

# CommaGlove 1S User Manual

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## CommaGlove 1S User Operation Menu (Hardware)

### A. Introduction of CommaGlove 1S

#### 1. *CommaGlove 1S Overview*

The overview of CommaGlove 1S is shown in Figure 1.

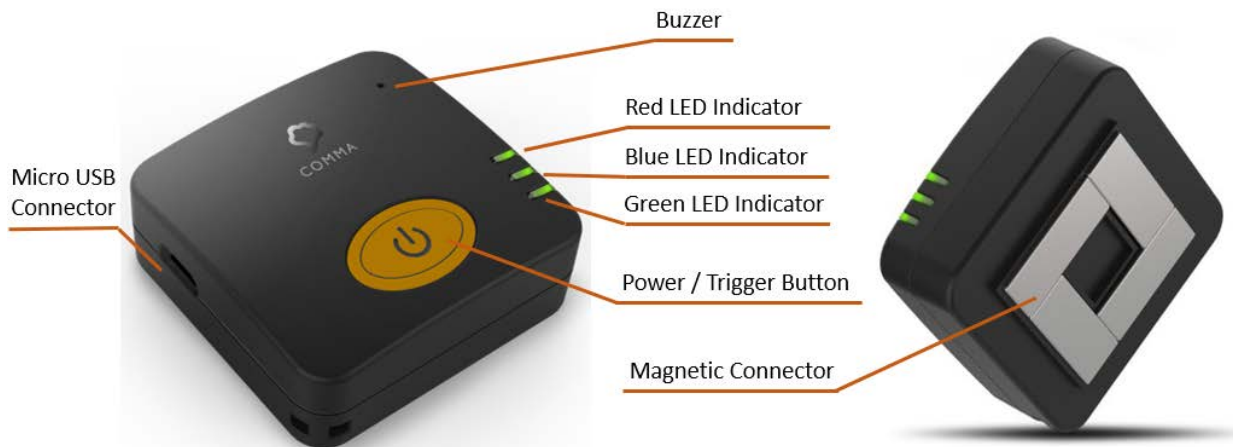


Figure 1 CommaGlove 1S Overview

#### 2. *Packing List*

The following items are included in your packaging box of CommaGlove

- CommaGlove 1S scanner
- USB connecting line
- User's manual

### 3. Accessories of CommaGlove 1S

Smart glove, which is shown in Figure 2, is an optional accessory that make CommaGlove wearable. Smart glove has magnetic connector that can attach CommaGlove. Left hand or right hand smart glove will be provided.



Figure 2 CommaGlove Overview (Optional Accessory)

The USB Auxiliary Trigger is another accessory that acts as the additional scanning trigger. It could be fixed on the smart glove to assist with scanning operations.

### 4. Button Functions

The followings are the brief description of the Button Functions

| Operation      | Description                                                                                                                                   |
|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| Power on / off | <ul style="list-style-type: none"><li>Long press the power / trigger button to power on / off the device</li><li>1 short beep sound</li></ul> |
| Trigger Scan   | <ul style="list-style-type: none"><li>Press the power / trigger button</li><li>Short beep sound for scanning success</li></ul>                |

### 5. LED Indicator Table

| Operation Status | Color | LED Status    | Description             |
|------------------|-------|---------------|-------------------------|
| Power Status     | Red   | Static        | Full battery (charging) |
|                  |       | Slow Blinking | Low battery             |
|                  |       | Long Blinking | Charging                |
| Bluetooth Status | Blue  | Static        | Connected               |

|                    |       |              |              |
|--------------------|-------|--------------|--------------|
|                    |       | Blinking     | Disconnected |
| Scan Result Status | Green | Flash 1 time | Scan success |

## 6. Buzzer Indicator Table

| Buzzer Status | Time       | Description                  |
|---------------|------------|------------------------------|
| Short Beep    | Once       | Scanning success             |
|               | Twice      | Bluetooth connection success |
| Long Beep     | 2 Seconds- | Bluetooth disconnect         |
|               |            | Off-line cache memory full   |

# CommaGlove 1S User Operation Menu (Application)

## B. Introduction of Application

### 1. Overview

We provide a SDK for developer to integrate our product to their own application. Also, a demo application, Comma Family App, is provided for user to test and experience our products.

### 2. Download and Installation

User can visit our website <https://www.pgyer.com/CommaDevice>, or scan the below 2D barcode to download and install the latest demo application to your android device (requires Bluetooth BLE and Android 4.3 or above).



Figure 3 URL for Comma Family Application

### 3. Demo Application Quick Start

After install the application, the operation of the demo application as follow

#### I. Turn on the device

Press the power button on the top of the CommaGlove to turn on the device. When a beep sound occurs and the blue LED starts flashing, the device has finished bootup.

#### II. Open Application

Click the CommaFaily icon to open the demo application.



*Figure 4 Comma Family Application*

### *III. Add Comma's devices*

The main interface of Comma Family is register devices list, which is shown in the left-hand side of Figure 5. To add a new Comma' device, click the “+” button in the upper right corner and the device selection screen will be displayed, which is shown in the right-hand side of Figure 5. Then, select CommaGlove icon to register CommaGlove.

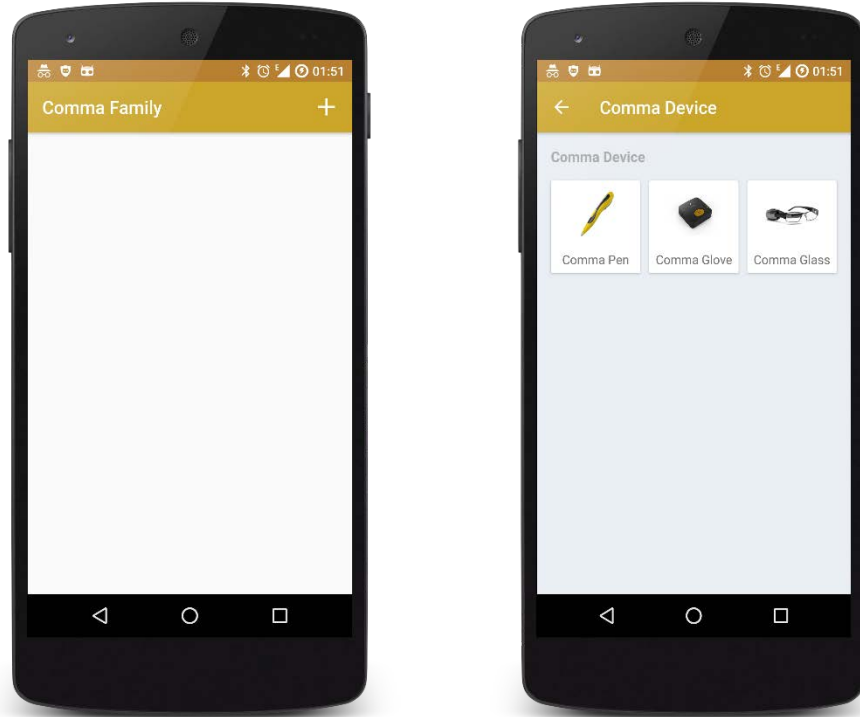


*Figure 5 Application Main Screen (Left), Add Comma's Devices Interface (Right)*

#### IV. Search BLE Device

After select the device type, the demo application will jump to device discovery interface and start searching and listed all available BLE devices. (Right-hand side of Figure 6) If the Android Bluetooth is not open, the application will ask for open the Bluetooth (Left-hand side of Figure 6).

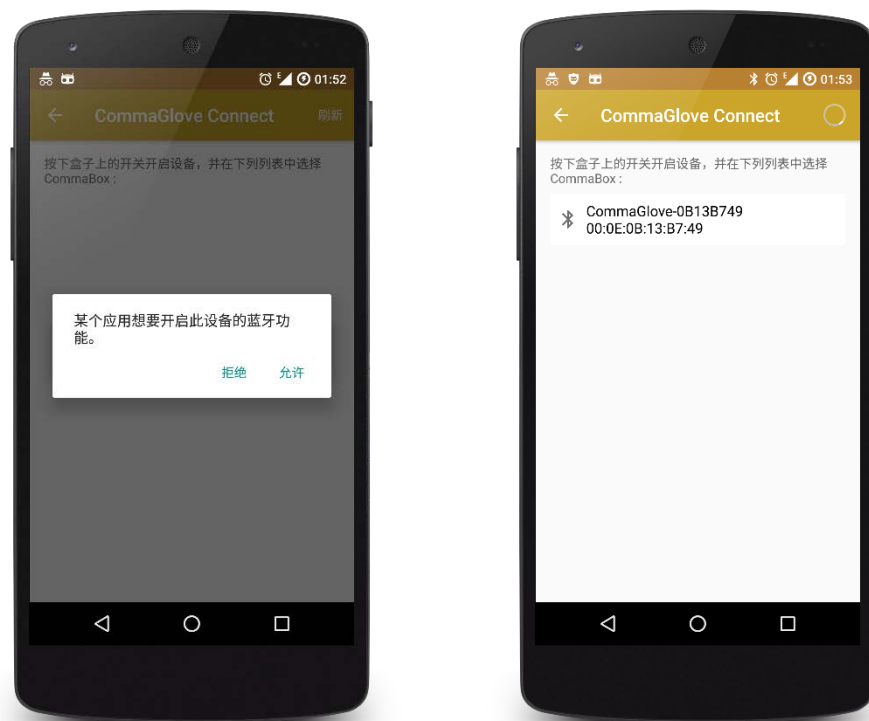


Figure 6 Bluetooth Discovery Interface

#### V. Establish Bluetooth connection

Click the CommaGlove device in the list to connect the device. If the connection success, the device will emit 1 beep sound and the blue LED will light static. The application will redirect to the device main interface (Figure 7).

In the device main interface, the upper right-hand corner shows the Bluetooth connection status. You can click the status to toggle the Bluetooth connection.

\*\* In the current version (v1.1.24.161208.ed09dfe), if user back to Comma Family main interface or exit the application, the application will disconnect the current device.



Figure 7 Device Main Interface

## VI. Read Data

You can trigger CommaGlove to read data in 3 ways. If the read process success, the device will emit a beep sound and a green LED will light 1 time.

- Soft trigger by click the "Scan" button (Left-hand side of Figure 8).
- Press the power / trigger button on the top of the CommaGlove (Figure 1)
- Press the read button via the USB auxiliary trigger (require CommaGlove accessory, Figure 2)

If the read operation success, the result will display in the result list (Right-hand side of Figure 8).

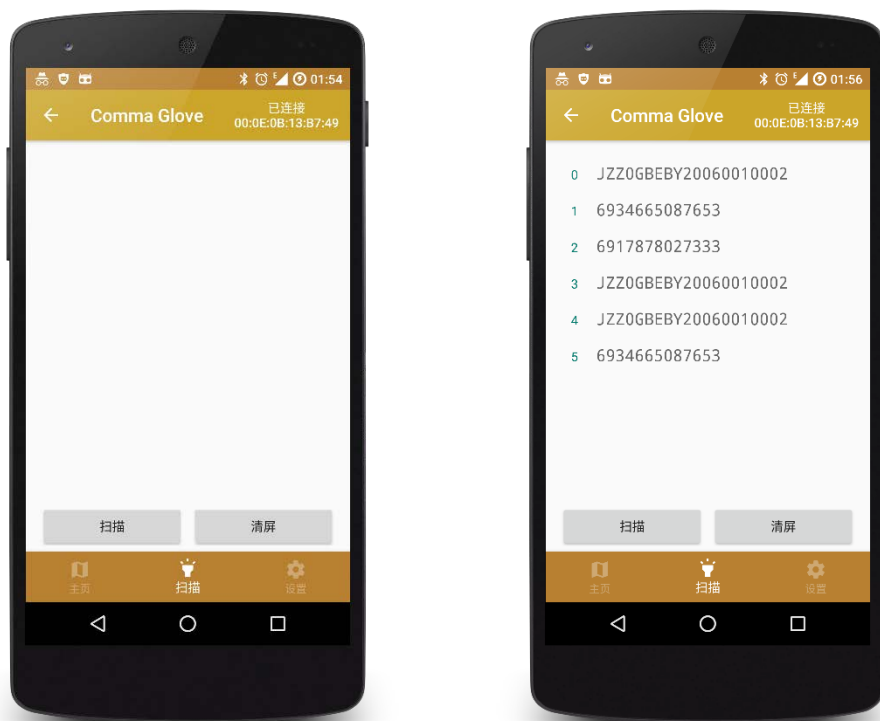


Figure 8 Data Reading

## 4. Device Configuration

In the device configuration tab (Figure 9), user can change the CommaGlove setting or reading behavior. The details of configurations are described as follows.



Figure 9 Device Configuration

### a) Bluetooth Setting

Turn on or off the Android device Bluetooth.

### b) Cache Mode

If the cache mode is on, the Comma's devices will cache the scanning data while the Bluetooth connection disconnected from the Android device, and transmit cached data to Android device while the Bluetooth connection resume.

### c) Continuous Read Mode

If the continuous read mode is on, the Comma's device will auto trigger scan action with a predefined time interval (Figure 10).

**\*\* The Cache Mode and Continuous Read Mode cannot enabled at the same time in current version (v1.1.24.161208.ed09dfe)**

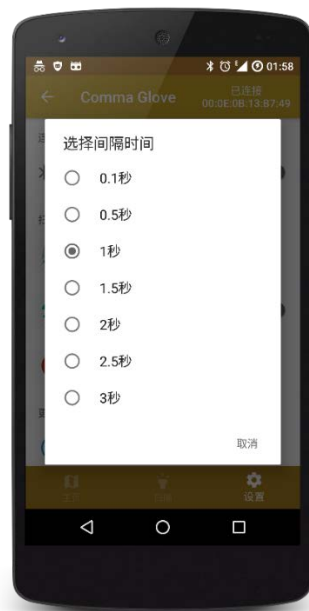


Figure 10 Continuous Read Mode

#### d) Sleep Setting

Comma's device will turn off after a specify period of idle time. The idle time can be configured from 1 minutes to 45 minutes (Figure 11).

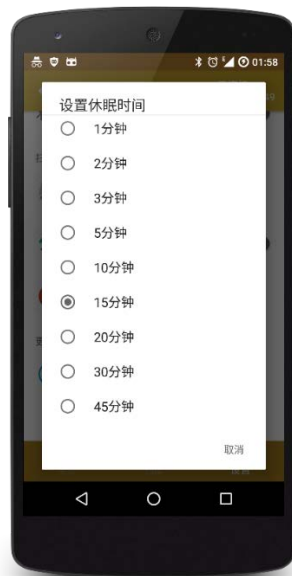


Figure 11 Sleep Setting

### e) Barcode Advance Setting

User can change the CommaGlove scanning behavior via scan the function quick code.

Each configuration requires three steps action to apply the setting.

- I. Scan “initiation” code
- II. Scan “function” quick code
- III. Scan “ending” code

The following example is the operation to disable / enable the GB code filtering function.

- I. Select “Filter GB Code”, then, use CommaGlove to scan the “Initiation” code (Figure 12).
- II. Select the mode to enable / disable, then, scan the function quick code (Figure 13).
- III. Finally, scan the “Ending” code to complete the operation (Figure 14).

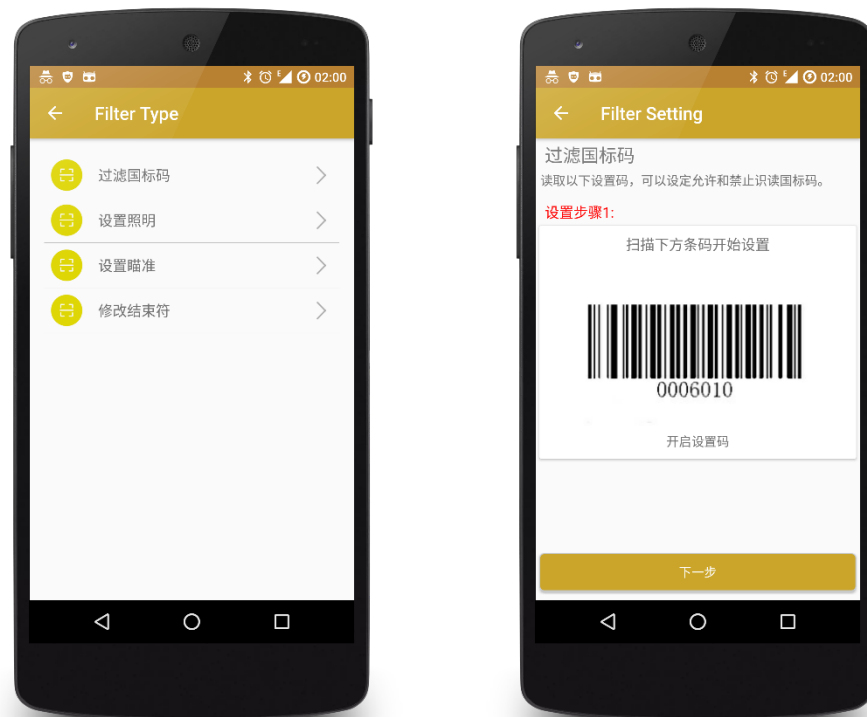


Figure 12 Scan the initiation code

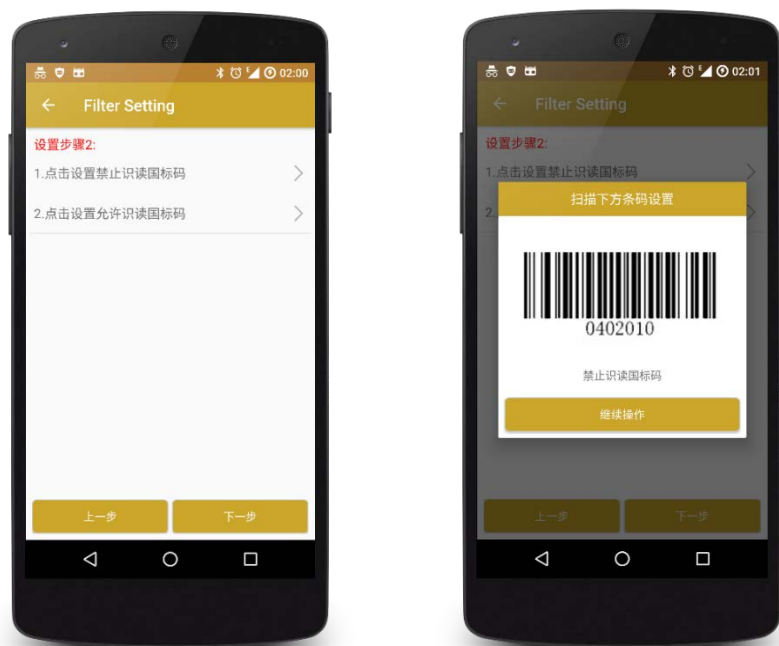


Figure 13 Scan the function quick code



Figure 14 Scan the ending code

## **FCC Warning:**

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.

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

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.