BLUETOOTH INFORMATION WRITING METHOD

When the complete MAIN board, knob (VOL) (SV) assy or front panel (SV) assy is replaced, the writing of Bluetooth information is necessary.

Write the Bluetooth information according to the procedure below.

Preparation:
- Windows PC
- NFC compatible smartphone that installed the file manager application (ASTRO File Manager, File Expert, etc.)
- USB cable for the smartphone
- NFCtagWriter.apk (ver.1.0.2 and above)

Note 1: The NFCtagWriter.apk is updated. When the NFCtagWriter.apk is prepared already, be sure to refer to the "6. Version Check Method of the NFC Tag Data Writing Application for the Servicing" on the page 12, and check the version of NFCtagWriter.apk.

Note 2: Confirm the method of obtaining the NFCtagWriter.apk to the service headquarters.

1. Installing the NFC Writing Application for the Servicing

Install the NFCtagWriter.apk on the smartphone for writing of Bluetooth information.

Procedure:
1. Prepare the NFCtagWriter.apk file on the PC.
2. Connect the smartphone to the PC with the USB cable.
3. Transfer the NFCtagWriter.apk to the smartphone.
4. When tapping the "Settings" → "Security" on the screen of the smartphone, check the box "Unknown sources".
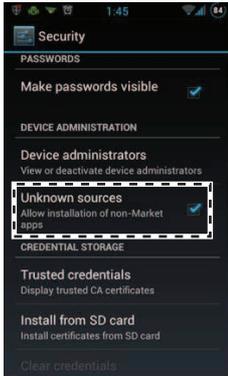
5. Disconnect the smartphone from the PC.
6. Use the file manager application to explore the NFCtagWriter.apk on the smartphone.
7. Click on the NFCtagWriter.apk to open it, and install the NFCtagWriter.apk to the smartphone.
8. When tapping the "Settings" → "Security" on the screen of the smartphone, uncheck the box "Unknown sources".

– Screen after the installation for reference –

NFCtagWriter application

9. Refer to the "6. Version Check Method of the NFC Tag Data Writing Application for the Servicing" on the page 12, and check the version of NFCtagWriter.apk.

ver.0.9.0 : The use is not allowed. Install the NFCtagWriter.apk of ver.1.0.2 and above.

ver.1.0.2 and above: This use is allowed.

2. Writing the NFC Tag Data

Write the NFC tag data (Bluetooth information) to the NFC module in the knob (VOL) (SV) assy.

Procedure:
1. Check the Bluetooth address (BD_ADDR).
   There are following two checking methods.
   - How to read from the BT module label
   - How to display on the liquid crystal display by the test mode

How to read from the BT module label:

Set the unit to the state where the BT module (Ref. No. IC1002 on the MAIN board) can be seen.
(Refer to the "2. DISASSEMBLY" on the page 23 and after)

– MAIN board top view –

BD_ADDR (Barcode)

BD_ADDR

Model:WB113C

BD ID 48D2242F241A
0D060801005502

BT module label

How to display on the liquid crystal display by the test mode:

1. In the state of source off (the clock is displayed on the liquid crystal display), enter the test mode by pressing the buttons in order of the [⟳ 4] → [MIC 5] → [PAUSE 6] (press only the [PAUSE 6] button for two seconds).

Software main version

2. In the state in which the software main version is displayed on the liquid crystal display, enter the Bluetooth address (BD_ADDR) display mode by pressing the [➡ SCRL DSPL] button.
(Displayed characters/values in the following figure are example)

Bluetooth address (BD_ADDR)

3. The resetting operation is executed by pressing the [➡ OFF SRC] button for 1 second after the confirming ends, and the unit returns to the normal condition.

2. Turn on the NFC function of the smartphone.
3. Start the NFCtagWriter application on the smartphone.
4. Tap the "Write" on the screen of the smartphone.

5. Input the Bluetooth Local Name (BL_NAME).
(Input the model name with the keyboard on the smartphone, or tap the "List" on the screen of the smartphone and select the model name)
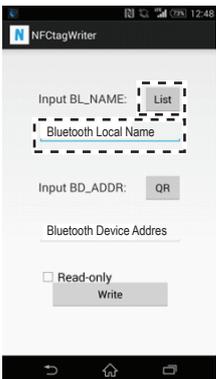
6. Input the Bluetooth address (BD_ADDR).
(Input the Bluetooth address (BD_ADDR) that written on the BT module label with the keyboard on the smartphone, or tap the "QR" on the screen of the smartphone and read the barcode with the camera of the smartphone)
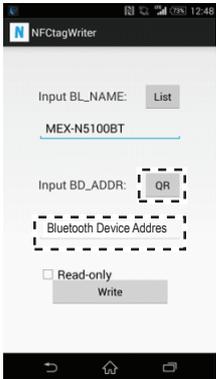
7. Tap the "Write" on the screen of the smartphone, in the state that unchecked the box "Read-only".
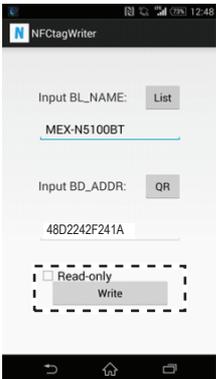
8. Touch the N-mark part of the smartphone to the N-mark part of the unit.
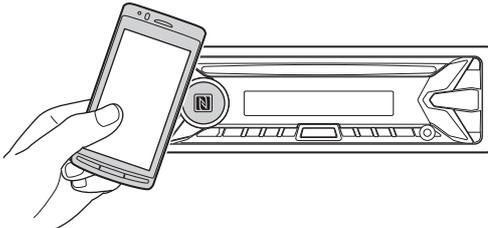
9. Check that "Completed!" is displayed on the screen of the smartphone.
Note 1: When "Completed!" is not displayed on the screen of the smartphone, refer to "3. Error Display" on the page 10.
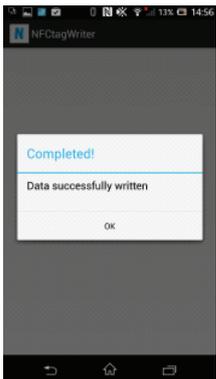
10. End the NFCtagWriter application on the smartphone.
11. Check the operation of connecting with the smartphone by one touch (NFC).
    (Refer to the "OPERATION CHECK OF THE NFC AFTER COMPLETING THE REPAIRS" on the page 6)
12. Start the NFCtagWriter application on the smartphone.
13. Tap the "Write" on the screen of the smartphone.

14. Check the box "Read-only" on the screen of the smartphone, and tap the "Write" on the screen of the smartphone.
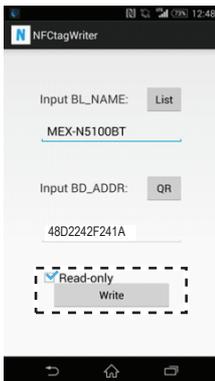
15. Touch the N-mark part of the smartphone to the N-mark part of the unit.
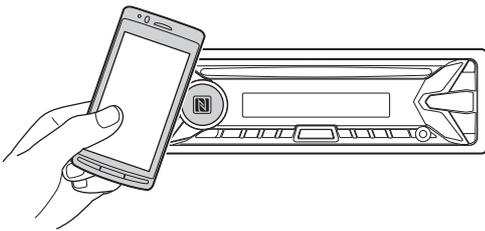
16. Check that "Completed!" is displayed on the screen of the smartphone.
Note 2: When "Completed!" is not displayed on the screen of the smart-phone, refer to "3. Error Display".
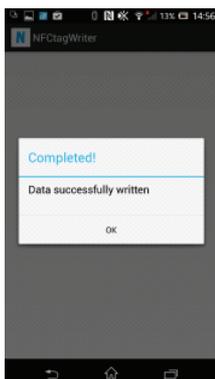
17 Tap the "Read" on the screen of the smartphone.

18. Check that "BD_ADDR" on the screen of the smartphone ac-cords with BD_ADDR written on the BT module label and "MODE" on the screen of the smartphone is "00 00 (Read-only)".
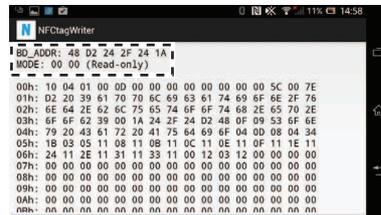
19. End the NFCtagWriter application on the smartphone.
20. Check the operation of connecting with the smartphone by one touch (NFC).
    (Refer to the "OPERATION CHECK OF THE NFC AFTER COMPLETING THE REPAIRS" on the page 6)

3. Error Display
When the writing of the NFC tag data has failed, "Error" is dis-played on the screen of the smartphone.
When "Error" is displayed on the screen of the smartphone, oper-ate according to the procedure below.
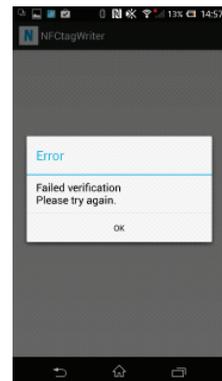
Procedure:
1. Tap the "Write" on the screen of the smartphone to write of the NFC tag data again.
2. When "Error" is displayed on the screen of the smartphone again, tap the "Read" on the screen of the smartphone.
3. Check that "MODE" on the screen of the smartphone is not "00 00 (Read-only)".
4. When "MODE" on the screen of the smartphone is "00 00 (Read-only)", execute the writing of the NFC tag data again after replacing the knob (VOL) (SV) assy.
    (When "MODE" on the screen of the smartphone is "00 00 (Read-only)", the writing of the NFC tag data cannot execute)

4. Check Method of the NFC Tag Data

Check the NFC tag data according to the procedure below.

Procedure:
1. Check the Bluetooth address (BD_ADDR).
   There are following two checking methods.
   • How to read from the BT module label
   • How to display on the liquid crystal display by the test mode

How to read from the BT module label:

Set the unit to the state where the BT module (Ref. No. IC1002 on the MAIN board) can be seen.
(Refer to the "2. DISASSEMBLY" on the page 23 and after)

– MAIN board top view –

BT module label

How to display on the liquid crystal display by the test mode:
1. In the state of source off (the clock is displayed on the liquid crystal display), enter the test mode by pressing the buttons in order of the [⟳ 4] → [MIC 5] → [PAUSE 6] (press only the [PAUSE 6] button for two seconds).

Software main version

2. In the state in which the software main version is displayed on the liquid crystal display, enter the Bluetooth address (BD_ADDR) display mode by pressing the [➡ SCRL DSPL] button.
   (Displayed characters/values in the following figure are example)

Bluetooth address (BD_ADDR)

3. The resetting operation is executed by pressing the [➡ OFF SRC] button for 1 second after the confirming ends, and the unit returns to the normal condition.

2. Turn on the NFC function of the smartphone.
3. Start the NFCtagWriter application on the smartphone.
4. Tap the "Read" on the screen of the smartphone.

5. Check that "BD_ADDR" on the screen of the smartphone accords with BD_ADDR written on the BT module label and "MODE" on the screen of the smartphone is "00 00 (Read-only)".

6. End the NFCtagWriter application on the smartphone.

5. The Factor that One Touch Connection is Impossible

The four following factors are considered as the factor that one touch connection is impossible.

Guess and check the defective factor by each checking result.

Note: The four following factors are examples.

	Factor	Bluetooth manual connection check by user	NFC tag data check	Bluetooth manual connection check by servicing	NFC one touch connection check with smartphone
1	BT module defect	NG	—	NG	NG
2	Knob (VOL) (SV) assy defect	OK	NG	OK	NG
3	NFC tag data writing failure	OK	NG	OK	NG
4	Smartphone	OK	OK	OK	NG

6. Version Check Method of the NFC Tag Data Writing Application for the Servicing

Check the version of the NFC tag data writing application (NFCtagWriter application) for the servicing according to the procedure below.

Procedure:

1. Start the NFCtagWriter application on the smartphone.
2. Tap the " ☰ " (menu button) or " ⋮ " of the screen of the smartphone, then tap the "About" that is displayed on the screen of the smartphone.

or
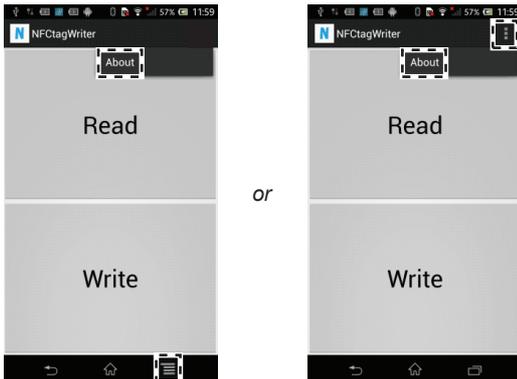
3. Check that version of the NFC tag data writing application for the servicing is displayed on the screen of the smartphone.
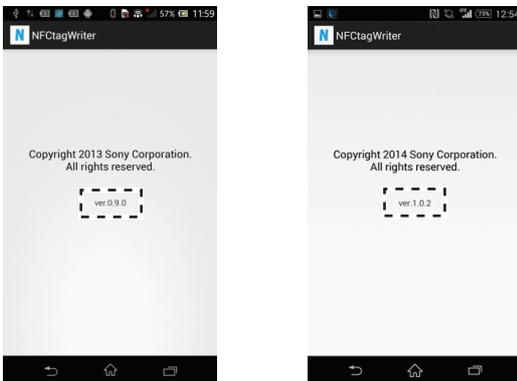
ver.0.9.0
The use is not allowed
(Use the ver.1.0.2 and above)

ver.1.0.2
The use is allowed

AFFIXING OF LABEL (SERIAL NUMBER)

When the front panel (SV) assy is replaced, it is necessary to affix the label (serial number).

2 labels (serial number) are included with a new front panel (SV) assy. Affix 1 label to the rear side of the front panel (SV) assy. Affix the other one to the bottom side of main unit.

Be sure to perform this procedure, as Bluetooth will not operate correctly if the serial number of the front panel (SV) assy and main unit do not match.

Also, since the serial number has changed, print page 13 and hand the tear-off with the product to the customer when returning the product after repairs are complete.

label (serial number)
– Front panel (SV) assy rear view –

label (serial number)
**– Main unit bottom view –
(MEX-N5100BE/N5100BT/
N5150BT: Saudi Arabia model)**

label (serial number)
**– Main unit bottom view –
(MEX-N5150BT: E, Mexican, Indian
and Australian models)**