Service Manual

G-Shot P611

Version K01A

Contents

1. Function Test

TOOL/EQUIPMENT

SD card*2, TV, AC adapter, lens-wiping paper

USB cable, flower, accessory, computer

OPERATION DESCRIPTION

ITEM	OPERATION DESCRIPTION
1	Load AAA battery and power on with power button. Confirm FW edition (right corner) is true and LCD display normal image.
2	Check the function of share menu and main menu. Confirm the handle and function of each button are OK.
3	Dial M/N Button to choose Normal and press Set Button to choose mode. Take a photo towards light and check if flash lamp is triggered. Stop camera lens and take a photo, check if flash lamp is triggered.
4	Dial M/N Button to choose digital zoom mode. Choose + mode and take a photo towards the flower. Meanwhile check if M/N Button has abnormal sound, rocking, hard to dial, no clip sense and other badness.
5	Press MODE button to choose Movie mode and press recording 5~10 sec. Confirm if recording is normal.
6	Press MODE button to choose and press Set. View captured photos and confirm they are OK. Press Shutter button to play back and check if playing back is normal.
7	Power off, insert SD card and power on the camera again. Repeat process 3~6 and confirm it is normal. (Take two photos in Normal AUTO mode: one towards dark place; one towards light place and record 2~5 sec. Press Mode key to choose Playback Mode and confirm photos and Movie are OK.)
8	Power off, take out SD card and power on the camera again. Connect PC with USB cable and check if photos and Movie are normal.
9	Exit USB mode after it is OK and press Mode button to choose . Press Menu again to choose Format from Delete. Format Flash Memory and delete captured photos and Movie.
10	Press Mode button to choose and choose Reset after press Set. Then press the right button and resume default value.
11	Select 10pcs camera each section and test as follow 1) Set Flash (Auto mode) and take 50 pictures towards the dark place. Confirm if it is triggered and if the photos are normal. 2) Power off and press Menu button. Exit after choose Self Timer and press Shutter to take 2 photos. Confirm if it can take photos and if the photos are OK.
12	Note the test result. OK products flow to the next section, and send NG products to be repaired.

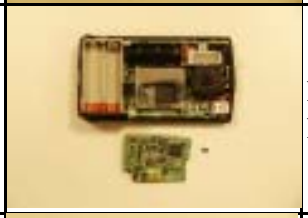
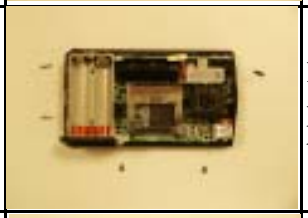
2. Troubleshooting

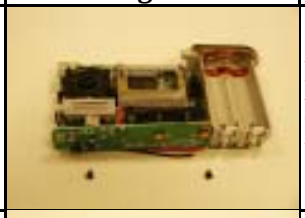
Item	NG point	NG Analyzing solution
Power system	**Power on fail**	**1>. Check if connection between battery spring and battery is OK. 2>. Check if power board 3.3VD is normal 3>. Check if connection between JP1 and MCU/B JP2 is OK. 4>. Check if connection between JP2 and MCU/B JP1 is OK. 5>. Check if the fuse F1 is OK. 6>. Check if the pin3 of U2 is being high electric level outputted. 7>. Check if output voltage is normal 8>. Check if pin39, pin40, pin47, pin48 of IC U1 have the vibration waveform output. 9>. Check if output sensor is cold soldering 10>. Change Power IC U1 11>. Check if the switch tube of each power is short circuit, broken circuit. 12>. Check if crystal Y1, Y2 of MCU board worked normally. 13>. Change EEPROM U10. 14>. Re-update F/W 15>. Check if Q6, Q5 is OK. 16>. Check if Trigger/B SW1 is OK.**
Display and image system	**Fail to Shot 1. LCD display “memory full”**	**1>. The camera memory & SD card is full**
	2. No reaction when press the shot button	**1>. Check if Trigger/B SW2 is cold soldering or broken.**
	3. Fail to save picture	**1>. Confirm if the SD card is OK. 2>. Check if U8/U9 is OK. 3>. Check if SD base is cold soldering**
	Fail to UPDATE	**Check if SD base is cold soldering Check if SD have the program and the program name is correct**

	TFT-LCD no image/noise	**1>. Check if LCD soft board is well connected to interface 2>. Check if JP3 is cold soldering. 3>. Check if LCD is OK. 4>. Check if signal DRV has the square wave output, LED ANDOE is about 7V.**
	TFT-LCD display LENS COVER CLOSED	**1>. Check if SW1 on Power Board is damaged, cold soldering.**
Charging and Triggering system	**Charging fail or insufficient charging voltage**	**1>. Check if Trigger/B IGBT Q2 is breakdown. 2>. Check if D3 is been reverse breakdown. 3>. Check if R1/R2/R4 is cold soldering, value changed. 4>. Check if U1 is cold soldering or NG. 5>. Check if Big capacitor is leakage.**
	Charging is normal but no triggering	**1>. Check if Flash Mode set is correct. 2>. Check if lead wire of reflector is cold soldering, broken-circuit. 3>. Check if C6, C7 is cold soldering, broken-circuit. 4>. Check if interface JP3 is cold soldering. 5>. Check if tube is cold soldering/offset/crack/broken-circuit. 6>. Check if Q3, Q5 is OK.**
Lens System	**Blur shot**	**1>. Check MCU board SW6 is cold soldering or broken which resulted in fail in switching while distant shot and close shot. 2>. Check if lens is dirty 3>. Check if lens is loose or work bad.**
Communications System	**USB no connection**	**1>. Check if USB interface is cold soldering, bad soldering. 2>. Check if USB wire, interface is OK. 3>. Check if L5, L6 is cold soldering, broken circuit. 4>. Check if PIN in USB interface is distort.**

If change any PCB of DSC, the calibration is necessary.

3. Disassemble Procedure

	Step	Figure	Description	Remark	Tools
Disassemble procedures	1		Finished Product	Examine if there's any scratch on the surface.	
	2		Remove all the screws on the camera housing then remove the Front Cover.	Do not scratch the camera surface while removing the screws.	Screw driver
	3		Remove the screws and Power PCB as shown.		Screw driver
	4		Remove the screws then prepare to disassemble the main PCB.		Screw driver
	5		Disconnect the FPC from rear cover.		Tweezers
	6		Desolder the joint from main PCB.		Iron soldering
	7		Desolder the wires on Main PCB		Iron soldering

	Step	Figure	Description	Remark	Tools
Disassemble procedures	8		Remove the strobe PCB form the main frame.		Screw driver
	9		Desolder the wires of flash from the strobe PCB.		Iron soldering
	10		Remove the flash and lens module from the main PCB as shown.		Screw driver
	11		Remove the lens cover from the front cover.		Screw driver

4. Firmware Update Procedure

Product : G-Shot P611

To update this camera firmware, you will need to have

1. The new firmware file from Premier.
2. One SD card.
3. One card reader.

Please follow the steps below to perform the update process:

1. Prepare a formatted and empty SD card.
2. Insert a SD card to the card reader. Copy the firmware file (file name should be "image.bin") into the SD card. Make sure the new firmware file is copied to the SD card.
3. Insert the SD card into the camera.
4. Plug in the AC adapter into the camera.
5. PRESS "Power" button to turn on the camera, then wait for update process
6. When led is blink, it means update ok.
7. Reformat the SD card if you want to use it again.

Note: Don’t remove the power source during firmware update procedures.

5. Part List (G-Shot P611)

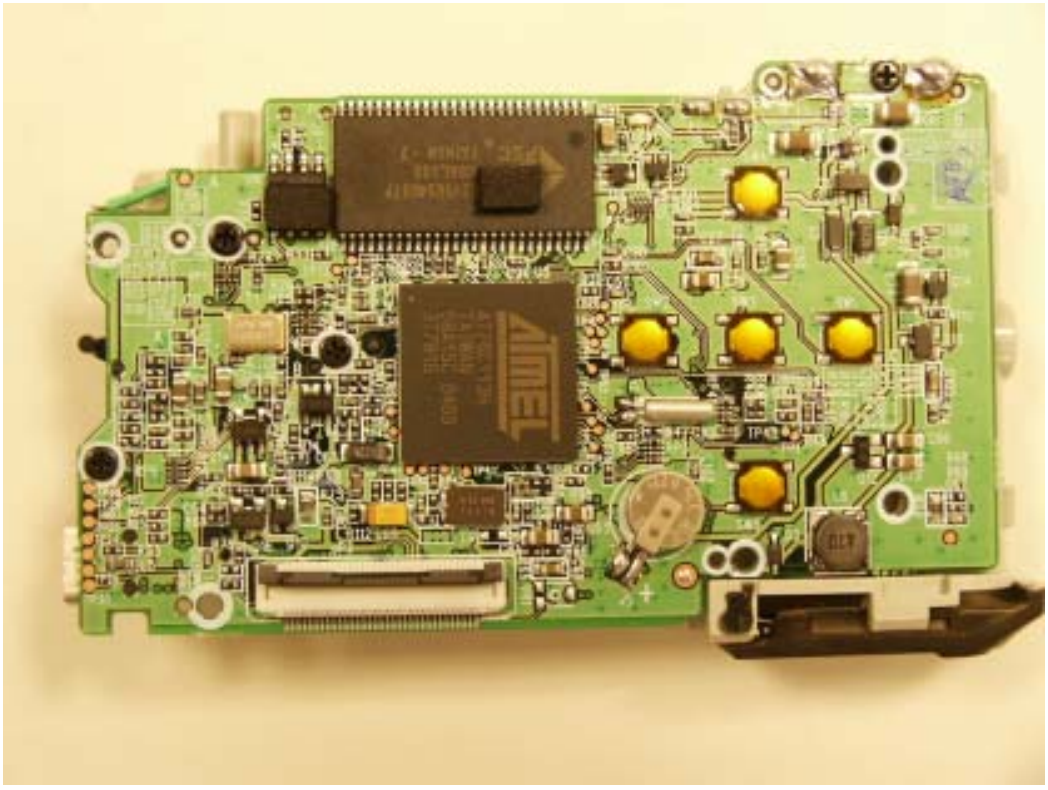
Item	Parts Name	Pcs / set	P/N	Remark
1	Front Cover ASSY	1	9L444-2000-0BL	
2	Rear Cover ASSY	1	9L444-3000-99	
3	Lens Cover	1	9L434-004-99	
4	Main PCB ASSY	1	9L547-0001	
5	Power PCB ASSY	1	9L547-8001	
6	Strobe PCB ASSY	1	9L547-4001	
7	Lens Module ASSY	1	9L446-6100	
8	Battery Cover	1	9L434-460-99	
9	USB Cover	1	9L434-010*0BL	
10	LCD	1	02092-0010-00	

1. **Front Cover ASSY**

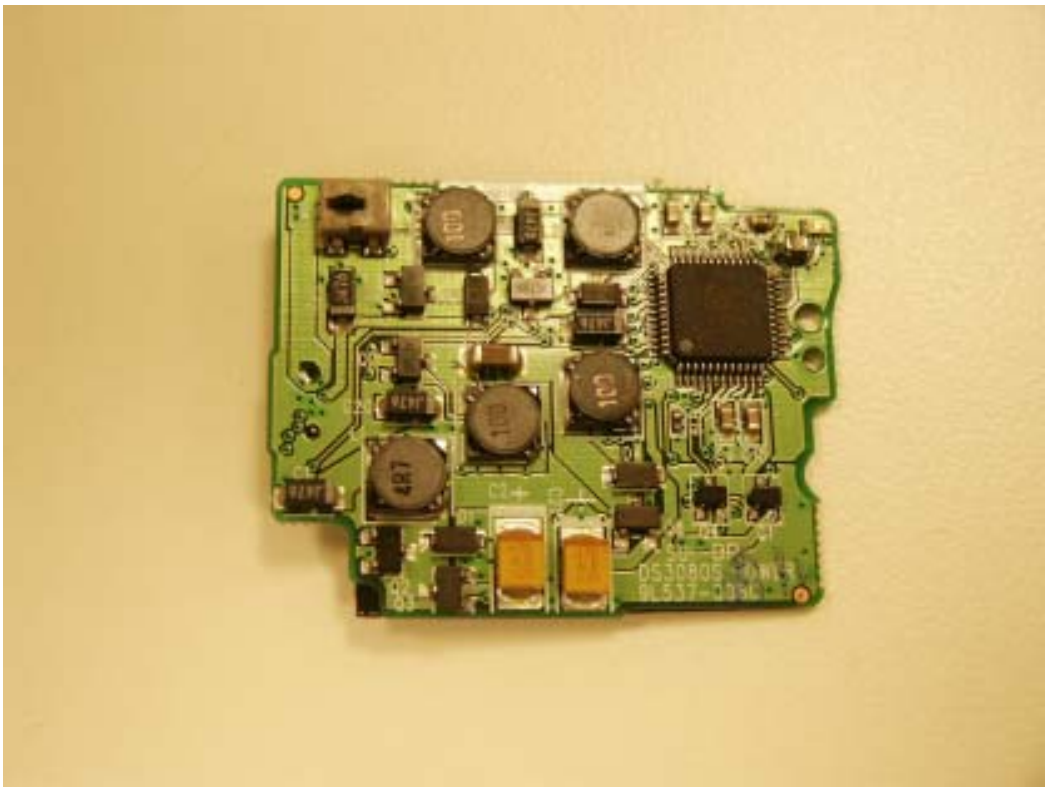
2. **Rear Cover ASSY**

3. **Lens Cover**

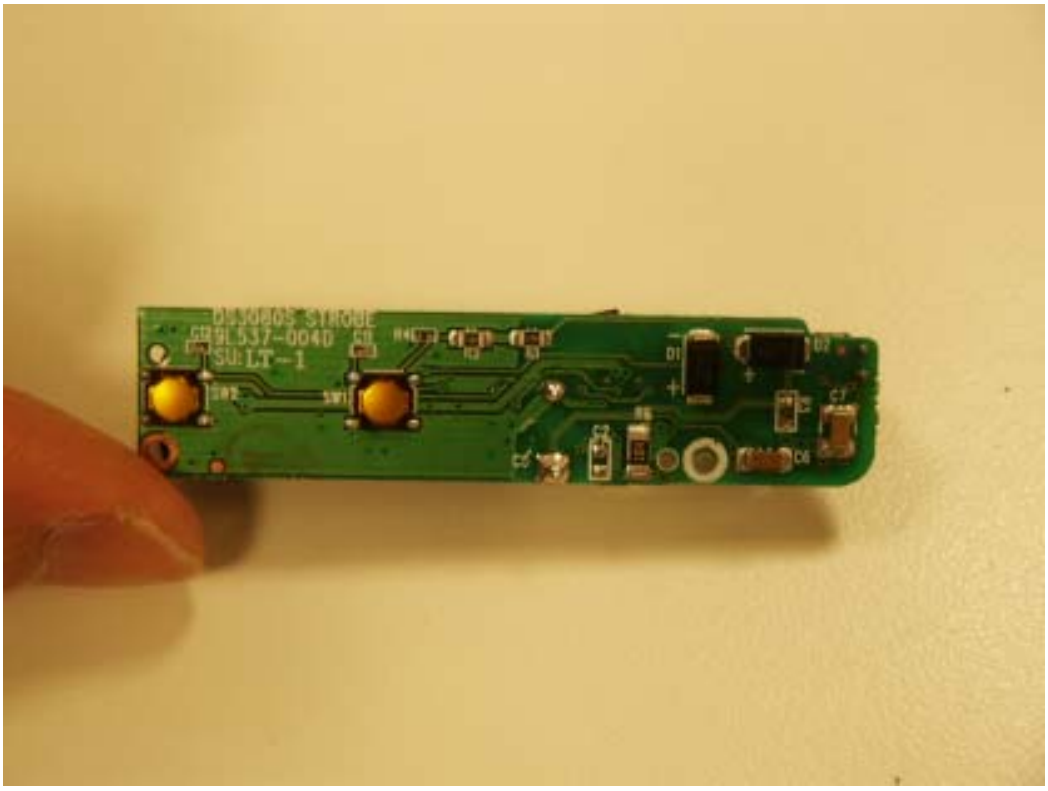
4. **Main PCB ASSY**



5. Power PCB ASSY



6. Strobe PCB ASSY

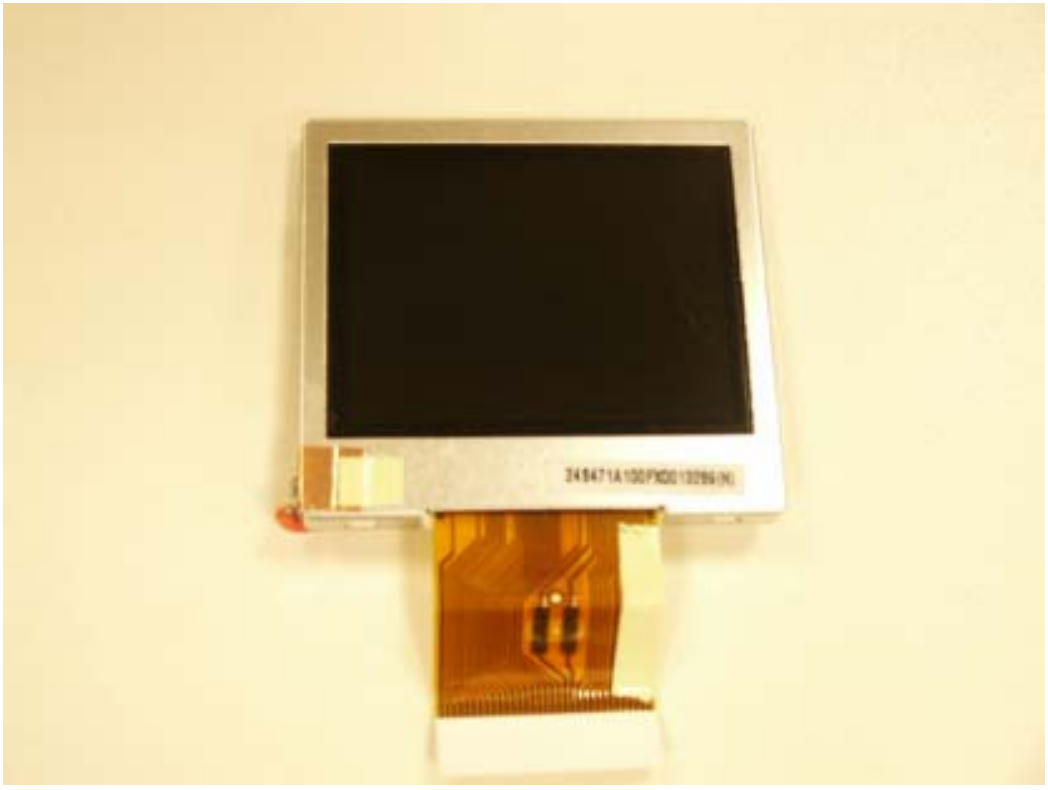


7. Lens Module ASSY

8. Battery Cover

9. USB Cover

10. LCD



6. Tooling

Item	Description	Mark
1	Screw Driver (2.0m/m)	
2	Tweezers	
3	Soldering iron	

1. Screw Driver

2. Tweezers

3. Soldering iron