Operation Manual

MPL MAP

for MPL-H11DX

TAKACHIHO

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1. Introduction

This app is used by connecting MPL-H11DX and a smartphone.

This app has the following features:

Receiver

  - Download the measurement data of the receiver to your smartphone.

  - Display the measured points on Google Maps.

  - Downloaded data is output in CSV file format.

Transmitter

  - Remotely control transmitter frequency and power level.

2. System requirements

a) Version

  - Android : Android version 8 and above

b) Equipped with Bluetooth® Low Energy

c) Turn on the provision of location information.

3. Installing MPL MAP

a) Download " MPL MAP " from the following:

  - Android device: Google Play

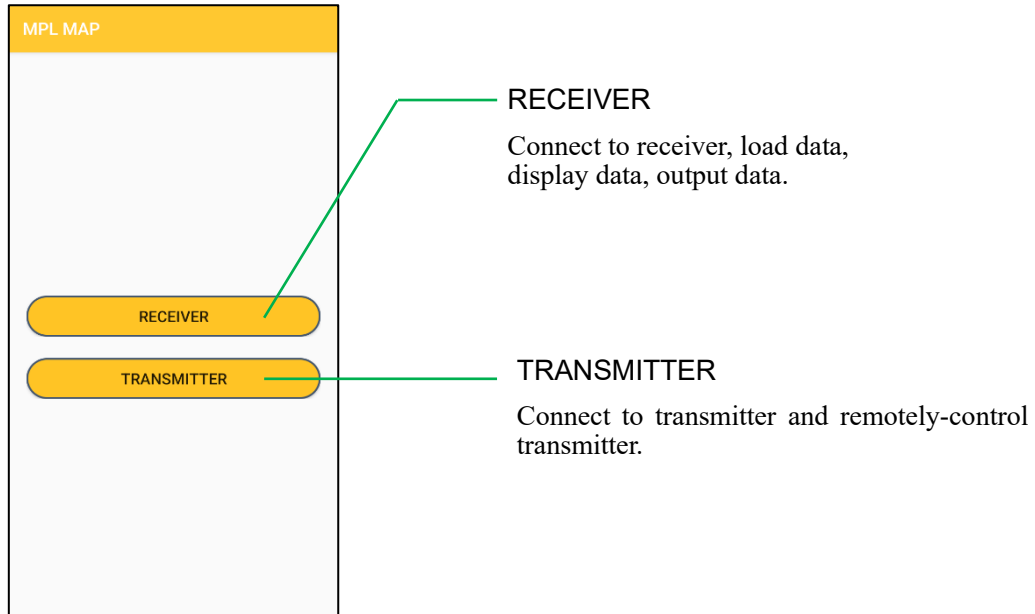b) After the app page is displayed, tap "Install".

c) Once the installation is complete, tap "Open" to launch the app.

The screen layout may differ from the description depending on the type of smartphone.

4. Select operating device
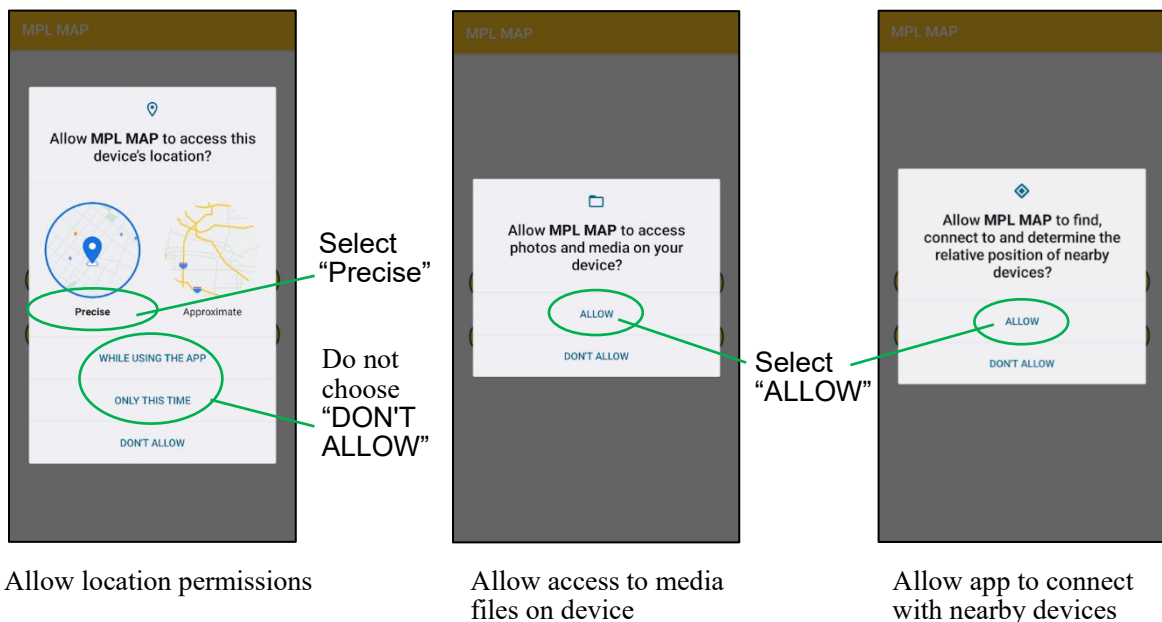
4-1. Select operating device screen

After launching the app, tap the button of the device you want to operate.

RECEIVER

Connect to receiver, load data, display data, output data.

TRANSMITTER

Connect to transmitter and remotely-control transmitter.

*When you start this application for the first time, a screen asking for permission may be displayed as shown in the image below. In this case, select anything other than "DON'T ALLOW" in all dialogs. If you select "DON'T ALLOW", this app will stop working properly.
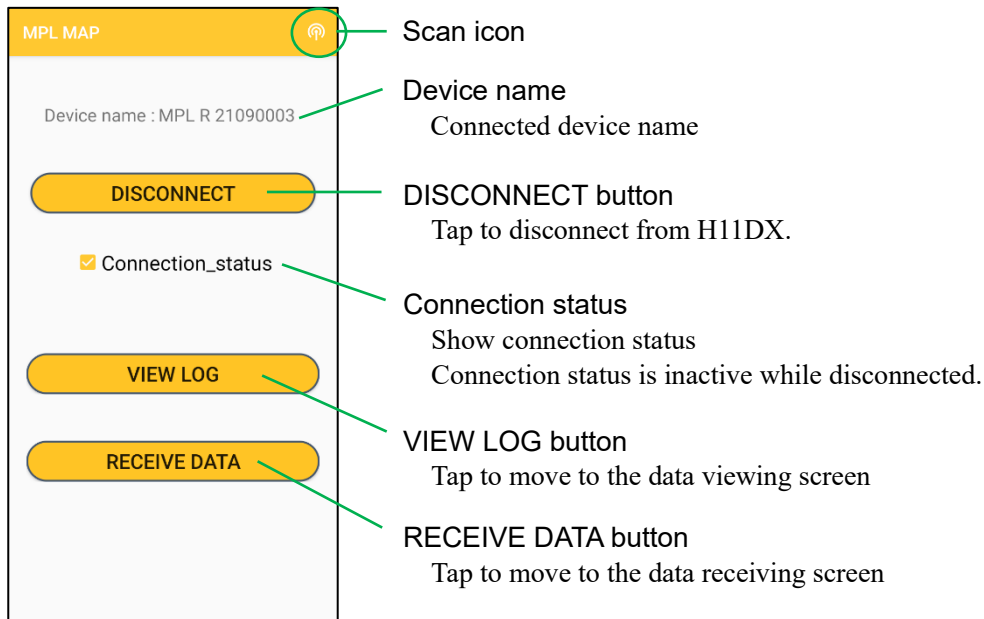
* The display may differ depending on the terminal and software version.

*Select "Precise" when asked to select the level of precision on the location permission screen. If you select "Approximate", this app will stop working properly.

Select "Precise"

Do not choose "DON'T ALLOW"

Select "ALLOW"

Allow location permissions

Allow access to media files on device

Allow app to connect with nearby devices

5. Operation of receiver measurement data

5-1. Description of the main screen

Scan icon

Device name
    Connected device name

DISCONNECT button
    Tap to disconnect from H11DX.

Connection status
    Show connection status
    Connection status is inactive while disconnected.

VIEW LOG button
    Tap to move to the data viewing screen

RECEIVE DATA button
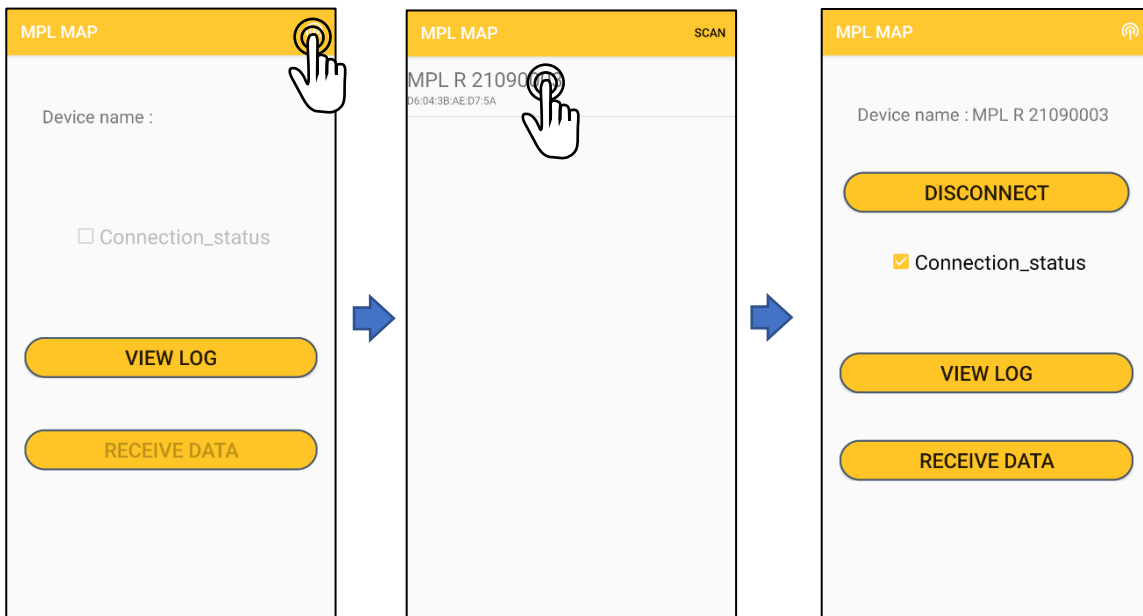   Tap to move to the data receiving screen

5-2. Pairing with receiver

a) Tap Scan icon.

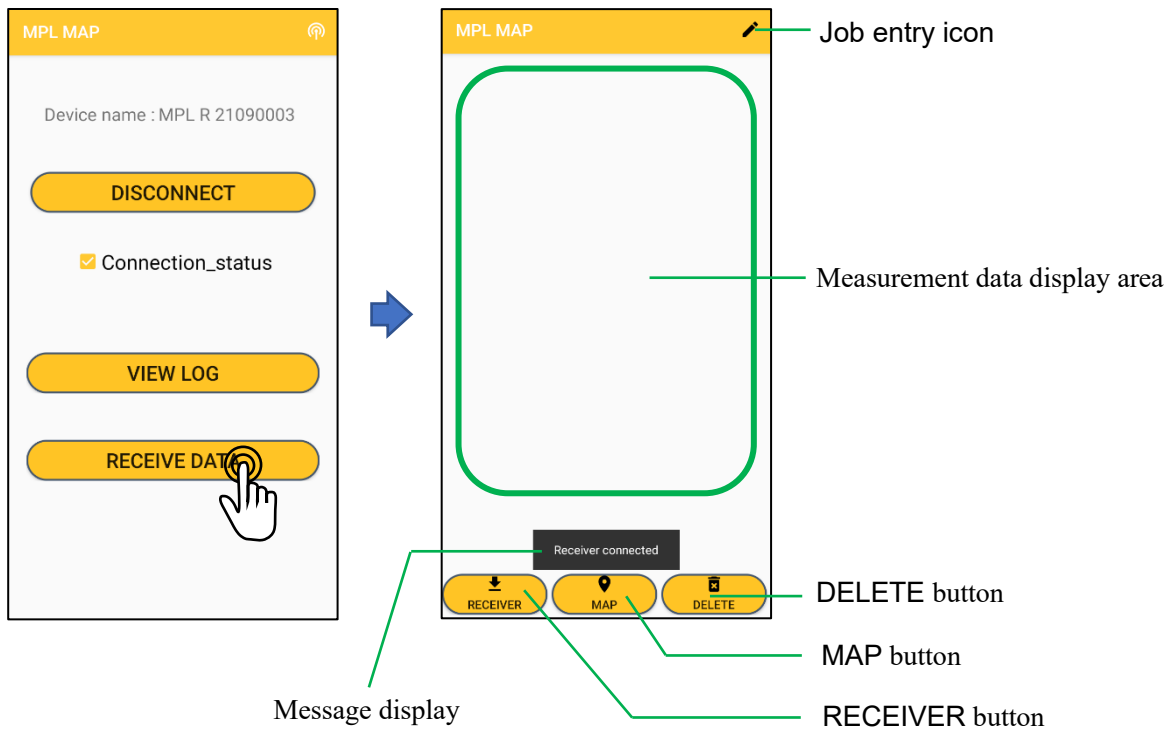b) Tap "MPL R xxxxxxxx" from the device list.

c) When pairing to the selected device, the screen below will appear.

After initial pairing is complete, the app will automatically connect to the last connected device name, so there is no need to scan again. Scan only if you change receivers.

5-3. Receiving and deleting measurement data, and entering job

a) Tap RECEIVE DATA button. The measurement data screen is displayed.

Job entry icon

Measurement data display area

DELETE button

MAP button

RECEIVER button

Message display

Message explanation

"Receiver connected"
   When connected to the receiver.

"Receiver disconnected"
   When disconnected from the receiver.

"Cannot connect to receiver please ensure receiver is on"
   Appears when the connection fails on the main screen.
   Make sure that the receiver is turned on, that the receiver is nearby, and that there is no interference around you before reconnecting.

"Data received"
   Displayed when data is received from the receiver.
   The received measurement data is displayed on the screen.

"Looking for GPS signal"
   Displayed when GPS data cannot be received.
   The MAP display button becomes inactive when there is no measurement data with coordinate data.

"GPS signal found"
   Displayed when GPS data can be received.
   If the MAP expand button was inactive, it will become active.

b) Locating and measuring depth of the cable/pipe with H11DX receiver.

Press MODE when displaying depth measurement data.

When the smartphone is already connected, "BLE ON" is displayed.

The data measured by the receiver is transferred to the smartphone.

Received data

Date and time
Depth
Frequency

"Data received" message appears

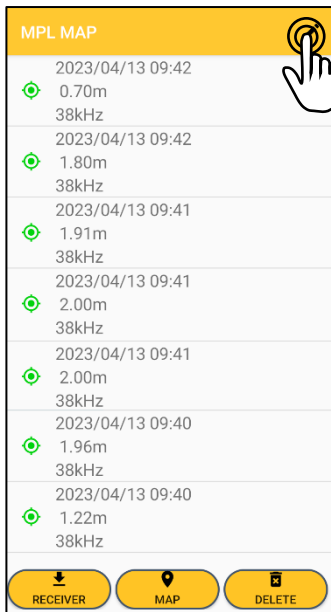c) Repeat the same operation to receive subsequent measurement data.

New data on top, old data on the bottom.

2023/04/10 10:34
2.01m
38kHz

2023/04/10 10:33
1.97m
38kHz

2023/04/10 10:32
2.46m
38kHz

2023/04/10 10:32

d) Creating a job entry

After completing the cable/pipe measurement, add a job name to the measurement data to create a new job entry.

Tap Job entry icon.

Job name entry screen is displayed.
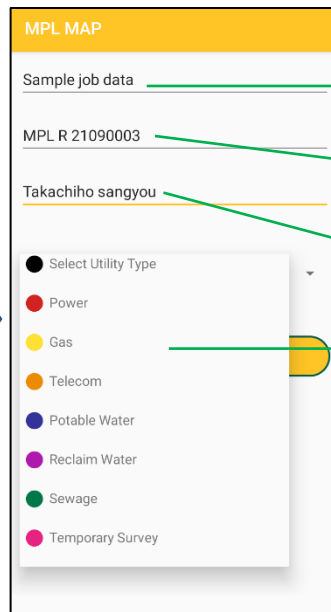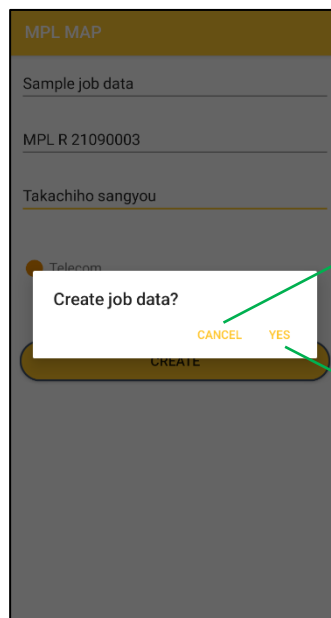

Job name:
(Up to 25 characters)

Device name:
(Up to 20 characters)

Operator name:
(Up to 20 characters)

Utility type drop-down menu

After inputting the Job name and selecting the utility type, CREATE button will become active.
Tap CREATE button.

CANCEL
Cancel entering job data.

YES
Entry job data.

"Save successful" is displayed
when the job data created successfully.

NOTE
You cannot enter the same name as a job name that has already been entered.
When the message "Please enter a different job site name" is displayed, please enter a different Job name

e) Display the measured data on the map

Tap MAP button, a marker is displayed on the map screen.
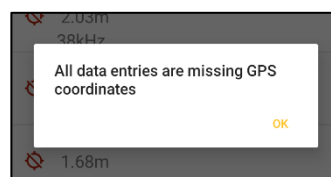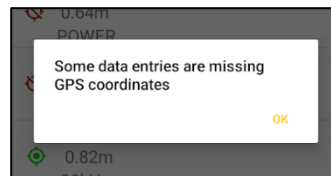

Tap the marker to see detailed information.

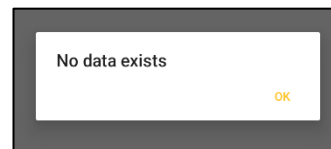If you are still connected to the receiver, you can add new measurement points from the Map screen.

Displays "Connected" when connected to receiver.

Message explanation

Measurement data without GPS data cannot be displayed on the map,
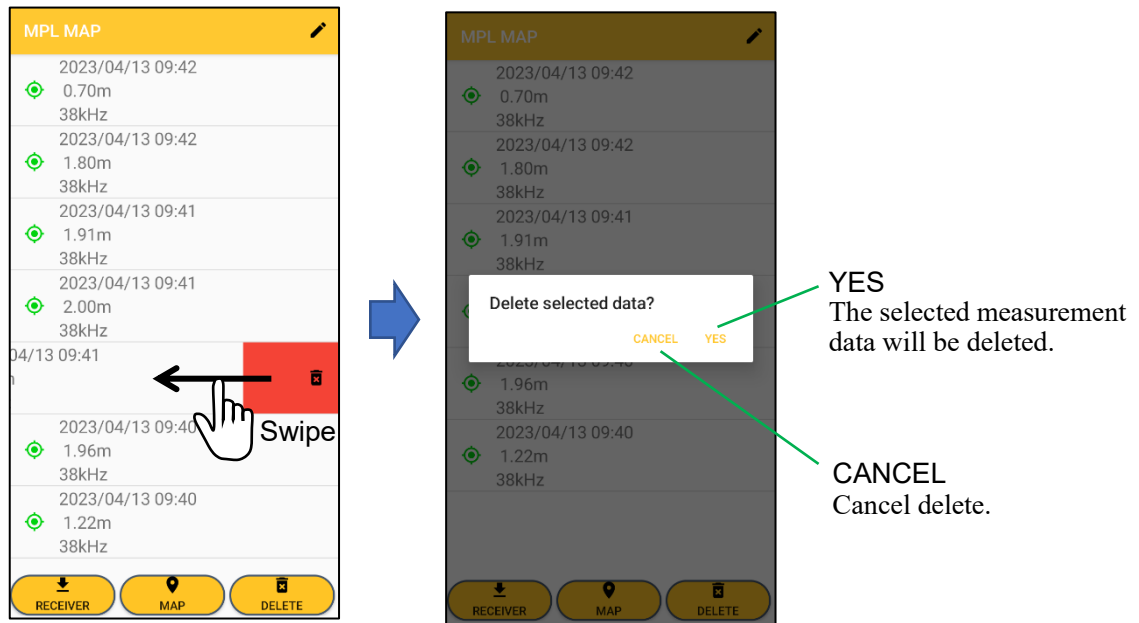so the following dialog will be displayed.

If there is no data to display, the following dialog will be displayed.
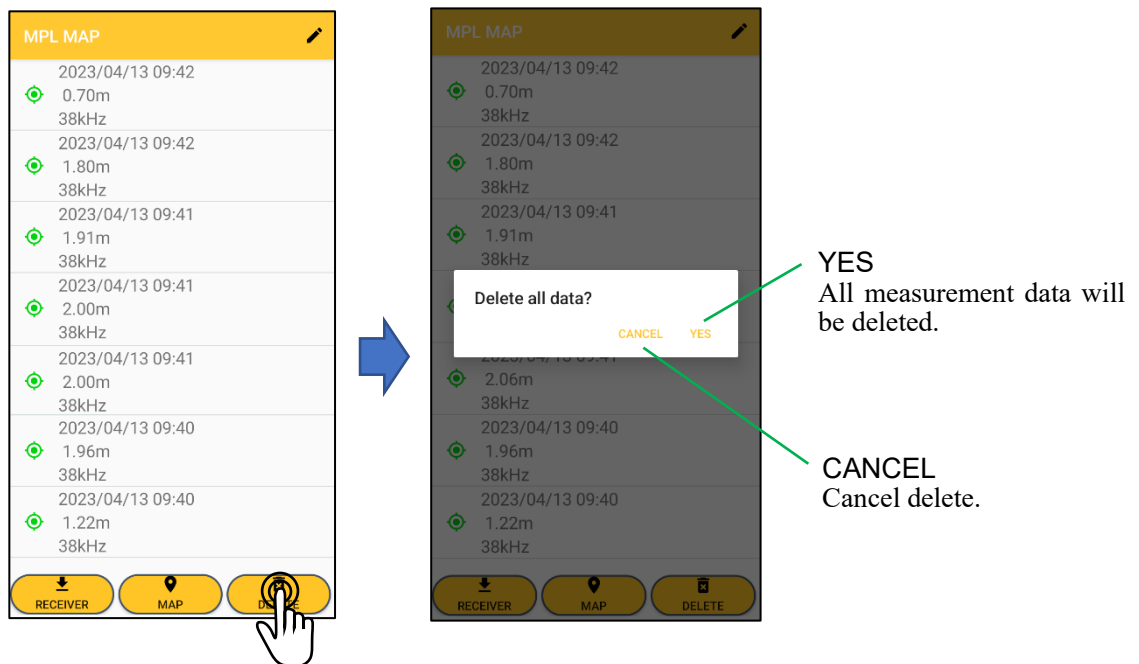
f) Data deletion during measurement

i) Deleting individual entries

Swipe left on the measurement data you want to delete.

YES
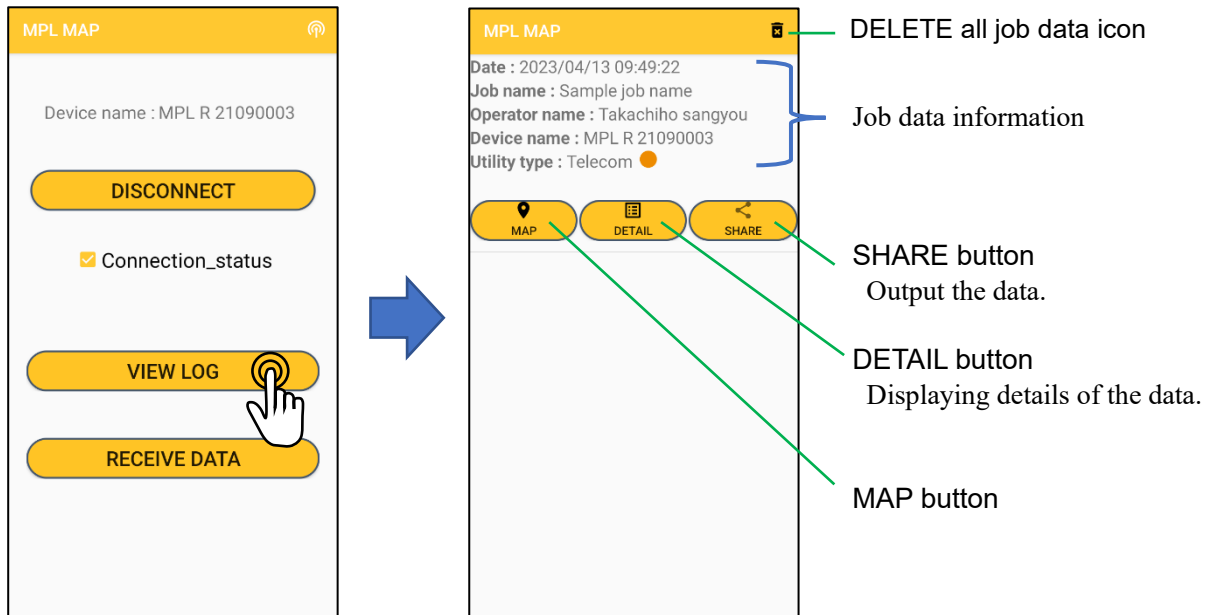The selected measurement data will be deleted.

CANCEL
Cancel delete.

ii) Deleting all data

Tap DELETE button at the bottom right of the screen.

YES
All measurement data will be deleted.

CANCEL
Cancel delete.

NOTE
Deleting data cannot be undone. Please check carefully before deleting.

5-4. Viewing, deleting, and outputting job data

Tap the VIEW LOG button on the main screen.

DELETE all job data icon

Job data information

SHARE button
Output the data.

DETAIL button
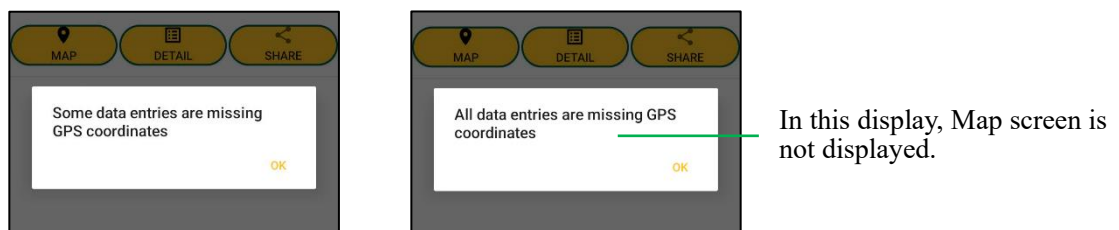Displaying details of the data.

MAP button

a) Job data map display

Tap MAP button to display the saved measurement data on the map.
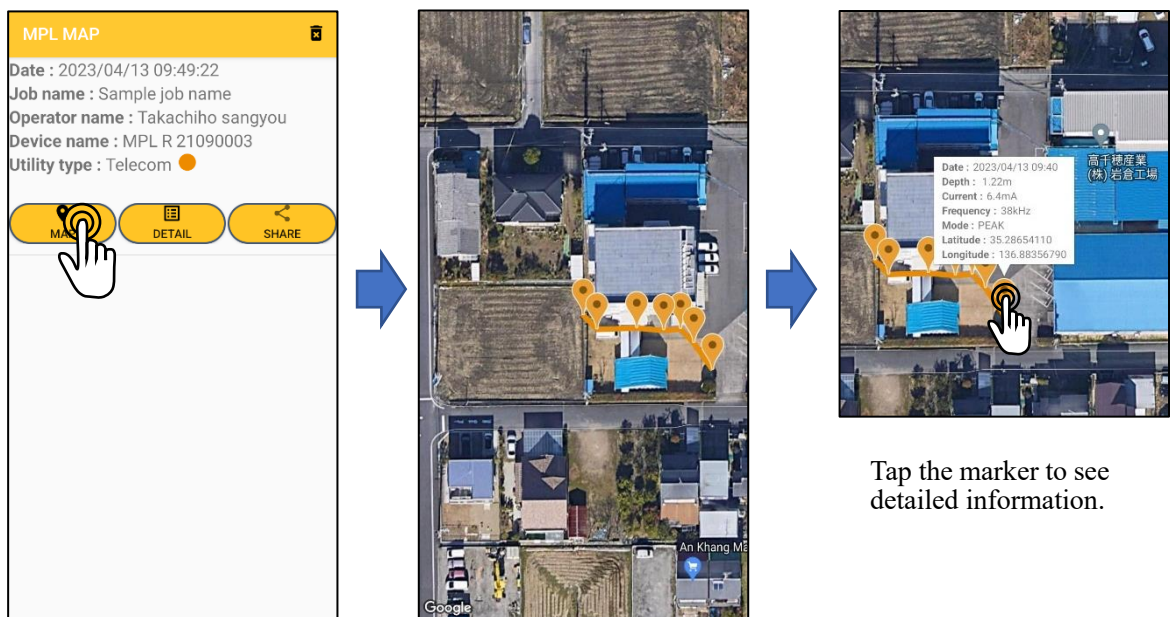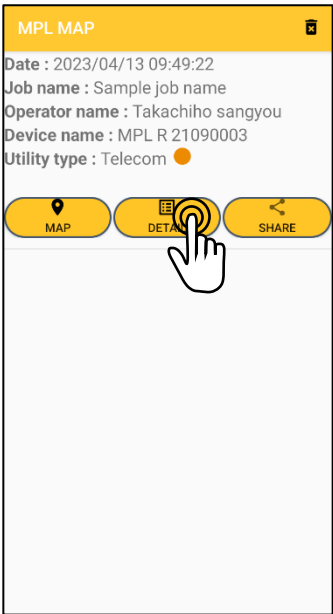

Tap the marker to see detailed information.

When there is measurement data without GPS data, a dialog like the one below will be displayed.

In this display, Map screen is not displayed.

b) Detailed display of Job data

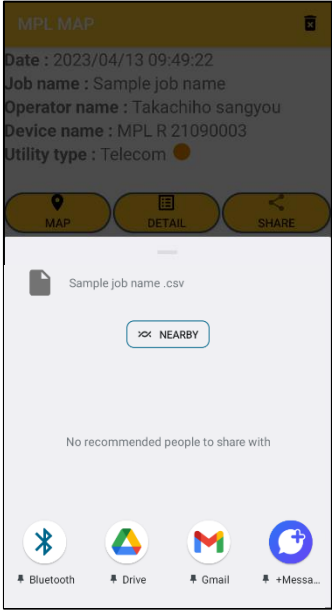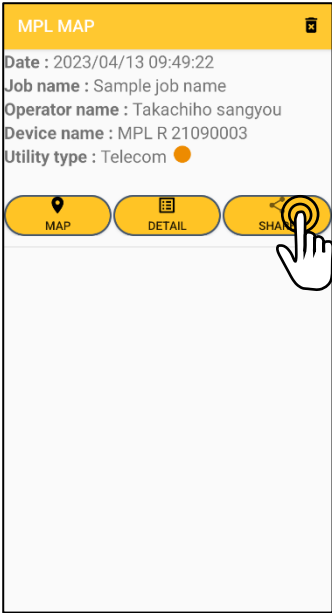Tap DETAIL button. Details of each saved measurement data are displayed.

c) Job data output

Tap SHARE button. A list of available apps to export Job data will be displayed.

Select the app you want to use, and the file will be output in CSV format.

d) Deleting job data

> **NOTE**
> **Deleting data cannot be undone. Please check carefully before deleting.**
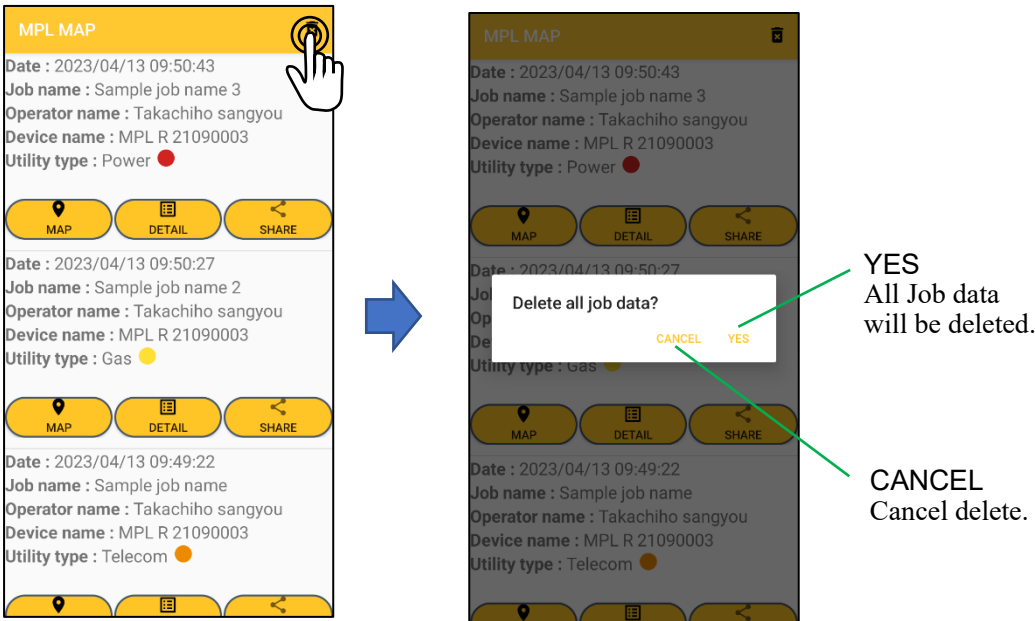
(i) Deleting entries individually

Tap and hold the measurement data you want to delete until the menu is displayed.
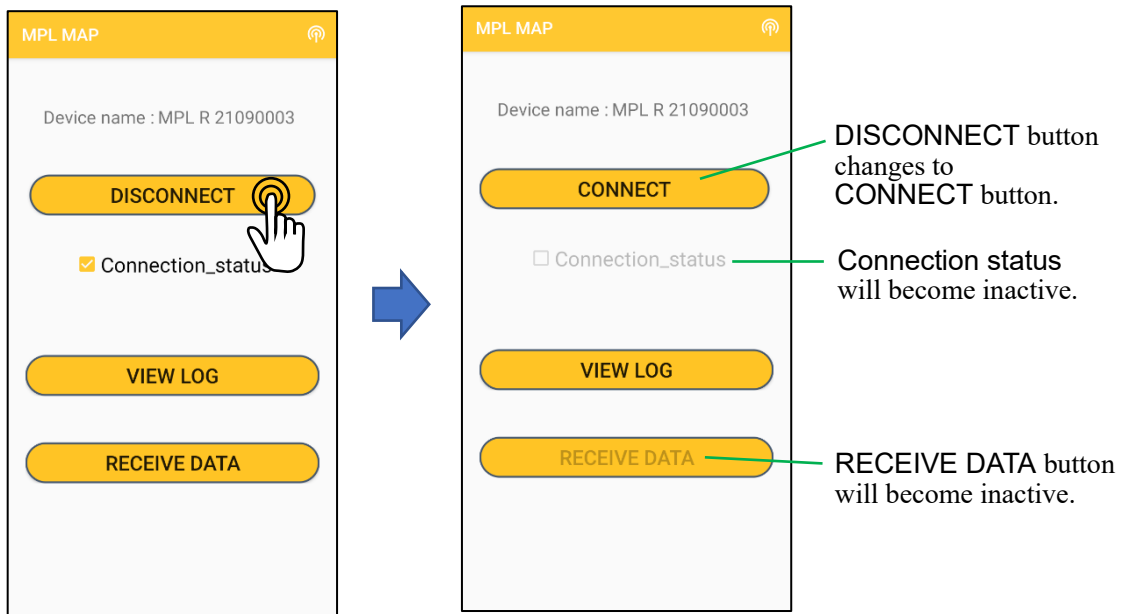Tap Delete on the menu.

YES
The selected Job data will be deleted.

CANCEL
Cancel delete.
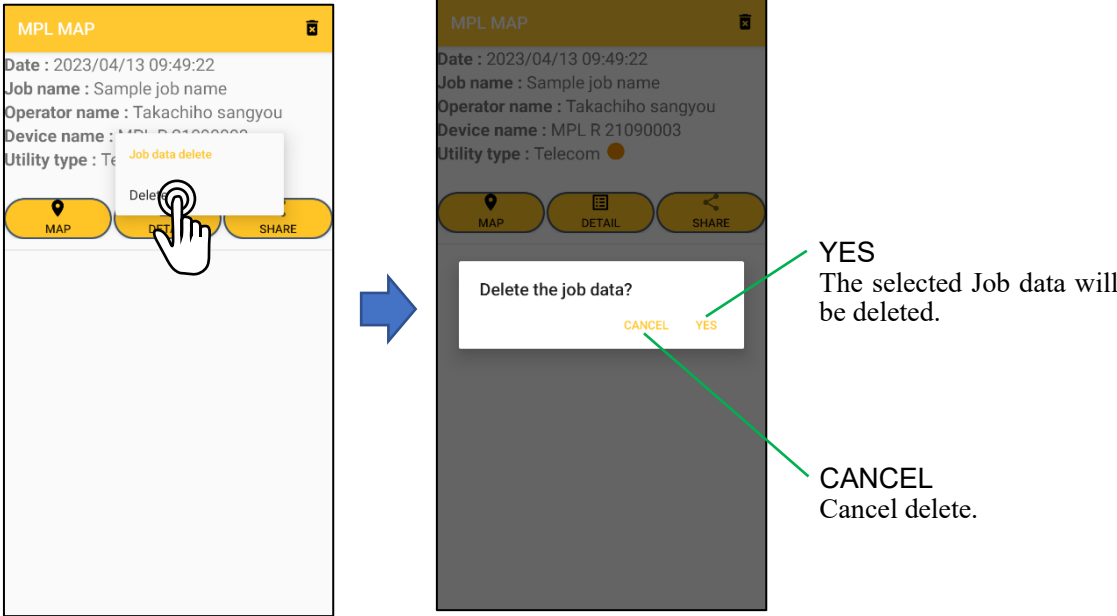
(ii) Deleting all job data

Tap DELETE all job data icon.

YES
All Job data will be deleted.

CANCEL
Cancel delete.

5-5. Disconnecting / reconnecting with receiver
   a) Disconnecting communication with receiver

Tap DISCONNECT button.

DISCONNECT button changes to CONNECT button.

Connection status will become inactive.

RECEIVE DATA button will become inactive.

b) Reconnecting communication with receiver

Tap CONNECT button.
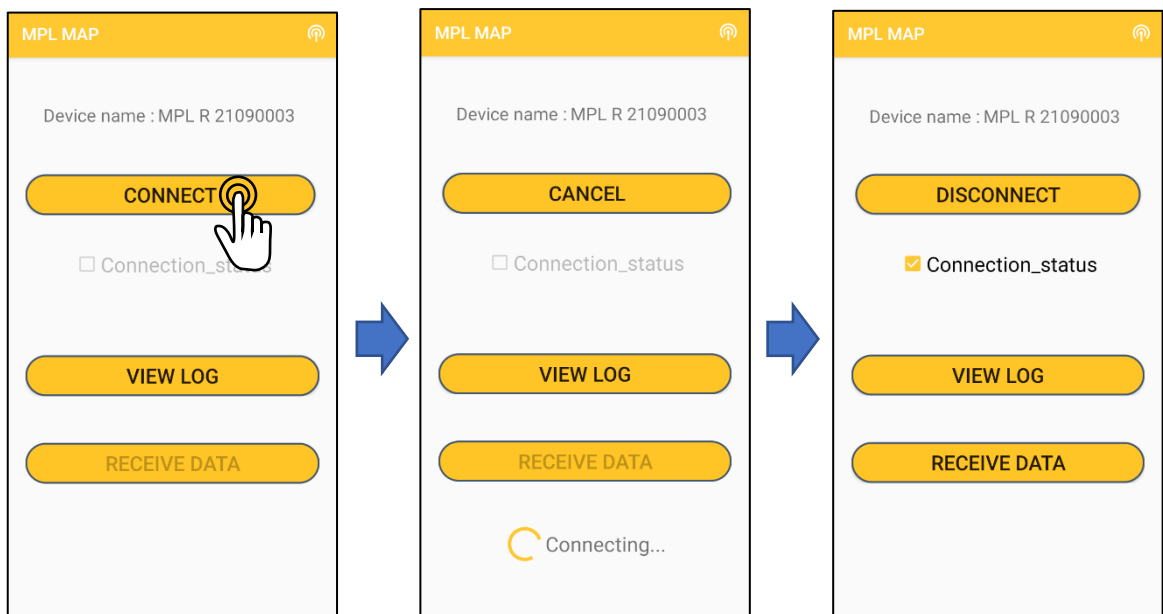
While connecting, the message "Connecting…" is displayed at the bottom of the screen.
If you want to cancel the connection, tap CANCEL button.

When reconnecting communication with receiver,
   - CONNECT button changes to DISCONNECT button.
   - Connection status becomes active and adds a check mark.
   - RECEIVE DATA button becomes active.

5-6. Receiving log data

Save the depth measurement results in the receiver and then you can receive all at once by using MPL MAP.

> **NOTE**
> **Log data does not include GPS data. Therefore, the app cannot display markings on the map.**

i) Depth measurement with the receiver. Press $\boxed{\text{LOG}}$ button when the depth result is displayed to save the depth log data in the receiver. Up to 400 log entries can be saved.

ii) Follow the procedure shown in 5-3 a) to connect the receiver and smartphone.
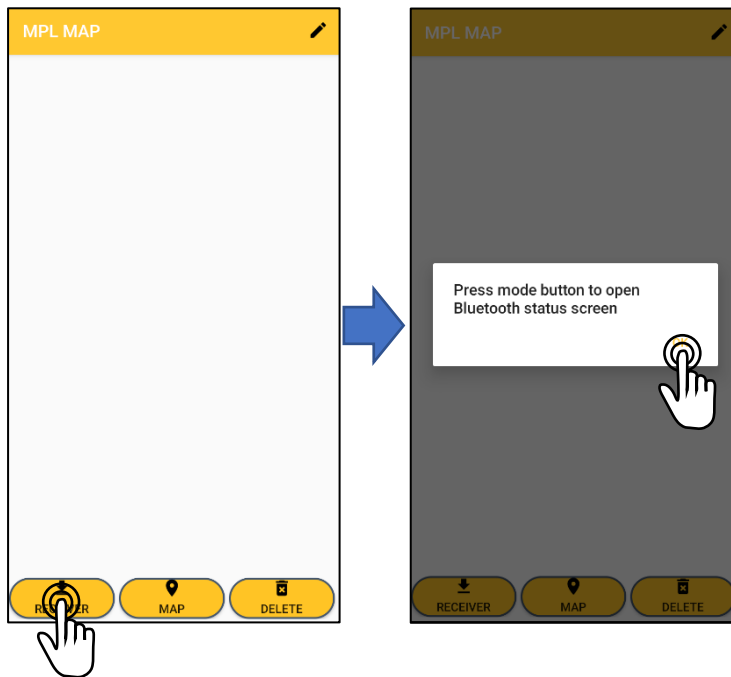
iii) Download the log data to your smartphone.

   a) Press $\boxed{\text{MODE}}$ button on the position measurement screen.

   b) BLE ON is displayed when connected to a smartphone.

c) Tap RECEIVER button.

Tap "OK".

Error message explanation

"Bluetooth status screen is not displayed"
The receiver is not on the "BLE ON" screen.

"No log data exists"
No log data.

d) Receipt of log data will start.

The message **"Receiving..."** is displayed during reception.

When reception is successfully completed, the message **"Download complete"** is displayed.

The icon changes because there is no GPS data in the log data.

Tap CANCEL to stop receiving log data.
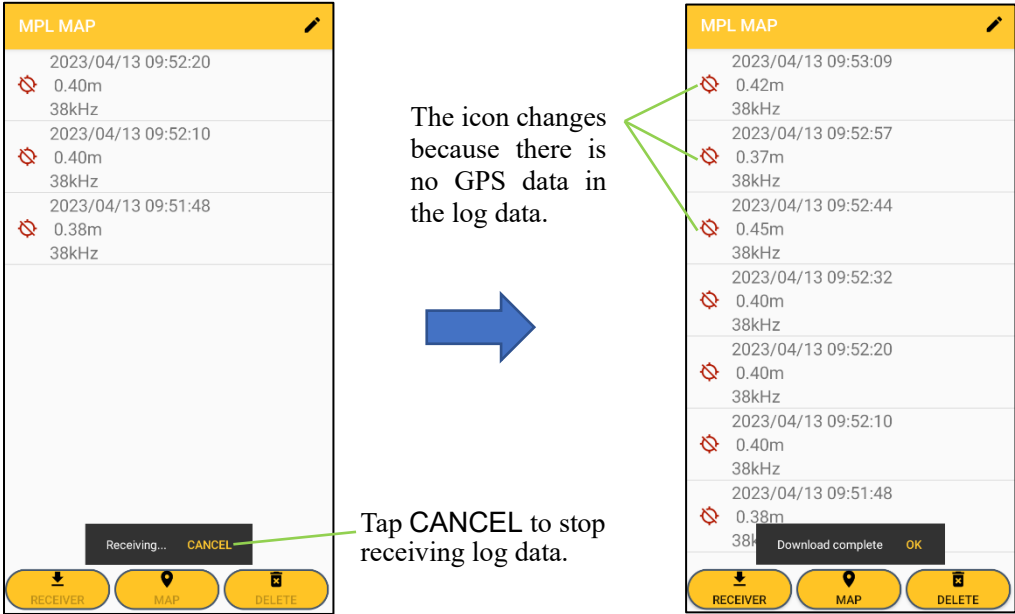
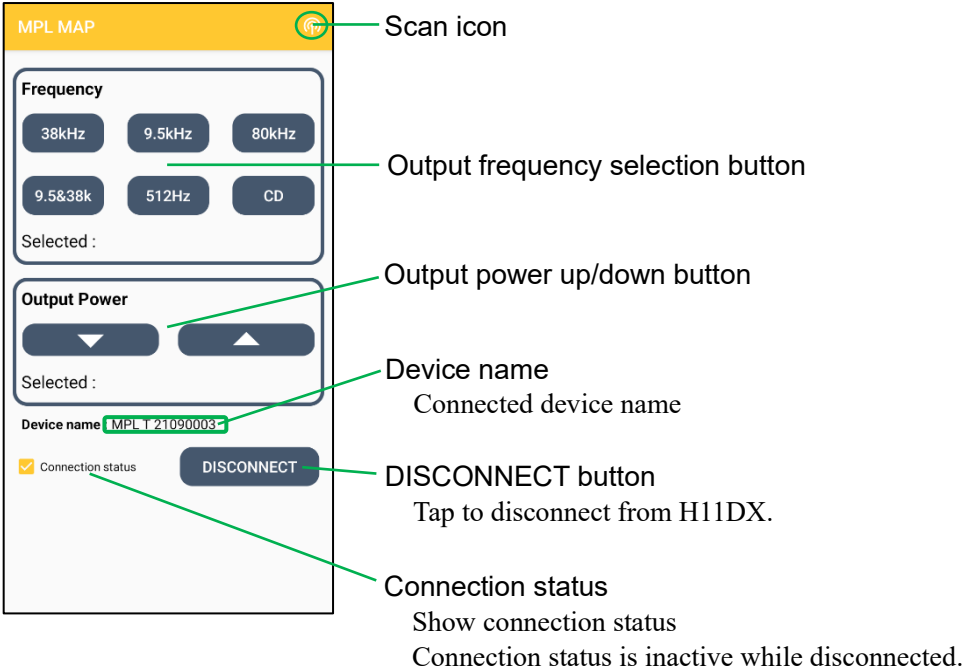e) Tap or swipe right on the measurement data to display details.

Details of the measurement data are displayed.


Swipe or Tap
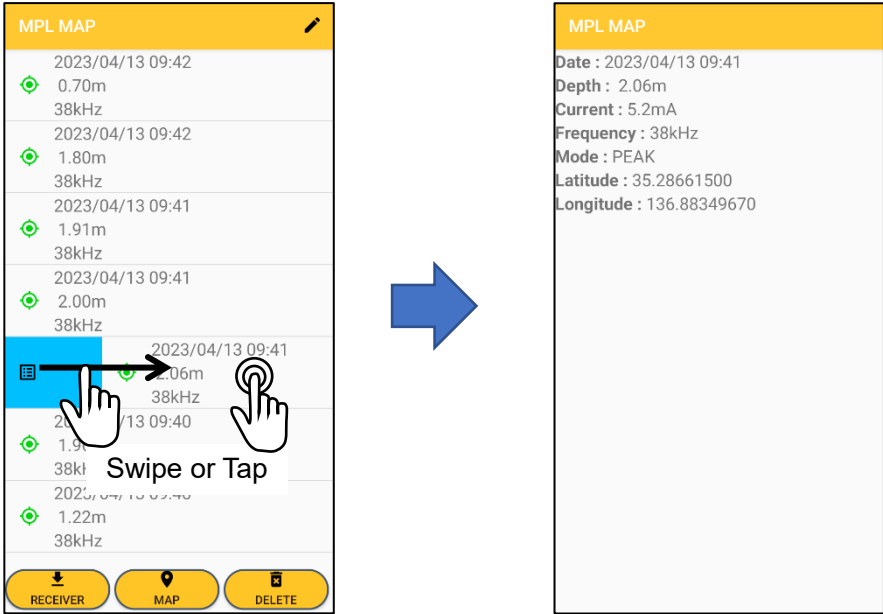
For other operations, please see 5-3. and 5-4.

6. Remote control of transmitter

6-1. Description of the main screen

Scan icon

Output frequency selection button

Output power up/down button

Device name
Connected device name

DISCONNECT button
Tap to disconnect from H11DX.

Connection status
Show connection status
Connection status is inactive while disconnected.

6-2. Pairing with transmitter

a) Tap Scan icon.

b) Tap "MPL T xxxxxxxx" from the device list.

c) When pairing to the selected device, the screen below will appear.
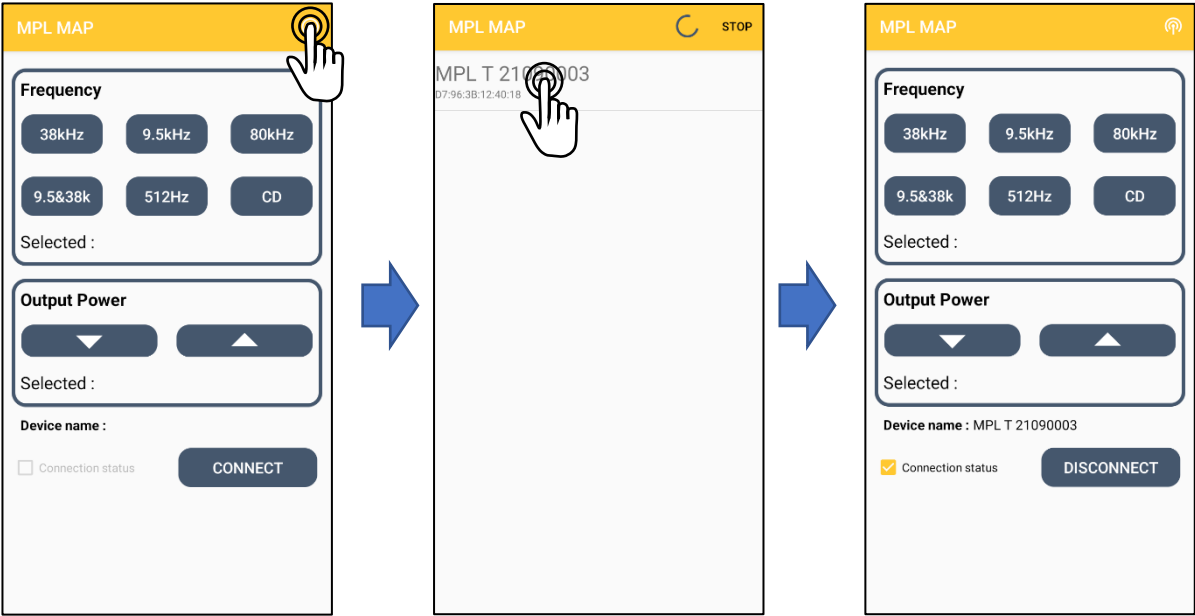
After initial pairing is complete, the app will automatically connect to the last connected device name, so there is no need to scan again. Scan only if you change transmitters.

If you cannot connect, check that the power of the transmitter is ON.
Also, if the transmitter is far away or there are obstacles, the Bluetooth signal may not reach the transmitter.
Move closer to the transmitter and try reconnecting.

6-3. Remote control of transmitter

a) Selection of output frequency

Tap the frequency button you want to use.

The selected frequency button changes color.
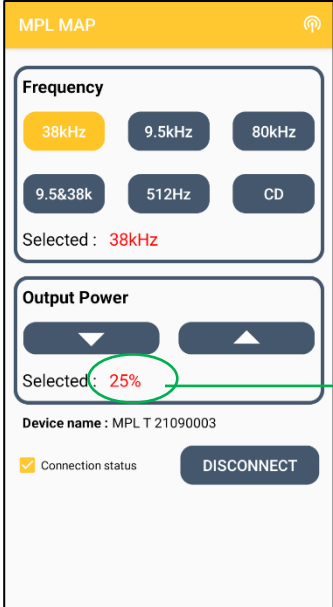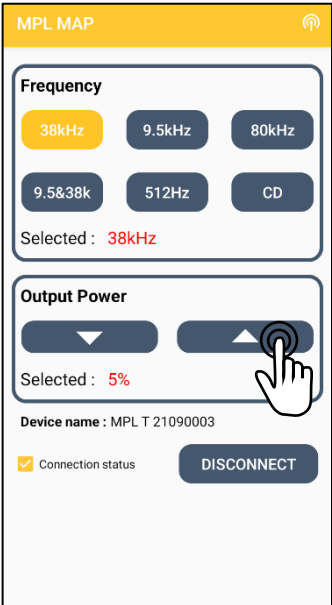Displays the status of the transmitter.
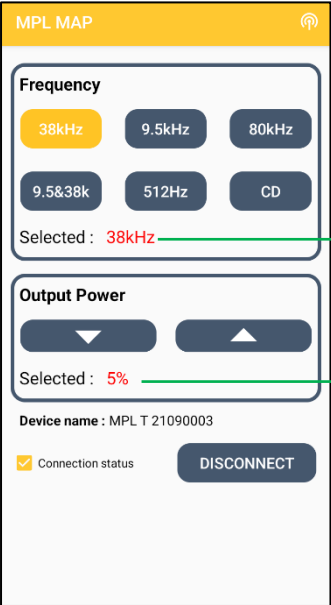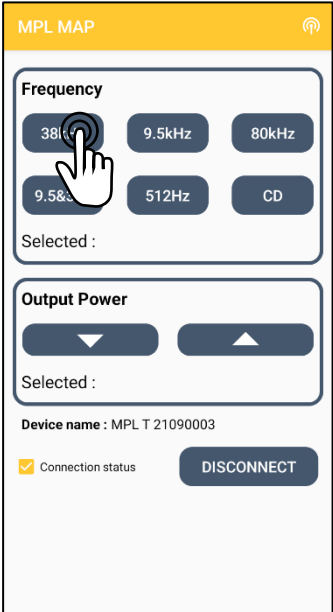
Frequency of signal output

Level of signal output

b) Output power up/down

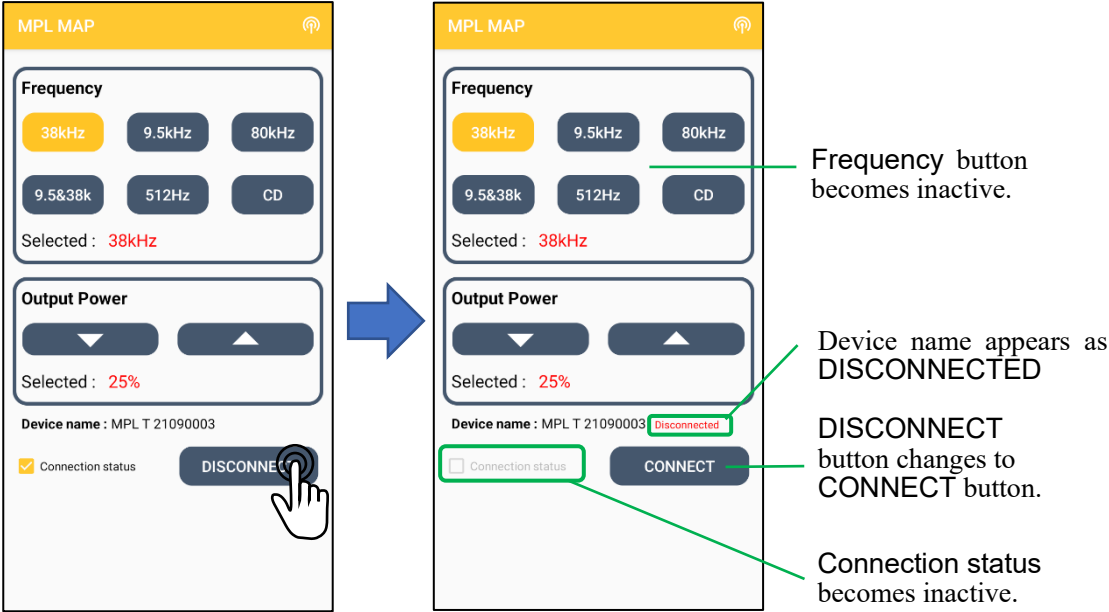Tap ▼ button to decrease the output, and ▲ button to increases it.

Display the latest output status of the transmitter.

Level of signal output

c) Disconnect communication with transmitter

Tap DISCONNECT button.

Frequency button becomes inactive.

Device name appears as DISCONNECTED

DISCONNECT button changes to CONNECT button.

Connection status becomes inactive.

This screen will also be displayed when the connection is disconnected due to being outside the communication range, etc.

d) Reconnect communication with transmitter

Tap CONNECT button.

Frequency button becomes active.

Connection status becomes active.
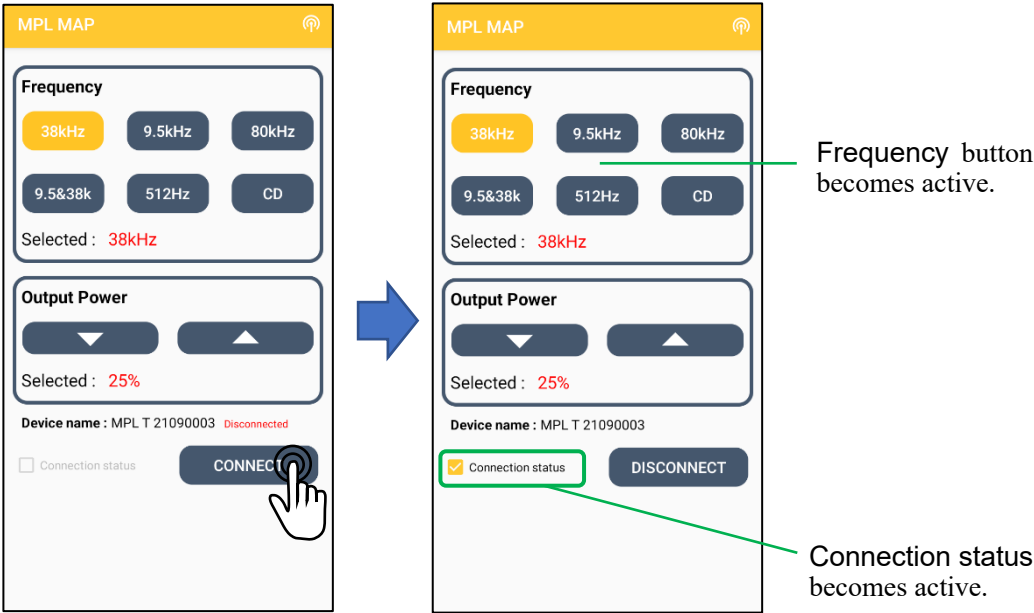
Dealer Contact :

www.takachiho-sc.com