



# **SAMSUNG NX1000**

# SERVICE Manual

#### **DIGITAL CAMERA**



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- 2. Product specifications
- 3. Disassembly and reassembly
- 4. PCB diagrams
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#### **1. Repair information**

#### **1-1 Customer satisfaction statement**

We hold ourselves to the highest standards of customer satisfaction and service.

- Combining perfect technical solutions with a customer-oriented approach is our top priority.
- We treat our customers we serve with kindness, loyalty, respect and dignity.
- We are committed to earn customers' trust continuously through excellence in repair solutions.
- We keep our promises and commitments to our customers.
- Committed to quick and easy resolution of all support issues, we deliver industry-leading response times.

#### [Guide]

We listen carefully to our customers' requirements and always find an optimum solution for their needs. We are committed to your satisfaction and have procedures in place to provide you with a fair, timely and effective means to resolve problems. It combines industry leading preventive assistance with responsive support that helps us address problems quickly and effectively. We will continuously maintain and improve our services to satisfy the needs of our customers.

#### 1-2 Warranty and repair service information

#### (1) General terms and conditions

It is guaranteed to be free of charge from defects in material and workmanship under normal use for a period of one year from date of purchase.

Digital Camera and lens come with a one year limited warranty from the date of purchase.

#### \* The duration of the warranty depends on the laws in the country in which it was purchased.

The following information will be required to process warranty requests:

- a. We imply warranties to one year from the original date of purchase. In the event that the purchaser is unable to provide a warranty card or proof of purchase, the warranty period will be determined by the date of manufacture. The warranty period shall be decreased to three months from the original product manufactured date.
- b. The coverage under this warranty begins on the date of your purchase of the product. In the event that a warranty card or proof of purchase is not available, a purchase receipt, preferably the purchase invoice, to confirm the date of purchase is required for warranty service.
- c. In the event that a valid date of purchase is not available, the warranty period will be determined by the date of manufacture. The warranty period shall be decreased to three months from the original product manufactured date.

#### Precautions

#### (2) Limited Warranty

It reserves the right to retain any parts or components replaced at its discretion in the event of a defect noticed in the product. The period with respect to retaining components may vary respectively depending on its components. We are not liable to repair or replace its faulty product after the Warranty Period has expired.

#### \* We warrant its retaining camera and lenses for five years and three years for the accessories.

- a. If a warranty claim is filed after the product has been discontinued, we reserves the right to honor the components warranty. Warranty period may vary depending on the type of components.
- b. In the event that no identical warranty information is available for service repair, company has the right to provide warranty. The warranty does not affect the consumers' rights against the company related to its information.

For the length of the period indicated on the chart below, it starts with the date of original purchase.

#### (3) Warranty Period for components

Our liability under this warranty shall be limited to the following:

- a. In the event of a same malfunction problem within two months after repair service by Samsung authorized technician, we will repair or replace free of charge the component of the product which is found to be defective.
- b. In the event of the component that you have paid the replacement cost is returned under normal use within one year at our premises, such components will be replaced free of charge component of the product which is found to be defective.

#### <Table. 1-1 Warranty Periods for Parts>

Part Name	Warranty Period	
Battery Charger		
AC Adaptor	Six months	
Battery	Six months	
Remote Control		
CD Software	Three menths	
Earphone	Three months	
Pouch for camera	Netensieckle	
Cable	Not applicable	

#### (4) Repair Claims

Essentially, the following causes of damage are covered:

- a. Failing to function properly under normal use during the limited warranty period.
- b. Repair Services free of charge is granted for the performance of a specific contract.

#### 2) Repair charges

This warranty does not cover damage caused by:

- a. Defect occurring after the expiration of the Warranty Period.
- b. Damage due to negligence, immersion in water, impact, loss and tampering.
- c. Repair or alteration performed by any party other than Samsung authorized technicians.
- d. Misuse or other improper use of the power button.
- e. Exhausted parts such as batteries, lamps and filters, etc.
- f. Defect that occurs due to sand, dirt liquid, etc. entering the inside of the product casing.
- g. Consumable parts which have ceased working through normal use such as as earphone, battery discharger and various accessories.
- h. Products purchased second hand or any damage that occurs due to a second hand or repair performed by anyone other than Samsung or a Samsung authorized service station.
- i. Fire, earthquake, flood or other natural disasters.

The warranty cover period for components is listed below as per table 1-2.

#### <Table. 1-2 Warranty Period for components>

Types of consumer damages			Compensation	
Failing to perform or failing to function properly under normal use	Required for essential repair within 10 days after the purchase		Replace the prod- uct or refund	-
	Required for essential repair within one month after the purchase		Replace the product or repair at free of charge	Repair charges
	Applicable to repair	Problem occurred twice due to same malfunction	Free of charge	
		Problem occurred three times due to same malfunction	Replace the prod- uct or refund	Repair charges
		Problem occurred four times due to some other malfunction		
	Not applicable to repair	Within the period with respect to retaining components		Replace the product at the cost of the depreciated value or refund its price added 10% of depreciation
	Applicable repair			Repair charges
Failing to perform or failing to function properly as a result of willful intent and negligence of customer	Not applicable to repair (Except for defects or malfunction as a result of fire or flood or other natural disasters		Replacement charge	Repair charge and replace the prod- uct at the cost of the depreciated value

Precautions

#### **1-3 Precaution for disassembly and reassembly**

# CAUTION 1. Use the anti-static handing procedures included with the anti-static mat to ensure that there is no electrostatic discharge and component damage. 2. Static electricity is the biggest danger to the PCB parts you are about to disassemble or assemble. It's important to use your anti-static wrist strap to prevent damage to these components. 3. Dismantling a discrete electronic component such as main capacitor is dangerous. The capacitor contains high voltage, which can cause a severe electric shock if you touch it. This holds a charge even when the unit is not plugged in and is capable of delivering a fatal shock. 4. Using excessive force during disassembly and assembly can damage locking parts. Use care when handling "Locking parts" to avoid damage to FPCB or wire. Apply pressure only at the points designated in the maintenance instructions. 5. Due to increasing environmental concerns, a number of restrictions have been placed on the material content of electronic components and electronic assemblies. It requires utilizing Lead-Free (Pb-free) Soldering. 6. The following precautions must be observed when handling such components below.

#### <Table. 1-3>

Component	Precautions
FPCB	FPCB is brittle material. It can be easily damaged thus it should be handled with care. It is recommended to use wooden or plastic tweezers for manual placement.
CCD (CMOS) IR CUT Filter LCD, LENS	Be careful not to stained your finger. It is recommended to use wooden or plastic tweezers for manual placement. Stain is often caused by the Alcohol used in these components. Find a clean, well-ventilated place to do your work.
PCB	Use an anti-static mat as well as an anti-static wrist strap to avoid ESD damage to PCB.
CONNECTOR	The use wooden or plastic tweezers is recommended for manual placement. Metal tip tweezer might make marks or damage.
BARREL	Always follow proper direction while assembling the components of the barrel.

## 2. Product specifications

#### **2-1 Specifications**

#### <Table. 2-1 Specifications>

Table. 2-1 opecification		
Image Sensor		
Type(size)	CMOS(23.5 X 15.7mm)	
Effective/ Total pixels	Approx. 20.3 mega-pixels/ Approx. 21.6 mega-pixels	
Lens Mount		
Type/ Available lens	Samsung NX Mount/ Samsung lenses	
Image Stabilization		
Type/ Mode	Lens shift (depends on lens)/ Mode 1 / Mode 2 / Off	
i-Function		
(i) effect (depends of	on lens), (1) zoom (X1.2, 1.4, 1.7, 2.0)	
Distortion Correct		
Lens Distortion Correct	on/off (depends on lens)	
Display		
Type/ Size	TFT LCD 3.0" (Approx. 7.6 cm)	
Resolution	VGA (640X480) Approx. 921 k dots	
Shutter		
Туре	Electronically controlled vertical-run focal plane shutter	
Speed	<ul> <li>Auto: 1/4,000-30 sec.</li> <li>Manual: 1/4,000-30 sec. (1/3 EV Step)</li> <li>Bulb (time limit: 4 min)</li> </ul>	
Dust Reduction		
Туре	Super sonic drive	
Flash		
Туре	External flash only (Bundle with SEF8A)	
Angle of view	28mm (35mm film equivalent)	
White Balance		
Mode	Auto WB, Daylight, Cloudy, Fluorescent White, Fluorescent NW, Fluorescent Daylight, Tungsten, Flash WB, Custom Set, Color Temperature (Manual)	
Micro adjustment	Amber/Blue/Green/Magenta 7 steps respectively	
Storage		
External memory (option	al): SD card (up to 1–2 GB guaranteed), SDHC card (up to 32 GB guaranteed), SDXC card (up to 128 GB guaranteed)	
GPS		
Туре	Geo-tagging with optional GPS Module (WGS 84)	
Feature	Location name (English and Korean only)     Google Map link (with Intelli-studio)	
Wireless network		
Туре	IEEE 802.11n supported	
Function	Social Sharing, Email, MobileLink, Remote Viewfinder, SkyDrive, Auto Backup, TV Link, Wi-Fi Direct	
Interface		
Digital output	USB 2.0 (HI-SPEED) (micro USB jack)	
Power Source		
Туре	Rechargeable battery: BP1030 (1,030 mAh)     Charger: BC1030	
Dimensions (W X H X	D)	
4.49 X 2.46 X 1.48 in (without protrusions)		
Weight		
7.83 oz (without battery and memory card)		

#### 2-2 Product comparison

#### <Table. 2-2 Product comparison>

Model Specs	NX1000	NX200
Product image	Shimsung Care County	
Image Sensor(size)	CMOS(23.5 X15.7mm)	CMOS(23.5 X15.7mm)
Effective pixels	Approx. 20.3 mega-pixels	Approx. 20.3 mega-pixels
Total pixels	Approx. 21.6 mega-pixels	Approx. 21.6 mega-pixels
Wight	7.83 oz(without battery and memory card)	7.77oz(without battery and memory card)
Dimensions	4.49 X 2.46 X 1.48 in (without protrusions)	4.59X2.46X1.44in(without protrusions)
Display	<ul> <li>Type : TFT LCD, 3.0" (7.6cm)</li> <li>Resolution : VGA (640X480) Approx. 921 k dots</li> </ul>	<ul> <li>Type : AMOLED, 3.0" (7.6cm)</li> <li>Resolution : VGA (640X480) 614 k dots (PenTile)</li> </ul>
i-Function	(i) effect (depends on lens), (i) zoom (X12, 1.4, 1.7, 2.0)	i-Scene (depends on lens), Smart Filter, Intelli zoom
Shutter	<ul> <li>Type : Electronically controlled vertical-run focal plane shutter</li> <li>Speed : - Auto: 1/4,000-30sec.</li> <li>- Manual: 1/4,000-30sec. (1/3 EV Step)</li> <li>- Bulb (time limit: 4min)</li> </ul>	<ul> <li>Type : Electronically controlled vertical-run focal plane shutter</li> <li>Speed : - Auto: 1/4,000-30sec. <ul> <li>Manual: 1/4,000-30sec. (1/3 EV Step)</li> <li>Bulb (time limit: 4min)</li> </ul> </li> </ul>
ISO equivalent	<ul> <li>1 Step: Auto, ISO 100, ISO 200, ISO 400, ISO 800, ISO 1600, ISO 3200, ISO 6400, ISO 12800</li> <li>1/3 Step: Auto, ISO 100, ISO 125, ISO 160, ISO 200, ISO 250, ISO 320, ISO 400, ISO 500, ISO 640, ISO 800, ISO 1000, ISO 1250, ISO 1600, ISO 2000, ISO 2500, ISO 3200, ISO 4000, ISO 5000, ISO 6400, ISO 8000, ISO 10000, ISO 12800</li> </ul>	<ul> <li>1 Step: Auto, ISO 100, ISO 200, ISO 400, ISO 800, ISO 1600, ISO 3200, ISO 6400, ISO 12800</li> <li>1/3 Step: Auto, ISO 100, ISO 125, ISO 160, ISO 200, ISO 250, ISO 320, ISO 400, ISO 500, ISO 640, ISO 800, ISO 1000, ISO 1250, ISO 1600, ISO 2000, ISO 2500, ISO 3200, ISO 4000, ISO 5000, ISO 6400, ISO 8000, ISO 10000, ISO 12800</li> </ul>
Flash	<ul> <li>Type : External flash only(Bundle with SEF8A)</li> <li>Angle of view : 28mm (35mm film equivalent)</li> </ul>	<ul> <li>Type : External flash only(Bundle with SEF8A)</li> <li>Angle of view : 28mm (35mm film equivalent)</li> </ul>
GPS	<ul> <li>Type : Geo-tagging with optional GPS Module(WGS 84)</li> <li>Feature : - Location name (English and Korean only)</li> <li>Google Map link (with Intelli-studio)</li> </ul>	<ul> <li>Type : Geo-tagging with optional GPS Module(WGS 84)</li> <li>Feature : - Location name (English and Korean only)</li> <li>Google Map link (with Intelli-studio)</li> </ul>
Wireless network	<ul> <li>Type: IEEE 802.11n supported</li> <li>Function: Social Sharing, Email, MobileLink, Remote Viewfinder, SkyDrive, Auto Backup, TV Link, Wi-Fi Direct</li> </ul>	-
Storage	External memory (optional): • SD card (up to 4GB guaranteed) • SDHC card (up to 32GB guaranteed) • SDXC card (up to 128GB guaranteed)	External memory (optional): • SD card (up to 4GB guaranteed) • SDHC card (up to 32GB guaranteed) • SDXC card (up to 128GB guaranteed)
Image Stabilization	<ul> <li>Type : Lens shift (depends on lens)</li> <li>Mode : Mode 1 / Mode 2 / Off</li> </ul>	<ul> <li>Type : Lens shift (depends on lens)</li> <li>Mode : Mode 1 / Mode 2 / Off</li> </ul>
Power Source	Rechargeable battery: BP1030 (1,030 mAh)     Charger: BC1030	<ul> <li>Rechargeable battery: BP1030 (1,030 mAh)</li> <li>Charger: BC1030</li> </ul>

#### **2-3 Accessories information**

#### <Table. 2-4 Unpacking & optional accessories>

image		Des	Parts No.	
	N USURE CONTRACTOR OF CONTRACTOR OF CONTRACT	<b>Camera</b> (including the body cap a	NX1000	
		External Flash		AD97-21562A
		USB cable	AD39-00190A	
		Rechargeable Battery		AD43-00202A
		Battery Cradle	AD44-00203A	
Packing		AC Power Cable	AC CODE CABLE_EXP-D1	3903-000616
items			AC CODE CABLE_USA-D1	3903-000618
			AC CODE CABLE_UK	3903-000613
			AC CODE CABLE_AUS-D1	3903-000612
			AC CODE CABLE_BRA	3903-000617
			AC CODE CABLE_CHINA	3903-000611
			AC CODE CABLE_ARG	3903-000610
		Software CD-ROM (User manual included)		AD46-00438A
	in sta	User manual Basic Operation	NX1000_QG_ENG(SEA)	AD68-07366A
	177800		NX1000_QG_SPA(SEA)	AD68-07367A
	SAMSUND	Strap	BLACK	AD63-07021A
			PINK	AD63-07021C
			WHITE	AD63-07021B

	image	Description		Parts No.
		<b>Camera bag</b> You can purchase the camera bag separa	AD69-03831A	
		<b>Camera bag</b> You can purchase the camera bag separa	ately.	AD69-03861A
	SAMSUNG	Memory card This product supports SD (Secure Digital),	Micro SD card	1109-001396
		SDHC (Secure Digital High Capacity), SDXC (Secure Digital eXtended Capacity),	SD card	1109-001394
	2GB	microSD, microSDHC, or microSDXC memory cards.	Card Adapter	AD81-02632A
		Filter You can create different colored effects by attaching filters to your lens.	-	
Ontional		USB cable You can purchase additional USB cables.	AD39-00190A	
accessories		HDMI cable You can view high-definition photos and videos by connecting the camera to an HDMI monitor with the HDMI (HDMI type D) cable.	AD39-00179A	
		Shutter release (micro USB type) Shutter release reduces shakiness when used with a tripod.		AD64-03699A
		<b>Strap</b> You can additionally purchase the straps.	BLACK	AD63-07021A
	SAMSUNA		PINK	AD63-07021C
		WHITE		AD63-07021B
	and the second sec	Battery pack You can purchase additional battery packs.		AD43-00202A
		Quick battery charger You can purchase an optional quick battery ch	AD69-03600A	

#### 2-4 About the memory card

#### <Table. 2-3 Memory card capacity>

2 GB S	D card:
--------	---------

	Size	Super Fine	Fine	Normal	RAW	RAW + S.Fine	RAW + Fine	RAW + Normal
	20.0M (5472X3648)	186	364	535	53	37	46	51
	10.1M (3888X2592)	378	724	1,043	-	47	53	56
	5.9M (2976X1984)	626	1,168	1,642	-	52	57	58
	2.0M (1728X1152)	1,627	2,742	3,553	-	58	60	61
	Burst	731	1,349	1,878	-	-	-	-
	16.9M (5472X3080)	230	448	655	-	40	49	53
Photo	7.8M (3712X2088)	485	919	1,310	-	50	55	57
	4.9M (2944X1656)	747	1,376	1,912	-	54	57	59
	2.1M (1920X1080)	1,573	2,666	3,468	-	58	60	61
	13.3M (3648X3648)	289	560	814	-	44	51	54
	7.0M (2640X2640)	536	1,010	1,432	-	51	56	58
	4.0M (2000X2000)	893	1,621	2,224	-	55	58	59
	1.1M (1024X1024)	2,645	4,057	4,936	-	60	61	61

	Size	HQ	Normal
	1080 30P 1920X1080(30FPS)	Approx. 17' 35"	Approx. 21' 56"
	810 24P Approx. 19 1920X810(24FPS)	Approx. 19' 00"	Approx. 23' 43"
Videos*	<b>120</b> <b>30</b> 1280X720(30FPS)	Approx. 29' 10"	Approx. 36' 20"
	<b>480</b> <b>3</b> 0P 640X480(30FPS)	Approx. 73' 26"	Approx. 91' 00"
	EPD For Sharing(30 FPS)	Approx. 236' 16"	Approx. 287' 12"

\* The recordable time may vary if you use the zoom. Several videos were recorded in succession to determine the total recording time.

#### 2-5 About the battery

#### <Table. 2-4 Battery specifications>

....

Specifications	
Item	Description
Model	BP1030
Туре	Lithium-ion battery
Cell capacity	1,030 mAh
Voltage	7.4 V
Charging time(when the camera is switched off)	Approx. 140 min

Battery life	
Shooting mode	Average time / Number of photos
Photos	Approx. 160 min/Approx. 320 photos
Videos	Approx. 160 min (Record videos at 1920X1080 resolution and 30 FPS.)

### 3. Disassembly and reassembly

#### **3-1 Disassembly**

1. Provide the general support.

: Take the parts such as LCD, Back-Cover and Top to Samsung authorized service centers.

2. Provide the technical expertise support.

: After replacing the parts such as Main PBA, CMOS, Shutter, CMOS, it is required to adjust these parts with equipments specified below.

For more detail information, refer to the service manual (CH7 Adjustmet).

<table.< th=""><th>3-2&gt;</th></table.<>	3-2>
---	------

Repair Service	Parts	Items to be adjusted	Required equipment	
General support	LCD, Back-Cover, Top	None	None	
	LENS Mount, Front-Cove	CMOS Tilt		
Technical expertise	ASSY-CMOS	CMOS Tilt, AWB(Light box)	Shutter speed	
support	Shutter MAINPBA	Shutter Speed	Light box (5,500K)	
	MAIN PBA	AWB(Light box)	LIGHT DOX (3,350K)	

#### 3-1-1 General support - Disassembly

1) Remove the 2 screws on the left side. / 1 screws on the right side / 4 screws on the bottom side



2) Run a pry tool around the groove to release the locking park as illustrated in image below. Slightly wiggle it to widen the gap. You'll have to apply a little force to remove it.



Fig. 3-2

3) Remove the FPCB from the connector as illustrated in Fig. A.





#### 4) Remove the ASSY COVER BACK.



Fig. 3-4

- 5) Remove the 5 screws of the ASSY COVER BACK.
- 6) Remove the FPCB from the connector as illustrated in Fig. B.





7) Remove the FPCB from the connector as illustrated in Fig. C.





- 8) Remove the following parts in the order indicated below.
- **(1) ASSY WHEELKEY / FPC BACK INTERFACE**
- ② ASSY PLATE LCD / LCD
- **3 BUTTON FUNCTION**
- **④ BUTTON REC**
- **5 WINDOW ACCESS\_NX200**



Fig. 3-7

9) Remove the following parts in the order indicated below.
1 ASSY PLATE LCD
2 LCD
3 CUSHON LCD



Fig. 3-8

10) Remove the FPC BACK INTERFACE from the ASSY WHEELKEY.





- 11) Remove the 3 screws.
- 12) Remove the 6 FPCBs from the connector as illustrated in Fig. C and Fig. D.



Fig. 3-10

13) Remove the ASSY MAIN PCB.





#### 14) Remove the 3 screws.

15) Remove the FPCB and WIRE as illustrated in Fig. E and Fig. F.



Fig. 3-12

#### 16) Remove the ASSY-SPK DRS and HOLDER TRIPOD as illustrated in Fig. G and Fig. H.



Fig. 3-13

- 17) Remove the COVER-HOT SHOE.
- 18) Lift up the PLATE-SPRING SHOEwith tweezers and remove it as illustrated in Fig. I.
- 19) Remove the screw as illustrated in Fig. J.





Fig. J



20) Remove the ASSY COVER TOP.







Fig. 3-16

22) Remove the 5 screws.
3) Remove the FPCB from the connector as illustrated in Fig. L.

SCREW-MACHINE (M1.7 x L3.5 / NI)

6001-001914

SCREW-TAPTYPE (M1.4 x L4 / NI)

6003-001739

Crew-taption (M1.4 x L4 / NI)

6003-001739

Percent the FPCB from the connector.

1. Open.

2. Remove.

FPCB

(FPCB

FPCB

(M1.4 x L4 / NI)

(M1.4 x L4 / NI)
(M1.4 x L4 / NI)

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(M1.4



24) Remove the following parts in the order indicated below.

- **1 HOLDER STRAP R**
- ② PLATE HOT SHOE BOTTOM
- **3 ASSY PCB TOP**



Fig. 3-18

25) Remove the 11 solders specified by the blue circle.







#### 26) Remove the 4 screws.









Disassembly and reassembly

#### 3-1-2 General support - Disassembly

#### 1) Remove the 4 screws.





- 2) Remove the following parts in the order indicated below.
- **① PLATE MOUNT LENS**
- **② MOUNT-INNER**
- **③ PLATE MOUNT SPRING**
- **④ SHAFT LENS DETECT**
- **5 SPRING LENS DETECT PIN**





#### 3) Remove the 3 screws.



Fig. 3-24

- 4) Remove the following parts in the order indicated below.
- ① DECO RING FRONT
- ② BLACK RING (Refer to Fig. M)
- **③ BUTTON LENS UNLOCK**
- ④ SPING (Refer to Fig. N)

#### CAUTION -

Take care not to misplace it when removing the BLACK RING.



Fig. 3-25

#### 5) Remove the 2 screws.





6) Lift up the HOLDER INNER MOUNT in the direction of the green arrow.7) Remove the ASSY COVER FRONT.





8) Remove the 3 screws as illustrated in Fig. O and Fig. P.



Fig. 3-28

- 9) Remove the following parts in the order indicated below.
- **①** GRIP FRONT
- 2 HOLDER STRAP L







- 1 3 SCREW
- ② ASSY CMOS
- **3 2 SCREW**
- **④ ASSY -SHUTTER**
- **5 ASSY-INNER MOUNT HOLDER**
- 6 3 SPRING-CS
- 1 ASSY LENS DETECT PCB



Fig. 3-30

#### 3-2 Reassembly

#### 3-2-1 Technical expertise support - Reassembly



- 2) Install the following parts in the order indicated below.
- **(1) HOLDER STRAP L**
- ② GRIP FRONT



Fig. 3-32

3) Tighten the 3 screws as illustrated in Fig. A and Fig. B.



Fig. 3-33

# 4) Lay the HOLDER INNER MOUNT over the ASSY COVER FRONT in the direction of the green arrow.5) Install the ASSY COVER FRONT.



ASSY COVER FRONT

Fig. 3-34

6) Tighten the 2 screws.



7) Install the following parts in the order indicated below.

- ① SPING (Refer to Fig. D)
- ② BUTTON LENS UNLOCK
- **3** BLACK RING (Refer to Fig. C)
- ④ DECO RING FRONT (Refer to Fig. E)

#### 

Take care not to misplace it when installing the BLACK RING.



Fig. 3-36

8) Tighten the 3 screws.







Fig. 3-38

10) Tighten the 4 screws.



Fig. 3-39

#### 3-2-2 General support - Reassembly

- 1) Install the following parts in the order indicated below.
- **(1) ASSY FPCB HOT SHOE**
- **② CUSHION MIC**
- **3 ASSY HOT SHOE**
- **④ PLATE HOT SHOE**
- **5 LEVER POWER**
- 6 KNOB MODE DIAL
- **⑦ PLATE MODE DIAL**
- **8 PLATE LEVER POWER**
- **9 DECORATION WIFI**
- **10 BUTTON WIFI**



#### 2) Tighten the 4 screws.



Fig. 3-41

#### 3) Solder to the 11 specified locations by the blue circle.





Fig. 3-42
- 4) Install the following parts in the order indicated below.
- **(1)** ASSY PCB TOP
- **② PLATE HOT SHOE BOTTOM**
- **3 HOLDER STRAP R** 
  - **③ HOLDER STRAP R**



Fig. 3-43

- 5) Tighten the 5 screws.
- 6) Connect the FPCB as illustrated in Fig. F.







Fig. 3-45

8) Install the ASSY COVER TOP.



Fig. 3-46

# 9) Tighten the screw as illustrated in Fig. H.10) Install the PLATE-SPRING SHOE.





- 11) Install the ASSY WHEELKEY as illustrated in Fig. I
- 12) Install the following parts in the order as illustrated in Fig. J
- ① CUSHON LCD
- 2 LCD
- **3 ASSY PLATE LCD**







Fig. 3-49

```
<text>
```

Fig. 3-50

- 15) Tighten the 5 screws.
- 16) Connect the FPCB as illustrated in Fig. L.





17) Install the HOLDER TRIPOD and ASSY-SPK DRS as illustrated in Fig. M and Fig. N.



Fig. 3-52

18) Tighten the 3 screws.19) Connect the FPCB and WIRE as illustrated in Fig. O and Fig. P.



### 20) Install the ASSY MAIN PCB.



Fig. 3-54

#### 21) Tighten the 3 screws.

22) Connect the 6 FPCB as illustrated in Fig. Q and Fig. R.

### CAUTION

Insert the FPCB into the connector making sure that it goes into its appropriate position and the silk line is straight and level. Extend it all the way to the end of the connector.



Fig. 3-55



25) Connect the FPCB as illustrated in Fig. T.



Fig. 3-57

### 26) Install the ASSY COVER BACK.



Fig. 3-58

27) Tighten the 2 screws on the left side. / 1 screw on the right side / 4 screws on the bottom side.





## 4. PCB diagrams

### **4-1 MAIN PCB**



### **4-2 TOP PCB**



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### 4-3 CIS PCB



### 4-4 DRS PCB



### **4-5 HOTSHOE FPCB**



### **4-6 BACK IF FPCB**



## 5. Block diagram



## 6. Firmware update

### **6-1 Product reset**



This section describes how to reset the factory data.

1. Turn on the camera by turning the power switch to the right.



Fig. 6-1

2. Select the smart auto by turning the mode dial to the right.



Fig. 6-2

- 3. Press the following buttons as shown below.
  - 1 Up button
  - **2** OK button
  - B Down button
  - OK button
  - **5** Right button
  - <sup>(</sup> +OK (Press and hold the Del(<sup>(</sup>) button and OK buttons simultaneously.)





#### Firmware update

4. Select the SYSTEM PARAMETER by pressing the down button. Then press the OK button.



Fig. 6-4

5. Select the FACTORY RESET and press the right button to check the box . Then press OK button.



Fig. 6-5

#### 6. Turn off the camera.





7. Turn on the camera by turning the power switch to the right. Then Check the initialization setting to insure that it is successfully initialized.

(

Date & Time		
age Date & Time		
Time Zone	London	
Date	01/01/2012	
Time	12:00	MENU
Туре	MM/DD/YYYY 24H	DISP
Language	English	
		THE BE
MENUL Evit	OK Select	



### 6-2 Firmware update by using user menu



• This section describes how to update the lastest version of firmware for camera body.

1. Insert the SD card which has the firmware file into the camera. - F / W file name : nx1000.bin, nx1000.Rom

	nx1000, bin	
•	nx1000,Rom	

2. Use AC adaptor or the fully recharged battery for power supply. \* Update can only be made when the battery level is full(3 bars).

3. Turn on the camera by turning the power switch to the right.



Fig. 6-8

4. Press the menu button.





5. Use the arrow keys to move tab "Settings 3" and select the "Device Information" item. (Press the OK button)



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Firmware update

6. Select the mode "Firmware Update" and press the OK button.





7. Select the mode "Body Firmware" and press the OK button.



Fig 6-10

8. Press the OK button to select the body firmware. Then press the up button to select the yes button. (Green LED will flash)







Fig 6-12

### 6-3 Firmware update by using CS menu

 $\bigotimes$ 

• This section describes how to update the latest version of firmware for camera body.

1. Insert the SD card which has the firmware file into the camera.

- F / W file name : nx1000.bin, nx1000.Rom



2. Use AC adaptor or the fully recharged battery for power supply. \* Update can only be made when the battery level is full(3 bars).

3. Turn on the camera by turning the power switch to the right.



Fig. 6-13

4. Select the smart auto by turning the mode dial to the right.



Fig. 6-14

Firmware update

- 5. Press the following buttons as shown below.
  - Up button
  - **2** OK button
  - B Down button
  - OK button
  - S Right button
  - € (Press and hold the Del() button and OK buttons simultaneously.)



Fig. 6-15

6. Select the FW UPDATE and press the OK button.



Fig. 6-16

7. Select the BODY FW UPDATE and press the OK button.



Fig. 6-17

8. Press the OK button to select the body firmware update.(Green LED will flash)



Fig. 6-18

9. Press the OK button to begin the firmware update.

It may take up to 2 to 3 minutes. Once it is complete, camera will turn off automatically.



Fig. 6-19

### 6-4 How to recover the MAIN PCB

- $\bigotimes$
- This section describes how to recover the MAIN PCB when camera stops functioning due to power failure or some other reasons during the firmware process.
- It is not necessary to go over all the adjustment process again since the existing adjustment data is not deleted.

#### Required materials

- 1. SD card less than 1GB
  - It is recommended to use a SD card with less than 1GB.
  - Occasionally a device may not read a SD card. Attempt to use different types of SD cards.)
- 2. Tweezer
- It is used to short out the TP on MAIN PCB.
- 3. The latest firmware files such as nx1000.bin, nx1000.Rom.
- You can download the latest firmware file from the K-zone or Samsung website.
- 4. Five recovery 5 files such as dnloader.bin, ONBL1.bin, ONBL2.bin, update.bin and rom.txt.
  - Note that the name of the firmware file may vary depending on NX model.

<How to recover>

- 1. Remove the screws and remove the back cover.
- 2. Download the latest firmware file and five recovery files and copy them to the SD card.
- 3. Connect the connector of back cover to MAIN PCB. \* Insert the fully charged battery and SD card into the camera.
- 4. Short out opener pad, which is boot terminal among the point of TP with tweezer as indicated in red circle. It has been up. Then press the power button to turn on the camera.



Fig. 6-20

- 5. LED will turn on when power is on. Then remove the tweezer.
- 6. LED will blink when tweezer is removed. Then MAIN PCB recovery process will proceed. It will takes about 3 to 5 minutes.
- 7. LED will turn off when the recovery process is complete.
- 8. Remove the SD card and turn on the camera. You may resume using the camera.

## 7. Adjustment

### 7-1 Adjustment process guide



After replacing the following parts, you need to adjust the following items.

The table below provides information about the necessary adjustment process.

#### 1. Please refer to the table information before beginning the adjustment process.

<Table. 1-1>

	Main PCB	CMOS Assy	Shutt Assy	Front Cover Assy
Firmware Upgrade	•	-	-	-
CIS Tilt ADJ	-	•	•	•
CIS Dot Input & Shutter Speed ADJ	•	•	•	•
ISO & AWB Low ADJ	•	٠	•	•
VFPN & CMOS Defect Pixel ADJ	•	٠	•	•
Color Shading ADJ	•	•	•	•

### 2. Required equipment specification

- CIS Tilt adjustment : kyoritsu (rsm-5000)
- CIS Dot Data & Shutter Speed adjustment : kyoritsu (rfs-5910)
- ISO & AWB Low adjustment: Light Source Box 1 : LV-1450DC (3200K, Lv.12)
  - Light Source Box 2 : LSB-1/10 (5500K, Lv. 16)
- 3. It is required to go through the process of adjustment completion after all the adjustment process is complete. Confirm with the process completion message. (Please refer to 7-9 adjustment completion report.)

## 7-2 Adjustmnet menu function description

 $\otimes$ 

This section describes the adjustment menu function.

1. Turn on the camera by turning the power switch to the right.



Fig. 7-1

2. Select the smart auto by turning the mode dial to the right.



Fig. 7-2

- 3. Press the following buttons as shown below.
  - **1** Up button
  - **2** OK button
  - **3** Down button
  - OK button
  - **5** Right button
  - **6** ()+OK button (Press and hold the Del(()) button and OK buttons simultaneously.)



Fig. 7-3

4. Select the SYSTEM PARAMETER by pressing the down button. Then press the OK button.



Fig. 7-4

5. Details menu appears.

9	3. ADJUSTMENT CONTROL	
	(1) AUTO START DISABLE         (2) PTP AUTOMATION ENABLE         (3) LINE PROCESS STEP         (4) LINE PROCESS MARK         (5) ADJUST DATA TO LOG FILE         (6) ADJUST RESULT	MENU Fn
	P/S: 70400 CIS S/N: 70400 Release Count:4 Strobe Count:0	
	SAMSUNG	сизтом

Fig. 7-5

<table. 7-2<="" th=""><th>The following</th><th>table describes</th><th>the menu</th><th>function&gt;</th></table.>	The following	table describes	the menu	function>
---	---------------	-----------------	----------	-----------

Menu	Sub menu	Description
1. FW UPDATE	<ol> <li>BODY FW UPDATE</li> <li>LENS FW UPDATE</li> <li>BEXT. FLASH FW UPDATE</li> <li>DSP FW UPDATE</li> <li>RESET USERDATA</li> </ol>	Display and update the firmware. This function is used for updating the firmware by using cs menu.
2. SYSTEM PARAMETER	<ol> <li>(1) FACTORY RESET</li> <li>(2) POWER OFF TEMP</li> <li>(3) DISABLE CHINESE LANG</li> <li>(4) DISABLE DISPLAY SEVE</li> <li>(5) DISABLE POWER SEVE</li> <li>(6) DISABLE MOVIE REC LIMIT</li> <li>(7) NO LENS RELEASE ENABLE</li> <li>(8) DISABLE INT ERR POWER OFF</li> <li>(9) DISABLE WATCHDOG RESET</li> </ol>	Display and reset the factory data.
3. ADJUSTMENT CONTROL (1) AUTO START DISABLE (2) PTP AUTOMATION ENABLE (3) LINE PROCESS STEP (4) LINE PROCESS MARK (5) ADJUST DATA TO LOG FILE (6) ADJUST RESULT		<ol> <li>(1) Prevent auto start mode when insert the adjustment file.</li> <li>(2) USB terminal PTP as recognized.</li> <li>(3) Setting of each adjustment procedure.</li> <li>(4) Confirm the former adjustment whether it is finish or not.</li> <li>(5) Save the result of adjustment.</li> <li>(6) Confirm the result of adjustment.</li> </ol>
4. LENS CONTROL	<ol> <li>(1) OIS ADJUSTMENT</li> <li>(2) ZOOM WIDE SET</li> <li>(3) ZOOM TELE SET</li> <li>(4) MR SENSOR ADJUST</li> <li>(5) LENS MOUNT INFO</li> <li>(6) LENS COMM SEVE</li> </ol>	<ol> <li>Set the OIS adjustment value.</li> <li>* Proceed the OIS Adjustment when replacing and installing the PCB inside lens.</li> <li>Set the wide value of zoom lens</li> <li>Set the telephoto(tele) value of zoom lens.</li> <li>* Do not move the lens during the LENS CONTROL process.</li> </ol>

## 7-3 CIS tilt adjustment

 $\bigotimes$ 

Adjust the flange back of MOUNT and CMOS. Then adjust the left and right tilt of CMOS ASSY.

#### <How to adjust>

#### 1. CIS center adjustment (Flange Back)

- 25.55mm ±0.01mm

ltem	NX10, NX5, NX11, NX100, NX20, NX1000
Tolerance	-0.0 ±0.01

#### 2. Tilt adjustment specification

- LeftUp, RightUp, LeftDown and Rightdown from the center  $\pm 0.01 \text{mm}$ 

ltem	NX10, NX5, NX11, NX100, NX20, NX1000
LeftUP	0.0 ±0.01
LeftDown	0.0 ±0.01
RightUp	0.0 ±0.01
RightDown	0.0 ±0.01

\* Screw : NX100, NX210, NX1000 Star(T6), NX 10/5/11 hexagon



Fig. 7-6

- 2. Tilt specification after installing the product measured the value of tilt after installing the product. Confirm if it is within the below specification.
  - Area at the center: 25.55mm + 0.015/-0.035
  - Area at the side:  $\pm 0.03$  form the center

### 7-4 CIS Dot input & shutter speed adjustment program installation

Input the CMOS manufacturing black defect data into the camera.

Required equipment

Shutter speed adjustment equipment, PC program, USB cable

<Program installation manuel>

- 1. Extract the NX\_SHUTTER\_ADJ.zip file provided.
- 2. ZIP file contains the below files.

	FILES
	LOG
	script
թ	libusb-win32-filter-bin-1.1.14.3.exe
-	NXShutterTester_3.7_For NX200.exe
1	NXShutterTester_4.5_For NX20_210_1000.exe
3	Pcomm.dll
3	PIMACOM.dll
	PIMACOM.lib
3	PIMACOM-0922.dll
	setup.ini
	shutter.txt
	USBSet.exe
5	usbset.ini
	USBSet1.1.exe
9	vcredist_x86.exe

Fig. 7-7

3. Extract the NXCISTEMP\_NX200.zip to the C:\ directory. It contains the below files.



Fig. 7-8

#### Adjustment

### 4. Install the vcredist\_x86.exe file.(Install only one time.)



Fig. 7-9

### 5. Install the libusb\_win32-filter0bin-1.1.14.3.exe file.

- This step is required to communicate NX1000 and PC. (Install only one time.)

### 7-5 CIS dot input & shutter speed adjustment

Adjust the CIS Dot Input and Shutter Speed Adjustment.

<How to adjust>

 $\bigcirc$ 

1. Copy the info.tgw file to SD card. Then insert the SD card into the camera.

#### 2. Install the USBSet 1.1.exe file.

• Connect the camera to PC using USB cable when this screen is displayed as illustrated in below.

USBSet (Ver1.1	ŋ		n en en ser en
-Set usb channel ->	> insert a usb cable -> click Reg	st channels button	
Chan1			
Chan2			
Chan3			
Chan4			
Chan5			
Chan6			
Chan7			
Chan8			
Chan9			
Chan10			
	Clear channels	Regist channels	
			ОК

Fig. 7-10

When you turn on the camera on the screen display in Fig 7-10, it will be connected to USB Channel1 path or other Channel path.
 Press the following buttons: Regist channels → USB channels are registered → OK

Chan1 WW?	₩USB#Vid_04e8&Pid_1337#5&b	a13035&0&7#{a5do	bf10-6530-11d2-901f-00c04fb	951ed}	
Chan2					
Chan3					
Chan4		USBS	et1.1		
Chan5					
Chan6			USB channels are regi	stered	
Chan7					
Chan8			2ОК		
Chan9					
Chan10					
	Clear shappeds	Desist share			

Fig. 7-11

3 After installation is complete, turn off the camera.

- Install the **USBSet1.1.exe** file just one time.
- If this program could not find the camera, install the USBSet1.1.exe file again.

#### 3. Install the NXShutterTester\_4.5\_For NX20\_210\_1000.exe file.

Connect the RFS-500 measuring equipment to PC using USB cable. Turn on the RFS-500.
 Check the COM connection status in device manager.



Fig. 7-12

- Error message may appear when it fails to load a script file.
  - Press the OK button.



Fig. 7-13

It will attempt to download the "CIS DOT" file via FTP server.

- Press the OK button to continue.





When the "FPS" button is disabled, its button color is not blue. It indicates there is an error for in setting up the COM port. - Follow these steps to reset up the COM port. Go to Option → SETTING → COMPORT.

- Set the new value for COM as illustrated below. The FPS button becomes enabled, turning its button color is blue.



Fig. 7-15

Go to Option → Open SCRIPT FILE. Then select the shutter.txt from the Dot Input\_Shutter ADJ folder. Dot Input\_Shutter ADJ folder. - Press the open button.





**6** Input the serial number in the gray tap above the start button.

shutter.	txt T	TOTAL 15 PASS 8 FAIL 7	CIS Sensor S/N
0070067 START X STOP	READ	У	
PTP RFS	ENSOR A SENSOR B SENSOR	C ITEM DATA	
AutoStart Scanner			0070067
process control, sound ok burst low, bettery 1 process shutters, speed adjust end process process, mark set 3 nu, setup 1 fe_number reset titter charge add on af on card on	III 2 3 1000 1000 1000		



• Input the serial number of CMOS and press the start button.

The PTP button color will be blue when turning the camera.

The Shutter Speed adjustment process will proceed automatically once the CIS DOT DATA is complete to record. - If Dot data does not exist, error message appears.

- Select the START button if Auto Start button is not selected.



Fig. 7-18

Once the process is completed, the completion message will be displayed.
 Repeat the above process when the FAIL message is displayed.

- When the adjustment process is successful, the "PASS" message will be displayed.



Fig. 7-19

## 7-6 ISO & AWB Low Adjustment

 $\bigotimes$ 

This section describes how to proceed the adjustment relating to the image quality.

Required equipment

LIGHT BOX : 3200K, LV12 ±0.2, Master Lens : 30mm, F5.6, Infinity

### <How to adjust>

1. Copy the below two script files to SD card.

🖬 info,tg	
🖻 nx 1000iso,awb, adj	

- 2. Attach the master lens to the camera body and insert the SD card into the camera.
- 3. Attach the camera to the 3200K light box as illustrated in the image below. When turning on the camera, the process will proceed automatically.



Fig. 7-20

### 7-7 VFPN & CMOS defect adjustment

 $\bigotimes$ 

■ VFPN (Vertical Fixed Pattern Noise): Adjust the vertical noise caused by the deviation analog circuits inside of CMOS sensor.

Required equipment

Mount cap

<How to adjust>

1. Copy the below two script files to SD card.



2. Install the mount cap to block the light.

3. When turning on the camera, the process will proceed automatically.

- Camera temperature should be more than 35 degree to proceed the VFPN adjustment.

- Camera may heat up during the operation due to the camera being on for extended periods of time. Make sure to set the correct temperature.

## 7-8 Color shading adjustment

 $\otimes$ 

This section describes how to proceed the adjustment relating to the image quality.

#### Required equipment

LIGHT BOX: 5500K, LV12 ±0.2, 3200K, LV12 ±0.2, Lens: 16mm, 30mm

#### <How to adjust>

- 1. Two type of Light boxes with 3200K and 5500K and two type of Lens with 16mm and 30mm are required to proceed the color shading adjustment process.
  - The below adjustment file will handle the four different combination of adjustment processes as the following step.
  - Copy the adjustment file from the shading folder to the SD card.

🖬 info,tg 🖬 nx1000\_shading adj

1) Adjustment with 16mm Lens and 3200K Light Box

- Mount the 16mm Lens to the camera body and attach the camera to the 3200K Light Box.
- When turning on the camera, the process will proceed.
- Once the process is complete, "Push OK, Next 16mmB" message will be displayed on the LCD.

2) Adjustment with 16mm Lens and 5500K Light Box

- Mount the 16mm Lens to the camera body and attach the camera to the 5500K Light Box. Press the OK button to proceed the process.
- Once the process is complete, "Push OK, Next 30mmA" message will be displayed on the LCD.
- 3) Adjustment with 30mm Lens and 3200K Light Box
  - Mount the 30mm Lens to the camera body and attach the camera to the 3200K Light Box. Press the OK button to proceed the process.
  - Once the process is complete, "Push OK, Next 30mmB" message will be displayed on the LCD.

4) Adjustment with 30mm Lens and 5500K Light Box

- Mount the 30mm Lens to the camera body and attach the camera to the 5500K Light Box. Press the OK button to proceed the process.
- Once the process is complete, "CS ADJUSTMENT OK!! POWER OFF" message will be displayed on the LCD. Finally the camera is automatically turned off.



Fig. 7-21

### 7-9 Adjustment completion report



This section displays the process completion message.

#### <How to adjust>

1. Copy the two files to SD card and insert it into the camera.



2. When turning on the camera, the process will proceed automatically.

#### 3. Once the process is complete, the camera will turn off automatically.

LCD screen will display the error message. Then repeat the adjustment process as indicated on screen.
 In this occasion, repeat the ISO adjustment process.



Fig. 7-22

## 8. Exploded view and parts list

### **8-1 TOTAL ASSEMBLY**



Loc. No	Parts No.	Description	Q ty	Available	Remark
1	AD90-05104A	ASSY BODY_BK	Х	1	BLACK
	AD90-05104B	ASSY BODY_WT	Х	1	WHITE
	AD90-05104C	ASSY BODY_PK	X	1	PINK
2	AD61-04096A	PLATE-SPRING SHOE_BK	0	1	BLACK
	AD61-06096B	PLATE-SPRING SHOE_SL	0	1	WHITE/PINK
3	AD63-06184A	COVER HOT SHOE_BK	0	1	BLACK
	AD63-06184C	COVER HOT SHOE_WT	0	1	WHITE
	AD63-06184D	COVER HOT SHOE_BK	0	1	PINK
4	AD68-07395A	LABEL-FCC_EXP	Х	1	
5	AD99-04065A	TOTAL ASSY_BK	Х	1	BLACK
	AD99-04053B	TOTAL ASSY_WT	Х	1	WHITE
	AD99-04080A	TOTAL ASSY_PK	Х	1	PINK

## 8-2 BODY ASSEMBLY



(19)

Loc. No	Parts No.	Description	Q ty	Available	Remark
1	AD97-22685A	ASSY FRONT_BK	1	Х	BLACK
	AD97-22685B	ASSY FRONT_WT	1	Х	WHITE
	AD97-22685C	ASSY FRONT_PK	1	Х	PINK
2	AD97-21624A	ASSY-SHUTTER	1	0	
3	AD66-01033A	DAMPER-SHUTTER	2	0	
4	6009-001410	SCREW-MACHINE (M1.4 X L4.7/WH)	2	0	
5	AD61-05757A	HOLDER TRIPOD	1	0	
6	6001-002152	SCREW-MACHINE (M1.4 X L4/BK)_BK	7	0	BLACK
	6001-002159	SCREW-MACHINE (M1.4 X L4/BK)_WT	7	0	WHITE
	6001-002159	SCREW-MACHINE (M1.4 X L4/BK)_PK	7	0	PINK
Loc. No	Parts No.	Description	Q ty	Available	Remark
---------	-------------	------------------------------	------	-----------	--------
7	AD92-01897A	ASSY PCB MAIN	1	0	
8	AD62-00188A	PAD GAP-CHAMBER	1	0	
9	6003-001739	SCREW-TAPTITE (M1.4 X L4/NI)	3	0	
10	AD97-22693A	ASSY DRS SPK	1	Х	
11	6001-002159	SCREW-MACHINE (M1.4 X L4/NI)	2	0	
12	6107-002736	SPRING-CS	3	0	
13	AD97-22687A	ASSY CMOS	1	0	
14	6001-002279	SCREW-MACHINE (M1.4 X L4/BK)	3	0	
15	AD41-01882A	DRS_IF_FPC	1	0	
	AD97-22688A	ASSY TOP_BK	1	Х	BLACK
16	AD97-22688B	ASSY TOP_WT	1	Х	WHITE
	AD97-22688C	ASSY TOP_PK	1	Х	PINK
17	6001-002282	SCREW-MACHINE (M1.7 X L3/NI)	1	0	
18	AD97-22686A	ASSY BACK	1	Х	
	AD90-05104A	BODY ASSY_BK	1	Х	BLACK
19	AD90-05104B	BODY ASSY_WT	1	Х	WHITE
	AD90-05104C	BODY ASSY_PK	1	Х	PINK

## **8-3 FRONT ASSEMBLY**



Loc. No	Parts No.	Description	Q ty	Available	Remark
	AD97-22679A	ASSY-CHAMBER_BK	1	Х	BLACK
1	AD97-22679B	ASSY-CHAMBER_WT	1	Х	WHITE
	AD97-22679C	ASSY-CHAMBER_PK	1	Х	PINK
2	AD97-22601A	ASSY HOLDER-MOUNT	1	0	
3	6107-001782	SPRING-CS	1	0	
4	AD97-22689A	ASSY-INNER MOUNT HOLDER	1	0	
	AD64-03724A	BUTTON LENS UNLOCK_BK	1	0	BLACK
5	AD97-03724B	BUTTON LENS UNLOCK_WT	1	0	WHITE
	AD97-03724C	BUTTON LENS UNLOCK_PK	1	0	PINK
	AD64-03744A	DECO RING FRONT_BK	1	0	BLACK
6	AD64-03744B	DECO RING FRONT_WT	1	0	WHITE
	AD64-03744C	DECO RING FRONT_PK	1	0	PINK
7	6001-002159	SCREW-MACHINE (M1.4 X L4/NI)	3	0	
8	AD66-00945A	SHAFT LENS DETECT	1	0	
9	6107-001781	SPRING LENS DETECT PIN	1	0	
10	AD61-05314A	PLATE MOUNT SPRING	1	0	
11	AD61-05307A	MOUNT-INNER	1	0	
12	AD61-05284A	PLATE MOUNT LENS	1	0	
13	6001-002662	SCREW-MACHINE (M1.7 X L5/Ni-Cr)	4	0	
14	AD67-01399A	CAP MOUNT	1	0	
	AD97-22685A	ASSY FRONT_BK	1	Х	BLACK
15	AD97-22685B	ASSY FRONT_WT	1	Х	WHITE
	AD97-22685C	ASSY FRONT_PK	1	Х	PINK

# 8-4 BACK COVER ASSEMBLY



Loc. No	Parts No.	Description	Q ty	Available	Remark
	AD97-22681A	ASSY BACK SUB_BK	1	0	BLACK
1	AD97-22681B	ASSY BACK SUB_WT	1	0	WHITE
	AD97-22681C	ASSY BACK SUB_PK	1	0	PINK
2	AD07-00170A	LCD;A030VVN01.3	1	0	
3	AD97-22674A	ASSY PLATE LCD	1	0	
	AD92-01923A	ASSY WHEELKEY_BK	1	0	BLACK
4	AD92-01924A	ASSY WHEELKEY_WT	1	0	WHITE
	AD92-01959A	ASSY WHEELKEY_PK	1	0	PINK
5	AD92-01902A	FPC BACK INTERFACE	5	0	
6	6003-001660	SCREW-TAPTYPE (M1.4 X L3 / NI)	1	0	
7	AD81-10117A	WINDOW LCD	1	0	
	AD97-22681A	ASSY COVER BACK_BK	1	0	BLACK
8	AD97-22681B	ASSY COVER BACK_WT	1	0	WHITE
	AD97-22681C	ASSY COVER BACK_PK	1	0	PINK

#### **8-5 BACK SUB COVER ASSEMBLY**



Loc. No	Parts No.	Description	Q ty	Available	Remark
	AD63-06990A	COVER BACK_BK	1	Х	BLACK
1	AD63-06990B	COVER BACK_WT	1	Х	WHITE
	AD63-06990C	COVER BACK_PK	1	Х	PINK
2	AD63-06279A	T/SHEET OLED WINDOW NX200	1	0	
3	AD81-10116A	CUSHION LCD	1	Х	
4	AD64-03385A	WINDOW CARD ACCESS NX200	1	0	
F	AD64-03728A	BUTTON REC_BK	1	Х	BLACK
5	AD64-03728B	BUTTON REC_SL	1	Х	WHITE/PINK
	AD64-03727A	BUTTON FN_BK	1	Х	BLACK
6	AD64-03727B	BUTTON FN_WT	1	Х	WHITE
	AD64-03727C	BUTTON FN_PK	1	Х	PINK
	AD97-22681A	ASSY COVER BACK SUB_BK	1	0	BLACK
7	AD97-22681B	ASSY COVER BACK SUB_WT	1	0	WHITE
	AD97-22681C	ASSY COVER BACK SUB_PK	1	0	PINK

# **8-6 INNER MOUNT HOLDER ASSY**



Loc. No	Parts No.	Description	Q ty	Available	Remark
1	AD61-05277A	HOLDER INNER MOUNT	1	Х	
2	AD97-22603A	ASSY SHAFT LENS UNLOCK	1	Х	
3	6031-001628	WASHER PLAIN	1	0	
4	AD67-01224A	CONTACT IF POWER	3	Х	
5	AD67-01225A	CONTACT INTERFACE	5	Х	
6	6107-001779	SPRING IF PIN	8	0	
7	AD41-01880A	LENS IF FPCB	1	Х	
8	AD61-04713A	PLATE IF PIN	1	Х	
9	6003-001679	SCREW-TAPTYPE (M1.7 X L2.5 / NI)	2	0	
10	AD92-01756A	ASSY LENS DETECT PCB	1	Х	
11	6003-001641	SCREW-TAPTYPE(M1.7 X L3.5 / BLK)	2	0	
12	AD63-06305A	SHEET ABSORB A	2	Х	
13	AD63-06306A	SHEET ABSORB B	2	Х	
14	AD97-22689A	ASSY HOLDER INNER MOUNT	1	0	

#### **8-7 TOP SUB COVER ASSEMBLY**



Exploded view and parts list

Loc. No	Parts No.	Description	Q ty	Available	Remark
1	4202-001538	ANTENNA-PLATE DIRECT	1	Х	
	AD63-06989A	COVER TOP_BK	1	Х	BLACK
2	AD63-06989B	COVER TOP_WT	1	Х	WHITE
	AD63-06989C	COVER TOP_PK	1	Х	PINK
3	6107-002731	SPRING MODE DIAL	2	0	
4	AD64-01738A	KNOB MODE DIAL-CLICK BALL	2	0	
	AD64-03729A	KNOB MODE DIAL-CLICK BALL_BK	1	Х	BLACK
5	AD64-03729B	KNOB MODE DIAL-CLICK BALL_WT	1	Х	WHITE
	AD64-03729C	KNOB MODE DIAL-CLICK BALL_PK	1	Х	PINK
6	AD61-05746A	PLATE MODE DIAL	1	Х	
7	6003-001674	SCREW-TAPTYPE (M1.4 X L2.5 / NI)	4	0	
8	AD64-03731A	DECORATION WIFI	1	Х	
0	AD67-02536A	CAP-BUTTON WIFI_BK	1	Х	BLACK
9	AD67-02536B	CAP-BUTTON WIFI_SL	1	Х	WHITE/PINK
10	AD63-07083A	T/SHEET-BUTTON WIFI	1	Х	
11	AD64-03726A	BUTTON WIFI	1	Х	
	AD66-01035A	LEVER POWER_BK	1	Х	BLACK
12	AD66-01035B	LEVER POWER_WT	1	Х	WHITE
	AD66-01035C	LEVER POWER_PK	1	Х	PINK
10	AD67-02535A	CAP-LEVER POWER_BK	1	Х	BLACK
13	AD67-02535B	CAP-LEVER POWER_SL	1	Х	WHITE/PINK
14	AD64-03725A	BUTTON SHOT	1	Х	
15	AD63-07075A	T/SHEET-BUTTON SHOT	1	Х	
	AD67-02537A	CAP-BUTTON SHOT_BK	1	Х	BLACK
16	AD67-02537B	CAP-BUTTON SHOT_SL	1	Х	WHITE/PINK
17	6107-001788	SPRING RELEASE	1	0	
18	6031-001628	WASHER PLAIN	1	0	
19	AD61-05745A	PLATE LEVER POWER	1	Х	
	AD81-10062A	BADGE NX_BK	1	Х	
20	AD81-10062B	BADGE NX_WT	1	Х	
	AD81-10062C	BADGE NX_PK	1	Х	
21	AD63-07095A	T/SHEET MIC	2	Х	
	AD97-22680A	ASSY COVER TOP SUB_BK	1	0	BLACK
22	AD97-22680B	ASSY COVER TOP SUB_WT	1	0	WHITE
	AD97-22680C	ASSY COVER TOP SUB_PK	1	0	PINK

#### **8-8 TOP COVER ASSEMBLY**



Exploded view and parts list

Loc. No	Parts No.	Description	Q ty	Available	Remark
1	AD97-22680A	ASSY COVER TOP SUB	1	0	
2	AD97-21707A	ASSY HOT SHOE	1	0	
3	AD61-05411A	PLATE HOT SHOE	1	0	
4	6001-002282	SCREW-MACHINE (M1.7 X L3 / NI)	1	0	
5	AD92-01903A	ASSY FPCB HOT SHOE	1	0	
6	AD81-10115A	CUSHION MIC	2	0	
7	AD61-05744A	PLATE HOT SHOE BOTTOM	1	0	
8	6001-001914	SCREW-MACHINE (M1.7 X L3.5/NI)	2	0	
9	AD61-05758A	HOLDER STRAP R	1	0	
10	6003-001739	SCREW-TAPTYPE (M1.4X L4 / NI)	1	0	
11	AD92-01896A	ASSY PCB TOP	1	0	
12	6003-001739	SCREW-TAPTYPE (M1.4X L4 / NI)	2	0	
13	AD81-10119A	CUSHION-AF LED	1	0	
	AD97-22688A	ASSY TOP_BK	1	Х	BLACK
14	AD97-22688B	ASSY TOP_WT	1	Х	WHITE
	AD97-22688C	ASSY TOP_PK	1	Х	PINK

## **8-9 CHAMBER ASSEBLY**





Loc. No	Parts No.	Description	Q ty	Available	Remark
	AD63-06985A	COVER FRONT_BK	1	0	BLACK
1	AD63-06985B	COVER FRONT_WT	1	0	WHITE
	AD63-06985C	COVER FRONT_PK	1	0	PINK
2	6107-001538	SPRING	1	0	
3	AD66-01036A	LEVER BATTERY LOCK	1	0	
4	6044-001137	RING-E	1	0	
5	6107-003085	SPRING	1	0	
6	AD61-05741A	PLATE CHAMBER	1	0	
7	AD63-02351A	SHIELD FOAM	1	0	
8	AD61-05754A	HOLDER STRAP L	1	0	
	AD63-06991A	GRIP FRONT_BK	1	0	BLACK
9	AD63-06991B	GRIP FRONT_WT	1	0	WHITE
	AD63-06991C	GRIP FRONT_PK	1	0	PINK

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Exploded view and parts list

Loc. No	Parts No.	Description	Q ty	Available	Remark
10	6003-001739	SCREW-TAPTYPE (M1.4 X L4 / NI)	3	0	
11	AD63-07077A	T/SHEET-TERHMAL A	1	0	
	AD63-06988A	COVER JACK_BK	1	0	BLACK
12	AD63-06988B	COVER JACK_WT	1	0	WHITE
	AD63-06988C	COVER JACK_PK	1	0	PINK
	AD63-06986A	COVER SIDE_BK	1	0	BLACK
13	AD63-06986B	COVER SIDE_WT	1	0	WHITE
	AD63-06986C	COVER SIDE_PK	1	0	PINK
14	AD63-06738A	MESH SPEAKER	1	0	
	AD63-06987A	COVER BATTERY_BK	1	Х	BLACK
15	AD63-06987B	COVER BATTERY_WT	1	Х	WHITE
	AD63-06987C	COVER BATTERY_PK	1	Х	PINK
16	AD66-00918A	LEVER BATTERY COVER_BK	1	Х	BLACK
10	AD66-00918C	LEVER BATTERY COVER_SL	1	Х	WHITE/PINK
17	AD63-06180A	COVER DUMMY BATTERY_BK	1	Х	BLACK
17	AD63-06180C	COVER DUMMY BATTERY_SL	1	Х	WHITE/PINK
18	AD61-05742A	PLATE OCVER BATTERY	1	Х	
19	AD66-00943A	SHAFT BATTERY COVER	1	0	
20	6107-002994	SPRING	1	0	
21	AD64-03730A	WINDOW AF	1	0	
22	AD97-22683A	ASSY COVER-BATTERY	1	0	
	AD97-22679A	ASSY-CHAMBER_BK		Х	BLACK
23	AD97-22679B	ASSY-CHAMBER_WT		Х	WHITE
	AD97-22679C	ASSY-CHAMBER_PK		Х	PINK

## **8-10 HOLDER CMOS ASSEBLY**

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Loc. No	Parts No.	Description	Q ty	Available	Remark
1	AD61-05756A	HOLDER CMOS	1	Х	
2	AD92-01933A	ASSY PCB CIS	1	Х	
3	AD63-06276A	CUSHION CMOS	1	Х	
4	AD61-05740A	HOLDER OLPF	1	Х	
5	AD67-02217A	RUBBER CMOS	1	Х	
6	AD97-21669A	ASSY-PZT	1	Х	
7	AD97-21628A	ASSY PLATE PZT	2	Х	
8	6001-002159	SCREW-MACHINE (M1.4 X L4 / NI)	2	0	
9	AD41-01765B	CIS FPCB	1	0	
10	AD97-22687A	ASSY CMOS	1	0	

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# 8-11 HOLDER CMOS ASSEBLY



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Loc. No	Parts No.	Description	Q ty	Available	Remark
1	AD61-05765A	HOLDER SPEAKER	1	0	
2	3001-002641	SPEAKER	1	0	
3	AD92-01904A	DRS PCB	1	0	
4	6003-001660	SCREEW TAP M1.4 X L3.0	1	0	
5	AD97-22693A	ASSY-SPK DRS	1	Х	

## **8-12 HOLDER MOUNT ASSEBLY**



Loc. No	Parts No.	Description	Q ty	Available	Remark
1	AD61-05755A	HOLDER MOUNT	1	Х	
2	AD61-05426A	SHAFT GUIDE CMOS A	3	Х	
3	AD61-05427A	SHAFT GUIDE CMOS B	2	Х	
4	AD97-22601A	HOLDER MOUNT ASSY	1	0	

### 8-13 PLATE LCD ASSEBLY



Loc. No	Parts No.	Description	Q ty	Available	Remark
1	AD61-05747A	PLATE LCD	1	Х	
2	AD63-06508A	T/SHEET EMI B	1	0	
3	AD97-22674A	ASSY PLATE LCD	1	0	

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#### 8-14 PCB SUB ASSEBLY



Loc. No	Parts No.	Description	Q ty	Available	Remark
1	AD41-01881A	FPCB:NX1000_BACK_FI_FPCB	1	0	
2	3708-002577	CONNECTOR-45P	1	Х	
3	3708-002856	CONNECOTR-10P	1	Х	

# **8-15 HOTSHOE FPCB ASSEBLY**



Loc. No	Parts No.	Description	Q ty	Available	Remark
1	AD94-00360A	HOT SHOE FPCB	1	Х	
2	3003-001159	MIC-CONDENSOR	2	0	
3	AD67-02416A	RUBBER-MIC	2	0	

# **8-16 PACKING ITEMS**



Loc. No	Parts No.	Description	Q ty	Available	Remark
1	AD97-21562A	External Flash	1	0	
2	AD39-00190A	USB cable	1	0	
3	AD43-00202A	Rechargeable Battery	1	0	
4	AD44-00203A	Battery Cradle	1	0	
	3903-000616	AC CODE CABLE_EXP-D1	1	0	
	3903-000618	AC CODE CABLE_UO-D1	1	0	
	3903-000613	AC CODE CABLE_UK	1	0	
5	3903-000612	AC CODE CABLE_AUS-D1	1	0	
	3903-000617	AC CODE CABLE_BRA	1	0	
	3903-000611	AC CODE CABLE_CHINA	1	0	
	3903-000610	AC CODE CABLE_ARG	1	0	
6	AD46-00438A	Software CD-ROM	1	0	
7	AD68-07366A	NX1000_QG_ENG(SEA)	1	0	
1	AD68-07367A	NX1000_QG_SPA(SEA)	1	0	
	AD63-07021A	Strap_BK	1	0	
8	AD63-07021C	Strap_PK	1	0	
	AD63-07021B	Strap_WT	1	0	



Area	Web Site			
Europe, MENA, CIS, Africa	https://gspn1.samsungcsportal.com			
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