

# User's Manual SRP-E770III

## THERMAL LABEL PRINTER Ver. 1.02



http://www.bixolon.com

## Introduction

SRP-E770III series printers have been designed to be connected to various types of electronic devices such as computer peripheral devices.

#### <u>\* The main features of the printer are as follows</u>

- 1. Maximum 127mm/s printing speed.
- 2. 4inch THERMAL LABEL PRINTER
- 3. 189 x 224 x 171(W x D x H)
- 4. Support for multiple interfaces(Standard: USB, Option: Serial or Ethernet)
- 5. Easy paper loading
- 6. Can print a range of barcodes
- 7. Supporting peeler option

It is advisable to read the contents of this manual carefully before using the printer for the first time.

#### **<u>\* Use only authorized supplies that can be trusted!</u>**

- We are not responsible for quality and service for damage caused by the use of unauthorized products (or recycled ones).

## **Safety Information**



*Warning*: Warnings must be heeded carefully in order to prevent serious physical harm.

Caution: Cautions must be heeded in order to prevent minor injuries, equipment damage, or data loss.

## **Symbol Information**

	DC (Direct current)
$\bigwedge$	Warning, Caution
	USB
율	Ethernet

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## **Manual Information**

This user's guide contains basic information for product usage as well as for emergency measures that may be required.

\* The following separate manuals provide more detailed content on various technological issues and areas.

#### 1. Windows Driver Manual

This manual provides information on the installation instructions and main functions of the Windows Driver.

#### 2. Unified Label Utility-II Manual

This manual provides information on the usage of software for function selection of this product, operating condition modification, etc.

#### 3. Programming (SLCS) Manual

This manual provides information on label printer commands.

#### 4. True Font Downloader Manual

This manual provides information on the usage of the font downloader that can download True Fonts and facilitate their usage as Device Fonts.

#### 5. Ethernet interface Manual

This manual provides information on the configuration and usage of Ethernet interface.

#### 6. Label design program Manual

This manual provides information on the usage of the Windows PC program that can make labels by adding text, graphics, or barcodes at desired positions.

## **Safety Precautions**

In using the present appliance, please keep the following safety regulations in order to prevent any hazard or material damage.





### CAUTION

Cautions must be heeded in order to prevent minor injuries, equipment damage, or data loss.



## 1. Content Confirmation

The following items should all be contained in the printer package.

Contact the dealer from which the purchase was made if any item is damaged and/or missing.



## 2. Product Part Names





## 3. Installation & Usage

#### **3-1 Power Connection**

• Connect power to the printer as shown below.



- 1) Turn off the printer power switch.
- 2) Check to see that the AC adapter voltage matches that of the power source.
- 3) Connect the AC adapter jack to the printer power connector.
- 4) Connect the power cord to the AC adapter.
- 5) Connect the power cord to a power source/outlet.



#### 3-2 Interface Cable Connection

#### 3-2-1 Standard Model(USB only)

Connect the interface cable as shown below.

This printer supports the following communications interface standards.

- USB B-Type Cable



- 1) Turn off the power switch.
- 2) Connect the communication cable to the printer communication port to be used. - Connect USB B-Type cable to the USB port.

(This port requires a shielded cable less than 1.8m long.)

⚠ Caution	<ul> <li>All cables must be connected while the product is turned off.</li> <li>Use of an unprotected interface cable with this printer conflicts with EMC standards. Users should only use cables approved</li> </ul>
	by BIXOLON.

#### 3-2-2 Serial Model(USB + Serial)

Connect the interface cable as shown below.

This printer supports the following communications interface standards.

- RS-232C(Serial) Cable
- USB B-Type Cable



1) Turn off the power switch.

2) Connect the communication cable to the printer communication port to be used.

- Connect the RS-232C(Serial) Cable to the SERIAL port. and tighten the screw on both sides. (This port requires a shielded cable less than 1.8m long.)
   Connect USP P Type cable to the USP port.
- Connect USB B-Type cable to the USB port. (This port requires a shielded cable less than 1.8m long.)

<ul> <li>All cables must be connected while the product is turned off.</li> <li>Use of an unprotected interface cable with this printer conflic EMC standards. Users should only use cables approved by BIXOLON.</li> </ul>	ts with:

#### <u>3-2-3 Ethernet Model(USB + Ethernet)</u>

Connect the interface cable as shown below.

This printer supports the following communications interface standards.

- LAN(Ethernet) Cable
- USB B-Type Cable



- 1) Turn off the power switch.
- 2) Connect the communication cable to the printer communication port to be used.
  - Connect the LAN(Ethernet) Cable to the ETHERNET port.
  - (This port requires a UTP cable(CAT5 or higher) less than 3.0m long.)
  - Connect USB B-Type cable to the USB port.

(This port requires a shielded cable less than 1.8m long.)

All cobles must be connected while the product is turned off
- All cables must be connected while the product is turned on.
- Use of an unprotected interface cable with this printer conflicts with
EMC standards. Users should only use cables approved
by BIXOLON.

#### **3-3 Paper Installation**

1) Open the Paper Cover.



3) Whether the paper label is wound inwards or outwards, its printing surface must face up.



2) Spread the paper holder and insert paper as shown.



4) Adjust the paper guide to the width of the paper.



5) Close the Paper Cover until a click sound is heard.

<ul> <li>Do not open the print cover while the printer is operating, otherwise the printer may be damaged.</li> <li>To prevent data loss, replace paper only when the printer is not receiving any data.</li> </ul>
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#### 3-4 LED Display



Feed button: Paper feed or cancel the print job.

LED: The current printer status can be viewed. (Refer to below)

The current printer status can be viewed via the printer's LED display.

#### 1) Green LED on

- The printer waits for the data from Host (PC) in normal mode.

2) Orange LED on

- It means paper gap sensing error. It becomes on when the printer fails to detect the paper or paper jam occurred. When fails to detect the paper correctly use Auto-Calibration function.

3) Red LED on

- The printer has stopped by pressing FEED button. It restarts printing when pressed again.

#### 4) Green LED blinking

- TPH (Thermal Printing Head) overheated or ;
- The printers is waiting for the button input to run Auto-Calibration function.
- 5) Orange LED blinking
  - No paper. Make sure the paper is loaded correctly.
- 6) Red LED blinking

- The printer cover is open.

A Caution	<ul> <li>If the printer does not power on, check that the adapter LED indicates "ON"</li> <li>For SRP-E770III products, press the power button and</li> </ul>
	then wait until the Green LED on.

#### 3-5 Feed Button Operations

- Feed Button can be used for various purposes as follows.
- 1) Feed Label

In Print Standby mode, pressed for shorter than 3 seconds, the printer feed one label.

2) Stand-alone Configuration Mode

In Print Standby mode, pressed for longer than 3 seconds, the printer enters into Standalone Configuration Mode. Please refer to 5-1 for details.

3) Pause and Resume printing

If pressed while printing labels, Printing toggled between Pause and Resume.

### 4. Self-test

The self-test checks whether the printer has any problems. (Users cannot perform this procedure if using the printer's label peel-off option.)

The self-test checks the following;

- 1) Make sure that the paper roll has been installed properly.
- 2) Turn on the power while holding down the FEED button. The self-test begins. (It takes about 5 seconds before starting self-test)
- 3) The self-test prints the current printer configuration information.
- 4) After the self-test results are printed out, a printer enters into Print Standby Mode.

**Caution** If the printer does not function properly, contact an authorized dealer

## 5. Detailed features

#### 5-1 Stand-alone Configuration Mode

• Various modes can be executed by using button and LED status.

#### 5-1-1 start Stand-alone Configuration Mode and execute each function

- 1) Make sure that a printer is in Print Standby Mode.
- 2) Depress the Feed button for about 3 seconds, then the LED changes to orange color.
- 3) Release the Feed button, then the printer starts the Standalone Configuration Mode and 6 numbers of LED status changes sequentially.
- 4) When the Feed button is depressed at specific LED status, the corresponding operation will be executed.

#### 5-1-2 Function List of Stand-alone Configuration Mode

Sequence	LED		Printer Operation	
Number	Color	Status		
1	Green	Blink 3 times	NONE	
2	Orange	Blink 3 times	Factory Reset and Gap Calibration	
3	Red	Blink 3 times	Factory Reset and Black Mark Calibration	
4	Green	Keep On 3 times	Toggle Power-up Auto-feed	
5	Orange	Keep On 3 times	Data Dump Mode	
6	Red	Keep On 3 times	Demo Mode	

\* This information can be printed out by printer self-test.

Caution

Contact the customer center if the printer does not enter Stand-alone Configuration Mode.

#### 5-2 Media Length Measurement

• The printer needs to have the exact length of currently installed paper to make a proper print image.

For this, the printer automatically starts Media Length Measurement Mode in the following conditions.

1) When the printer has no measure length, for example first feeding after installation.

2) When the detected label length differs from the measured value.

In this mode, the printer feeds 2 or 3 labels to measure the exact length of label and saves the measured value on printer's non-volatile memory.

#### 5-3 Pause/Resume

• Press FEED button to pause at the middle of labels printing.

- 1) Press FEED once.
- 2) Printer stops after on-going printing and Red LED becomes on.
- 3) Press FEED once again. It resumes printing in a queue.

Contact the customer center if the printer does not execute
pause/resume function

#### 5-4 Media Sensor Auto-Calibration

• Media sensor auto-calibration is used when the printer does not detect a gap or black mark on the label paper correctly.

Generally a printer is set to detect most types of gap or black mark but sometimes it fails to detect and keep feeding the paper without a stop when special paper used. In such case, use media sensor auto-calibration function for a proper detection.

1) Make sure that paper roll has been installed properly.

- 2) Use Stand-alone Configuration Mode, Sequence Number 2 or 3(refer to 5-1)
  - Sequence Number 2: Gap Media Auto-Calibration
  - Sequence Number 3: Black Mark Media Auto-Calibration.



#### 5-5 Media Sensor Manual-Calibration

• Manual-calibration of media detection can be used when the printer cannot detect a media gap (or black mark) even after auto-calibration has been executed.

Users can calibrate sensor parameters in detail by using the utility program provided by the manufacturer.

The installation files and manuals are provided on the BIXOLON official website. (<u>http://www.bixolon.com</u>)

Please make sure the printer is connected and execute the utility program. Please the Calibration Setting Manager Button after setting the interface type.

ified Label	Utility-11		Sensing Value Distribution 32: 0000 64: 0000 96: 0000 128: 0000 160: 0000 192: 0000 224: 0000	STEP 1 : Start Sensing Type :
nterface Type		User Setting	0 256 : 0000	
Serial	🔘 Parallel 🛛 USB 🔘 Ethernet	Configure Printer Setting	O 320 I 0000	Check Sensing Value
Communication	Setting	Configure Print Quality	0 352 : 0000 0 384 : 0000	
LPT Port	LPT1:	Calibration Setting Manager	0 416 : 0000 0 448 : 0000	STEP 2 : Save
COM Port	COM1:	Downloader	C 480 : 0000 C 512 : 0000	Middle Gap Value :
Baud Rate	115200 ▼	PCX File Downloader	0 544 : 0000 576 : 0000	0
Data Bits	8	Printer Tool	0 608 : 0000 640 : 0000	Gap Count :
Parity	None	Send File	C 672 : 0000 C 704 : 0000	[/ *]
Stop Bits	1	Printer Tool	0736: 0000 0768: 0000	Save Calbration
IP	192 . 168 . 100 . 185	Communication Tool	0 800 : 0000 0 832 : 0000 0 864 : 0000	
Port	9100	SLCS Test Tool	0 896 : 0000 0 928 : 0000	Cancel
C	Disconnect	EXIT	0 960 : 0000 992 : 0000 0 1024 : 0000	Cancel Calibration

- 1) Select the sensing type and input the label length by millimeter and click on "Check Sensing Value" tap. Then printer starts to calibrate.
- 2) Printer will print the scanned values after calibration and the values will appear on the Screen.
- 3) Optimal sensing values will appear in black bold letters on the left of the utility screen and select one of the values and click on "Save Calibration"
- 4) If chosen value does not work properly, please try the other values among the black bold letters.

5) To go back to the initial value, please click on "Cancel Calibration"



Contact the customer center if the printer does not enter Media Sensor Manual-Calibration Mode.

#### 5-6 Data Dump Mode

• This function can be used to diagnose the communication issues when the printer does not work correctly.

In this mode, the received data are not analyzed and printed, instead they are dumped in hex format without processing.

Turn the printer off and on to recover to the Print Standby Mode.

Use Stand-alone Configuration Mode, Sequence Number 5(refer to 5-1) to start Data Dump Mode



#### 5-7 The Peel-off

• This function is used to automatically separate labels from the liner.

- 1) Open the paper cover.
- 2) Open the peel-off cover and turn on the peeler switch.



3) Check if the peeler LED is on.



- Remove
- 4) Remove the paper and insert the paper through the slot.

5) Adjust the paper guides and close the cover.



- 6) Close the Paper Cover until a click sound is heard.
- 7) Turn the printer off and back on.

A Caution
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#### 5-8 Using Fan-Fold Paper

• Supplying paper to the printer externally is done as follows.

1) Insert the paper at the rear of the printer and then open the Paper Cover.



2) Adjust Paper Holders to the paper width by using the Fix Tool.



3) Adjust Paper Guides and close the Paper Cover until a click sound is heard.



- To prevent data loss, replace paper only when the printer is not receiving any data.

## 6. Cleaning Printer

Printing quality might be degraded by dust, foreign substance, adhesive substance, or other pollution materials stuck in the printer head or inside the printer.

When dirty, clean the print head as follows

#### 6-1 Cleaning Head

- 1) Open the paper cover and clean the printhead using the cloth or cotton swab soaked in alcohol for medical.
- 2) After cleaning the head, do not use the printer until the alcohol used for cleaning evaporates completely (1~2 min) and the printer has completely dried.



▲ Note	Perform the cleaning process each time the paper roll is replaced to prevent print quality deterioration.		
A Caution	<ul> <li>Make sure to turn the printer power off prior to cleaning.</li> <li>As the print head gets very hot during printing, if intending to clean the print head, turn the printer power off and wait approximately 2~3 minute before commencement.</li> <li>Take care not to allow the print head to become scratched and/or damaged in any way.</li> <li>When cleaning the print head, take care not to touch the heated portion of the print head.</li> <li>Printer Head is susceptible to damage from static electricity, etc.</li> </ul>		
A Warning	Do not touch the printer head immediately after printing, as it could burn the skin.		

#### 6-2 Replacing Roller

- 1) Open the Paper Cover and remove the paper.
- 2) Use some tool such as a flat-head screwdriver to rotate 'Bush Roller' to forward direction until seeing lever.



3) Remove 'Bush Roller' from a printer by holding up lever on it.



4) Disassemble 'Bush Shaft' from 'Roller', and then replace 'Roller Ass'y' with new one.



5) Assemble 'Roller' in reverse order.

Caution

Make sure to turn the printer power off prior to cleaning.

#### 6-3 Cleaning Sensors, Roller or/and Paper Path

- 1) Open the Paper Cover and remove the paper.
- 2) Remove any dust or foreign substance using dry cloth or cotton swab.
- 3) Soak the cloth or cotton swab in alcohol for medical use and use it to remove adhesive foreign substances or other pollution materials.



## 7. Appendix

#### 7-1 Specifications

ltem		Description			
	Printing Mothod	Direct Thormal Printing			
Printer					
	Dot Density				
	Printing Width	Max. 104 mm (Max. 4.09")			
	Printing Speed	Max. 127 mm/sec (Max. 5ips)			
Paper	Roll Width	42 ~ 106 mm (1.65 ~ 4.17")			
	Roll	Max 130 mm (Max. 5.12")			
	Core	25.4 ~ 38 mm (1" ~ 1.5")			
AC Adapter	SMPS Input Voltage	AC 100 ~ 240V			
	Frequency	50/60 Hz			
	SMPS Output Voltage	DC 24V ±5%			
	SMPS Output Current	2.5A			
Usage Conditions	Tomporatura	0 ~ 40 ℃ (Operating)			
	remperature	-20 ~ 60 ℃ (Storage)			
	Humidity	10 ~ 80 % RH (Operating)			
	(except for paper)	10 ~ 90 % RH (Storage)			
	- Printing speed	- Printing speed can vary depending on the data transmission speed			
	and combinat	and combination of control commands.			
	- This equipme	- This equipment is for indoor use and all the communication wirings			
	are limited to	are limited to inside of the building.			

- The switch is the disconnecting device. Turn off switch from any hazard.

#### 7-2 Label Types

- The label types used with this printer are as follows.
  - · Control Labels: PP
  - Other Labels: PET

## Copyright

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BIXOLON Co., Ltd. maintains ongoing efforts to enhance and upgrade the functions and quality of all our products.

In the following, product specifications and/or user manual content may be changed without prior notice.

## Caution

Some semiconductor devices are easily damaged by static electricity. You should turn the printer "OFF", before you connect or remove the cables on the rear side, in order to guard the printer against the static electricity. If the printer is damaged by the static electricity, you should turn the printer "OFF".

## **Compliance information**

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

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

Caution: Exposure to Radio Frequency Radiation.

To comply with FCC RF exposure compliance requirements, a separation distance of at least 20 cm must be maintained between the antenna of this device and all persons.

Caution: Any Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

Class A Digital Device : Wired Device

This Apparatus complies with class "A" limits for radio interference as specified in the Canadian department of communications radio interference regulations.

This Class A digital apparatus complies with Canadian ICES-003.

Appareil numérique de classe A: appareil filaire

Get appareil est conforme aux normes class "A" d'interference radio tel que specifier par ministre canadien des communications dans les reglements d'interference radio.

Cet appareil numérique de la classe A est conform à la norme NMB-003 du Canada.

## Waste Electrical and Electric Equipment (WEEE)



This marking shown on the product or its literature, indicates that is should not be disposed with other household wastes at the end of its working life, To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources. Household

users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling. Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.

## **Revision History**

Ver.	Date	Page	Description
1.00	20.03.18	-	New
1.01	14.06.19	8,22	Delete CD
1.02	09.12.19	28	Modified how to clean the printhead