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# Liuwa User Manual

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**Liuwa Kids Wearable**

**LW01A1, LW01A2, LW02A1**

*Dec 2015*

*Version 1.0*

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## Document Revisions

Date	Version Number	Document Changes
Dec 25, 2015	1.0	Initial Draft



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## 1 Introduction

### 1.1 Statements and Purpose

*This user's manual is to guide the user to set up and use Liuwa hardware – wearable accessory for kids, together with Liuwa APP, to monitor the kids' safety status real time. It also covers how to issue SOS when emergency happens to ask all communities around you to help you find your kids once lost.*

*Liuwa wearable device is a Bluetooth Low Energy device working with the corresponding APP. Please read the following statements before using the device.*

**1. CAUTION : RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE.  
DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.**

**2. EUT: Max working temperature is 85 degree.**

**3. R&TTE Delaration**

*Hereby, Shenzhen Zhiliuyun Keji Kaifa Limited, declares that this "Liuwa" wearable device is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC. The declaration of conformity may be consulted at [www.address.com/DoC.pdf](http://www.address.com/DoC.pdf).*

**4. The device complies with the RF specifications when the device is used at a distance of 0.1 cm from your body. Ensure that the device accessories such as a device case and a device holster are not composed of metal components.**

**5. FCC Part 15B Compliance**

*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 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.*

*Changes or modifications made to this device may void the FCC authorization to operate this device.*

#### *6. Battery Safety*

*This device contains a coin cell battery. Do not eat or bite the device. Do not expose this device under extreme conditions such as high pressure, high temperature etc.*

**7.FCC ID: 2AGRL001**

## 2 Pre-requisites and App Installation

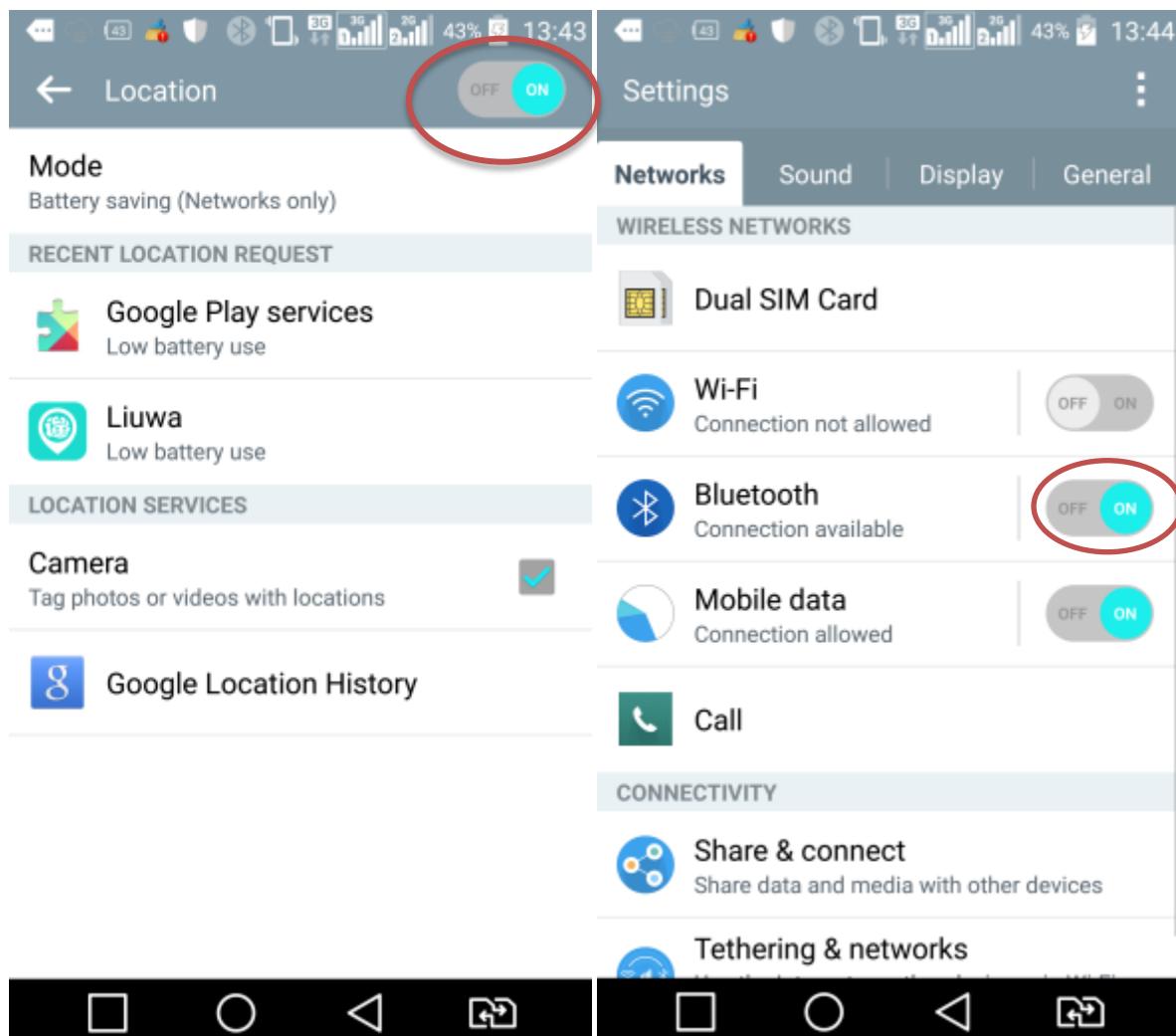
Liuwa APP requires Android 4.3 and up and iOS 8.0 and up

Android App Liuwa is available at Google Play Store.

iOS App Liuwa is available at Apple App Store.

Follow the instructions to download Liuwa APP and install it.

Liuwa APP requires the user to turn on Bluetooth and Location Service in the Smart Phone. If for any reason, you cannot see Liudou while it is right beside the phone, please check the Bluetooth setting in Settings and the Location service in Settings and make sure they are both "On".



### 3 First time user registration and set up

*Liuwa APP builds a setup wizard for first time users to set everything up in one go just following the instructions. Please do not skip any step unless you are sure you have no need for that setup.*

#### 3.1 Registration

*Liuwa APP uses user's phone number (which should be unique per phone thus per user) as the major key to identify users.*

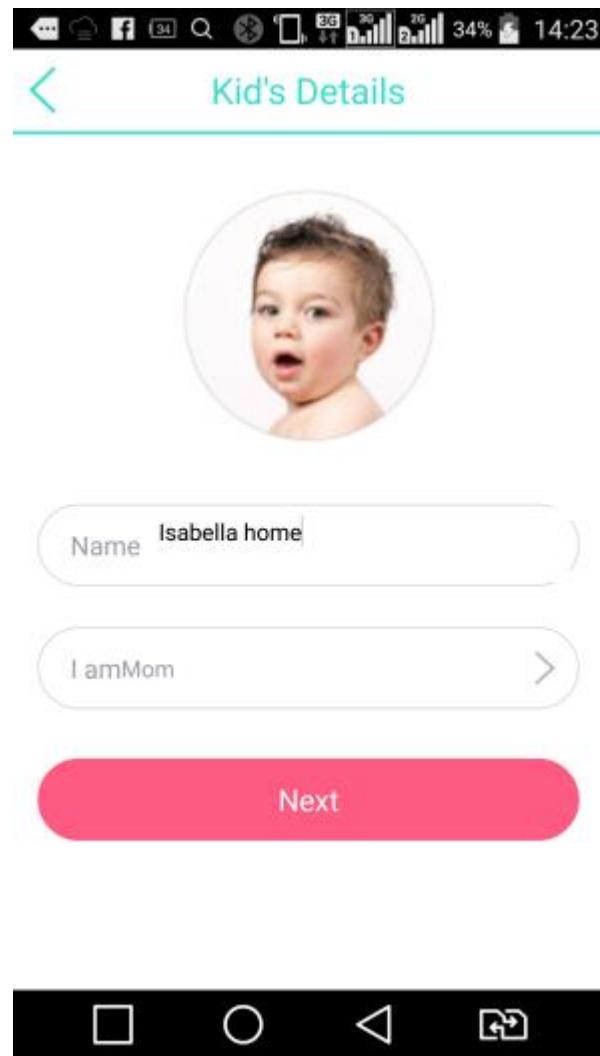
##### 3.1.1 Introduction to Liuwa

1. Read the Splash introduction pages. They highlighted the major functions and scenarios of Liuwa.
2. Once finished, press Try now

##### 3.1.2 Registration (Please note you would need internet access via Wi-Fi or 3G/4G wireless network for Registration)

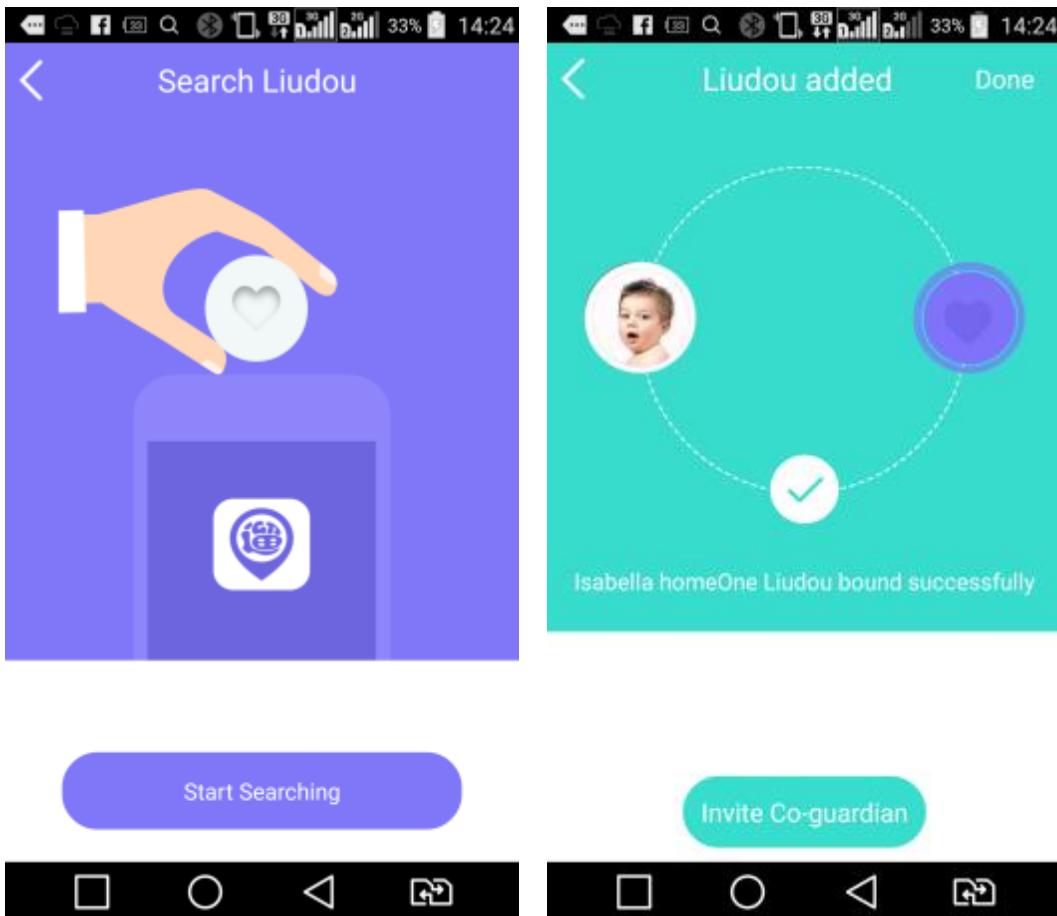
1. Input your phone number and Obtain verification code.
2. An SMS message will be sent to your phone with a 6 digit verification code.
3. Input the verification code, if correct, you will be directed to set up Basic information for your kids, bind the Liudou and guardians information.
  - a) Add basic information for the kid.  
Required info:  
Kid's name (to protect the user's privacy, only nick name is required)  
Relationship of current user to the kid

Click Next to Save and move to the next step

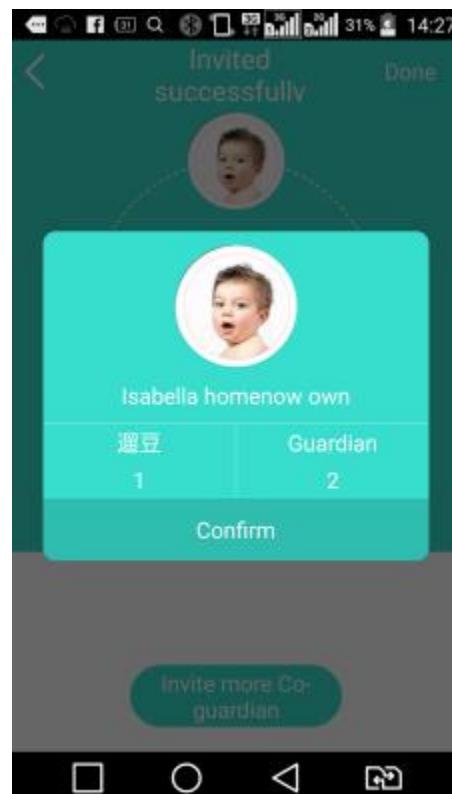
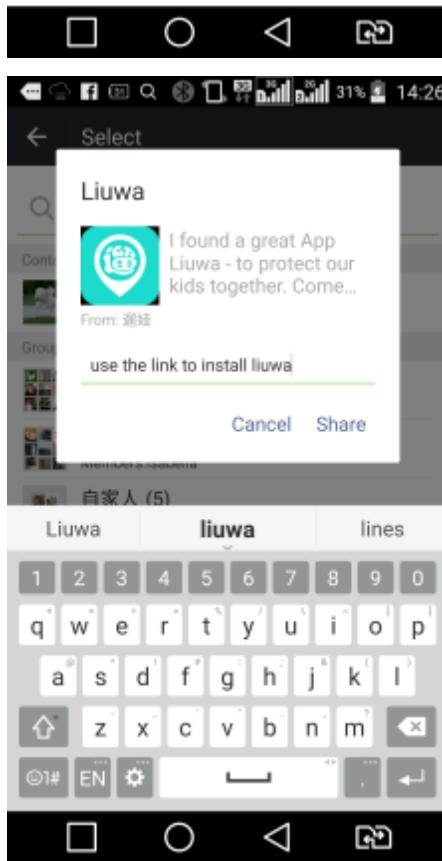
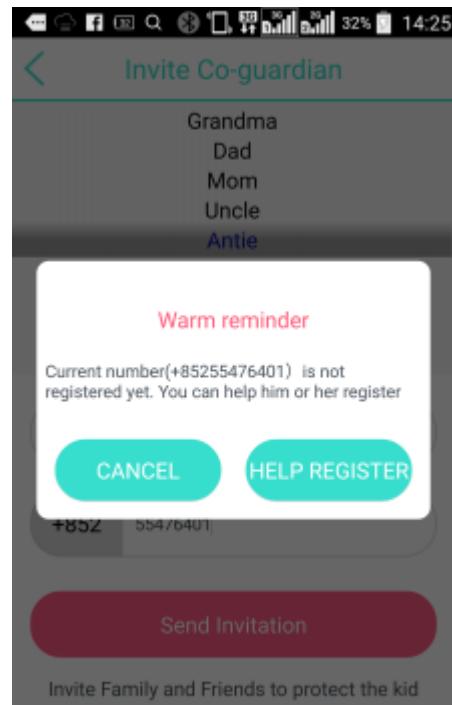
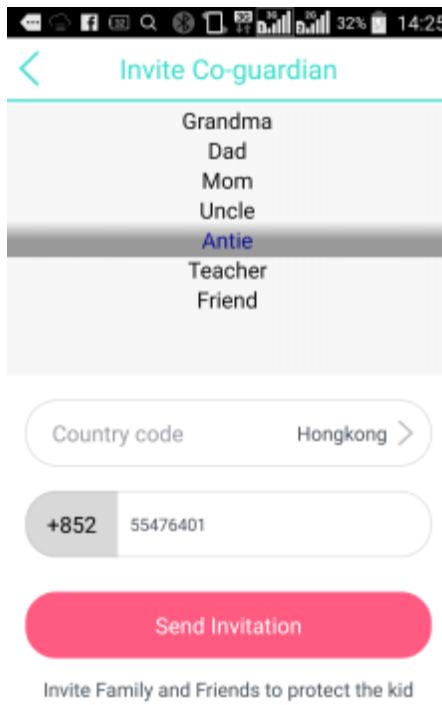


b) Move the new Liudou to the edge of the phone and click Search Searching. Please note if the Liudou cannot be found, please move the Liudou to the top, right edge or on the surface of the phone. We limit the signal from Liudou has to be very strong in the search function to avoid binding the wrong Liudou if more than one Liudou is around. If Liudou cannot be found repeatedly, please check the Bluetooth and Location Service settings and make sure they are all ON.

You could get an error stating the Liudou is already in use thus cannot be bound. That means this Liudou already belongs to another kid, you have to remove the bounding first (you can do so after you get into the App -> Menu -> Identify Liudou (to find out who this Liudou is belonging to) -> Remove the Liudou from the kid under "My Kid".



- c) After the new Liudou is bound to the kid, we will start add guardians for the kid. The current user is default to be the guardian for the kid and the relationship is specified in step a. Follow the guide to add each individual guardian by specify their relationship with the kid and their phone number. Please note phone number is THE unique key for Liuwa to identify the user and we do require verification for the phone number so an accurate and true phone number is required to help the guardians registered with Liuwa.
- d) You can share the Liuwa download via WeChat Share to the co-guardian. The co-guardian only needs to download the APP following the link and verify their phone number. They do not need to add kid info or bind Liudou to the kid any more.
- e) Repeat the “adding guardian” process till you add all of your trusted family, friends and teachers of your loved one as guardians.
- f) Complete the registration process and start enjoy the convenience and protection Liuwa brings to protect our loved ones together.



## 4 Daily Use Functions

*Liuwa APP's UI is designed with simplicity in mind. Daily use does not require more than one touch to start watching the kids or to stop watching to save battery.*

### 4.1 Central Control On/Off

*Right upper corner of Liuwa APP, there is a very important control – an eye shaped control to turn monitoring ALL kids on/off with one click.*



*As Liuwa APP uses Bluetooth scanning and Location service (including GPS positioning), even though Liuwa has tried all methods to control battery consumption for the APP, with monitoring on, your cell phone's battery can be consumed more rapidly compared to monitoring off. (15% more battery consumption) So it is suggested to turn off the monitoring when you feel your kid is 100% safe say at home sleeping. To make this easier for the user with more than one kid, the eye control is one central control for all kids under your protection.*

### 4.2 Views

*Liuwa APP offer 4 types of major views*

- *Gauge view*
- *List view*
- *Detail view*
- *Radar view*

#### 4.2.1 Gauge view

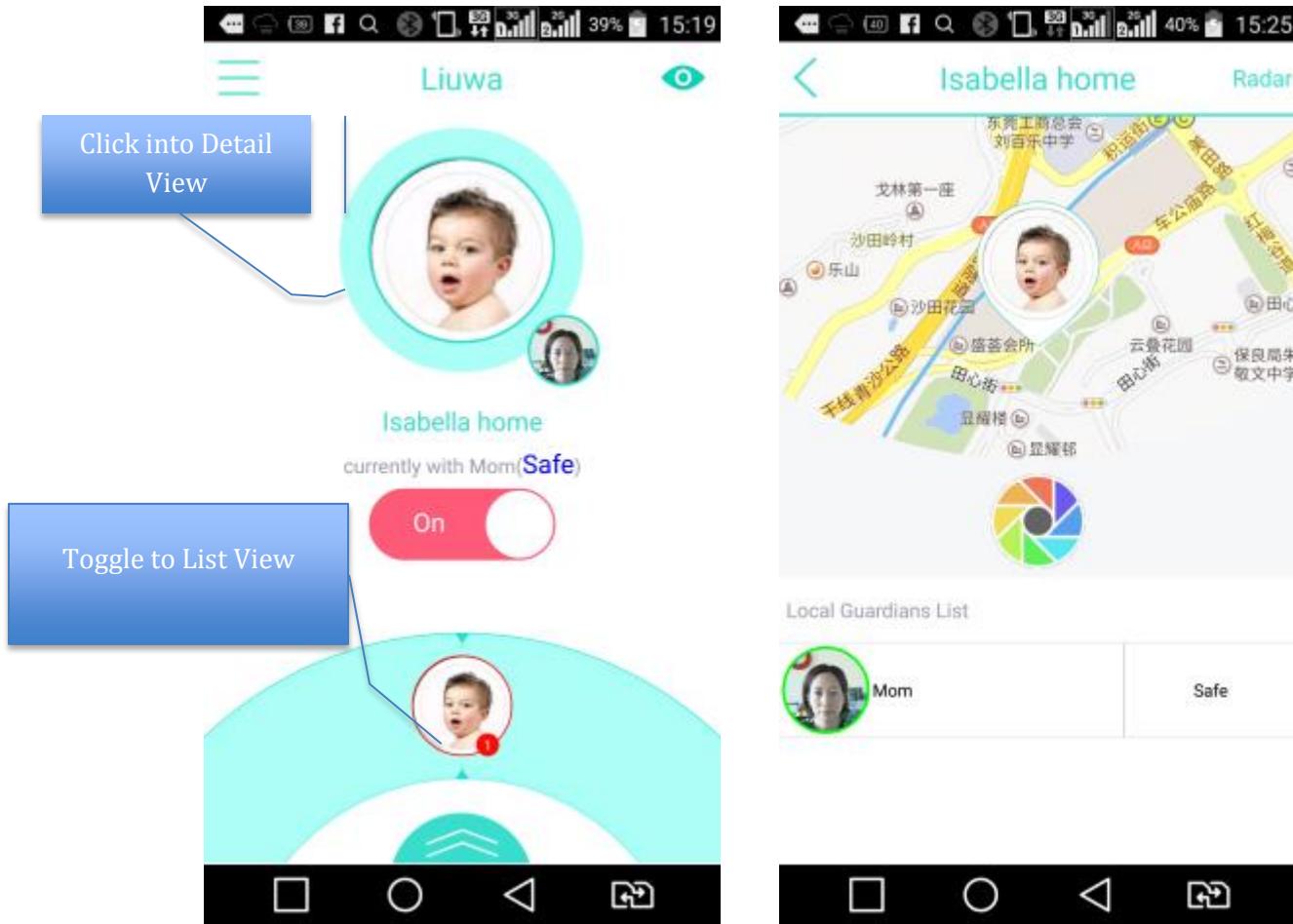
*Gauge view is ideal to monitor less than 5 kids. Works best if only one or two kids are the focus. Click on the thumbnail of the kid's profile picture in the Gauge will turn the Gauge to*

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center on the focus kid and show his/her status (safe, a little far, too far or SOS) and who he/she is with (all concurrent local co-guardians' profile pictures will be shown)

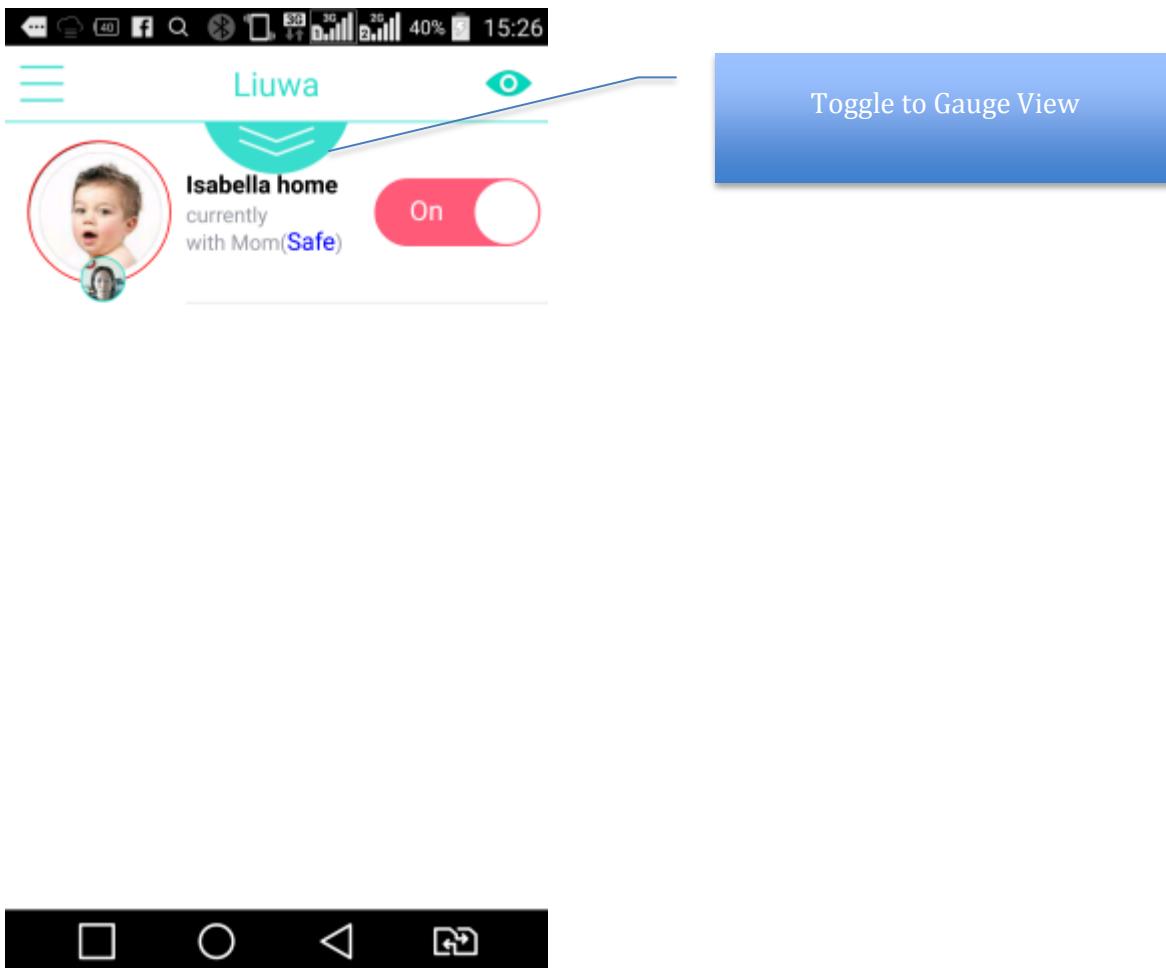
Click on the kid's profile picture at the center of the view will lead the user to the detail view.



#### 4.2.2 List view

List view is ideal to monitor more than one kid at one time. The list view provide a complete view on statues for all kids on the screen (safe, a little far, too far or SOS) and who he/she is with (all concurrent local co-guardians' profile pictures will be shown). Scroll down to see more kids on the list.

Click on the kid's profile picture at the center of the view will lead the user to the detail view.



#### 4.2.3 Detail view

Under normal status, detail view show detailed location of the kid and the co-guardian(s) on the map. A list of real time co-guardians with their individual status with the kid, whether they are around (if they are, they will appear in the list) and their distance to the kid (safe or a little far), will be shown.

Click on the right upper corner “Radar” button can switch the detail view to Radar view. Radar view will show the kid’s distance to the current user.

When the kid is at different status, safe, lost or SOS, the detail view details are different. Lost and SOS screen will be explained in more details in the Alert Handling and SOS Process section.



#### Local Guardians List

 Mom	Safe
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#### 4.2.4 Radar view

Radar view is a tool you can use to search the kid if he/she is around but cannot be seen – blocked by walls etc. Walk around with the Radar view, you can see if you are moving closer to the kid or moving farther away.

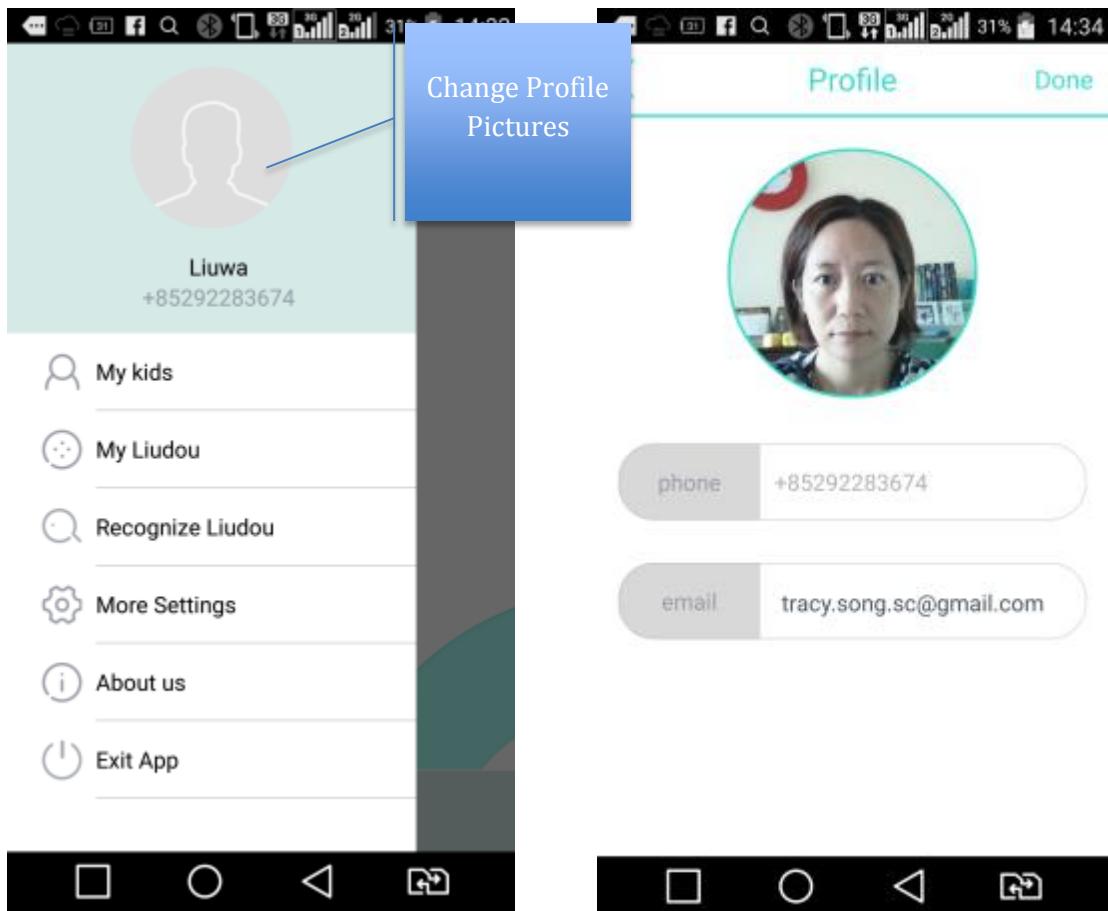


## 4.3 Menu

Left hand Menu provide functions such as Add/Update/Delete kid info and their bound Liudou info. User can also Add/Update/Delete guardians for kids. Performance tuning for the APP sit also inside Menu under More settings.

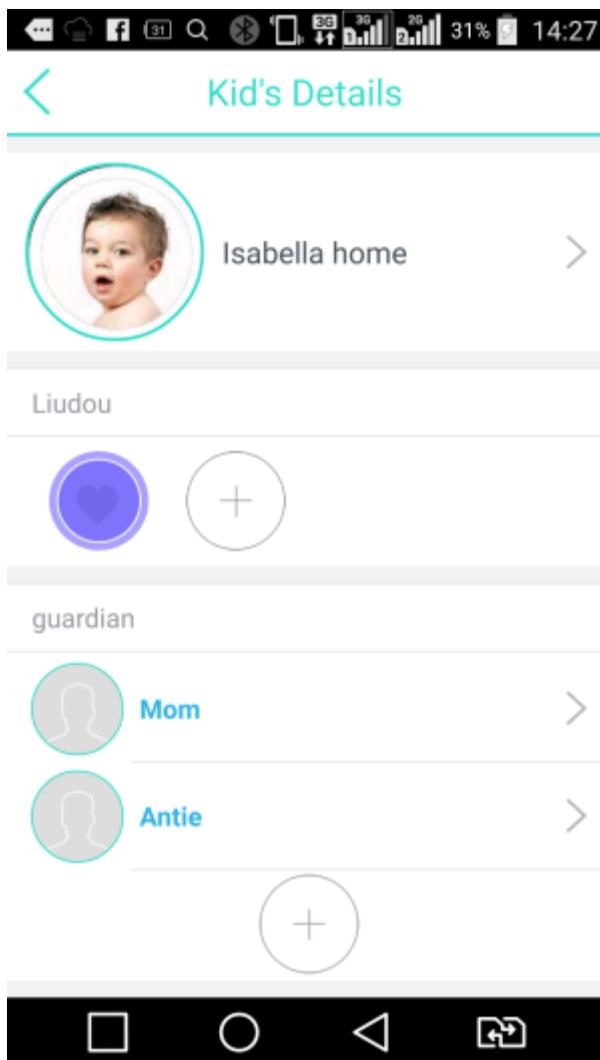
### 4.3.1 Change User Profile

At the top of the Menu, the user's profile picture is shown. You can click on the profile picture to update it.



#### 4.3.2 My Kids

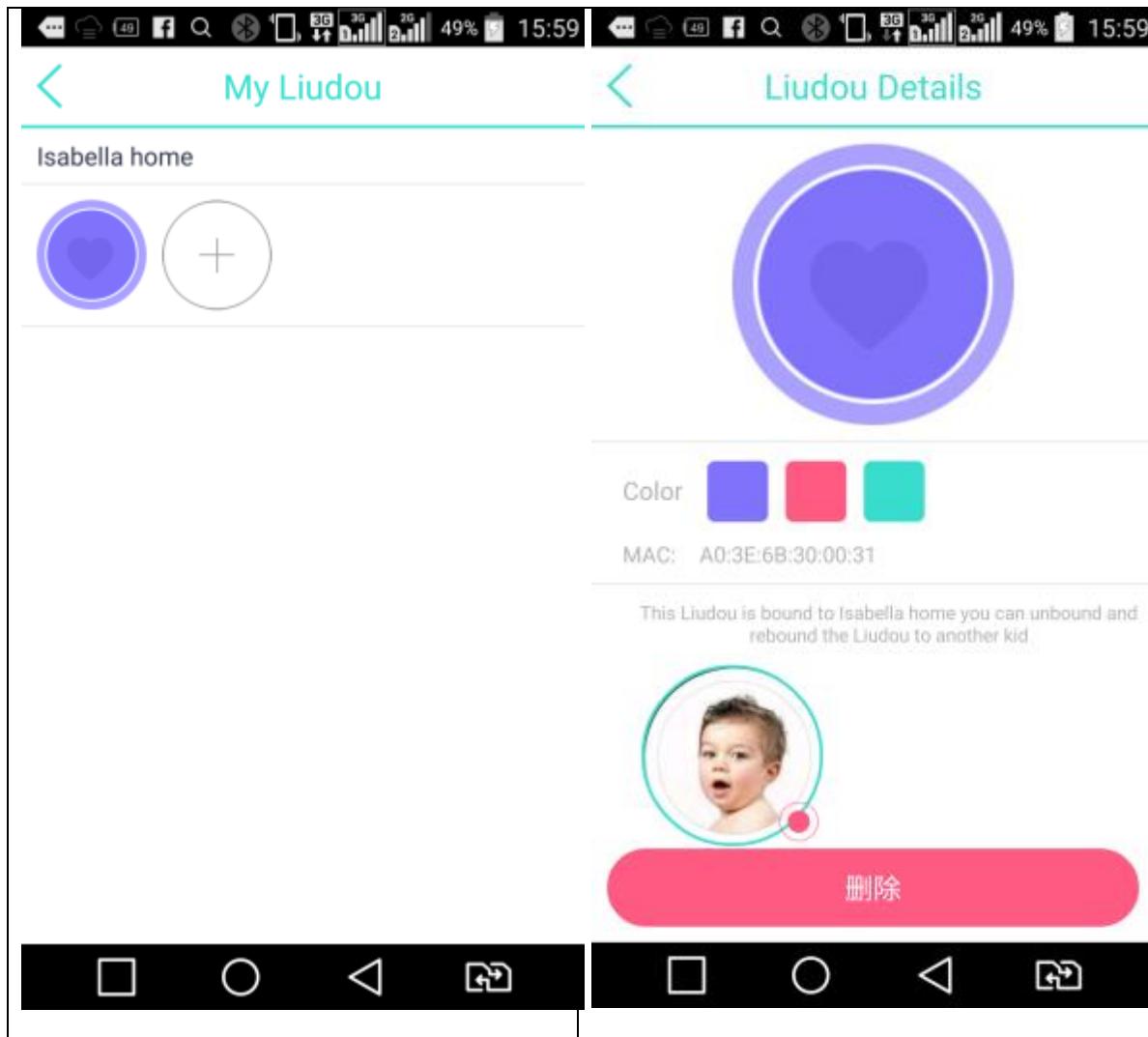
My Kids provides a list of added kids. Click on each kid, you can see a list of Liudou this kid owns and a list of guardians for this kid.



Please note that the current user is shown as a guardian. Guardian's profile picture cannot be updated under my kids. The guardian can go to his/her own account to update the profile picture if needed.

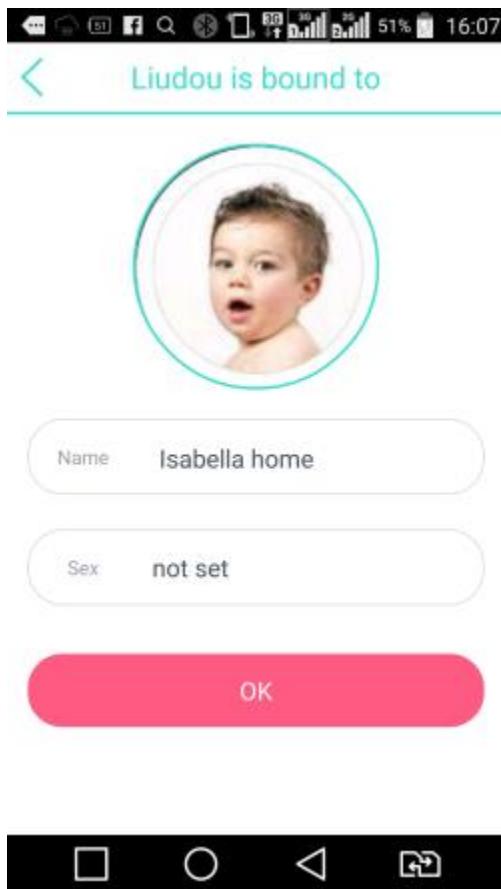
#### 4.3.3 My Liudou

My Liudou provides a list of Liudous belonging to the kids of the current user. One stop update/delete of Liudou can be conducted here.



#### 4.3.4 Recognize Liudou

To detect which Liudou belongs to which kid, user can use this function. Move the target Liudou close to the phone and click "Search", once the Liudou is detected, the APP will tell you who this Liudou is belonging to.



### 4.3.5 More Settings

#### 4.3.5.1 Multi-Language

APP will default to phone's system language. If you want to change the default language, please use this setting to change. Currently English, Simplified Chinese and Traditional Chinese are supported

#### 4.3.5.2 Sensitivity Level

Increase sensitivity level could trigger alert more promptly but could cause a few false alarms.

Currently High, Medium (recommended) and Low sensitivity levels are defined. If you think false alarms are too frequent, please adjust the sensitivity towards Low. If you are in a crowded environment and would like to get prompt alert, please adjust the sensitivity towards High.

#### 4.3.5.3 *Distance setting for “Too Far” notification*

Liuwa APP supports notification sent to users if the kid runs a little too far but still within monitored range. Soft notifications can be sent to user alongside with phone vibration and soft ringtone reminders.

The default setting for “Too Far” notification is OFF. If you would like to use this feature, please turn it ON first.

The distance between the guardian and the kid can be adjusted. APP will generate notifications when the kid is

Close – around 10 meters away

Medium – around 15 meters away

Far – around 20 meters away

#### 4.3.5.4 *Change phone number*

There are times we need to change phone number but do not want to re-set everything again. Liuwa APP supports such request using this setting. We will ask you to input the new phone number and we will migrate all the settings for the current user to the new number. Of course, the new phone number needs to be verified before logging in.

#### 4.3.5.5 *Sign Off*

Current user can sign off from current account by using Sign off function. The APP will ask the user to re-sign in and allow to sign in using a different account. Please note that Liuwa APP does not allow simultaneous signed in using the same account but onto different phones. Once signed in, if there is another session using the same account, the other session will be signed off automatically. This is to protect data integrity.

#### 4.3.6 *About Us*

Links to Liuwa website and hotlines can be found in About Us.

Current version of the APP can also be found here.

#### 4.3.7 Exit App

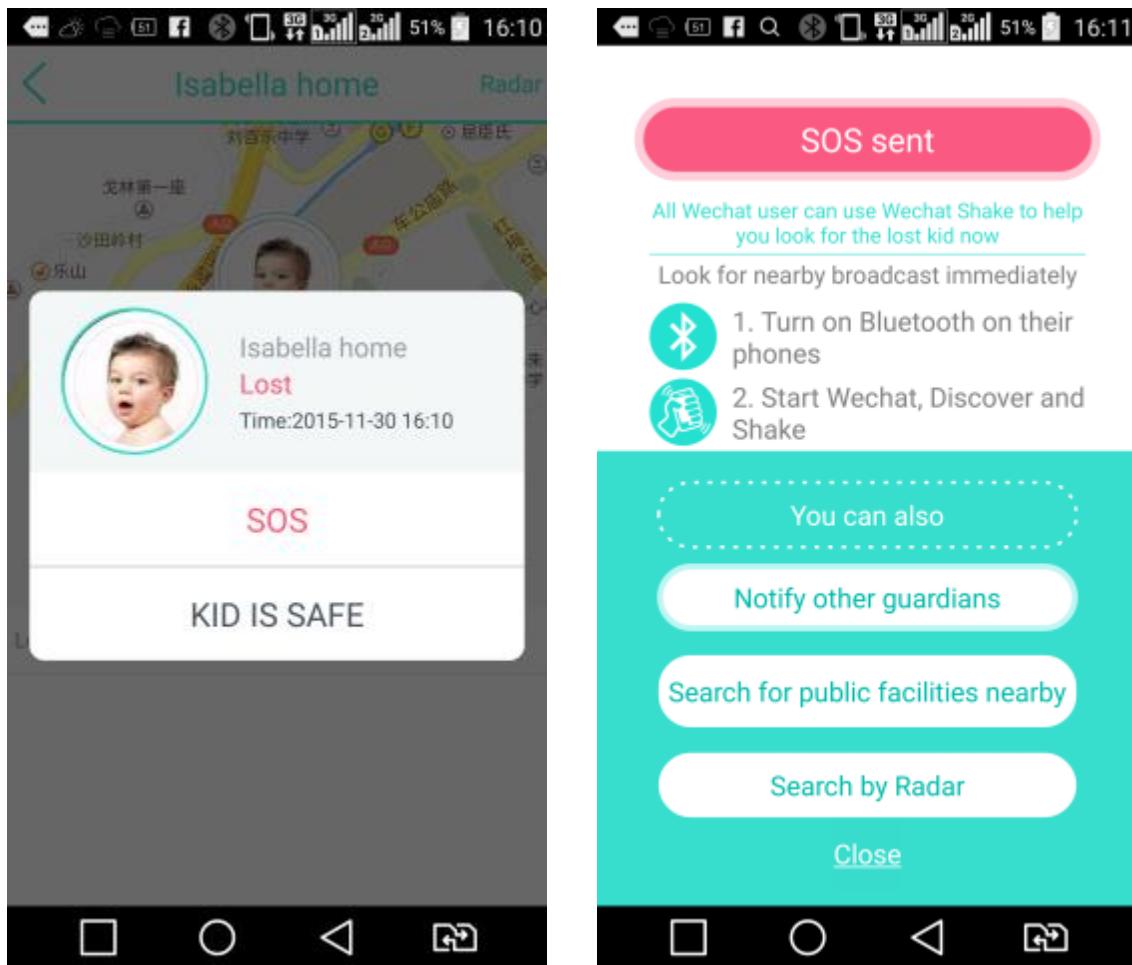
Android users have the option of Exit the App from Menu. This will kill Liuwa APP as an active app and allow re-start in this way also.

iOS does not support exit from an APP within the APP. So iOS users need to double click "Home" button and select Liuwa APP, slide up to kill the APP.

## 5 Alert Handling and SOS Process

*Liuwa APP focuses on providing instant alerts when kids are running away from the guardians. We put a lot of efforts in building a robust alerting and submitting SOS to local communities system.*

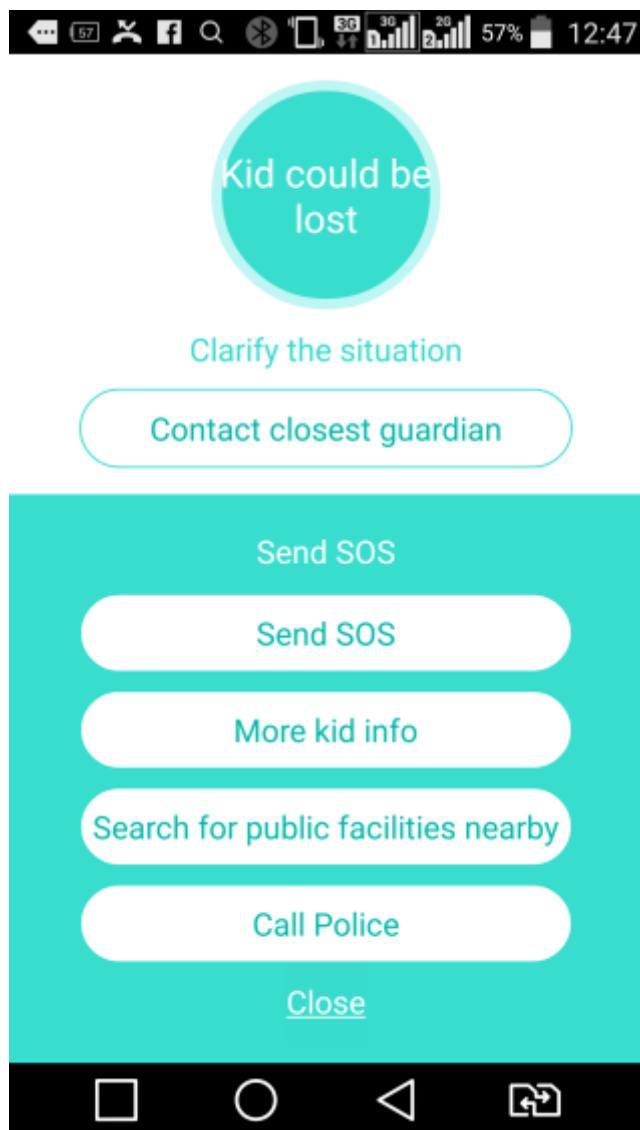
## 5.1 Alerts to local Guardian



Select submit SOS to ask for help

Select "KID IS SAFE" if the kid enters a safe area but no signal of Liudou detected. No more alert will be generated until the Liudou is detected again and start a new session.

## 5.2 Alerts to remote Guardian

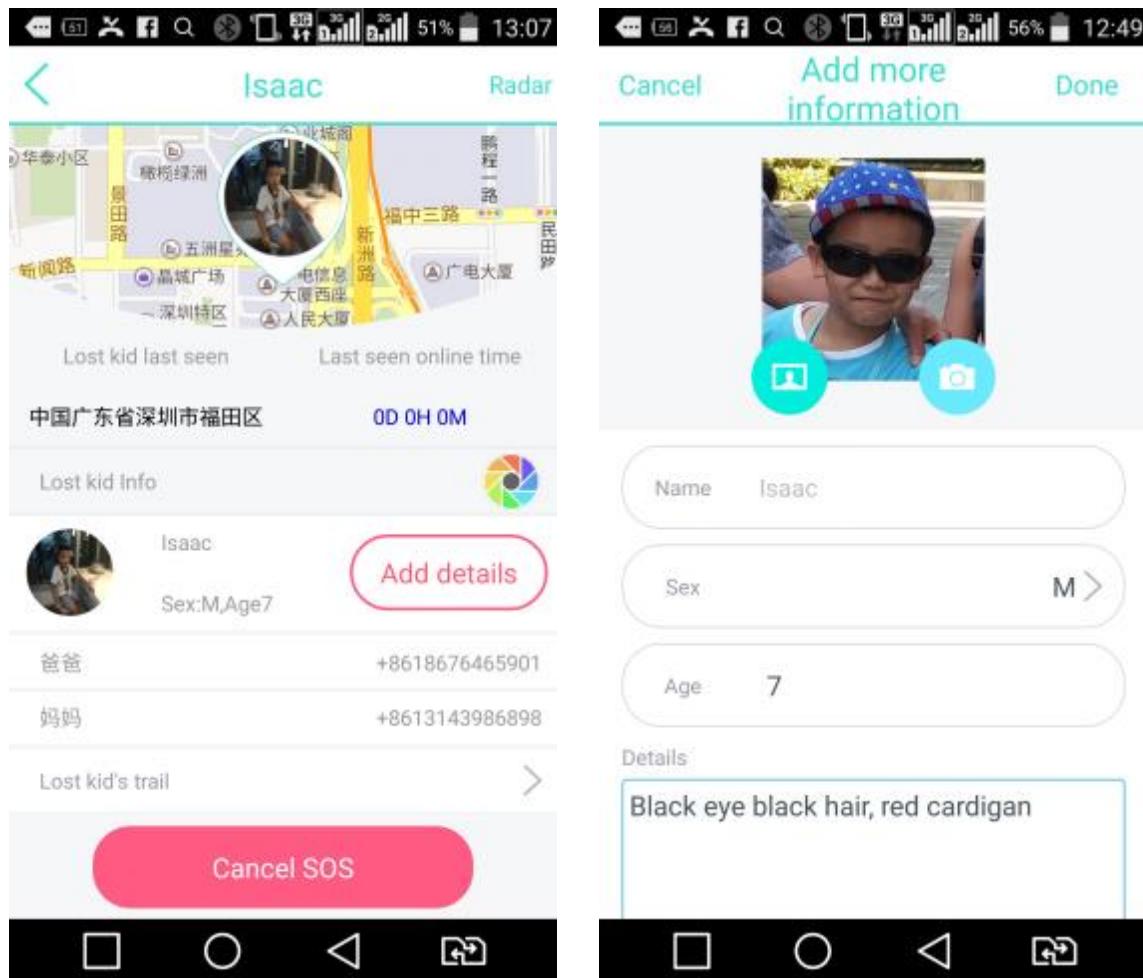


Remote guardian will see a different screen with options to help local guardian to quickly ask for help.

## 5.3 Submit SOS

Sending SOS to the cloud server requires the phone having internet access. If the phone has no internet access, it is suggested to contact a remote guardian who has internet access to send SOS out immediately.

After submitting SOS, it is suggested for the guardian to fill in more details for the lost kid such as clothes worn, color of eyes and hair, height, weight, etc to make community helpers easy to spot the lost kid.



Sharing the lost kid to as many community helpers as possible is the next step.

#### 5.4 Community help methods supported

Wechat offers sophisticated community helper tools to search for Liudou automatically.

- Wechat “Shake” (Simplified Chinese and Traditional Chinese versions) support “Nearby” function to search for Bluetooth devices registered with Wechat. Liuwa has already integrated with Wechat back end to register all official Liudou.
- It is highly recommended to find public facilities that have broadcast functions to ask all Wechat users to help use “Shake”. If the lost kid is within 30 meters from the Wechat community helper, the Liudou signal will be detected automatically. The found message as well as the location information (if the helper agrees to share the location information) will be sent to kid’s guardians. The community helper will also get lost kid’s parents’ phone numbers to contact the parents directly.
- Liuwa Wechat public account also support H5 ranging auto-search functions. Community helper simply subscribe to Liuwa public account, open the “Search together” will open the H5 page. As long as the page is open, wechat will automatically search for Liudou signals. The community helper can walk around to search a bigger area for the lost kid.
- Sharing the lost kid information to people all around the area is proven to be an efficient way for community to help. Liuwa supports sharing the lost kid information to Wechat Chat and Wechat Friends Circle.



Lost kid. Please help search for him.



Isaac is Lost! Everyone please help search for the lost kid! Pass your love and



Festival City 名城

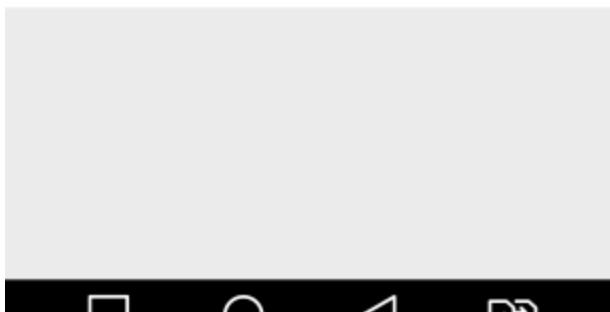


Share to

Family



Mention



- Sharing the lost information to international social media can be supported also. Plan has already been made to support:

- Sharing to Facebook
- Sharing to Twitter
- Sharing to Google+

Sharing to Foursquare

## Label

Product: Liuwa Kids Wearable

Model: LW01A2

FCC ID: 2AGRL001

**RoHS CE**