QT Medical

QT ECG APP
USER'S MANUAL

https://www.qtmedical.com
Version: V1-R18

App Version:
Android: V2.2.6 (Singapore)
V2.3.1 (Other regions)
iOS: V2.3.2 (Singapore)
V2.5.4 (Other regions)

Update Date: 07/22/2024

Android

iOS

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QT ECG App Introduction

The QT ECG App is an integral part of the QT ECG system. It works with most Apple and Android-based mobile devices.

Note : Always use the latest version of the QT ECG App.

Check compatible devices and operating systems on the QT Medical Website.
https://www.qtmedical.com/en-gb/compatibility

Note : Run a virus scan regularly on your mobile device.

Preparation for Use

If you are the admin of the facility and you don't have your account yet, please refer to the QT Cloud User Manual, "Chapter 1: New User Registration" to create the account; otherwise, please contact your facility administrator for your account information.

ECG Recording

2.1 Operation on tablet

Tap the QT ECG App icon to open the app.

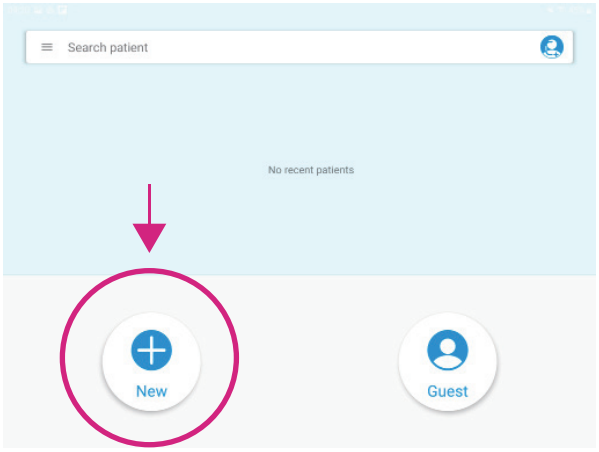
2.1.1 Log in

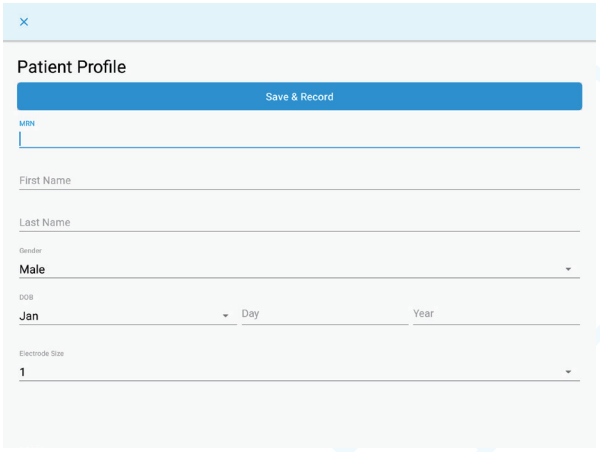
1. Input username and password, press the **“Login”** button.

Note : The QT ECG App will keep users logged in for fifteen days.

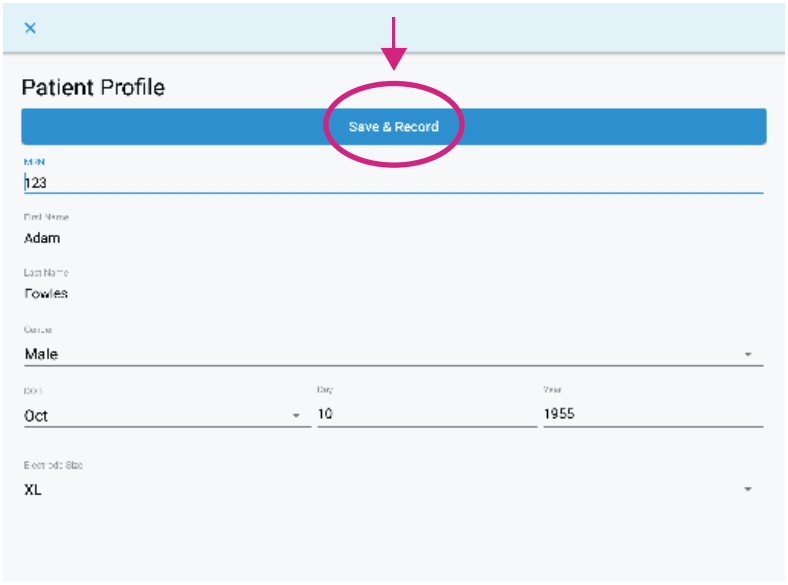
2.1.2 Input patient’s profile

1. Tap on the **“+ New”** button to input the patient’s medical record number (MRN, if applicable), First and Last Name, Gender, DOB (date of birth), and Electrode Strip size.

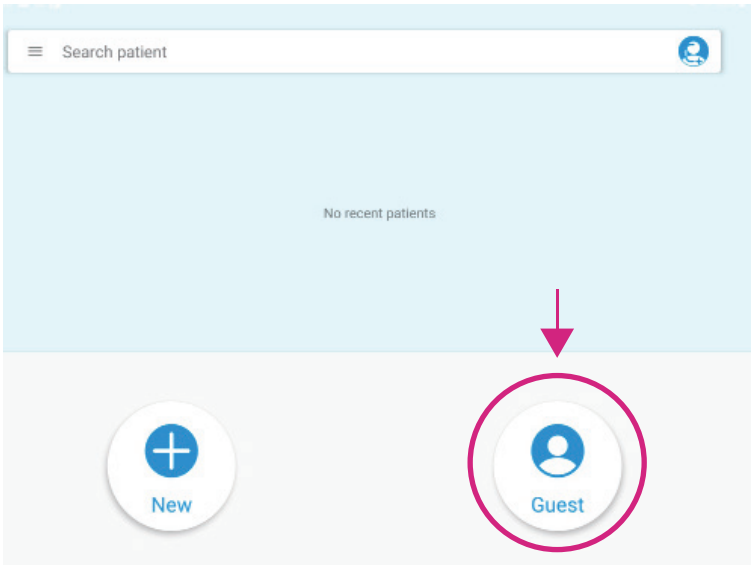




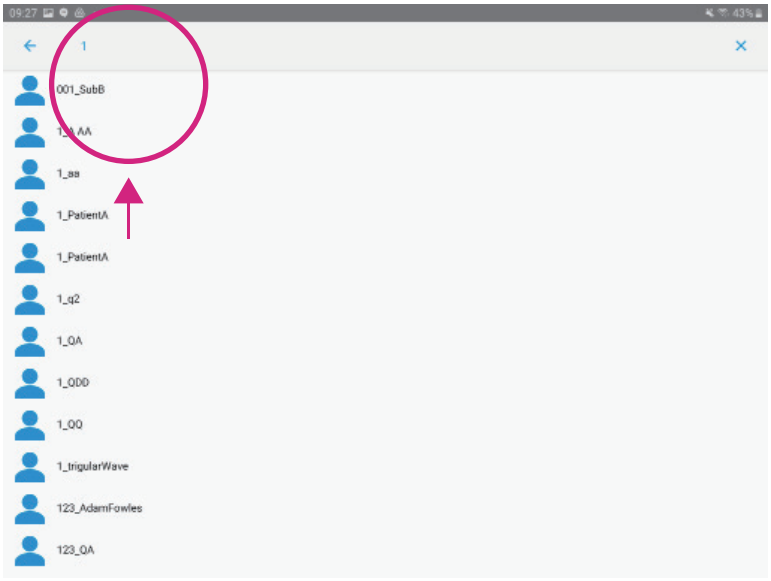
2. Input patient's profile and press "Save & Record" to save patient's information and start recording.



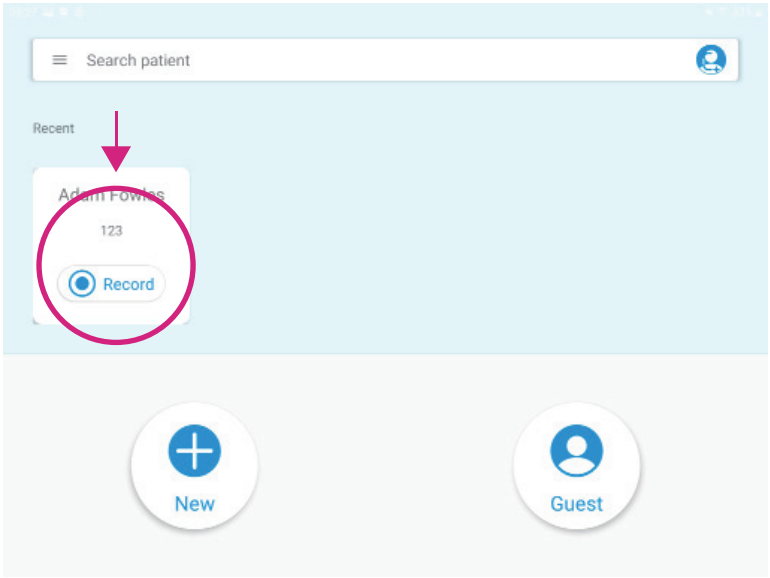
3.If you prefer to start recording without inputting Patient's demographics, press "Guest" to start the recording process.



4. Click on the “Search bar” to search for Patient’s Name or MRN. If the patient info has been inputted before, their info will appear then select the Patient.

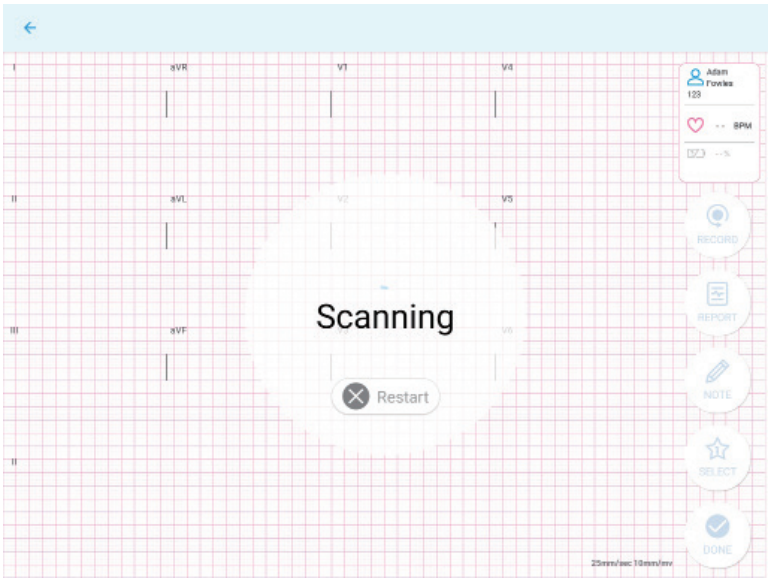


5. In the Recent section, the 10 most recent recorded patients will be displayed. Press “Record” to start recording.

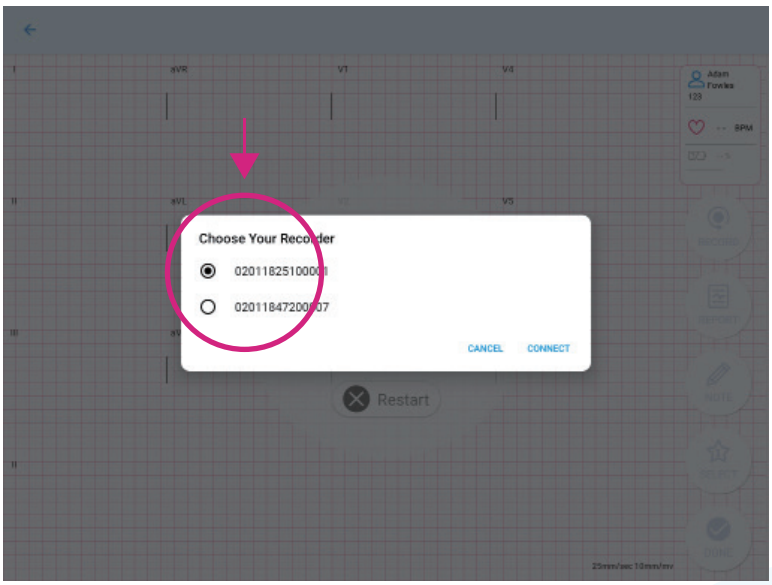


2.1.3 Connect QT ECG Recorder

1.Please note, the APP will automatically search, connect and pair with QT ECG recorder(s).



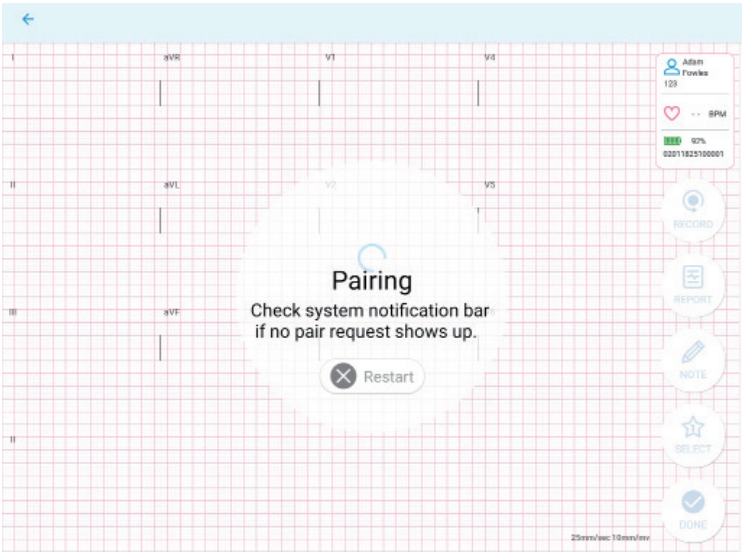
2.Choose Your Recorder, the mobile device will scan for available QT ECG recorder(s) and show their serial numbers, select your recorder and press CONNECT. Once connected the recording process will start automatically.



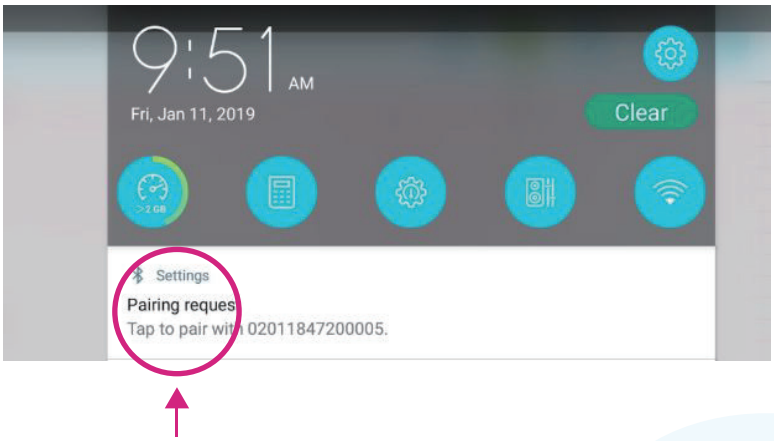
Android

Note :

- In the case when only one Recorder is found, the app will connect to the Recorder automatically without showing its serial number.
- The app will show pairing requests only if the Recorder has never been paired with the device before.



- The pairing request may not pop up but can be revealed by swiping down from the top of the screen (as shown in the screenshot below).



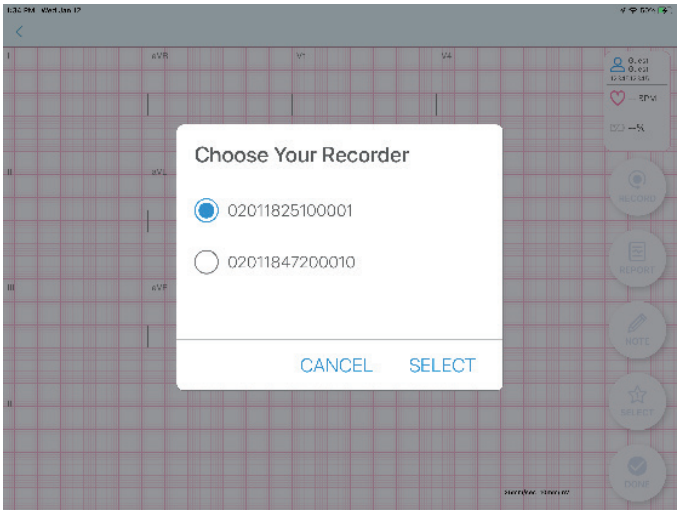
iOS

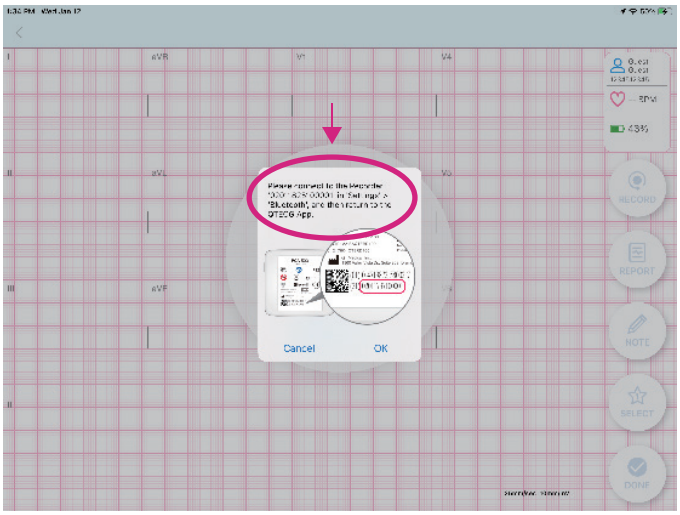
Note :

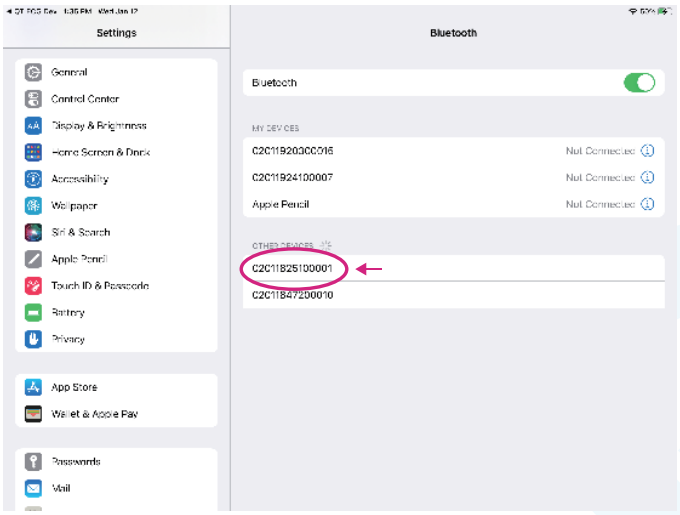
- If many ECG recorders are found, the application will display a list of serial numbers of ECG recorders. Please select the ECG recorder you want to connect. After selection, a prompt message for ECG pairing will appear. After confirmation, the system will automatically go to the Bluetooth connection page. Please select the serial number of the target ECG recorder for pairing. After successful connection, please switch back to QT ECG App from the Bluetooth page.

- If only one ECG recorder is found, the app will directly display the pairing prompt message of the ECG recorder. After confirmation, the system will automatically go to the Bluetooth connection page. Please select the serial number of the ECG machine for pairing. After successful connection, please switch back to QT ECG App from the Bluetooth page.

- The app's pairing request will only appear when the ECG recorder is paired with



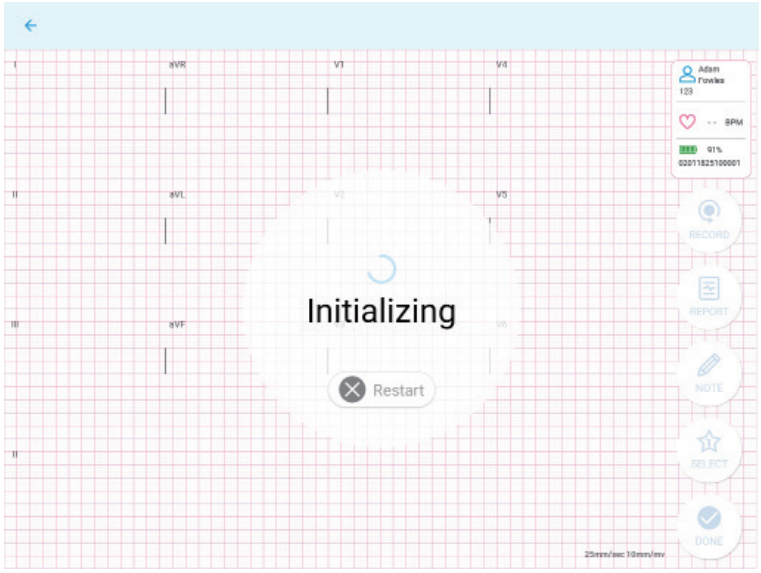




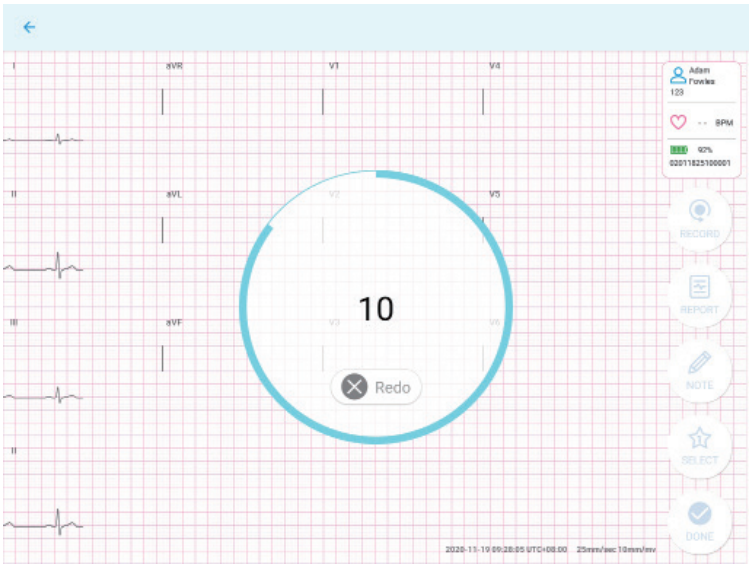
Note :

- QT ECG has passed IEC 60601-1-2, but serious interference is still needed to be avoided. If the Bluetooth connection keeps failing, it may be due to environmental interference; please try rebooting, or move to environment

● Initializing

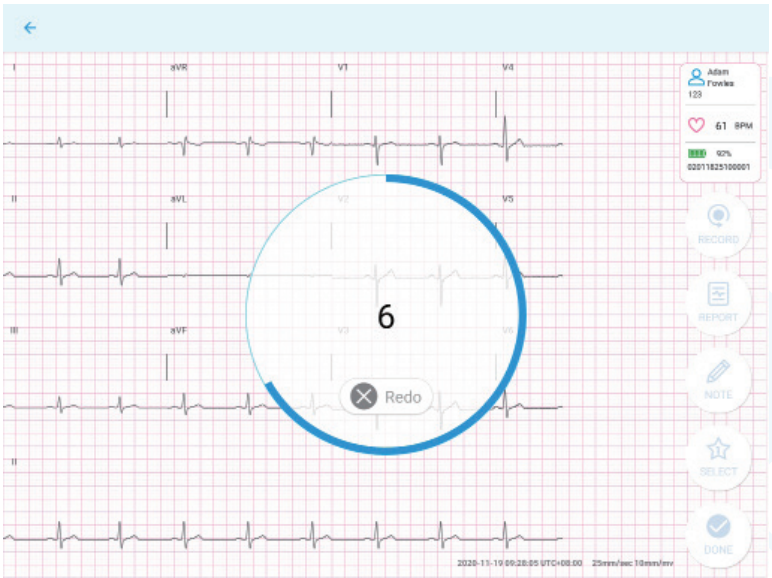


● New Recording Delay



3.If you press “Redo” during the countdown from 10, it will restart the recording process.

● New Recording

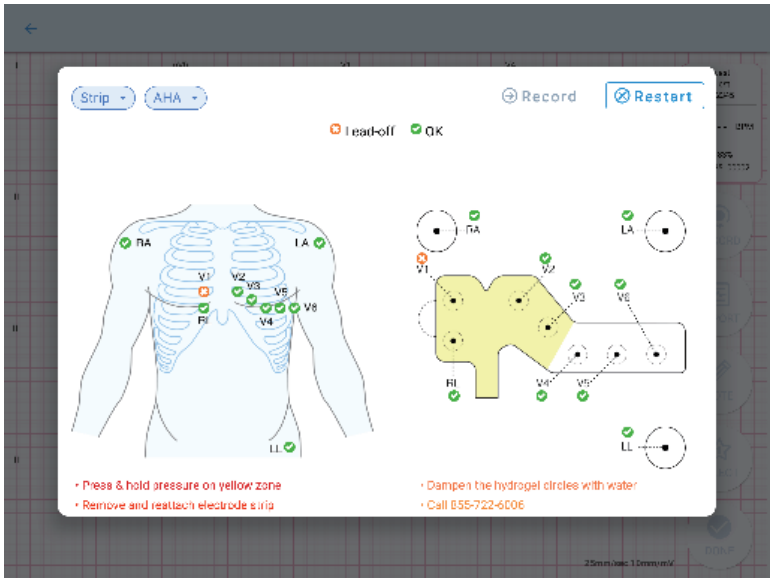


2.1.4 Checking lead-off

- The screen displays the status of all of the leads on the patient's body.
- If the lead icon shows "Lead-off", please follow the onscreen troubleshooting tips.

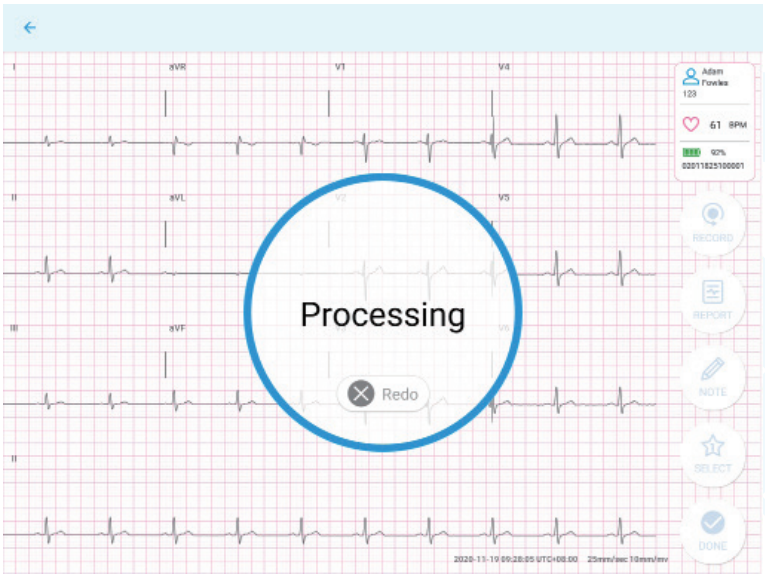
  When troubleshooting is successful, APP will automatically continue recording and processing, press "OK" when Completed.

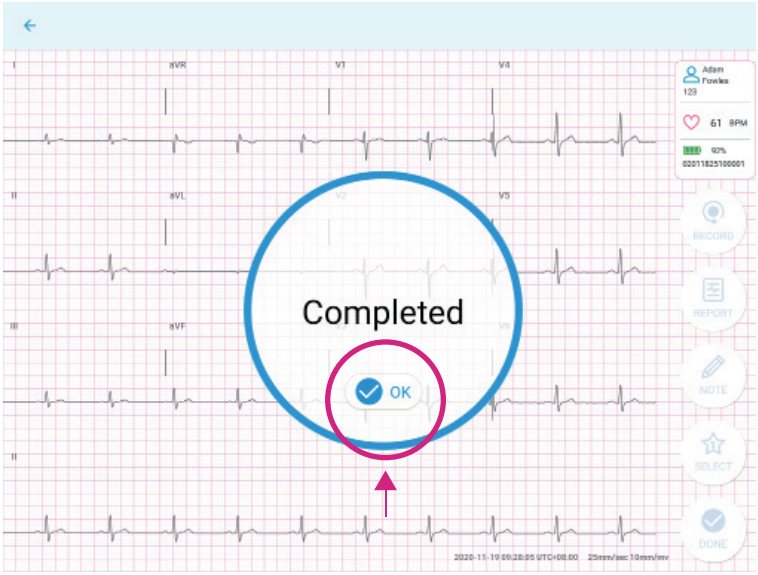
Note : In the Lead view, both the iOS and Android support users to select different modes (AHA or IEC). For layperson, please check the corresponding electrode for lead-off indication.



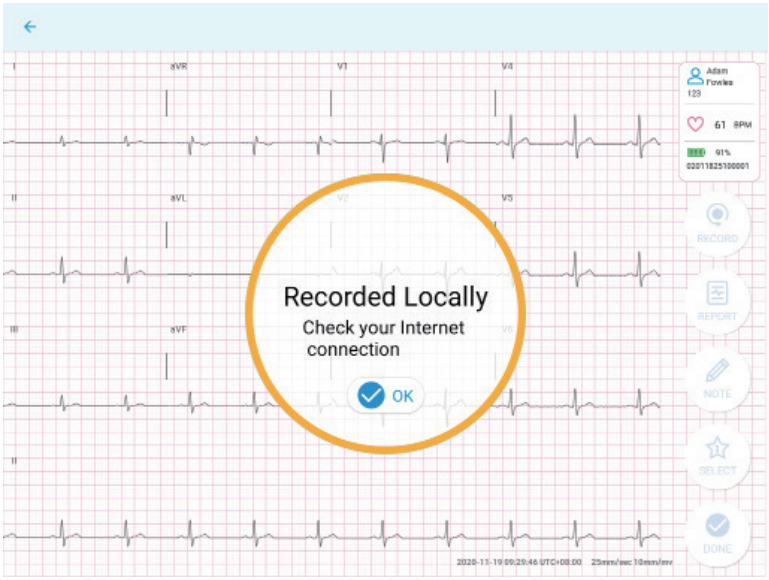
2.1.5 Recording ECG Data

- After successfully attaching the electrodes, a live stream of your electrocardiogram will be displayed on your device.

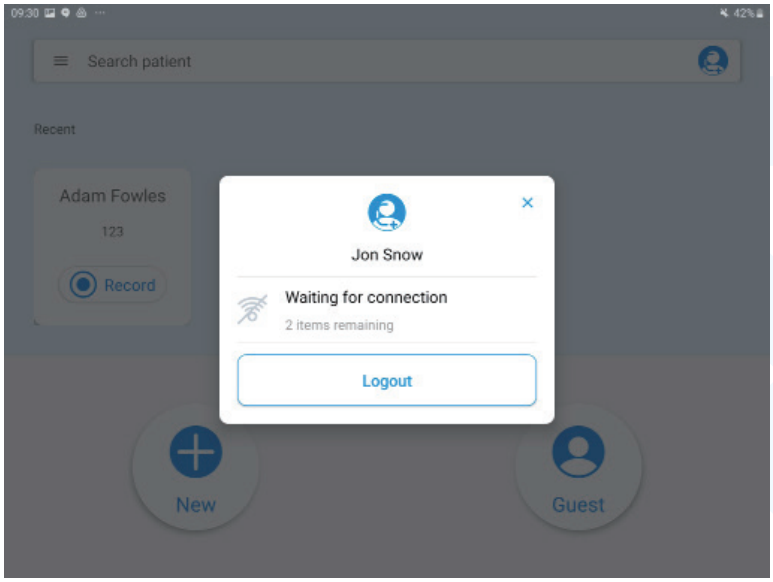




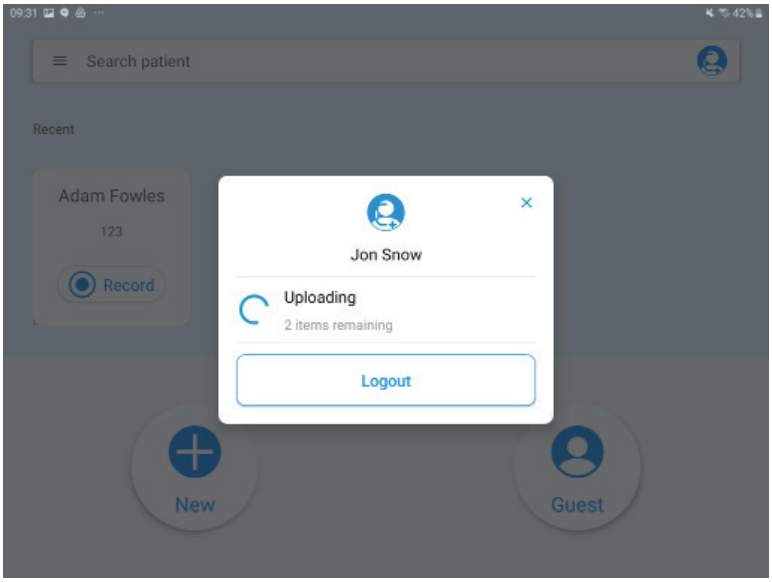
- After completing your recording and if without internet connection, “Recorded Locally” will be displayed, please check your internet connection.



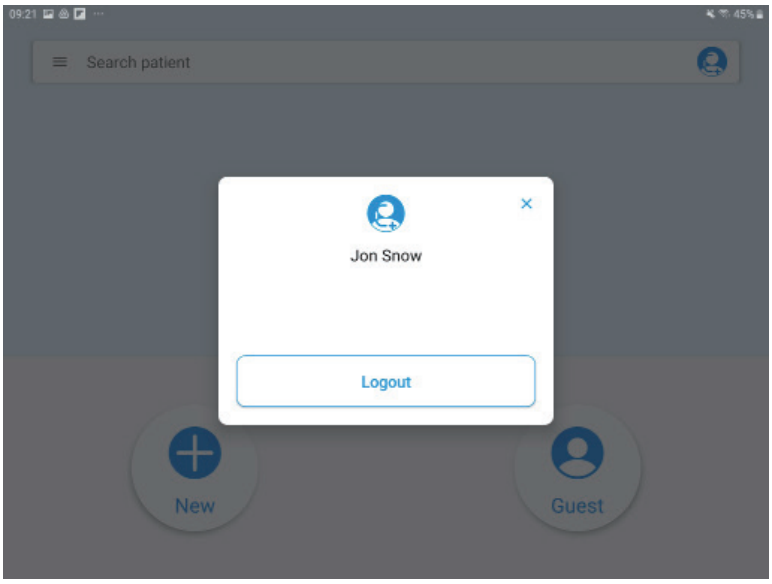
- Waiting for internet connection



- Internet connection established. Uploading recordings.



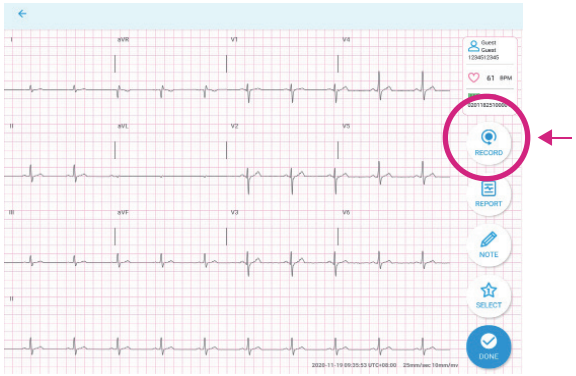
- Upload completed.



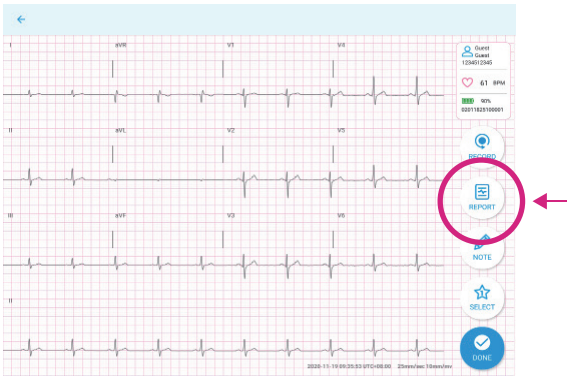
2.1.6 Uploading the ECG file

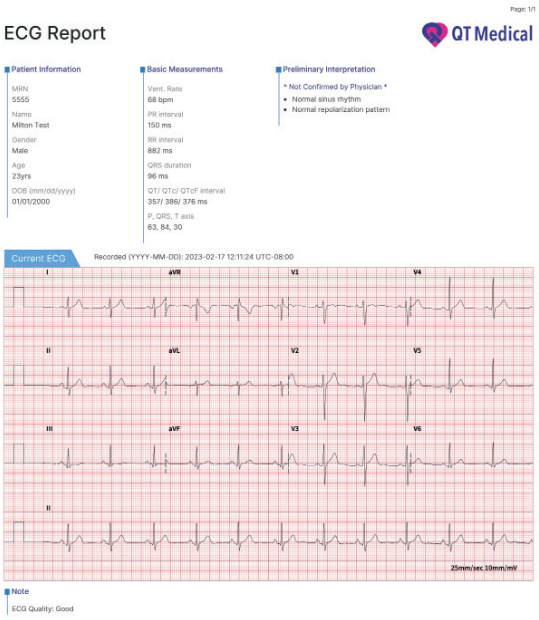
- Upon completion of the 10-second ECG recording, the app will automatically upload the ECG file to the server and display the following.

- Press “RECORD” on the top right hand to record again.

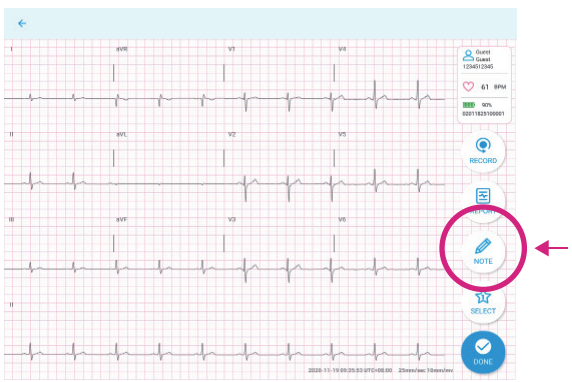


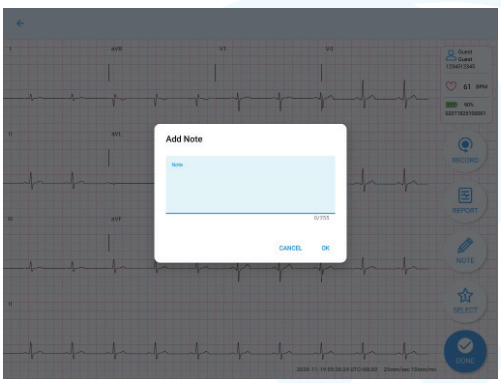
- Press “REPORT” to view the PDF report of the recording that was just completed.





- Press “NOTE” to add notes.

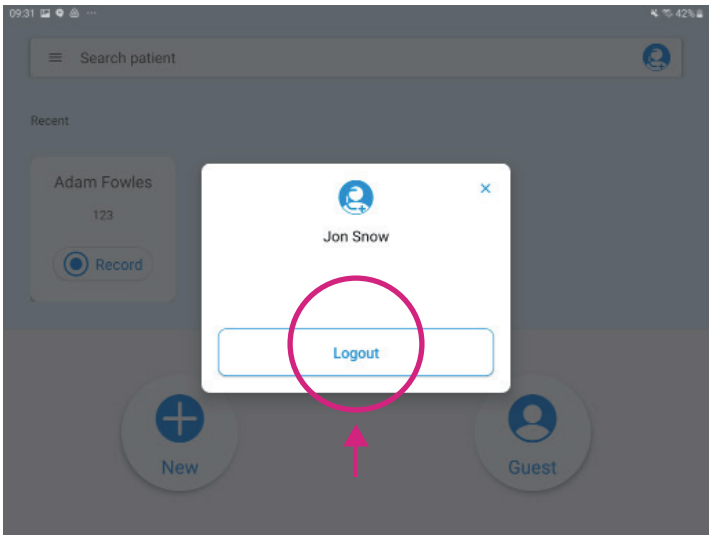




- Press “SELECT” to choose the best recording, if there’s more than 1 recording, and press “OK”.

- Press “DONE” to return to the home screen.

- Upon completion of your recording, you may “Logout” of your User Account.



2.1.7 Detaching the Device

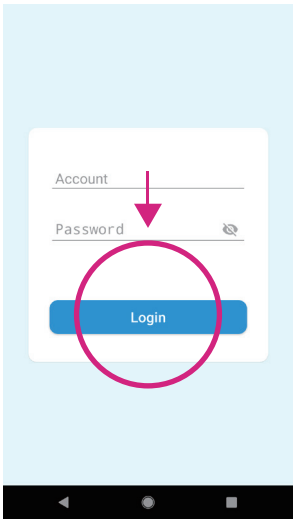
- After an ECG recording is completed, turn off the QT ECG recorder and detach it from the QT ECG Electrode Strip. Then, carefully remove the QT ECG Electrode Strip from the chest.

2.2 Operation on phone

Tap the QT ECG App icon to open the app.

2.2.1 Log in

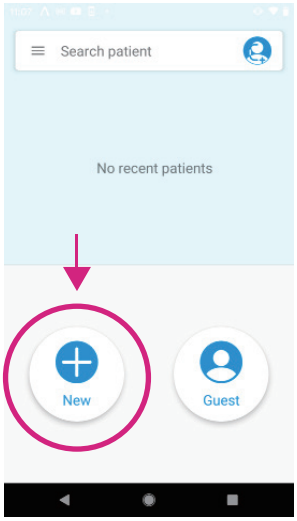
1. Input username and password, press the **“Login”** button.



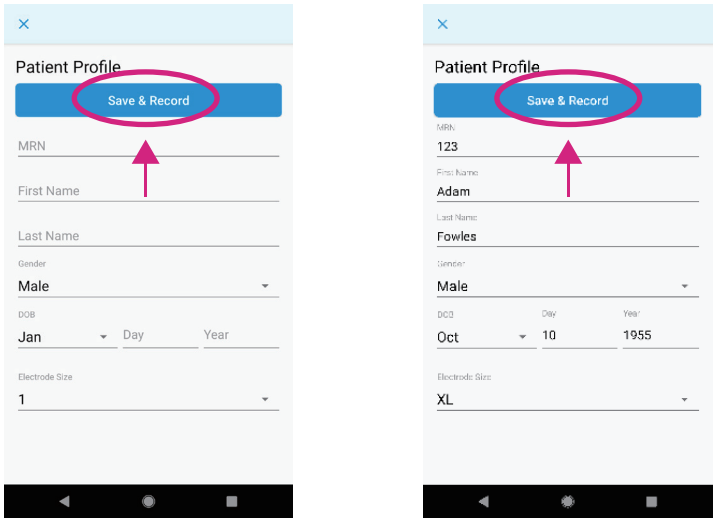
Note : The QT ECG App will keep users logged in for fifteen days.

2.2.2 Select patient’s profile

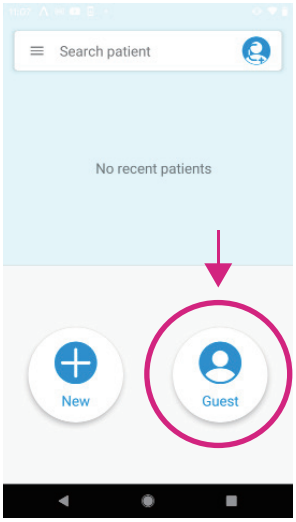
1.Tap on the “+ New” button to input the patient’s medical record number (MRN, if applicable), First and Last Name, Gender, DOB (date of birth), and Electrode Strip size.



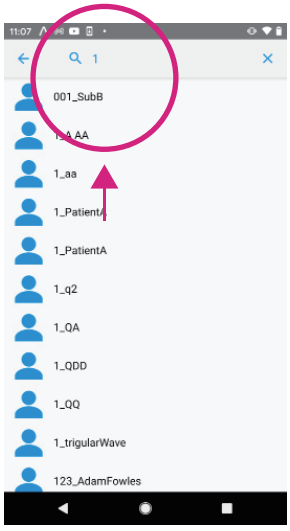
2.Input patient's profile and press "Save & Record" to save patient's information and start recording.



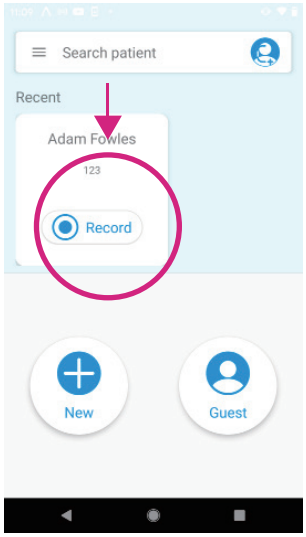
3. If you prefer to start recording without inputting Patient's demographics, press "Guest" to start the recording process.



4. Click on the "Search bar" to search for Patient's Name or MRN. If the patient info has been inputted before, their info will appear then select the Patient.

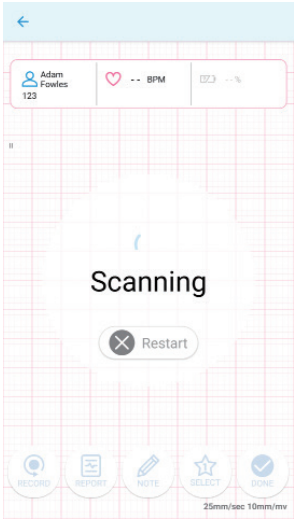


5. In the Recent section, the 10 most recent recorded patients will be displayed. Press “Record” to start recording.

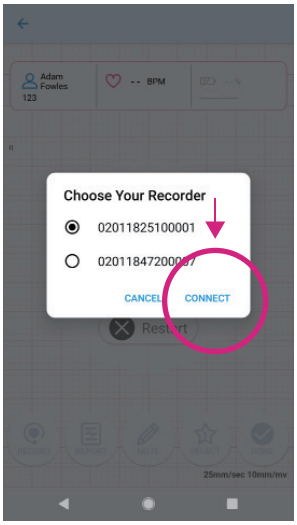


2.2.3 Connect QT ECG Recorder

1.Please note, the APP will automatically search, connect and pair with QT ECG recorder(s).



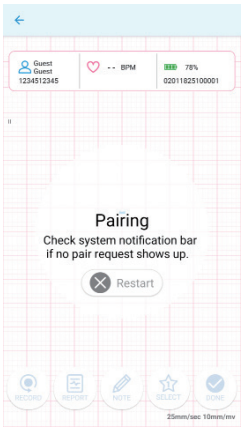
2.Choose Your Recorder, the mobile device will scan for available QT ECG recorder(s) and show their serial numbers, select your recorder and press CONNECT. Once connected the recording process will start automatically.

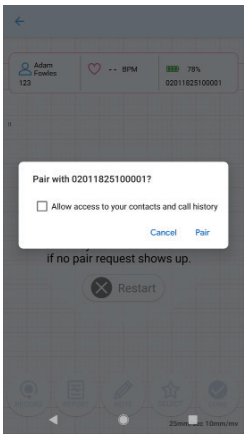


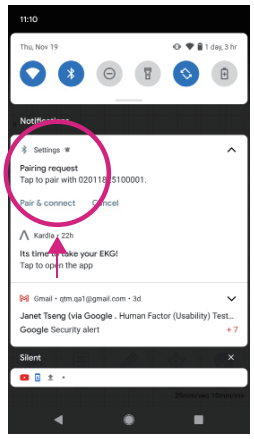
Android

Note :

- In the case when only one Recorder is found, the app will connect to the Recorder automatically without showing its serial number.
- The app will show pairing requests only if the Recorder has never been paired with the device before.
- The pairing request may not pop up but can be revealed by swiping down from the top of the screen (as shown in the screenshot below).



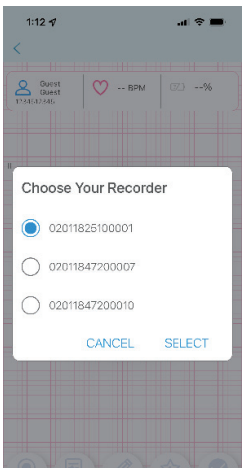


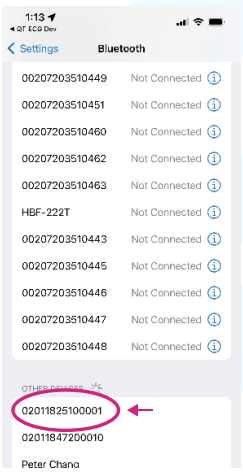


iOS

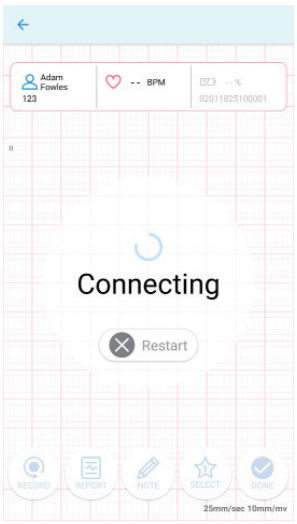
Note :

- If many ECG recorders are found, the application will display a list of serial numbers of ECG recorders. Please select the ECG recorder you want to connect. After selection, a prompt message for ECG pairing will appear. After confirmation, the system will automatically go to the Bluetooth connection page. Please select the serial number of the target ECG recorder for pairing. After successful connection, please switch back to QT ECG App from the Bluetooth page.
- If only one ECG recorder is found, the app will directly display the pairing prompt message of the ECG recorder. After confirmation, the system will automatically go to the Bluetooth connection page. Please select the serial number of the ECG machine for pairing. After successful connection, please switch back to QT ECG App from the Bluetooth page.
- The app's pairing request will only appear when the ECG recorder is paired with the mobile device for the first time, as well as when trying to connect after a failed connection.

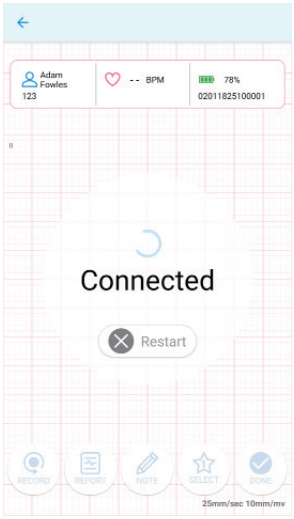




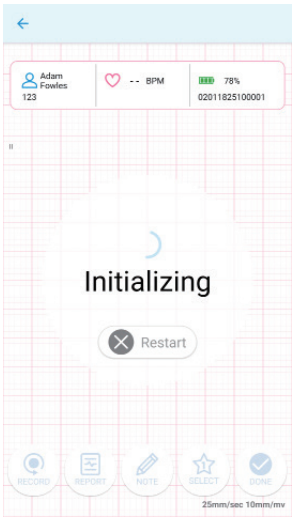
● Connecting



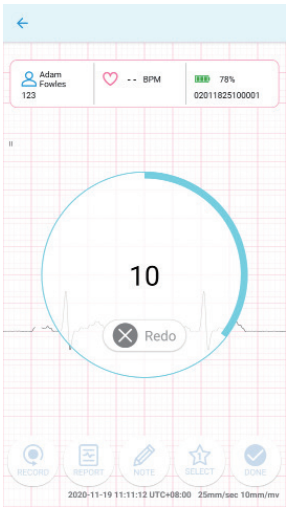
● Connected



● Initializing

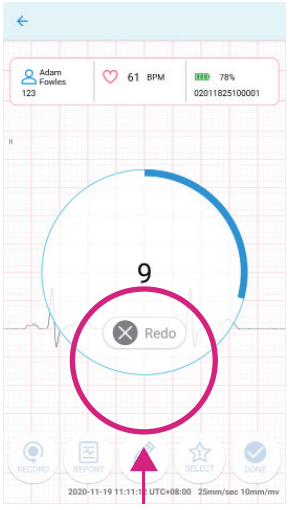


● New Recording Delay



3.If you press “Redo” during the countdown from 10, it will restart the recording process.

● New Recording



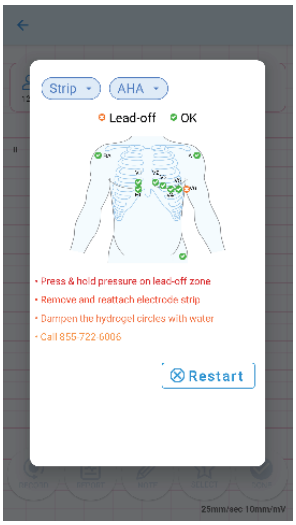
2.2.4 Checking lead-off

- The screen displays the status of all of the leads on the patient's body.

- Check the "Lead" button to ensure all leads are securely attached with a green check mark. If the "Lead" icon shows yellow, please refer to the onscreen troubleshooting tips.

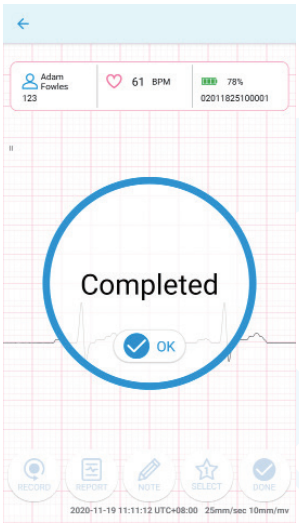
  When troubleshooting is successful, APP will automatically continue recording and processing, press "OK" when Completed.

Note : In the Lead view, both the iOS and Android support users to select different modes (AHA or IEC). For layperson, please check the corresponding electrode for lead-off indication.

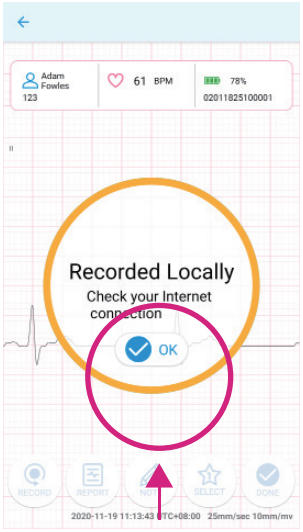


2.2.5 Recording ECG Data

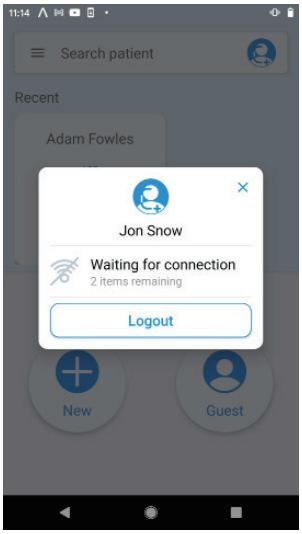
- After successfully attaching the electrodes, a live stream of your electrocardiogram will be displayed on your device.



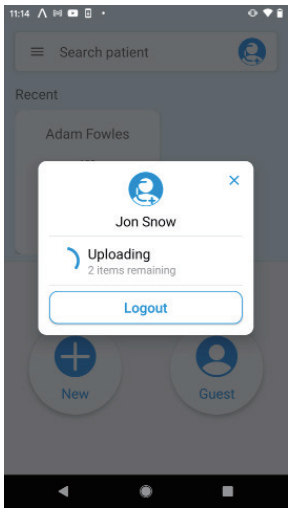
- After completing your recording and if without internet connection, “Recorded Locally” will be displayed, please check your internet connection.



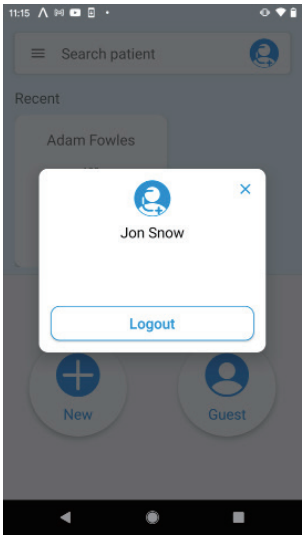
- Waiting for internet connection



- Internet connection established. Uploading recordings.



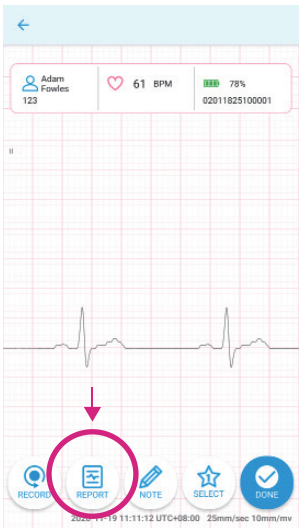
- Upload completed.

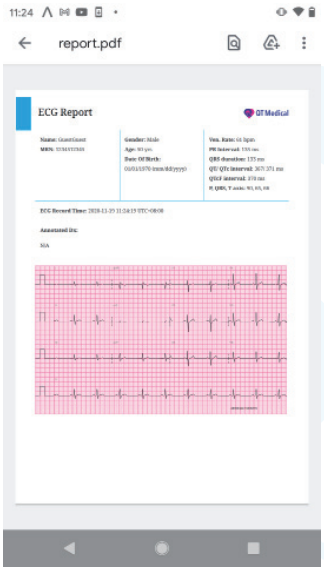


2.2.6 Uploading the ECG file

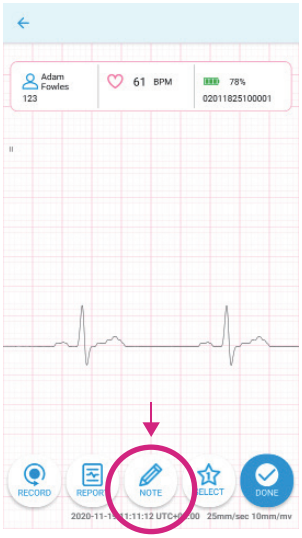
- Upon completion of the 10-second ECG recording, the app will automatically upload the ECG file to the server and display the following dialog.
  Press “RECORD” on the button to record again.

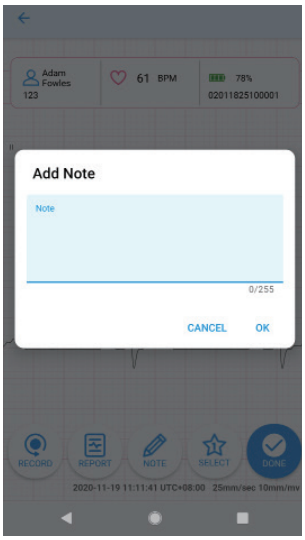
- Press “REPORT” to view the PDF report of the recording that was just completed.



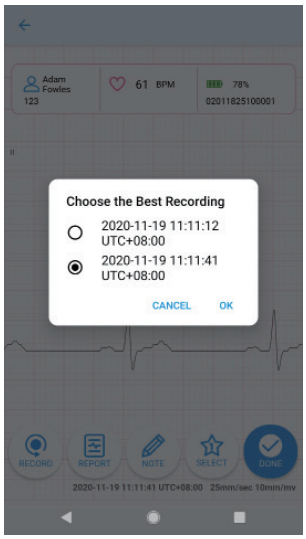


- Press “NOTE” to add notes.

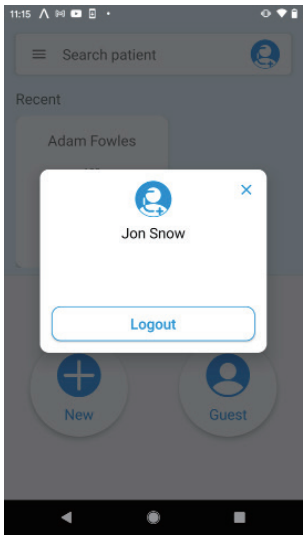




- Press “SELECT” to choose the best recording, if there’s more than 1 recording, and press “OK”.



- Press “DONE” to return to the home screen.
- Upon completion of your recording, you may “Logout” of your User Account.



2.2.7 Detaching the Device

- After an ECG recording is completed, turn off the QT ECG recorder and detach it from the QT ECG Electrode Strip. Then, carefully remove the QT ECG Electrode Strip from the chest.

Troubleshooting

3.1 The APP crashes during use.

Solution : Make sure you run the latest version of the APP and the operating system on your mobile device. Reboot and restart your mobile device. If the problem persists, please contact QT Medical customer service.

Always ensure that the latest version of the app is running; if an older version of the app is running, the app may not function properly (Please be advised, we recommend that you turn off the automatic update functions for your phone's OS and app. Before proceeding with updates, please check our compatibility list for the most updated OS/app combination that we currently support.)

3.2 Cannot open application or the app quits unexpectedly.

Solution : Please contact QT Medical customer service.
https://www.qtmedical.com/contact-us

3.3 QT ECG application is not performing smoothly

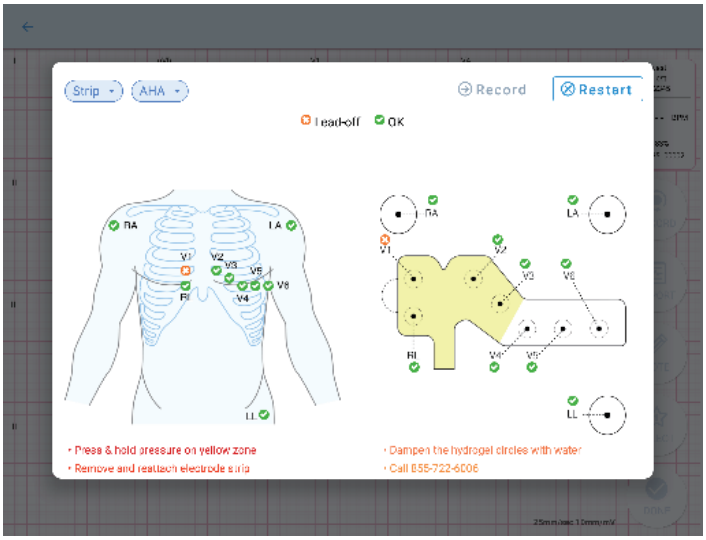
Solution : Too many apps may be opened and running at the same time. Reboot the mobile device and try again.

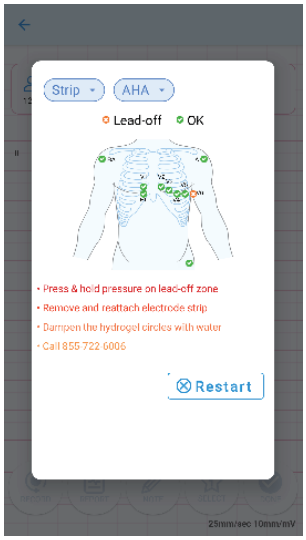
3.4 All ECG tracings disappear on the display.

Solution : The problem may be caused by system overload. Disconnect the QT ECG Recorder from the Electrode Strip then carefully remove the Strip from the Patient's chest. Restart the entire process by re-attaching the Electrode Strip (or use a new Strip) on the patient. If the problem persists, please contact QT Medical customer service.

3.5 Lead-off warning.

See figure below :





Solution : Check the corresponding chest electrode(s). Make sure each electrode is attached properly to the skin and making good physical contact. Firmly press on the area of the strip indicated in yellow to ensure good electrode contact with the skin.

1. press firmly down on the strip to ensure it is making good skin contact.

2. If this does not resolve the problem, ensure the skin is clear. If there is hair in the electrode strip area, shave along the indicated area. If the skin is oily or dirty, try wiping down the skin under the electrode strip with a clean cloth.

3. In a low humidity environment, electrodes may dry up, preventing adhesion to the skin. If the electrodes have been stored in a dry environment, and a "lead-off" alert is shown in the app during use, please use a moist cloth to dampen the hydrogel circle(s) of unattached electrode(s) indicated in the app alert, then reattach the electrode.

3.6 Low battery warning.

Solution : Disconnect the Recorder from the Electrode Strip and remove the Electrode Strip from the patient. Charge the QT ECG Recorder using the wall charger and Micro-USB cable provided. Do not attempt to use the Recorder and charge the battery at the same time.

3.7 Cannot record ECG signals.

Solution : Review the User's Manual to ensure all steps and instructions are followed properly.

Solution : If the instructions are followed but the app problem persists, close the app, reboot the mobile device and the QT ECG Recorder, and try again.

Note: For IOS system: Make sure the bluetooth in the "Settings" and "Control center" are both opened.

Solution : If all the steps are followed but the recorder continues to fail to record , contact QT Medical customer service.

3.8 Situations below may affect the signal quality.

Situation 1 : When the Electrode Strip first attaches to the recorder.

Situation 2 : When the mobile device first connects to the recorder through Bluetooth.

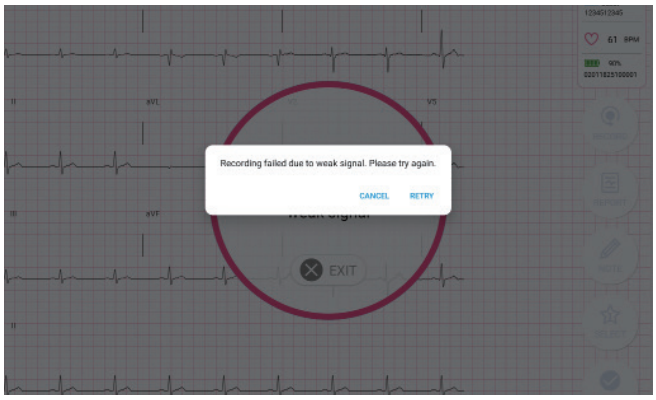
Situation 3 : When the mobile device first comes back from sleep mode.

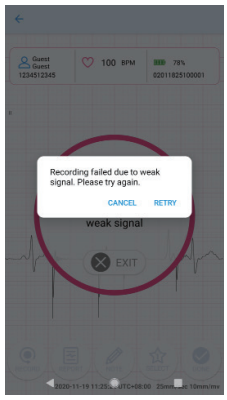
Situation 4 : When restarting recording after uploading successfully.

Solution : Wait for 5~10 seconds before recording. If the recorder continues to fail, contact QT Medical customer service.

3.9 Weak signal warning.

See figure below :





Solution :

(For iOS devices) Wait for 5~10 seconds before recording. If the recorder continues to fail, contact QT Medical customer service.

(For Android devices) Reset network settings on the mobile device and record again. If the problem persists, please contact QT Medical customer service.

- Tip: To reset network settings,

  (Google Pixel Phone) open your phone's Settings app and tap System > Advanced > Reset options > Reset Wi-Fi, mobile & Bluetooth.

  (Samsung devices) open the mobile device's Settings app and tap General management > Reset > Reset network settings.

Customer Service Support

For customer service support, please contact:

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