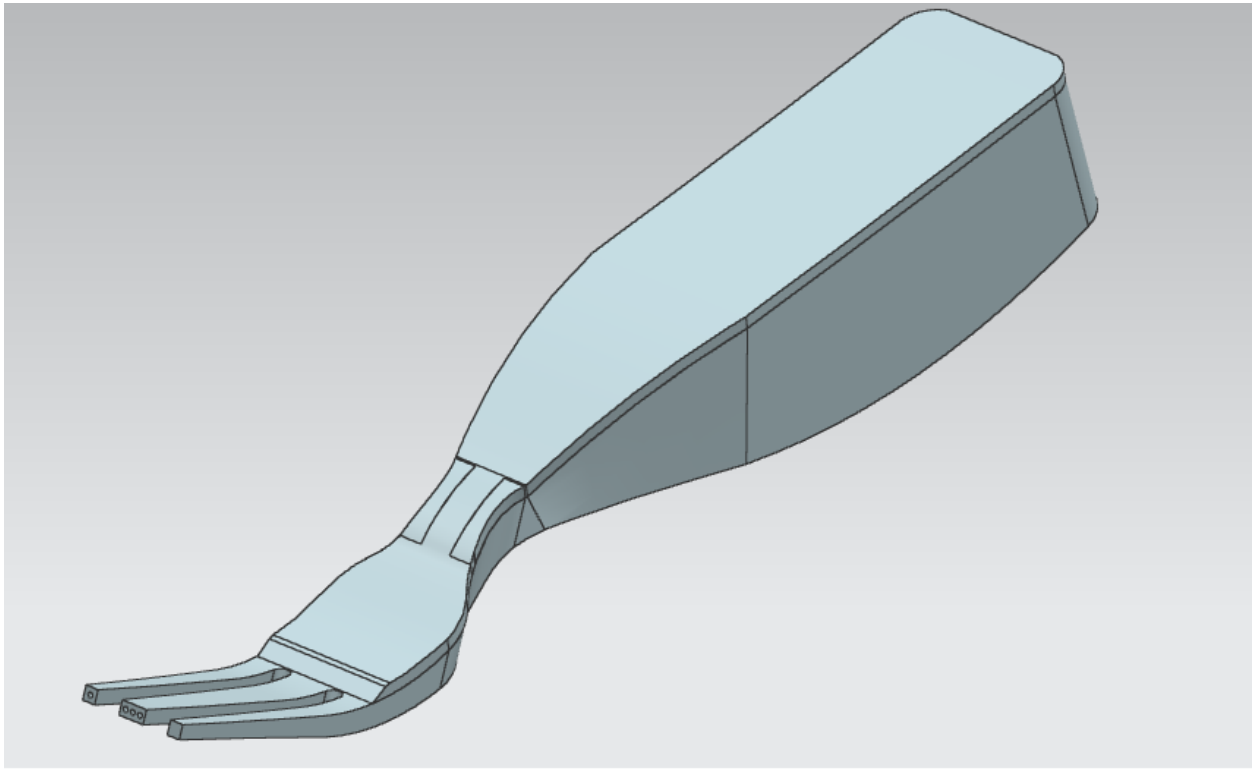
Safety Briefing

We do not advise placing the fork in your mouth while the power is turned on. Turn OFF Functional Flatware before eating.

Requirements

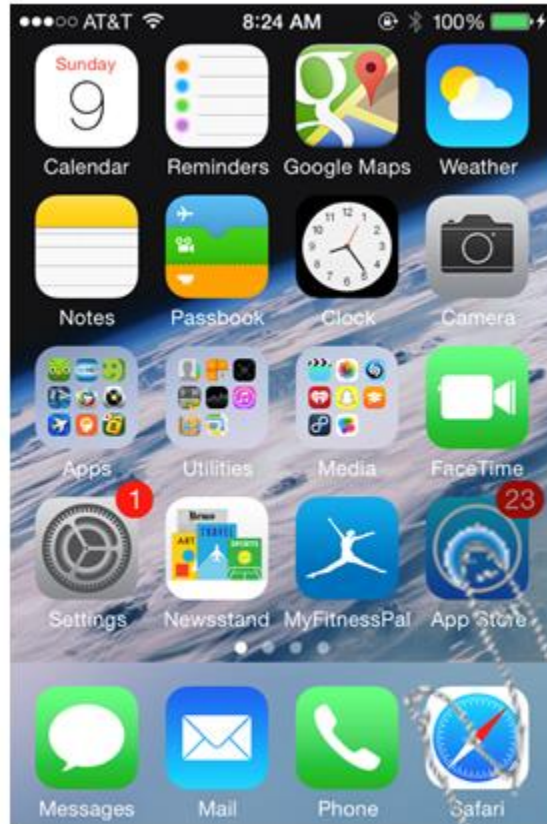The Functional Flatware application has the following minimum requirements:

- iPhone 4S or newer model
- iPad with iOS 7.1 or newer software
- iOS 7.1 or newer software

Note: This information can be found through Apple support (www.apple.com/support/iphone/essentials/)

Installation

To install Functional Flatware on your iPhone, follow these steps.

1. Open "App Store"

2. Search for "Functional Flatware" in the search window

3. Press "Free" then "Install" to install the application.

Note: You may need to be logged in to you Apple account to download applications. See www.apple.com/support/iphone/features/ for more information.

4. Functional Flatware is now located on the home screen of your phone.
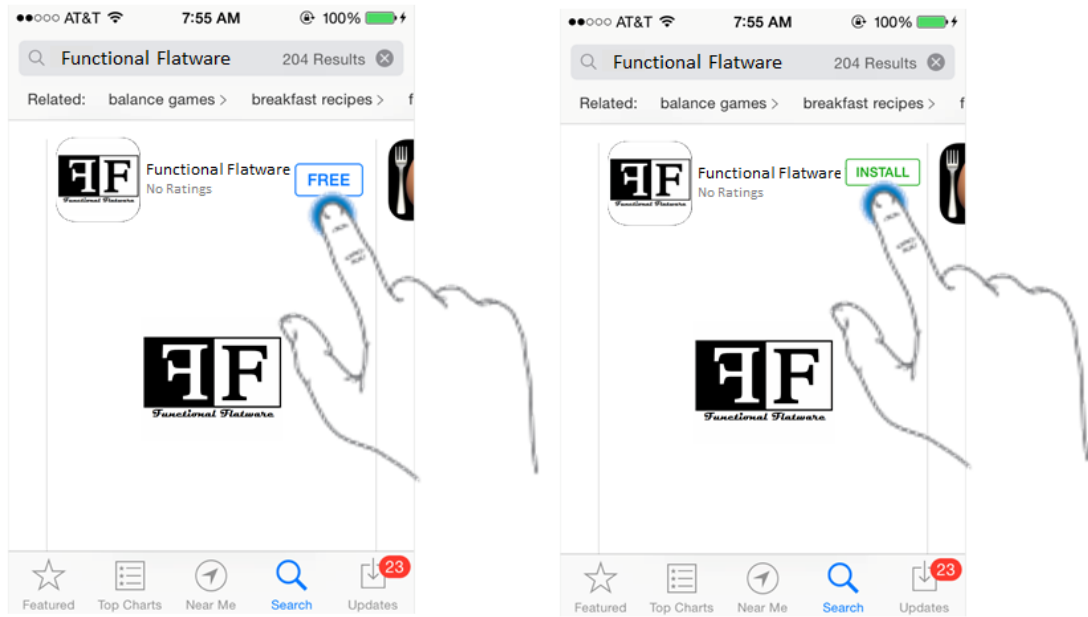
5. Functional Flatware is now located on the home screen of your phone.
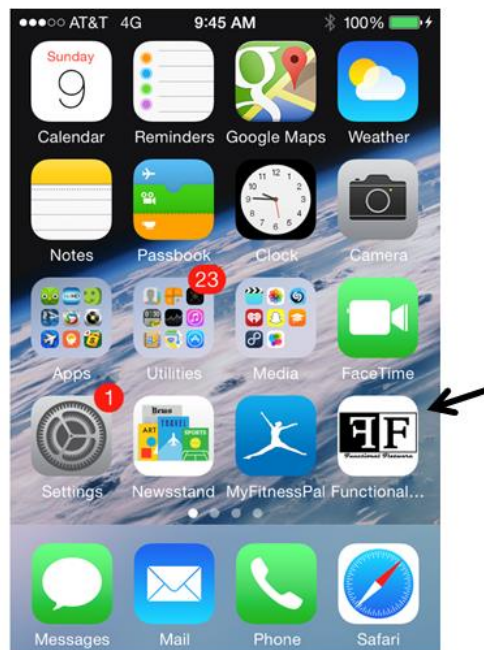
Getting Started

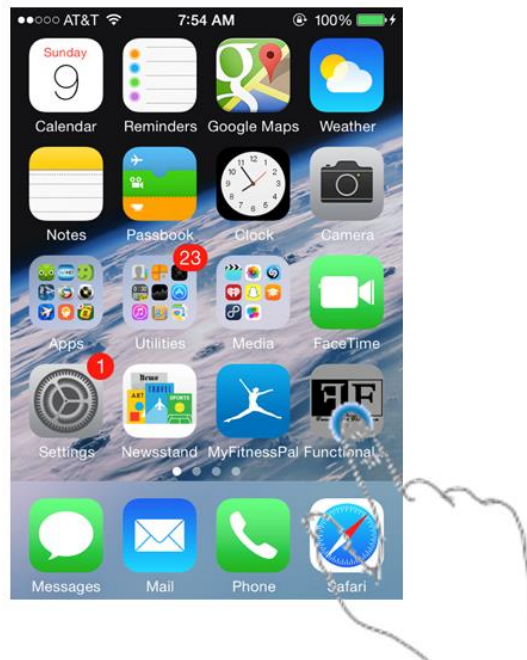Use the following process to use Functional Flatware to identify food and determine food temperature.

1. Ensure that Bluetooth is enabled on your device.
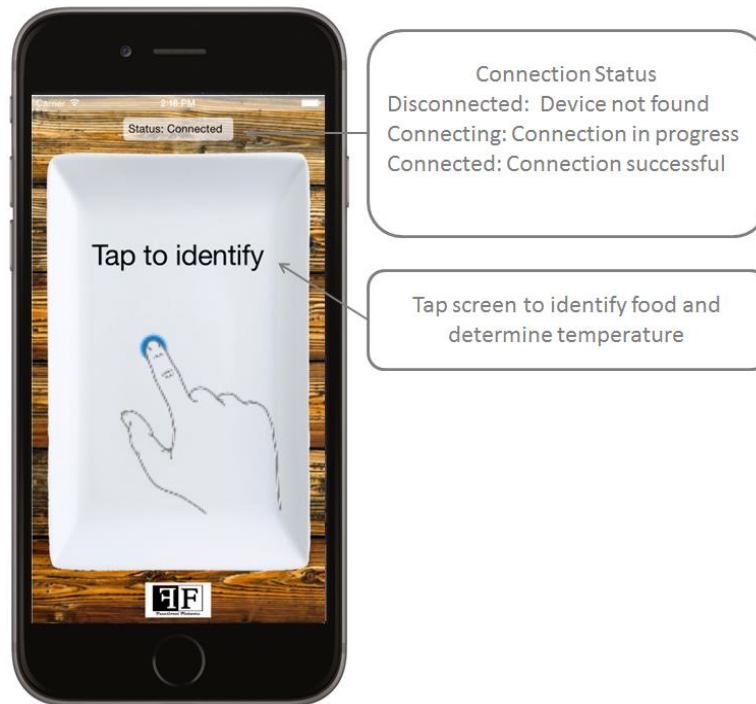

2. Turn on the physical device by flipping the power switch.
3. Open Functional Flatware.

4. Wait for the device to automatically connect. Voice commands will notify you of the connection status in addition to the prompt at the top of the screen.

Connection Status
Disconnected: Device not found
Connecting: Connection in progress
Connected: Connection successful

Tap screen to identify food and determine temperature

5. Insert the flatware device into the food in question.
6. Tap the iPhone screen to trigger the identification process.
7. Results will be displayed on the screen and communicated via voice from the iPhone.

Food identification and measured temperature are displayed and communicated via voice

Sweet Potato
80.3° F
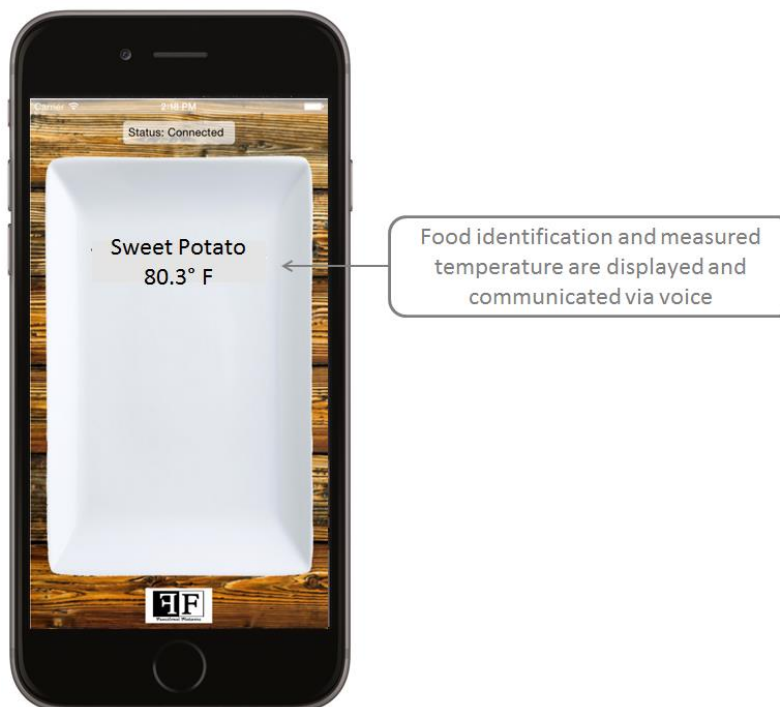
8. Tap the screen again to repeat the identification process.

Narrowing the Search

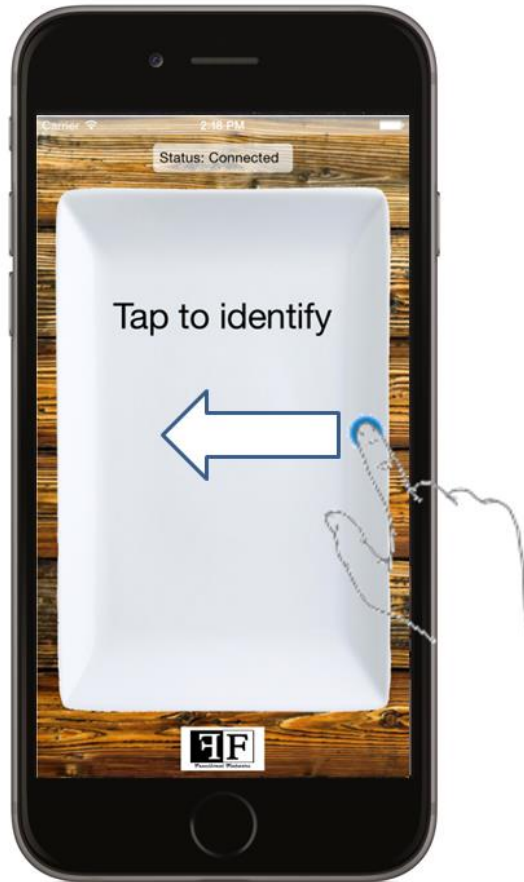1. Use the following process to limit the identification process to certain groups of food. This makes Functional Flatware more accurate. Swipe the screen from right to left.

2. A list of categories will appear. Saying any one of these categories will limit the identification process to foods that belong to these categories. Alternatively, swipe from left to right to cancel.

Carrier 📶   2:16 PM

‹ Back

Meat

Dairy

Vegetables

Fruits

Legumes

Jarred Items

Deli Items

Cold Products

Uncooked foods

Cooked Foods
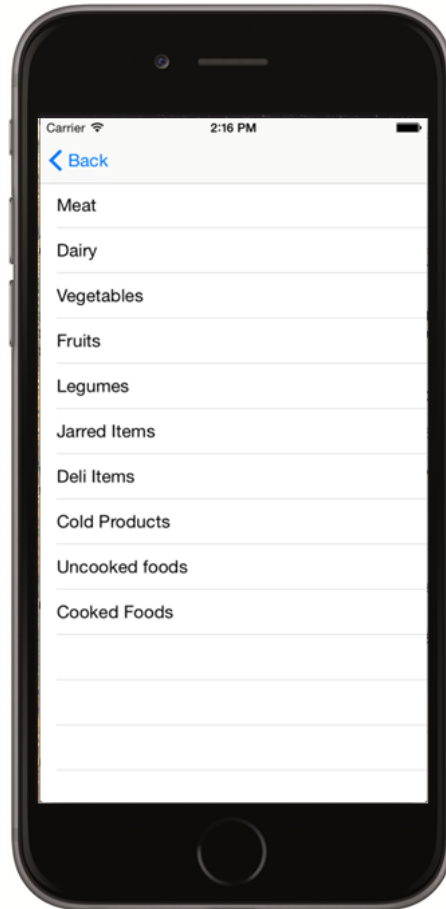
3. To remove a category constraint, reopen the category constraint menu by swiping from right to left. Cancelling the category constraint by swiping from left to right will remove all constraints.

Voice Guide for User

In conjunction with the proper device (Apple iPhone & iPad), Functional Flatware can also be activated and used with voice commands. Once the fork is powered on,

To Open the Application
1. Press and Hold the iDevice's Middle button to activate Siri
2. Speak: "Open Functional Flatware"
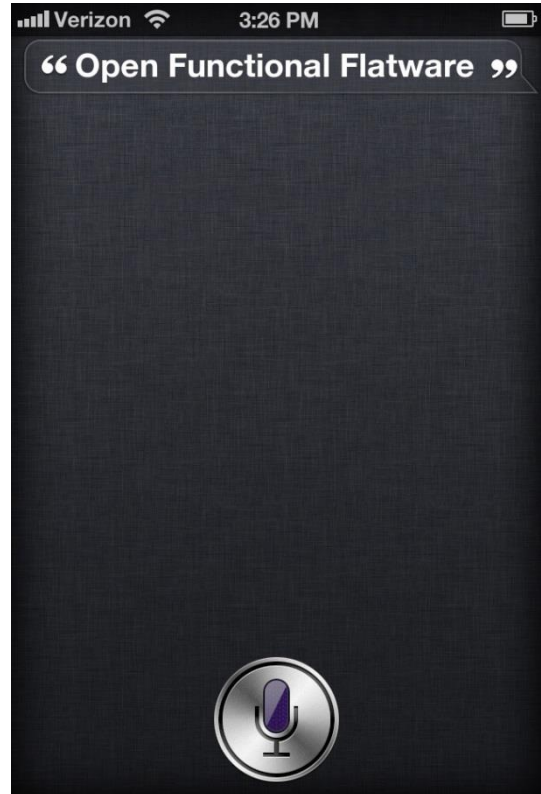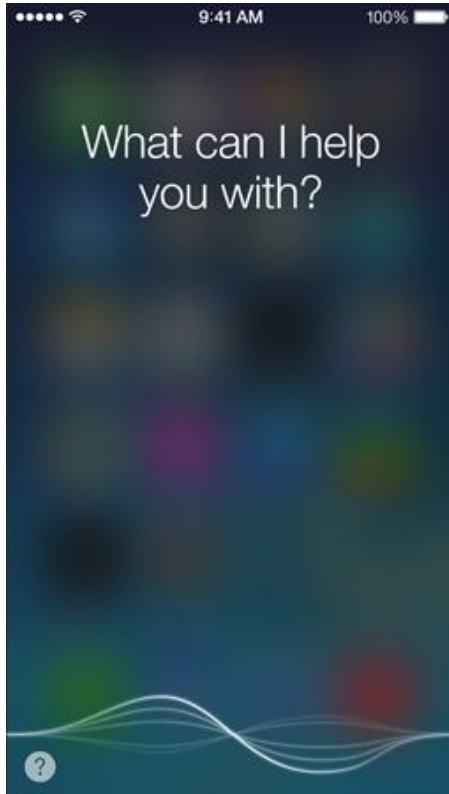
To Use the Application
1. Tap to Identify
2. Swipe Left to Limit your Categories
3. User will then pick a category and speak it back to the device
4. Phrases the App understands: "Greens, Milk, Meat, Fruit"
5. App "Limiting to _____"
6. If the category is correct, Insert fork into food to get a reading
7. If No, App will say "Limit Your Options, Here are your categories", revert back to step 1
8. If no reading can be found (food not in database) App will speak "No Item Found", revert back to step 1

Information for the Aid

Battery Housing

Power Button
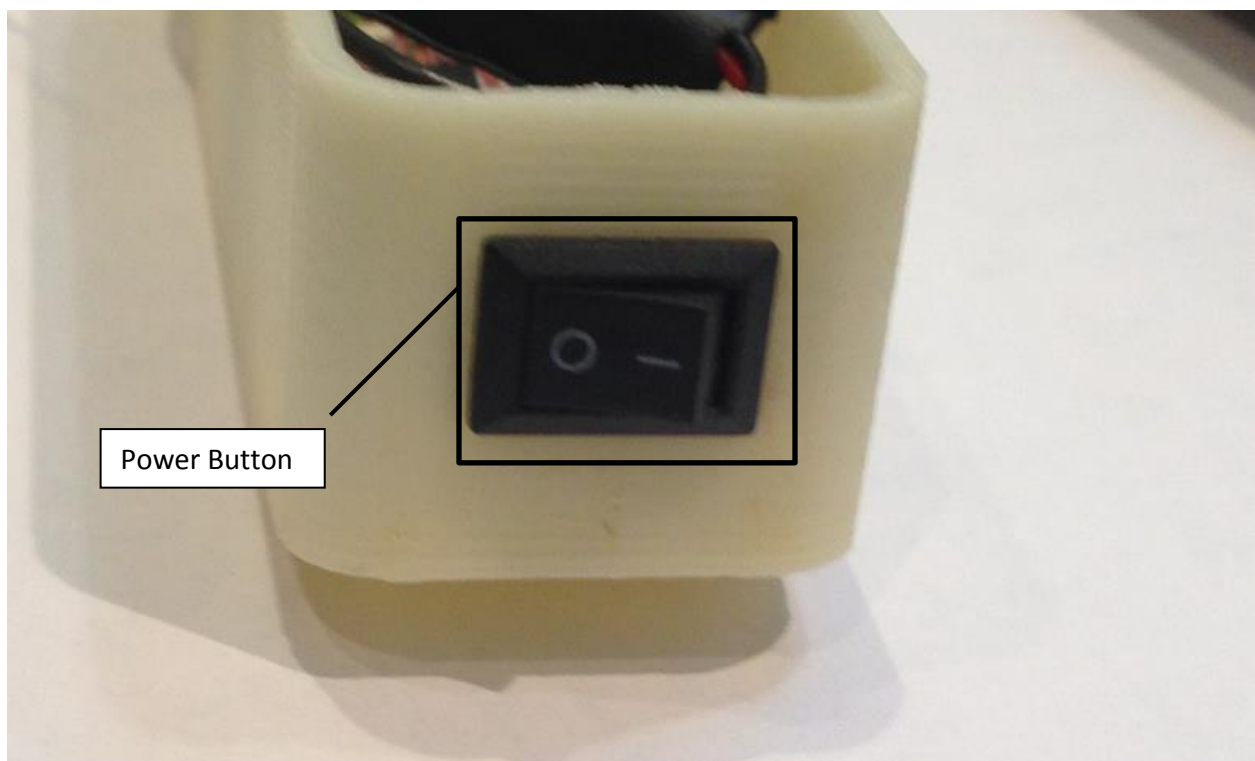
Cleaning/Maintenance

Functional Flatware has been designed to be washed after each use. We do not recommend placing it in the dishwasher as the intense heat could damage the electrical components. For best results, hand-wash the flatware with warm water and a standard dish soap. The electrical components are sealed in a water tight compartment, although we do not recommend you soak Functional Flatware.

Recommended	Not Recommended
Hand Washing	Place in Dishwasher
Warm Water	Hot/Cold Water
Towel Dry	Letting it soak in water
Standard Dish Soap	

Troubleshooting/Repair

- **Power**

Ensure that the battery in your fork is properly installed. Refer to "Installing the Battery" in this guide. Cycle the power on and off using the power button located on the top of the fork

- **Connections**

If your fork is unable to connect to the application on your device, ensure that Bluetooth is enabled on your device. Cycle the power of your fork on and off and re-launch the application to begin the pairing process again.

- **Limit Your Options**

In order for the "Limit your Options" voice command to work, your device must be connected to the internet. This service is unavailable without a network connection.

- **Sensors**

If your fork is unable to provide a reading, ensure that the terminals where the sensors are is not blocked by food particles.
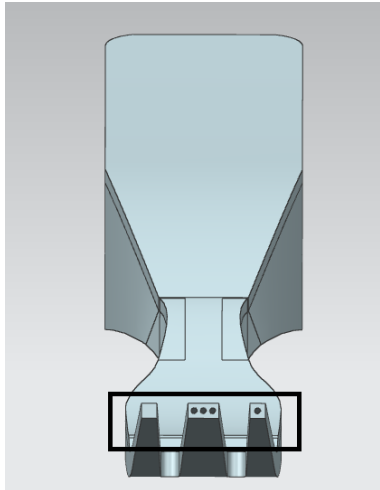
Frequently Asked Questions (FAQ)

Q: Are there any warning systems that will warn me of low battery, bugs, etc.?
A: Regarding our original phase, no we have not implemented this technology. This product must be sent in for servicing if the batteries die. We anticipate the incorporation of this technology in our upcoming phase of Functional Flatware.

Q: Are there any other products or interchangeable parts available?
A: We are developing interchangeable heads and replacement parts, which will be available for purchase online.

Service

How to Get Service?

Email us at www.functionalflatware.com/?page=contact . A service representative will walk you through the process of repair or replacement, depending on the severity of your damage.

Contact Information

Website: www.functionalflatware.com

Email: functionalflatware@gmail.com

Our Team

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