PIXMA mini260 Service Manual

Revision 0



QY8-13BF-000

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Scope

This manual has been issued by Canon Inc., to provide the service technicians of this product with the information necessary for qualified persons to learn technical theory, installation, maintenance, and repair of products. The manual covers information applicable in all regions where the product is sold. For this reason, it may contain information that is not applicable to your region.

Revision

This manual could include technical inaccuracies or typographical errors due to improvements or changes made to the product. When changes are made to the contents of the manual, Canon will release technical information when necessary. When substantial changes are made to the contents of the manual, Canon will issue a revised edition.

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Copyright © 2006 by Canon Inc. CANON INC. Inkjet Device Quality Assurance Div. 1 451, Tsukagoshi 3-chome, Saiwai-ku, Kawasaki-shi, Kanagawa 212-8530, Japan This manual consists of the following three parts to provide information necessary to service the PIXMA mini260:

Part 1: Maintenance

Information on maintenance and troubleshooting of the PIXMA mini260

Part 2: Technical Reference

New technology and technical information such as FAQ's (Frequently Asked Questions) of the PIXMA mini260

Part 3: Appendix

Block diagrams and pin layouts of the PIXMA mini260

Reference

This manual does not provide sufficient information for disassembly and reassembly procedures. Refer to the graphics in the separate Parts Catalog.



II. TABLE OF CONTENTS

Part 1: MAINTENANCE

- 1. MAINTENANCE
 - 1-1. Adjustment, Periodic Maintenance, Periodic Replacement Parts, and Replacement Consumables by Service Engineer
 - 1-2. Customer Maintenance
 - 1-3. Product Life
 - 1-4. Special Tools
 - 1-5. Serial Number Location
- 2. LIST OF ERROR DISPLAY / INDICATION
 - 2-1. Operator Call Errors
 - 2-2. Service Call Errors
 - 2-3. Other Error Messages
 - 2-4. Warnings
 - 2-5. Troubleshooting by Symptom
- 3. REPAIR
 - 3-1. Notes on Service Part Replacement
 - 3-2. Special Notes on Repair Servicing
 - 3-3. Adjustment / Settings
 - (1) Paper feed motor adjustment
 - (2) Grease application
 - (3) Ink absorber counter setting
 - (4) User mode
 - (5) Service mode
 - Service test print, EEPROM initialization, Ink absorber counter resetting
 - Destination settings
 - Button and LCD test
 - LF / Eject correction
 - 3-4. Verification Items
 - (1) Service test print
 - (2) EEPROM information print
- 4. PRINTER TRANSPORTATION

Part 2: TECHNICAL REFERENCE

- **1. NEW TECHNOLOGIES**
- 2. CLEANING MODE AND AMOUNT OF INK PURGED
- **3. PRINT MODE**
- 4. FAQ (Problems Specific to the mini260 and Corrective Actions)

Part 3: APPENDIX

- 1. BLOCK DIAGRAM
- 2. CONNECTOR LOCATION AND PIN LAYOUT
 - 2-1. Logic Board
 - 2-2. Card Slot Board
 - 2-3. Operation Panel Board
 - 2-4. PE Sensor Board
 - 2-5. Print Beam / PictBridge Board
- 3. PIXMA mini260 SPECIFICATIONS

Part 1

MAINTENANCE

1. MAINTENANCE

1-1. Adjustment, Periodic Maintenance, Periodic Replacement Parts, and Replacement Consumables by Service Engineer

(1) Adjustment

Adjustment	Timing	Purpose	Tool	Approx. time
Destination settings (EEPROM settings)	- At logic board replacement	To set destination.	None. Perform in the service mode.	1 min.
Ink absorber counter resetting (EEPROM settings)	At logic board replacementAt ink absorber replacement	To reset the ink absorber counter.	None. Perform in the service mode.	1 min.
Paper feed motor position adjustment	- At paper feed motor replacement	To adjust the belt tension. (Position the paper feed motor so that the belt is stretched tight.)	None.	2 min.
LF / Eject correction	 At logic board replacement At LF roller replacement At eject roller replacement At guide rail replacement At spur base replacement At platen unit replacement At pressure roller replacement 	To correct line feeding and paper ejection accuracy.	None. Perform in the service mode.	3 min.
Grease application	- At carriage unit replacement	- To the carriage shaft sliding portion - To the carriage oil pad	EU-1	1 min.
	- At LF roller replacement	- To the LF roller groove	IF-20	
	- At AP motor replacement	- To the reduction gear	MOLYKOTE PG641	
	- At paper thickness lever replacement	- To the paper thickness lever sliding portion	FLOIL KG-107	
	- At idle gear replacement	- To the idle gear contact		
	- At guide rail replacement	- To the carriage slider		
Ink system function check	At logic board replacementAt carriage unit replacement	To maintain detection functionality for presence and position of the ink tank.	None. Perform in the service mode.	1 min.

Caution: DO NOT loosen the red screws at both ends of the carriage shaft, securing the print head position, as they are not re-adjustable.

The red screws securing the paper feed motor may be loosened only at replacement of the paper feed motor unit.

(2) Periodic maintenance

No periodic maintenance is necessary.

(3) Periodic replacement parts

There are no parts in this printer that require periodic replacement by a service engineer.

(4) Replacement consumables

There are no consumables that require replacement by a service engineer.

1-2. Customer Maintenance

Adjustment	Timing	Purpose	Tool	Approx. time
Print head alignment	- At print head replacement	To ensure accurate dot placement.	 Printer buttons Computer (printer driver) 	3 min.
Print head cleaning	When print quality is not satisfying.	To improve nozzle conditions.	 Printer buttons Computer (printer driver) 	1 min.
Print head deep cleaning	When print quality is not satisfying, and not improved by print head cleaning.	To improve nozzle conditions.	- Computer (printer driver)	2 min.
Ink tank replacement	When the ink tank becomes empty. ("No ink error" displayed on the monitor or on the printer LCD, or short flashing of the ink tank LED)	_	_	2 min.
Paper feed roller cleaning	When paper does not feed properly.When the front side of the paper is smeared.	To clean the paper feed rollers.	- Printer buttons	2 min.
Bottom plate cleaning	When the back side of the paper is smeared.	To clean the platen ribs.	- Plain paper - Printer buttons	1 min.

1-3. Product Life

(1) Printer

Specified print volume (I) or the years of use (II), whichever comes first.

(I) Print volume: 2,880 pages (L size, borderless printing of a standard photo)

Reference: Approx. 2,100 pages (4 x 6, borderless printing of a standard photo, calculated based on the amount of 4 x 6 size pages)

(II) Years of use: 5 years of use

(2) Print head

Print volume: 2,880 pages (L size, borderless printing of a standard photo)

(3) Ink tank (actual measurement value)

Average yield	CLI-36
Photo (4" x 6")*	109 pages

* When printing Canon standard patterns on 4" x 6" Photo Paper Plus Glossy continuously with the default settings of Photo Paper Plus Glossy using Windows XP printer driver in borderless printing mode and Windows XP Photo Printing Wizard. Declared yield value determined based on Canon standard method referring to ISO/IEC FCD24712.

Note: Ink yield may vary depending on texts/photos printed, applications software used, print mode and type of paper used.

(4) Battery (actual measurement value)

Average yield	CLI-36
Photo (4" x 6")*	85 pages

- Charging: 300 times

- Storage period: 2.5 years
- * When printing Canon standard patterns on 4" x 6" Photo Paper Plus Glossy continuously with the default settings of Photo Paper Plus Glossy using Windows XP printer driver in borderless printing mode and Windows XP Photo Printing Wizard. Declared yield value determined based on Canon standard method referring to ISO/IEC FCD24712.

Note: Ink yield may vary depending on texts/photos printed, applications software used, print mode and type of paper used.

1-4. Special Tools

Name	Tool No.	Price (JPY)	Application	Remarks
Grease MOLYKOTE PG-641	QK-0562	820	To the reduction gear.	
Grease FLOIL KG-107A	QY9-0057	225	To the following items:- Platen lever plate sliding portion- Idle gear contact- Eject pulley holder cover shaft joint- Guide rail sliding portion	
Grease ELECTRICITY IF-20	CK-8006	630	To the LF roller groove	
Oil EU-1*	QY9-0037	210	To the carriage shaft sliding portion and carriage oil pad	

* In Europe, purchase Grease EU-1 from the following company:

- Company name: NTN WALZLAGER (EUROPA) GmbH

- Contact person: Mr. Hideji Todo, Manager, Hideji.Todo@ntn-europe.com

1-5. Serial Number Location

On the bottom of the printer.





2. LIST OF ERROR DISPLAY / INDICATION

Errors and warnings are displayed by the following ways:

- 1) Operator call errors are indicated by the Alarm LED lit in orange, and the error and its solution are displayed on the LCD in text and by icon.
- 2) Messages during printing from a computer are displayed on the printer driver Status Monitor.
- 3) Error codes are printed in the "operator call/service call error record" area in EEPROM information print.

Buttons valid when an operator call error occurs:

- 1) ON/OFF button: To turn the printer off and on again.
- 2) OK button: To clear and recover from an error. In some operator call errors, the error will automatically be cleared when the cause of the error is eliminated, and pressing the OK button may not be necessary.
- 3) Stop/Reset button: To cancel the job at error occurrence, and to clear the error.

2-1. Operator Call Errors (by Alarm LED Lit in Orange)

Error	Error code	Message on the LCD	Solution
No paper in the ASF.	[1000]	Auto sheet feeder. There is no paper. Load paper and press [OK].	Confirm that the ASF is selected as the paper source. Set the paper in the ASF, and press the OK button.
Paper jam.	[1300]	The paper is jammed. Clear the paper and press [OK].	Remove the jammed paper, and press the OK button.
Ink may have run out.	[1600]	The following ink may have run out. Replacing the ink tank is recommended. (U041)	Replace the ink tank, or press the OK button to clear the error without ink tank replacement. When the error is cleared by pressing the OK button, ink may run out during printing.
Ink tank not installed.	[1660, 1687]	The following ink tank cannot be recognized. (U043) (Applicable ink tank icon)	Install the ink tank properly, and confirm that the ink tank LED lights red.
Print head not installed, or not properly installed.	[1401]	Print head is not installed. Install the print head.	Install the print head properly.
Print head temperature sensor error.	[1403]	The type of print head is incorrect. Install the correct print head.	Re-set the print head. If the error is not cleared, the print head may be defective. Replace the print head.
Faulty EEPROM data of the print head.	[1405, 1682]		
Warning: The ink absorber becomes almost full.	[1700, 1701]	Contact the support center or service center for ink absorber replacement. Press [OK] to continue printing.	Replace the ink absorber, and reset its counter. [See 3-3. Adjustment / Settings, (5) Service mode.] Pressing the OK button will exit the error, and enable printing without replacing the ink absorber. However, when the ink absorber becomes full, no further printing can be performed unless the applicable ink absorber is replaced.
The connected digital camera or digital video camera does not support Camera Direct Printing.	[2001]	The device may be incompatible. Remove the device and check the manual supplied with the connected device.	Remove the cable between the camera and the printer.
Failed in automatic print head alignment.	[2500]	Auto head align has failed. Press [OK] and repeat operation. <see manual=""></see>	Press the OK button to clear the error, then perform the automatic print head again.
Low battery	[1810]	No battery. Turn printer off and use the AC adapter or install a charged battery.	Use the AC adapter, or attach a charged battery.
Ink tank not recognized.[1684]The following ink tank cannot be recognized. (U140) (Applicable ink tank icon)A		The following ink tank cannot be recognized. (U140) (Applicable ink tank icon)	A non-supported ink tank is installed (the ink tank LED is turned off). Install the supported ink tank.
		1-4	

Ink tank not recognized.	[1410 to 1419]	The following ink tank cannot be recognized. (U150) (Applicable ink tank icon)	Replace the ink tank.
No ink (no raw ink in a new ink tank).	[1688]	Printer detected ink out condition of the following ink. Replace the ink tank.	Replace the ink tank, and close the printer cover. By pressing the Stop/Reset button, printing can be continued without replacing the ink tank, however, ink may run out during printing.
No ink (a used ink tank).	[1689]	The following ink tank cannot be recognized.	Replace the ink tank, and close the printer cover. By pressing the Stop/Reset button, printing can be continued without replacing the ink tank, however, ink may run out during printing.

2-2. Service Call Errors (by Cyclic Blinking in Orange (Alarm LED) and Blue (Power LED))

Service call errors are indicated by the number of cycles the Alarm and Power LEDs blink, and the corresponding error code is displayed on the LCD.

Cycles of blinking in orange (Alarm LED) and blue (Power LED)	Error	Error code	Conditions	Solution Replacement of listed parts, which are likely to be faulty)
2 times	Carriage error	[5100]	An error occurred in the carriage encoder signal.	 Carriage unit (QM2-3987) Timing slit strip film (QC2-3208) Logic board ass'y (QM3-0110)^{*1} Carriage motor ass'y (QM3-0142)
3 times	Line feed error	[6000]	An error occurred in the LF encoder signal.	 Paper feed encoder unit (QM3-0118) Timing slit disk (QC2-0211) Paper feed roller ass'y (QL2-1691) Platen unit (QM2-3976) Logic board ass'y (QM3-0110)^{*1} Paper feed motor ass'y (QM3-0143)
4 times	Purge cam sensor error	[5C00]	An error occurred in the purge unit.	 Purge unit (QM2-3980) Logic board ass'y (QM3-0110)^{*1}
5 times	ASF (cam) sensor error	[5700]	This error takes place when feeding paper from the ASF after an error occurred in the ASF cam sensor.	 Sheet feed unit (QM2-3992) PE PWB unit (QM3-0128) Logic board ass'y (QM3-0110)^{*1}
6 times	Internal temperature error	[5400]	The internal temperature is not normal.	- Carriage unit (QM2-3987) - Logic board ass'y (QM3-0110) ^{*1}
7 times	Ink absorber full	[5B00, 5B01]	The ink absorber is supposed to be full. <u>Message on the LCD:</u> Ink absorber full. Service required. <u>Error codes:</u> 5B00: Main ink absorber is full (overseas). 5B01: Main ink absorber is full (Japan).	- Absorber kit (QY5-0182)
8 times	Print head temperature rise error	[5200]	The print head temperature exceeded the specified value.	 Print head (QY6-0069) Logic board ass'y (QM3-0110)^{*1}
9 times	EEPROM error	[6800]	A problem occurred in writing to the EEPROM.	- Logic board ass'y (QM3-0110) ^{*1}
10 times	VH monitor error	[B200]	The internal temperature exceeded the specified value.	 Print head (QY6-0069) Carriage unit (QM2-3987) Logic board ass'y (QM3-0110)^{*1}
12 times	AP position error	[6A00]	The AP motor does not move because the ASF unit, purge unit, or AP motor is faulty.	 Sheet feed unit (QM2-3992) Logic board ass'y (QM3-0110)^{*1} Purge unit (QM2-3980)

15 times	USB Host VBUS overcurrent	[9000]	The USB Host VBUS is overloaded.	- Logic board ass'y (QM3-0110) ^{*1}
16 times	Battery error	[A100] The thermistor is faulty, or the battery temperature exceeded the specified val		 Portable Kit LK-60 Logic board ass'y (QM3-0110)^{*1}
17 times	Battery error	[A000]	The microcomputer built in the battery got faulty due to short circuit, etc.	 Portable Kit LK-60 Logic board ass'y (QM3-0110)^{*1}
20 times	Other hardware error	[6500]	The PCI bus error is detected by the ASIC.	- Logic board ass'y (QM3-0110) ^{*1}
Alarm LED lit	ROM error		The check sum value is incorrect in the ROM check at hard-power-on.	- Logic board ass'y (QM3-0110) ^{*1}
Alarm LED lit	RAM error		An error is detected in the RAM check at hard-power-on.	- Logic board ass'y (QM3-0110) ^{*1}

*1: Before replacement of the logic board ass'y, check the ink absorber counter value (by service test print or EEPROM information print). If the counter value is 7% or more, also replace the ink absorber kit (QY5-0182) when replacing the logic board ass'y. If the counter value is less than 7%, register the current ink absorber counter value to the replaced new logic board instead. [See 3-3. Adjustment / Settings, (5) Service mode, for details.]

2-3. Other Error Messages

Message on the LCD	Cause	Solution
The print head lock lever is not properly applied. Open the cover and press the lock buttons on both ends of the lever.	The print head lock lever was not completely lowered, contacting the printer cover.	Push the lever to fit it in place, and close the printer cover.
Read/write attribute is not available during battery operation.	To prevent data loss (in case the printer power turns off due to exhaustion of the battery power), writing to a memory card cannot be performed.	Connect the printer to the AC power supply.
Cannot print via wireless communication. - No photo data - Unsupported photo data	The image size was too large, or the image file was not supported.	Change the image, and try wireless communication again.
- Photo data too large		
There are no photos in memory card.	Supported image files are not in the memory card.	 A temporary error. Confirm that supported image files are in the memory card. Images with double-byte characters used in the file name (or folder name) may not be recognized. Change the file (or folder) name so that it contains only single-byte alphanumeric characters. If images are edited on the computer, print them from the computer.
The value exceeds the number of copies you can print.	During selecting images or specifying the number of copies, the total print quantity exceeds the prescribed value of 999.	A temporary error. The last operation before the error is cancelled, and the total print quantity returns to the value before the error.
Memory card is not set. Insert the card after checking the direction.	The memory card is not inserted in the slot properly.	Set a memory card properly.
DPOF information is not saved in the memory card.	DPOF print was selected in the menu, but no DPOF files are contained in the memory card.	A temporary error. The LCD automatically returns to the display before the error occurrence.
Change the setting after removing the card.	With a memory card inserted in the slot, change of the Read/Write attribute was attempted.	A temporary error. Remove the memory card, then change the Read/Write attribute.
The card is currently write-enabled. Set to read-only mode before performing operation.	With the memory card set to the Read/write mode, Card Direct printing operation was attempted from the menu.	A temporary error. Remove the memory card, change the memory card setting to Read-only, then perform Card Direct printing.

2-4. Warnings

Warning	Message on the LCD	Solution
Print head alignment (recommendation on arrival)	Head alignment required. Load paper and press [OK]. Yes	 Select Yes, and press the OK button. => Automatic print head alignment is performed.
Cancellation of image select information	Reset the selected photo information? Yes No	 In Layout print, the message will be displayed when a user attempts to display the menu or sub-menu after selecting one or more photos. Select Yes, and press the OK button. => The image selection is cancelled, and the menu or sub-menu is displayed. Select No, and press the OK button. => The LCD returns to the display immediately before the message was displayed.

2-5. Troubleshooting by Symptom

	Symptom	Solution
Faulty operation	The power does not turn on. The power turns off immediately after power-on.	 Confirm the connection of the power cord, and between the logic board and the power supply unit. Replace the AC adapter, logic board ass'y^{*1}, or Portable Kit LK-60.
	A strange noise occurs.	 Remove foreign material. Attach a removed part if any. Check the operation of the moving parts (such as purge unit, carriage unit, and paper feeding mechanism) Replace a faulty part, if any.
	Nothing is displayed on the LCD.	 Confirm the connection between the operation panel, the LCD viewer unit, and the logic board. Replace the LCD viewer unit, or logic board ass'y^{*1}.
	A portion of the LCD is not displayed.	 Perform the button and LCD test in the service mode, and confirm that the LCD is displayed without any segments missing. Confirm the connection between the operation panel and the logic board. Replace the LCD viewer unit, or logic board ass'y^{*1}.
	Paper feed problems (multi-feeding, skewed feeding, no feeding).	 Examine the inside to confirm that no parts are damaged, and the rollers are clean. Remove foreign material. Adjust the paper guide properly. Set the paper properly. Confirm the connection between each harness and the logic board. Replace the sheet feeder unit, or logic board ass'y^{*1}.
	Carriage movement problems (contact to other parts, strange noise).	 Confirm that the timing slit strip film is free from damage or grease. Clean the timing slit strip film (with ethanol and lint-free paper). Remove foreign material. Replace the
	1-7	

		- timing slit strip film, or - carriage unit.
Unsatisfactory print quality	No printing, or no color ejected.	 Confirm that the ink tank is installed properly. Perform print head maintenance. Replace the ink tank, or print head^{*2}. Remove foreign material from the purge unit caps, if any. Replace the purge unit, or logic board ass'y^{*1}.
	Printing is faint, or white lines appear on printouts even after print head cleaning.Line(s) not included in the print data appears on printouts.	 Remove and re-install the print head. Confirm that the ink tank is installed properly. Perform print head maintenance. Replace the ink tank, print head^{*2}, purge unit, or logic board ass'y^{*1}.
	Paper gets smeared.	 Feed several sheets of paper. Perform bottom plate cleaning. Clean the paper path with cotton swab or cloth. Clean the ASF paper feed rollers.
	A part of a line is missing on printouts.	 Replace the ink tank, or print head^{*2}.
	Color hue is incorrect.	 Confirm that the ink tank is installed properly. Perform print head maintenance. Replace the ink tank, or print head^{*2}. Perform print head alignment^{*3}.
	Printing is incorrect.	Replace the logic board ass'y ^{*1} .
	No ejection of black ink.	 Confirm that the ink tank is installed properly. Perform print head maintenance. Replace the ink tank, or print head^{*2}. Remove foreign material from the purge unit caps, if any. Replace the purge unit.
	Graphic or text is enlarged on printouts.	 When enlarged in the carriage movement direction: Clean grease or oil off the timing slit strip film. Replace the timing slit strip film, carriage unit, or logic board ass'y^{*1}. When enlarged in the paper feed direction: Clean grease or oil off the timing slit disk. Replace the timing slit disk, paper feed encoder unit, LF roller, or logic board ass'y^{*1}.

*1: Before replacement of the logic board ass'y, check the ink absorber counter value (by service test print or EEPROM information print). If the counter value is 7% or more, also replace the ink absorber kit (QY5-0182) when replacing the logic board ass'y. [See 3-3. Adjustment / Settings, (5) Service mode, for details.]

*2: Replace the print head only after the print head deep cleaning is performed 2 times, and when the problem persists.

*3: Use Matte Photo Paper (MP-101) or Photo Paper Plus Glossy (PP-101) for print head alignment.

< <Part 1: 2. LIST OF ERROR DISPLAY / INDICATION> 🕨 🛕

3. REPAIR

3-1. Notes on Service Part Replacement (and Disassembling / Reassembling)

Service part	Notes on replacement ^{*1}	Adjustment / settings	Operation check
Logic board ass'y QM3-0110	 Before removal of the logic board ass'y, remove the power cord, and allow for approx. 1 minute (for discharge of capacitor's accumulated charges), to prevent damages to the logic board ass'y. Before replacement, check the ink absorber counter value (by service test print or EEPROM information print). If the counter value is 7% or more, also replace the ink absorber kit (QY5-0182) when replacing the logic board ass'y. [See 3-3. Adjustment / Settings, (5) Service mode, for details.] 	 After replacement: Initialize the EEPROM. Set the ink absorber counter value. Set the destination in the EEPROM. Check the ink system function. [See 3-3. Adjustment / Settings, (5) Service mode, for details of 1 to 4.] Perform print head alignment in the user mode^{*1}. Perform LF / Eject correction in the service mode. 	 EEPROM information print Service test print Printing via USB connection Direct printing from a digital camera
Absorber kit QY5-0182		After replacement: 1. Reset the ink absorber counter. [See 3-3. Adjustment / Settings, (5) Service mode, for details.]	 Service test print EEPROM information print
Carriage unit QM2-3987		At replacement: 1. Apply oil to the sliding portions. [See 3-3. Adjustment / Settings, (2) Grease application.] After replacement: 1. Check the ink system function. [See 3-3. Adjustment / Settings, (5) Service mode, for details.] 2. Perform the print head alignment in the user mode ^{*1} .	- Service test print (Confirm ink system function.)
Paper feed motor QM3-0143	- The red screws securing the paper feed motor are allowed to be loosened only for paper feed motor replacement. (DO NOT loosen them in any other cases.)	At replacement: 1. Adjust the paper feed motor. [See 3-3. Adjustment / Settings, (1) Paper feed motor adjustment.]	
Paper feed roller ass'y QL2-1698 Eject roller ass'y QL2-1699	- After replacement, perform LF / Eject correction.	After replacement: 1. Perform LF / Eject correction in the service mode. [See 3-3. Adjustment / Settings, (5) Service mode, for details.]	- Service test print
Platen unit QM2-3976	- Do not bend the bridge sheet on the bottom of the platen.	After replacement: 1. Confirm that the ink path for the platen ink absorber is secured. [See 3-3. Adjustment / Settings, (5) Service mode, for details.]	
Timing slit strip film QC2-0142 Timing slit disk QC2-0211	 Upon contact with the film, wipe the film with ethanol. Confirm no grease is on the film. (Wipe off any grease thoroughly with ethanol.) Do not bend the film 	After replacement: 1. Perform print head alignment in the user mode ^{*1} .	- Service test print
Print head QY6-0069		After replacement: 1. Perform print head alignment in the user mode ^{*1} .	- Service test print

*1: For print head alignment, use Matte Photo Paper (MP-101) or Photo Paper Plus Glossy (PP-101).

General notes:

- Make sure that the flexible cables and wires in the harness are in the proper position and connected correctly. See 3-2. Special Notes on Repair Servicing, (1) Flexible cable and harness wiring, connection.
- Do not drop the ferrite core, which may cause damage.
- Protect electrical parts from damage due to static electricity.
- Before removing a unit, after removing the power cord, allow the printer to sit for approx. 1 minute (for capacitor discharging to protect the logic board ass'y from damages).
- Do not touch the timing slit strip film and timing slit disk. No grease or abrasion is allowed.
- Protect the units from soiled with ink.
- Protect the housing from scratches.
- Exercise caution with the screws, as follows:
 - i. The screws of the paper feed motor may be loosened only at replacement of the paper feed motor unit (DO NOT loosen them in other cases).
 - ii. DO NOT loosen the red screws on both sides of the main chassis, securing the carriage shaft positioning (they are not adjustable in servicing)

For Germany:

A lithium battery is installed in the mini260. Please be cautious of the following:

- At repair:

Risk of explosion if battery is replaced by an incorrect type.

- Explosionsrisiko, falls Batterie nicht mit vorgeschriebenem Baterrietypus ersetzt wird.
- At disposal:

Dispose of used batteries according to the local regulations.

Batterienentsorgung gemaess lokalen Vorschriften.

When the Service Manual issued by CINC is localized, be sure to include the above cautions (at repair and disposal) in German.

For California, U.S.A .:

Included battery contains Perchlorate Material-special handling may apply.

See http://www.dtsc.ca.gov/hazardouswaste/perchlorate/ for detail.

< <Part 1: 3-1. Notes on Service Part Replacement> ⋗ 🛕

3-2. Special Notes on Repair Servicing

Be sure to protect the machine, especially the LCD, operation panel unit, scanner unit, and logic board, from static electricity in repair servicing.

(1) Flexible cable and harness wiring, connection

Be cautious of wiring of the flexible cables and harness. Improper wiring or connection may cause breakage of a line, leading to ignition or emission of smoke.

(I) Logic board ass'y wiring



Logic board ass'y wiring (front side):



Logic board ass'y wiring (back side):



(II) Panel cable wiring



CORE



(III) Coin battery unit wiring



(IV) Purge unit wiring



(V) LF motor cable, paper feed encoder cable, and platen sensor cable wiring



(VI) Platen sensor unit wiring



(2) Main cover assembly

Be cautious not to fasten the main cover ass'y (QL-1700) screws too tight. If the screws are fastened too tight, the main cover may be forced down, contacting the carriage.



(3) Carriage unit replacement

When replacing the carriage unit (QM2-3897), confirm the carriage flexible cable position.

Incorrect positioning of the carriage flexible cable will cause malfunction due to contact of the cable to other parts, or deformation of the cable itself.

(I) Carriage flexible cable position

Confirm that the carriage flexible cable is not seen in the concave-shaped space of the carriage FCC holder.



(II) Carriage FCC holder sheet position

Attach the carriage FCC holder sheet in the red rectangle-indicated position.



(4) Platen unit assembly

- When replacing the platen unit (QM2-3976), confirm that the bridge sheets at the bottom of the platen unit do not curl or bend.
- Curled or bent sheets may prevent ink flow from the borderless ink absorber to the main ink absorber, causing ink leakage from the absorbers.

Bridge sheet position:

Insert the sheets in the holes of the chassis.



<Part 1: 3-2. Special Notes on Repair Servicing>

3-3. Adjustment / Settings

(1) Paper feed motor adjustment

- 1) When attaching the motor, fasten the screws so that the belt is properly stretched (in the direction indicated by the blue arrow in the figure below).
- 2) After replacement, be sure to perform the service test print, and confirm that no strange noise or faulty print operation (due to dislocation of the belt or gear, or out-of-phase motor, etc.) occurs.



Caution:

The red screws securing the paper feed motor may be loosened only at replacement of the paper feed motor unit. DO NOT loosen them in other cases.

(2) Grease application

1) Printer unit

No	Part name	Where to apply grease / oil	Drawing No.	Grease / oil	Grease / oil amount (mg)	Number of drops
1	Carriage shaft	Entire surface where the carriage unit slides	(1)	EU-1	60 +/- 10	
2	Carriage oil pad	Moisten the entire pad with the grease	(2)	EU-1	81 +/- 5	
3	LF roller	LF roller groove	(3)	IF-20	9 to 18	1/2
4	Platen lever	Chassis burring sliding portion	(4)	Floil KG107A	9 to 18	1/2
5	Guide rail	Carriage rail slider sliding portion	(5)	Floil KG107A	9 to 18	1
6	Idler gear	Idler gear where the LF idle gear spring contacts	(6)	Floil KG107A	9 to 18	1
7	Main chassis L	Main chassis L where the LF idle gear spring contacts	(7)	Floil KG107A	9 to 18	1
8	LF roller bushing L	Spring contact portion	(8)	Floil KG107A	9 to 18	1
9	Eject roller bushing L	Spring contact portion	(9)	Floil KG107A	9 to 18	1/2
10	ASF idle gear	Gear teeth	(10)	MOLYKOTE PG641	4.5 to 9	

1 drop = 9 to 18 mg







(3) Ink absorber counter setting

When the logic board ass'y is replaced, reset the ink absorber counter. In addition, according to the ink absorber counter value, replace the ink absorber (ink absorber kit). The standard counter value for ink absorber replacement is given in the table below.

Ink absorber counter value ^{*1}	Ink absorber kit replacement
Less than 7%	Not required.
7% or more	Required.

*1: Check the ink absorber counter value by service test print or EEPROM information print. [See 3-3. Adjustment / Settings, (5) Service mode, for details.]

(4) User mode

Function	Procedures	Remarks
Print head manual cleaning	- Cleaning Color: Perform via the printer operation panel, or from the printer driver Maintenance tab. See "Standalone printer operation" below.	
Print head deep cleaning	- Cleaning Color: Perform via the printer operation panel, or from the printer driver Maintenance tab. See "Standalone printer operation" below.	
Paper feed roller cleaning	Perform via the printer operation panel. See "Standalone printer operation" below.	
Nozzle check pattern printing	Perform via the printer operation panel, or from the printer driver Maintenance tab. See "Standalone printer operation" below.	
Print head alignment	Perform via the printer operation panel, or from the printer driver Maintenance tab. See "Standalone printer operation" below.	Automatic and manual print head alignment available via the printer operation panel or the printer driver Maintenance tab.
Bottom plate cleaning	Perform via the printer operation panel. See "Standalone printer operation" below.	Cleaning of the platen ribs when the back side of paper gets smeared.
Print head replacement	The print head is replaceable at the same position as for ink tank replacement. (Open the printer cover. When the carriage stops at the center, the print head can be replaced.)	

<Standalone printer operation>

- 1) Turn on the printer.
- 2) Press and hold the Stop/Reset button until the Power LED blinks the specified number of times listed in the table below, and release it. The operation starts.

LED blinking	Operation	Remarks
8 times	Infrared communication mode	



(5) Service mode

Function	Procedures	Remarks
Service test print	See "Service mode operation	Set a sheet of 4" x 6" paper.
- Model name	procedures" below.	For print sample, see 3-4. Verification Items, (1)
- Destination		Service test print, <service print="" sample="" test="">.</service>
- ROM version		
- USB serial number		
- Ink absorber counter value (ink amount in the ink absorber)		
EEPROM initialization	See "Service mode operation procedures" below.	The following items are NOT initialized, and the shipment arrival flag is not on: - USB serial number - Destination settings
Ink absorber counter reset	See "Service mode operation procedures" below.	If the ink absorber counter value is 7% or more, replace the ink absorber kit.
Destination settings	See "Service mode operation procedures" below.	
LF / Eject correction	See "Service mode operation procedures" below.	

Note: At the end of the service mode, press the ON/OFF button. The paper lifting plate of the sheet feed unit will be raised.

<Service mode operation procedures>

- 1) With the printer power turned off, while pressing the Stop/Reset button, press and hold the ON/OFF button. (DO NOT release the buttons). The Power LED lights in blue to indicate that a function is selectable.
- 2) While holding the ON/OFF button, release the Stop/Reset button. (DO NOT release the ON/OFF button.)
- 3) While holding the ON/OFF button, press the Stop/Reset button 2 times, and then release both the ON/OFF and Stop/Reset buttons. (Each time the Stop/Reset button is pressed, the Alarm and Power LEDs light alternately, Alarm in orange and Power in blue, starting with Alarm LED.)
- 4) When the Power LED lights in blue^{*1}, press the Stop/Reset button the specified number of time(s) according to the function listed in the table below, then press the ON/OFF button. (Each time the Stop/Reset button is pressed, the Alarm and Power LEDs light alternately, Alarm in orange and Power in blue, starting with Alarm LED.)

Time(s)	LED indication	Function	Remarks
0 times	Blue (Power)	Power off	When the print head is not installed, the carriage returns and locks in the home position capped.
1 time	Orange (Alarm)	Service test print	See 3-4. Verification Items, (1) Service test print.
2 times	Blue (Power)	EEPROM information print	See 3-4. Verification Items, (2) EEPROM information print.
3 times	Orange (Alarm)	EEPROM initialization	
4 times	Blue (Power)	Ink absorber counter resetting	
5 times	Orange (Alarm)	Destination settings	Press the Stop/Reset button the specified number of time(s) according to the destination.
6 times	Blue (Power)	Print head deep cleaning	
7 to 11 times	Orange (Alarm) at odd numbers, Blue (Power) at even numbers	Return to the menu selection	
12 times	Blue (Power)	Button and LCD test	
13 times	Orange (Alarm)	LF / Eject correction	
14 times	Blue (Power)	Return to the menu selection	
15 times or more ^{*2}	Orange (Alarm)	Return to the menu selection	

- *1: If the LED does not light in blue (the printer does not enter the service mode), disconnect the power cord and plug it again. Then start from step 1) to start the printer in the service mode again. If the automatic power-on function is enabled in the printer, the printer enters the service mode for the first time, but it will never enter the service mode if the printer is turned off by the ON/OFF button. This is because the printer remains to be turned on internally if the power is turned off by the ON/OFF button. To prevent this, disconnection of the power cord is required before starting the printer in the service mode.
- *2: If the Stop/Reset button is pressed 15 or more times, the Alarm LED (orange) or Power LED (blue) lights steadily without any changes.

<Destination settings>

In the destination settings mode, press the Stop/Reset button the specified number of time(s) according to the destination listed in the table below, and press the ON/OFF button.

Time(s)	LED indication	Destination
0 times	Blue (Power)	No change of the destination
1 time	Orange (Alarm)	Japan
2 times	Blue (Power)	Korea
3 times	Orange (Alarm)	US
4 times	Blue (Power)	Europe
5 times	Orange (Alarm)	Australia
6 times	Blue (Power)	Asia
7 times	Orange (Alarm)	China
8 times	Blue (Power)	Taiwan
9 times or more	Orange (Alarm)	Return to the menu selection

Note: After setting the destination, confirm the model name and destination in service test print or EEPROM information print. [See 3-4. Verification Items, (1) Service test print, or (2) EEPROM information print.]

<Button and LCD test>

Confirm the operation after replacement of the operation panel unit, or LCD unit.

- 1) In the button and LCD test mode, press the Stop/Reset button. The LCD turns blue, waiting for a button to be pressed.
- 2) Press each button of the operation panel, except the Power, Stop/Reset, and OK buttons (total 12 buttons).
- 3) Only one button should be pressed at one time. If 2 or more buttons are pressed at the same time, only one of them is considered to be pressed, and the other buttons are ignored.

The LCD is divided into 12 segments, representing each button. The color of a segment corresponding to the pressed button changes to red. When all the buttons are pressed, the entire LCD changes to a full red screen.

The buttons to be pressed are:

- NAVI button
- HOME button
- Back button
- Function buttons (f1) / (f2)
- Up / down / left / right cursor buttons
- + / buttons
- Print button



- 4) Rotate the Easy-Scroll Wheel clockwise and counterclockwise 1 round (24 steps) each, as follows:
 - 4-1) Rotate the Easy-Scroll Wheel clockwise step by step. The LCD is divided into 24 segments, representing each step. The color of a segment corresponding to the step changes from red to green.

If the wheel is rotated counterclockwise before clockwise round completes, the color of segment(s) corresponding to the number of steps the wheel is rotated counterclockwise returns to red.

If the wheel keeps rotated clockwise over 1 round (24 steps), the color of segment(s) corresponding to the extra number of steps returns to red, starting with the "Start" segment in the figure below.



- 4-2) When the Easy-Scroll Wheel is rotated clockwise 1 round (24 steps), press the OK button.
- 4-3) Rotate the Easy-Scroll Wheel counterclockwise step by step. The LCD is divided into 24 segments, representing each step. The color of a segment corresponding to the step changes from blue to blue.

If the wheel is rotated clockwise before counterclockwise round completes, the color of segment(s) corresponding to the number of steps the wheel is rotated clockwise returns to blue.

If the wheel keeps rotated counterclockwise over 1 round (24 steps), the color of segment(s) corresponding to the extra number of steps returns to blue, starting with the "Start" segment in the figure below.



- 4-4) When the Easy-Scroll Wheel is rotated counterclockwise 1 round (24 steps), press the OK button. The color of all segments turns red.
- 5) If there is any step left un-selected (a blue segment remained in step 4) above), even the Stop/Reset button is not accepted.
- 6) Adjust the transparent color and LCD flicker, as follows:
 - 6-1) Press the OK button. "OK1" in white is displayed on the black background.

If the result is not good, "NG1" in black is displayed on the white background (transparent color) immediately after "OK1."



6-2) Press the OK button.

6-3) "OK2" in black is displayed on the white background.

If the result is not good, "NG2" in white is displayed on the black background (transparent color) immediately after "OK2."



6-4) Press the OK button.

- 6-5) The printer enters the LCD flicker adjustment mode.
- 6-6) Press the OK button again, then the ON/OFF button, to exit the button and LCD test and return to the service mode menu selection.

<LF / Eject correction>

- After replacement of the paper feed roller ass'y, eject roller ass'y, or logic board in repair servicing or in refurbishment operation, perform the adjustment.
- Details: Print the LF / Eject correction pattern on 3 sheets of paper. Select the Pattern No. (0 to 2) in which streaks or lines are the least noticeable, press the Stop/Reset button the same number of time(s) as the selected Pattern No., then press the ON/OFF button.
- 1) In the LF /Eject correction mode, press the Stop/Reset button the specified number of time(s) according to the destination listed in the table below, then press the ON/OFF button. (Set 3 sheets of Glossy Photo Paper GP-401 in the ASF.)

Time(s)	Destination	Paper size
1 time	Japan	L size
2 times	Others	4" x 6"

Note: - Each time the Stop/Reset button is pressed, the Alarm and Power LEDs light alternately, Alarm in orange and Power in blue.

- If the Stop/Reset button is NOT pressed, and only the ON/OFF button is pressed, the printer remains in the LF / Eject correction mode.
- If the Stop/Reset button is pressed 3 times or more, then the ON/OFF button is pressed, the printer returns to the service mode menu selection.
- 2) The LF / Eject correction pattern is printed. (LF correction values from 0 to 2 in the upper half, Eject correction values from A to C in the lower half)



3) In the printout, select the Pattern No. in which streaks or lines are the least noticeable for LF correction and Eject correction respectively, press the Stop/Reset button the same number of time(s) as the selected Pattern No., then press the ON/OFF button.

How to determine the selection:

a. Select the pattern with no streaks or lines.



b. If streaks or lines appear on all the patterns, select the pattern with thinnest streaks or lines.



c. If the width of the streaks or lines is almost the same, select the pattern with the black streaks or lines.



3-1) LF correction value

Selected pattern number	Number of times the Stop/Reset button is pressed
1	1 time
0	0 times
2	2 times

Note: - Each time the Stop/Reset button is pressed, the Alarm and Power LEDs light alternately, Alarm in orange and Power in blue.

- If the Stop/Reset button is pressed 3 times or more, then the ON/OFF button is pressed, the printer returns to the service mode menu selection.

3-2) Eject correction value

Selected pattern number	Number of times the Stop/Reset button is pressed
В	1 time
A	0 times
С	2 times

Note: - Each time the Stop/Reset button is pressed, the Alarm and Power LEDs light alternately, Alarm in orange and Power in blue.

- If the Stop/Reset button is pressed 3 times or more, then the ON/OFF button is pressed, the printer returns to the service mode menu selection.

4) The selected LF correction value or Eject correction value is written to the EEPROM. The printer returns to the service mode menu selection after the Eject correction value is written to the EEPROM.

<Part 1: 3-3. Adjustment / Settings, (5)>

3-4. Verification Items

(1) Service test print

<EEPROM information contents>

On the service test print (sample below), confirm the EEPROM information as shown below. (The information is printed in the top area of the printout.)

mini260: Model name

Vx.xx: ROM version

TIC = xxxxxxxx: Timer IC data

D = xxx.x: Ink absorber counter value (%)

USB (xxxxx): USB serial number

Note: For the ink amount in the ink absorber, confirm it in the EEPROM information print.

<Print check items>

On the service test print (sample below), confirm the following items:

- Check 1, top of form accuracy: The lines shall not extend off the paper.

- Check 2, EEPROM information
- Check 3, nozzle check pattern: Ink shall be ejected from all nozzles.
- Check 4, destination
- Check 5, check pattern for uneven printing due to line feeding or carriage movement: There shall be no remarkable unevenness.
- Check 6, straight line and carriage movement accuracy: There shall be no remarkable dot mis-alignment on a line.
- Check 7, LF / Eject correction values

<Service test sample>



(2) EEPROM information print

<Print check items> Print sample: mini260 JPN V1.00 ST=2006/07/10-18:30 LPT=2006/07/12-09:09 ER(ER0=1000 ER1=5100) P_ON(S=00009) P_OFF(S=00009) MSD(015) IF(USB1=1) PC(M=002 R=000 T=001 D=009 C=009) D=004.5 TPAGE=0215 CLT(2006/02/25-18:30) CH=002 CT=00030 IS(PBK=1 M=1 C=1 Y=1) A_REG=1 M_REG=0 CDIN(PB=005 OPB=001) PAGE(All=00083 HR+MP=00003 PR+SP+SG =00000 GP =00000 PC=00000) CDPAGE=00000 PBPAGE=00000 BTPAGE=00000 CDP=00000 BATPAGE=00098 EDGE=00316 L=0246 INK_OFF(PBK=0 M=0 C=0 Y=0) LF=0 EJ=1 <Direct> LG=01 Japanese CDI=017 CDD-PPR (L=00027 PC=00030) CDD-SP (L=00046 PC=00044) CDD-MP (L=00012 PC=00016) DCD-PP (L=00000 PC=00000) DCD-FPP(L=00012 PC=00003) DCD-MPP(L=00000 PC=00000) SC=00495 Seal=00000

HDEEPROM information (EEPROM information in hex, Address 00h to FFh)

Printed items:

- 1. Model name (destination) 2. ROM version 3. Installation date 4. Last printing time
- 5. Operator call/service call error record 6. Power-on count (soft) 7. Power-off count (soft) 8. Longest period where printing stops
- 9. Connected I/F 10. Purging count (manual/deep cleaning/timer/dot count/ink tank replacement)
- 11. Ink amount in the main ink absorber (%)
- 12. Total print pages
- 13. Cleaning time
- 14. Print head replacement count 15. Ink tank replacement count
- 16. Ink status (PBK/M/C/Y)
- 17. Automatic print head alignment by user 18. Manual print head alignment by user
- 19. Camera Direct Print-supported device connection record

20. ASF feed pages (total, High Resolution Paper & Matte Photo Paper, Photo Paper Pro & Photo Paper Plus Glossy & Photo Paper Plus Semi-gloss, Glossy Photo Paper, postcard)

21. Feed pages by I/F (Camera Direct print pages, Print Beam print pages, Bluetooth print pages, Card Direct print pages, print pages using the battery)

22. Borderless print pages

23. 4x6 print pages

24. Disabling of the remaining ink amount detection function (PBK/M/C/Y]) 25. LF correction value 26. Eject correction value

<Direct>

- 27. Language 28. Memory card use count
- 29. Card Direct print pages: Photo Paper Pro (4 x 6, postcard) 30. Card Direct print pages: Photo Paper Plus Glossy (4 x 6, postcard)
- 31. Card Direct print pages: Matte Photo Paper (4 x 6, postcard) 32. Camera Direct print pages: Photo Paper (4 x 6, postcard)
- 33. Camera Direct print pages: Fast Photo Paper (4 x 6, postcard) 34. Camera Direct print pages: Matte Photo Paper (4 x 6, postcard)
- 35. Business card and Credit Card size paper feed pages
- 36. Sticker sheets fed

HDEEPROM information

(EEPROM information in hex, Address 00h to FFh)

<Part 1: 3-4. Verification Items>>>

4. PRINTER TRANSPORTATION

This section describes the procedures for transporting the printer for returning after repair, etc.

- 1) In the service mode, press the ON/OFF button to finish the mode, and confirm that the paper lifting plate of the sheet feed unit is raised.
- 2) Keep the print head and ink tank installed in the carriage.

See Caution 1 below.

3) Turn off the printer to securely lock the carriage in the home position. (When the printer is turned off, the carriage is automatically locked in place.)

See Caution 2 below.

- 4) Fix the following items with tape:
 - Paper guide
 - Paper thickness lever, set to the right (for the narrower)

Caution:

- (1) If the print head is removed from the printer and left alone by itself, ink is likely to dry. For this reason, keep the print head installed in the printer even during transportation.
- (2) Securely lock the carriage in the home position, to prevent the carriage from moving and applying stress to the carriage flexible cable, or causing ink leakage, during transportation.

Memo:

If the print head must be removed from the printer and transported alone, attach the protective cap (used when the packing was opened) to the print head (to protect the print head face from damage due to shocks).

<Part 1: 4. PRINTER TRANSPORTATION>

Part 2

TECHNICAL REFERENCE

1. NEW TECHNOLOGIES

1) New ink tank system (BCI-19, CLI-36)

An LED is installed in the ink tank.

By the LED indication, wrong installation of the ink tank will be prevented, and the remaining ink level can be visually recognized with the ink tank seated in the carriage.

2) Super-photo quality printing

By the FINE technologies, 1 pl of ultra-fine ink droplet is adopted.

The mini260 provides excellent super-photo print quality without graininess at the maximum resolution of 9,600 dpi x 2,400 dpi^{*1}.

*1: Printing at the minimum distance of 1/9600 inch between the dots.

3) New size of print media

The Hi-Vision size (Photo Paper Pro Wide size) is now supported.

4) Design

New design with a lower height.

The "Easy-Scroll Wheel" enhances usability, offering intuitive operation to users.

With the handle and optional battery (Portable Kit LK-60), the printer can easily be carried to anywhere.

5) USB 2.0 Hi-Speed supported

The printer supports USB 2.0 Hi-Speed, enabling high speed data transfer in use with the computer, OS, and USB hub.

	mini260	DS810
LCD	2.5 TFT color LCD	2.5 STN color LCD
Paper feed method	J-shaped path	Switchback
Resolution (dpi)	9,600 x 2,400	4,800 x 1,200
Print head alignment	Automatic (sensor), manual	Manual
Ink droplet	5, 2, and 1 pl	5 and 2 pl
	L size: 2,880 pages	L size: 2,000 pages
Product life	4 x 6: Approx. 2,100 pages (calculated based on the amount of L size pages)	4 x 6: 2,000 pages
Inly tonk wield	L size: 143 pages	L size: Approx. 95 pages
liik talik yleiu	4 x 6: Approx. 109 pages	4 x 6: Approx. 70 pages
Ontional	- BU-20	- BU-20
Optional	- Portable Kit LK-60	

< <Part 2: 1. NEW TECHNOLOGIES> ▶ 🔺

2. CLEANING MODE AND AMOUNT OF INK PURGED

To prevent printing problems due to bubbles, dust, or ink clogging, print head cleaning is performed before the start of printing (when the cleaning flag is on), except in the following cases:

- Cleaning on arrival: Performed when the printer cover is closed.
- Manual cleaning / deep cleaning: Performed manually.

<Cleaning mode list>

Condition	Details	Amount of ink used (g) (in the normal temperature/humidity environment)	Est. required time (sec.) (not including the time of opening the caps)
On arrival of the machine	First and second cleaning after shipped from the plant.	0.41	62
Timer cleaning - 0	If 504 to 1,440 hours have elapsed since the previous cleaning till the start of the next printing.	0.22	51
Timer cleaning - 1	If 1,440 to 2,160 hours have elapsed since the previous cleaning till the start of the next printing.	0.38	49
Timer cleaning - 2	If 2,160 to 4,320 hours have elapsed since the previous cleaning till the start of the next printing.	0.41	62
Timer cleaning - 3	If 4,320 to 8,640 hours have elapsed since the previous cleaning till the start of the next printing.	0.41	62
Timer cleaning - 4	If 8,640 or longer hours have elapsed since the previous cleaning till the start of the next printing.	0.41	62
At print head replacement	When the print head is removed and installed.	0.41	62
At ink tank replacement ^{*1}	When an ink tank is replaced (without the print head removal or re-installation)	0.38	49
Manual cleaning	Via the operation panelVia the printer driver	0.22	51
Deep cleaning	- Via the operation panel - Via the printer driver	0.945	65
If the print head has not been capped before soft- power-on		0.38	49

*1: When the ink tank is removed for 60 seconds or longer before the ink tank is reinstalled (or another ink tank is newly installed), cleaning at ink tank replacement is performed. Regardless of how often the ink tank removal / installation is carried out, the cleaning is performed when a total ink tank-absent time of the same tank reaches 60 seconds or longer.

< <Part 2: 2. CLEANING MODE AND AMOUNT OF INK PURGED> 🕨 🛕

3. PRINT MODE

	Default setting		
	Selectal	ble in the printer driver Main tab	
	Custom setting		
Ink used	PBk:	CLI-36CL	
	C:	CLI-36CL	
	M:	CLI-36CL	
	Y:	CLI-36CL	
Print control	Bi:	Bi-directional	
	Uni:	Uni-directional	

3-1. Normal Color Printing via Computer

Paper type	Item	5 Fast	4	3	2	1 Fine
Glossy Photo Paper (GP-401)	Print quality Print control Ink used: Resolution			Standard 4 passes, Bi PBkCMY: 1200x2400	High 6 passes, Bi PBkCMY: 1200x2400	
Photo Paper Pro (PR-101)	Print quality Print control Ink used: Resolution			Standard 4 passes, Bi PBkCMY: 1200x2400	High 6 passes, Bi PBkCMY: 1200x2400	Custom 16 passes, Bi PBkCMY: 9600x2400
Photo Paper Plus Glossy Photo Paper Plus Semi-gloss (PP-101/SG-101)	Print quality Print control Ink used: Resolution			Standard 4 passes, Bi PBkCMY: 1200x2400	High 6 passes, Bi PBkCMY: 1200x2400	
Matte Photo Paper (MP-101)	Print quality Print control Ink used: Resolution			Standard 4 passes, Bi PBkCMY: 1200x2400	High 6 passes, Bi PBkCMY: 1200x2400	

3-2. Card Direct / Camera Direct Printing

Donor tyme	Itom		Print direction, ink used, resolution			
Paper type	Item	Quatliy 5	Quality 4	Quality 3	Quality 2	Quality 1
Photo Paper Pro (PR-101)	Print quality Print control Ink used: Resolution			Standard 4 passes, Bi PBkCMY: 1200x2400	High 6 passes, Bi PBkCMY: 1200x2400	
Photo Paper Plus Glossy (PP-101)	Print quality Print control Ink used: Resolution			Standard 4 passes, Bi PBkCMY: 1200x2400	High 6 passes, Bi PBkCMY: 1200x2400	
Matte Photo Paper (MP-101)	Print quality Print control Ink used: Resolution			Standard 4 passes, Bi PBkCMY: 1200x2400	High 6 passes, Bi PBkCMY: 1200x2400	
Glossy Photo Paper (GP-401)	Print quality Print control Ink used: Resolution			Standard 4 passes, Bi PBkCMY: 1200x2400	High 6 passes, Bi PBkCMY: 1200x2400	

< <Part 2: 3. PRINT MODE> 🕨 🔺

4. FAQ (Problems Specific to the mini260 and Corrective Actions)

No.	*	Function	Phenomenon	Condition	Cause	Corrective action	Possible call or complaint
1	A	Print results	Uneven printing at the trailing edge of paper (banding perpendicular to the paper feed direction)		Since the bottom edge of paper is not held by the pinch roller, placement of ink droplet can shift, causing uneven printing.	 Set the print quality to High. Use Canon paper. Perform print head alignment. 	 Streaks or uneven printing at the bottom of paper. Printing quality is not good. (Printing is smeared.)
2	А	Setup	Print head lock lever not properly set	 The print head lock lever was not completely lowered. The ink tank was not completely seated in place. 	The print head lock lever is not completely lowered, or the ink tank was not securely seated in place.	 Push the buttons on both sides of the print head lock lever. Install the ink tank in place. 	 Error. Strange noise. The LEDs blink in orange and blue.
3	в	Setup	Failure in print head alignment	- Use of non- specified paper	The paper was not set properly, or the printed data could not be scanned properly since non-specified paper was used and the gloss level was out of specification.	 Set the paper guide properly. Confirm that printing is performed on the print side of paper. Use either of the following types of paper: Matte Photo Paper Photo Paper Plus Glossy Perform manual print head alignment. 	- Error in print head alignment.
4	в	Print results	Scratches (or uneven printing) at the leading edge of paper		- Whenmultiple sheets of paper are set, the back side of paper being picked up scratches the front side of paper beneath.	Reduce the number of sheets set in the ASF (or set only a single sheet), or use other types of paper (such as Photo Paper Pro, or Matte Photo Paper).	 Scratches at the top of paper. Print quality is not good. (Printing is smeared.)
5	С	Print results	Smear on paper		If paper is curled significantly, the print head will contact the printed surface, smearing printouts.	 Use Canon paper. Eliminate the curl of the paper. 	 Paper gets smeared (on the printed side). Print quality is not good. Paper edges are bent.
6	С	Print results	Smear on paper, streaks or lines on printouts.		Ink was not ejected properly, or the paper thickness lever was not set properly.	 Set the paper thickness lever properly. Set the print quality to High. Use Canon paper. Perform print head cleaning. 	- Streaks or lines on printouts.

* Occurrence level:

A: The symptom is likely to occur frequently. (Caution required)

B: The symptom may occur under certain conditions, but likeliness is assumed very low in practical usage.

C: The symptom is unlikely to be recognized by the user, and no practical issues are assumed.



Part 3

APPENDIX

1. BLOCK DIAGRAM

1-1. mini260

Enlarged view

Block Diagram



2. CONNECTOR LOCATION AND PIN LAYOUT

2-1. Logic Board





CN101 Not used

CN102 (to lithium battery)

No.	Signal name	Function	Input / Output
1	BATT_VDD	Battery driver power supply	IN
2	GND	Ground	-

CN201 (to Pict Bridge)

No.	Signal name	Function	Input / Output
1	VBUS	VBUS power supply	OUT
2	D-	D- signal	BUS
3	D+	D+ signal	BUS
4	S-GND	Signal ground	-
5	F-GND	Frame ground	-

CN203 (to USB2.0 for PC)

No.	Signal name	Function	Input / Output
1	VBUS	VBUS power supply	IN
2	D-	D- signal	BUS
3	D+	D+ signal	BUS
4	S-GND	Signal ground	-
5	F-GND	Frame ground	-
6	F-GND	Frame ground	-
7	F-GND	Frame ground	-
8	F-GND	Frame ground	-

CN301 (to carriage PWB J3)

No.	Signal name	Function	Input / Output
1	TH	Thermistor output	OUT
2	AB_CLK	AB clock signal	BUS
3	AB_POW	AB power supply	OUT
4	AB_DATA	AB data signal	BUS
5	DATA_BK_EV	BK serial data	OUT
6	A_HE	Heat enable A	OUT
7	HLATCH	Head data latch signal	OUT
8	VSS	Head logic ground	-
9	HCLK	Head data transfer clock	OUT
10	VSEN_3.3V	Power supply for sensor 3.3V	OUT
11	DATA_BK_OD	BK serial data	OUT
12	E_SK	Head EEPROM serial clock	OUT
13	E_CS	Head EEPROM chip select	OUT
14	E_DIO	Head EEPROM data input/output	OUT
15	VSS	Head logic ground	-
16	A_DIA <diode0></diode0>	Head temperature sensor anode A	IN
17	B_DIA	Head temperature sensor anode B	IN
18	CH_A	Carriage encoder phase A	IN
19	VSS	Head logic ground	-
20	CH_B	Carriage encoder phase B	IN
21	VSS	Head logic ground	-

CN302 (to carriage PWB J1)

No.	Signal name	Function	Input / Output
1	ENB4	Head enable	OUT
2	B-HE3	Heat enable 3	OUT
3	B-HE2	Heat enable 2	OUT
4	HVDD_3.3V	Head logic drive power supply 3.3V	OUT
5	B-HE1	Heat enable 1	OUT
6	DATA_PK_OD(3)	PK serial data (odd)	OUT
7	DATA_PK_EV(5)	PK serial data (even)	OUT
8	DATA_Y_OD	Y serial data (odd)	OUT
9	DATA_Y_EV	Y serial data (even)	OUT
10	VSS	Head logic ground	-
11	DATA_M1N_OD(3)	M1N serial data (odd)	OUT
12	DATA_M1N_EV(1)	M1N serial data (even)	OUT
13	DATA_M5N_OD	M5N serial data (odd)	OUT
14	DATA_M5N_EV	M5N serial data (even)	OUT
15	SNS_REG	REGI sensor	IN
16	VSEN_REG	REGI sensor power supply	OUT
		3-3	

17	VSS	Head logic ground	-
18	DATA_C5N_EV	C5N serial data (even)	OUT
19	DATA_C5N_OD	C5N serial data (odd)	OUT
20	DATA_C1N_EV(1)	C1N serial data (even)	OUT
21	DATA_C1N_OD(3)	C1N serial data (odd)	OUT

CN303 (to carriage PWB J2)

No.	Signal name	Function	Input / Output
1	VHT	Head drive power supply	OUT
2	HVDD_3.3V	Head logic drive power supply 3.3V	OUT
3	VSSFG	Head logic frame ground	-
4	B_VH	Head drive power supply	OUT
5	B_VH	Head drive power supply	OUT
6	B_VH	Head drive power supply	OUT
7	B_VH	Head drive power supply	OUT
8	B_GNDH	Head drive power supply ground	-
9	B_GNDH	Head drive power supply ground	_
10	B_GNDH	Head drive power supply ground	-
11	B_GNDH	Head drive power supply ground	-

CN401 (to platen sensor)

[No.	Signal name	Function	Input / Output
	1	SNS_CR_LIFT	Platen sense	IN
	2	GND	Ground	-

CN402 (to ASF sensor)

No.	Signal name	Function	Input / Output
1	SNS_ASF_CAM	ASF sense	IN
2	GND	ASF sensor ground	-

CN403 (to Purge & wiper sensor)

No.	Signal name	Function	Input / Output
1	SNS_MAIN_CAM	Purge sense	IN
2	GND	Purge & wiper sensor ground	-
3	SNS_PUMP_R	Wiper sense	IN
4	GND	Purge & wiper sensor ground	-

CN406 (to LF encoder)

No.	Signal name	Function	Input / Output
1	LF_ENC_B	LF encoder phase B	IN
2	VSEN_3.3V	LF encoder power supply 3.3V	OUT
3	GND	LF encoder power ground	-
4	LF_ENC_A	LF encoder phase A	IN

CN407 (to AP encoder)

No.	Signal name	Function	Input / Output
1	APCL_ENC_B	APCL encoder phase B	IN
2	VSEN_3.3V	APCL encoder power supply 3.3V	OUT
3	APCL_ENC_A	APCL encoder phase A	IN
4	GND	Ground	-
5	AP_M	AP motor phase +	OUT
6	AP_MN	AP motor phase -	OUT

CN408 (to panel PWB)

No.	Signal name	Function	Input / Output
1	GND	Ground	-
2	LVDS_DATA_P	LVDS D-	BUS
3	LVDS_DATA_N	LVDS D+	BUS
4	GND	Ground	-
5	LVDS_CLK_P	LVDS clock signal +	BUS
6	LVDS_CLK_N	LVDS clock signal -	BUS
7	GND	Ground	-
8	+1.5V	Logic power supply +1.5V	OUT
9	+1.5V	Logic power supply +1.5V	OUT
10	POLPOUTINT_OUT0	Panel interrupt signal	OUT
11	POLPOUTTXD0	POLPO transmission data	OUT
12	POLPOUTRXD0	POLPO reception data	IN
13	+3.3V	Logic power supply +3.3V	OUT
14	+3.3V	Logic power supply +3.3V	OUT
15	PANEL RESET	Panel reset signal	OUT
16	+5.5V	LCD backlight power supply	OUT
17	+5.5V	LCD backlight power supply	OUT
18	COVER SW	Cover switch	IN
19	GND	Ground	-
20	POLPOUTM RXD	POLPO M reception	IN
21	POLPOUTM TXD	POLPO M transmission data	OUT
22	POLPOUTM INTOUT	POLPO M input/output	BUS
23	GND	Ground	-
24	RESUME LED	Stop/Reset LED	OUT
25	POWER LED	Power LED	OUT
26	RESUME SW	Stop/Reset switch	IN
27	POWER SW	ON/OFF switch	OUT
28	PANEL F_GND	Frame ground	-

CN409 (to ground)

No.	Signal name	Function	Input / Output
1	GND	Ground	-
2	GND	Ground	-
3	GND	Ground	-
4	GND	Ground	-
5	GND	Ground	-
6	GND	Ground	-
7	GND	Ground	-
8	GND	Ground	-
9	GND	Ground	-
10	GND	Ground	-

CN501 (to carriage motor)

No.	Signal name	Function	Input / Output
1	CR_MN	Carriage motor -	OUT
2	CR_M	Carriage motor +	OUT

CN502 (to LF motor)

No.	Signal name	Function	Input / Output
1	LF_M	LF motor +	OUT
2	LF_MN	LF motor -	OUT

CN11 (to card & IrDA & PE PWB unit)

No.	Signal name	Function	Input / Output
1	IrDA RXD	IrDA reception data	IN
2	IrDA TXD	IrDA transmission data	OUT
3	+3.3V	Logic power supply	OUT
4	D-	D- signal	BUS
5	D+	D+ signal	BUS
6	S-GND	Signal ground	-
7	CARD_RESET	Card reset signal	OUT
8	CARD_INT	Card interrupt signal	OUT
9	5.1V	Power supply CF,MD	OUT
10	VSEN_PE	PE sensor power supply	OUT
11	SNS_PE	PE sense	IN
12	F-GND	Frame ground	-

CN601 (from battery)

No.	Signal name	Function	Input / Output
1	[-]	Ground	-
2	[-]	Ground	-
3	С	DOUT (data output)	OUT
4	S	DIN (data input)	IN
5	D	BSENSE (battery sense)	OUT
6	W	SDOWN (shut down)	IN
7	Р	PSENSE (printer sense)	IN
8	А	VOUT	OUT
9	[+]	VIN	IN
10	[+]	VIN	IN

CN602 (from AC adapter)

No.	Signal name	Function	Input / Output
1	VIN	Motor head (logic) power supply +16V	IN
2	F-GND	Frame ground	-
3	NC	Not used	-

<Part 3: 2-1. Logic Board>

2-2. Card Slot Board



J101 (from main PWB)

No.	Signal name	Function	Input / Output
1	IR_RXD	IrDA reception data	IN
2	IR_TXD	IrDA transmission data	OUT
3	+3.3V	Logic power supply	OUT
4	D-	D- signal	BUS
5	D+	D+ signal	BUS
6	GND	Ground	-
7	RESETX	Card reset signal	OUT
8	INTX	Card interrupt signal	OUT
9	+5.0V	CF,MD power supply	OUT
10	VSEN_PE	PE sensor power supply	OUT
11	SNS_PE	PE sense	IN
12	F-GND	Frame ground	-

J102 (to PE SNS PWB)

No.	Signal name	Function	Input / Output
1	GND	PE sensor ground	-
2	SNS_PE	PE sense	IN
3	VSEN_PE	PE sensor power supply	OUT
4	GND	PE sensor ground	-

J201(to 4-in-1<SM/SD/MMC/MS>)

No.	Signal name	Function	Input / Output
1	SD_WIPSW	SD write protect	IN
2	SD_WIPSW_GND	SD write protect ground	-
3	SD_CD	SD card detect	OUT
4	SD_CD_GND	SD card detect ground	-
5	SM_CDSW	SM card detect	OUT
6	SM_CDSW_GND	SM card detect ground	-
7	SM_VCC	SM logic power supply	OUT
8	SM_GND(SM_CDX)	SM logic ground	OUT
9	SM_D4	SM 16-bit data bus	BUS
10	SM_GND	SM logic ground	-

11	SM_D5	SM 16-bit data bus	BUS
12	SM_D3	SM 16-bit data bus	BUS
13	SM_D6	SM 16-bit data bus	BUS
14	SM_D2	SM 16-bit data bus	BUS
15	SM_D7	SM 16-bit data bus	BUS
16	SM_D1	SM 16-bit data bus	BUS
17	SM_LVD	SM low power voltage detect	-
18	SM_D0	SM 16-bit data bus	BUS
19	SD_DATA1	MMC, SD 16-bit data bus	BUS
20	MS_GND	MS logic ground	-
21	SD_DATA0	MMC, SD 16-bit data bus	BUS
22	MS_BS	MS bus state	OUT
23	SD_GND	SD logic ground	-
24	MS_VCC(D1)	MS logic power supply	OUT
25	SD_CLK	MMC, SD clock	OUT
26	MS_DIO(D0)	MS 16-bit data bus	BUS
27	SD_VCC	MMC, SD logic power supply	OUT
28	reserve(D2)	MS 16-bit data bus	BUS
29	SD_GND	SD logic ground	-
30	MS_INS	MS card insert signal	IN
31	SD_CMD	MMC, SD command	OUT
32	reserve(D3)	MS 16-bit data bus	BUS
33	MS_SCLK	MS system clock	OUT
34	SD_DAT3	MMC, SD 16-bit data bus	BUS
35	MS_VCC	MS logic power supply	OUT
36	SD_DAT2	MMC, SD 16-bit data bus	BUS
37	MS_GND	MS logic ground	-
38	SM_GND	SM logic ground	-
39	SM_WPX-IN	SM write protect	IN
40	SM_BSYX	SM busy	OUT
41	SM_WEX	SM write enable	IN
42	SM_REX	SM read enable	IN
43	SM_ALE	SM address latch enable	IN
44	SM_CEX	SM chip enable	IN
45	SM_CLE	SM command latch enable	IN
46	SM_VCC	SM logic power supply	OUT
47	SM_GND	SM logic ground	-
48	SM_WIPSW	SM write enable	IN
49	SM_WIPSW_GND	SM write protect ground	-
50	F-GND	Frame ground	-
51	F-GND	Frame ground	-

J202 (to CF <CompactFlash>)

No.	Signal name	Function	Input / Output
1	GND	Ground	-
2	CF_D3	CF 16-bit data bus	BUS
3	CF_D4	CF 16-bit data bus	BUS
4	CF_D5	CF 16-bit data bus	BUS
5	CF_D6	CF 16-bit data bus	BUS
6	CF_D7	CF 16-bit data bus	BUS
7	CF_CS0X	CF chip select	OUT
8	GND(CF_A10)	Ground (CF 24-bit address bus)	-
9	GND(CF_ATASELX)	Ground (CF output enable)	-
		2.0	

10	GND(CF_A9)	Ground (CF 24-bit address bus)	-
11	GND(CF_A8)	Ground (CF 24-bit address bus)	-
12	GND(CF_A7)	Ground (CF 24-bit address bus)	-
13	VCC	CF logic power supply	OUT
14	GND(CF_A6)	Ground (CF 24-bit address bus)	-
15	GND(CF_A5)	Ground (CF 24-bit address bus)	-
16	GND(CF_A4)	Ground (CF 24-bit address bus)	-
17	GND(CF_A3)	Ground (CF 24-bit address bus)	-
18	CF_A2	CF 24-bit address bus	BUS
19	CF_A1	CF 24-bit address bus	BUS
20	CF_A0	CF 24-bit address bus	BUS
21	CF_D0	CF 16-bit data bus	BUS
22	CF_D1	CF 16-bit data bus	BUS
23	CF_D2	CF 16-bit data bus	BUS
24	CF_IOCS16X	CF chip select/16-bit input/output	BUS
25	CF_CD2X	CF card detect	OUT
26	CF_CD1X	CF card detect	OUT
27	CF_D11	CF 16-bit data bus	BUS
28	CF_D12	CF 16-bit data bus	BUS
29	CF_D13	CF 16-bit data bus	BUS
30	CF_D14	CF 16-bit data bus	BUS
31	CF_D15	CF 16-bit data bus	BUS
32	CF_CS1X	CF chip select	OUT
33	CF_VS1X	CF power voltage sense	IN
34	CF_IORDX	CF read strobe input/output	IN
35	CF_IOWRX	CF write strobe input/output	OUT
36	VCC(CF_WEX)	CF logic power supply	OUT
37	CF_INTRQ	CF interrupt	OUT
38	VCC	CF logic power supply	OUT
39	GND(CF_CSELX)	CF ground (chip select)	-
40	CF_VS2X	CF power voltage sense	IN
41	CF_RESETX	CF reset	OUT
42	CF_IORDY	CF ready input/output	BUS
43	CF_INPARKX	CF card response	IN
44	VCC(CF_REGX)	CF register select	OUT
45	CF_DASPX	Not used	-
46	CF_PDIAGX	Not used	-
47	CF_D8	CF 16-bit data bus	BUS
48	CF_D9	CF 16-bit data bus	BUS
49	CF_D10	CF 16-bit data bus	BUS
50	GND	CF ground	-
51	F-GND	Frame ground (not used)	-
52	F-GND	Frame ground (not used)	-

<Part 3: 2-2. Card Slot Board>

2-3. Operation Panel Board



J101 (from main PWB)

No.	Signal name	Function	Input / Output
1	FGND	Frame ground	-
2	POWER_SW	ON/OFF switch	IN
3	ERROR_SW	Alarm switch	IN
4	POWER_LED	Power LED	OUT
5	ERROR_LED	Alarm LED	OUT
6	GND	Ground	-
7	MINT	Interrupt signal	IN
8	MTXD	Transmission data	OUT
9	MRXD	Reception data	IN
10	GND	Ground	-
11	COVER_OPEN_SNS	Cover open switch	OUT
12	5.1V	LCD backlight power supply	OUT
13	5.1V	LCD backlight power supply	OUT
14	RST	Reset	IN
15	3.3V	Logic power supply	OUT
16	3.3V	Logic power supply	OUT
17	RXD	Reception data	IN
18	TXD	Transmission data	OUT
19	INT	Panel interrupt signal	IN
20	1.5V	Logic power supply	OUT
21	1.5V	Logic power supply	OUT
22	GND	Ground	-
23	CLK_N	Panel clock signal N	BUS
24	CLK_P	Panel clock signal P	BUS
25	GND	Ground	-
26	DATA_N	D- signal	BUS
27	DATA_P	D+ signal	BUS
28	GND	Ground	-

J201 (to LCD-relay-28)

No.	Signal name	Function	Input / Output
1	GND	Ground	-
2	DISP	LCD(RGB serial) data	OUT
3	D7	LCD_D7 signal	OUT
4	D6	LCD_D6 signal	OUT
5	D5	LCD_D5 signal	OUT
6	D4	LCD_D4 signal	OUT
7	D3	LCD_D3 signal	OUT
8	D2	LCD_D2 signal	OUT
9	D1	LCD_D1 signal	OUT
10	D0	LCD_D0 signal	OUT
11	GND	Ground	-
12	DCLK	LCD clock signal	OUT
13	GND	Ground	-
14	HSYNC	Horizontal synchronization signal	OUT
15	VSYNC	Vertical synchronization signal	OUT
16	CS	Chip select signal	OUT
17	SCK	System clock	OUT
18	SDI	Serial data input	IN
19	VCC(3.3V)	Logic power supply	OUT
20	GND	Ground	-
21	VDD(12V)	LCD power supply	OUT
22	VREF	LCD reference voltage	OUT
23	VCOML	Common low power supply	OUT
24	VCOMH	Common high power supply	OUT
25	GND	Ground	-
26	ANODE	Anode	OUT
27	CATHODE	Cathode	IN
28	GND	Ground	-

J301 (from main PWB)

No.	Signal name	Function	Input / Output
1	FGND	Frame ground	-
2	FGND	Frame ground	-
3	FGND	Frame ground	-
4	FGND	Frame ground	-

<Part 3: 2-3. Operation Panel Board>

2-4. PE Sensor Board



J1

No.	Signal name	Function	Input / Output
1	GND	PE sensor ground	-
2	SNS_PE	PE sensor power supply	OUT
3	VSEN_PE	PE sense	IN
4	GND	PE sensor ground	-



3-12

2-5. Print Beam / PictBridge Board



J1

No.	Signal name	Function	Input / Output
1	VBUS	VBUS power supply	OUT
2	D-	D- signal	BUS
3	D+	D+ signal	BUS
4	S-GND	Signal ground	-
5	F-GND	Frame ground	-

No.	Signal name	Function	Input / Output
1	VBUS	VBUS power supply	OUT
2	D-	D- signal	BUS
3	D+	D+ signal	BUS
4	S-GND	Signal ground	_

┥ <Part 3: 2-5. Print Beam / PictBridge Board> ▶ 🔺

3. PIXMA mini260 SPECIFICATIONS

<Printer>

Nai	<u>me</u>	Size	Stacking capacity		
GP	-401	4x6, Credit Card	1 20 sheets		
GP	-501	4x6	20 sheets		
PR	-101	Wide, 4x6, 4x8	20 sheets		
PP-	101	4x6	20 sheets		
MP	-101	4x6	20 sheets		
SG	-101/201	4x6	20 sheets		
PS-	101		1 sheet		
	Туре		Desktop serial color inkjet printer		
Paper feeding method Auto she		ng method	Auto sheet feed (ASF)		
Resolution			500 x 2,400dpi (Max. in printing from a computer)		
			1,200 x 2,400dpi (Direct printing)		
	Photo		hoto 4 x 6 (PP-101, standard, borderless) [*] : Approx. 52 sec.		
	Throughput (target value)		* Based on Canon standard pattern. Print speed may vary depending on system configuration, interface, software, document complexity, print mode, page coverage, type of paper used and does not take into account data processing time on host computer.		
			Note: Notations for the Americas should be confirmed with the related marketing section of each sales		

Throughput (target value)	account data processing time on host computer.				
	Note: Notations for the Americas should be confirmed with the related marketing section of each sales company in the Americas.				
Printing direction	Bi-directional, uni	-directional			
Print width	Max. 94.8mm (10	1.6mm in bord	erless printing)		
	- Computer: USB	2.0 Hi-Speed			
Interface	- Camera Direct: PictBridge with a PictBridge-supported digital camera and digital video camera				
	- Mobile phone: IrDA 1.2, Bluetooth ver. 1.2 (optional), both for JPEG files only				
ASF stacking capacity	20 sheets or less (2	l sheet for Pho	to Stickers PS-10	1)	
Paper specifications					
	- Presence of print	head / ink tan	k		
	- Print head install	ation			
	- Opening / Closin	g of printer co	ver		
	- Remaining ink a	mount (dot cou	int)		
	- Printing position				
Detection functions	- Paper presence				
Detection functions	- Ink amount in the	e ink absorber			
	- Internal temperature				
	- Paper feed roller	position			
	- Carriage position	- Carriage position			
	- Head-to-paper distance				
	- Supported camer	a direct printin	ng device		
Acoustic noise	Approx. 38dB (Ph	oto Paper Pro,	highest print qual	ity settings)	
	During operation		Temperature	5C to 35C (41F to 95F)	
Environmental			Humidity	10%RH to 90%RH (no condensation)	
requirements	Non operation		Temperature	0C to 40C (32F to 104F)	
			Humidity	5%RH to 95%RH (no condensation)	
		D 1	1.	A C 100 / 240V	
	AC adapter:	Power supply	voltage:	AC 100 to 240V	
Power supply		Frequency:	mentione.	SU/60HZ	
TT J		Fower consul	inpuon:	Approx 1.7W	
		Dower off:		Approx. $0.4W$	
	1	r 0wer-011:	3-14	Approx. 0.4 w	

	Battery (optional): Rating: DC 11.1V, 23Ah		
External dimensions	- With the trays and LCD retracted: Approx. 226 (W) x 225 (D) x 82 (H)mm - With the trays and LCD extended: Approx. 226 (W) x 332 (D) x 185 (H)mm		
Weight	Approx. 2.2kg, including print head, excluding optional units		
Related standards (Printer, Adapter)	 Electromagnetic radiance: VCCI, FCC, IC, CE Mark, C-Tick, CCC (China EMC), Gost-R Electrical safety: Electrical Appliance and Material Safety Law (DENAN), UL, C-UL, CB Report, CE Mark, TUV, Gost-R, FT, CCC, SPRING Environmental regulations: RoHS (EU), WEEE (EU), Package Recycle Law, Law for Promotion of Effective Utilization of Resources, Chlorinated Paraffins Decision, Chemicals Substances Act (WMS), Appliance Efficiency Regulations, Batteries Disposal Decree, Law on Promoting Green Purchasing, Energy Star 		
Serial number location	On the bottom of the printer		
Remaining ink amount detection	Available (detection by dot count, enabled at default)		
Paper type detection	Not available		
Print head alignment	Available (automatic or manual alignment in printing via a computer and in Direct printing, automatic alignment at default)		

<Direct printing>

	Supported memory card	- Compact Flash TYPE I/II (3.3V)	
		- Microdrive	
		- SmartMedia Card (3.3V only, 1MB and 2MB not supported)	
		- Memory Stick, Memory Stick PRO	
M		- SD card	
Memory card drive		- MultiMedia Card (ver. 3.31)	
		- xD-Picture Card*	
		- miniSD card*	
		- Memory Stick Duo*, Memory Stick PRO Duo*	
		* Adapter required	
	Operation	Via the printer buttons.	
Storage function	Condition	Before changing the settings, the memory card must be removed.	
	Function	Read / Write	
	File format	JPEG (DCF, CIFF, Exif 2.2 or prior, JFIF), TIFF (Exif), DPOF compliant	
	Print quality	Standard, High (Photo Paper Pro, Photo Paper Plus Glossy, Matte Photo Paper, Glossy Photo Paper)	
	Image correction function	VIVID, Photo Optimizer PRO, Noise reduction, Face brightener, Image optimizer	
	Image adjustment function	Brightness, contrast, color hue (skin tones)	
	Image processing function	Not available	
Card Direct printing	Image retrieval function	Not available	
, and the formula	DPOF	 Ver. 1.00 compliant standard printing Index printing Printing of an image the specified number of copies Printing of the specified image(s) Printing with the shooting date 	
		Single-photo/multi-photo/all-photo printing:	
		1 photo per page (bordered/borderless)	
		Index printing:	
		6, 15, 24, 28 photos per page	
		· / 1 / L	

		Layout printing:	
	Print layout	2, 4, 8 photos per page (bordered/borderless)	
		Half (bordered/borderless, with/without lines)	
		Album (4 photos per page, right/left)	
		Sticker printing:	
		16 stickers	
	Information print	Date, file number	
		Approx. 56 sec. (4" x 6" borderless)	
	Throughput	Note: - When printing a 6 megapixel image taken by certain Canon digital camera from a memory card on default settings using Photo Paper Plus Glossy without border. Actual print speed may vary depending on image data, print mode, type of paper and type of memory card used.	
		- Notations for the Americas should be confirmed with the related marketing section of each sales company in the Americas.	
		- Default: Selections based on the mini260 settings	
	Supported paper size	- 4x6: Photo Paper Pro (PR-101), Photo Paper Plus Glossy (PP-101), Photo Paper Plus Semi-gloss (SG-201), Glossy Photo Paper (GP-401/501), Photo Stickers (PS-101)	
		- Credit Card: Glossy Photo Paper (GP-401)	
		- Wide: Photo Paper Pro (PR-101)	
		- Default: Selections based on the mini260 settings	
	Supported paper type	- Photo: Photo Paper Plus Glossy, Glossy Photo Paper	
		- Fast Flioto, Flioto Fapel Flo	
	Print layout	- Default (selections based on the mini200 settings): Bordered, borderiess	
	Trimming	According to the settings on the connected PictBridge_supported digital camera	
		- Default setting (selections based on the mini260 settings): ON / OFF	
PictBridge printing	g Image correction function	- VIVID*	
		- NR (Noise reduction) [*]	
		- VIVID + NR*	
		- Face brightener	
		* Available on Canon PictBridge-supported digital cameras only.	
	Date / file no. print	According to the settings on the PictBridge-supported digital camera.	
	Throughput	Approx. 59 sec. (4" x 6" borderless)	
		Note: - When printing a 6 megapixel image taken by certain Canon digital camera from PictBridge on default settings using Photo Paper Plus Glossy without border.	
		Actual print speed may vary depending on image data, print mode, type of	
		- Notations for the Americas should be confirmed with the related marketing	
		section of each sales company in the Americas.	
Print Beam printing	Supported mobile phone	Mobile phone equipped with IrDA 1.2 port, or with Bluetooth 1.2 port (when the optional unit is attached to the printer)	
	Printable data	Image (JPEG only, text printing not possible)	
	Standard	Bluetooth version 1.2	
	Communication range	Good for approx. 10 m in radius (depending on interference between the communication devices, or radio wave conditions)	
Printing via	Supported profile	BIP, OPP, SPP, HCRP	
communication		- Windows XP Service Pack 2 or later	
(optional)	Supported OS for HCRP	- Windows XP Service Pack 1 or later:	
		Microsoft "Support for Bluetooth Wireless Devices" or Toshiba Bluetooth Stack for Windows Ver. 3.00.10 or later has to be installed	
		- Wac OS A V 10.5.5 OF Taler	

<Print head>

Туре	4-color integrated single head	
Define has d	CMY (5 pl): 256 nozzles each	
Print nead	PBK (5 pl) / CMPBK (2 pl) / CM (1 pl): 128 nozzles each	
Ink color	Black, cyan, magenta, yellow	
Trula Accela	Japan: BCI-19CL (dye-based)	
шк тапк	Others: CLI-36CL (dye-based)	
Weight (Net)	Print head, approx. 31g (not including the ink tank, protective and packing material)	
Supply method	As a service part (not including ink tank)	
Part number	QY6-0069-000	

<Ink tank>

Model name and destination		Dye-based ink		
		BCI-19CL	CLI-36CL	
PIXUS mini260	Japan	0	Х	
PIXMA mini260	Others	Х	0	

O: Usable

X: Not usable

Note: The ink tank for the Japanese model is not compatible with that for the other models. Be sure to use the appropriate ink tank in servicing.

<Portable Kit>

Lithium-ion battery	
DC 11.1V, 23.Ah	
Approx. 3 hours*	
3 levels	
2.5 years (unopened from the day immediately after the battery is produced)	
300 times	
- Battery pack: 161 (H) x 41 (D) x 27 (H)mm, Approx. 180g	

* The charging time can differ depending on environment.

<Part 3: 3. PIXMA mini260 SPECIFICATIONS >

Block Diagram

