

Wireless Thermometer ECPIN Tutorial

1.1 Before you start using ECPIN

1. Please make sure to read the instruction manual carefully. This information will help you to familiarise yourself with your new device, to find out important details about its first use and how to operate it and to get advice in the event of malfunction.
2. Following these instructions will prevent damage to your device and loss of your statutory rights arising from malfunction due to incorrect use.
3. We shall not be liable for any damage due to non-compliance with these instructions or misuse of the device.

1.2 Product Description

1.2.1 Intelligent Wireless Food Thermometer (ECPIN)

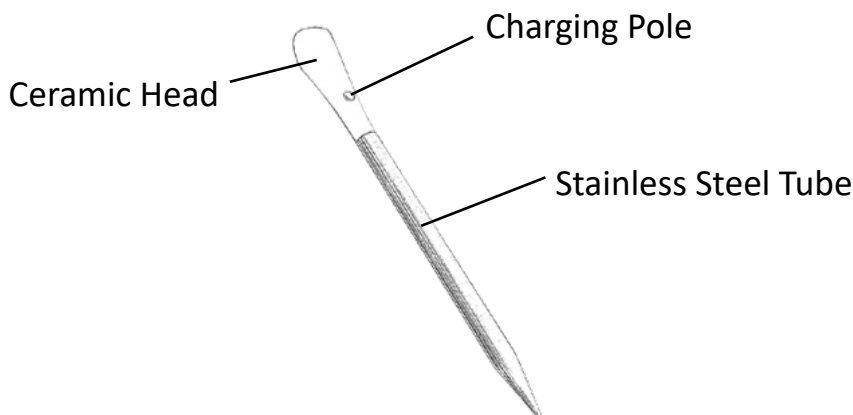


Figure 1. Intelligent Wireless Food Thermometer (ECPIN)

1.2.2 Charger

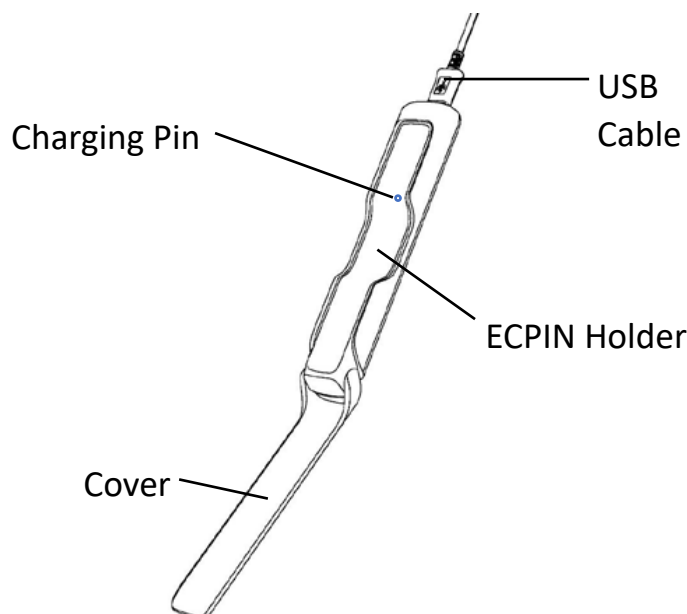


Figure 2. Charger for ECPIN

1.3 Product Specification - ECPIN

Item	Specification
Dimension (metal part)	Length : 81 mm Diameter : 6 mm
Oven temperature	Up to 300 °C (572 °F) (1)
Connectivity	2.4GHz Bluetooth (BLE) (2)
Transmission Range	Up to 10 meter (33 feet)
Operating Time	Up to 4 hours
Standby Time	Up to 6 hours
Charging Time	Less than 3 minutes
Temperature precision	1 °C
Waterproof	Water-resistant
Multi-probe	Support
OS Software for ECPin APP	iOS version 11 or above; Android version 6.0 or above

Remarks:

- (1) The maximum operating temperature of the probe, ECPIN, is 100 °C. Please make sure the probe is inserted in the meat during cooking.
- (2) Bluetooth RF Frequency and transmit power
Frequency Range : 2402MHz to 2480MHz;
Transmit power : 0~4dBm

1.4 Important Notes – Please read this carefully before use

1. This product is not intended for using by persons with ages 12 and under.
2. This product is exclusively for cooking meat/food in grill or oven. It should only be used as described within these instructions.
3. **DO NOT TOUCH THE WIRELESS THERMOMETER (ECPIN) WITH BARE HANDS AFTER COOKING.** Always wear oven gloves to remove ECPIN from the meat/food after cooking.
4. Before and after use, clean ECPIN with cloth and soapy water; and dry it thoroughly.
5. ECPIN can be cleaned and washed but do not immerse it long in water.
6. Do not use ECPIN in microwave oven.
7. Always use the given charger to charge ECPIN before cooking.
8. Since the charging time is short (less than 2 minutes) and ECPIN starts consuming power after charging, it is recommended to charge ECPIN just before cooking.
9. While putting ECPIN into the charger, please make sure the charging pole of ECPIN is facing downward and contact with the charging pin of the charger.

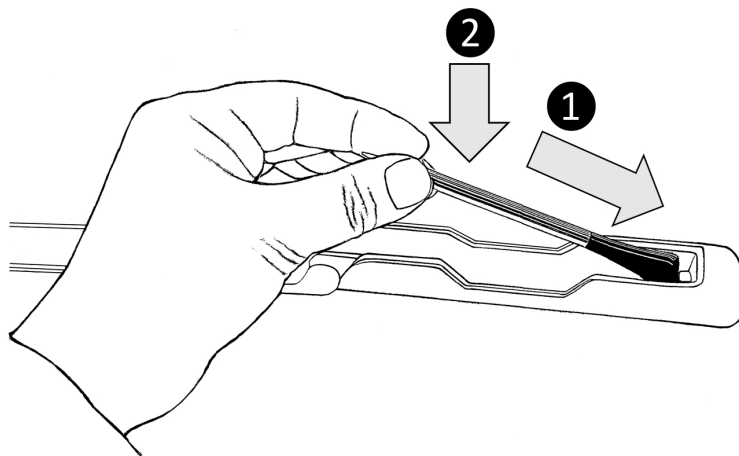


Figure 3. Insert ECPIN to the charger

10. After charging ECPIN, it is easily to take it out with your fingers at the lower part (closer to the tip) of ECPIN.

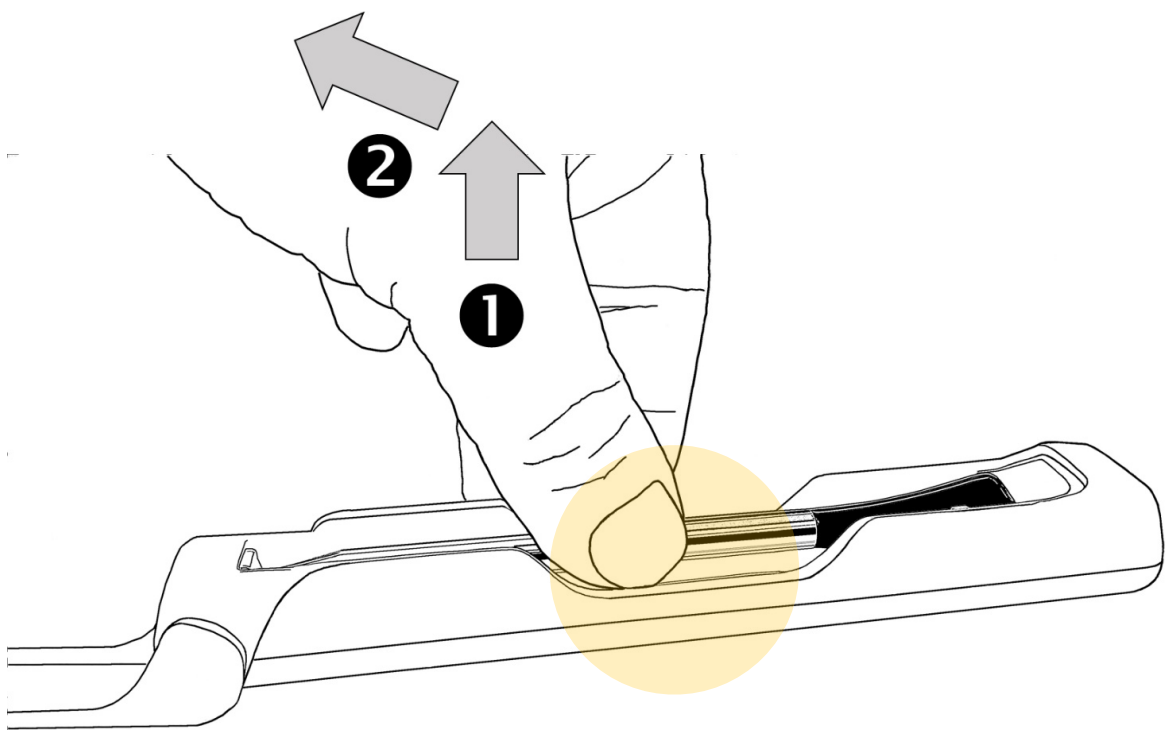


Figure 4. Take out from the charger

- 11. Do not expose the metal part of ECPIN to direct heat.
- 12. ECPIN has to be inserted into the meat/food during cooking.
- 13. Make sure the mobile phone is **within the range** of monitoring distance and **keep the app open** during cooking, i.e. stay closer to ECPIN when there is “Signal Loss”.

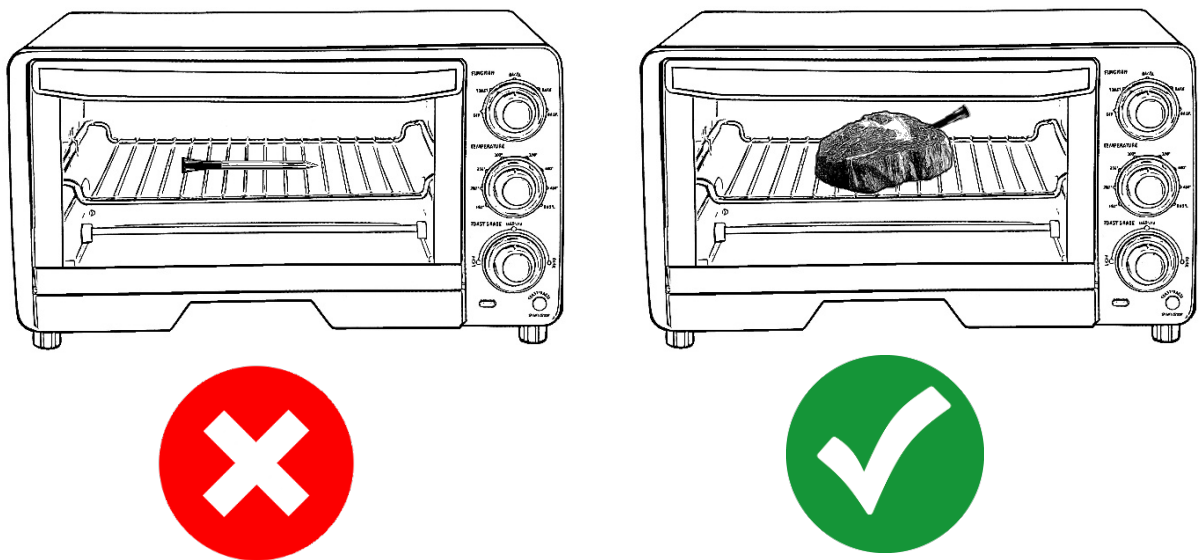
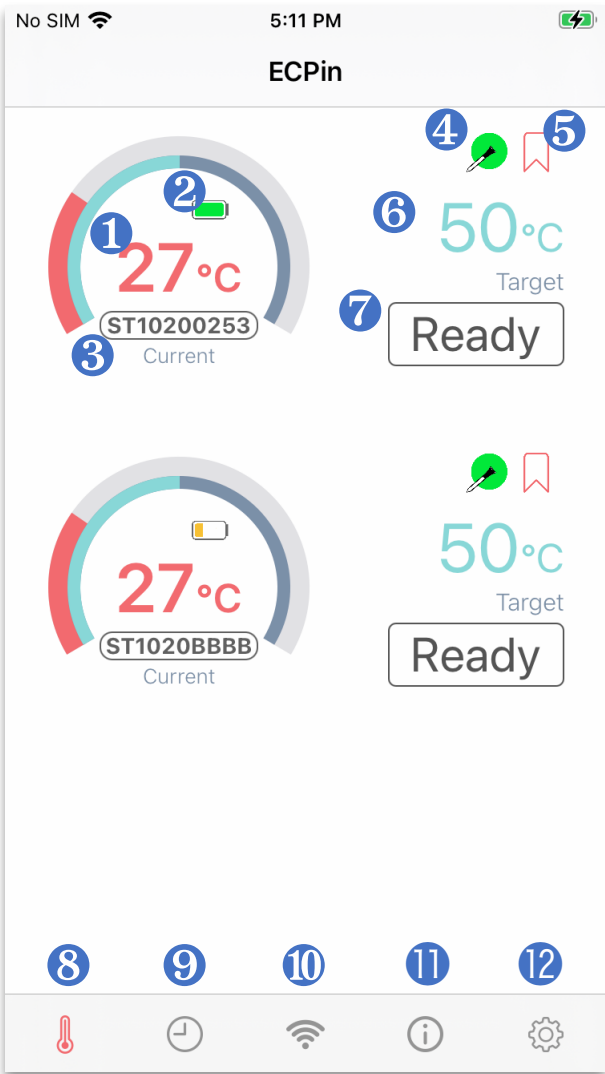


Figure 5. Safety in using Wireless Thermometer

1.5 Getting Started

1. **Install the mobile phone software APP** (ECPin Pro) in your mobile phone.
2. **Clean ECPIN** with cloth and soapy water. Dry it thoroughly with a clean cloth.
3. **Charge ECPIN**. Connect the charger to USB power source with the USB cable. Put ECPIN into the charger. *Please make sure that the charging pole of the ECPIN is connected to the charging pin of the charger.* The LED of the charger will be switched on and flashing during charging. When the LED is switched off, ECPIN is fully charged.
4. **Turn on Bluetooth and launch the software APP.**
5. The APP will search for ECPIN. When you see the reading of ECPIN (see example in Figure 6), **it is now ready for use**



- 1.Current Temperature
- 2.Battery Level
- 3.ECPIN ID (Probe colour indicated by text background colour)
- 4.Probe Signal Indicator
- 5.Bookmark - Prioritise probe to show
- 6.Target Temperature
- 7.Cooking Status
- 8.Temperature View
- 9.Cooking Records
- 10.Sharing
- 11.ECPIN Connect (Extend ECPIN range with Wifi)
- 12.Setting

Figure 6. Example of ECPIN Reading

2.1 Cooking with Guided Cook

1. Insert ECPIN to the meat/food.

Please make sure ECPIN is fully charged. To obtain the best result, please make sure the tip of the metal tube is at the centre of the meat/food.

2. Tap the area of the information of the probe on the “Available Probes” screen, the “Cook Setup” screen will be shown in Figure 7.
3. Choose type of meat by tapping “I want to cook” once and then select the meat type. (see Figure 7)
4. Choose cut of meat to cook by tapping “Cut of meat” once and then select the cut of meat. (see Figure 7)
5. Choose the doneness by tapping “Doneness” once and then select the desirable doneness. (see Figure 7)

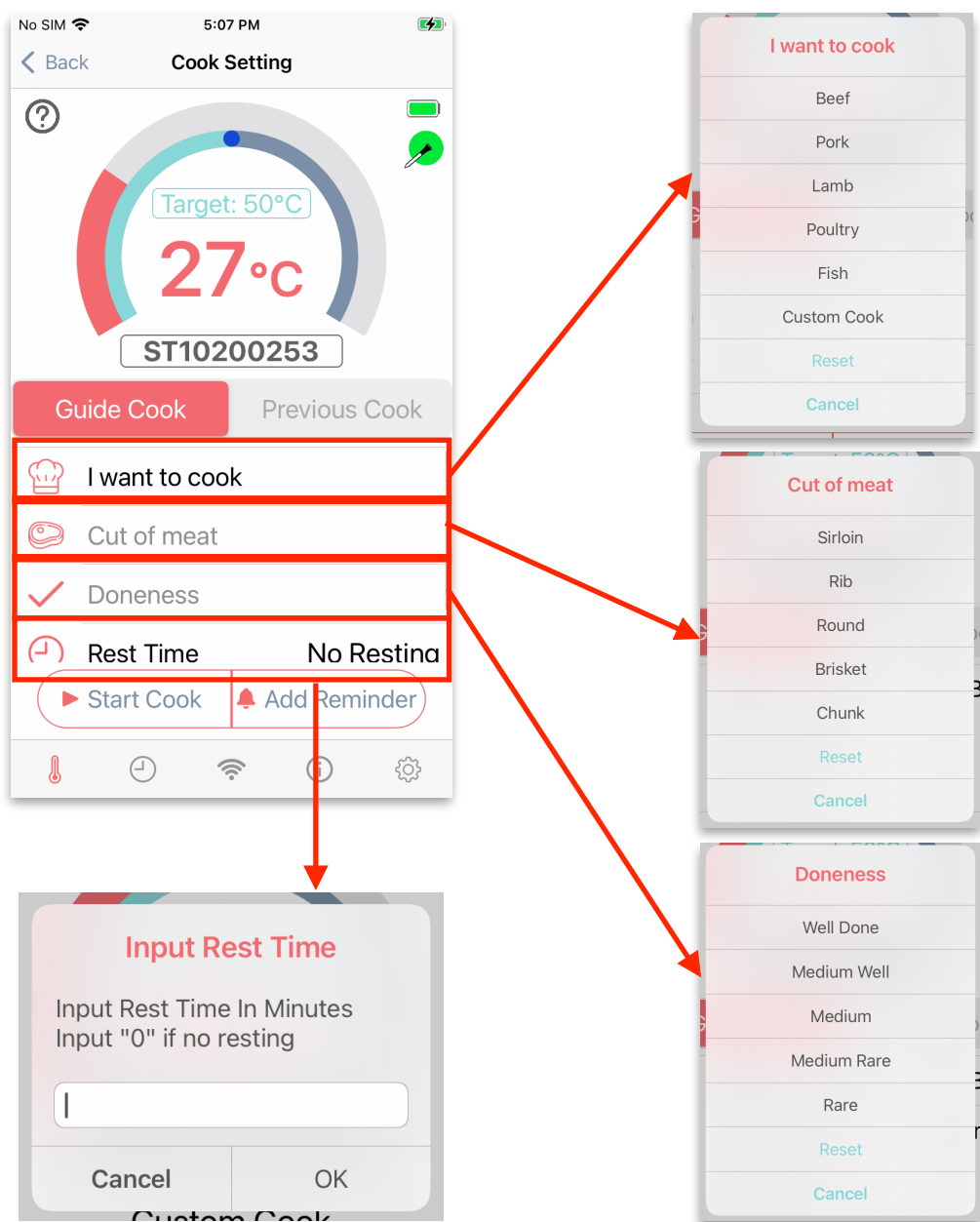


Figure 7. Guide Cook Setup

- 6. Setup temperature reminder or time reminder(optional) by tapping “Add Reminder”
- 7. Preheat the oven to the desirable temperature and put the meat/food into the oven.
- 8. Tap “Start Cook” to create a cooking task.
- 9. Customise cooking name (optional) and start monitoring.
- 10. During cooking. You will see the cooking screen in your mobile phone as shown in Figure 8.

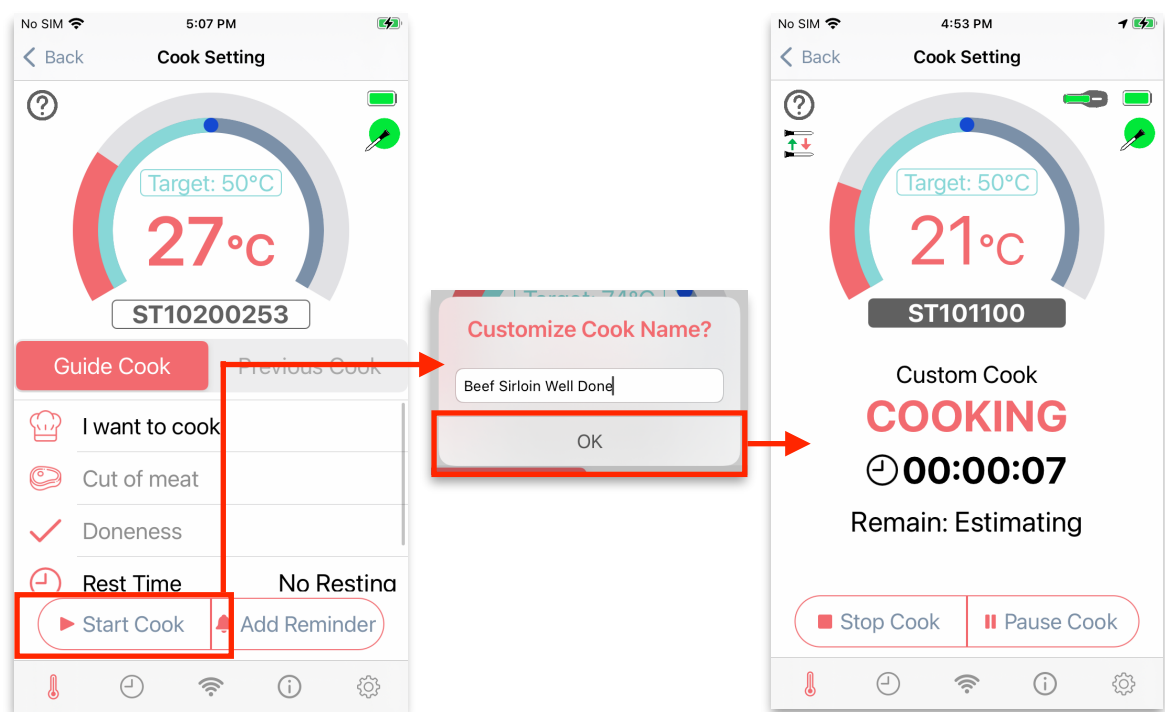


Figure 8. Start Cooking Process

- 11. When the temperature is close to the target, you will receive an alert and the corresponding message will be shown in the cooking screen as shown in Figure 9. Please start get close to the oven

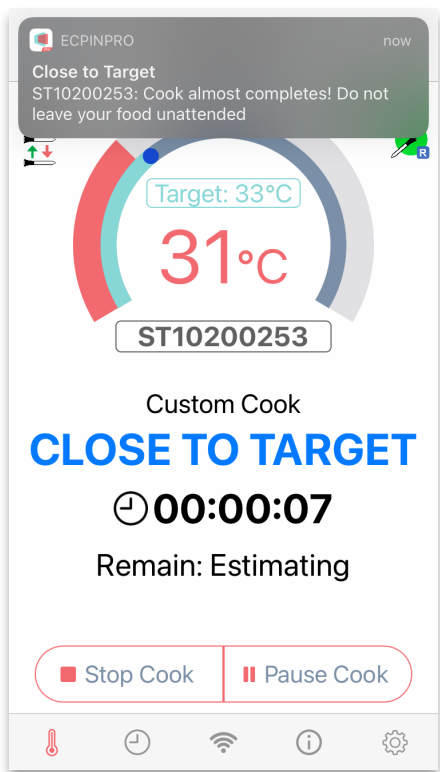


Figure 9. Close to Target

12. When the temperature reaches the target temperature, you will receive an alert and the corresponding message will be shown in the cooking screen as shown in Figure 10 and 11. Please wear the oven gloves and use tools (if needed) to take out the meat/food from the oven.



NOTE : Please note that the ceramic head of ECPIN is **HOT** just after cooking. If you want to take out ECPIN from the meat/food, please use the oven gloves.



Figure 10. Cooking Completed
(If not custom cook, beef or lamb)

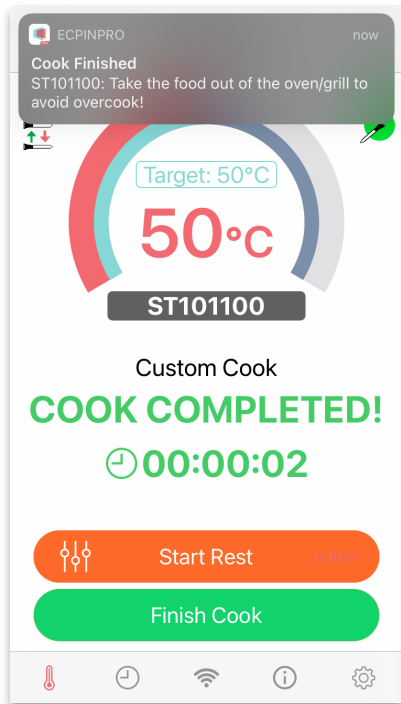


Figure 11. Cooking Completed
(If custom cook, beef or lamb)

13. If user finish cooking custom cook, beef or lamb, there will be a rest time setting button and a start rest button above finish cook button. Resting count down starts once “Start Rest” is pressed.

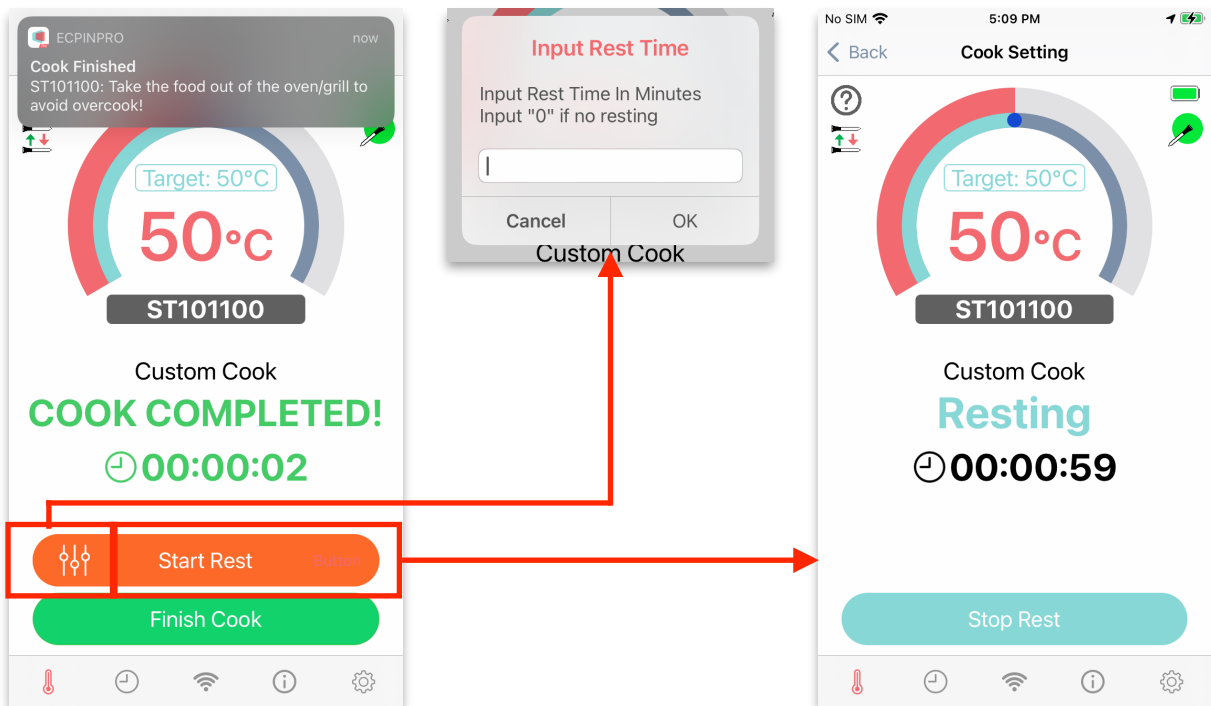


Figure 12. Set up and Start Resting after cooking finish

2.2 Use Previous Cooking Records for Cooking

1. You can use previous cook record to setup the cook instead of entering type of meat, cut of meat and doneness information every time.
2. In the cook setup screen, tap previous cook to show a list of previous records.
3. Scroll and choose which cooking record you want to repeat.
4. The corresponding setting is chosen automatically.
5. Simply tap “**Start Cook**” to start monitoring.

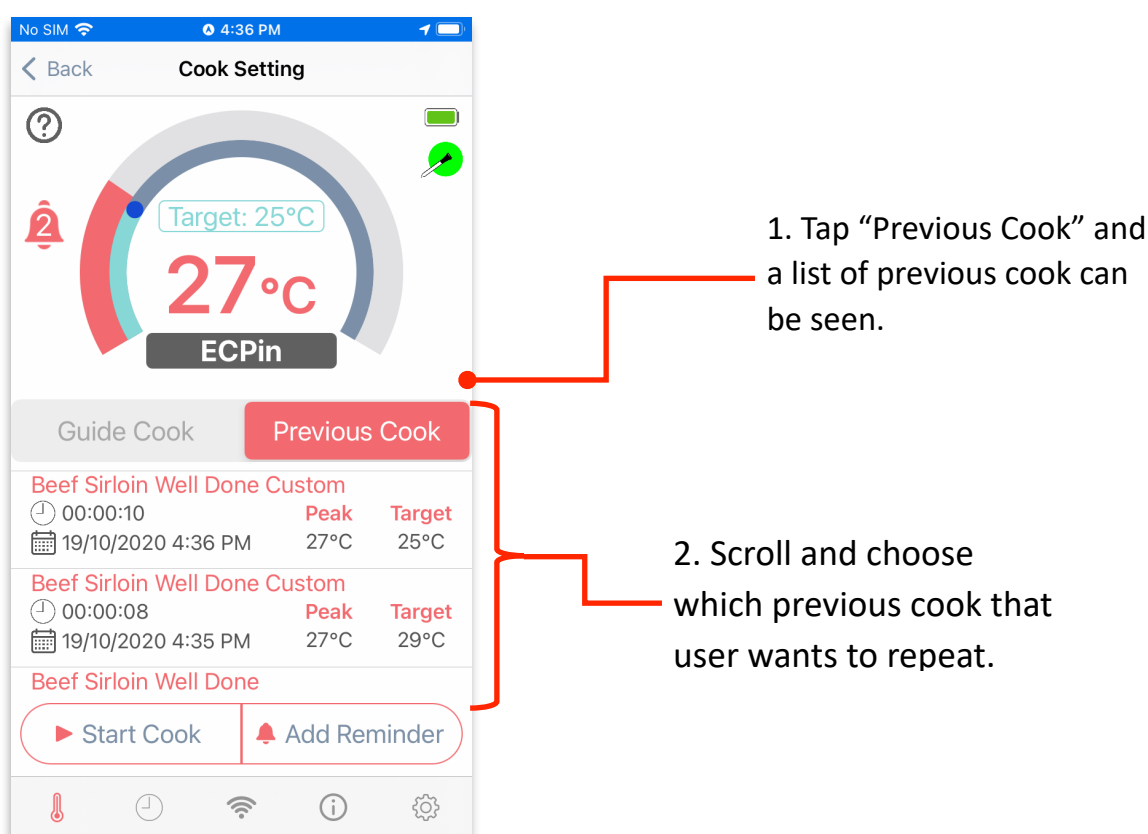


Figure 13. Previous Cook

2.3 Customise Target Temperature

1. You can select the final temperature of the meat/food instead of using the temperature setting in Guide Cook menu in order to cook the meat/food to your desirable texture and taste.
2. In the Cook Setup screen, you can touch the blue target bar and move to the final meat/food temperature or click the target text box to input target with keyboard. Tap “Start Cook” when you put the meat/food into the oven.

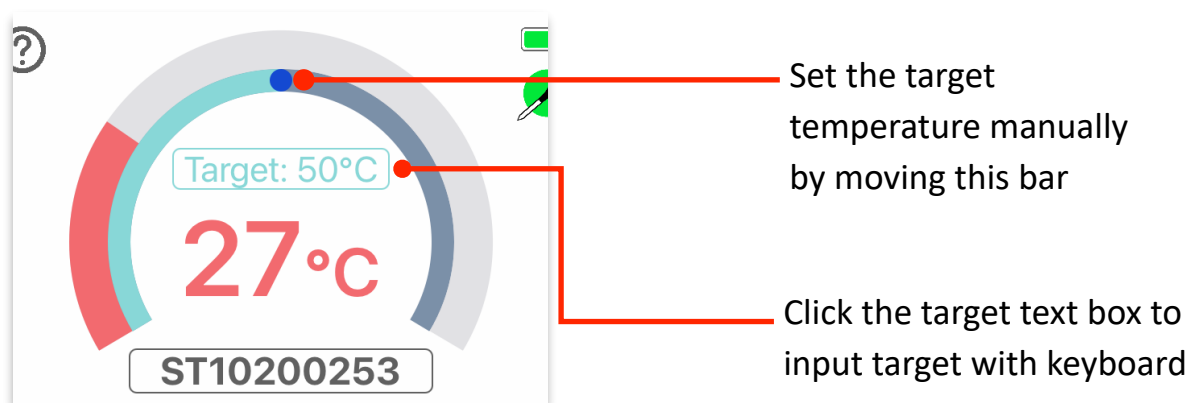


Figure 14. Adjust the Target Temperature

2.4 Custom Cook

1. Select “Custom Cook” in “I want to cook” section, you can customise the target temperature

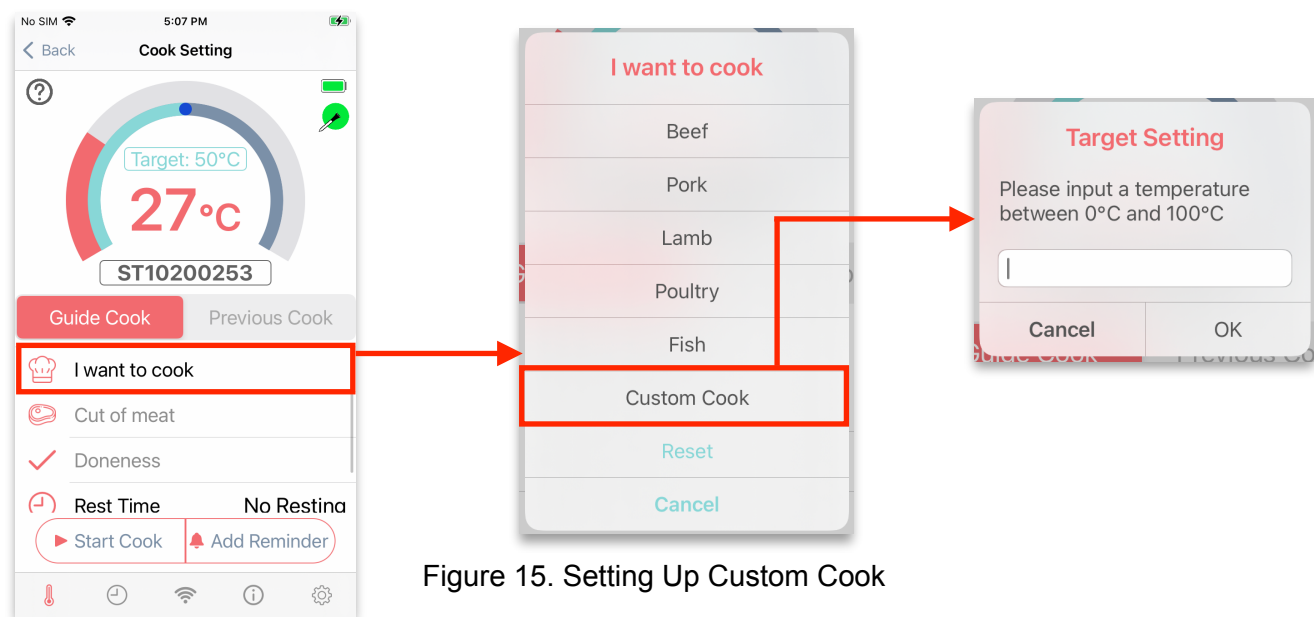


Figure 15. Setting Up Custom Cook

2.5 Setup of Reminder/Alert

There are two types of reminders, Temperature and Time, that you can set during the monitoring and cooking process. For each cooking, you can set maximum of two reminders in order to help you to take actions during cooking, such as flip over the steak. Please follow the following steps to setup the reminder.

2.5.1 Temperature Reminder setup

In Cook Setup screen, tap “**ADD REMINDER**”. Select the “**Temperature**” and slide the temperature bar to the temperature that you want to have. Tap “**Add Reminder**” to finish the setup.

2.5.2 Time Reminder setup

In Cook Setup screen, tap “**ADD REMINDER**”. Select the “**Time**” and scroll the dials to setup the timer. Tap “**Done**” to finish the setup.

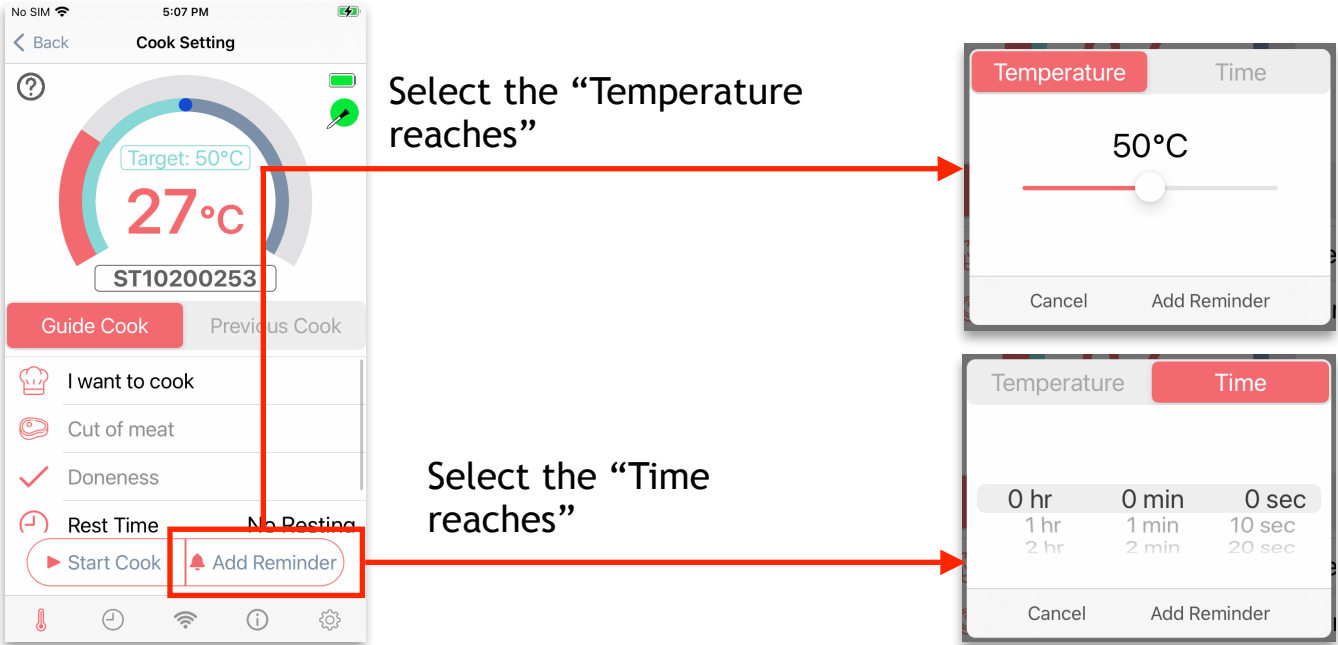


Figure 16. Setting Up Alerts

2.6 Low Battery Alert, changing probes and pause cook

When ECPIN is nearly running out of power, a low battery reminder will ask you to pause the cook or continue cooking with another ECPIN (probe). Please make sure you have charged up the other ECPIN.

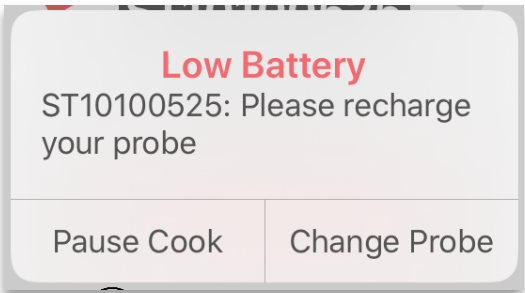


Figure 17. Low Battery Reminder when cooking

Besides, you may use another ECPIN to carry out cooking or pause whenever you want by pressing the buttons as shown below.

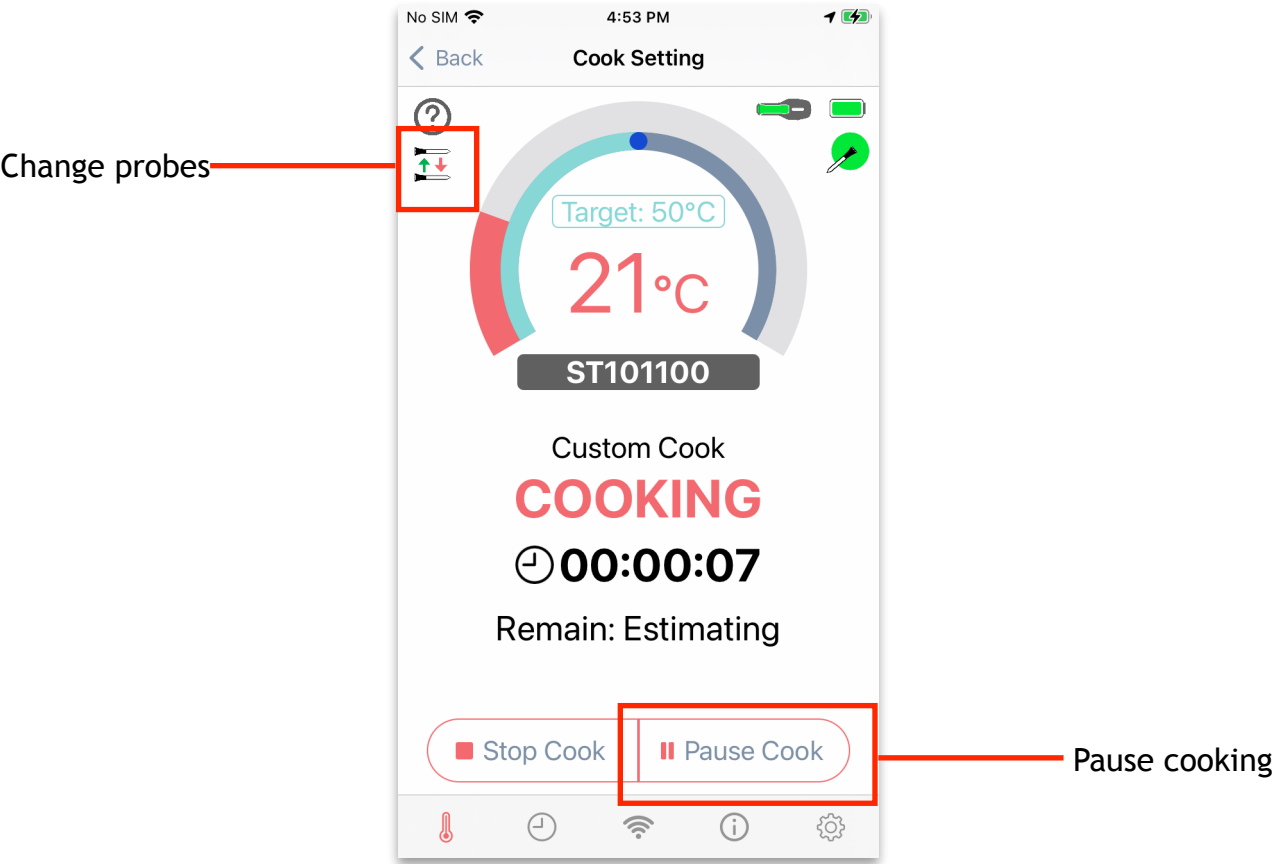


Figure 18. Positions of change probe button and pause cook button

2.7 Overheat Alert

To prevent ECPIN from damage by applying high temperature directly to the electronic parts, there is a built-in Overheat Alert. When the measured temperature is equal to or higher than 80°C or 176°F, the Overheat Alert will be triggered. Please take out ECPIN from the heat source with the oven gloves as soon as possible. Please do not immediately immerse ECPIN into cold water after taking out from the heat source.

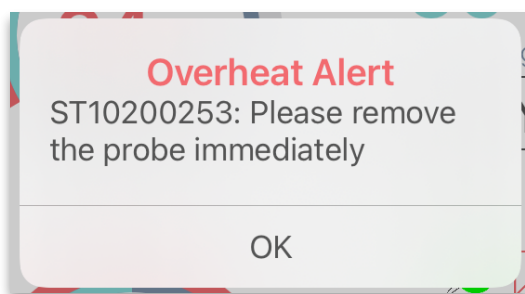



Figure 19. Overheat Alert

3.0 Cooking Records

You can view the previous cooking records by tapping the  icon.

After tapping the icon, a list of previous cook records can be seen. You can prioritise a record with the bookmark icon

Tap on the records, corresponding cooking curve will be displayed.

4.0 Sharing Cooking Fun

After completing the cooking, you can share the photos of your delicious food with your friends immediately by tapping the sharing icon at the bottom. You can take the photos after cooking and share with other people by using ECPIN APP.

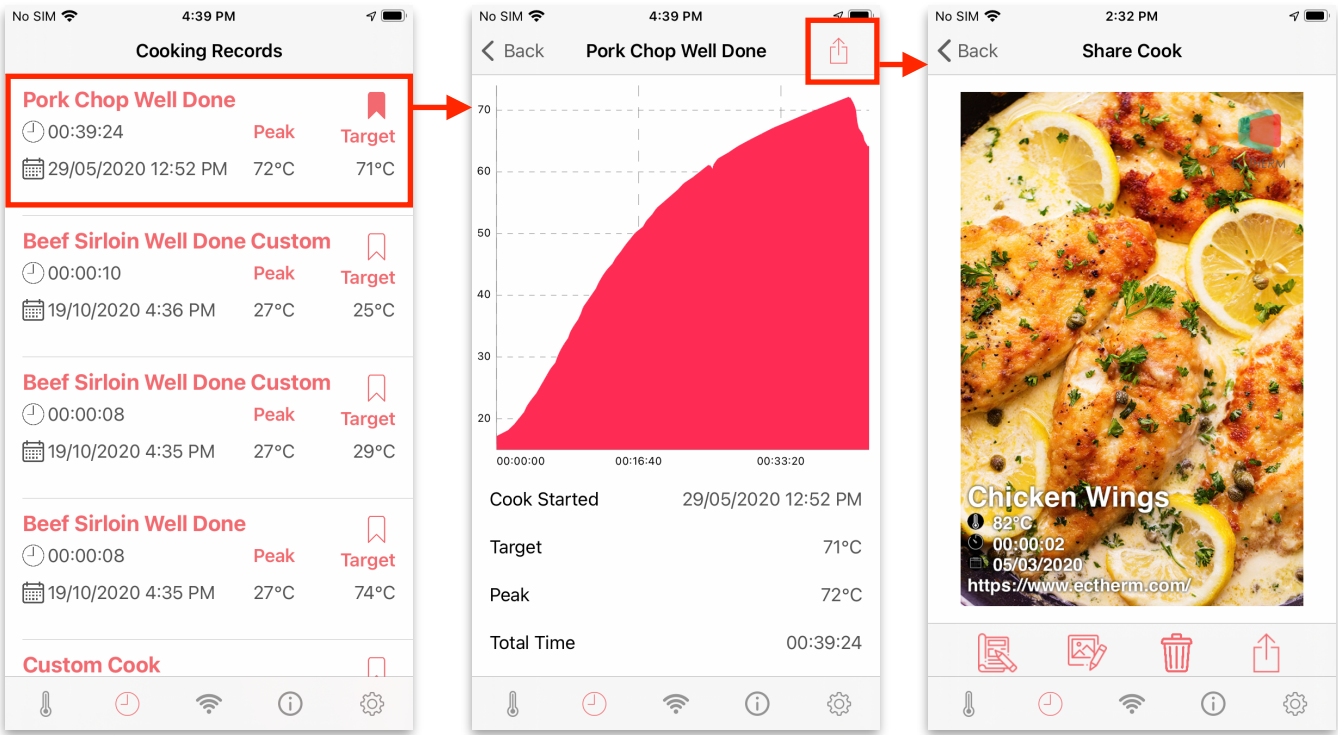


Figure 20. Accessing Cook Record Detail and Share Cooking

5.0 Extend ECPIN Range with Wi-Fi

- 1.To use the ECPin connect feature, make sure you have two smart phones and they are in the same Wi-Fi network. It can be either a network hosted by a router or a mobile Wi-Fi hotspot
2. Click the circle button to set up the roles of your phones.

Important Note: Please keep the app open in Repeater phone to ensure best Bluetooth performance.

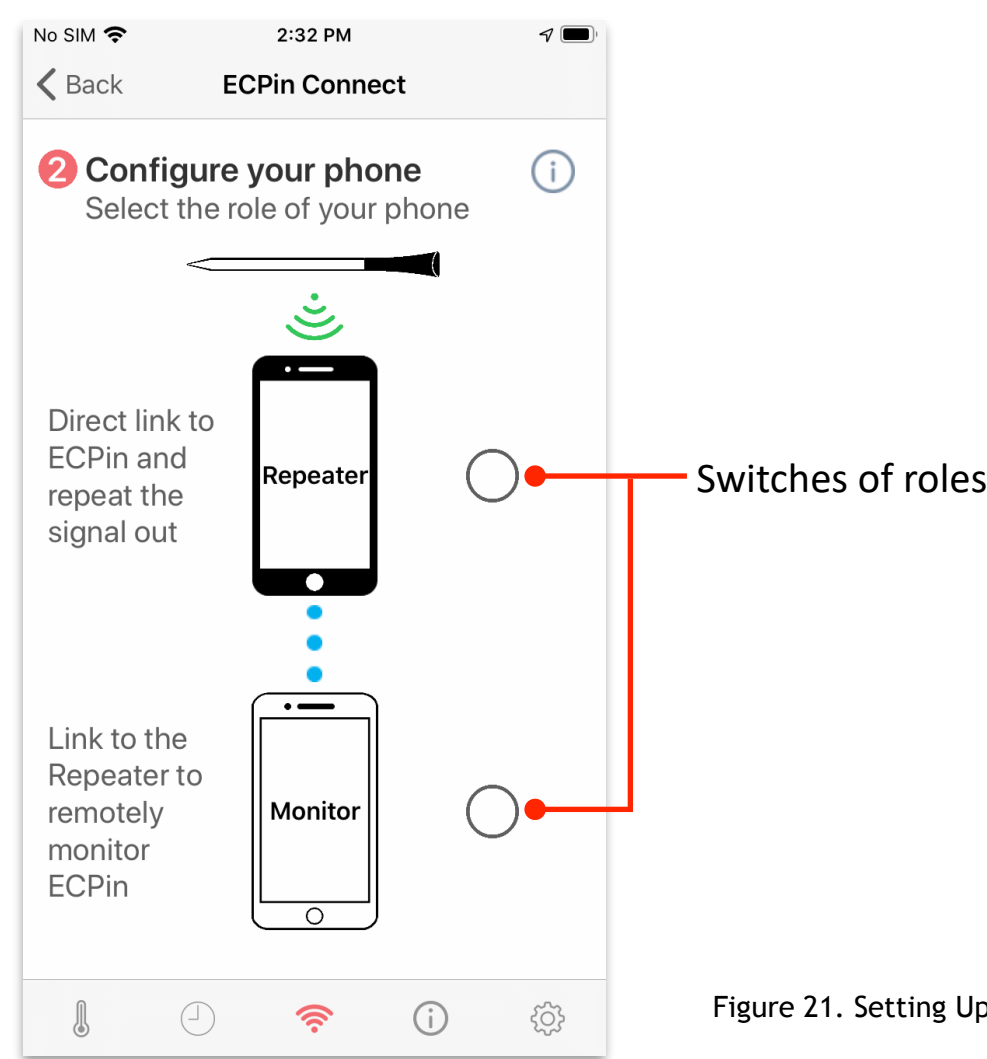


Figure 21. Setting Up ECPIN Connect

6.0 ECPIN Range Extender SR200

Smart Repeater SR200 is designed dedicated for the Wireless Food Thermometer ECPIN. It can automatically search the signal sent by ECPIN, duplicate the data and resend out. In addition, SR200 provides the charging function to ECPIN. SR200 can be powered up either by USB power source or AAA battery. With the AAA battery and the magnets, SR200 can stick onto the metal surface where is close to the cooking equipment, such as oven, grill, or smoker etc. to extend the operating range of ECPIN. With the smart design of SR200, there is no installation nor setup required. You just need to power up the SMART Repeater SR200 and place it close to ECPIN. Then, you can enjoy the extended range of operation in using ECPIN.

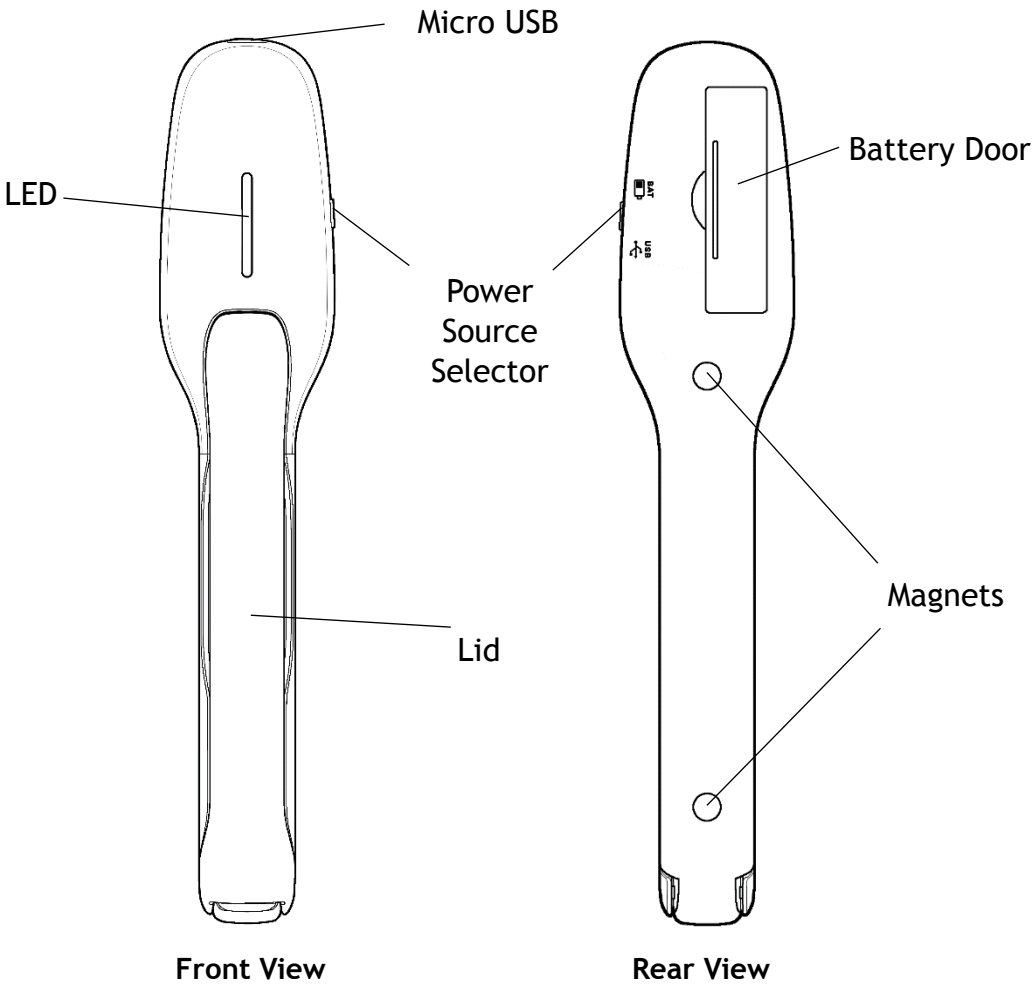


Figure 22. Front and Rear views of Smart Repeater (SR200)

6.1 Product Specification – Repeater SR200

Item	Specification
Connectivity	2.4GHz Bluetooth (BLE) for both sending and receiving
Transmission Range	Up to 150 feet
Operating Time	Up to 10 hours* (with Battery) for repeater function
Charging Time	Less than 2 minutes to fully charge up ECPIN.
Power	1 AAA cell Battery or external USB power
Multi-probe	Support
OS for Software APP	iOS version 11 or above; Android version 6.0 or above

**The operating time depends upon the type of battery used. It is recommended to use alkaline battery.*

6.2 Important Notes for SR200

1. This product is not intended for using by persons with ages 12 and under.
2. This product is exclusively used for charging and repeating signals of ECPIN. It should only be used as described within this User Manual.
3. Take out the battery whenever you are not using the repeater.
4. Always slide the power source selector to “USB” position after use.
5. Make sure the mobile phone is within the range of monitoring distance during cooking. The distance of operation is dependent on the actual working environment. It will be shorter if ECPIN or SR200 is covered or blocked by a metal case.
6. Do not let the Range Extender stay at high temperature.
7. The supplier will not be liable for any damage of SR200 due to misuse of the device.

6.3 Using Repeater for charging ECPIN

6.3.1 With Battery

1. Put a AAA cell battery into the battery compartment of the Range Extender SR200.
2. Slide the power source selector to “BAT” location.
3. Insert ECPIN to the repeater and close the lid.

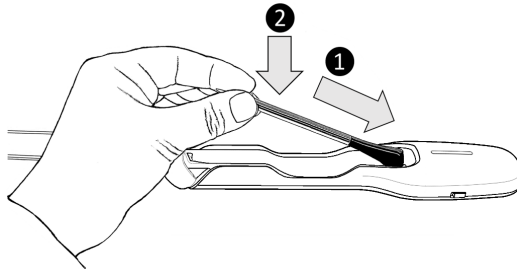


Figure 23. Using Repeater for charging ECPIN

4. The LED will be flashing during charging process and turn off after completing the charging process.
5. If Amber LED colour is shown, the battery level is low and it requires to replace a new battery.
6. Slide the power source selector to “USB” location when you have completed the charging process.
7. Please take out the battery if you do not intend to use battery as the power source or you will not use the repeater for a long period of time.

6.3.2 With USB power source

1. Connect the external USB power source and the repeater with the USB cable.
2. Slide the power source selector to “USB” location.
3. Insert ECPIN to the repeater and close the lid.
4. The LED will be flashing during charging process and turn off after completing the charging process.
5. The LED will be flashing again with a slow flashing rate which the repeater starts repeating the signal.
6. If you want to turn off the repeater, please disconnect the repeater with the USB power source.

6.4 Using Repeater to extend the range of operation of ECPIN

6.4.1 With Battery

1. Put a AAA battery into the battery compartment of the repeater.
2. Slide the power source selector to “BAT” location.
3. The LED will be flashing during the signal repeating process.
4. If Amber LED colour is shown, the battery level is low and it requires to replace a new battery.
5. Slide the power source selector to “USB” location if you want to turn off the Repeater.
6. Please take out the battery if you do not intend to use battery as the power source or you will not use the Range Extender for a long period of time.

6.4.2 With USB power source

1. Connect the external USB power source and the repeater with the USB cable.
2. Slide the power source selector to “USB” location.
3. The LED will be flashing during the signal repeating process.
4. If you want to turn off the repeater, please disconnect the repeater with the USB power source.

When the repeater is powered on, the mobile application will connected to the repeater automatically, same as the ECPIN connection process.

If you see the reading of ECPIN with a repeater icon (see example in Figure 24), ECPIN Range Extender and ECPIN are functioning normally.

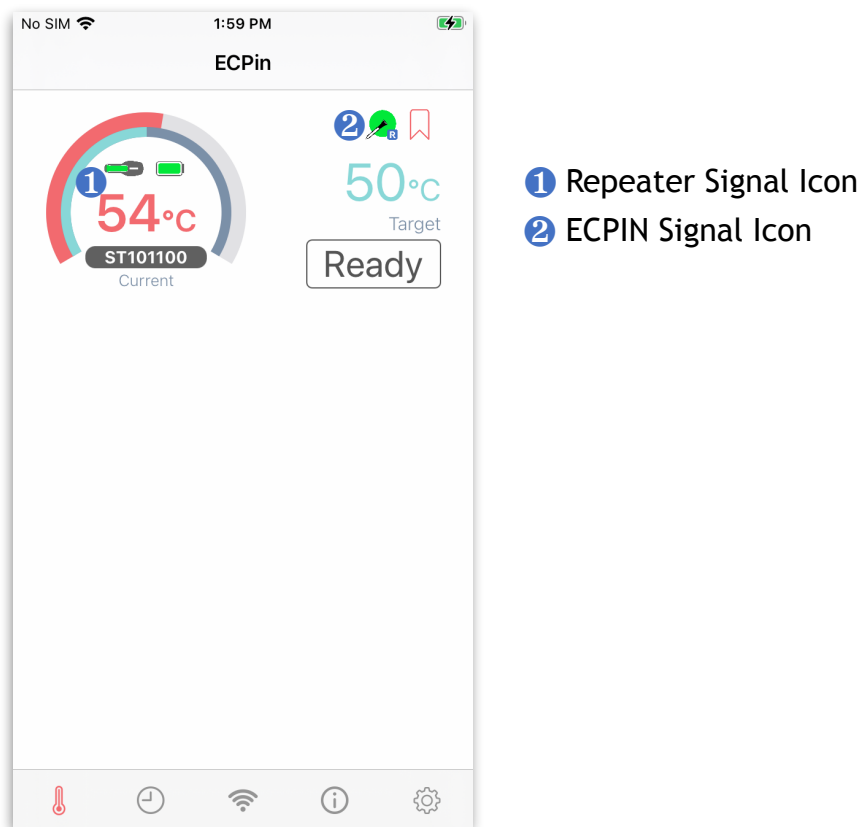
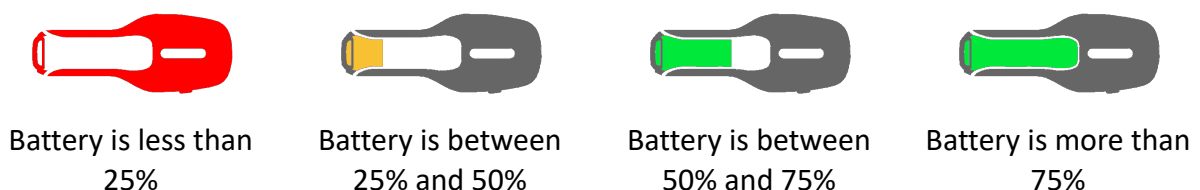


Figure 24. ECPIN Reading with Repeater Signal Icon

6.5 Repeater Battery Display

When repeater is running with battery, the repeater icon colour will change according to battery level:



6.6 Accessing Repeater Details and Change Repeater Display When More Than One Repeater Exist

1. Click the ECPIN in the probe list page (Figure 24), you can see the cook set up page with a repeater icon (Figure 25)
2. Click the repeater icon, a dialog box will pop up with details of the smart repeater (Figure 26)
3. If more than one repeater exist, you will be able to see the repeaters found by the application. Click on the repeater id to change the current repeater being shown.



Figure 25. Cook Set Up Page

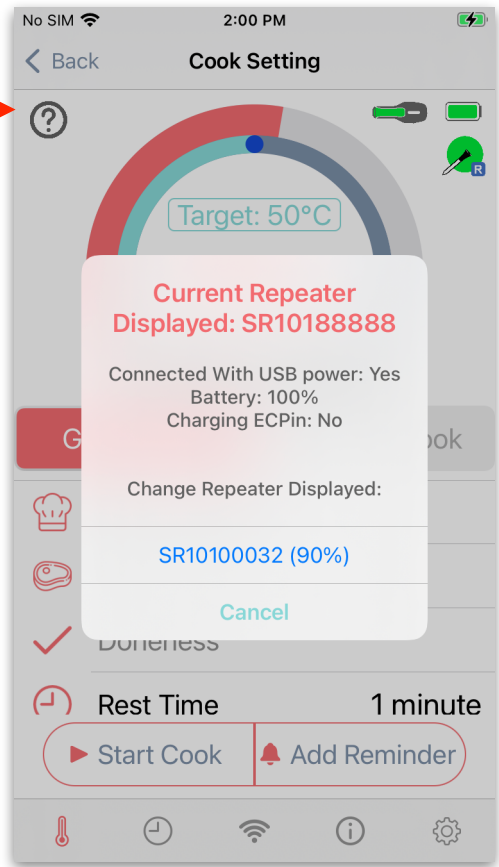


Figure 26. Repeater Detail Dialog

6.7 “Repeater not repeating” Alert

When the repeater is too far away from ECPIN that it cannot receive ECPIN signal, the “R” character in probe signal icon will disappear and a “Repeater not repeating” alert will be triggered. Please put the repeater closer to ECPIN until the “R” character in probe signal is shown again.



Probe signal is repeated by
repeater



Probe signal is directly from
ECPIN



No ECPIN Signal

6.8 “Repeater Timeout” Alert

When the application cannot find repeater signal, the repeater signal icon will disappear and a “Repeater Timeout” alert will be triggered. Please place your mobile phone closer to the repeater until the repeater icon is back.

6.9 “Repeater Low Battery” Alert

When the repeater is running with battery and the power of battery is low, the repeater icon will turn red and a “Repeater Low Battery” Alert will pop. Please change the battery or use USB power source instead.

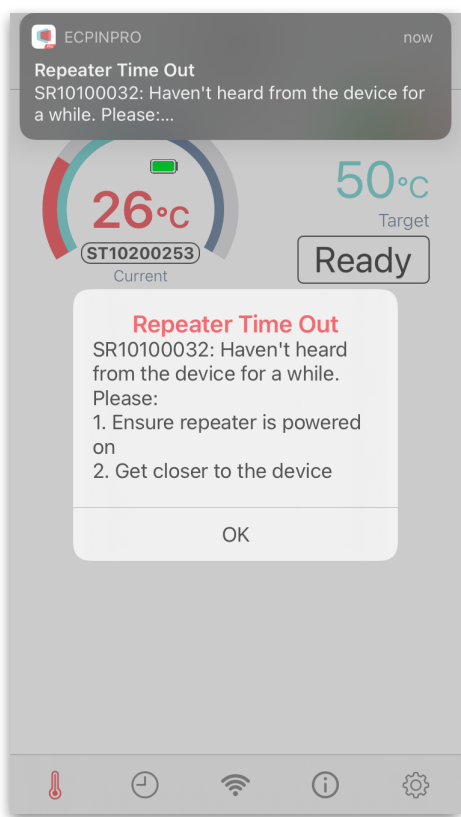


Figure 27. Repeater Timeout

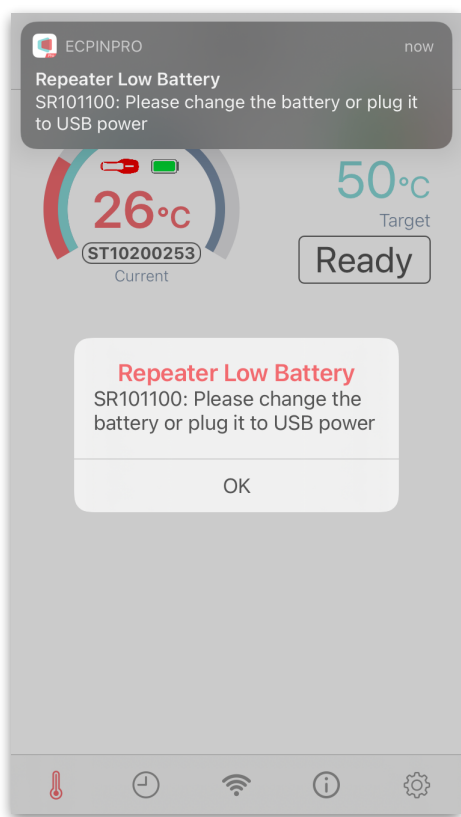


Figure 28. Repeater Low Battery

7.0 Change the default setting

You can change the setting of the APP in the Settings manual by tapping the setting icon at the bottom.

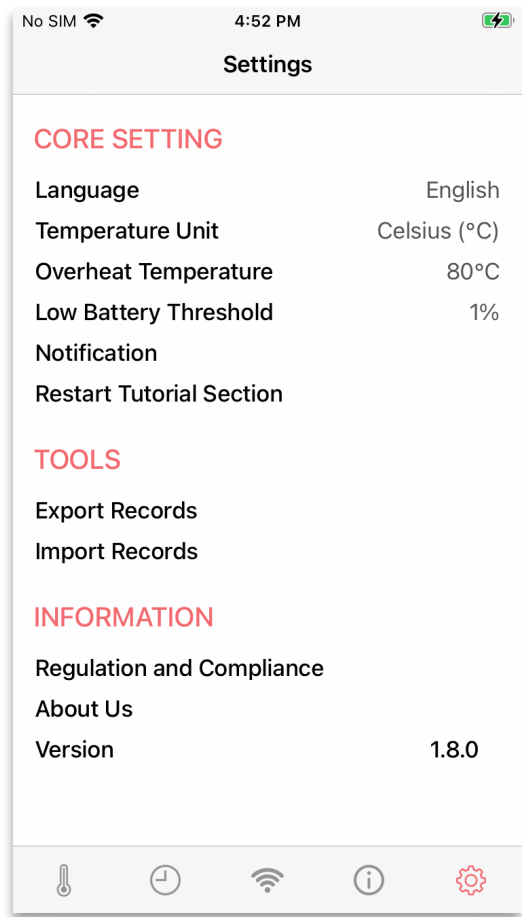


Figure 29. Setting

7.1 Export Import Records

If you would like to transfer all records to another phone or re-install the app, we suggest making use of the export import feature in settings.

Simply click export button, a text file will be generated and you may import the records to the app when needed.

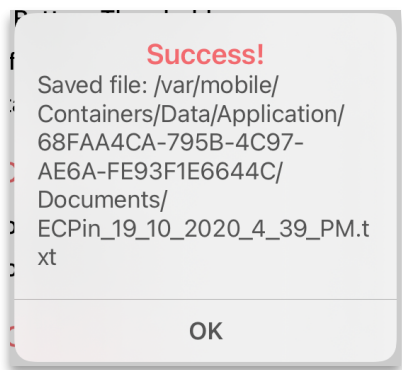


Figure 30. Success Message When Exporting Record

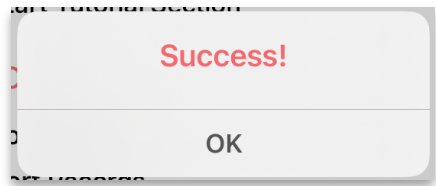


Figure 31. Success Message When Importing Record