TOSHIBA

Wave Tool Advance
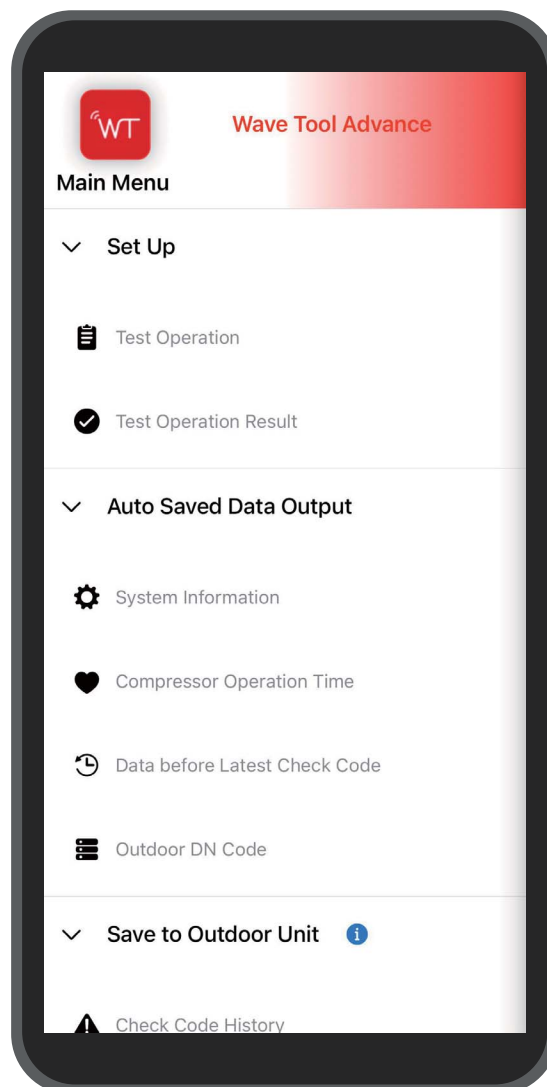## Smartphone Application

Table of Contents

1   Terms of Use

About Application

- This "Wave Tool Advance" is an application software for the Android / iOS smartphone to assist installation and maintenance of the compatible air conditioning equipment.
- This application enables checks of some of the system and data and test operations of the compatible air conditioning equipment.
- For use of this application, the NFC (Near Field Communication) function of smartphone is necessary.
- Please check the information about the compatible air conditioning equipment in the Applicable Model and smartphone in the Compatible Terminal in 2-2.Installing the Application. In this regard, however, Carrier Japan Corporation does not warrant that this application works properly in all terminals even if the terminal is designated as the compatible smartphone.

License Agreement

IMPORTANT: Please read the terms and conditions of this agreement (hereinafter called as the "Agreement") carefully before using "Wave Tool Advance" (hereinafter called as the "Software"). If a user do not agree to these terms and conditions, the user shall not download, install nor use the Software. By downloading, installing, or using the whole or a part of the Software, the user is deemed to have agreed all the terms and conditions of the Agreement.

1. Software
   For the purpose of the Agreement, the "Software" means a computer program of Wave Tool Advance, the information and data within the computer programs and update or upgrade version thereof, which are distributed along with the Agreement, and the Software can be used by the user after concluding the Agreement.

2. Intellectual Property Rights
   The Software is the proprietary property of Carrier Japan Corporation and Carrier Japan Corporation owns all intellectual property rights including copyrights in the Software except for the portion which the third parties own the rights. The Software is protected under applicable laws and international conventions regarding the copyright. The user shall pay serious attention to the intellectual property rights of the Software.

3. License of Use
   The user may install the Software into a compatible device (hereinafter called as a "Smartphone") and use the Software only for the purpose of doing test operations and maintenance of the compatible product of Carrier Japan Corporation (hereinafter called as "Purpose"). In addition, the user may use the information and data which is obtained by the use of this Software (hereinafter called as "Data") only for the Purpose. Except for the foregoing case, the user shall not install and use the Software.
   (2) The user shall be prepared for the compatible device at its own cost and responsibility and be responsible for any internet provider fees, telecommunications fees, connection fees, or other fees required for download, install and use the Software.

4. Prohibited Matters
   The user shall use the Software in the environment where the Software can be connected. If the Software version is not the latest version, the user shall update the Software to its latest version. If the Software version is not the latest version, the Software may not be displayed properly.
   (2) The user shall be responsible for telecommunications fees required for download, install, update, other use of the Software.
   (3) Behavior or display of the Software may differ depending on the user's Smartphone in use. Even a compatible Smartphone does not guarantee proper operation of the Software. If the user updates the OS version of a Smartphone, the Software may be unavailable. In no event shall Carrier Japan Corporation be responsible for additional operation or use of the Software through the other communication environment.
   (4) In no event shall Carrier Japan Corporation be responsible for bug fixes, other modifications, or improvement in the Software.

(5) The user shall not reverse engineer, decompile, disassemble, or modify the Software, nor copy, sell, or transfer the Software in whole or in part without permission.

(6) The user shall not provide the Software as an environment for the use by plural people through internal networks or the internet.

(7) The user shall not distribute, transfer, rent, lease, or sell to anyone the Software or the right to use the Software, nor shall it grant to anyone a sublicense for the use of the Software.

(8) The user shall not use the Software for a criminal act or an act that is, or is likely, in violation of laws and ordinances.

(9) The user shall not use the Software for any act that infringes, or likely to infringe, property rights including the intellectual property rights, privacy, or other rights or interests of any third party including Carrier Japan Corporation.

(10) The user shall collect and use personal data, which means information about a living individual which can identify the specific individual by name, date of birth or other description contained in such information (including such information as will allow easy reference to other information and will thereby enable the identification of the specific individual) (hereinafter called as "Personal data"), which is obtained by the use of this Software, only for the Purpose and shall not divulge or disclose the Personal data to any third party(ies).

(11) In regard to the test operation function of the Software, the user shall decide to use the test operation function at the user's own responsibility, and shall obtain prior approval of the owner or the administrator of a building as necessary. If you want to disable the test operation function, perform the operation(s) as described in the Service Manual for outdoor units.

(12) Before starting a test operation, the user shall confirm the situation of the building and the people inside, and shall pay serious attention to the situation so that any accident or injury would never happen. When the user knows that there are people inside the building, the user shall let them know in advance that an air conditioning equipment will operate.

(13) The user shall confirm that the Smartphone has sufficient battery power when using the Software.

(14) It is recommended to activate an auto-lock function of the Smartphone to prevent a malfunction or incorrect operation.

(15) The user shall confirm that the air conditioning equipment is powered on when using the Software. Some functions of the Software can work without power supply to the air conditioning equipment.

(16) Communication between the Smartphone and the air conditioning equipment may not work well by simply touching the Smartphone to the outdoor unit. In such case, the user can find the "TOUCH" mark as the location of the NFC tag device of the outdoor unit, and move the NFC antenna of the Smartphone around it (Refer to the user guide, 3. Overview for detail). It may take a while to get and display data, depending on the condition of the air conditioning equipment and the operating environment.

(17) The user shall not operate the Smartphone while the Smartphone communicates with the outdoor unit. For example, if a user tap the home button during communication, it may result in obtaining wrong data or erroneous judgement.

5. Disclaimer

The Software is provided "as is" without any warranty of any kind, either express or implied, including, but not limited to, the implied warranty of merchantability and the fitness for a particular purpose. Carrier Japan Corporation hereby disclaims any warranties relating to quality, performance and noninfringement of the third party rights of the software.

(2) In no event shall Carrier Japan Corporation be responsible for any conflicts between the user and any third party including customer of the user caused by or in connection with this Software.

(3) In no event shall Carrier Japan Corporation be responsible for the loss, divulgation and any other incident of the information and data within this Software.

6. Limitation of Liability

   To the maximum extent not prohibited by applicable law, Carrier Japan Corporation shall not be liable for any damages, losses, expenses or costs, if any, incurred by the user in connection with or as a result of the use of the Software.

7. Discontinuation of Use

   In a case of breach of any terms and conditions of this Agreement by the user, the user shall immediately uninstall and delete the Software and any Data.

   (2) Carrier Japan Corporation reserves the right to request the user to stop using the Software at any time upon notice to the user.

8. Changes of the Software and the Agreement

   Carrier Japan Corporation may make a change, modification or improvement to the Software at any time without prior notice to the user.

   (2) Carrier Japan Corporation may make a change or modification to the terms and conditions of this Agreement at any time without prior notice to the user. If the user uses the Software after such change or modification of the Agreement, the user shall be deemed agreed to the changed or modified Agreement.

   (3) Carrier Japan Corporation may discontinue to distributing the Software including the update and the upgrade version thereof at any time without prior notice to the user.

9. Export Control Compliance

   The user shall comply with the Foreign Exchange and Foreign Trade Law of Japan, the U.S. Export Control Laws, and the Export Control Laws and regulations of the country where the user is located and the other applicable Law, and if the user exports and uses this Software, the user shall take the prescribed procedure at its own responsibility and expense.

10. Governing Law

    This Agreement shall be governed and construed by the laws of Japan (excluding its rule of choice of laws).

11. Severability

    If any provisions of this Agreement shall be held to be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired.

    (2) The user shall use the document created in the Software at its own responsibility.

    (3) The user shall pay serious attention to the intellectual property right of the Software owned by Carrier Japan Corporation and be responsibility for the confidentiality obligations of the technical or business information owned by Carrier Japan Corporation, which the user may have learned in the course of using the Software, to any third party.

    (4) The calculation results in the Software are reference values, Carrier Japan Corporation shall not guarantee the values.

2 Before the Use

2-1. Applicable Model

Wave Tool Advance is an application software for the Android / iOS smartphone.
If you install Wave Tool Advance application (WTA App.), you can get system capacity, instruct test operation, and save the test operation results and simple reports to Outdoor Unit (NFC tag) when installing or servicing.
Please check the information about compatible air conditioning equipment and smartphone from the following URL titled in blue as "Objective products list" and "Smartphone models & OS Version".

* WTA App. dose not support SMMS-e series. Please use the "SMMS Wave Tool" when using the SMMS-e series.

2-2. Installing the Application

If you want to use WTA App., please move to following URL (or QR Code) and download the smartphone application and User Guide.
We cannot use other than smartphones to install WTA App.

< Download & Support URL >
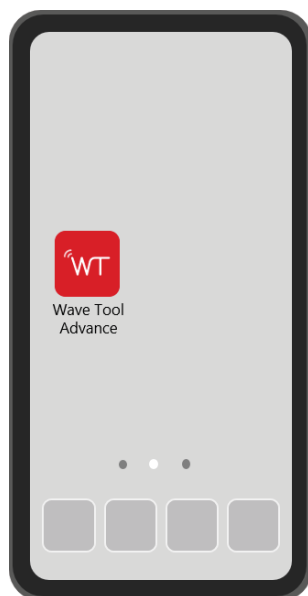https://www.toshiba-carrier.co.jp/global/appli/smms_wave_tool_advance/index.htm

< Download & Support URL >

When installation of WTA App. is completed, the following icon will be displayed on the smartphone screen.

* Every picture such as an icon in this User Guide is for purpose of reference.
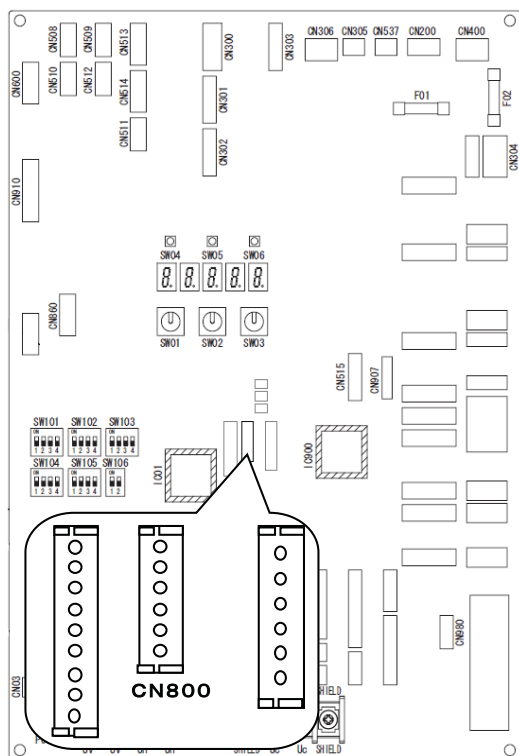 Therefore its shape may differ depending on the smartphone settings.

NOTE
There is possibility of communication charges from your service provider you download the application, even when the application cost itself is free.

## 2-3. Limitation when Using the CN800 Connector on an Outdoor Interface P.C. Board

Using the Wave Tool Advance application with a device connected to the CN800 connector on the outdoor unit interface P.C. board may cause both the CN800 connector and Wave Tool Advance application not to operate normally.

When operation above does not work normally, stop using either of the CN800 connector or the Wave Tool Advance application.
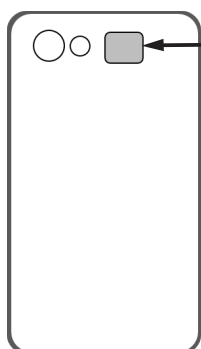
3 Overview

3-1. Component
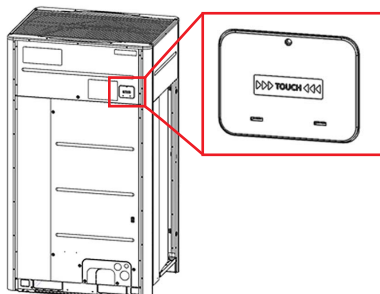
NFC tag on the Outdoor Unit
The NFC tag is built in behind the outdoor unit cover as shown in the left.
A TOUCH mark is an antenna position inside the NFC tag.

NFC Antenna Position on the Smartphone
The NFC antenna position differs depending on the smartphone.
For details, refer to the user manual of your smartphone.
Set the NFC function of the smartphone to ON before use.
The example depicted in the left describes the case of iPhones.
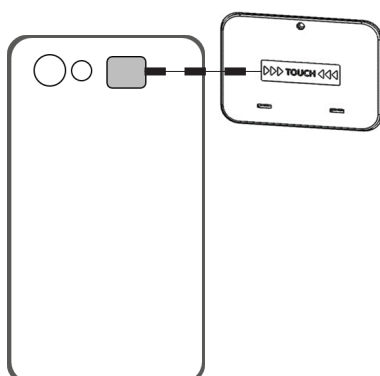
Notes on the Antenna Position
When WTA App. needs communication with the NFC tag, a pop-up that asks you to touch your smartphone to the NFC tag onto the outdoor unit is displayed.
If it is displayed, make sure that the NFC antenna on the smartphone is aligned with the TOUCH mark on the NFC tag.

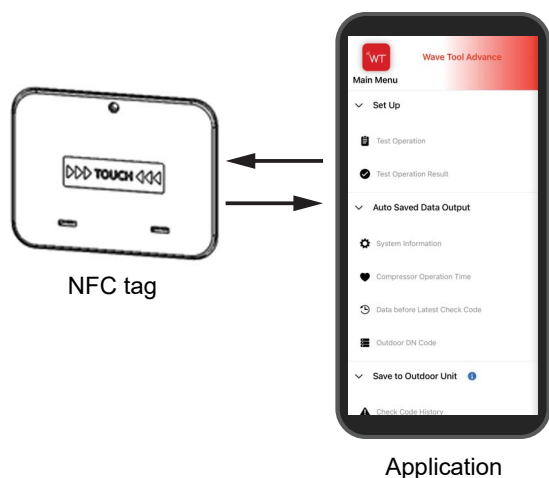## 3-2. Wave Tool Advance System

NFC tag

Application

For iPhone

For Android

Wave Tool Advance System

The Wave Tool Advance requires a compatible smartphone with WTA App. installed and the NFC tag installed in the outdoor unit.

You can select the menu in this application to give a test operation instruction to the NFC tag, acquire system information, and acquire refrigerant cycle data before the check code occurs.
The obtained information is automatically saved on the smartphone.
It can also be converted into a CSV file available as various report functions.
The functions of the application are explained in Section 3-3.

Also, you can save the GPS location obtained by the smartphone with the site name in the NFC tag on the outdoor unit.
The site name will be reflected in the save folder name in the smartphone.
This enables you to manage the site based on the site name and GPS information.
Saving the site name allows anyone to share the same site management information anytime by touching the smartphone to the NFC tag in case a trouble occurs.

When the communication is successful, the pop-up screen as shown in the left figure is displayed, vibration of the smartphone constantly operates, and an alarm sound is occurred.

NOTE

- Set the vibration and alarm sound functions of your smartphone to ON.
- Some smartphones may not operate even if the vibration and alarm sound functions of the smartphones are set to ON.
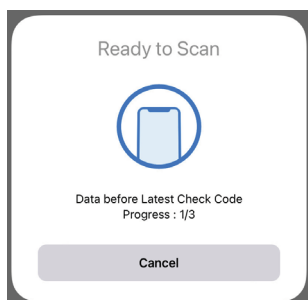
System configuration diagram

* 1:The information to be handled in Wave Tool Advance is saved.
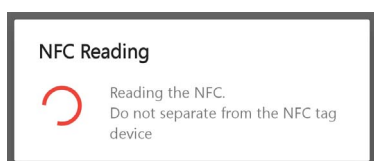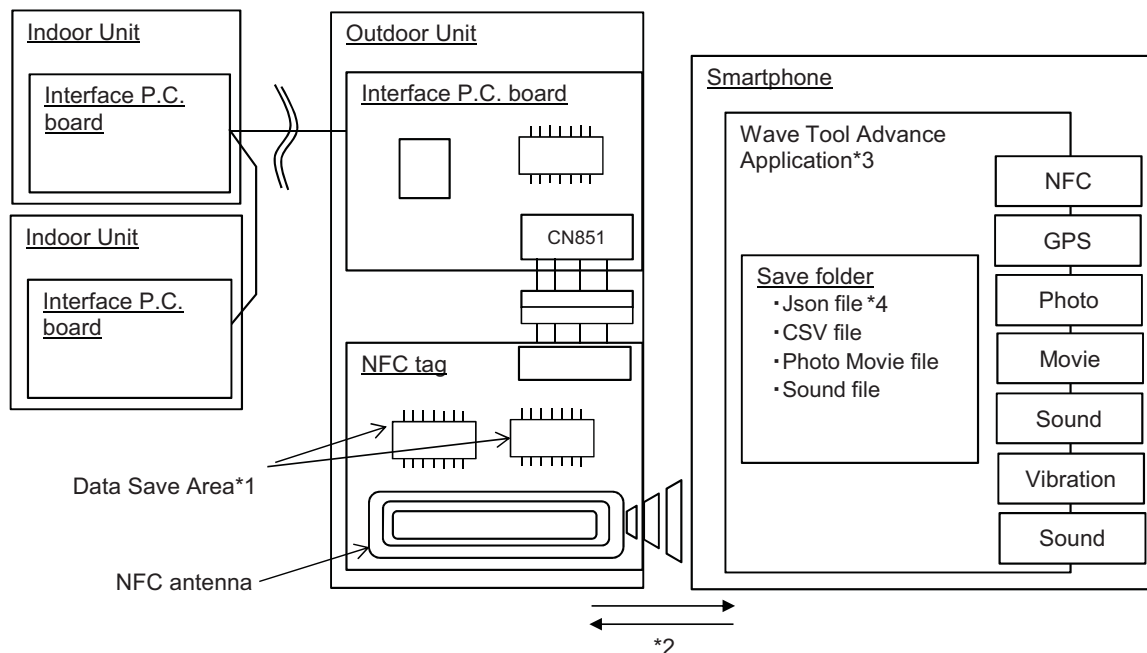* 2:Select the menu in the Wave Tool Advance application and touch your smartphone to the NFC tag of an outdoor unit to exchange the data.
* 3:The Wave Tool Advance application creates a dedicated save folder. (Refer to 3-4.Storage area in the Smartphone) NFC communication, GPS, photos, movie, voice, vibration, or sound in the Wave Tool Advance application uses the smartphone functions.
* 4:WTA App. obtains data from an outdoor unit, and automatically saves it as a Json file in the smartphone. Find the file by the Search function in the Main Menu, and tap it to replay its data in a similar display as when obtained.

NOTE

- In a system with multiple outdoor units connected together, each outdoor unit that is touched displays / saves individual data, but the data will not be shared among the outdoor units.
- For example, Check Code History displays data happened in with respect to the outdoor unit that is touched.
- Therefore, to confirm the entire system, touch every outdoor unit.
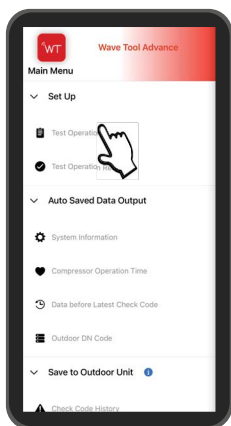

3-3. Functions

Start of Wave Tool Advance
Tap the Wave Tool Advance icon to start it.
  *The icon image may differ depending on the smartphone settings.
   Tap the icon to display Main Menu.

Functions of Wave Tool Advance
WTA App. has seven major functions as described below.
Functions of Wave Tool Advance allow you to acquire each data without the outdoor unit panel opened.

• Test Operation Function	:Setup function used during the test operation.
• Auto Saved Data Output	:Read out the information automatically saved in an outdoor unit.
• Save Data to Outdoor Unit	:Enable other workers to read and share information anytime on site.Some functions are available while an air conditioning unit is not powered on.
• Capture	:Acquire operation data at the time when you touch your smartphone to an outdoor unit or you set a timer.
• Simple Report	:Use the functions installed in the smartphone to create simple reports.
• Data Management	:Search and edit the data saved in your smartphone.
• Help	:Show help functions of the Wave Tool Advance NFC system settings, NFC tag replacement methods, and Abbreviations.

For details about each function, refer to the table below.

If touching a smartphone to an outdoor unit for the first time, a site name will be saved to the outdoor unit. In the smartphone, WTA App. saves files with categorizing by site names.

Follow the steps below, and use WTA after saving a site name to an outdoor unit:
(1) Touch a smartphone to the outdoor unit.
    Then a screen will be displayed to confirm a site name.
     Here, we cannot edit the site name.
(2) Tap the Save button and touch the smartphone to the outdoor unit.
    Then the site name will be saved in the outdoor unit.
     Here, the site name in the outdoor unit also cannot be modified.
(3) After the site name saved successfully, we can enjoy WTA.

NOTE

For each site, WTA App. will create a folder with the site name in the smartphone, and saves files in the folder.
See 3-4.Storage area in the Smartphone for detail.
This screen will also be displayed when the NFC tag in an outdoor unit is replaced.
The site name will be created based on the date when a smartphone is touched to the NFC tag in an outdoor unit for the first time.

Table below shows each menu function.

	Name	Function	Detail
Test operation	Test Operation	Execute test operation mode through Wave Tool Advance. You can select an operation mode and a unit number and set a saving timer for test operation result.	4-1.
	Test Operation Result	Check test operation result with refrigerant cycle data.	4-2.
Auto Saved Data Output	System Info.	Display system info. of the touched outdoor unit. System info. : Unit connection Number, Capacity, Dip Switch setting.	4-3.
	Compressor Operation Time	Display compressor operation time per 10Hz. You can check total system operation time and you can use it as a guide for total operation time and operation load.	4-4.
	Data before Latest Check Code	Enable you to check and analyze detail refrigerant cycle data before check code detection.	4-5.
	Outdoor DN Code	Display the list of DN code values that have been set to an outdoor unit. After setting, confirm whether the DN code values have been correctly set all at once.	4-6.

|	Name	Function	Detail
Save to Outdoor Unit	Check Code History	Up to 10 latest check codes are saved with internal estimated timer. If you tap a check code, check code explanation is displayed.	4-7.
	Notice Code History	Up to 10 latest notice codes are saved with internal estimated timer. If you tap a notice code, notice code explanation is displayed.	4-8.
	Refrigerant Amount History	Enable you to save the data of additional refrigerant (or removed refrigerant) in the NFC tag. Saving the data of refrigerant amount will help you for periodic check or troubleshooting.	4-9.
	Replacement Parts History	Enable you to save the replaced parts with the date. The application screen displays a list of typical replacement parts, so you can select a replacement part and save it to the NFC tag.	4-10.
	GPS Location	Link with the location information of the GPS module in your smartphone. You can use this function for site management by saving the GPS Location. *A GPS Location can be manually input.	4-11.
Capture	Cycle Data	Acquire the refrigeration cycle data at the time when an outdoor unit is touched.	4-12.
	Timer Save of Cycle Data	Automatically save the refrigeration cycle data at the time set in the timer for acquisition of the cycle data. The timer can be set up to 2 days (48 hours in energizing time). You can acquire the refrigerant cycle data by touching your smartphone to an outdoor unit.	4-13.
Simple Report	Photo Movie Report	Create a simple report using the movie function of your smartphone.	4-14.
	Sound Report	Create a simple report using the sound function of your smartphone.	4-15.
	QR Code Report	Read the information in the QR Code on our product using the QR Code reader function of your smartphone.	4-16.

	Name	Function	Detail
Data Management	Search	Search files and data in the smartphone created with Wave Tool Advance. If you select a Json file, you can send an e-mail.	4-17.
	Memory Dump of Outdoor Unit	Output and save all the data saved in the NFC tag of an outdoor unit to the smartphone. You can save the items automatically saved in the NFC tag and information entered by the user into your smartphone.	4-18.
	CSV File Conversion	Convert a Json file saved in the smartphone into a CSV file so that you can check it on your P.C. Use this function to send the file to your P.C.	4-19.
	Mail All Data about Site	Compress data saved in the smartphone into a file and attach it to an e-mail.	4-20.
Help	License Agreement	Provide a license agreement for using the Wave Tool Advance application.	5-1.
	Abbreviations	Explain terms in the Wave Tool Advance application.	5-2.
	Check Code List	Display detail information such as Determining method or Check Contents for various check codes.	5-3.
	Notice Code List	Display detail information such as Determining method or Check Contents for various notice codes.	5-4.
	NFC Troubleshooting	Describe troubleshooting contents of mainly NFC communication.	5-5.
	NFC Tag Replacement Setup	Describe the setup method that you should perform after replacing the NFC tag.	5-6.
	NFC Communication Setting	Change NFC communication setting. This function is not usually used.	5-7.
	View Options	Change setting of language, unit and decimal separator in the display.	5-8.

Function execution screen

1 **Main Menu button**
If you tap this icon, the display returns to Main Menu.

2 **Title area**
Show a function name.
This title is a typical example.

3 **Update button**
If you need latest information from an outdoor unit, tap this button.
NFC communication mode will start.

4 **Basic information area**
Display outdoor unit basic information.

5 **Basic information area pull up-down button**
If you do not need to display all information, tap this icon to pull up the screen.

6 **Display of each function**
The items of the selected function are displayed in this area after you touch your smartphone to the NFC tag.
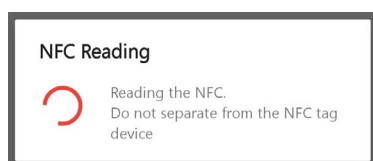
**Basic information display list**

Site Name	Show the Site name of the touched outdoor unit. The Site name is reflected to a folder name in the smartphone.
Model Name	Show the outdoor unit model name of the touched outdoor unit.
Serial No.	Show the outdoor unit serial number of the touched outdoor unit.
Unit No. / HP (Ton)	Unit No. is the outdoor unit location. HP (Ton) is outdoor unit capacity of the touched outdoor unit.
Start Priority	Show starting priority of the touched outdoor unit.
Defrost Group	Show defrost control group of the touched outdoor unit.
Line Address	Show the line address number of the touched outdoor unit.
Check Code	Show the check code of the touched outdoor unit.
Notice Code	Show the notice code of the touched outdoor unit.
Unit	Show a unit of the display value.

For iPhone
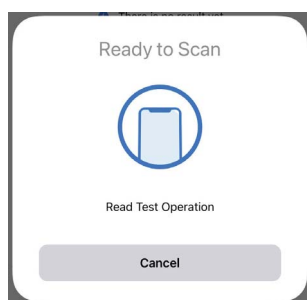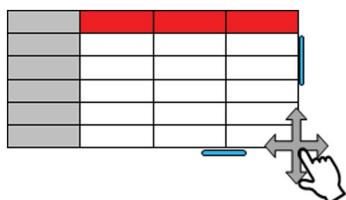
Other common display 1
Pop-up guidance
  A pop-up guidance will appear in each steps, follow the pop-up instruction to proceed.
   *This pop-up is a typical example

For Android

Other common display 2
You can display items that are not displayed on the screen by swiping across the screen.
You should note the display when checking the system in which multiple units are connected.

3-4.   Storage area in the Smartphone

The WTA application saves the data captured by touching the outdoor unit as a Json file in the smartphone device. Storage locations are categorized by site name, outdoor unit information, and function name, and Json file name is automatically generated from the communication time data and the outdoor unit designation (Header/Follower).

<u><Example></u>

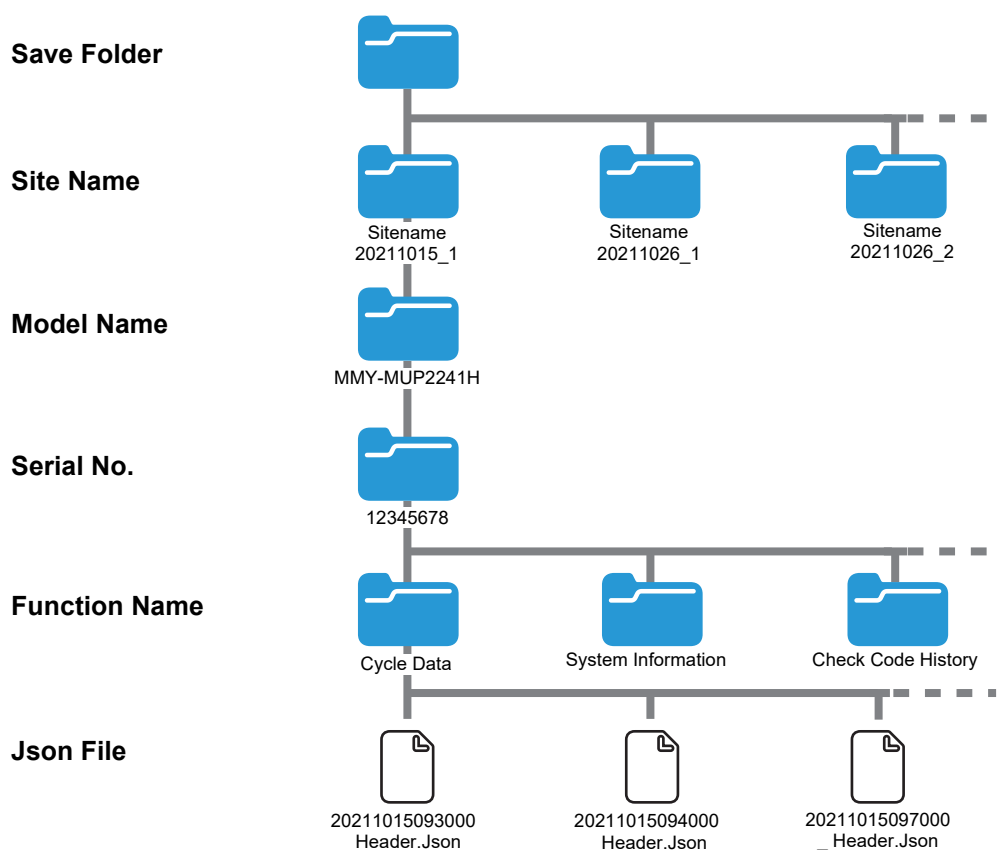|	
Site Name	: SiteName20211015_1
Model Name	: MMY-MUP2241H
Serial No.	: 12345678
Function Name	: Cycle Data
Outdoor Unit	: Header

<Save Folder Structure>

Save Folder	📁

Site Name	Sitename 20211015_1	Sitename 20211026_1	Sitename 20211026_2

Model Name — MMY-MUP2241H

Serial No. — 12345678

Function Name	Cycle Data	System Information	Check Code History

Json File	20211015093000 _Header.Json	20211015094000 _ Header.Json	20211015097000 _ Header.Json

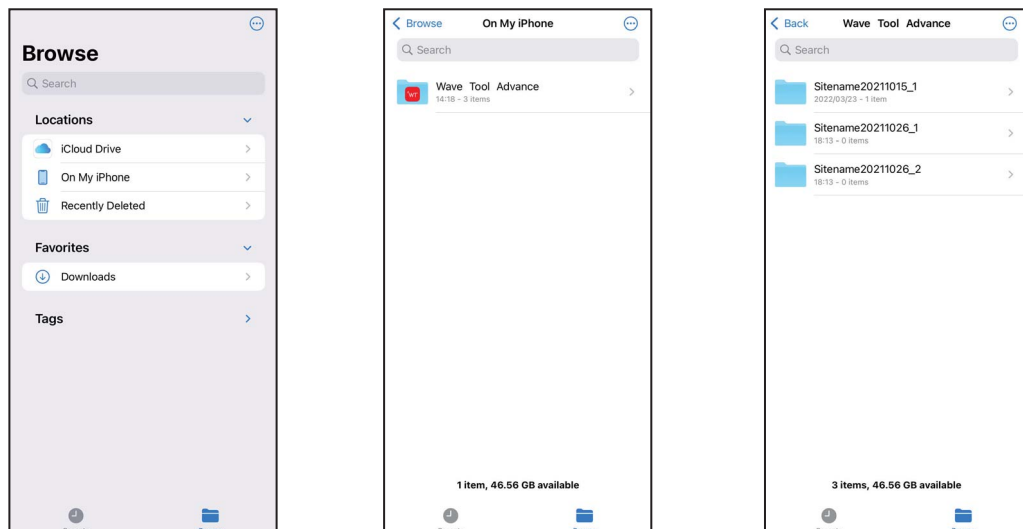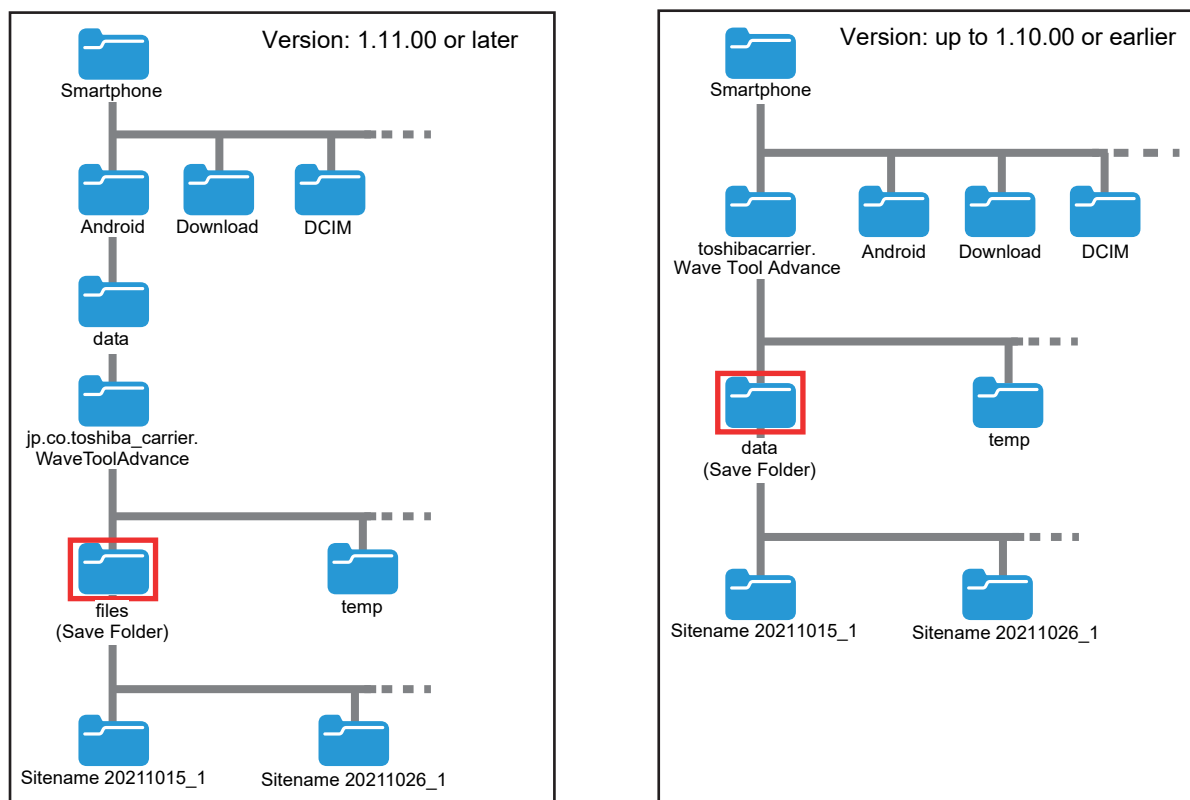## <For iPhone>

A folder named Wave Tool Advance is generated in your iPhone. This folder serves as site data saving folder.

<For Android>

A folder dedicated to the Wave Tool Advance application is created in your smartphone.
The location where the site data saving folder will be saved differs depending on the version of Android. About this, refer to the following figure.


NOTE

• Photo, movie, or sound data created in the Wave Tool Advance app function are principally saved only in the Wave Tool Advance dedicated folder, but you should note that the data may be saved in folders other than the Wave Tool Advance dedicated folder for some smartphones.
  Entering information able to identify the target outdoor unit to a folder name allows you to easily organize and manage data.

• When you upgrade the Android version from earlier than 1.11.00 to 1.11.00 or later, the location for the saving folder changes and a message may appear, prompting you to transfer the saving folder. In that case, follow the message to perform the folder transferring operation.

4 Detail Functions

4-1. Test Operation
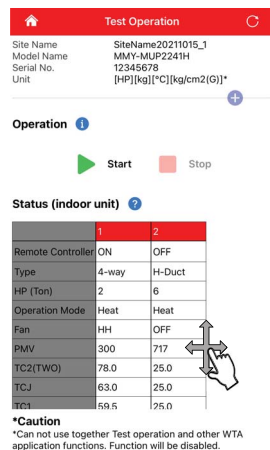
This function allows you to confirm the current operation, select each test operation mode, and operate the outdoor unit.
Also, you can set the time to record the cycle data during test operation.

1 From Main Menu screen, tap Test Operation and touch your smartphone to an outdoor unit.
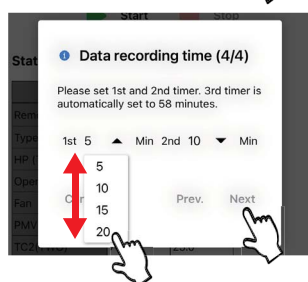
2 Operation Data of each indoor unit in the connected system is displayed on the screen.
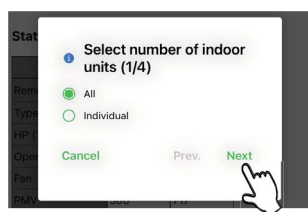
3 Tap the Start button to select the number of operating units and their operation mode.
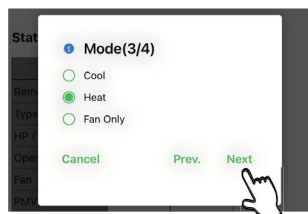
4 When finished selecting the number of operating unit and their operation mode, set the 1st and 2nd timings for saving the test operation data.

The 3rd timing is always saved in 58 minutes, before end of test operation.
The test operation time is up to 60 minutes.

5 When finished setting the number of operation unit, the operation mode, and the data saving, the Start button becomes available. Tap the Start button to start the test operation.

6 Tapping the Start button makes the Stop button available. To stop the system after finished confirming the test operation, tap the Stop button.

NOTE

- A test operation can be started from the WTA application before 48 hours have elapsed after the outdoor unit is turned on. After that period, the test operation function of the WTA application becomes disabled.
- The Timer Save of Cycle Data funtion cannot be used for a test operation.
- Please start another function after test operation stopped.
- Be sure to operate this function to the header outdoor unit.
  Operation of this function to the follower units becomes invalid.
- Even if the test operation stop has not instructed, the test operation automatically will stop after 60 minutes operation; however, the outdoor and indoor units keep operating.
- To return to an original operation after the test operation, see the Json file of the test operation instruction obtained.
---

4-2. Test Operation Result

This function allows you to acquire the test operation result at the time set in the test operation instructions.

1 From a Main Manu, Tap Test Operation Result and touch your smartphone an outdoor unit.

2 Operating states of the indoor units in the connected system is displayed on the screen.

* If some data cannot be acquired at once, the Get Data button will appear.
  Tap the Get Data button to acquire the data again.

3 Tap the Get Data button to follow the pop-up guidance and touch your smartphone the outdoor unit.

4 When finished acquiring data, the outdoor and indoor unit data is displayed.
Select either Outdoor Unit or Indoor Unit, and Time (e.g. 5 min later).

Once the selected item is activated, a red line appears at the lower part of the selected tab.
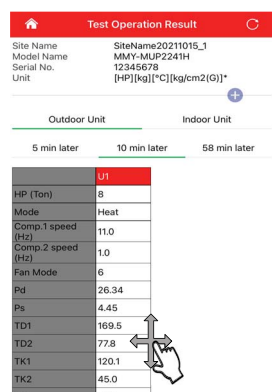
* Note that information may not be displayed on the display area.
  Swipe vertically or horizontally across the screen to display the information.
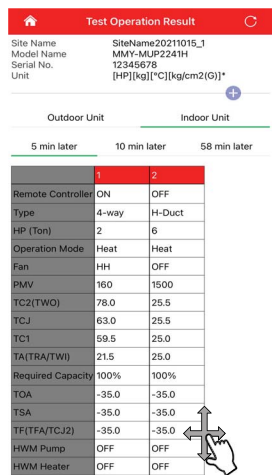
* Note that information may not be displayed on the display area.
  Swipe vertically or horizontally across the screen to display the information.

NOTE

To confirm whether a Check Code occurred or not, see 4-7.Check Code History.

4-3. System Information

System Information		
Site Name	SiteName20211015_1	
Model Name	MMY-MUP2241H	
Serial No.	12345678	
Unit No./HP(Ton)	Header/8HP	
Start Priority	15555	
Defrost Group	12121	
Line Address	1	
Check Code	-	
Notice Code	-	
Unit	[HP][kg][°C][kg/cm2(G)]*	

Unit Connection Number

Outdoor Unit	2
Indoor Unit	10

Outdoor Unit Capacity

	HP (Ton)
Total	8
U1:Header	8
U2:Follower1	0

Indoor Unit Type and Capacity

	Type	HP (Ton)
Total	-	8
1	4-way	2
2	H-Duct	6

Outdoor Unit Dip Switch Setting

	0:OFF; 1:ON
SW101	0000
SW102	0000
SW103	0010
SW104	0100
SW105	0011
SW106	10

This function displays system Information about the outdoor unit you touched.

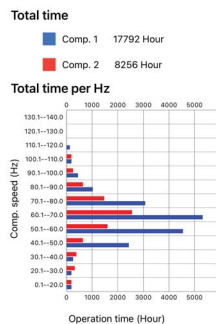**1** From Main Menu, tap System Info. and touch your smartphone to an outdoor unit.

2 Unit connection Number, Outdoor unit and Indoor unit Capacity, Indoor unit Type, and Outdoor Dip Switch setting are displayed on the screen.

NOTE

Touching the Header unit with your smartphone allows you to acquire much information as shown in the left figure, while touching Follower units limits available information.

4-4. Compressor Operation Time

This function indicates operation time of compressor(s) in several ways.
Please use this function as a guide for total operation time and operation load.

1 From Main Menu, tap Compressor Operation Time and touch your smartphone to an outdoor unit.

2 Total time and Operation time per Hz of each Compressor are displayed on a bar chart.

> **NOTE**
>
> • This function indicates information of compressor(s) in the outdoor unit only that you touched.
> • Each time indicator / value increases by 4 hours.

4-5. Data before Latest Check Code

	62	63	64
Check Code	-	-	P07-02(00)
Power On Time (hour)	22016	22016	22016
TD1	80.0	80.0	80.0
TD2	-	-	-
TE1	-14.0	-14.0	-14.0
TE2	-2.5	-2.5	-2.5
TE3	-	-	-
TS1	9.0	9.0	9.0
TS2	-	-	-
TS3	2.0	2.0	2.0
TL1	39.5	39.5	39.5
TL2	26.5	26.5	26.5
TL3	34.0	34.0	34.0
TG1	3.5	3.5	3.5
TG2	1.0	1.0	1.0
TG3	-	-	-
TO	36.5	36.5	36.5
TK1	71.0	71.0	71.0

Site Name: SiteName20211015_1
Model Name: MMY-MUP2241H
Serial No.: 12345678
Unit: [HP][kg][°C][kg/cm2(G)]*

This function displays a time series of cycle data of an outdoor unit up to occurrence of a check code, which the outdoor unit has saved in its interface P.C. board automatically. Please use this function for analysis in case a trouble occurs.

1 From Main Menu, tap Data Before Latest Check Code and touch your smartphone to the outdoor unit.

2 Outdoor unit data up to occurrence of the check code is displayed on the screen.

 * Note that information may not be displayed on the display area.
 Swipe vertically or horizontally across the screen to display information.

NOTE

- This function displays 64 data acquired every 15 -second.
  The data at the time when the Check Code occurred is the 64th data.
- Only one latest Check Code is saved on the outdoor I/F P.C. board. Every time a Check Code occurs, the data on the P.C. board is overwritten.
- It displays only data associated with the outdoor unit but not indoor unit data.
- It displays data before check code detected by the outdoor unit you touched. To confirm the situation of the entire system, acquire data from all the outdoor units.

4-6. Outdoor DN Code

This function shows the list of DN codes whose values have been set in an outdoor unit. Confirm whether the DN code setting is correct in a site. While confirming, data of DN code setting will be saved in a smartphone, and it can help to manage the site information.

1 Tap Outdoor DN Code from Main Menu, and touch the smartphone to the outdoor unit.

2 The display shows the list of outdoor DN codes read from the outdoor unit. Since there are many items, up and down scrolling will help to see them.

NOTE

- Of the outdoor unit that you touched, the DN code list will be displayed.
- To obtain the DN code list for every outdoor unit in a system with multiple outdoor units connected together, touch a smartphone not only to the header unit but also to each follower unit.
- See the Service Guide of outdoor units for detail of DN codes.
- We cannot change any DN code value from a smartphone.
- We cannot display any data of DN codes of indoor units.

4-7. Check Code History

	Check Code History	
Site Name	SiteName20211015_1	
Model Name	MMY-MUP2241H	
Serial No.	12345678	
Unit	[HP][kg][°C][kg/cm2(G)]*	

Check Code History

	Power On Time [hh:mm]	Check Code
1	31580:24	F09-02(FF)
2	21912:17	P05-01(FF)
3	18152:16	L29-12(13)
4	13912:47	L29-12(13)
5	9956:38	P05-01(FF)
6	8616:43	P04-01(FF)
7	7516:18	F24-FF(01)
8	4940:07	P07-04(FF)
9	3948:19	F08-FF(FF)
10	3588:08	L29-09(13)

Current Power ON Time[hh:mm]*

64:16

*If you want to get latest power ON time, please touch
the outdoor unit when the outdoor unit power supply
is ON.

Check Code List

Check Code	Detected Device	Cause
F19	Indoor (M-HWM)	Indoor heat exchanger temperature sensor (TCJ2(TF)) trouble
F22	I/F	TD3 sensor trouble
F23	I/F	PS sensor trouble
F24	I/F	PD sensor trouble
F25	Indoor (M-HWM, H-HWM)	Water inlet temperature sensor (TWI(TA)) trouble.
F26	Indoor (M-HWM, H-HWM)	Water outlet temperature sensor(TWO(TC2)) trouble.
F29	Indoor	Other indoor trouble

Check Code Details Information

	Details
Check Code	F24
Cause	PD sensor trouble
Determining Method	Output voltage of PD sensor is zero (sensor open-circuited). Pd > 4.15MPa despite compressor having been turned off.
Check Contents	Check connection of PD sensor connector. Check for trouble in PD sensor. Check for trouble in outdoor P.C. board (I/F).

This function displays the 10 latest Check Codes.

1 From Main Menu, tap Check Code History and touch your smartphone to an outdoor unit.

2 The 10 latest Check Codes together with Accumulated Power ON Time are displayed on the screen.
Accumulated Power ON time at the time when you touch the outdoor unit is also displayed.

3 Tap Check Code to display the Detected Device and Cause.

4 Tap Check Code more to display detail information such as Determining method or Check Contents.

NOTE

- The Check Codes are codes detected by the outdoor unit you touched.
- To confirm the situation of the entire system, acquire data from all the outdoor units.
- Almost all data are displayed with no power supplied to the outdoor unit.

4-8. Notice Code History

This function displays the 10 latest Notice Codes.

1 From Main Menu, tap Notice Code History and touch your smartphone to an outdoor unit.

2 The 10 latest Notice Codes together with Accumulated Power ON Time are displayed on the screen.
Accumulated Power ON time at the time when you touch the outdoor unit is also displayed.

3 Tap Notice Code to display the Detected device and Items.

4 Tap Notice Code more to display detail information such as Determining method or Check Contents.

NOTE

- The Notice Codes in the display are codes occurred in the outdoor unit you touched.
  To confirm the situation of the entire system, acquire data from all the outdoor units.
- An update cycle of Current Comp. 1/2 operation time is 1 hour.
- Almost all data are displayed with no power supplied to the outdoor unit.

Check Code History

Site Name SiteName20211015_1
Model Name MMY-MUP2241H
Serial No. 12345678
Unit [HP][kg][°C][kg/cm2(G)]*

Check Code History

	Power On Time [hh:mm]	Check Code
1	31580:24	F09-02(FF)
2	21912:17	P05-01(FF)
3	18152:16	L29-12(13)
4	13912:47	L29-12(13)
5	9956:38	P05-01(FF)
6	8616:43	P04-01(F
7	7516:18	F24-FF(01)
8	4940:07	P07-04(FF)
9	3948:19	F08-FF(FF)
10	3588:08	L29-09(13)

Current Power ON Time[hh:mm]*

64:16

*If you want to get latest power ON time, please touch the outdoor unit when the outdoor unit power supply is ON.

Notice Code List

Notice Code	Detected Device	Items
001	I/F	Compressor maintenance timer over
022	I/F	NFC tag wiring trouble

Notice Code Details Information

Notice Code	001
Detected Device	I/F
Items	Compressor maintenance timer over
Check Contents	• Check Compressor maintenance timer setting. (Outdoor DN code setting) • Check Compressor operation time.

4-9. Refrigerant Amount History

This function allow you to save the initial refrigerant amount data at installation.
Please use this function to manage an refrigerant amount in system.
Also, you can record a maximum of five Refrigerant Amount Histories when adding or removing some refrigerants at the additional installation or layout change.
This function can be used even when the power is off.

1 From Main Menu, tap Refrigerant Amount History and touch your smartphone to an outdoor unit.

2 Total Refrigerant Amount in time of Installation and the Refrigerant Amount History occurred at the Additional Works are displayed on the screen.
Without the saved data, the figures in each item are not displayed.

3 Tap Edit button to record a new history.

4 When the editing screen is displayed for each item, enter the requirements into each item and tap OK button. A entering guide for each item is described in the next section.

5 Tap Save button to save the data to the outdoor unit.

NOTE

The Total Refrigerant Amount is the sum of the refrigerant amount at shipment for all outdoor units and the refrigerant amount charged at local site (B + C + D).
For charge of each refrigerant amount, refer to the Installation Manual. The outline is described below.
Enter the figures of following items to calculate the Total Refrigerant Amount.
• Total Charged Refrigerant Amount
• Amount at Shipment for all Outdoor Units ···· A
• Work Date
• Additional Amount by Pipe Length   ···· B
• Corrective Amount by Indoor Units   ···· C
• Corrective Amount by Outdoor Units   ···· D

e.g. :Total Refrigerant Amount = A + B + C + D
= 15.0 + 10.1 + 5.1 - 3.1 = 27.1 kg

The screen on the left is an entering example at the edition of the Total Refrigerant Amount.
Be sure to enter figures of each amount in each item to automatically calculate the Total Refrigerant Amount at local site.

The screen on the left is an entering example for removing or adding some refrigerants among charged refrigerants.
This is an edition of the additional work for the added or removed refrigerant amount.
Select **No** for an item of **Replace all refrigerant?**

When entering figures for Added / Removed Amount (kg), enter + (plus) before the figures for added amount and enter - (minus) before the figures for removed amount.
Total refrigerant amount at local site is automatically calculated depending on the figures of Added / Removed Amount.
This edition allows you to save the latest total refrigerant amount to an outdoor unit.

The screen on the left is an entering example for removing all refrigerants charged.
This is an edition of additional work for removing all refrigerants.
Select **Yes** for an item of **Replace all refrigerant?**

When entering figures for Removed Amount (kg), enter - (minus) before the figures.
Total refrigerant amount at local site is automatically calculated depending on the figures of Removed Amount (kg).

This edition allows you to save the latest total refrigerant amount to an outdoor unit.
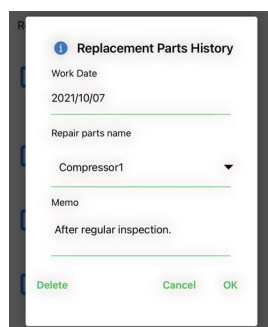
NOTE

- This function is available while the outdoor unit is not powered on.
- The memo will be saved in the smartphone and shared by using the Mail All Data about Site function, but not saved in the outdoor unit.

4-10. Replacement Parts History

This function allows you to save replacement or repair parts.
You can save up to 5 Replacement Parts History data to an outdoor unit.
This function can be used even when the power is off.

1 From Main Menu, tap Replacement Parts History and touch your smartphone to the outdoor unit.

2 Tap Edit button.

3 Tap Edit button to display the editing screen for Work Date, Repair Parts name, and Memo.
Enter the required information of each item.

4 When finished entering information, tap OK button.

> **NOTE**
> • This function is available while the outdoor unit is not powered on.
> • The memo will be saved in the smartphone and shared by using the Mail All Data about Site function, but not saved in the outdoor unit.
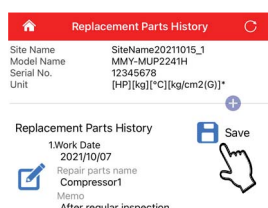
5 When finished entering information, Save button become available.
Tap Save button to save the data to the outdoor unit.

> **NOTE**
> • In a system with multiple outdoor units connected together, each outdoor unit that is touched saves / provides indivisual data, but the data will not be shared among the outdoor units.
> • If you replace parts for an outdoor unit, then be sure to save the part data to that outdoor unit.

4-11. GPS Location

This function allows you to save and read GPS location data of an outdoor unit.

It can help manage a site, such as referring somebody to the site for regular visits and/or in case of trouble.
The GPS location data can be shared by using the Mail All Data about Site function, and it can help to make a report about the site.

1   Tap GPS Location from Main Menu, and touch a smartphone to an outdoor unit.

2   The screen shows the GPS location data read from the outdoor unit.

3   Tap the Edit button, then the screen shows the data to be saved to the outdoor unit on the screen.
Please edit and confirm them.
Just after tapping Edit button, the data may change largely. So, please wait for a while.

4   Tap the Save button, and then touch the smartphone to the outdoor unit.
The GPS location information will be saved to the outdoor unit.

5   When successfully saved, the Save button is grayed out and impossible to be tapped.

NOTE

- The date and time indicate the time when the GPS location data were saved.
- The smaller value of the Accuracy, the higher quality.
- Above sea level is for purpose of reference.
- If your smartphone does not have a GPS function, GPS location data will not be edited automatically. In that case, tap the latitude and longitude fields to edit them manually.
- If you have anything to share, use Memo. The Memo data will be saved in a Json file, and can be shared by e-mail. The Memo data will not be saved in the outdoor unit.

4-12. Cycle Data

	U1
HP (Ton)	8
Mode	STOP
Comp.1 speed (Hz)	32.0
Comp.2 speed (Hz)	0.0
Fan Mode	53
Pd	27.32
Ps	3.96
TD1	80.7
TD2	59.7
TK1	71.5
TK2	55.3
TS1	9.0

This function allows you to acquire the refrigerant cycle data at the moment when you touch your smartphone to an outdoor unit.

1 From Main Menu, tap Cycle Data and touch your smartphone to an outdoor unit.

2 Outdoor unit information is displayed on the screen.

* Note that information may not be displayed on the display area.
Swipe vertically or horizontally across the screen to display the information.

3 To switch information, tap either Outdoor Unit or Indoor Unit tab

4 Tap Indoor Unit tab to display indoor unit information on the screen.

	1	2
Remote Controller	ON	OFF
Type	4-way	H-Duct
HP (Ton)	2	6
Operation Mode	Heat	Heat
Fan	HH	OFF
PMV	1250	537
TC2(TWO)	78.0	25.0
TCJ	62.5	25.0
TC1	59.5	25.0
TA(TRA/TWI)	21.5	25.0
Required Capacity	100%	0%
TOA	-35.0	-35.0
TSA	-35.0	-35.0
TF(TFA/TCJ2)	-35.0	-35.0
HWM Pump	OFF	OFF
HWM Heater	OFF	OFF
HWM Valve	OFF	OFF
Check Code	--	--

* Note that information may not be displayed on the display area.
Swipe vertically or horizontally across the screen to display the information.

NOTE

Touching the Header unit acquires information about all the indoor units and outdoor units. However, touching a follower unit does only information about the outdoor unit that you touched (with no indoor unit information).

4-13. Timer Save of Cycle Data

Setting the time when you want to acquire the refrigerant cycle data allows the information to be automatically saved to an outdoor unit at the set time.
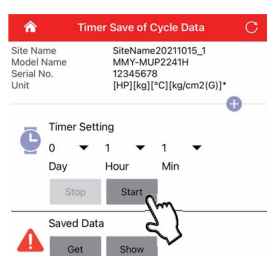Touch your smartphone to the outdoor unit to acquire data after the setting time for acquisition of information.
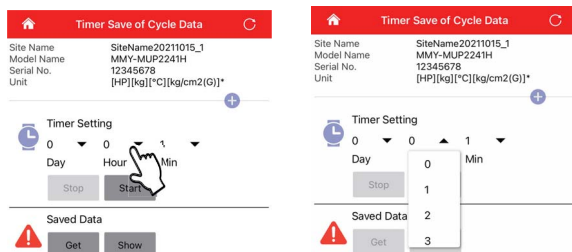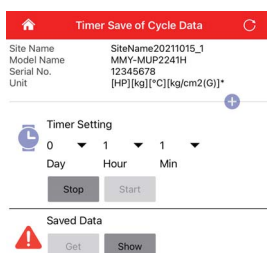

1 Timer setting

1-1 Tap Timer Save of Cycle data and touch your smartphone to the outdoor unit.
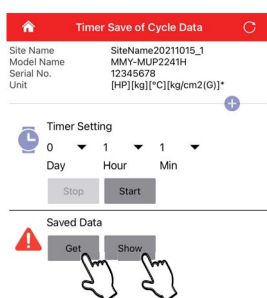
1-2 Choose Timer setting value from pull-down menu.

1-3 Tap the Start button on the screen and touch your smartphone to the outdoor unit.

1-4 If Timer setting is completed, the Start button will gray out. And if you want to stop timer, tap Stop on the screen and touch your smartphone to an outdoor unit.

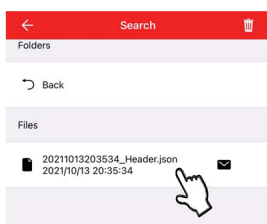**2** Get data and display Timer save of Cycle Data*

* After confirming that the set timer has expired, perform the following operations.

2-1 Tap Timer setting of Cycle data and touch your smartphone to the outdoor unit.

2-2 Tap the Get button and touch your smartphone to the outdoor unit.

2-3 Tap the show button

2-4 Select a file in the list.

Timer Save of Cycle Data	
Site Name	SiteName20211015_1
Model Name	MMY-MUP2241H
Serial No.	12345678
Unit	[HP][kg][°C][kg/cm2(G)]*

Outdoor Unit	Indoor Unit

	U1
HP (Ton)	8
Mode	STOP
Comp.1 speed (Hz)	0.0
Comp.2 speed (Hz)	0.0
Fan Mode	0
Pd	0.00
Ps	0.17
TD1	24.9
TD2	22.1
TK1	11.5
TK2	14.3
TS1	9.0
TS3	16.7
TE1	17.8
TE2	16.7
TE3	17.8
TG1	18.1
TG2	23.7
TG3	20.6

2-5　Outdoor unit information is displayed on the screen.

　*　Note that information may not be displayed on the display area.
　　Swipe the screen up and down or left and right to display the information.

2-6　To switch information, tap ether Outdoor Unit or Indoor Unit tab.

Timer Save of Cycle Data		
Site Name	SiteName20211015_1	
Model Name	MMY-MUP2241H	
Serial No.	12345678	
Unit	[HP][kg][°C][kg/cm2(G)]*	

Outdoor Unit	Indoor Unit

	1	2
Remote Controller	OFF	OFF
Type	4-way	H-Duct
HP (Ton)	2	6
Operation Mode	Cool	Cool
Fan	OFF	OFF
PMV	30	30
TC2(TWO)	25.0	25.0
TCJ	25.0	25.0
TC1	25.0	25.0
TA(TRA/TWI)	24.0	25.0
Required Capacity	0%	0%
TOA	-35.0	-35.0
TSA	-35.0	-35.0
TF(TFA/TCJ2)	-35.0	-35.0
HWM Pump	OFF	OFF
HWM Heater	OFF	OFF
HWM Valve	OFF	OFF
Check Code	--	--

2-7　Tap Indoor Unit tab to display indoor unit information on the screen.

　*　Note that information may not be displayed on the display area.
　　Swipe the screen up and down or left and right to display the information.

NOTE

Touching the Header unit acquires information about all the indoor units and outdoor units. However, touching a follower unit does only information about the outdoor unit that you touched (with no indoor unit information).

4-14. Photo Movie Report
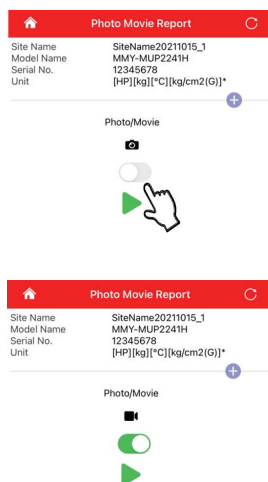
This function allows you to create photo and movie report together with the data displayed in basic information area.

1 From Main Menu, tap Photo Movie Report and touch your smartphone to an outdoor unit.

2 Basic information is displayed in the upper part of the screen.

3 Select Photo or Movie to display a shooting screen for Photo / Movie.

4 Tap Shutter button.

5 Select Save or Delete.
* Display items may differ depending on the your smartphone.

6 The photo or movie data will be saved in the specified folder.

NOTE

- This function uses a camera function in your smartphone.
  Ensure that the setting for the camera function is available.
- You cannot save photo and movie data into an outdoor unit.
- The photo and movie files are principally saved only in the Wave Tool Advance dedicated folder, but they may appear also in folders other than the Wave Tool Advance dedicated folder for some smartphones.

4-15. Sound Report
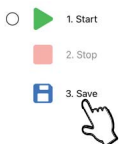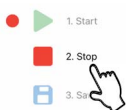
This function allows you to create audio report together with the data displayed in basic information area.

1 From Main Menu, tap Sound Report and touch your smartphone to an outdoor unit.

2 Basic information is displayed in the upper part of the screen.

3 Tap Start button to start recording.

4 Tap Stop button to stop recording.

5 To save the recording data, tap Save button.

6 Once a saved file is displayed on the screen, check the file.
Tap the Trash icon to delete the data.

NOTE

- You cannot save the photo and movie data into an outdoor unit.
- The recording audio file created are principally saved only in the Wave Tool Advance dedicated folder, but they may appear also in folders other than the Wave Tool Advance dedicated folder for some smartphones.
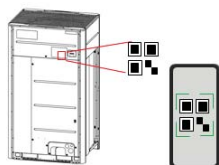
4-16. QR Code Report

This function allows you to save QR Code scan data together with the data displayed in basic information area to an outdoor unit.
The QR Code on the name plate or a main part includes information such as the part name or the serial number.
Please use this function as traceability information in case of trouble.

1 From Main Menu, tap QR Code Report and touch your smartphone to an outdoor unit.

2 Confirm the basic information in the upper part of the screen.

3 Tap Scan button.

4 Once QR Code reader screen is displayed, move the smartphone to the outdoor unit or the part so that it captures the QR Code.

5 WTA App. interprets the QR Code and displays the data on the screen.

6 To save the data to the outdoor unit, tap the Save button and touch your smartphone to the outdoor unit.

7 Tapping the Read button further will load the data of the outdoor unit into the "Saved data in Outdoor Unit" field

<div style="border:1px solid">NOTE</div>

• The data in QR Code differs for each part.
  Please use the data when you consult with service centers.
• An outdoor unit can save QR Code data of size up to 36 bytes.
  If you perform step 6, the data will be overwritten.

4-17. Search
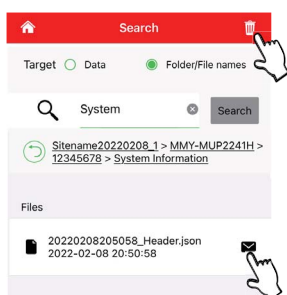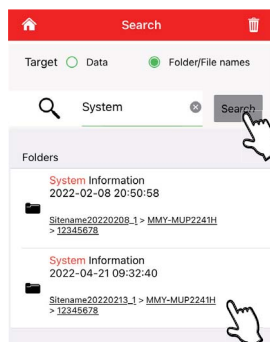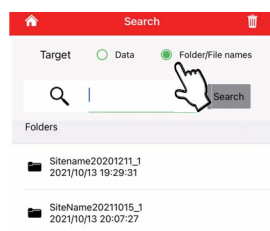
This function allows you to search information in your smartphone.
The search target is Data or Folder / File names in the files created in the WTA App.

1   From Main Menu, tap Search.

2   Select the search target.
To search data in a file, select Data.
To search a folder / file names, select Folder / File.

3   Enter a keyword / keyphrase in the search box.
The words through your search results are highlighted in red.

4   Selecting a search result allows you to see its detail.
To attach the data to a mail, tap Mail icon.
To delete the data, tap Trash icon.

> **NOTE**
>
> To confirm the structure of folders and files in WTA App., see 3-4. Storage area in the Smartphone.

4-18. Memory Dump of Outdoor Unit

This function reads out all the data saved in the NFC tag of an outdoor unit and allows you to attach them to an e-mail.
It cannot display the data in WTA App. Only if our company requests you, use this function to acquire data and send them by an e-mail.

1 From Main Menu, tap Memory Dump of Outdoor Unit and touch your smartphone to the outdoor unit.

  * It may take a few minutes to acquire data.
  During data acquisition, align the NFC antenna on the smartphone with the outdoor unit and hold its position.

2 When finished acquiring the data, an e-mail sending display corresponding to OS in your smartphone is displayed on the screen.
The acquired data is filed as a zip file to be attached to the e-mail.

3 Enter the destination address to send the e-mail.

> **NOTE**
>
> The data is saved as a file in the smartphone even when you stop work on the way without sending an e-mail.

4-19. CSV File Conversion
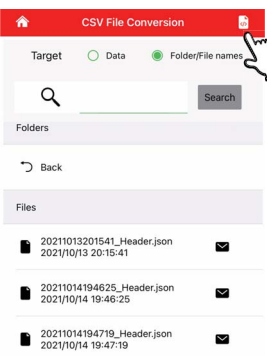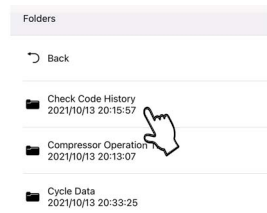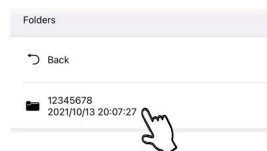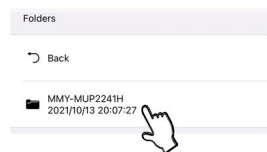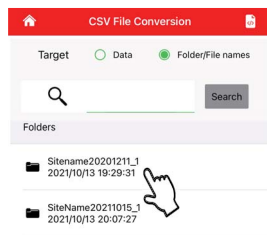
This function allows you to convert a created Json file to a CSV file.
Please use it when referring to data with softwares other than WTA App.

1 From Main Menu, tap CSV File Conversion.

2 A list of folders with Site names saved in the smartphone is displayed on the screen.
Select a folder to convert to a CSV file.

3 Model names of the outdoor units are displayed on the screen.
Select a folder to convert a created Json file to a CSV file.

4 A serial number is displayed on the screen.
Select a folder to convert a created Json file to a CSV file.

5 The menu items which have been applied are displayed on the screen.
Select a folder to convert a created Json file to a CSV file.

6 When a Json file you want to convert is displayed on the screen, tap the CSV File Conversion mark.
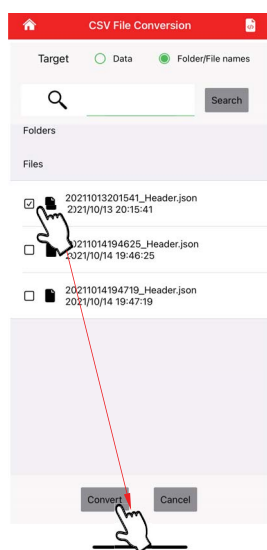
7 Select a check box and tap Convert button.

8 When CSV conversion is successful, the pop-up is displayed on the screen as shown in the left.

NOTE

Any folder, photo, movie, or audio file cannot be converted to a CSV file.

4-20. Mail All Data about Site
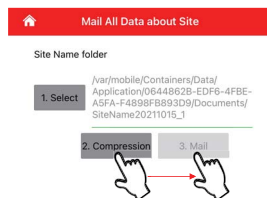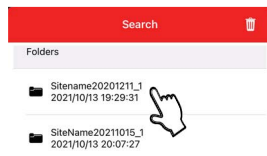
This function compresses files on your smartphone and allow you to attach it to an E-mail.
All files and folders under a site name folder will be compressed.
Use this function to send all the information about a site.

1 From Main menu, tap Mail All Data about Site.

2 Select the site name folder that you want to compress.

3 Confirm the selected folder, then tap the Compression button.
When the file is correctly compressed, a zip file will be created in the folder where the site name folder belongs.

4 Send a mail with the zip file as an attachment.

5 A mail function corresponding to your smartphone setting appears on the screen. Follow your smartphone function to send your e-mail.

NOTE

- It depends on the environment that receives the mail whether it can replay the Json / csv files.
- Check the destination address to send your e-mail.
- A smartphone can replay the files if WTA App. installed.
- If the environment of the mail destination is WTA App., each file can be replayed by WTA App. by expanding the contents of the attached file in the Wave Tool Advance folder, or by moving the expanded contents of the attached file to the Wave Tool Advance folder. See 3-4. Storage area in the Smartphone for detail about the Wave Tool Advance folder.

5   Help

5-1. License Agreement
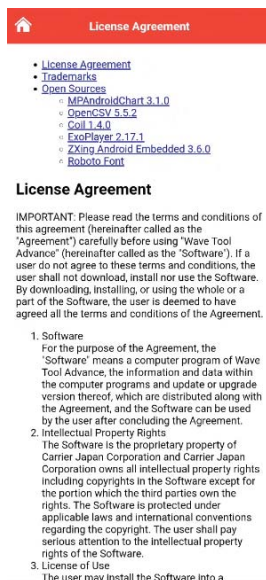
This is the license agreement necessary for WTA.
Confirm the content before using WTA.

1   From Main Menu, tap License agreement.

2   A list of agreements and a list of OSSs being used are displayed on the screen.

3   Tap each item to confirm its content.

5-2. Abbreviations

This function displays explanation for representative terms or abbreviations in the WTA.

1 From Main Menu, tap Abbreviations.

2 Explanations for terms or abbreviations are displayed on the screen.

5-3. Check Code List

This function displays a list of check coeds.

1 In the Main Menu, tap Check Code List.

2 The check codes are displayed in a list.

3 Tap Check Code to display detail information such as Determining method or Check Contents.

5-4. Notice Code List

This function displays a list of notice coeds.

1 In the Main Menu, tap Notice Code List.

2 The notice codes are displayed in a list.

3 Tap Notice Code to display detail information such as Determining method or Check Contents.

5-5. NFC Troubleshooting

WTA Troubleshooting

Site Name   SiteName20211015_1
Model Name   MMY-MUP2241H
Serial No.   12345678
Unit   [HP][kg][°C][kg/cm2(G)]*

Check Function for Wave Tool Advance Communications.

When you can not read out the information of NFC Tag Device with your Smartphone, perform the following steps.

1. Power ON
Be sure to turn on the power at the indoor unit before power-ON of outdoor unit.

2. Set the rotary switches SW01/SW02/SW03 on the interface P.C. board to [2/16/14].

3. If [nFc.Er] is displayed on 7-segment, check wiring work between NFC tag and interface P.C. board.
If above check no problem or Displayed [nFc.], go to next step.

4. Return the rotary switches SW01/SW02/SW03 on the interface P.C. board to [1/1/1].

5. Hold your Smartphone over NFC Tag.Push Communication Test button, test timer will start.

Communication Test

Please use this function when you have troubles while using Wave Tool Advance system.
This function does not guarantee the operation of the smartphone.

1 From Main Menu, tap WTA Troubleshooting.

2 Steps (1 to 5) for troubleshooting are displayed on the screen.
Check those steps before tapping the communication Test button.

3 If reaching Step 5, tap the Communication Test button.

4 Align the NFC antenna on the smartphone with TOUCH mark on the NFC tag of an outdoor unit and hold its position for a few seconds.

*Communication Test won't be successful if their positions are not aligned.
If these components are aligned, smartphone will vibrate and make a sound.

5 Communication test result is displayed on the screen.
When WTA Check Codes are displayed on the screen, follow each troubleshooting steps.
If Communication Test was successful appears on the display without any Check Code, there is no trouble.
For the subsequent works, refer to the positions of the NFC antenna that was aligned with the NFC tag in this test.

Outline of the display contents

6. Communication test result

WTA Check Code	Cause

Troubleshooting
7.*****
8.*****

Display part for WTA Check Codes

Display part for cause of WTA Check Codes occurrence

Display part for steps of troubleshootings for WTA Check Codes

6. Communication test result

WTA Check Code	Cause
WTAErr01	Smartphone-NFC Tag Communication ERROR

Troubleshooting
7. Check object smartphone and Outdoor unit at Application down load Home page.

8. Check with the manufacturer to make sure that the NFC antenna of the smartphone is not faulty.

9. Please make sure that NFC Tag and NFC antenna of smartphone are aligned.
   If these component are aligned, the smartphone will vibrate and make a sound.

10. If above check no problem, replace the NFC Tag.

Details of the WTA Check Codes

WTAErr01: Smartphone-NFC tag Communication ERROR

The outdoor unit cannot communicate with your smartphone.
Please follow each step of troubleshootings to solve the trouble.

6. Communication test result

WTA Check Code	Cause
WTAErr02	Smartphone Disconnecting ERROR

Troubleshooting
7. Check object smartphone and Outdoor unit at Application down load Home page.

8. If above check no problem, replace the NFC Tag.

WTAErr02: Smartphone Disconnecting ERROR

As communication between the smartphone you are using and the outdoor unit is not complete, the outdoor unit cannot communicate with the NFC tag.
Please follow each step of troubleshootings to solve the trouble.

6. Communication test result

WTA Check Code	Cause
WTAErr03	Application Internal ERROR

Troubleshooting
7. Error may occur in the application.
   If it occurs again after reinstalling the application.
   Please contact Carrier Japan Corporation.

WTAErr03: Application Internal ERROR

An error has occurred in the application.
If it occurs again after reinstalling WTA App., please contact Carrier Japan Corporation.

6. Communication test result

WTA Check Code	Cause
None	Communication Test was successful

Test result is no issue.
The NFC antenna on the smartphone is aligned with the TOUCH mark.
Please refer to it in the future.

WTA Check Code is None

There is no trouble in the test result. The position of a NFC antenna on your smartphone in this test is thought to be best.
For the subsequent works, refer to the position in the test.

5-6. NFC Tag Replacement Setup

This function allows you to write Outdoor Model Name and / or Serial No. stored in an outdoor Interface P.C. board to the NFC tag you have replaced.

When simultaneously replacing NFC tag and outdoor Interface P.C. board, you should use WTA App. to write Outdoor Model Name and / or Serial No. to both the NFC tag and the outdoor Interface P.C. board after replacing.

1 From Main Menu, tap NFC TAG Replacement Setup.

2 Check whether Case A or Case B applies to your works.

3 Confirm the steps in the selected Case, and save the Outdoor Model Name and the serial No.

NOTE

Save Outdoor Model Name and serial No. described on the nameplate of the outdoor unit cabinet.

5-7. NFC Communication Setting
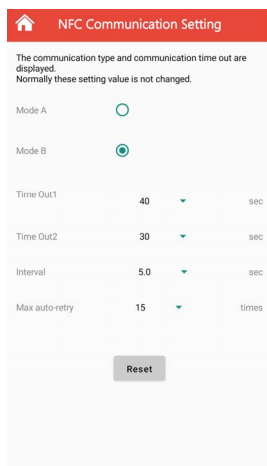
This function displays the communication type and communication time limit (out) corresponding to your smartphone.
Normally, these setting values are not needed to be changed.
If communication troubles occur frequently, change setting time of each item and try improving the communication.
This function does not guarantee the operation of the smartphone.

1　From Main Menu, tap NFC Communication Setting.

2　The communication mode A / B, communication time limit, and retry settings that are relevant for your smartphone are displayed on the screen.

3　To change communication time limit, tap drop-down menu to select setting time of each item.
　　To return to the initial setting, tap Reset.

NOTE

While increasing setting values of Time OUT and Interval allows improvement of the communication trouble, the time of touching your smartphone to an outdoor unit also increases.

5-8. View Options

View Options
Unit of Weight
kg
Unit of Temperature
°C
Unit of Pressure
kg/cm2(G)
Date Format
yyyy/MM/dd
Decimal Separator
Period
Language
English
Character encoding(CSV file)
Default/English (UTF-8, LF)
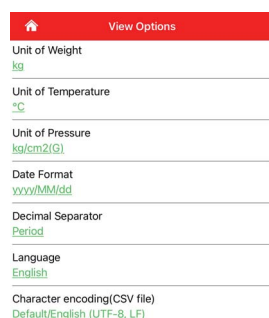
This function allows you to change the display settings such as language, units, and decimal separator format.

1 From Main Menu, tap View Options.

2 The options that can be changed are displayed in a list.

3 Select the item that you want to change, and a pop-up will appear. Then, select the setting of your choice.

Unit of Weight
- ● kg
- ○ lbs

Unit of Temperature
- ● °C
- ○ °F

Unit of Pressure
- ● kg/cm2(G)
- ○ MPa(G)
- ○ psi(G) *G...Pressure

Date Format
- ● yyyy/MM/dd
- ○ yyyy-MM-dd
- ○ dd/MM/yy
- ○ dd/MM/yyyy
- ○ dd. MM. yyyy
- ○ dd-MM-yy
- ○ MM-dd-yy

Decimal Separator
- ● Period
- ○ Comma

Application Language setting
- ● English
- ○ 日本語

Character encoding (CSV file)
- ● Default/English (UTF-8, LF)
- ○ Japanese (Shift-JIS, CR+LF)

NOTE

- The selected option will be reflected immediately.
- The selected options will be automatically saved and retained even after closing WTA App.
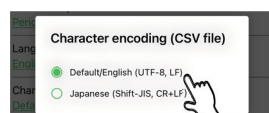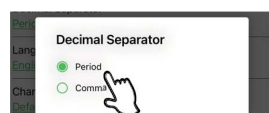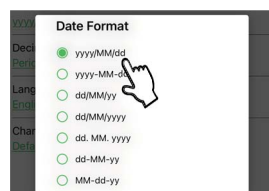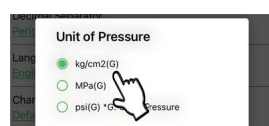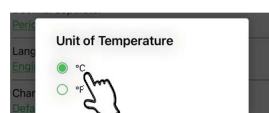
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Revision record

Number	The contents of modification	Page	Date
First issue	-	-	Oct., 2020
Revision 1	Contents revised.	Pages 26, 28, 32, 36, 48 and 49	Dec., 2020
Revision 2	Contents revised for Android / iOS	All pages	Oct., 2021
Revision 3	Integration of content for iOS / Android	All pages	Apr., 2022
Revision 4	Contents revised.	All pages	Aug., 2022
Revision 5	Company Name Change	First page, Page 4, 5, 6, 7, 44, 48, 52 and Last page	Jul., 2024

EH99965501-5