

Aura - 9000

THERMAL PRINTER

USER'S MANUAL

POSIFLEX



Rev.: Original

FCC Notes:

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions manual, may cause interference to radio communications. It has been tested and found to comply with limits for a Class A digital device pursuant to subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference in which case the user at his own expense will be required to take whatever measures to correct the interference.

CE manufacturer's Declaration of Conformity (EC Council Directive 89/336/EEC of 3 May 1989)

This product has been designed and manufactured in accordance with the International Standards EN50081-1/01.92 and EN50082-1/01.92 following the provisions of the Electro Magnetic Compatibility Directive of the European Communities as of May 1989

Warranty Limits:

Warranty terminates automatically when any person other than the authorized technicians opens the machine. The user should consult his/her dealer for the problem happened. Warranty voids if the user does not follow the instructions in application of this merchandise. The manufacturer is by no means responsible for any damage or hazard caused by improper application.

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P/N: 19790900010

GETTING START

PRODUCT BRIEFING

Posiflex Aura-9000 series is a super fast speed, easy loading, low noise, high reliability, and trustworthy thermal printer. The printing speed of Aura-9000 series is able to reach 300 mm/sec for text and graphic mode. This series printer has been elegantly design for Point-Of-Sale, kitchen & kiosk application. Aura-9000 series comply with UPOS standards under Posiflex UPOS driver support. An additional brilliant design of Aura-9000 is front side receipt dispensing. This design protects the receipt from the water spill and keeps the printed paper always clean.

These Aura series printers serve the stand-alone desktop and wall mount application as well as the application within a Posiflex integrated POS system equally perfect. Subsequently, to a paper jam in Posiflex Aura-9000 series printer is an easiest thing. The paper jams (in most cases) can be solving by pull the “Hood Release” directly. Furthermore, it even supports some enhancement capability for reminder function to persons around. It can be use to drive a separately purchased **kitchen bell** for reminder function in noisy environment. This series make beeping sound as response to Paper End or Paper Near End signals. 20 plus code pages are supported in the standard model for application convenience. Other useful functions such as paper saving and 1D &2D barcode printing are design in this printer to help user to gaining the convenience.

Aura-9000 series support 5 types of interface input through different sub-codes to the model number. The standard model of Aura-9000 is USB interface, Aura-9000S is Serial interface, Aura-9000W is Wi-Fi interface and for Aura-9000P is parallel interface. The Aura-9000L connects to a LAN port of Posiflex POS systems. The Aura-9000 able to connect the USB port of Posiflex POS systems through simulates a RS232 device through driver and performs thermal printing particularly designed for POS applications. The Aura-9000 series is already POSReady and Win 7 compliance.

UNPACKING

Followings items you may find when you unpack the carton carefully that delivers Aura-9000 printer. If there is any discrepancy or problem, contact your dealer immediately. **Please keep the packing materials in case that the printer needs to be shipped.**

- 1). An Aura-9000 printer.
- 2). One tests thermal paper roll 80 mm wide.
- 3). 83/80/58 mm paper spacing plate.
- 4). One of the interface cables:
 - a. Serial cable with 9 pin D sub Female to 9 pin D sub Male connectors for Aura-9000S model
 - b. Parallel cable with 25 pin D sub Male to 25 pin D sub Female connectors for Aura-9000P parallel model
 - c. No interface cable for Aura-9000L or Aura-9000W
 - d. USB cable for Aura-9000U
- 5). One of the power sources:
 - a. Power adaptor + power cord (depend on country type ordered)
 - b. Power supply cable (when no power adaptor and no powered USB cable ordered)
- 6). User's Manual.
- 7). Driver CD for Aura-9000U and Aura-9000L/W.

OPTIONS

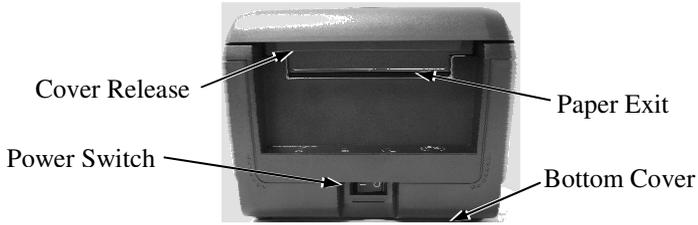
- * Kitchen bell (Alarm type KL-100)
- * Wall Mount Kit.
- * Parallel Interface Kit.
- * Serial Interface Kit.
- * LAN Interface Kit.
- * Wi-Fi Interface Kit.

Language to add in standard model: Japanese Kanji, Korean, Simplified Chinese or Traditional Chinese

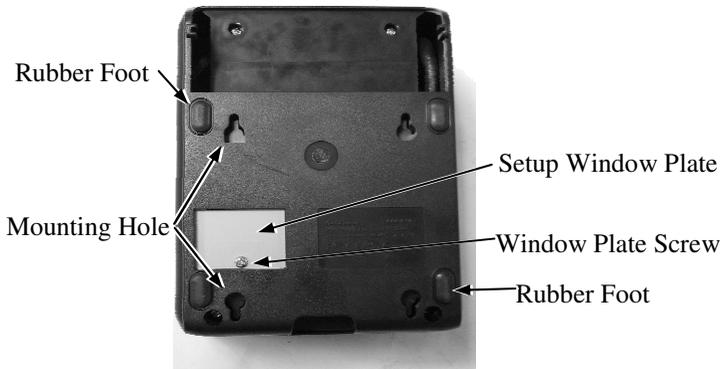
PRODUCT PICTURES



Front View



Bottom View



Rear View



Power Connector

CR Port

USB Port

(I/O Area for Aura -9000P)



Parallel Adaptor

Parallel Port Fixation Screw

(I/O Area for Aura -9000L)



LAN Adaptor

LAN Port Fixation Screw

(I/O Area for Aura -9000S)



Frame Ground Screw
Serial Port

(I/O Area for Aura -9000W)



Reset Button Wi-Fi Indicator

INDICATORS

- * Power LED: Green.
- * Error LED: Red (brief lit indicates printer busy).
- * Paper out LED: Red.

QUICK START-UP

POWER SWITCH

Please open the protect cover as show in the right picture when first time to switch on the printer. Reserve the cover or reassemble to the original position after turn on the printer.



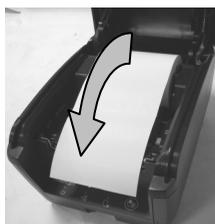
LOADING PAPER

Desk Top Application



Release Button

Pix. 1

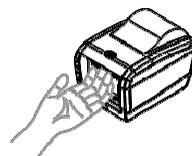


Pix. 2

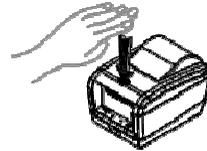


Pix. 3

1. Pull the hood release button to release the top cover as in **Pix. 1** and lower right picture.
2. Raise the released hood wide open manually as in **Pix. 2**. Drop the thermal paper roll inside the printer in direction as shown in **Pix2**.



3. Close the hood back by press the center of hood front end; and leaving the tail of the paper roll coming out of the opening between the hood and the top cover as in **Pix. 3**.
4. Excessive paper will cut automatically.



When to Replace Paper

Whenever the printer gives paper out signal or a red line appears on the thermal paper, it is the proper timing for replacing the paper. Do not wait till the print engine is dragging the paper roll at the very end. Remove the top cover and replace a new paper roll as illustrated above to prevent excessive paper dust in the printer and reduce the possibility of paper jam.

Furthermore, during the standby mode (not in the power off mode), it can straight to replace the paper roll. The printer will automatically cut the unnecessary paper right after the top hood closed.

CONNECTING CABLES

Serial Connection

All the external connectors are in the recessed area at the rear bottom for Aura-9000S series. The serial connector is a 9-PIN D sub Female connector at the left in this area. Apply the male connector of RS232 cable to this port for serial application. The default protocol used in serial connection is 115,200 bps, none parity, 8 data bits, 1 stop bit.

Virtual Serial Port

A virtual serial port is a redirector driver used in USB interface which is usually used to create a pair of back-to-back virtual COM ports on the same computer. It can then communicate using virtual serial ports instead of conventional inter-process communication mechanisms.

Parallel Connection

The parallel connector is a 25-PIN D sub Male connector at the leftmost location in the connector area for Aura-9000P. Apply the female end of the parallel cable at this port for parallel application.

LAN Connection

The LAN connector is an 8-PIN RJ45 type modular connector at the position left to the power connector in the connector area for Aura-9000L. Please use a LAN cable of CAT 5 with proper length to connect the LAN connector on the printer to the LAN HUB as appropriate. Please note that for Aura-9000L, there must be no cable connection at the serial port on the printer. The LAN port is 10/100BaseT compliant.

USB Connection

The USB connector on Aura-9000 is a type B USB connector at lower right position below the serial port. Use the normal USB Cable (P/N: 21863250800) as in the left picture to connect the type A end to a normal USB port of host system.

Please visit our web site <http://www.posiflex.com> or <http://www.posiflex.com.tw> for detailed

information of the USB driver installation if required. Please note that for Aura-9000, there must be no cable connection at the serial ports on the printer.



Type A
Type B
Normal USB

Peripheral Connection

The peripheral controller is a 6-pin RJ11 type modular jack. With use of Posiflex cash drawer cable come with cash drawer, this port can control a Posiflex cash drawer CR3100 or CR3200 or CR4000 or CR4100 or CR-6310. If a Posiflex special split cable is used instead, this port can control two cash drawers of above models. When the printer is used as a kitchen printer, please use this port for kitchen bell connection instead.

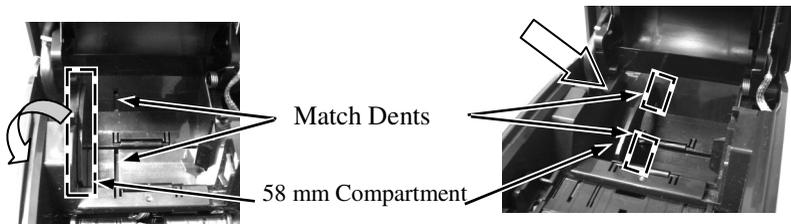
Wi-Fi Connection

To use Wi-Fi connection, please set up through official utility - Posiflex Wi-Fi POS Printer Manager. There are two interfaces to organize Aura-9000W which are USB and Wi-Fi. When the first time use Aura-9000W, please set the host terminal's Wi-Fi configuration to AD-HOC (peer to peer) mode when setting through Wi-Fi interface. Another method to setup Aura-9000W is by USB interface and please uses Wi-Fi POS Printer Manager to setup Printer after USB connected.

Power Connection

The power connector is a 3-PIN jack between the peripheral connector and the parallel connector for Aura-9000P. Either a Posiflex supplied power adaptor or a printer power cable from a Posiflex POS system can be connected to this connector to supply power for this printer. During insertion of the power plug, be sure to hear the click to obtain a firm contact.

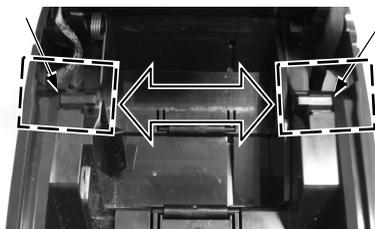
CAUTION: Before doing the insertion or extraction of the power plug, be sure to pull the outer sleeve of the plug backward to release the internal latch. Failure to do this could damage the power plug. Such damage is considered as an artificial destruction and is not covered by the warranty.



Please pull up the spacing plate which in the most left end and which show in the upper picture. Next, take the plate insert to the noted corners of the spacing plate into the 2 dents inside the paper roll compartment. After fixed the spacing plate and checking the switch setting, this printer can start to use 58mm paper roll. Moreover when using 83 mm paper roll, simply remove the Paper Spacing Plate and set up the DIP switch SW1 or software switch to 83 mm options and it able to work perfectly.

Wall Mount

When using the wall mount function of Aura-9000, please notice that the paper roll shaft hold has to **exchange position** according to the wall mount direction. Please refer to the following pictures and use flat screw driver to remove the shaft hold as arrowed in the picture. Please exchange the right and the left position and reassemble them.



INSTALLING DRIVER

There will be a Posiflex Product Information CD or DVD or a separate CD of similar nature, which is specifically create for the Aura-9000U, Aura-9000W and Aura-9000L. Please find the appropriate subfolder from the non-specific Posiflex Product Information CD or DVD and please find the information document such as “read me” or installation guide or application guide and follow the instructions inside.

LAN and Wi-Fi PRINTER SPECIFIC ISSUES

Web Manager for Aura-9000L

The default static IP for the Aura-9000L is 192.168.192.168 and default listen port is 9100. User may set his own IP to the same network segment and use any browser to connect to the printer IP to configure the LAN setup of the

Aura-9000L including changing the printer IP for application according to his network administrator's request. However, **DHCP is not support.**

Reset Pin Hole

As the setup for the Aura-9000L/W can be set freely, the changes are not well registered some troubles could be introduced. Therefore, in Aura-9000L/W, there is a "Reset pin hole" near the LAN connector or Wi-Fi Module. Use something like a ball pen tip or straightened end of paper clip to push and hold for at least 5 seconds into this hole will reset the LAN / Wi-Fi setup of the printer back to the default values at delivery so the user may re-do all setup. The LAN setup can be viewed in second paragraph of self-test printout for the Aura-9000L.

LAN POS Printer Manager

This utility can be used to manage multiple Aura-9000L's connected in same network under Windows as long as there is no conflicting IP in the network. This utility can assign to each LAN printer a different device name for easy recognition. In case of confusion, please check the MAC addresses listed in this utility against the MAC address label you can find under each printer.

Any PC connected in same network can use TCP/IP to use Aura-9000L in the way like a directly connected local printer. So, for direct I/O control by tools like "HyperTerminal" all commands applicable to the serial or parallel interface model can work on Aura-9000L in the same way, as Aura-9000 except the port must be TCP/IP with the IP address of the printer. Similarly, for Windows printer driver setup, please "Add Printer" and select for "Local printer" and select port "TCP/IP" with the printer IP address then uses the same Windows printer driver of Aura-9000L.

Posiflex Wi-Fi POS Printer Manager for Aura-9000W

When set the host system by AD-HOC mode; please set the host system IP in the same network segment with Aura-9000W which in the 192.168.192.XXX. Please set the Aura-9000 into normal mode that can be search by this printer manager utility. After start the software, the host system will automatically search printer by Broadcast or search by IP modes and show as a list. After Aura-9000 showed in the list, the IP address setting can modify. Please notice that Aura-9000W Wi-Fi module will reboot automatically right after change or update setting. Finally set the host system back to original mode.

For modify the printer's Wi-Fi setting through USB interface, please connect the cable to USB port. **It significant that when using USB interface to regulate the Aura-9000W, please set the hardware DIP switch 1-6 or software switch 1-6 to "ON".** After change or update setting, please set the

SW 1-6 back to off and please reboot the Aura-9000W right after change or update setting.

OPERATION GUIDE

MAINTENANCE GUIDE LINES

- * Please turn off and disconnect power before opening the cover.
- * The areas around the print head and motor become very hot during and just after printing, DO NOT touch them.
- * When handling the interior of the thermal printer, please pay attention not to be hurt by any sharp edge of the metal parts.

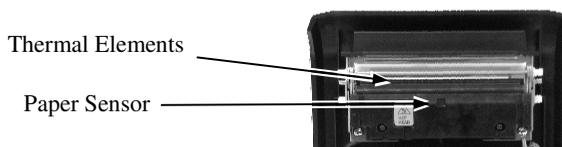
GENERAL CLEANING

Please use soft hairbrush or compressed air to clear away any dust or paper scraps accumulation inside the printer. Check also the area of the auto-cutter regularly.

PRINT HEAD CLEANING

The print head is located underneath the roll paper passage at the exit as in the picture below. You can clean the thermal elements of the print head and paper sensor gently using a cotton swab moistened with isopropyl alcohol solvent. Before putting back the paper roll for printing, alcohol solvent must be dry completely.

NOTE: Never do this when print head is still hot. Do not touch the print head thermal elements and scratch the print head



TROUBLE SHOOTING

This section gives solutions to some printer problems you may have.

General Problems

No LED lights up on control panel when switched on –Make sure that the power supply cables are correctly plugged into the printer, the power adaptor and to the power outlet. Make sure that power is supplied to the power outlet. If a switch or timer controls the outlet, try using another outlet

Printing Problems

Nothing can be printed with ERROR LED flashing – Most possible cause for the flashing Error LED is that the printer has been printing for quite a period of time and the print head temperature become too high. After few minutes under normal ventilation, the print head should be able to cool down and the Error LED will stop flashing. Printing will resume after cooled down. If this is not the case, contact a qualified service person.

Nothing can be printed with ERROR LED ON – Check the Paper Out LED. If it is ON, most probably either the paper roll is not installed or the paper roll is at or near the end. Install a new paper roll. If the Paper Out LED is OFF, please check if the print hood is properly closed. There are 2 internal checkpoints inside the printer to assure the locking of the hood for a decent printing.

Therefore any dislocation of the hood may cause an error status and inhibition to printing. **Press down the hood at middle of the opening and** when closing it till it audibly clicks into place. If both situations are not the cause, please try pulling the hood lock forward. If the top hood won't release automatically, **check for paper jam** described in next item.

If there is no paper jam and the print head is not overheated, turn off the printer and wait for half a minute then turn it back on. If the problem still remains, contact a qualified service person.

Nothing can be printed with ERROR LED ON – Try to run self-test according to previous chapter to check if the printer itself works properly. If the self-test passes, check the following:

- 1). Check the connection of the interface cable at both the printer and computer ends. Also make sure that this cable meets the specification required for both the printer and the computer.
- 2). For serial interface, check the printer data communication settings against the computer. The printer settings can be found easily on the self-test print out.

If the problem remains or the self-test fails, contact your dealer or a qualified service person.

Poor printing quality – Contaminants like paper scraps and dusts on the thermal print head can lower the print quality drastically. Clean the print head as described in previous section.

Paper Jam Problems

Paper is jammed inside the printer – Pull up the cover release then the top hood can be released. Remove the jammed paper and reinstall the paper roll. Close the hood properly and firmly for operation.

Advanced Analysis Tool

This printer supports **Hexadecimal Dump** for experienced user to view exactly what data the printer receives. This can be useful in finding software problems.

To start the dump mode: Turn off printer; Open print hood; Hold down FEED button while turning printer on; Close the hood.

To stop the dump mode: Press the FEED button to print out the last line; Turn off the printer.

During dump mode: All commands except **DLE EOT** and **DLE ENQ** are disabled.

USEFUL TIPS

- * Please note that only those qualified technicians may adjust several jumpers for some technical settings. Please visit our web site <http://www.posiflex.com> or <http://www.posiflex.com.tw> for details of the technical information such as driver installation, DIP switch settings and command sets etc. if required.
- * Place the printer on a sturdy, level surface.
- * Choose a place that is well ventilated and free of excessive dust, smoke or fume.
- * Do not put the printer under direct sunlight or near a heater.
- * Ideal room temperature is from 5°C to 40°C. Ideal humidity is from 20% to 85% RH (no condensation).
- * Do not set any liquid or drinks such as coffee on the printer case.
- * Do not touch any metal part to avoid possible electrostatic damage.
- * Do not touch the areas around the print head and motor during or right after printing. It can be very hot.
- * Do not allow the cut receipt to slide back into the cutter during the operation. As this would lead to multiple cutting at the lower edge of a receipt and the multiple cut thin slips tend to cause mechanical malfunction.
- * Use a grounded AC power outlet with only the power cord and power adaptor furnished with the printer.
- * Do not use a power outlet of a circuit shared with any equipment that uses a lot of power or causes great electrical noises, such as a copier, electric motors or a coffee maker.

- * Do not use thermal paper containing Sodium (Na+), Potassium (K+) and Chlorine (Cl-) ions that can harm the print head thermal elements.
- * If the surface of thermal paper is scratched with a hard object such as a nail, the paper may become discolored.
- * Use only water paste, starch paste, polyvinyl paste or CMC paste when gluing thermal paper.
- * If thermal paper touches anything containing ophthalmic acid ester plasticizer for a long time, the image formation ability may be reduced or the printed image may fade.
- * Use of volatile organic solvents such as alcohol, ester and ketone or some adhesive tapes on thermal paper can cause discoloration.
- * Thermal paper must not be stored with the printed surfaces against each other as the printing may be transferred between the surfaces.
- * Since the paper roll is highly thermal sensitive, please keep them in a dark place that is 20° and 65% RH when not installed in the printer. Avoid extended exposure to direct light. Use only products made from polyethylene, polypropylene or polyester for storage of thermal paper.

SPECIFICATIONS

PRINTER

ITEM	SPECIFICATION
Interface	USB Interface
Maximum Printing Speed	300mm/sec
Paper Type	Thermal roll paper
Printing Method	Thermal dot line printing
Paper Width	83/80/58 +0/-1 mm
Maximum Printable Width	80mm
Default Printing Width	64 mm (512 dots/line)
Paper Feed Method	Friction auto-feed
Paper Load Method	Drop and use
Paper cutting method	Slide cutting
Type of paper cutting	Full cut or Partial cut (1.5±0.5mm tab left at the center)
Paper roll outside diameter	maximum φ 80mm (install the tension roller around the paper inlet.)
Minimum paper core diameter	φ 18mm
Minimum paper cutting length	20mm

PAPER

PAPER TYPE	THERMAL ROLL PAPER
Paper roll formation	External side is heat-sensitive side
Paper width	83/80 (or 58) + 0 / - 1 mm
Paper roll outer diameter	80 mm max.
Paper roll inner diameter	12 + 1 / - 0 mm
Paper thickness	60 ~ 80 um

POWER ADAPTOR

ITEM	REQUIREMENT
Input voltage	100 V AC ~ 240 V AC
Input frequency	47~63 HZ
Input current	2.5 A MAX.
Output voltage	+ 24 V DC
Output power	60 W
Output regulation	+ / - 5 %
MTBF	30,000 HRS
EMI standards	CISPR22, EN55022 Class B

MULTIPLE INTERFACE ISSUE

For model Aura-9000, there is only 1 connector for host connection through USB. For Aura-9000P, there are 2 connectors for host connection: USB and in addition to Parallel port. For Aura-9000S, there are 2 connectors for host connection: USB Port and in addition to the Serial port. For Aura-9000L, there are 2 connectors for host connection: USB and in addition to the LAN port. Please always connect **only one interface at a time**. Simultaneous multiple host connections could result in unexpected results!

UPOS CONCERNS

The UPOS compliance and WEPOS compliance ability of the Aura-9000 series dictates the printer to perform certain internal affairs such as counter refreshment periodically. When the printer is engaged in such operations there will be a brief period of time that the printer is busy without externally apprehensible cause. In other words, the printer will lit the ERROR LED briefly once in a while even when no external communication is in process and that is definitely normal.

FURTHER TECHNICAL INFORMATION

PRINTER SETUP

There are two difference way to setup Aura-9000. Firstly, one is the DIP Switch in the bottom of printer for setup the function such as baud rate, paper width and others. Another switch is setup trough software to adjust such as printer density and others. Following explanation is going to descript these switches setting.



DIP Switch

On bottom cover of the Aura-9000 series thermal printer, there is a screwed metal plate for setup window. In this window, there is an 8-position DIP switch for printer setup. Please use proper tool to change the switch setting when necessary. The switch position counting starts from the nearest edge of printer. The functions of each position may evolve with the revisions of the firmware. The information below applies to the latest version to the date of print of this manual.

The 8-position SW1 DIP switch works as following:

Switch position	ON	OFF
1~2	Baud rate definition (ref. separate table below)	
3~5	Paper Width & Printable Width	
6	USB interface (Default).	Other interface.
7	Auto Cutter Disable	Auto Cutter enable
8	Firmware Update Enable	Firmware Update Disable

Effect of positions 1 & 2 on baud rate is defined as in table below:

SW1 Pos. 1	OFF	OFF	ON	ON
SW1 Pos. 2	OFF	ON	OFF	ON
Baud rate setup	19200 bps	115200 bps	9600 bps	38400 bps

Please notice when use in USB mode and likes to use Virtual Serial Port, please place the SW1-1&2 to ON position in order to use Vendor Class for Virtual COM port.

Effect of positions 3, 4 & 5 on Paper & Printable Width is defined as below:

SW1 Pos. 3	OFF	ON	OFF	ON	OFF	ON	OFF	ON
SW1 Pos. 4	OFF	OFF	ON	ON	OFF	OFF	ON	ON
SW1 Pos. 5	OFF	OFF	OFF	OFF	ON	ON	ON	ON
Paper &	80mm	80mm	58mm	58mm	83mm	83mm	83mm	83mm

Printable Width	512dot	576dot	424dot	432dot	512dot	576dot	640dot	640dot
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For switch position 6, switch to “ON” when use USB interface. For other interface such as Serial, Parallel, LAN and Wi-Fi, please place the switch to “OFF”.

Switch position 7 defines the auto cutter. When needs to enable the paper auto cut function, it have to place to “Off”. On the other hands, the auto cutter function will disable when it place at “On”.

Switch position 8 defines the firmware update function. If the printer needs to update the firmware, please set to “ON” position. In order to operating perfectly, please set in “OFF” when the printer do not needs to update the firmware or in normal situation.

The factory default for each position listed as below:

Switch 1 Position	1	2	3	4	5	6	7	8
Default setup for Aura-9000	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF

Software switch

Another method to setup Aura-9000 series is through the software switch setting, which means other functions must be change by software utility. Please visit our web site <http://www.posiflex.com> or <http://www.posiflex.com.tw> to download the **Aura-9000 software switch utility**. Software switches has divided into **SW1, SW2, SW3 and SW4**. Following information is going to describe these settings.

SW2 software switch works as following:

Switch position	ON	OFF
1	Paper Back Feed Disable.	Enable Paper Back Feed.
2	Disable paper auto-cut at top cover close.	Enable paper auto-cut at top cover close.
3	Full-cut mode.	Partial-cut mode.
4	Cut without paper feed	Cut with auto paper feed
5	Busy on “buffer full”	Busy on “buffer full” and/or “off line”
6	CR code (0Dh) effective	CR code (0Dh) invalid
7	Even parity	None parity
8	XON/XOFF handshaking	DSR/DTR handshaking

Software switch 2-1 controlled the retractable function. When this switch set to OFF, printer will enable to retract paper 14.5 mm before it start to print with the aim of reduce paper loss. In contrast, it will straight to print when this switch place to ON. Please notice that the factory default of this switch is OFF.

For the switch position 2, it is recommended to place at Off. In this way, the printer performs an automatic paper cut each time when the top cover is closed (e.g. after paper roll loaded) with the printer in operating condition. However, if it placing in ON, it will not automatically cut paper after top cover closed.

When switch position 3 set to “ON”, the paper will fully cut after paper printed. If the printed-paper do not needs to completely cut, please set this switch to “OFF” then the printed paper will be partially cut and left a tiny piece that user needs to rip the printed paper. When the printer set to full-cut mode, please notice that the paper should be take away immediately right after printed. Otherwise, the last paper will cut again with the next printed-paper cut. Please notice that when it place to ON, the paper will retract 14.5 mm before it start to print.

For switch position 4, when it set to “OFF”, the paper will feed before cutting when software does not define this point and there will be a further paper feeding after cutting to prevent last 2 lines cutted. Before setting this switch to “ON”, please make sure that your software will take care of enough paper feed for printed lines cut prevention issue.

For switch position 5, if the switch is set to “ON”, the busy signal set to host only when input buffer is full. When it is set to “OFF”, busy signal is sent to host whenever the input buffer is full or an off line status occurs. Therefore, signals including the paper near end detect will generate busy signal to the host. Moreover, the printer will keep on beeping at Paper End (completely no paper) till paper is replaced when S2-5 is “ON”. When S2-5 is “OFF”, the printer will keep on beeping every 3 seconds at Paper Near End (still long paper in replace) till paper is replaced.

For switch position 6 and when it is set to ON, the printer responds to a carriage return command (CR code or 0Dh) with also a line feed (LF code or 0Ah) action. Then if the text editor always expresses the change to a new line with both the CR and LF codes, there will be an extra line advance than expected. However it works for some old editors that express the change to a new line with only either one of the LF code or the CR code.

Switch position 7 defines the parity check regulation in serial interface. In Aura-9000, it is selectable between even and none.

For switch position 8 can choice the handshaking method in serial interface. When it is set to ON, the printer transmits an “XOFF” for busy and sends an “XON” for not busy. When it is set to OFF, the printer signifies the busy status

over hardware signals that can be detected by the host as “DSR” or “CTS”.

SW3 software switch works as following:

Switch position	ON	OFF
1	Raster Bitmap Print by line print.	Raster Bitmap Print by buffer batch.
2~4	Printing Speed regulate.	
5~8	Print Density Adjust	

For switch position 3-1, it defines the printing behavior of the printer on graphic printing. When it is set to ON, the printer prints on each printing command received immediately. However, the printer may have to engage brake frequently waiting for next command resulting in trembling. When this switch is set to OFF, the printer starts printing only when more graphical data are collected thus performing a much smoother printing operation.

Effect of positions 2, 3&4 on Printing Speed is defined as below:

SW3 Pos. 2	OFF	ON	OFF	ON	OFF	ON
SW3 Pos. 3	OFF	OFF	ON	ON	OFF	OFF
SW3 Pos. 4	OFF	OFF	OFF	OFF	ON	ON
Printing Speed	300 mm/sec	280 mm/sec	250 mm/sec	220 mm/sec	200 mm/sec	180 mm/sec

Please notice when system recognizes barcode will be printing, the speed will automatic set to 180mm/sec to ensure these barcode prints perfectly.

Effect of positions 5, 6 & 7 on Print Density is defined as below:

SW3 Pos.5	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF
SW3 Pos.6	OFF	OFF	ON	ON	OFF	OFF	ON	ON	OFF	OFF	ON
SW3 Pos.7	OFF	OFF	OFF	OFF	ON	ON	ON	ON	OFF	OFF	OFF
SW3 Pos.8	OFF	OFF	ON	ON	ON						
Print Density	100%	105%	110%	115%	120%	125%	130%	95%	90%	85%	80%

Since the qualities of different paper are not alike, please regulate the print density and printing speed to obtain the satisfaction of printing quality.

SW4 software switch works as following:

Switch position	ON	OFF
1	Available “Beep” sounds after printing.	Disable “Beep” sounds after printing.
2~3	Barcode Height Reduction.	
4~5	Line Space Reduction	
6~7	Line Feed Reduction	
8	Set Hardware Switch 1 Invalid	Set Hardware Switch 1 Valid

SW4-1 switch controlled the “Beep” sound after printing. Please select “ON” if this beep sound is required and it will not make any sound after “OFF” is selected.

Software switch SW4-2&3 is helping user to saving paper by reduce the barcode height to 25%, 50% or 75% of the original size. Please refer to the following table to change this switch’s setting.

Effect of positions 2 & 3 on Barcode Height Reduction as in table below:

SW4 Pos. 2	OFF	ON	OFF	ON
SW4 Pos. 3	OFF	OFF	ON	ON
Barcode Height Reduce	Disable	Reduce 25%	Reduce 50%	Reduce 70%

This function is to reducing the spaces between every two lines in every single paragraph. For SW4-4&5, please refer to the below table before regulate the percentage of line space reduce.

Effect of positions 4 & 5 on Line Space Reduction as in table below:

SW4 Pos. 4	OFF	ON	OFF	ON
SW4 Pos. 5	OFF	OFF	ON	ON
Line Space Reduce	Disable	Reduce 25%	Reduce 50%	Reduce 70%

For switch 4 position 6 & 7, it can reduce the spare space between paragraphs. No matter how many blank lines, this function will reduce the total unused space for three particular percentages which are 25%, 50% and 75%. Please refer to the following table to adjust switch 4-6&7.

Effect of positions 6 & 7 on Line Feed Reduction as in table below:

SW4 Pos. 6	OFF	ON	OFF	ON
SW4 Pos. 7	OFF	OFF	ON	ON
Line Space Reduce	Disable	Reduce 25%	Reduce 50%	Reduce 70%

For software switch SW4-8, it can control hardware DIP switch disable or available. When it set to ON, the SW1 can setup through software switch1 only. The functions of Hardware DIP Switch will invalid setting.

Note: Please reboot the printer after setting adjustment finished.

