













ASUS P320

Service Manual (L1&L2)



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1 Equipment Need

| NO# | Equipment Description | ASUS Part# | Supplier | Quantity | Remarks |
|-----|-----------------------|--------------|----------|----------|---|
| 1 | Computer | None | None | 1 |  |
| 2 | SIM Card | None | None | 1 |  |
| 3 | P320 | 80A-S5N1000 | ASUS | 1 |  |
| 4 | Battery | 07G016063459 | ASUS | 1 |  |
| 5 | USB download cable | 14G000506200 | ASUS | 1 |  |
| 6 | Screwdriver (T5) | 16-T00362002 | ASUS | 1 |  |
| 7 | Tweezers | 16-000600014 | ASUS | 1 |  |
| 8 | Plastic Wrench | 13GV0400PZZZ | ASUS | 1 |  |
| 9 | Micro SD Card | 04G352800500 | ASUS | 1 |  |
| 10 | ADAPTER | 04G267013800 | ASUS | 1 |  |

2 Introduction

2.1 About This Service Manual

Using this service manual and the suggestions contained in it assures proper installation, operation, and maintenance of the PDA P320. This manual aids service personnel in testing and repairing P320. Service personnel should be familiar with electronic assembly, testing, and troubleshooting methods.

2.2 Overview

ASUS P320 is the smallest Windows Mobile GPS PDA phone with the compact size of 99*54.5*13.35 mm to further enhance mobility. The female fashion design makes it slim and compact. EDGE/GPRS & WiFi can help to enhance data transmission and Bluetooth can also make the PDA connect with PC and peripherals. New ASUS-only applications complement WM's diversity.



2.3 Product Specification

| | |
|-------------------------------|--|
| System | EDGE/GPRS/GSM 850/900/1800/1900MHz EGPRS Class B, Multi-slot Class 10 |
| Form Factor | Bar Type |
| Dimension & Weight | 99 x 54.5 x 13.35 mm, 105g |
| Battery | 1100 mAh Lithium-Ion |
| Talk Time | 4 hrs (TBC) |
| OS | Microsoft Windows Mobile 6 Professional* |
| Processor | TI OMAP 850 200 MHz |
| Memory | 128 MB Flash + 64 MB DDR |
| Display | 2.6" , Touch Screen 65K, TFT, 240 x 320 |
| Camera | 2.0 Mega pixel AF |
| GPS | SiRF StarIII LT with internal antenna, AGPS supported (optional) |

| | |
|----------------------------|--|
| Connectivity | WLAN 802.11b+g, USB v1.1, Bluetooth V2.0+EDR |
| Exp. Slot | Micro-SD (SDHC Compatible) |
| Music | MP3, WMA, AAC, and AAC+ |
| Browsing | HTTP and WAP 2.0 |
| Messaging | SMS, MMS 1.2, and Push E-mail |
| JAVA | J2ME (CLDC 1.1 + MIDP2.0) |
| DRM | OMA 1.0 (optional) |
| PIM & Utilities | Contacts, Notes, Calendar, Tasks, Alarm, Calculator, File Manager, and MSN |
| Ringtone | 128-ch Polyphonic ringer & MP3 |
| Others | ASUS Today, Profile Manager, Theme Manager, UrTime, Newstation, ASUS Backup, etc. |

3 Disassembly / Assembly Procedure

3.1 Introduction

This section describes how to disassemble PDA P320. Many of the integrated devices used in this phone are vulnerable to damage. Ensure adequate static protection is in place when handling, shipping, and servicing any internal components.

3.1.1 Recommended Tools

- ☐ Anti-Static Mat (Ground Cord included)
- ☐ Anti-Static Wrist Strap
- ☐ Torque Screw Driver (T5 type, torque is set to 1.2kg-cm)
- ☐ Tweezers
- ☐ Plastic blade



3.1.2 Disassembly Procedure

The following set of diagrams will demonstrate the correct sequence and action to disassemble P320.

■ Step 1

Take the stylus away from the PDA.



■ Step 2

Remove the battery cover and take the battery away.



■ Step 3

Pry the left side and the top side of the antenna cover and then take the antenna cover away.

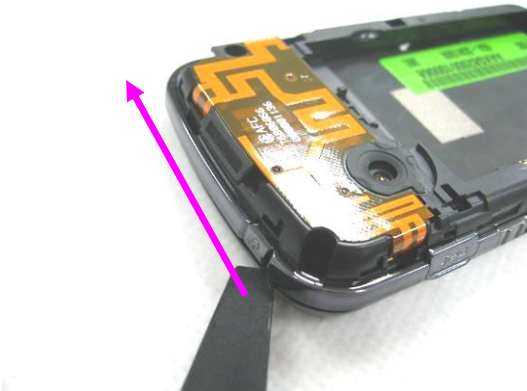


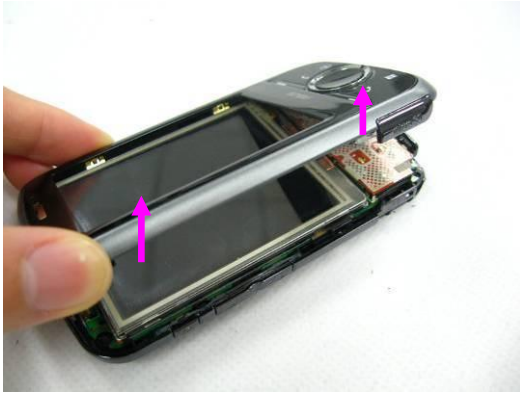


- Step 4
Unscrew and remove 5 screws on PDA by screw driver.



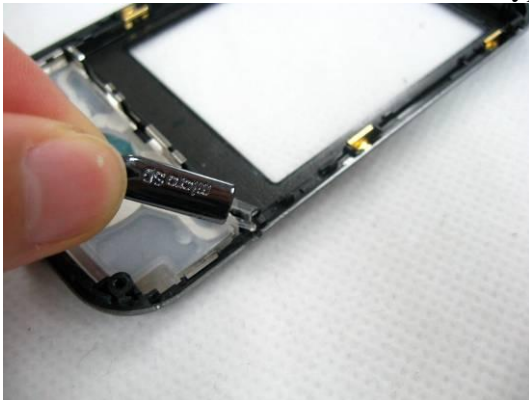
- Step 5
Pry the top side and the left side of the top case assy and then separate the top case from the PDA.





■ Step 6

Remove the Micro SD cover and the keypad.



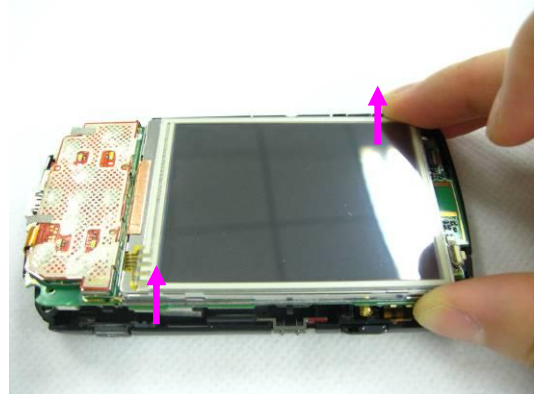
■ Step 7

Remove the receiver by a pair of tweezers.

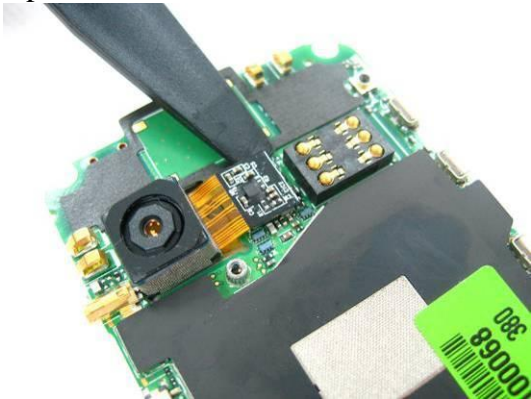


■ Step 8

Release the main board from the hook on bottom case first. Then separate the main board from the bottom case assy. Please pay attention to the GPS CON. Do not crush it when disassembling.

**■ Step 9**

Open the camera connector and remove the camera.

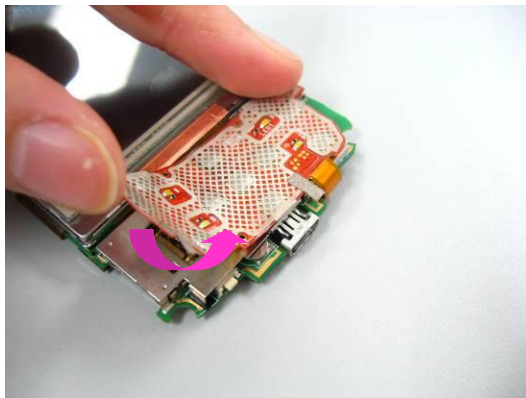
**■ Step10**

Remove the MIC rubber.

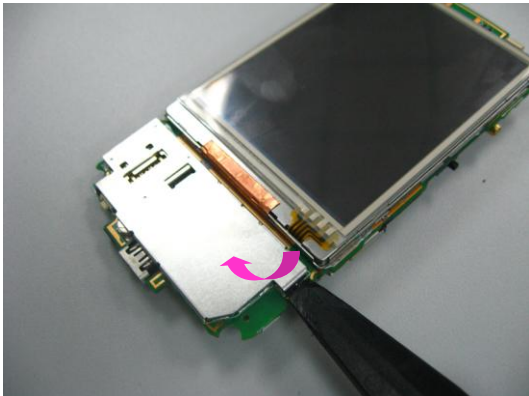


■ Step11

Tear off the keypad CONN mylar and open the keypad connector. Then release the keypad FPC by a pair of tweezers. Tear off the Keypad-VER CAREER from the keypad frame.

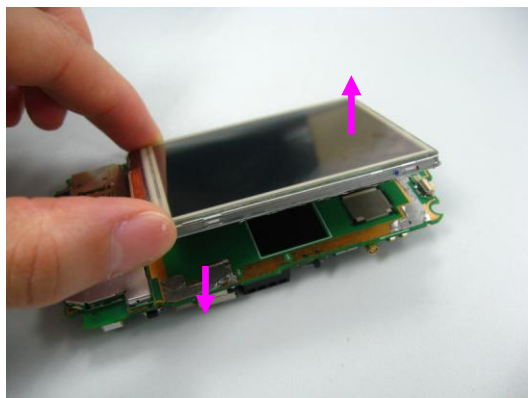
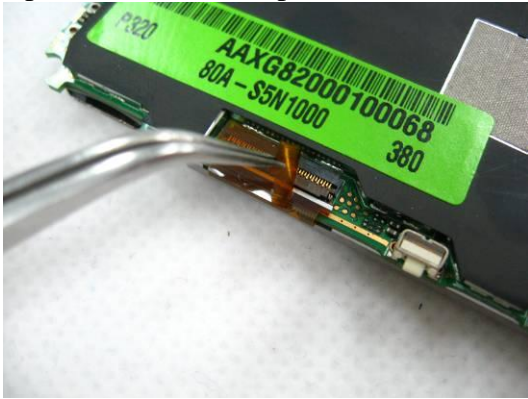
**■ Step12**

Release the keypad frame from its hook. Then pry the right side and separate it from the main board.

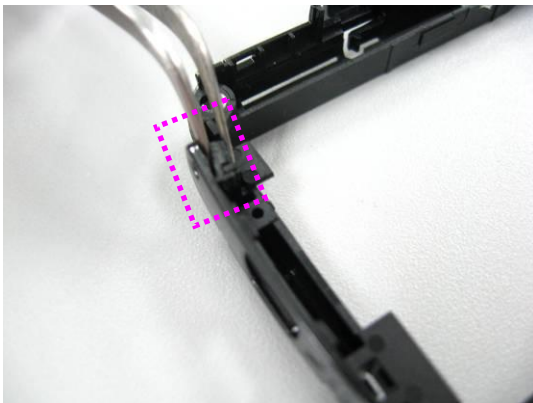


■ Step 13

Tear off the LCD Conn mylar and open the FPC connector. Then release the touch screen FPC by a pair of tweezers. Separate the touch screen from the main board.

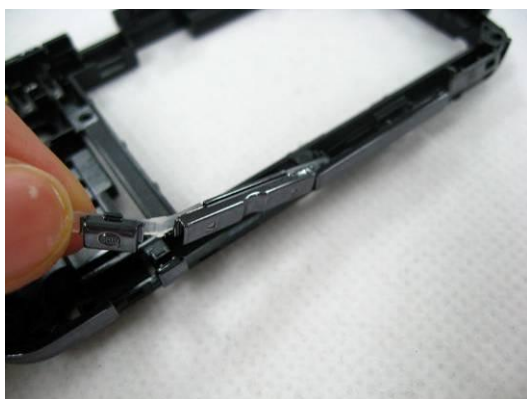
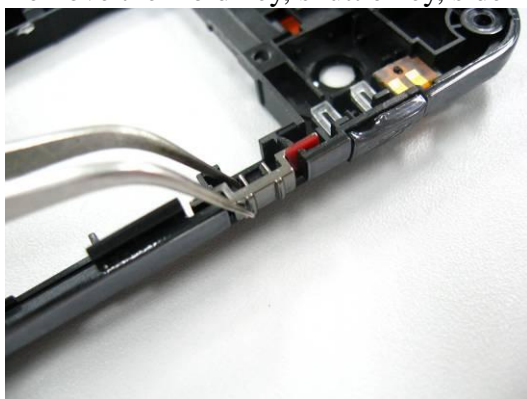
**■ Step 14**

Remove the reset rubber in bottom case.



■ Step15

Remove the Hold key, shuttle key, side key and power key from the bottom case.



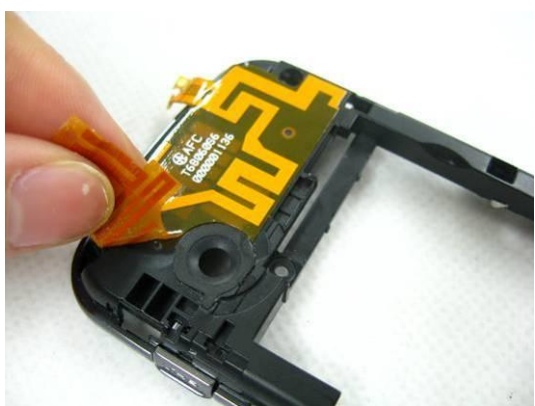
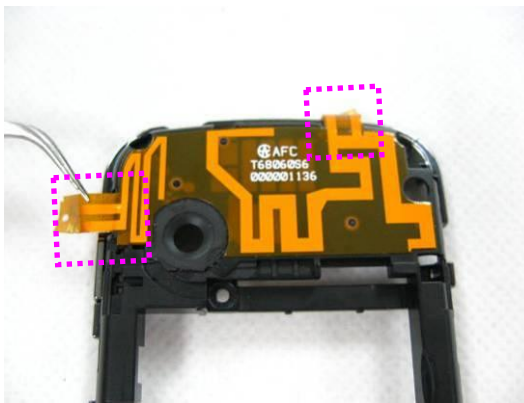
■ Step16

Remove the speaker.



■ Step17

Release the antenna FPC from the bottom case and pull it out. Then tear off the antenna FPC from the bottom case.

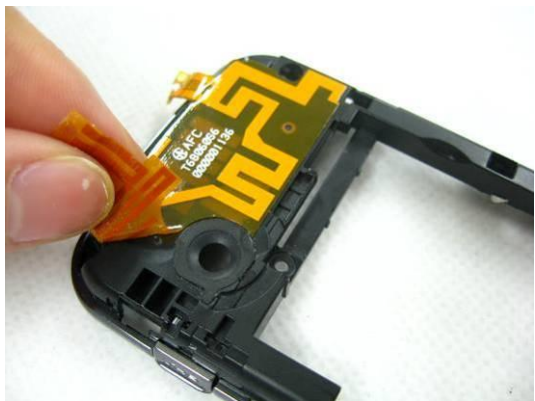


3.1.3 Assembly Procedure

It is carried out in the exact reverse sequence as the disassembly.

■ Step 1

Paste the antenna FCP on bottom case assy and arrange it well.



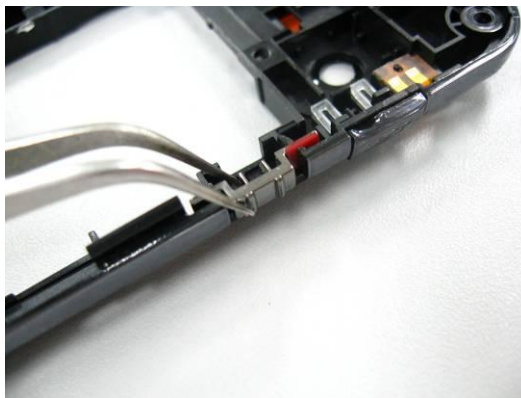
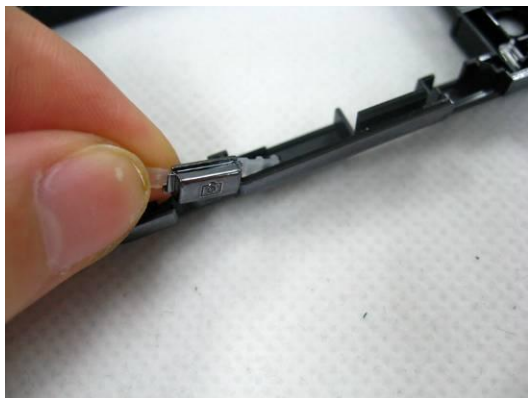
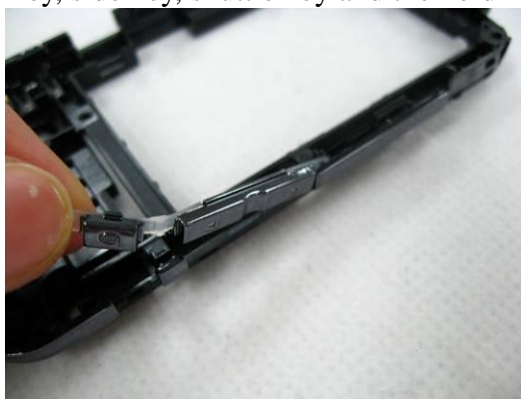
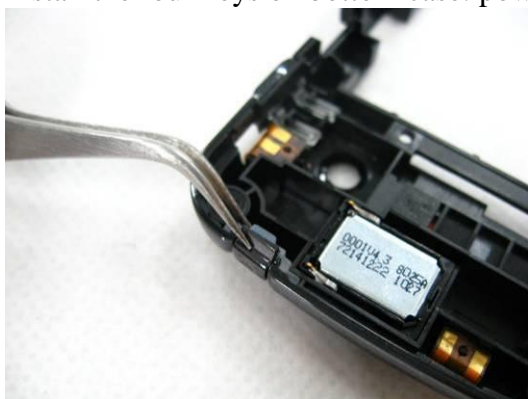
■ Step 2

Install the speaker on bottom case assy.

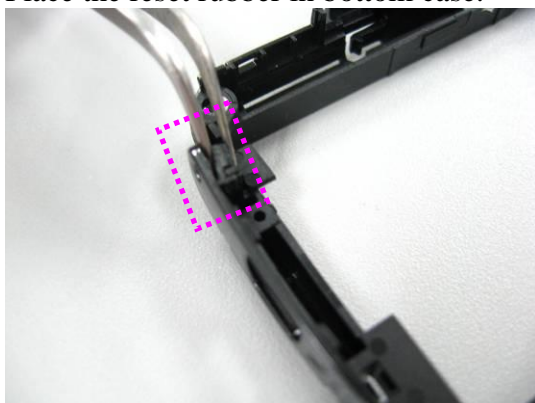


■ Step 3

Install the four keys on bottom case: power key, side key, shuttle key and the hold key.

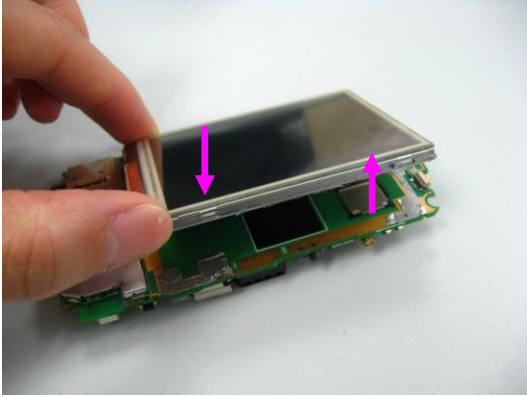
**■ Step 4**

Place the reset rubber in bottom case.



■ Step 5

Assemble the touch screen with the main board. Connect the FPC and close its connector. Then paste 1 LCD Conn mylar.

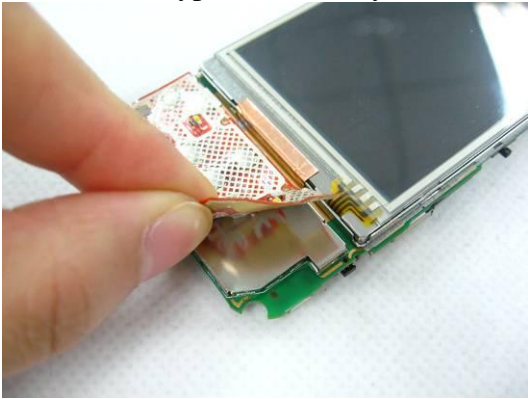
**■ Step 6**

Assemble the keypad frame and press to fix it into the hooks.



■ Step 7

Paste the Keypad-VER CAREER and connect its FPC with the main board. Close its connector and fix the keypad CONN mylar.

**■ Step 8**

Install the MIC rubber.

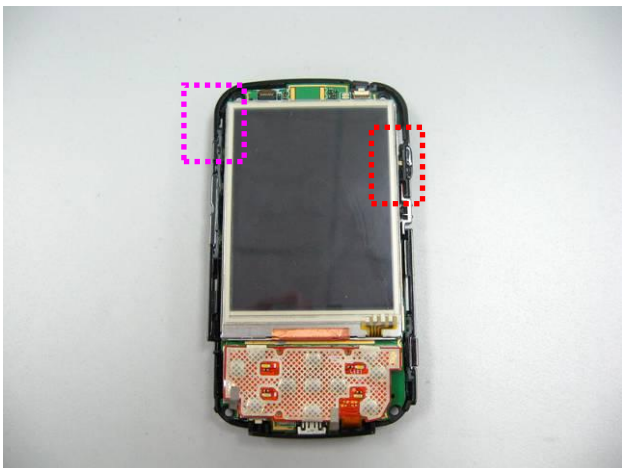
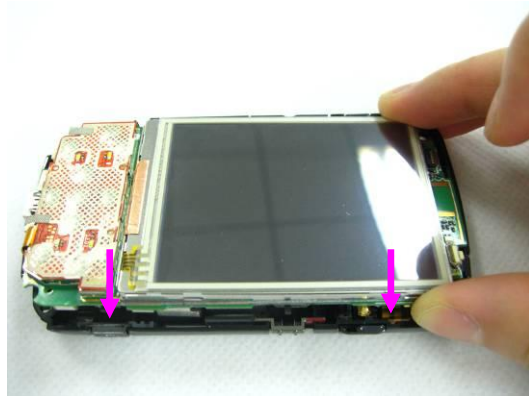
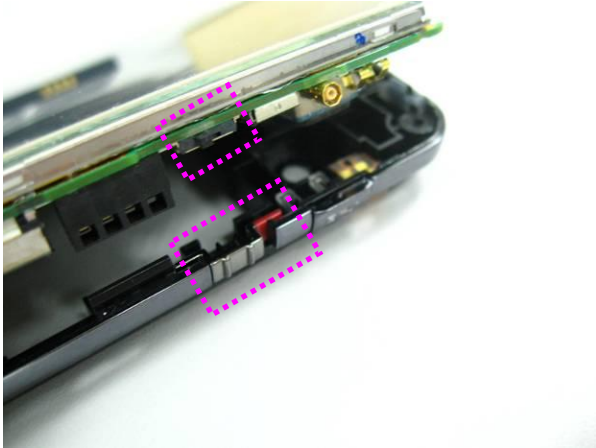


■ Step 9

Install the camera and fix its connector.

**■ Step 10**

Install the main board and arrange it in the bottom case. **Please switch the Hold key to the right place on main board and bottom case at first.** Press the main board into the hook in bottom case. **Please do not crush the GPS CON.**

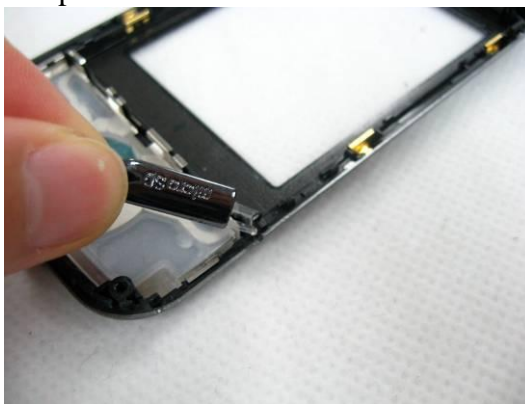


■ Step 11

Install the receiver by a pair of tweezers.

**■ Step 12**

Assemble the keypad and Micro SD cover on top case.

**■ Step 13**

Install the top case and press four sides to fix it.



■ Step 14

Secure 5 screws on bottom case assy.

**■ Step 15**

Install the antenna cover and press to fix it.

**■ Step 16**

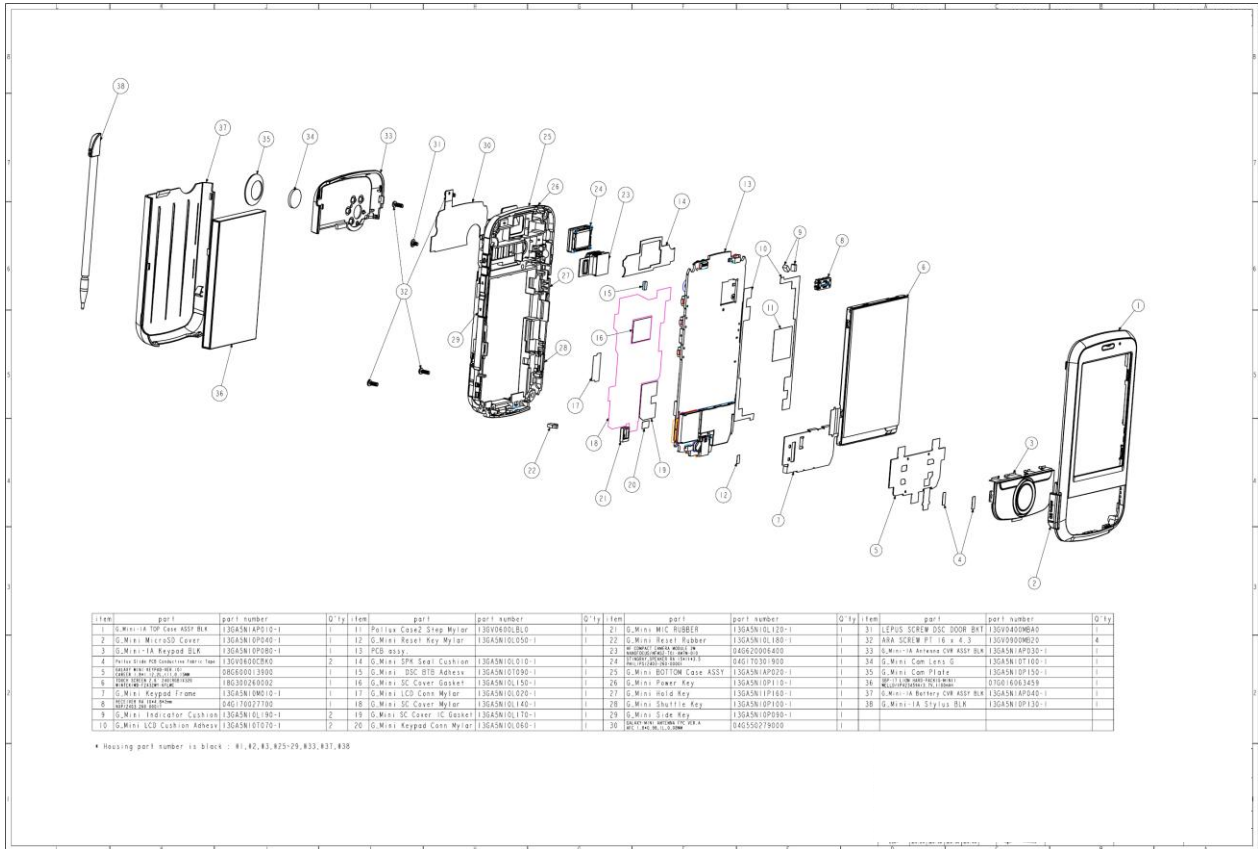
Place the battery back and install the battery cover.



■ Step 17
Insert the stylus.



3.2 Exploded Diagram



4 MMI Testing

1. Download & Copy files to micro SD card.










2. Insert micro SD card.



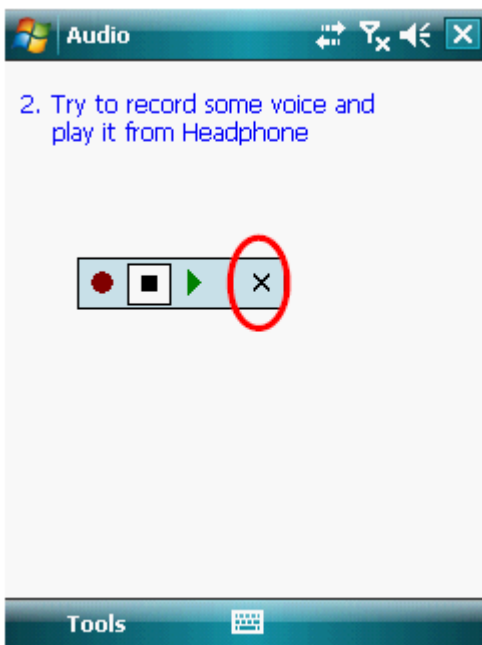
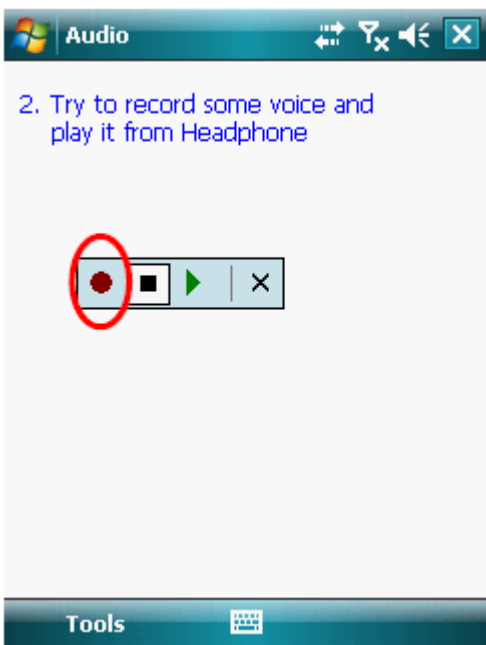
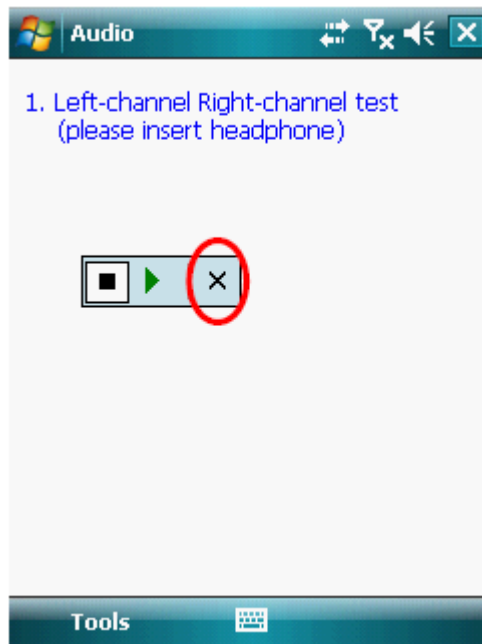
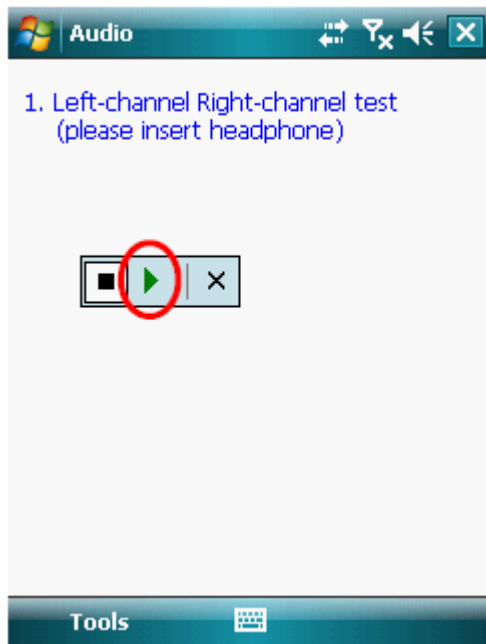
3. Please follow instructions as displayed.

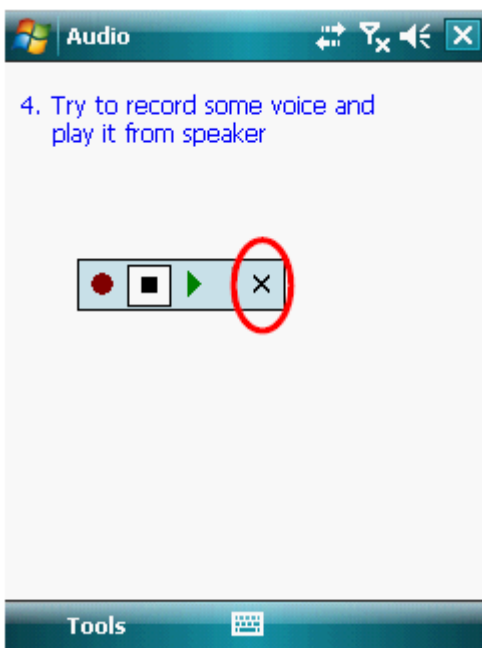
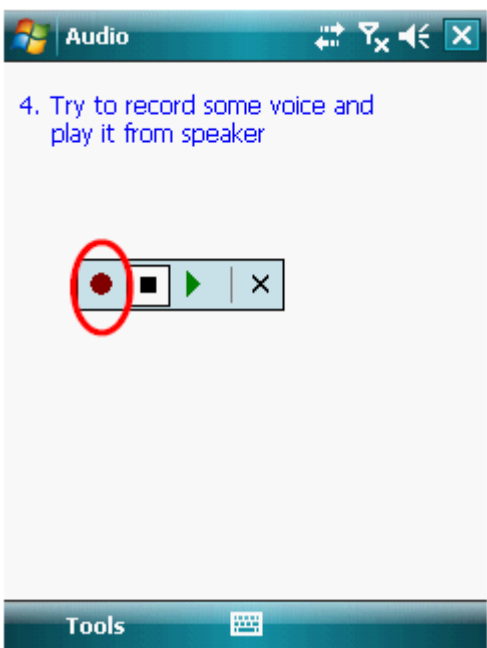
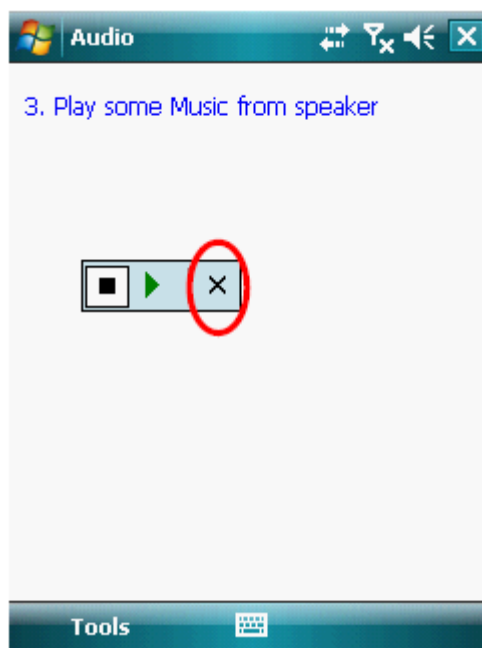
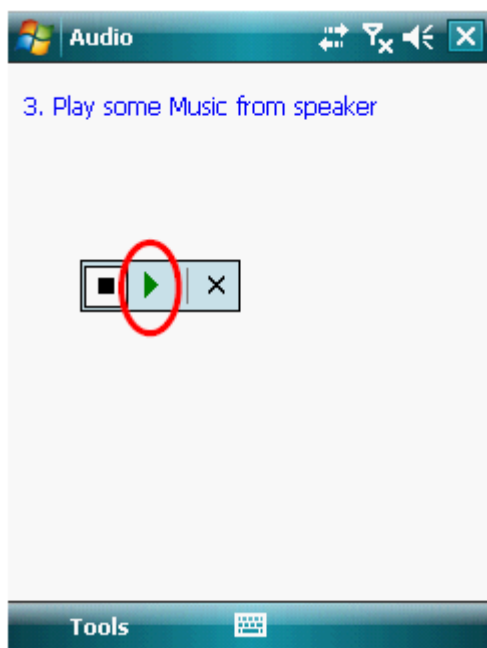
3-1. Touch Panel Calibration Test

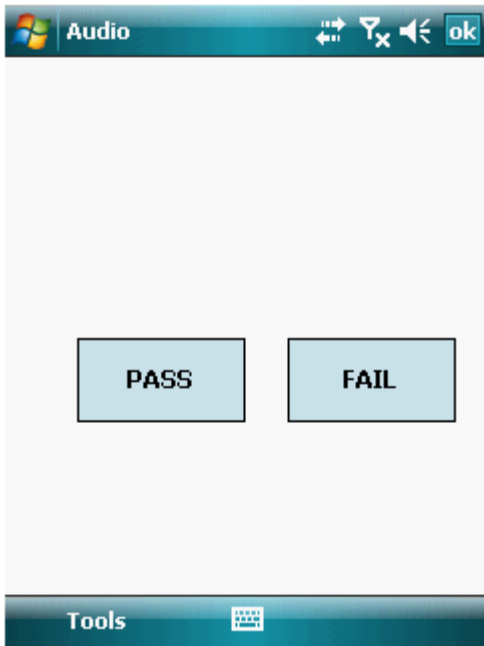
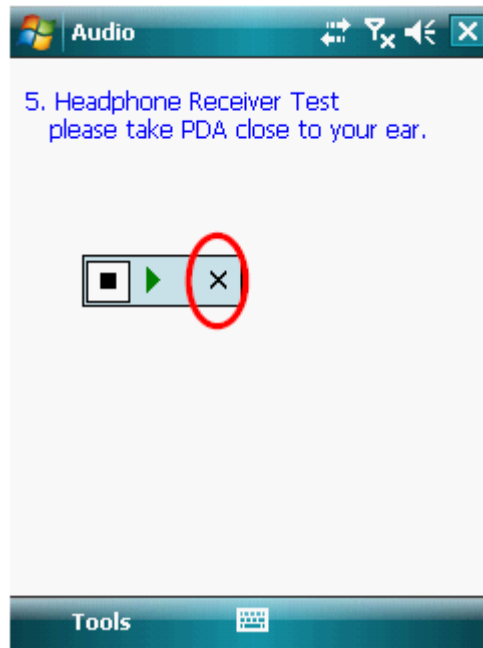
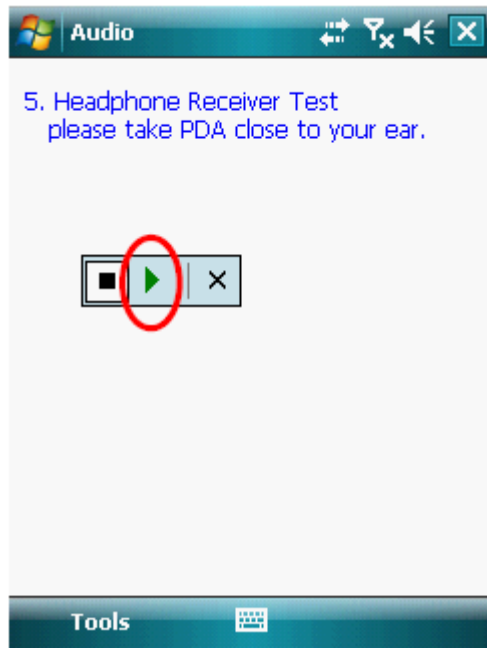
| | |
|---|--|
|  <p>Tap the target firmly and accurately at each location on the screen. The target will continue to move until the screen is aligned.</p>  |  <p>Tap the target firmly and accurately at each location on the screen. The target will continue to move until the screen is aligned.</p> |
|  <p>Tap the target firmly and accurately at each location on the screen. The target will continue to move until the screen is aligned.</p>  |  <p>Tap the target firmly and accurately at each location on the screen. The target will continue to move until the screen is aligned.</p>  |

3-2. Audio Test

In this test, item 1 & 2 need to be done with the headphone, otherwise, just bypass.







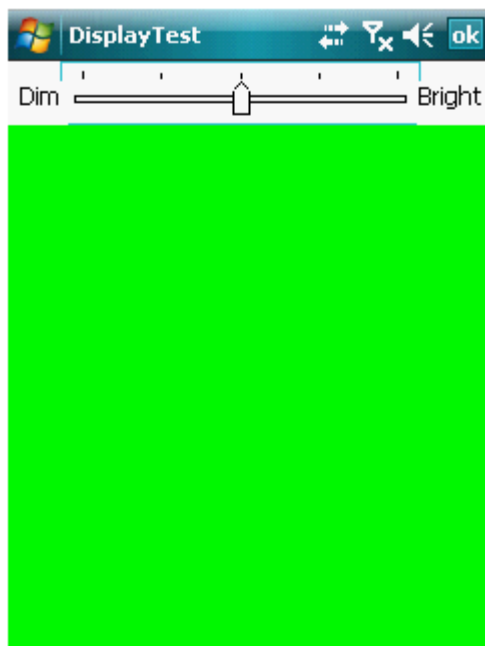
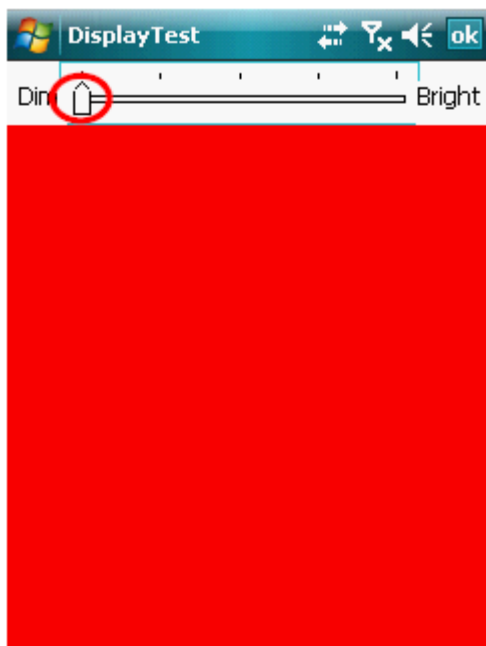
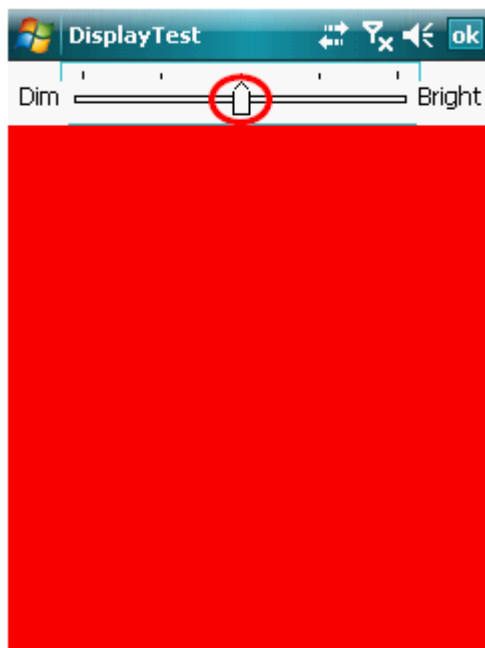
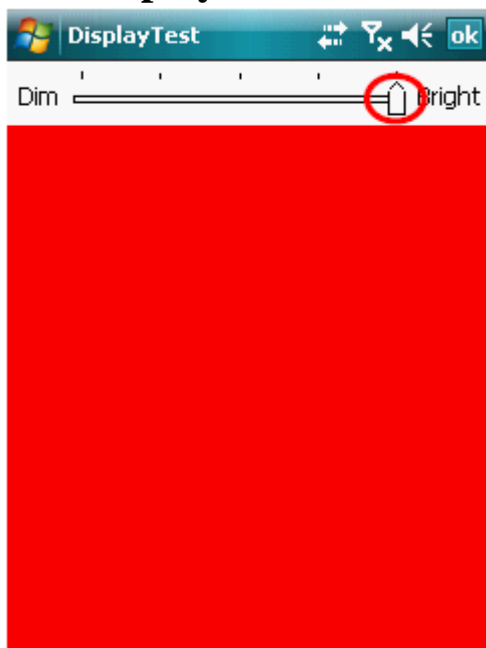
3-3. Keypad Test

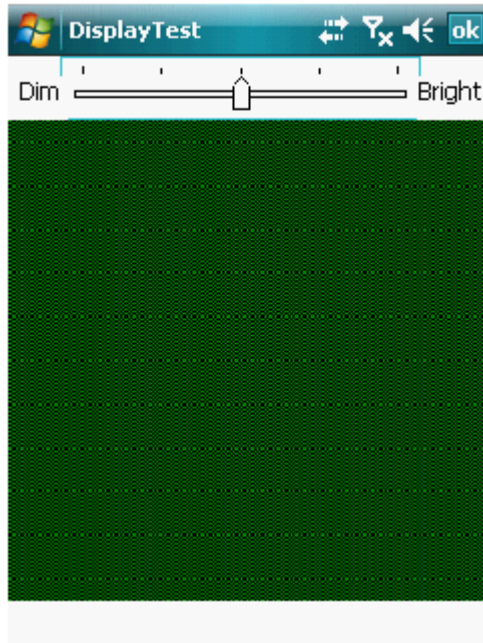
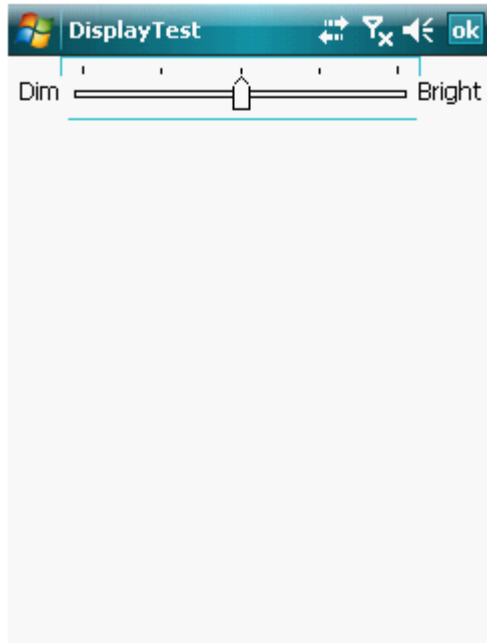
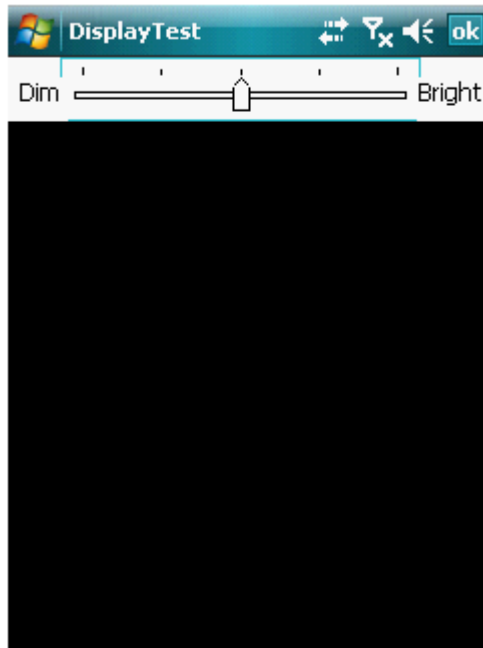
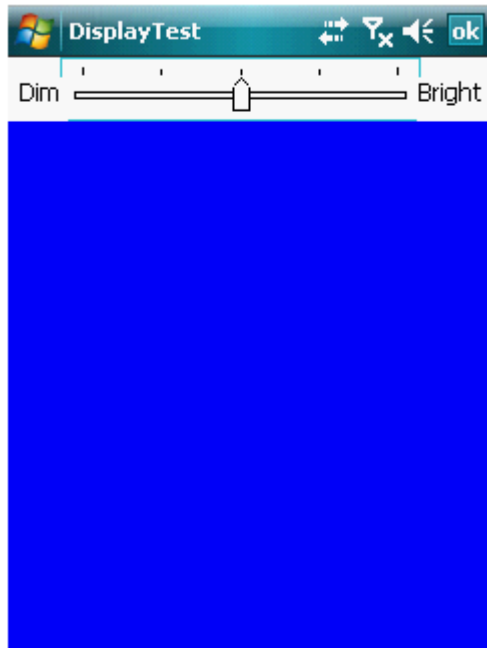


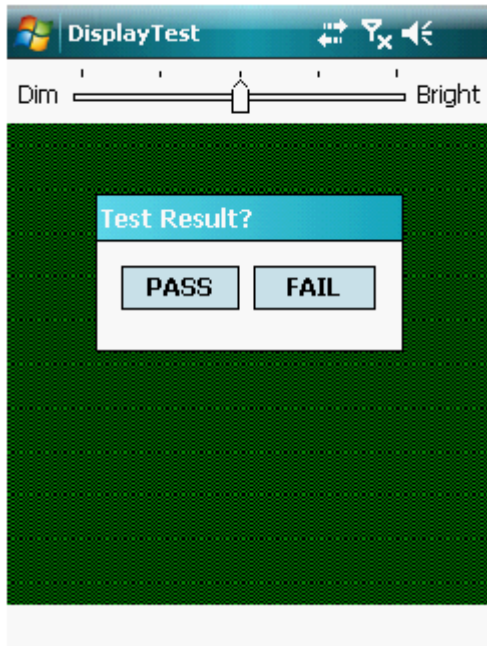
3-4. Camera Test



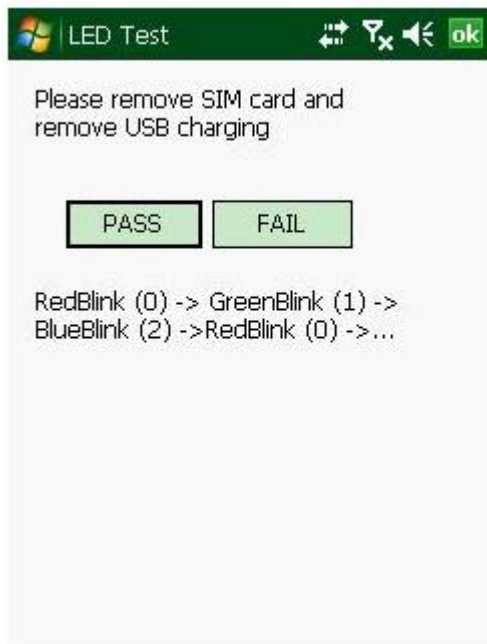
3-5. Display Test







3-6. LED Test



3-7. Vibrator Test



3-8. Battery Test



Instruction:
Please Plug AC

Current Status:
Not Charging
Battery Life Percentage: 95%

10



Instruction:
Checking... Please Wait...

Current Status:
Charging...
Battery Life Percentage: 95%



Instruction:
Please Unplug AC

Current Status:
Charging...
Battery Life Percentage: 95%

10



Instruction:
Checking... Please Wait...

Current Status:
Not Charging
Battery Life Percentage: 95%

