

# Pinout User Manual

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Zesty Systems Inc.  
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## What you need to use Pinout

To use pinout with your DSLR you will need

1. Pinout app
  - A) Smartphone: your smartphone must have BLE capability to use pinout
  - B) iOS device: iPhone 4s/5/5s/6/6s or later, iPad2 / iPad mini, Apple watch,iOS 9.0 or later
  - C) Android device: OS4.4、 5.0、 6.0 or later (BLE is required)
2. Pinout device
3. Your DSLR

## How to get connected to Pinout

1. Download pinout app to your smartphone (put link here)
2. Attach pinout to your DSLR
3. Make sure BLE is available on your smartphone

# Introduction of Pinout

Pinout is a small device that plugs to your DSLR camera; it uses Bluetooth LE technology and a dedicated app on your smartphone to give you remote access and much more to the camera.

The main functions of pinout are as follows

- Simple release
- Long exposure
- Timed release
- Time lapse
- Distance lapse
- Star trail
- Geo tagging
- Geo logging
- Bulb ramping
- LE HDR
- LE HDR time lapse
- Loss prevention
- Multi-camera control

## Pinout hardware overview

Pinout does not require batteries and uses a very tiny portion of camera's charge. It seamlessly blends in with camera. No cable, does not use hot shoe, and no need to take it off before stowing away camera in camera bag.

### TYPE-A

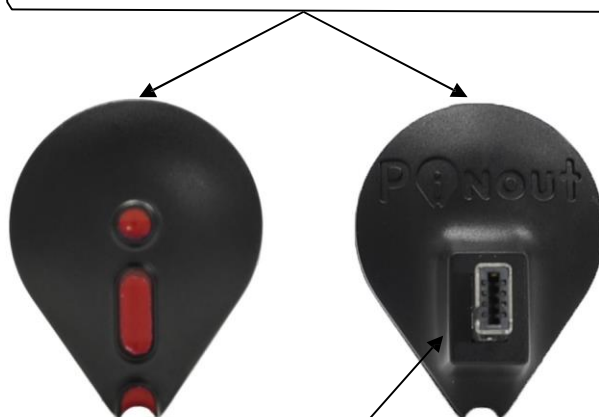
LED indicator  
After connecting with camera, the red LED goes on and off.



10-pins connector  
Connect to remote-control interface

### TYPE-B

LED indicator  
After connecting with camera, the red LED goes on and off.



10-pins connector  
Connect to remote-control interface

# Camera compatibility

Pinout includes type A and type B. Please confirm your digital camera models before purchase

| Type   | DSLR Models                                                                                                                         |
|--------|-------------------------------------------------------------------------------------------------------------------------------------|
| Type A | Nikon D5, D500, D4, D4s, D3, D3S, D3X, D2X, D2XS, D2HS, D2H, D800, D800E, D810, D810A, D700, D300, D300S, D200 and Fujifilm S5 Pro; |
| Type B | Nikon Df, D750, D610, D600, D90, D7200, D7100, D7000, D5500, D5300, D5200, D5100,                                                   |

# Connect pinout to your DSLR

Connect to remote-control interface of the camera

Connect pinout to your DSLR by easily friction fit the port (please don't screw otherwise the interface or pinout maybe damaged).



TYPE-A



TYPE-B

# Quick start of application

Step 1. Power on the camera

Step 2. Check the installation of smart phone software

If the application is not installed on your smart phone, please download as follows.

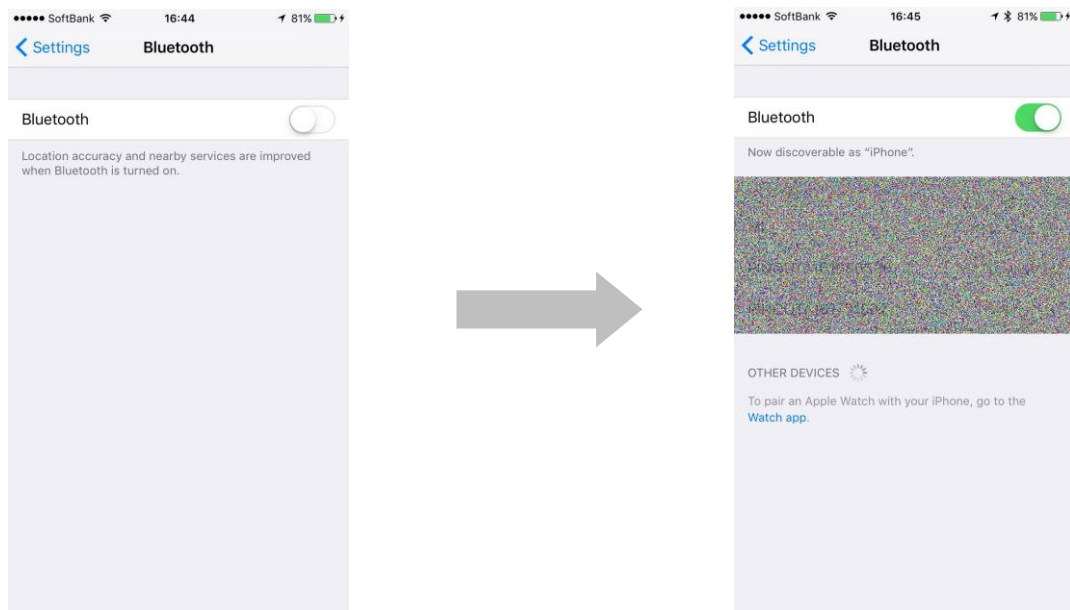
For iPhone users: please download pinout App from appstore (Free)

For Android users: please refer to the latest information of our HP.

Step 3. Set Bluetooth before starting the application

The products can't work without starting Bluetooth. For iPhone users,

Please start Bluetooth as follows.



#### Step 4. Start pinout app

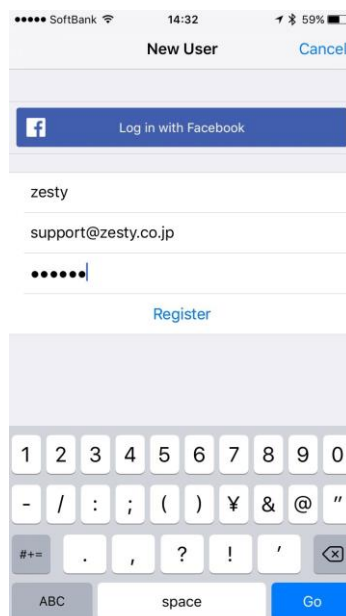
Start pinout application. If it is the first time your start pinout app, you will see following.



The registration page of pinout app

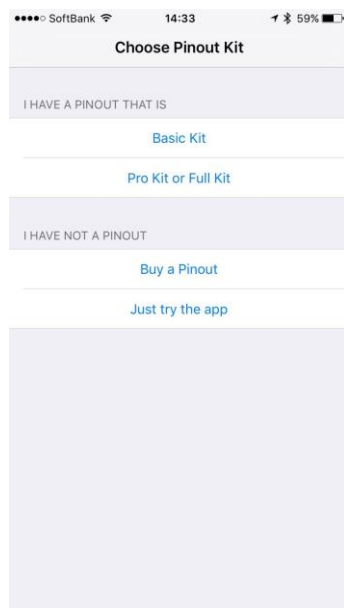
#### Step 5 user registration and pinout kit setting or login

If you are a new user please choose new user and register as following. Or login.

A screenshot of the Pinout app's 'New User' registration form. The form is displayed on a mobile device screen. At the top, it says 'New User' with a 'Cancel' link. Below this is a 'Log in with Facebook' button. The form fields are: 'zesty' for the username, 'support@zesty.co.jp' for the email, and a password field with six dots. Below the password field is a 'Register' link. At the bottom, there is a numeric keypad and a 'Go' button.

Register a new user

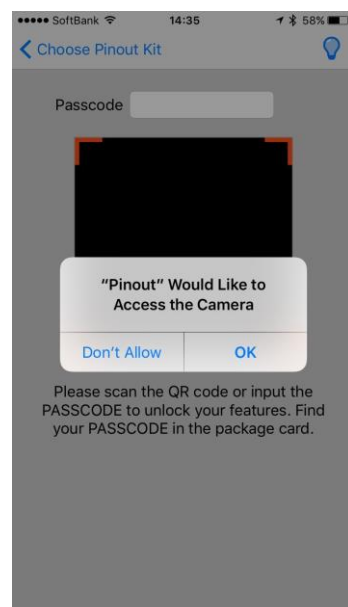
After you registered as a new user you need to choose the kit you purchased.



Choose the pinout kit you purchased

If you purchased a pro kit or a full kit, you need to tear off the seal and scan the QR code printed on the warranty card or input the passcode manually.

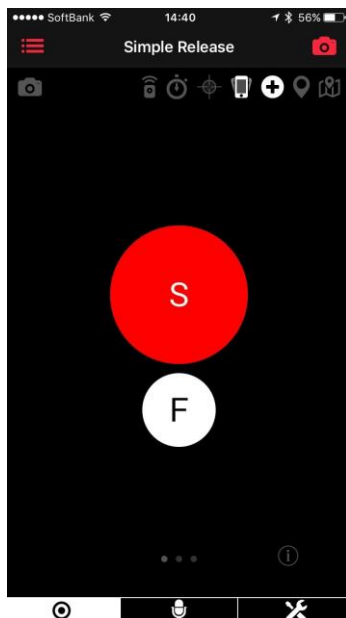
When the scan is finished, your registration is done and you are ready to use Pinout.



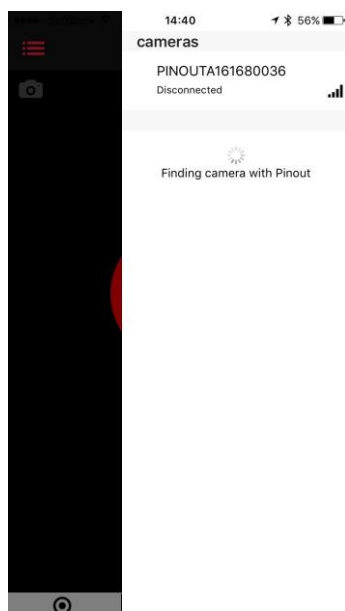
QR code scan to register to a pro or full kit user

## Step 6. Connect pinout to your DSLR

Tap the camera icon on top-right screen, pinout app will start to search DSLRs and give out a list, tap the right DSLR to connect to pinout app.



Tap top-right camera icon



Discover the DSLR nearby

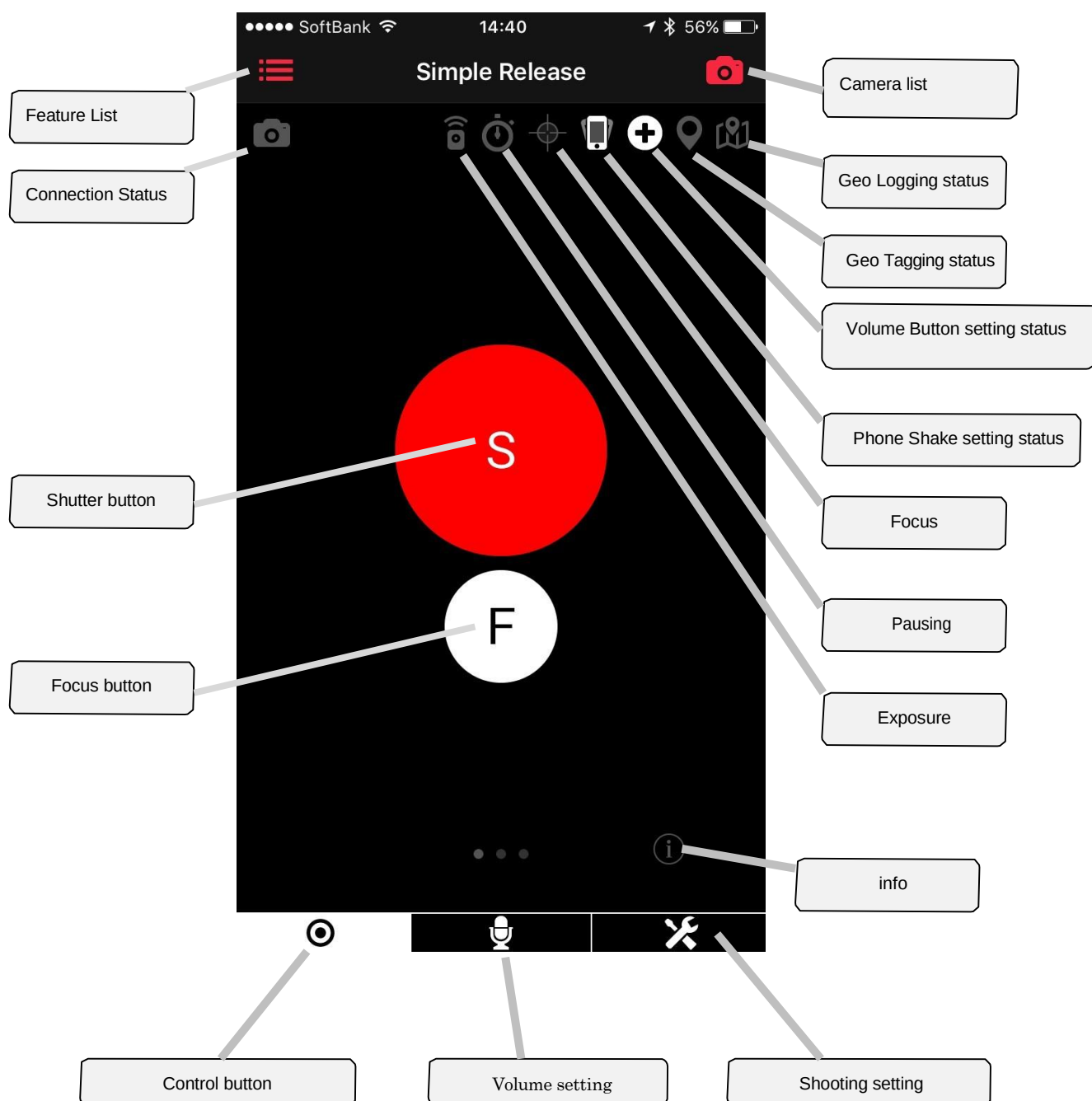


Connect the right DSLR to pinout app

#### Step 7. Shooting

Click back to the main screen, and press the red S button to start shooting.

## Main Screen of Pinout app



Feature list: tap to get the feature list

Connection status: the camera icon turns to white when connection between smartphone and pinout is established, otherwise the color is gray

Shutter button: tap to start shooting

Focus button: tap to start focus, **focus is only effective when your camera is set to autofocus mode.**

Camera list: tap to get camera list and connect to cameras

Geo logging status: when geo logging feature is on this status icon turns on, tap to get location information

Geo tagging status: when geo tagging feature is on this status icon turns on

Volume button setting status: this status icon turns on when set using volume level to shoot pictures

Phone shake setting status: this status icon turns on when set using phone shake to shoot pictures

Focus: this status icon turns on when press focus button

Pausing: this status icon turns on during pausing

Exposure: this status icon turns on during exposure

Info: tap to get more info or help

Control button: tap to get back to the shooting screen

Volume setting: tap to setting using volume level to shoot pictures

Shooting setting: tap to setting the way to shooting pictures (phone shake or volume button)

#### **NOTICE:**

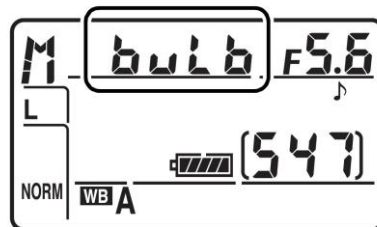
1. Pinout supports exposure time control from 0.01s to 99hours 59minutes 59.99 seconds, only exposure time can be controlled by pinout, the actual exposure value can only be set on the camera.
2. When you set your camera to auto focus, the exposure time you set by pinout app maybe not work properly. (It depends on the time cost on auto focus) we suggest you to use pinout under manual focus mode.

# Simple Release

Pinout has no wires, and is easily controlled via an app on your smartphone. You can snap a picture with the volume control button, a simple click using the app, shaking your phone, or even by simply saying “CHEEESE” with voice volume control mode.

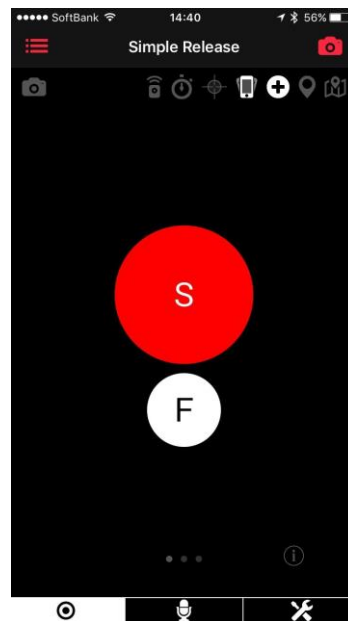
Remote release is a popular tool used by serious photographers both outside and inside for shooting wildlife, scenery, and studio shoots. One reason is because when you manually press the shutter on your camera, even the steadiest of us send a small vibration to the camera body leading to blurry pictures. With Pinout, you can capture that crisp, beautiful shot of sunset you always wanted.

Camera setting : simple release works in all camera modes, acts as a trigger. The shutter speed control is only effective when your camera is under bulb mode. Taking photos by volume level, phone shake, volume button are effective in all camera modes except bulb mode.



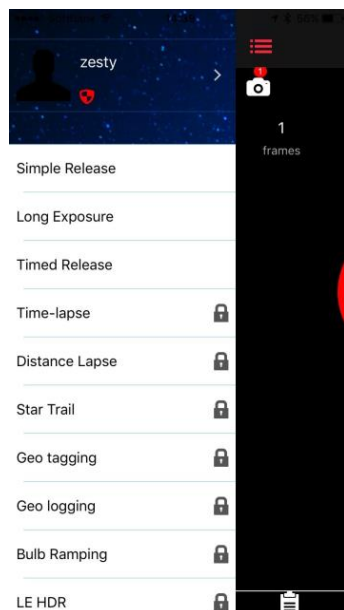
The way of using simple release is as follows.

Step1. Tap the left-top icon to get the feature menu



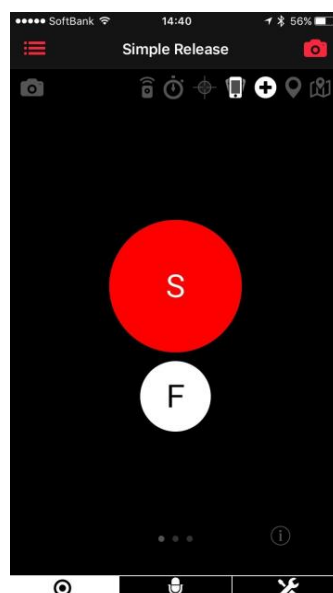
Tap to get feature menu

Step2. Choose simple release from the feature menu



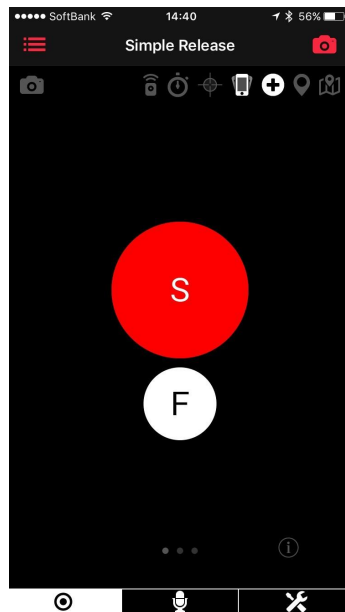
Choose simple release from the feature menu

Step3. Tap the focus to adjust the focus or press the red shutter button to take a photo.  
(When your camera is set to bulb mode, long press the shutter button can control the exposure time)

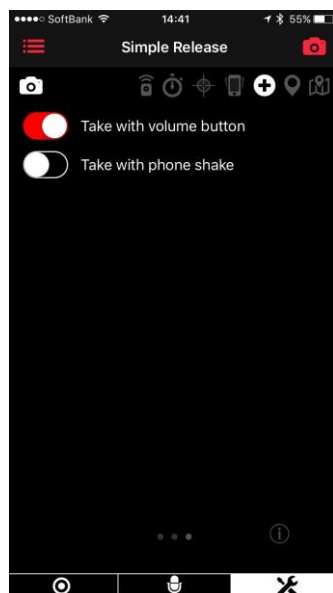


It is possible to take with shake or volume down button, or volume level setting  
Take with volume button or phone shake(it doesn't work under bulb mode)

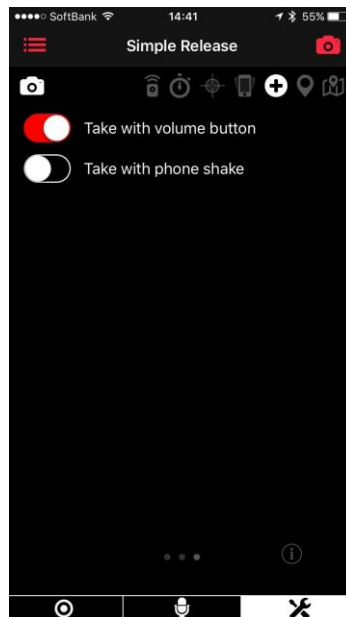
Step1. Tap the toolbox icon on the simple release screen.



Step2. Use the sliding button to choose take with volume button, take with phone shake or both



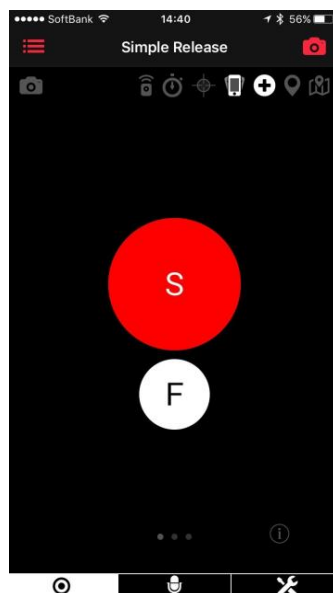
Step3. Tap the double circle button to get back to the main screen.



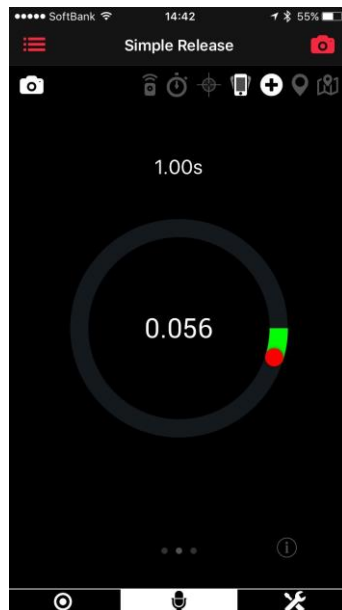
Step 4. Take photos by press the volume down button or phone shake.

Take with volume level setting.

Step1. Tap the microphone icon in the middle of the bottom menu



Step2. Set up the volume level you want to shoot.



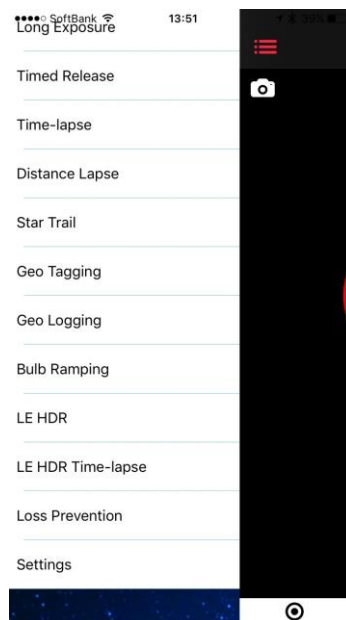
Step3. Take photos by voice, when the voice level exceeds the level you set, shooting will be taken place automatically.

# Loss Prevention

Expensive cameras are an easy target for theft. With Pinout, you can set your smartphone to alert you when your camera goes 20 or 30 meters (up to 98 feet) away from your phone, with your camera on or off. No more leaving your camera somewhere and forgetting it behind. You can even track the point where your camera went out of range if it does get lost or stolen.

The way of using loss prevention is as following

Step1 choose loss prevention from the feature menu



Choose loss prevention

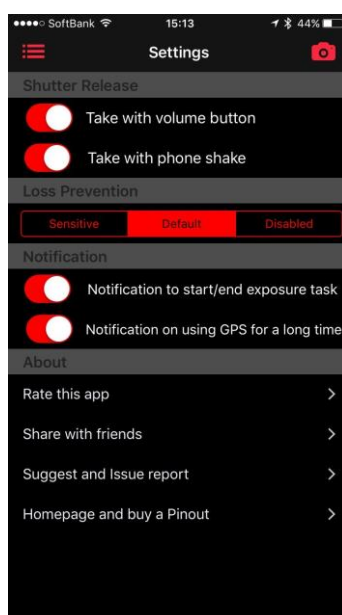
Step 2. Tap the name of the pinout you want to check, then the current location or the location of the link broken detected will be shown on the map.



Location of the lost pinout

Loss prevention mode can be set from the setting menu

From the features menu, please choose settings.



Setting loss prevention mode

Set up the loss prevention mode from the setting page.

Sensitive: you will receive an alert if the distance between pinout and your smartphone exceeds 3-5 meters, or the BLE link is broken.

Default: you will receive an alert if the BLE link between pinout and your smartphone is

broken.

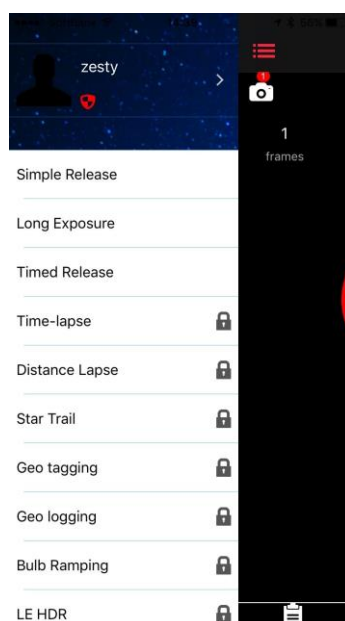
Disabled: disable the loss prevention function.

## Timed Release

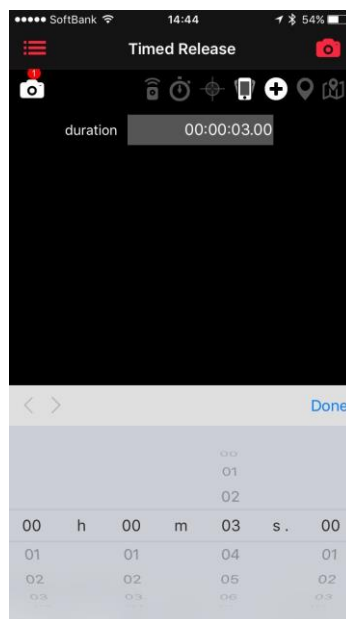
Pinout provides you a simple interface to setup the timer to shoot the photos.

**Camera setting: this feature only works when your camera is under blub mode.**

Step1. Choose timed release from the feature menu.

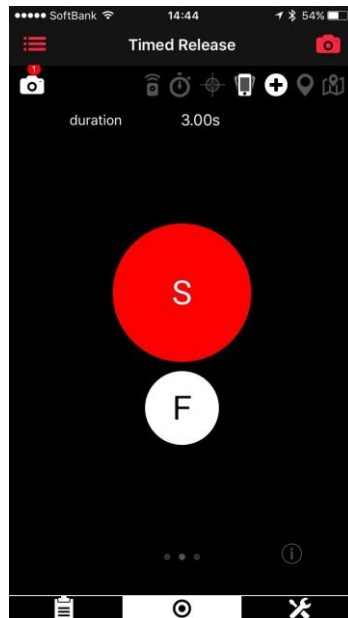


Step2: set the value of the duration and click done.



Duration: exposure time

Step3. Tap the double circle button to get back to the shooting screen. Press the red S button to start shooting.

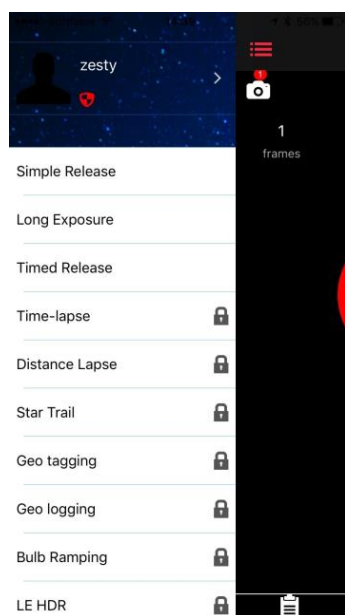


# Long Exposure

With pinout, you can focus on the objects or you want to shoot. Single click the app to start the shoot, and double click to stop.

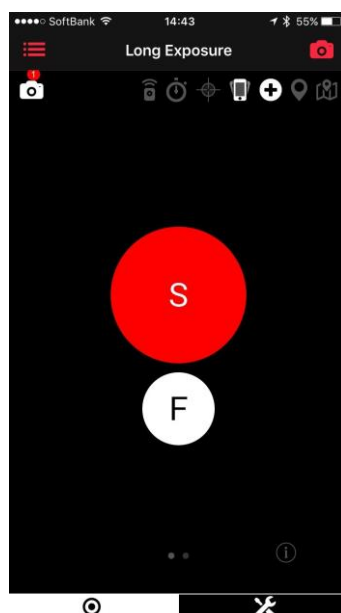
**Camera setting: this feature only works when your camera is under blub mode.**

Step1: Choose long exposure from the feature menu.

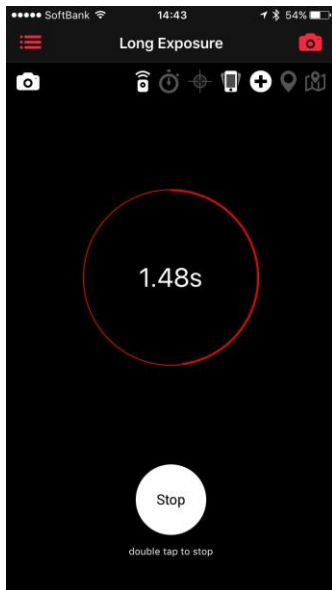


Step2:

Press the red S shutter button to start long exposure.



Step3. Double click the stop button to stop the shooting.



# Timelapse

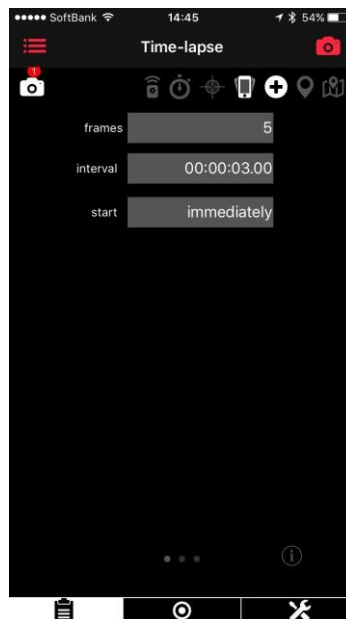
A series of pictures are captured at a particular interval and played back to yield what looks like a video. This feature is perfect for capturing subtle changes to scenery or objects over a period of time. Time-lapse allows you to cut through the noise and observe things from a different perspective by manipulating the flow of time.

With Pinout, you can easily set the interval, number of frames to shoot, and exposure on the app. With the premium function, you can set exposure of each frame individually as well. Once you press start, Pinout receives the command and starts the time-lapse, allowing you to watch videos, surf, or even turn off your smartphone.

**Camera setting: pinout works as a trigger, the exposure time you set on the camera must be smaller than the interval**

Step1. Choose time-lapse from the feature menu

Step2. Set the parameters (interval, number of exposure, start) and click done

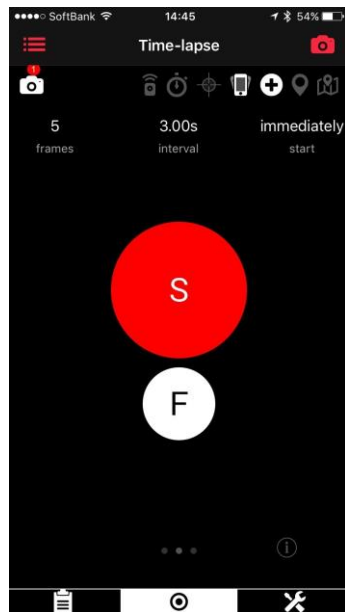


Frames: number of shooting

Interval: the amount of time you would like between exposures.

Start: time to start shooting

Step3: Press the double circle button to get back to the shooting screen.



Step4. Press the red S shutter button to start shooting time lapse.

## Distance Lapse

you can also perform distance-lapse with Pinout which allows you to take a series of pictures with interval of a particular distance, instead of time. For example, you can strap your Pinout-attached camera to your car's roof and drive around your neighborhood to capture scenery that changes with distance.

**Camera setting: pinout works as a trigger**

Step1. Choose distance lapse from the menu

Step2: Set the distance to trigger the shutter



Step3. Click the double circle icon to get back to the shooting screen.

Step4. Click the red S shutter button to start distance lapse shooting

# Star Trails

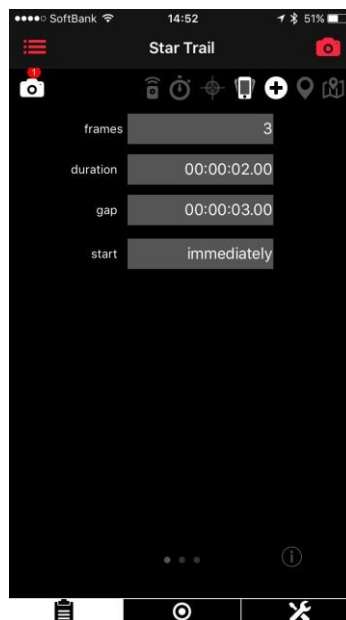
Pinout provides you a simple interface to setup all the necessary parameters (interval, exposure, duration, start and end time) to shoot startrails.

The way of using startrails functions is as following.

**Camera setting: this feature only works when your camera is under blub mode.**

Step1. Choose star trails from the menu

Step2. Set up the parameters (interval, number of exposure, start,)



Frames: number of shooting

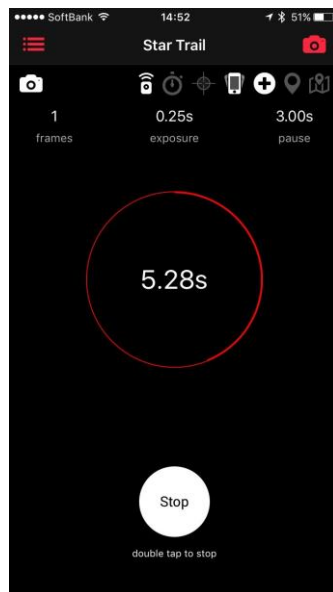
Duration: exposure time

Gap: pausing time

Start: start time of shooting

Step3. Click the double circle icon to get back to the shooting screen.

Step4. Click the red S shutter button to start shooting star trails.



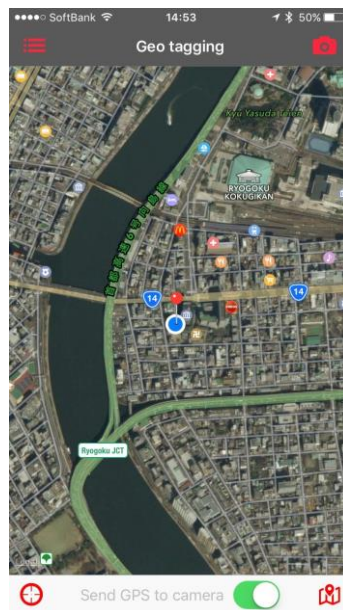
# Geo Tagging

With the GPS feature, you can automatically geo-tag your photos by recording GPS position data of each picture you take into EXIF information, as you shoot. Moreover, on the easy-to-use map interface on the dedicated app, you can set your location to the place you're taking a picture of. For example, you can take pictures of Mt. Fuji from hundreds of kilometers away and set your location to Mt. Fuji so that all of your pictures are automatically tagged with what's actually in the picture.

Automatically Geo Tagging saves a lot of time in the long run and also makes it easy to share location of the shoot when you share photos on social media.

Step1. Choose geo tagging from the feature menu

Step2. Drag the “send GPS to your camera” to green to real time tag the location information to your photos



There are advanced features of geo tagging as following

1. Modify the current location manually and tag it to the pictures automatically

To use this feature, just simply move the red pin on the map to the location you want to locate.

The blue round indicates your current location, the red pin indicates the new location you want to tag to your pictures.

You can tap the red left bottom icon to relocate the pin to the current location.



## 2. Fix the location

If you want to move with your smartphone but want to tag the fixed location information to the pictures, you can simply tap the right-bottom icon to tick Fix Location from the menu.



In the map above, pinout will tag the red pin location to your pictures, the blue round indicates your actual location.

From the map, you can choose different views.

Standard: map view

Satellite: satellite view

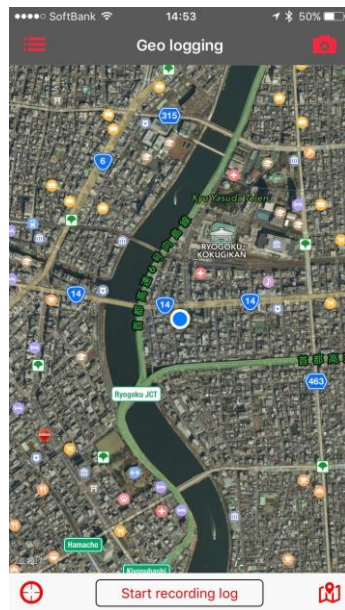
Hybrid: satellite with map view

# Geo Logging

Pinout automatically records your location information. You can use the log of the location afterwards as you like.

Step1. Choose geo logging from the feature menu.

Step2. Click start recording log



You can tap right bottom icon to change the view and check the log.

Standard: map view

Satellite: satellite view

Hybrid: satellite and map view

History: check the geo log

# Bulb Ramping

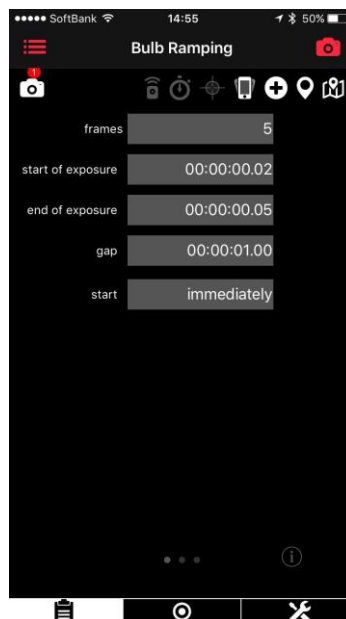
Bulb Ramping allows you to take a time-lapse of scenes with changing exposure levels and adjusts for the light variation gradually to drastically reduce the flickering effect. Pinout provides you an interface to setup the change of the exposure levels, number of shooting and all other necessary parameters.

**Camera setting: this feature only works when your camera is under bulb mode.**

The way of using bulb ramping is as following

Step1. Choose bulb ramping from features menu

Step2. Input the necessary parameters (start of exposure, end of exposure, interval, number of exposures, start)



Frames: number of shooting

Start of exposure: starting value of the exposure time

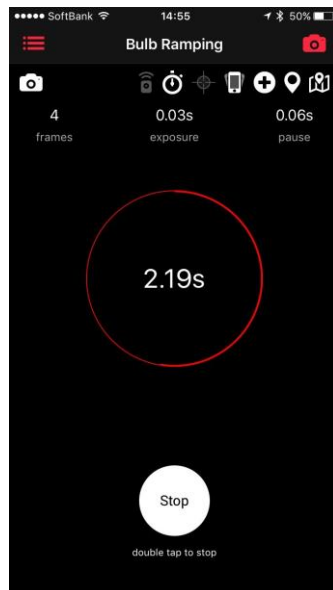
End of exposure: end value of the exposure time

Gap: pausing time

Start: start time of the shooting

Step3: Click the double circle button to get back to the shooting screen.

Step4. Click the red S shutter button to start bulb ramping



## LE HDR

LE HDR allows you to take serials photos at different exposure levels then mashed them together by software. By merging all the photos, HDR can avoid blown-out highlights, flat shadows

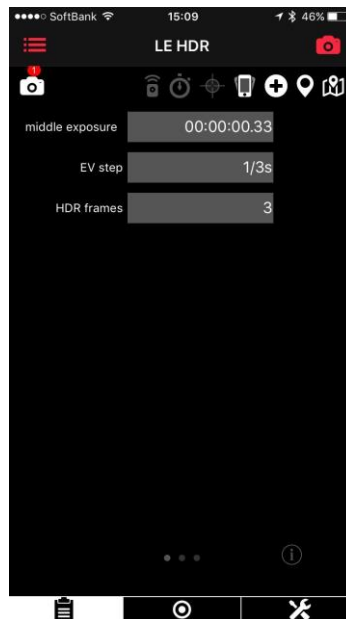
Use Pinout app, you can easily setup middle exposure, EV step and number of exposures that are necessary to shoot LE HDR.

**Camera setting: this feature only works when your camera is under bulb mode.  
The gap is fixed, 1 second.**

The way of using LE HDR is as following.

Step1. Choose LE HDR from the menu

Step2. Set the parameter (middle exposure, EV step, number of exposures)



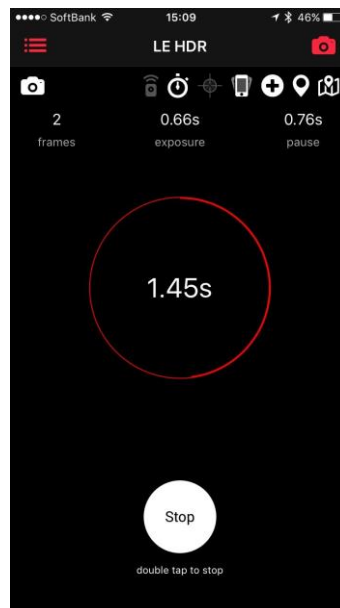
Middle exposure: middle value of the exposure time

EV step: value change of the exposure time

HDR frames: number of shooting

Step3. Click the double circle button to get back to the shooting screen.

Step4. Click red S shutter button to start LE HDR



# LE HDR Time-lapse

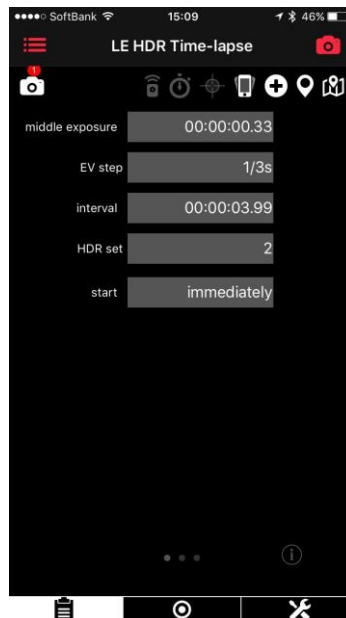
LE HDR Timelapse is to take series of HDR photos which allows you to edit them to a perfect video afterwards.

**Camera setting: this feature only works when your camera is under bulb mode.**

The way of using LE HDR timelapse is as following.

Step1: Choose LE HDR Timelapse from the menu

Step2: Set the parameter (middle exposure, EV step, timelapse interval, number of exposures, start)



Middle exposure: middle value of the exposure time

EV step: value change of the exposure time

Interval: the amount of time you would like between exposures.

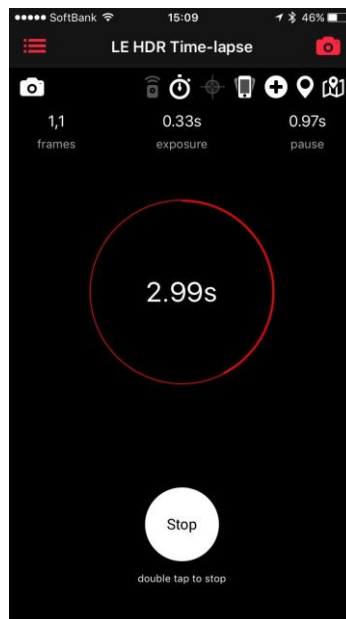
HDR set: number of the HDR timelapse set

Start: starting time of the shooting

The number of shooting in one HDR set is 3.

Step3: Click the double circle button to get back to the shooting screen

Step4: Click red S shutter button to start LE HDR timelapse

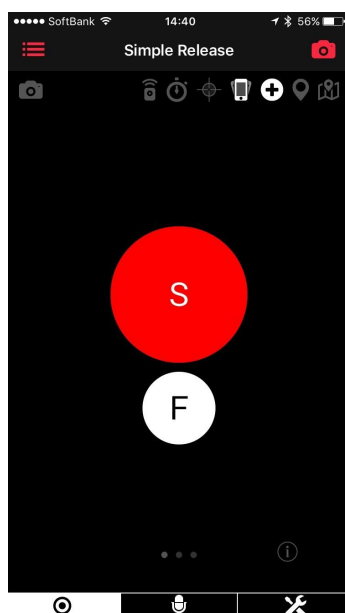


# Multi-Camera

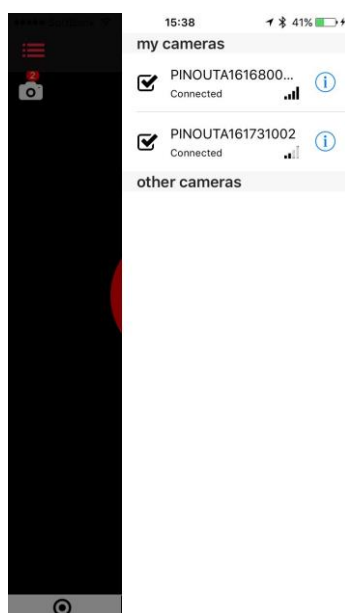
Pinout app can control up to 10 cameras simultaneously, so by setting up cameras at different angles you never miss the perfect angle for that perfect moment. Great for photographing sports!

The way of using multi-camera function is as following.

Step1. Tap the right-top camera icon



Step2: To click find cameras to discover cameras or the camera discovery is taken place automatically



Step3. Tick the cameras you want to connect, the status of the connection will be shown under the name of pinout.

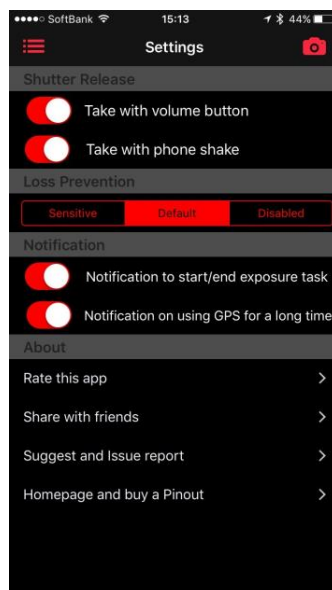
Step4. Get back to the main screen to choose the functions you want to use, and start multi-camera shooting.

## Sensor Release

DSLR cameras have few sensors built-in but smartphones come packed with sensors such as motion sensor, vibration sensor, face detection sensor, along with camera and microphone. Pinout can use your smartphone's sensors to enhance DSLRs' capabilities. For instance, by using motion sensor any changes in your smartphone's position triggers the shutter on your Pinout-connected camera so you can snap a picture at the moment your phone moves(refer to the simple release to find how to use this function.) other sensor based functions will be implemented and released gradually.

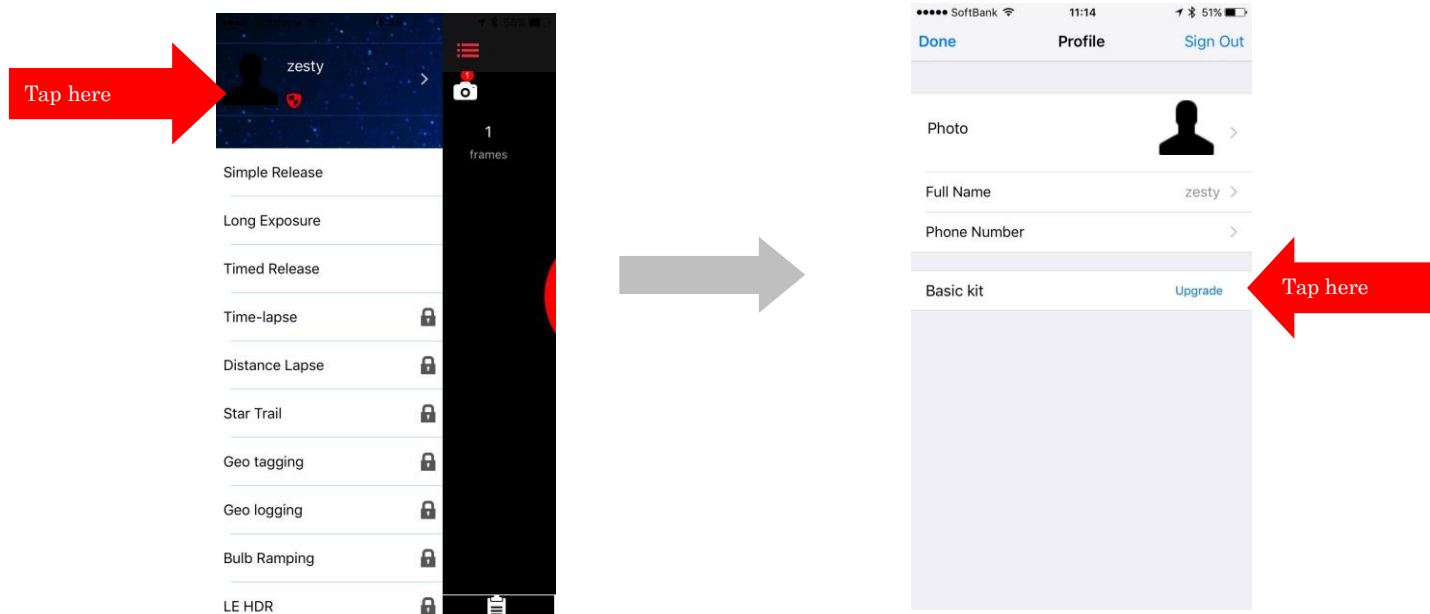
## Settings

Pinout app also provides a setting function to let you set up some parameters in advance. You can find settings function from the function menu.



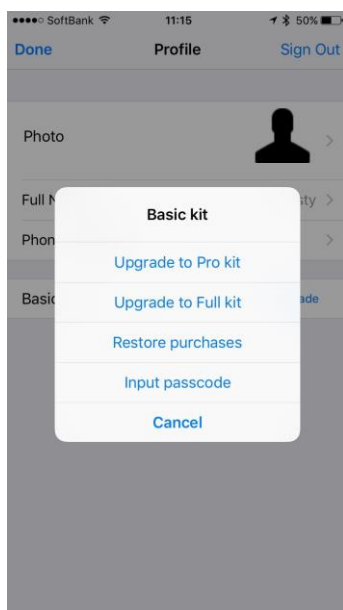
## User profile and upgrade your kit

User information (name, photo, phone number) can be updated when you click on the user name.

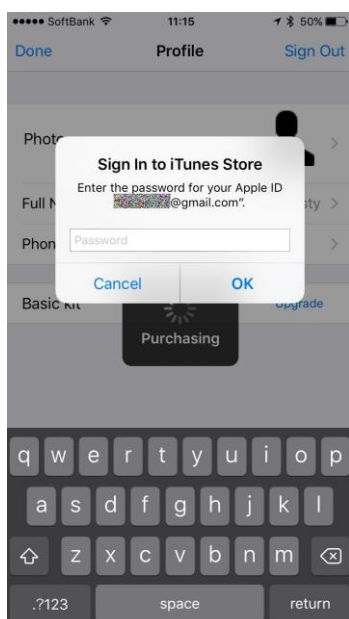


The status of your kit is shown in the profile, you can upgrade your kit by tapping on the kit status.

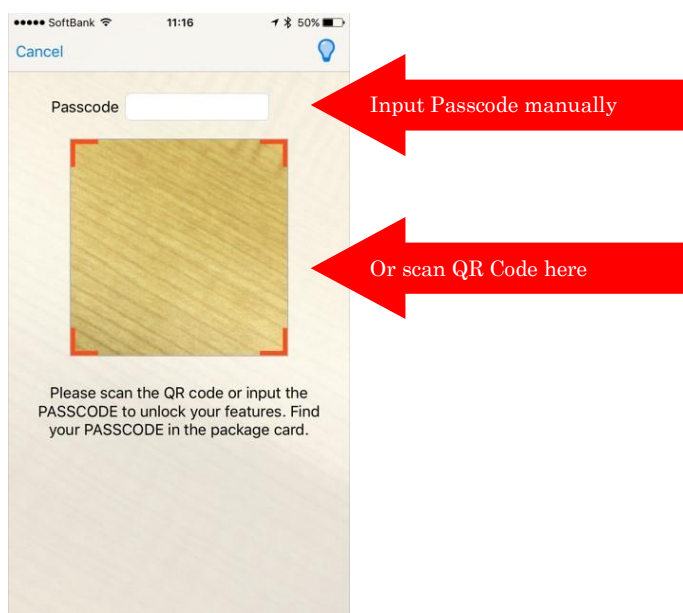
Step1 After you tap on the current kit name, you will get the screen below



If you choose “upgrade to Pro kit” or “upgrade to Full kit”, you will get a popup message to ask you to sign in itunes store to purchase the kit.



If you choose “input passcode”, you need to tear off the seal and scan the QR code printed on the warranty card or input the passcode manually.



## Technical Support

Please send emails to following email address if you have any questions

[support@zesty.co.jp](mailto:support@zesty.co.jp)

## Regulatory

**FCC**

**CE**



**RoHS**

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.

The grantee is not responsible for any changes or modifications not expressly approved by the party responsible for compliance. Such modifications could void the user's authority to operate the equipment.

NOTE: 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.