

ComBadge Manual



v0.1a

OPEN-SOURCE

COMPACT

MOBILE

Exploded View:

Silver Coated
3D Printed
Main
Capacitive
GesturePad

ESP32 PCB
Featuring:
- INMP441
- 3.3v 600mA
Regulator
- I2S Sound
- 8Ω Speaker
- TP4056 LiPo
Charger

USB-C
Charge Port

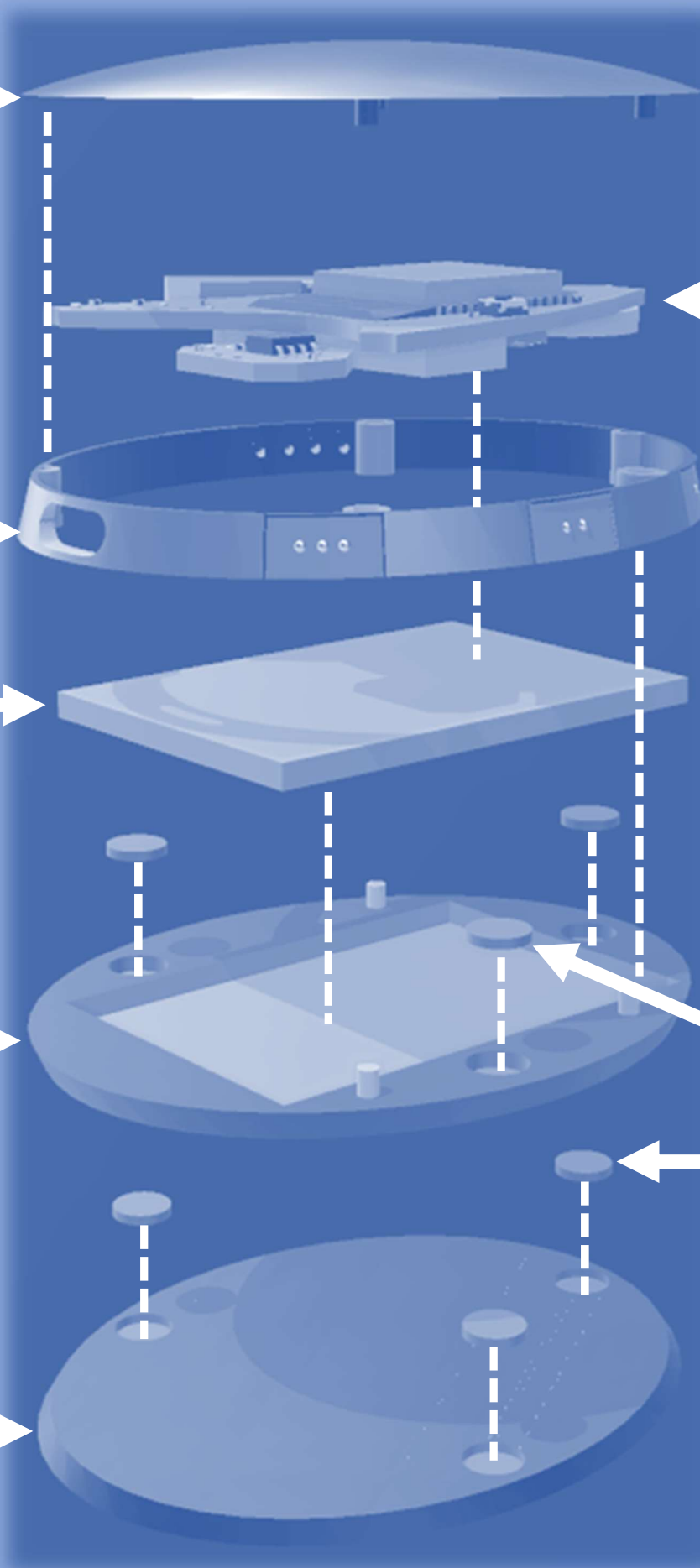
Gold Plated
3D Printed
Structure

1000mAh
LiPo Battery

Recessed
Rear Panel

Neodymium
Magnets

Undershirt
Magnetic
Holder



Interaction:

Microphone Input

Main Capacitive GesturePad

Speaker Output

USB-C Charging Port
(NOT Data)

Secondary Capacitive Touch Pads

To use:

Main Capacitive GesturePad:

- Tap to activate **Listening Mode** where the ComBadge will listen for Spoken Commands. - See **Commands**.
- Second Tap cancels and exits current Mode or ends current Call.
- For list of Gestures - See **Gestures**

Secondary Touch Pads:

- Tap to activate corresponding function. - See **Secondary Functions**.

Commands:

After a **Tap** on the Main Capacitive GesturePad, counter of 5 seconds will begin, where **Listening mode** is active.

During **Listening Mode** speak one of the following to activate its function:

Command	Function
Call < NAME >	Calls Contact with matching name. AI hears command, sends request for Matching < BADGE-ID > from local Contacts list, Connects both Badges to a Private Channel.
Time, Date etc	AI hears command and Responds with requested information.
Add Contact	Adds new Local Contact. * AI sends request for < NAME > of contact. Speak the name you will say to Call them. AI then requests < BADGE-ID >. Speak < BADGE-ID > (found in Wireless AP & rear of Badge). Both get saved to local Badge Storage.
Translate to < LANGUAGE >	AI begins recording, translates and plays back the translation. *

* Not all features are currently enabled

Secondary Touch Button Functions:

Button	Function
Middle Right	Function-Lock Key (SHIFT) Used to ensure no accidental activation of other buttons (HOLD to use)
Top Left	Mute
Middle Left	On-Demand Wireless Configuration Access Point
Bottom Left	User Programable Function Default: Speak Time

