

❖ *Fast Radon Detector App* ***User instruction***

2016.09.08
RadonFTLab

❖ *Update history*

version	Change point	Date
V1.0	Hanguel version	2015-11-05
V1.1	FRD400 / FRD800 update	2016-09-06
V1.2	English version	2016-09-08

❖ **Table of contents**

1. Remarks

2. App. Installation & Execution

(1) Installation

(2) Execution

3. FRD Scan & Connection

4. Screen components

5. Operation

(1) Measurement start

(2) Measurement stop

(3) Start the data recording on device

(4) Stop the data recording on device

6. LOG

(1) Device recorded data download

(2) Data recording on mobile device

7. Menu

(1) Configuration setting

(2) File loading on graph table

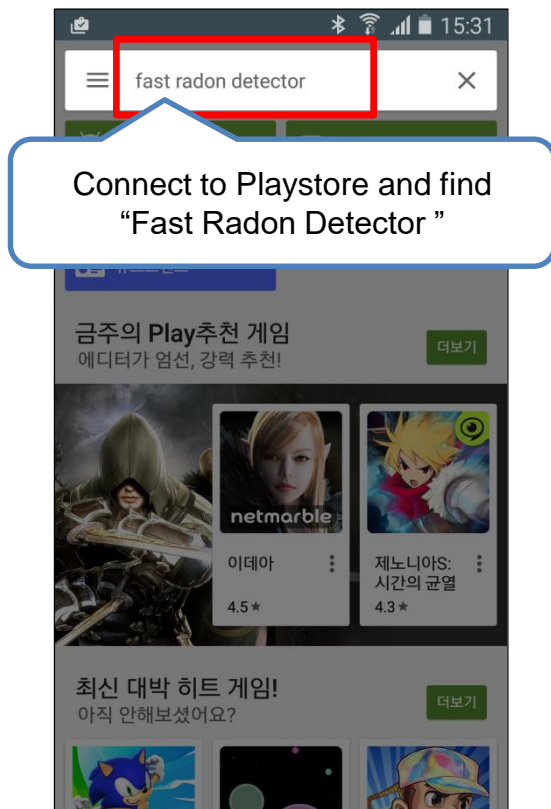
1. Remarks

This instruction is for the FTLab Fast Radon Detector mobile Application.

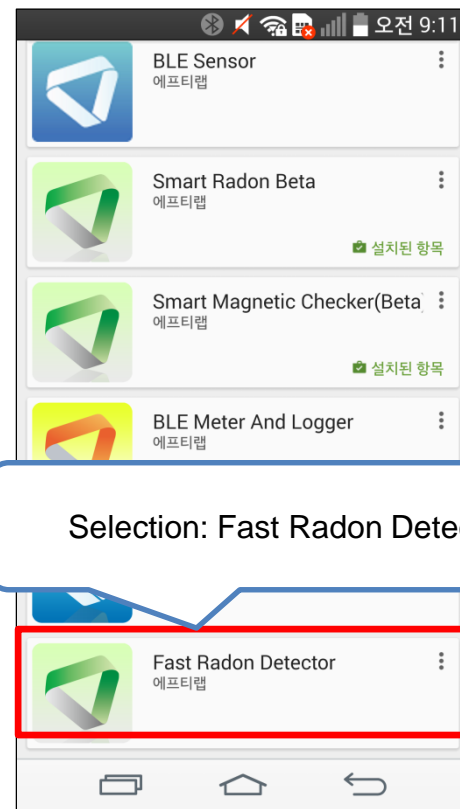
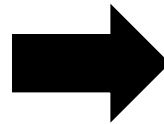
If you want to find Radon Detector Device handbook or PC program instructions then please contact to FTLab Homepage (<http://RadonFTLab.com>)

- This mobile Application is based on BLE(Bluetooth Low Energy) communication
- Bluetooth 4.0 upper version is needed
- Android 4.3 upper version is needed.
- Communication between Device to Mobile is restricted by the BLE's Range(10M) and barrier

2. App installation - Android



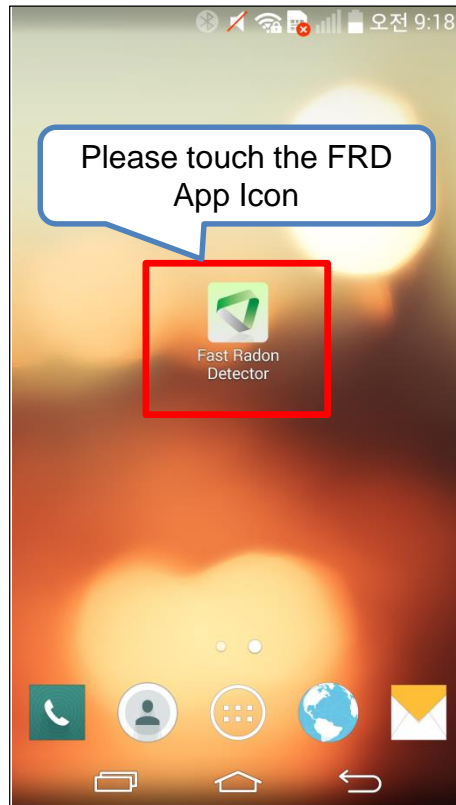
[Play store App]



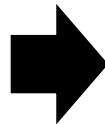
[Searching results]

-Mobile device should support BLE(Bluetooth Low Energy)

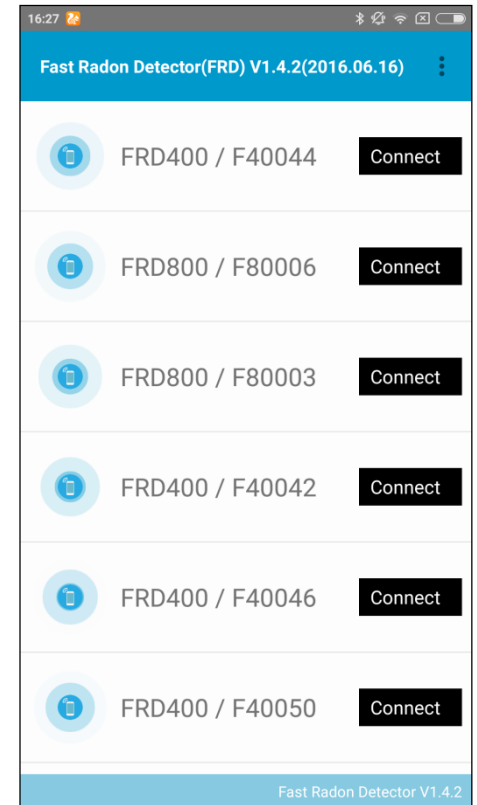
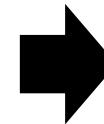
2. App execution - Android



[Mobile device screen]



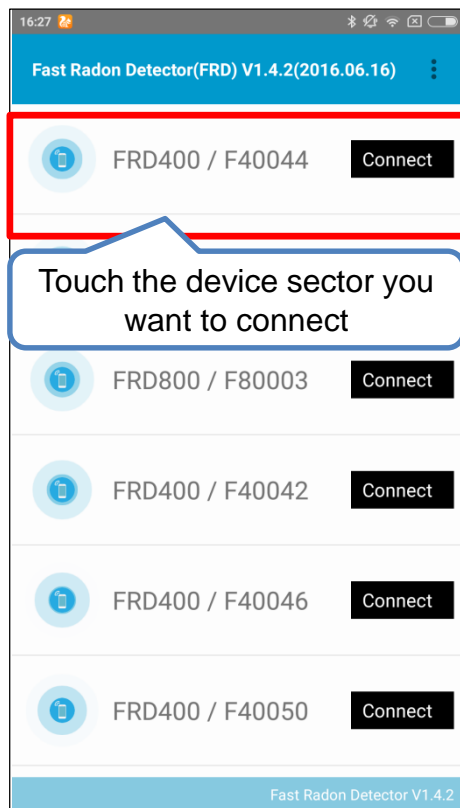
[FRD App intro screen]



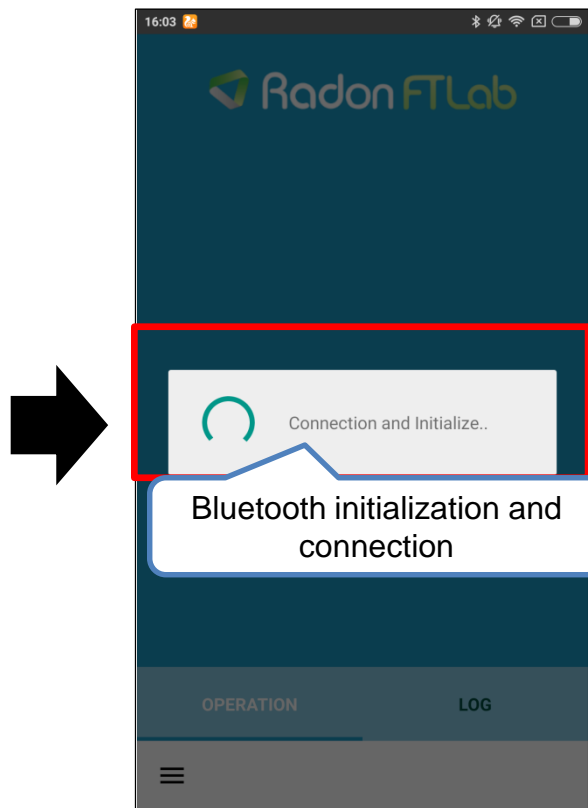
[Device List screen]

-FRD App intro screen will change into device list screen immediately

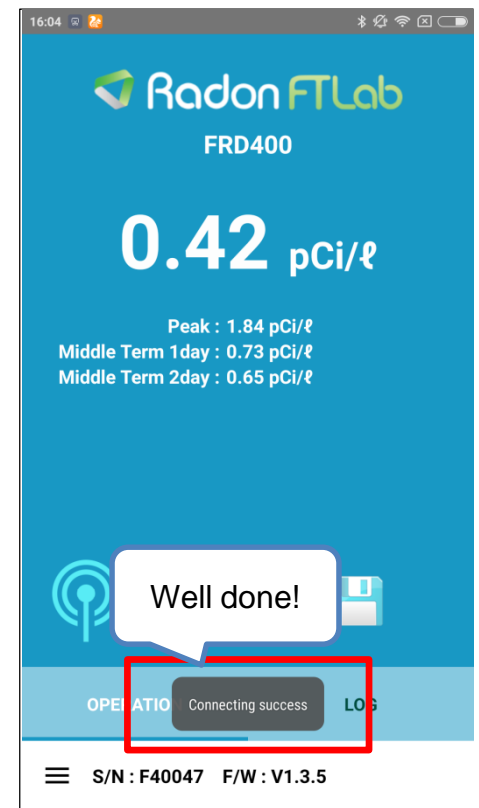
3. FRD scanning & connection



[스마트기기 바탕화면]



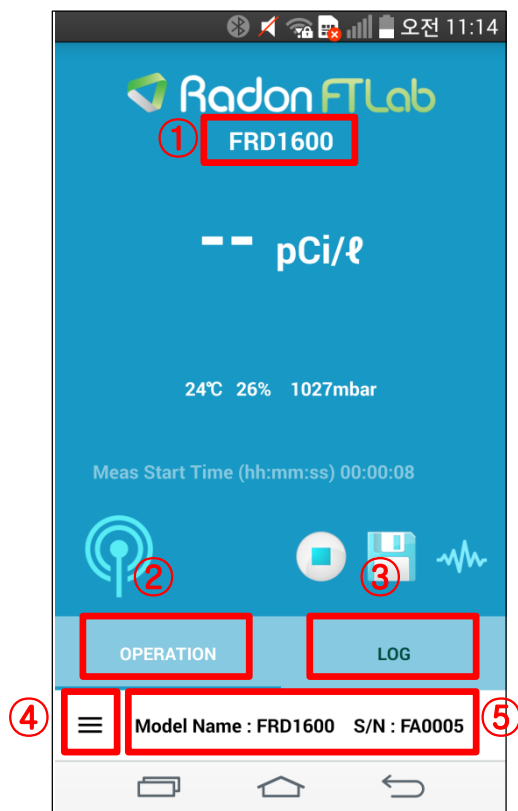
[초기화면]



[Device List View]

-Device choice and connecting process

4. Screen components



[OPERATION TAB]

1.Connected device model: ex) FRD400 / FRD800 / FRD1600

2.OPERATION tab

- Current radon value
- atmospheric value(Temp, Humidity, Air pressure)
- BLE connecting status
- START/STOP/PAUSE Button(only for FRD800/FRD1600 model)

3.LOG tab

- Calling the log data from Radon detector memory
- Recording the log data on mobile device

4.Menu button

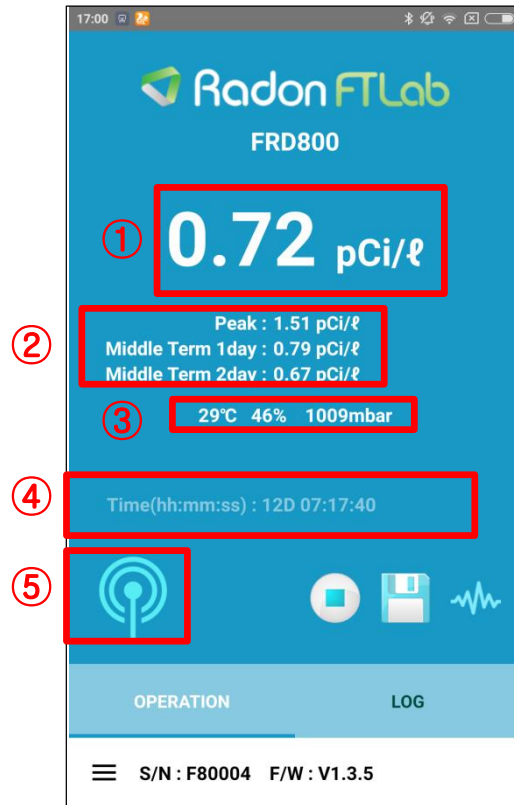
- Configuration / Data Logging / File Load / Reset(RD200)

5.Connected device information

- Model, Serial#

-OPERATION tab / LOG tab / MENU tab

5. OPERATION tab

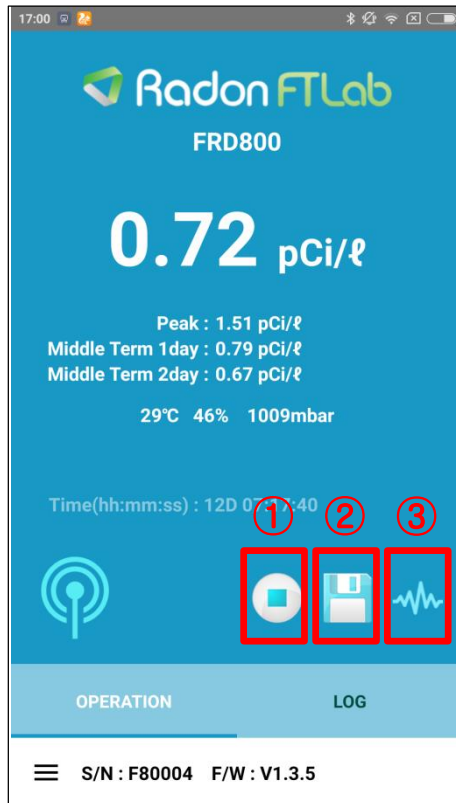


[OPERATION TAB]

1. Current Radon value
 - Value will be refreshed as set up time interval
2. Calculated Value
 - Maximum value within measurement time
 - Average value of 1day, 2day before based on the current time
3. Atmospheric value (only for FRD800/FRD1600 model)
 - Temp, Humidity, Air pressure
- 4.Measurement time(data refreshed every 3second)
 - Radon Count: Measured radon counting value
 - Process Time : total elapsed time
5. BLE connection status Icon
 - Blink every 1second normally

-OPERATION tab is composed of measurement value and control buttons

5. OPERATION tab



[OPERATION TAB]

1.Start / Stop Button

-Measurement control

2.Save Button

-Recording the log data to mobile memory

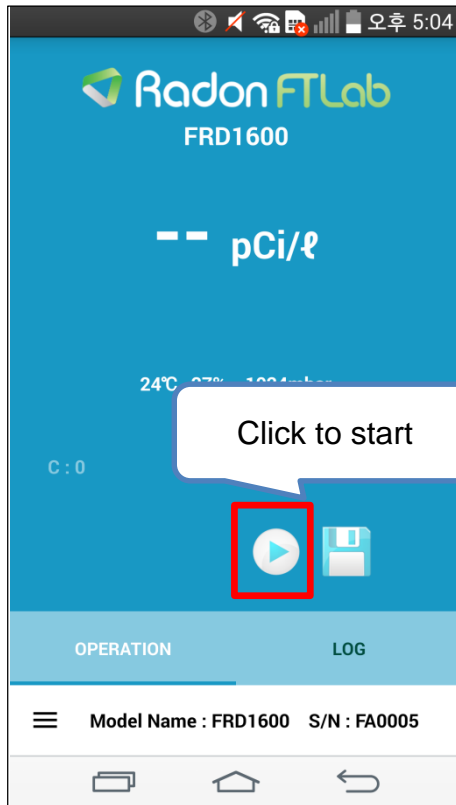
3.Vibration status

-in normal case this symbol will not displayed

-Vibration factor should be terminated and then the symbol will disappeared after 3 second.

- On/Off, Saving control and vibration status checking

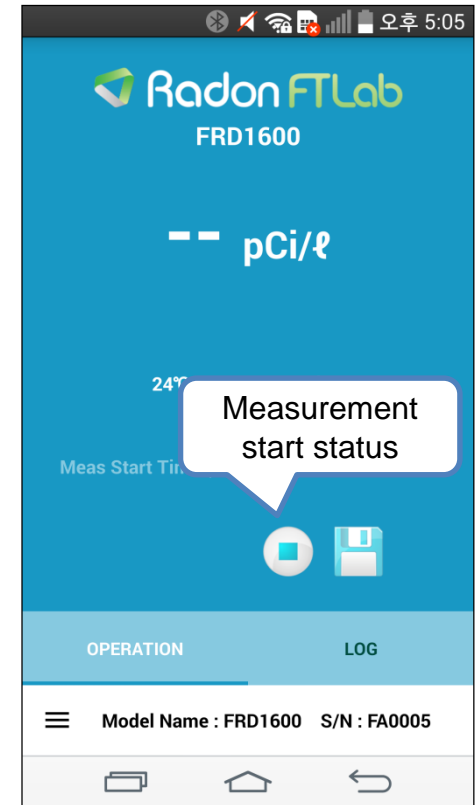
5-1. OPERATION tab – measurement start(FRD800/1600)



[Measurement control]



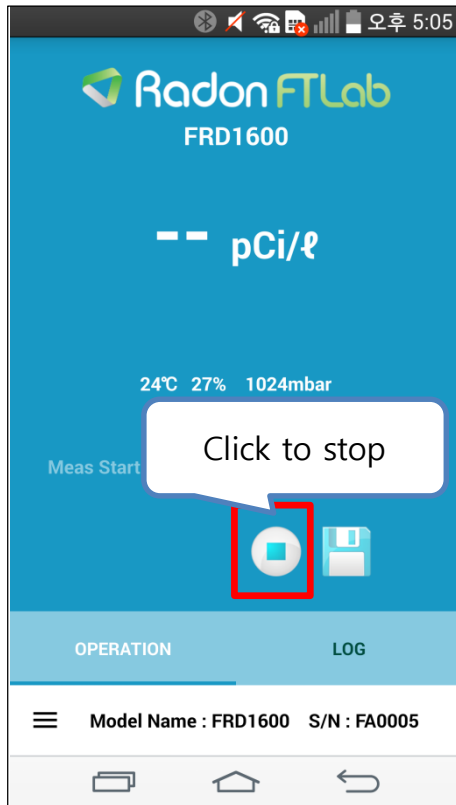
[Measurement confirmation]



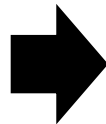
[Measurement status]

--Device measurement control(FRD800/1600), FRD400 has the button on the device

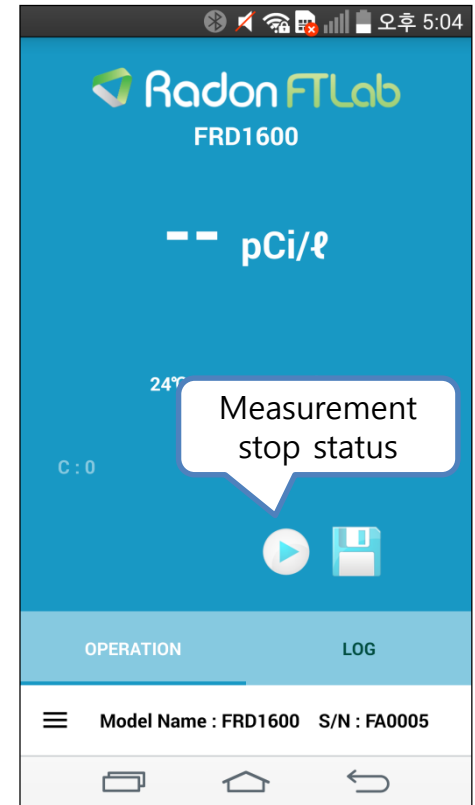
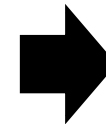
5-2. OPERATION tab – measurement stop(FRD800/1600)



[Measurement control]



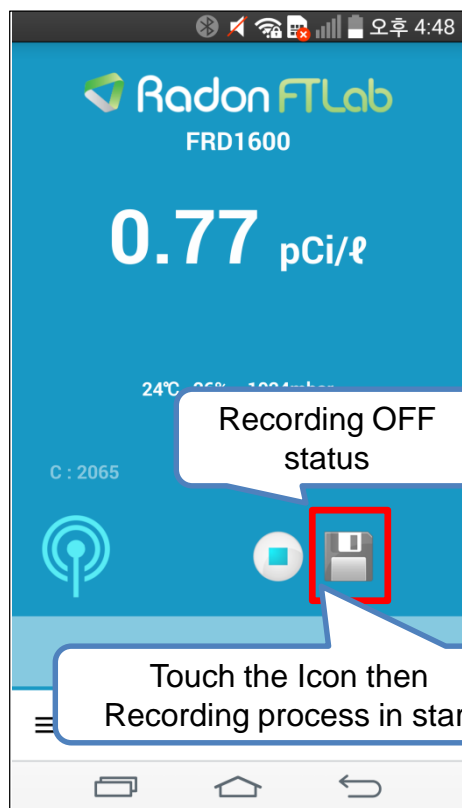
[Stop confirmation]



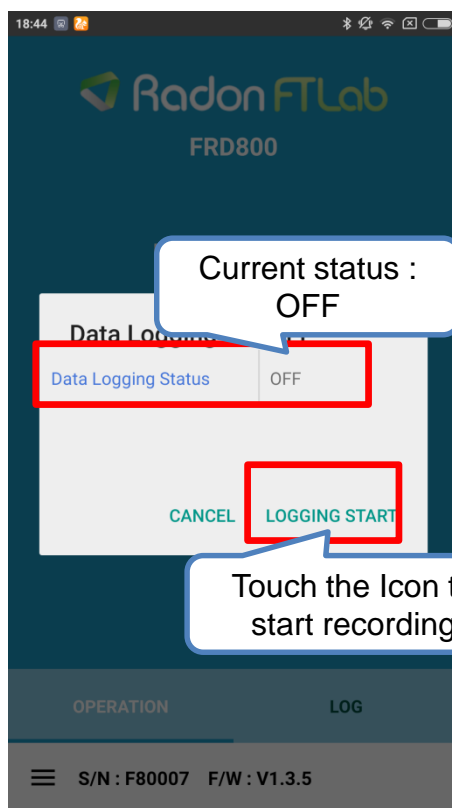
[Measurement status]

--Device measurement control(FRD800/1600), FRD400 has the button on the device

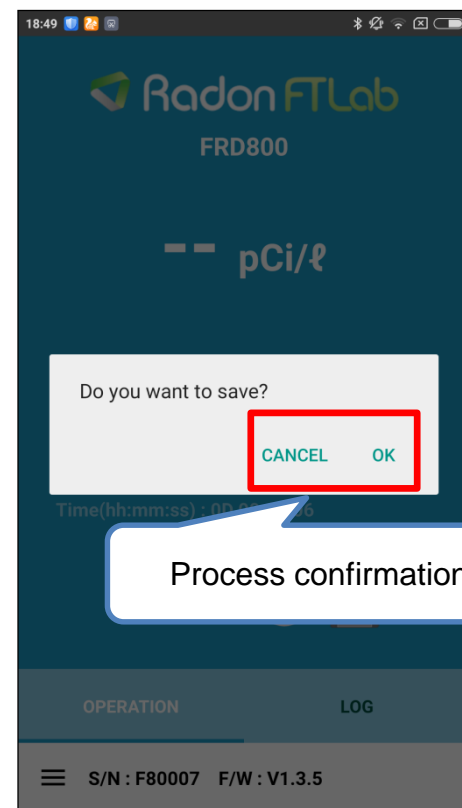
5-3. OPERATION tab – Data recording start(FRD800/1600)



[Data Recording status change]



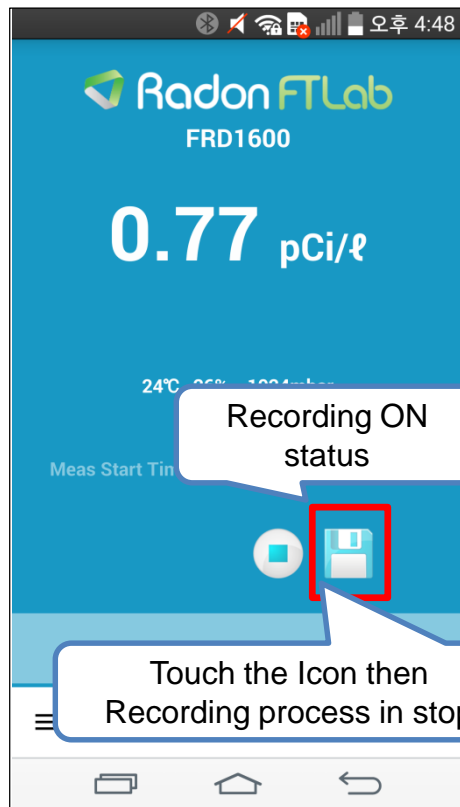
[Recording status choice]



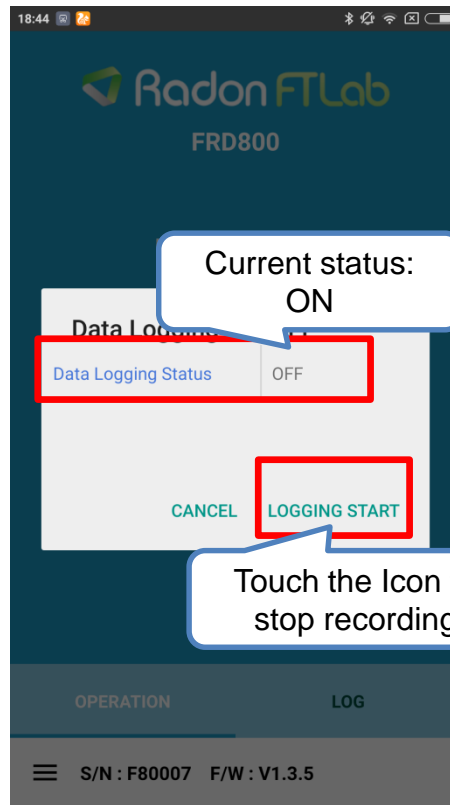
[Confirmation]

--Data recording on device process

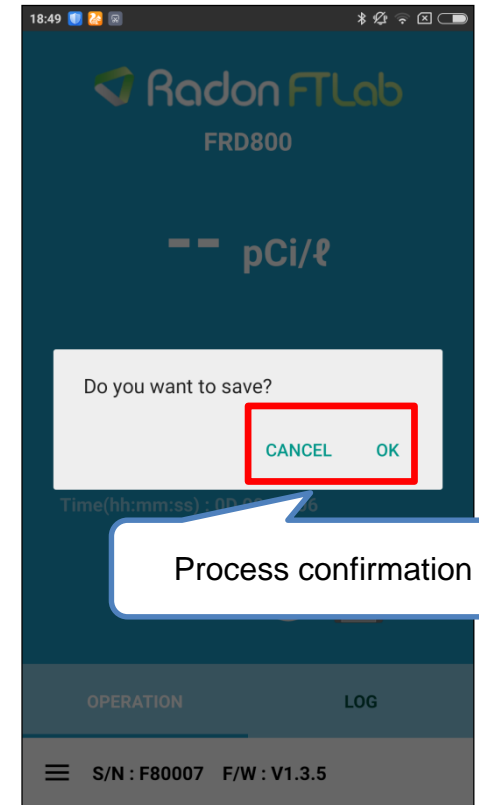
5-4. OPERATION tab – Data recording stop(FRD800/1600)



[Data Recording status change]



[Recording status choice]



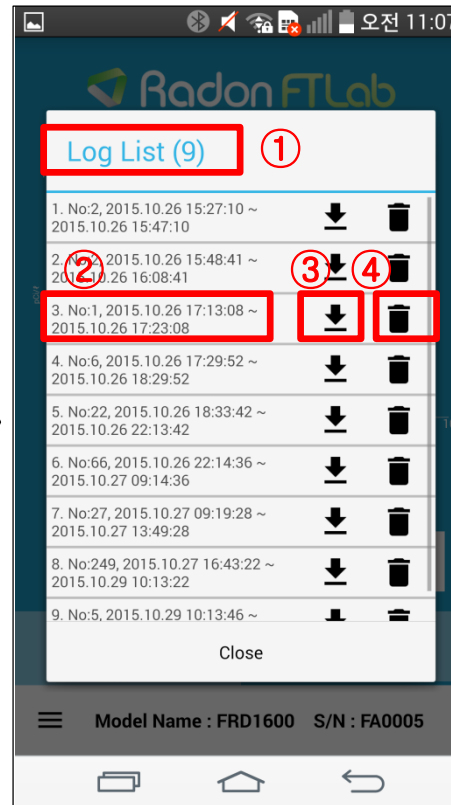
[Confirmation]

--Data recording stop process

6-1. LOG tab – Data download on mobile device



[Move to data table window]

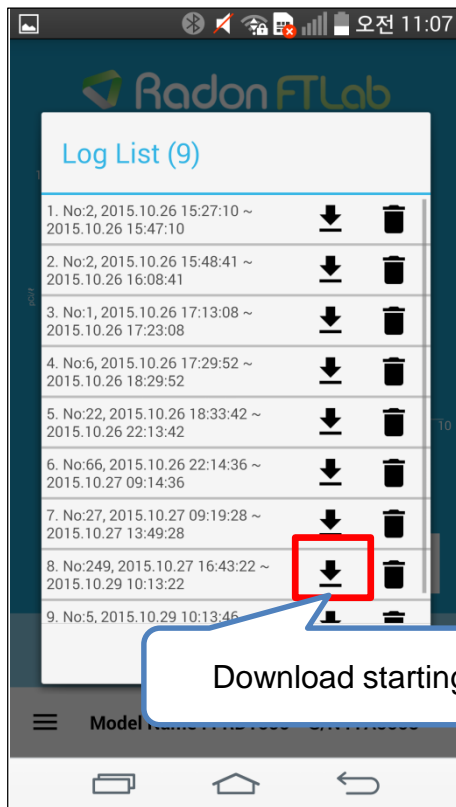


[Recorded data Table List]

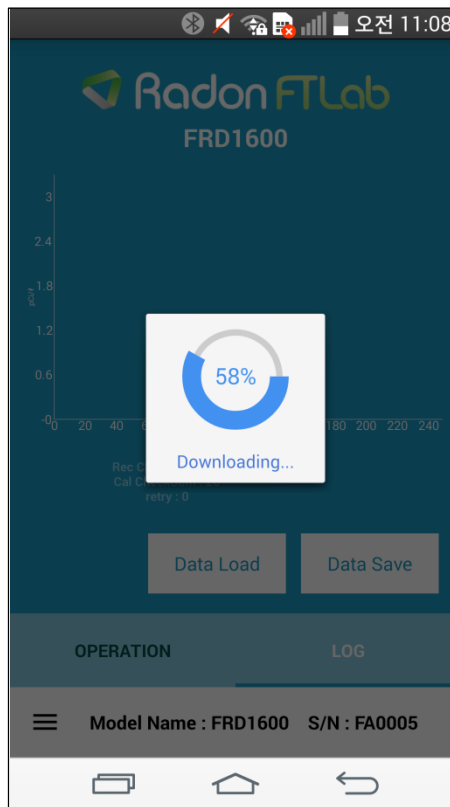
1. Device recorded data list
 - Recording table(Max 10ea)
2. Recorded table Information
 - (1) displaying item
 - No:(Data number recorded on table)
 - Recording start time ~ stop time
3. Recorded table download
 - Download to mobile memory
4. Recorded table erase
 - Recorded data will be erased
 - Data table will not erased under measurement

-Data table will not erased under measurement activation

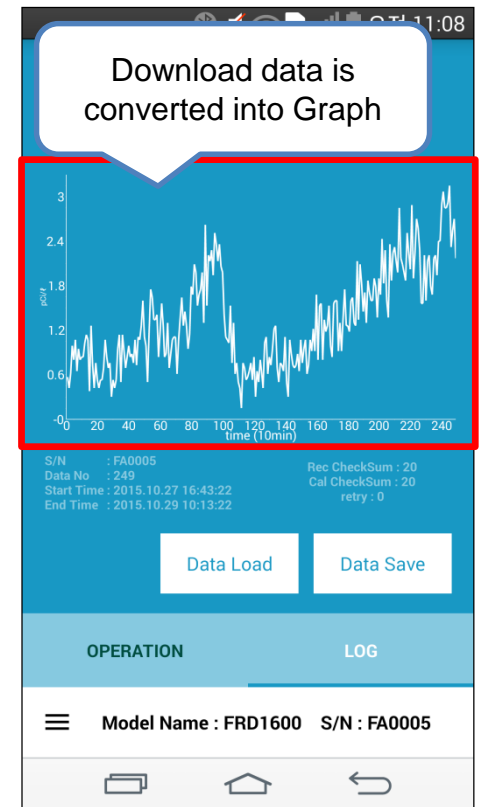
6-1. LOG tab – data download to mobile device



[Log List Window]



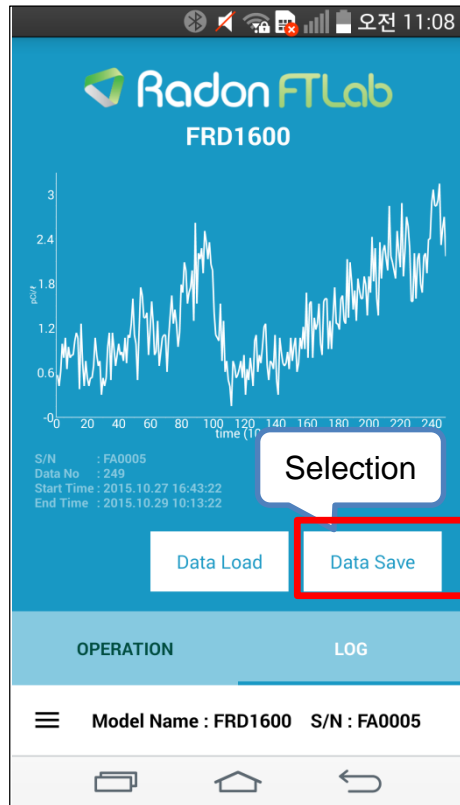
[Under download]



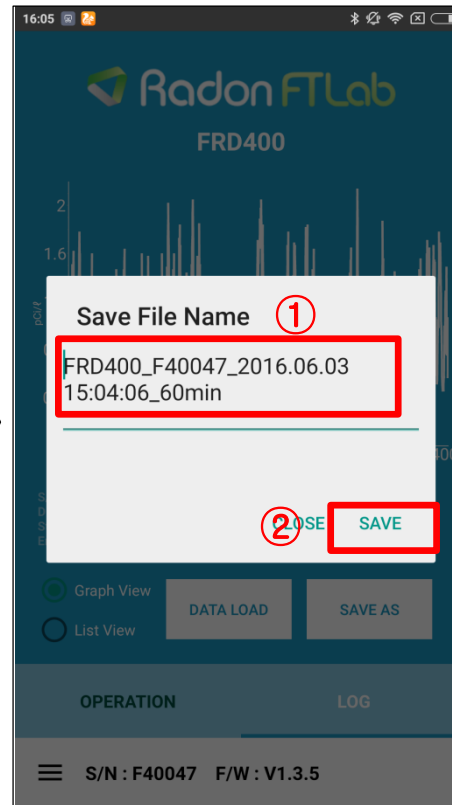
[Download completed]

--Device recorded data download process to mobile device

6-2. LOG tab – Recording the download data



[Log Save]



[File Name 설정 및 저장]

1. File Name setting

(1)Default : Model + S/N + Recording start time

(2)User can change the name

3. Save

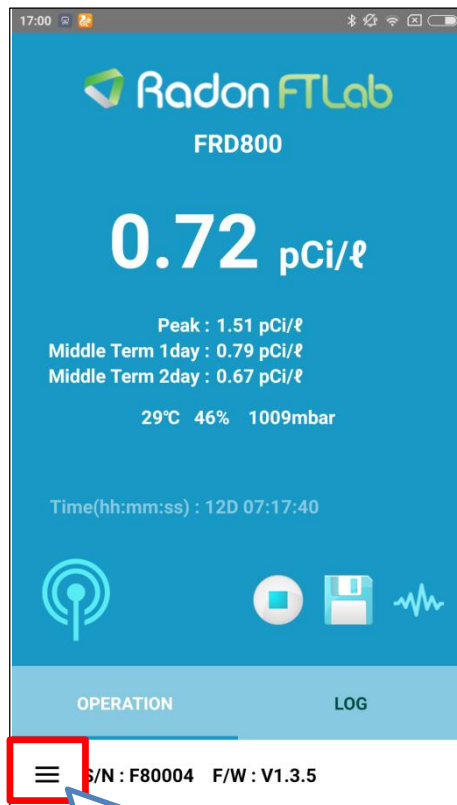
(1)Recording the data to mobile device

(2)Recording folder position:

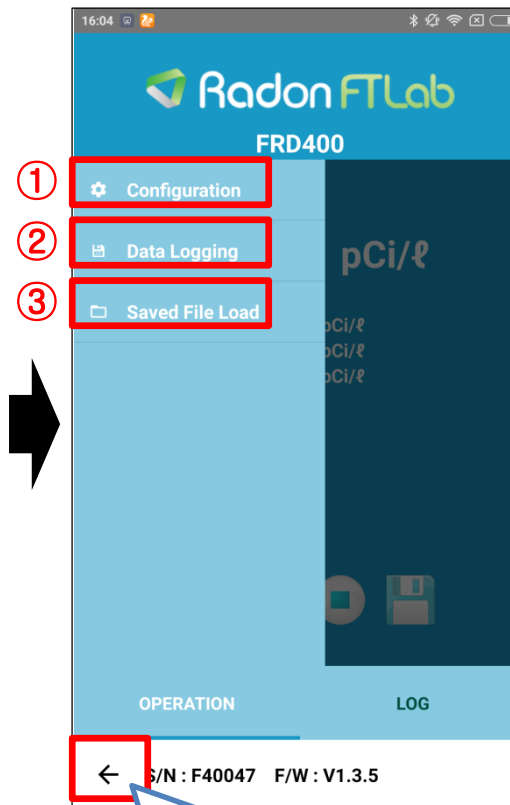
device\Radon FTLab\

-Down load data format is '*.txt'

7. MENU



Menu Icon: Selection to configuration window



Selection to main window

1.Configuration

- Unit setting
- Buzzer setting
- Alarm setting
- Avg Term setting
- Long Term setting

2.Data Logging

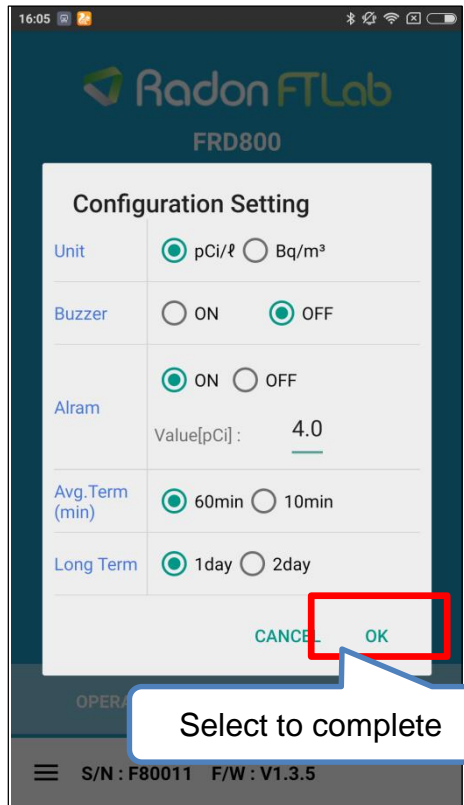
- Data recording ON/OFF setting

3.Saved File Load

- Recorded file open

-Contents of menu window

7-1. MENU – Configuration setting



1. Unit

-pCi / Bq / CPM selection

2. Buzzer

-Buzzer ON/OFF setting

3. Alarm

(1) Alarm ON/OFF selection

(2) Alarm Value

-Alarm ON: available setting the value

-Alarm Value: pCi , between 1.1 to 100

4. Avg. Term

-Average calculation time setting

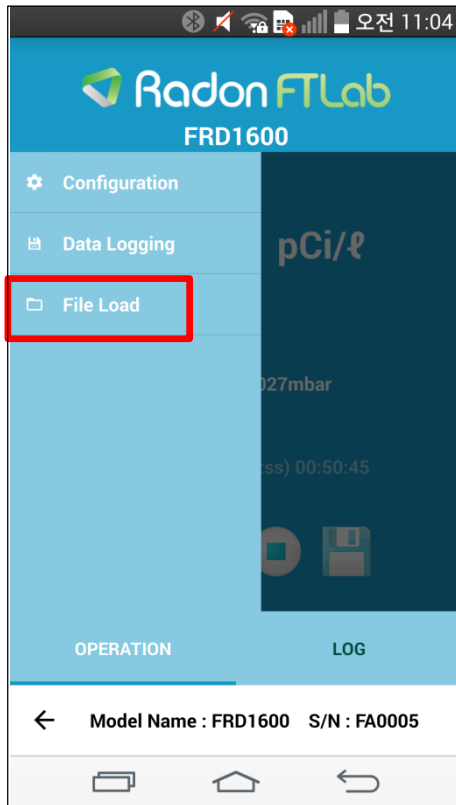
-10min / 20min / 30min / 60min

5. Long Term

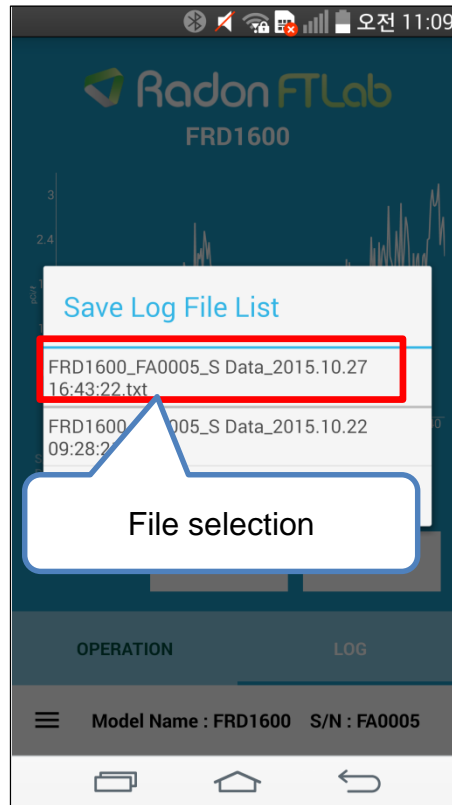
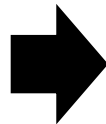
-1day / 2day

-Touch the OK icon is necessary when the setting is changed

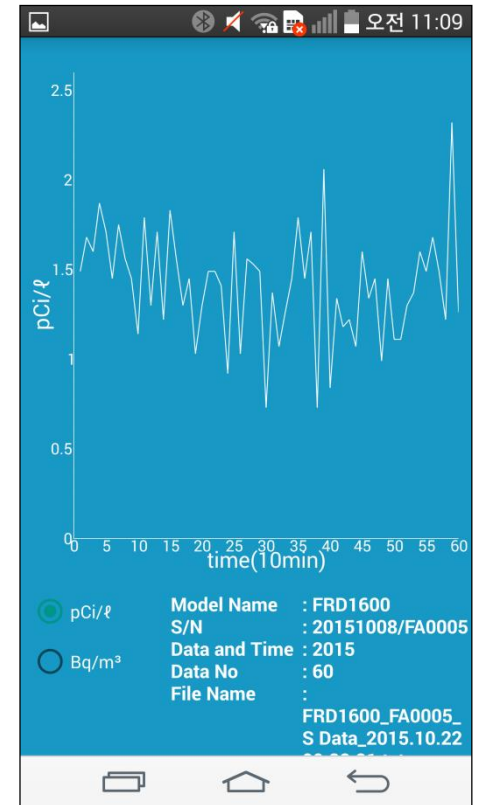
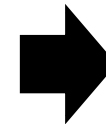
7-2. MENU – File loading on graph table



[MENU-File Load]



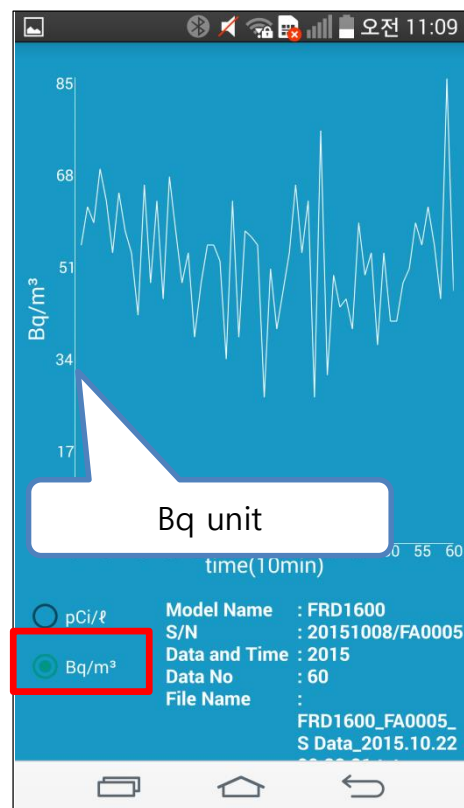
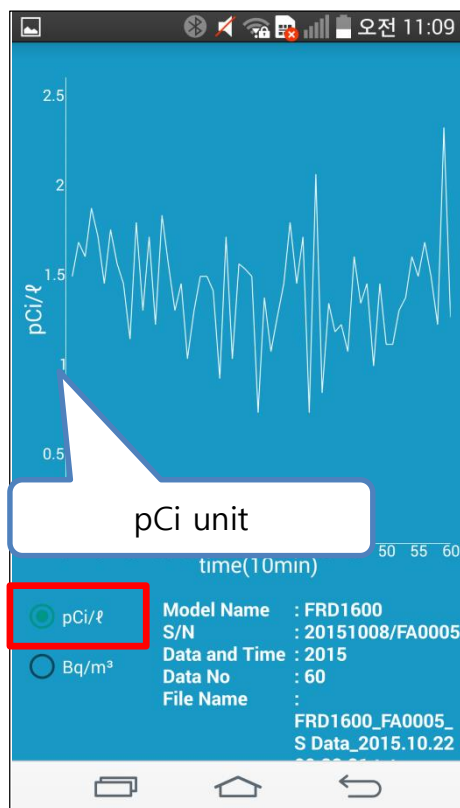
[File List]



[Selected data graph]

--Saved data is converted to graph

7-2. MENU – File loading on graph table



1.pCi / Bq selection

-Unit variable

-Data is saved pCi value

- pCi <-> Bq converting graph is just calculate value and not saved

-The data is saved only pCi value