

Quick Reference Guide PR9

CONTENTS OF PACKING BOX AND OPTION DEVICES

PACKING BOX

Please first check the contents of packing box after unpacking. The contents should be:

- One PR9 passbook Printer.
- One Power Cord.
- One Ribbon Cartridge.
- CD-ROM of the User's Manual
- One Printed out default menu configuration.

CAUTION: Please contact YOUR PRINTER SUPPLIER instantly if any of list above is missed.

WARNING : Please do not connect the printer's power cord at this moment, otherwise printer may be damaged permanently.

CAUTION : Put the packing box aside in case of future use.

OPTION DEVICES

Following option devices can be provided:

Hardware option: horizontal magnetic stripe R/W, parallel interface, serial interface port2, USB interface and so on.

Add the second interface port

Printer has basic configuration of one standard serial communication interface. At the rear of printer there is a second interface installation slot, which is for option interface. The slot can be installed with option boards and cards as below:

- parallel interface board
- second serial interface board and USB interface board
- second serial interface board
- USB interface board

CAUTION: When printer equipped with second or more other data communication interface boards, interface's working mode can be selected by menu setup configuration.

1 Working with single communication port

Printer can only work according to the interface mode and emulation selected by menu configuration, even if printer has been equipped with more interface boards.

2 Working with dual-port

- If printer has been equipped with option interface board, operator can set up printer's working mode to be dual-port mode through the operator panel to meet different usage requirement.
- If printer has been installed second serial port board and USB interface board, there are only two serial ports(first serial port and second serial port) can work synchronously. Under this configuration, printer can check witch port is active. Any one of these two ports, if its data has been received, printer will be under the control of this port, and be kept in this state till this port's task is end. Two ports are independent. And two ports have the same configuration except emulation mode. Emulation mode can be shifted by commands.
- If printer has been installed with second parallel interface board and configured as dual-port activity, it will check witch port's buffer has data. If any one of these two ports detect data has been received, printer will be under the control of the port and it will be kept in this state till port's task is end. Dual-port functionality and corresponding parameters can be selected though operator panel. Under the especial circumstance, each port can has its own emulation mode, and emulation mode can be shifted by using commands.

- If printer's hardware configuration has two interface and the setup item 'interface' in the menu is 'DUAL', then it can print out two interface's corresponding emulation configuration in self-test sheet. Printer can set which port to be active and emulation mode according to host's communication port.

DEFINITION OF TERMS

ON-LINE: Printer is ready after normal power on sequence.

STOP MODE: When printer is ON-LINE, if **STOP** key is pressed down or printer cover is opened, printer will enter STOP mode.

OFF-LINE: Press down **STATION2** and **COMPRESS** key synchronously when power on printer, or press down **STATION2** and **COMPRESS** key synchronously when printer is ON-LINE, printer will enter OFF-LINE mode.

PRINTER SKETCH

·Front appearance (refer to figure 1.2-1)

- (1) top cover
- (2) operator panel
- (3) front paper feeding platform
- (4) power switch
- (5) bottom frame

·Rear appearance (refer to figure 1.2-2)

- (6) serial communication interface connector
- (7) option interface board slot
- (8) rear paper feeding path
- (9) power cord socket
- (10) electrical label

·cover opened appearance (refer to figure 1.2-3)

- (11) ribbon rotation shaft
- (12) print head
- (13) print unit lift handle

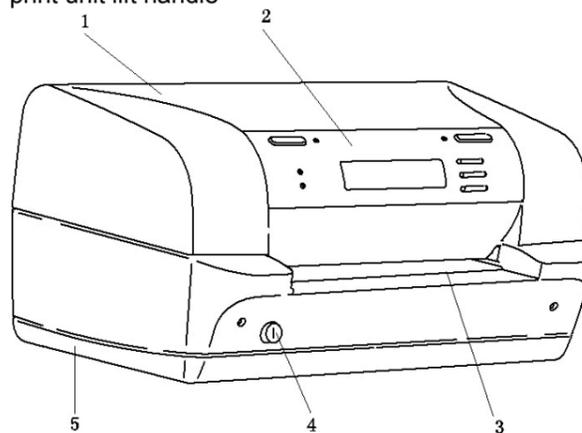


Figure 1.2-1 Front appearance

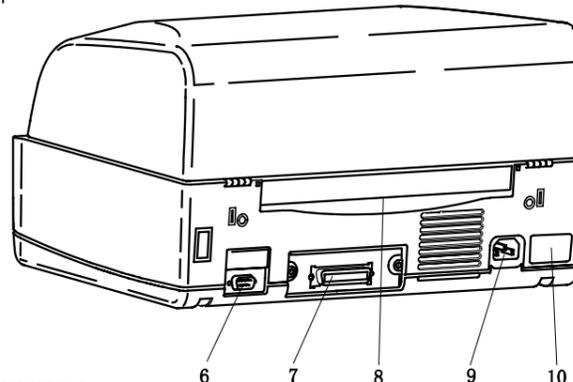


Figure 1.2-2 Rear appearance

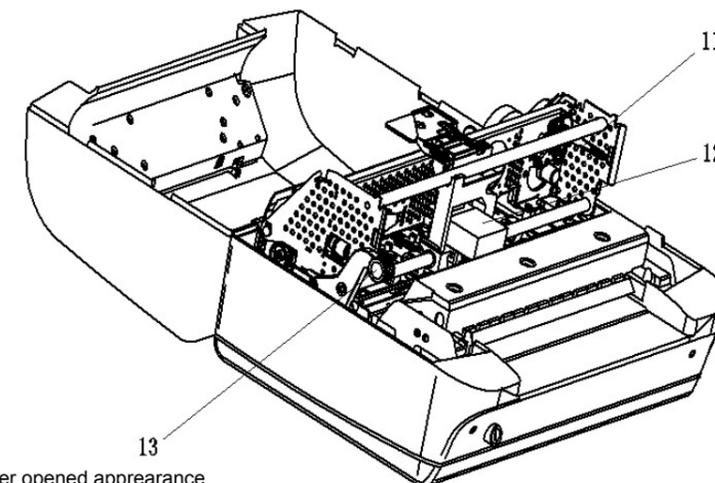
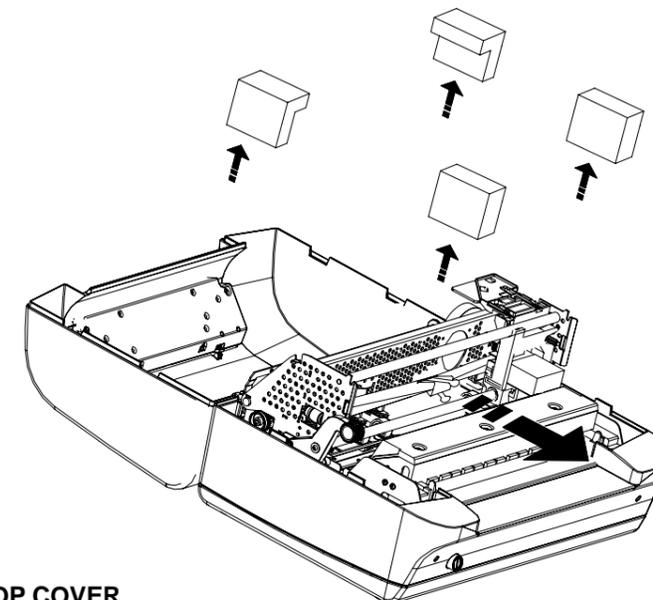


Figure 1.2-3 Cover opened appearance

REMOVE TRANSPORTATION PROTECTION CLIP



OPEN TOP COVER

Open top cover with about 90 degrees. Be careful not to overexert to avoid damage of cover gemel.

TAKE OUT THE BLACK IRON CLIP AND RED LABEL.

The black iron clip and red label are on the left side of print head.

TAKE OUT THE FOUR FOAM-RUBBER CUSHIONS WHICH ON THE BOTH SIDES OF CARRIAGE.

WARNING : The black iron clip , yellow label and four foam-rubber cushions must be taken out from carriage belt before power on printer. Otherwise printer will be damaged. Please keep the clip for future use.

ENVIRONMENTAL CONDITIONS

This printer is designed to be installed in a typical office environment. We claim that customer must follow these operation explanation as below for printer's well working status and safety of operator:

Make sure that the electrical wall outlet to which the printer is connected has a valid ground and that it is able to supply the power needed by the machine. A wall outlet without ground can cause functional problems and can be a safety hazard.

Do not plug the printer to electrical wall outlets that are already being used by equipment that could cause electrical noise and excessive voltage fluctuations (fans and air conditioners, large photocopiers, lift motors, TV radio transmitters and signal generators, high frequency safety devices, and so on).

- During machine storage and operation, make sure that condensation does not form as the result of extreme environmental variations. Dust, dirt and smoke can cause the parts in motion to wear excessively, short circuits (in the presence of a high degree of humidity). High temperatures and low humidity can cause problems due to static electricity.
- Do not put printer to the high temperature, shake or wet environment. And no exposure to direct sunlight. For example boiler, humidifier or fridge.
- A stable level surface for placement.
- A clean, well-ventilated, and big enough environment for client.

INSTALLATION OF ALIGNMENT UNIT AND RIBBON CARTRIDGE

The alignment unit is important part of printer to align paper and rub paper. As same to ribbon cartridge, alignment unit is packaged alone to avoid been damaged in transport.

Description of lift handle

User can rise and fall lift handle up and down(replacement) to install and take down alignment unit and ribbon cartridge expediently, and service the printer easily. Before using lift handle please open the top cover firstly. The position of lift handle is referred to Figure11.5-1, 13.

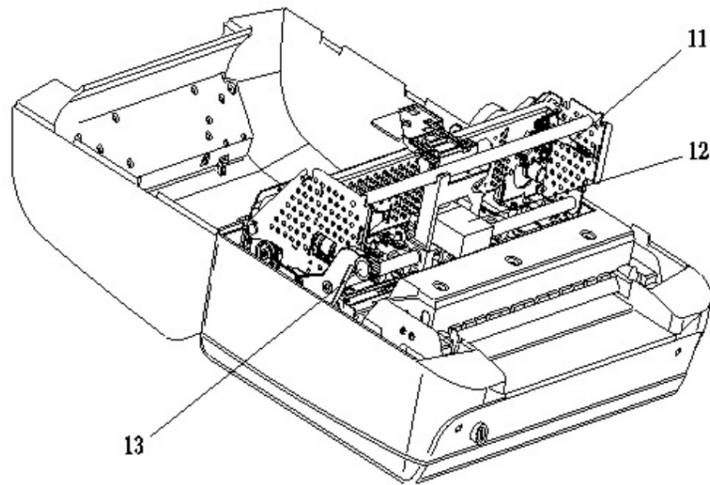


Figure11.5-1 description of lift handle

- Rise the lift handle

Open the top cover, buttress the bottom of shell with right hand and fasten the lift handle with left hand. Rise the lift handle gently, and make framwok layback rise till to it been locked.

- Fall the lift handle

Buttress the bottom of shell with right hand and fasten the lift handle with lift hand. Pull the lift handle gently and make the up framwok touch the below framwok and been locked.

Warning: do not loosen hands in rising or falling the lift handle optionally to avoid hands to be hurt.

INSTALL ALIGNMENT UNIT

DESCRIPTION OF ALIGNMENT UNIT

The alignment unit is important part of printer to align paper and rub paper. As same to ribbon, alignment unit is packaged alone to avoid been damaged in transport. Alignment unit's position is referred to Figure11.5-2. The definition of term are :

(A), (B): Alignment unit's installation position on framework.

(1), (2): Lock blocks' postion. After been installed alignment unit will be locked

by these two blocks.

(3): Alignment unit

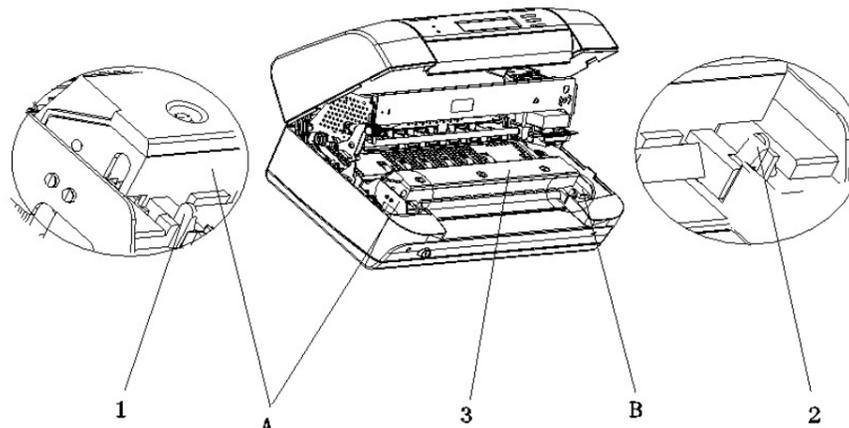


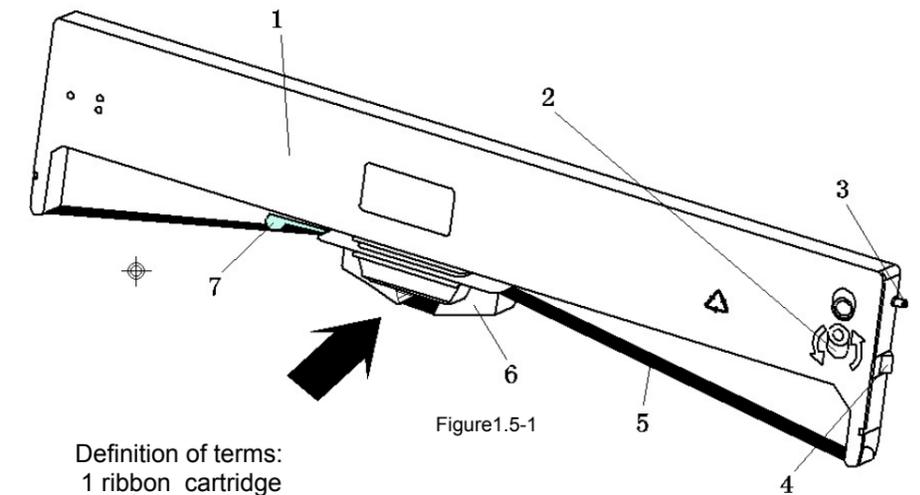
Figure11.5-2 description of alignment unit

INSTALL ALIGNMENT UNIT

- Make sure the power has been shut down.
- Open the top cover and inspect if the black iron clip, yellow label and 4 foam-rubber cushions have been taken out. If not, please take out of them referred to PACKING BOX.
- Install alignment unit
 - Using the lift handle to rise the up framwok completely, please notice that the paper blocking device should be sink here.
 - Insert alignment unit in direction about 45° into flute on the below framwok.
 - Press down the alignment unit to make the framwok lock the block on the alignment unit.
 - Fall the lift handle and close the top cover.

WARNING: If the paper blocking device does not sink when user install the alignment unit, or before user wants to re-install alignment unit which has been taken out, it requires user to make the paper blocking device sink. After paper blocking device sinked user can install the alignment unit to avoid damage of alignment unit ,blocked badly by rasied paper blocking device.

INSTALLATION OF RIBBON CARTRIDGE



Definition of terms:

- 1 ribbon cartridge
- 2 active wheel
- 3 fixation axle
- 4 fixation block
- 5 ribbon
- 6 ribbon guide
- 7 protective foil

- Take out the ribbon cartridge from plastic wrapping bag. Take the lock slice away, which is located between ribbon cartridge and ribbon guide for transportation protection. Please refer to the figure 1.5-1.
- Open top cover and using print unit lift handle to lift the print unit entirely.
- Move print head to the centre and insert the fixation axles at the both ends of ribbon cartridge into the slots at both ends of print unit frame. Please refer to the Figure 1.5-3.
- Try to push ribbon cartridge by rotation as shown in figure 1.5-3. If there are any resistance, please rotate active wheel slightly. Insert ribbon cartridge fixation block into both ends slot of print unit

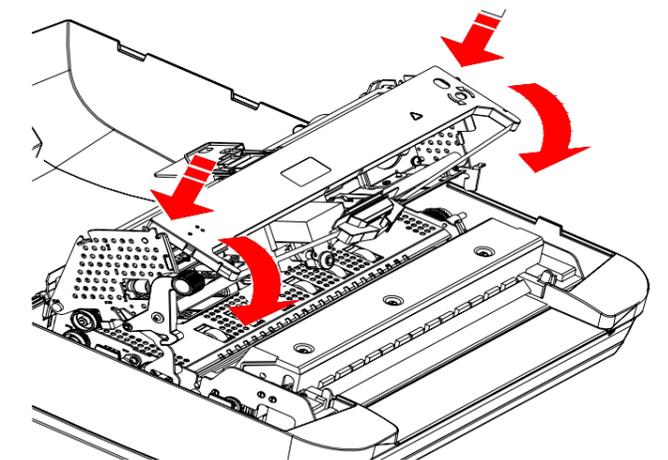


Figure 1.5-3

- Insert ribbon guide into print head and press it up to make sure that two dowels on the ribbon guide have been fixed. Please refer to the figure 1.5-4.

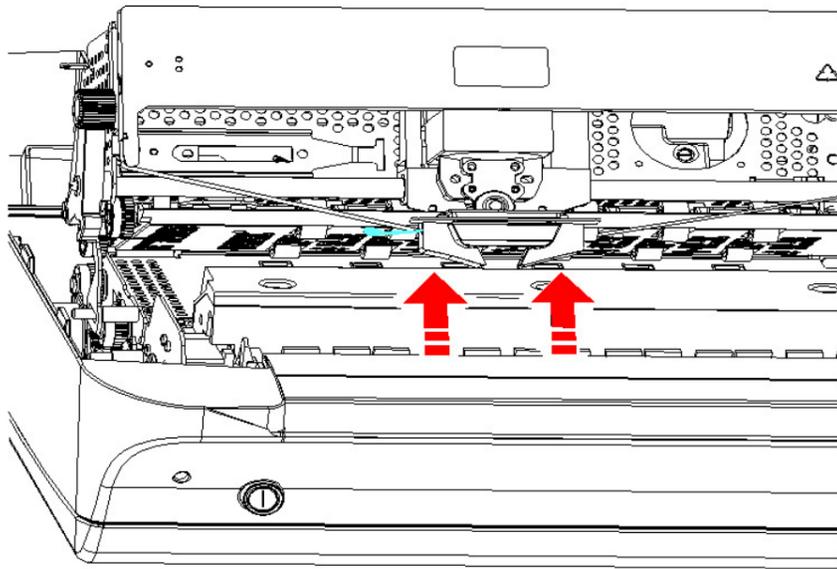


Figure 1.5-4

- Take out of the protective foil as shown in figure 1.5-5.
- Circumgyrate the ribbon cartridge active wheel contraclockwise till the ribbon is tight.

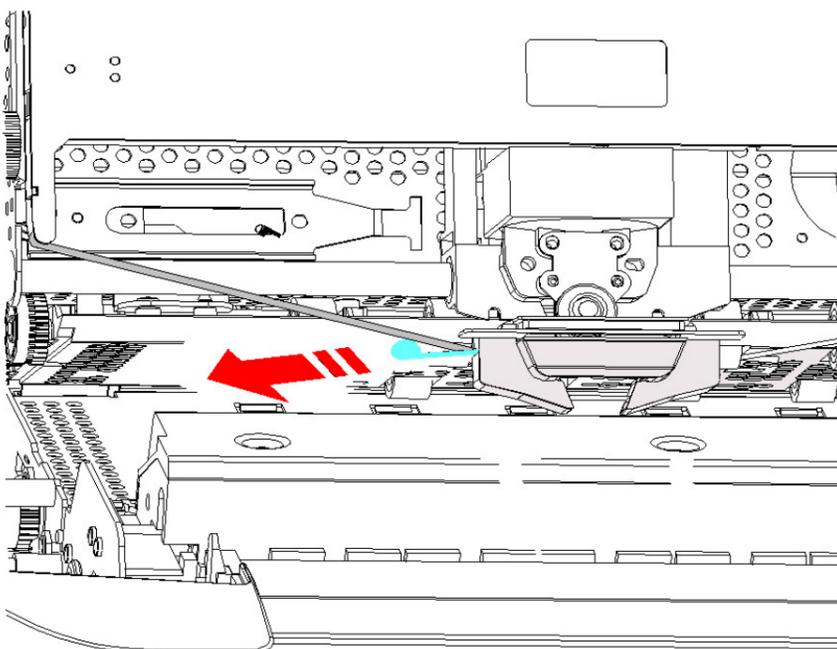


Figure 1.5-5

- Rotate print unit lift handle to let print unit return back to its normal position.
- Close top cover.

CONNECT POWER CORD

WARNING: Before plug the power cord into the electrical wall outlet and power on the printer, voltage rating indicated on the electrical data plate must be checked to correspond to the local mains. Make sure point 1.4 are completely satisfied.

It must not use the printer if the local mains voltage value is not consistent with value on the electrical data plate, or plug does not match the socket. Please contact to YOUR PRINTER SUPPLIER instantly.

Power cord connection sequence:

- Power switch is in "off" position.
- Plug power cord to printer's power socket.
- Plug power cord to the local mains.

WARNING: Your printer supplier will not take any responsibility if you use the substitute or damaged power socket and make any contingency

Operator can press down front power switch to power on printer now.

After power on:

- ON, STATION1, STATION2 and FEED/EJECT indicator will be all lighted. After several seconds print head start initialization action. Only ON indicator will be light after initialization has been finished.
- Any printing medium in the printer paper path will be ejected.
- If anything happen not according to what listed above please refer to chapter 4 of Reference manual 'MAINTENANCE AND TROUBLESHOOTING'.

PRINT TEST

SELFTEST

After power on, printer gets to the ON-LINE state. Pressing down **STATION 2** and **COMPRESS** key synchronously can make printer get to OFF-LINE state. Pressing down **COMPRESS** key to select 'MENU PRINTING' and pressing down **STOP** key to confirm

After feeding an A4 paper printer processes the selftest printing.

During printing if paper used out, printer will eject the paper.

If printing finished, printer will eject paper.

SELFTEST PRINTING CONTENTS

For different menu setup configuration, there will be different printed out selftest printing contents. Concerning your printer's menu configuration please refer to printer packing enclosed sheet.

PR9/K10-P 2.08 CCG. GB18030 CG. 001
 PRINTER ID : 02B00007F66681
 NEEDLE TEST:

1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 O E
 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 D V

CONFIGURE

INTERFACE:	DUAL INTERFACE
RS1 EMULATION:	OLIVETTI
BAUD RATE(RS1):	9600
BIT/CHARACTER(RS1):	8
PARITY(RS1):	NONE
STOP BITS(RS1):	1
DSR(RS1):	NO
CX EMULATION:	IBM
CX STROBE EDGE:	FALLING EDGE
SB CURRENCY SYMBOL:	YES
CHINESE CODE STD:	GB18030
DRAFT SPEED:	NORMAL
LQ TYPE:	NLQ1
NEEDLE FORMS:	NO
SPECIAL FORMS:	NO
IGNORE COVER OPEN:	YES

OLIVETTI CONFIGURE

EMULATION:	PR9
TOF PR40 LIKE:	NO
PRINTING MODE:	CHINESE
ASCII CHARACTER SET:	OPTION 1

HIGH SPEED PRINTING	NO
CPI:	10
LPI:	6
CHARACTER DEFINITION:	DRAFT
LF+CR:	NO
LEFT MARG.(1/60"):	0
TOP MARG.(1/60"):	0
CHARACTER SET:	IBM/PC
IBM CHARACTER SET:	PC
PC CHARACTER SET:	437(INT)
ISO CHARACTER SET:	CPOLUNIX
BIM DEFAULT DPI:	96
VERT. RESOLUTION:	1/240
LINE LENGTH:	90

After checking menu configuration, printer can be connected to host PC or system.

CONNECT TO HOST

PR9 is generally connected to host using RS232 C serial interface. Plug cable connector to the D type 9-way socket and fix the cable with those two screws.

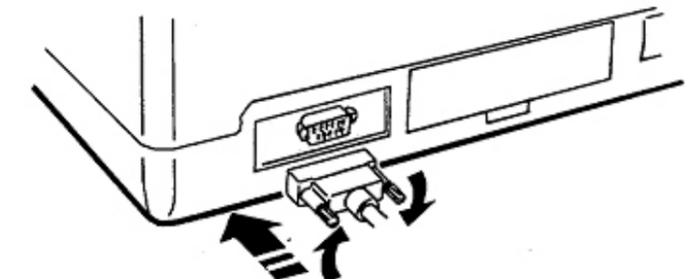


Figure 1.8-1 connection of PC and PR9

It is suggested that the cable length would be less than 1.5 meters to avoid any data communication problem when using parallel interface.

Items listed below must be followed when install and use printer:

- Printer must be switched off before connecting data communication cable. Avoid plugging and pulling out the cable when printer is power on. Connector must be fixed by attached screw after cable is connected to socket to avoid it falling off the socket.
- AC power regulator is suggested to be used to avoid printer working unsteadily or being damaged due to the reason that if local mains is unstable.
- To select single-phase 3-wire power socket with high quality and enough surplus. Its protection end must be grounded. Ground resistance must be less than 4Ω.
- Keep working environment clean and dustproof. Avoid using liquid cleaner to clean interior of printer.
- Do not disassemble printer's electronic parts and mechanical parts. Mechanical parts need to be regulated and adjusted with special tools and instruments. Incorrect regulation will cause printer be damaged badly.
- Please contact your printer supplier if meeting with any troubles.

Operator Panel

The operator panel locates at the central top front of the printer. And which comprises 4 LEDs and 5 buttons.

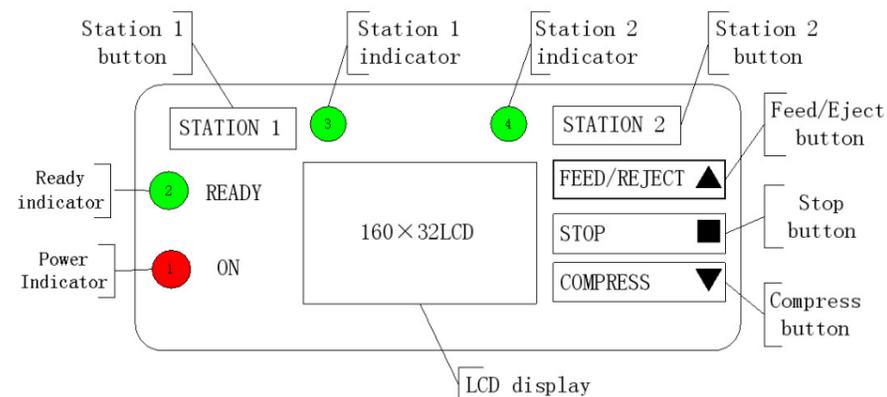


Figure 2.1-1 operator panel on printer

LED INDICATORS

The LEDs indicate operator the current state of the printer, as list below.

LEDs	ON	OFF	BLINK
LED1(ON)	POWER ON	POWER OFF	
LED2(READY)			RECEIVING DATA
LED3(STATION 1)	ASSIGNED TO USER 1		
LED4(STATION 2)	ASSIGNED TO USER 2		

BUTTONS

The buttons function differently according to whether or not the printer is on line. Please refer to the following table for details when press button.

CONNECTION BUTTON NAME	ON-LINE	OFF-LINE
STATION 1	Assign printer to user 1.	
STATION 2 (ALIAS: SKIP)	Assign printer to user2 press together with the COMPRESS button in the same time to become off-line.	press together with the COMPRESS button in the same time to restore on-line Menu returns to the upper level if there is one, otherwise remain unchanged
FEED/EJECT (ALIAS: UP/LEFT ARROW)	Feed the next page except the last one if consecutive paper has been recognized by printer. In other cases, eject the paper.	Menu move backward to the previous item within the same group. It may cycle to the last item from the first one.
STOP (ALIAS: ENTER)	Toggles between stops printer temporarily and wakes up printer to continue its job	Ok. Acceptance
COMPRESS (ALIAS: DOWN/RIGHT ARROW)	Toggles between activates and cancels compulsory compression in print. press together with the STATION 2 button in the same time to become offline.	Menu move forward to the next item within the same group. It may cycle to the first item from the last one. press together with the STATION 2 button in the same time to restore online

The LCD display corresponds to the button usage, and realizes the interaction between human and machine thus complete the operation guide and state indication for the printer.

LOAD PRINT MEDIUM

This printer is capable of dealing with single paper, cheque, multilayer carbon paper, passbook and credit card. The printer will start process automatically if operator put the print medium into paper feeding path. User needn't bother to align the print medium with the either border of the printer. The printer itself will look after the alignment.

Note: As soon as the auto alignment process start after you put in a medium, please release the medium.

Note: When apply passbook, to avoid both poorer print quality and jam as paper advances, please make sure there is no curl or tears on the passbook. In addition, please fold a new passbook toward the opposite direction so as to flat it than before, and ease the paper process in printer.

SETUP AND CONFIGURATION

PRINTER SETUP

If factory default setting doesn't meet the customer's requirement, set up the printer again. It might be helpful to know that some parameters are only available to special machine model, while some other parameters have sub-choices only when the optional plug-in device is mounted, and some parameters are even not allowed to change.

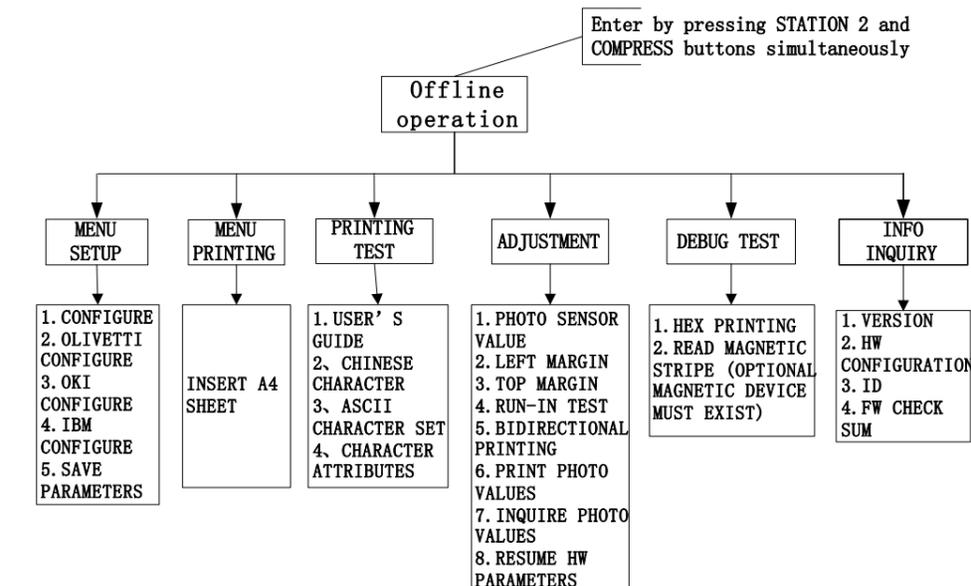
Operator has to understand what the parameters will result in before to alter them. To prevent the printer from being left abnormal, operator is encouraged to read this section beforehand.

CLASSIFICATION OF OFF-LINE OPERATIONS

The off-line operations can be divided into 6 different classes by the functions and objects.

- Menu setup
Contents: Set up menu parameters for various modules (common configuration and different emulation) in FW.
- Menu printing
Contents: Print parameters settings of the current menu which related to a specific module.
- Printing test
Contents: include printing user guide of off-line operation, ASCII characters sets, Chinese characters set, and characters attributes.
- Adjustment
Contents: Include printing the current settings of photoelectric sensor, resetting up the photoelectric sensor and printing the new settings, setting up the left margin, setting up the top margin, alignment adjusting for bi-direction print, and run-in printing etc.
- Debug test
Contents: include printing in hex (usual transaction and data printing), soft test for reading magnetic stripe.
- Info inquiry
Contents: Inquire current parameters settings of both software and hardware, including version (version number, non-standard issue tag, special simulation etc.), hardware configuration (characters generators, optional connection interface, scanner, sprocket), PCB ID, firmware check sum etc.

The classification is shown in the diagram below:



HOW TO SET UP MENU

- Menu parameters can be partitioned into 5 modules (configuration, OLIVETTI configuration, OKI configuration, IBM configuration and save parameters). To modify the parameters, the relevant module must be selected at first.

Operation guide

To enter the menu setup, either press both **STATION 2** and **COMPRESS** buttons when switch on printer, or press both **STATION 2** and **COMPRESS** buttons when printer is online.

During staying at off-line, usually press **FEED/EJECT** to scroll up menu items list (but if it is the first parameter, press this key will scroll to the last parameter). Press **COMPRESS** to scroll down menu items list (but if it is the last parameter, press this key will scroll to the first parameter). Press **STOP** to acknowledge current setting. Press **STATION 2** to return to upper level of menu (But if it is the topmost level, this key is invalid).

The first line on LCD displays the current level of menu, while the second line displays the sub-menu.

ADJUSTMENT

Adjustment can be used to tuning and investigate some inherent parameters of the printer. It may enhance the print performance. Sometimes, it's possible to improve the page layout to conform to the practical environment. The printer has been adjusted corresponding to factory criteria before it is delivered. User may usually leave the settings as what they are. If the printer has to be adapted, the user should have already well understood the involved parameters. Or else the printer may miss normal function. The following introduce the adjustable parameters.

These parameters below allow manipulation on operator panel:

- Photoelectric sensor
- Left margin
- Top margin
- Run-in test
- Alignment adjustment for bi-directional printing
- Printing settings of photoelectric sensor