



SmartSource® ReceiptNOW Elite Printer Troubleshooting & Triage



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About this Document

Audience

- Digital Check and Digital Check partners' field support personnel
- Digital Check and Digital Check partners' telephone support personnel
- Digital Check clients operating centralized user support organizations (“help desks”)
- Digital Check clients' document processing operations supervisory personnel

How to Use This Document

This material summarizes the detailed information found in other SmartSource ReceiptNOW Elite printer documentation.

Based on a description of the problem provided by the user, locate the most appropriate topic in the troubleshooting chart below. Since some symptoms can result from different problem causes, it's usually necessary to gather additional information about the symptoms in order to identify a likely cause/correction selection.

The troubleshooting chart summarizes the most likely cause for a problem and how to correct it. Generally there is additional detail for additional troubleshooting of that area and/or detailed background information.

Other supporting documents, including the complete ReceiptNOW Elite User manual 82278 4813-XXX, can be accessed on the Digital Check website, <http://www.digitalcheck.com/>

Functions and Characteristics

- The ReceiptNOW Elite printer is available only with a USB 2.0 interface and an optional Ethernet interface
- The ReceiptNOW Elite printer is designed to provide a base for the Digital Check SmartSource Elite-series printers.
- Supports two color and gray level printing
- Low noise, high-speed printing
- Drop-in easy paper load design
- Maximum print speed is 200mm/s
- Supports continuous thermal paper type
- Adjustable paper width between 56mm and 82.5mm
- Automatic Paper Cutting – either full or partial cuts
- Paper low & empty sensors
- Support for the following Windows Operating Systems:
 - Windows 2000 SP4, Windows XP Pro SP3 (32/64 bit), Vista SP1 (32/64 bit), Windows 7, Windows 8, Windows 10

Printer Technical Specifications

Items	Parameter	
Print method	Thermal print by line	
Print resolution	203*180DPI	
Print speed	Maximum print speed is 200mm/sec, two-color printing speed 100mm/sec, gray print speed 100mm/sec. Depending on the different print content, the printer will automatically adjust print speed	
Print Span	Maximum is 80mm; paper width is from 56-82.5mm.	
Paper type	Paper thickness is 0.06-0.10mm, Maximum paper roll OD is 83mm Continuous thermal paper or thermal paper tags	
Support Bar code type	Barcode 1D: UPC-A, UPC-E, CODE 39, CODE 93, CODE 128, EAN8, EAN13, ITF, CODABAR Barcode 2D symbols: PDF417, QR-CODE	
Character support	U.S.A., France, Germany, U.K., Denmark I, Denmark II, Italy Sweden, Spain I, Spain II, Japan, Norway, Latin America, Korean etc. optional	
Enlarge character	All characters can be enlarged from in level 1-6 both in the horizontal and vertical direction.	
Character rotation	Four direction printing rotation (0°, 90°, 180°, 270°)	
Paper detection	Photoelectric sensors (out of paper, paper low)	
Front cover position detection	Micro switch	
Print head temperature detection	Thermistor	
Graphics processing	Download bitmap	Print bitmap directly
	Download buffer size: RAM:128KB FLASH:512KB	Support bitmap mode, fast graphic printing
Communication interface	USB 2.0 interface	
Memory	FLASH Memory Capacity: Maximum 4MB; SDRAM memory total capacity: Maximum 2MB; Data receive buffer size: 64K, 4KB, 45 bytes selectable; RAM bit map area: 128KB; Area available to the user FLASH: 512KB;	
Power	AC 110-240V 50/60 Hz, ~1.5A - Power supply input DC 24V ± 5% average current 2.0A - Power supply output Maximum instantaneous current 8A	
Print head lifetime	Print head lifetime, thermal single color print : 100 Kilometers Print head lifetime, thermal two color print: 50 Kilometers Print duty ratio: 12.5%	
Operating temperature and humidity	5-45°C (41-113°F), 20% - 90% at 40°C, 104°F	
Storage temperature and humidity	-40-60°C (-40 ~ 140°F), 10% - 93% at 40°C (104°F)	
Dimensions	242mm × 145mm × 135mm (9.53in × 5.71in × 5.2 in) - L×W×H	

Cutter Technical Specifications

Item	Parameter	Note
Cutting method	Sliding blade	
Cutting time	500ms	Cutter cuts for one time.
Cutting interval	2s	30 cuts / min (maximum)
Type of paper	0.06~0.1mm	thermal paper or equivalent thickness paper
Operating voltage	24VDC	
Maximum operating current	1.2A	24VDC
Cutter lifetime	1.5 million times (0.06mm thick paper)	*Includes full-cut, partial cut

Full cut: completely severs paper

Partial cut: partly severs paper, leaves tear-off tab

Thermal Paper Parameters

- Type of Paper: Continuous thermal paper
- Paper Feeding Method: Paper Roll
- Paper Width: Maximum 82.5±0.5mm, width can be adjusted between 56-82.5mm (2.20 to 3.25")
- Paper Thickness: 0.06mm-0.1mm
- Thermal Layer: External
- Paper Roll Size: OD (Max) 83 mm (3.26")
- Inside Diameter: (Min) 12.5mm (0.5")

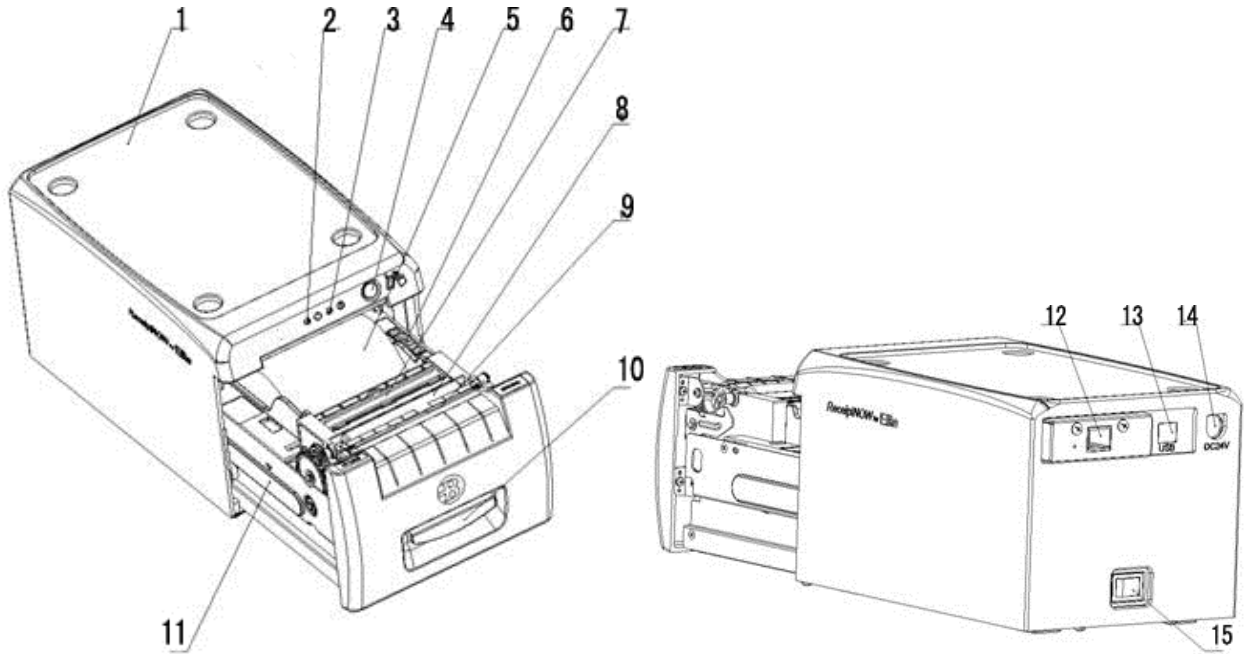
Recommended papers:

Part Number	Manufacturer
401095994	Digital Check
F240AC,F220-VP,FV230A1, PA220AG,HP220A	Mitsubishi Paper Mill CO., LTD
FD210,PD150R,PD160R	OJI Paper CO., LTD.
F70NA	FUJI PHOTO FILM CO., LTD

Attention

- ✧ Please use recommended paper or equivalent quality paper. The use of other types of paper may affect print quality and print head life.
- ✧ If the paper is contaminated by chemicals or oil, the paper may become discolored or printing result may not be clear.
- ✧ Do not scratch the thermal paper with any sharp or hard object. This may cause the printing to be obscured or unclear.
- ✧ All thermal printer paper will degrade and produce poor quality printing if exposed to temperatures greater than 70°C (158°F), high humidity or strong light. Store thermal printer paper in a cool, dry place and in its original wrapping until ready for use.

ReceiptNOW Elite – layout & appearance



1- Top cover	9- Cutter
2- Power indicator light	10- Opening latch
3- Error indicator light	11- paper-low sensor (inside printer
4- Paper Feed Button	12- Optional Ethernet interface
5- Paper roll holder	13- USB interface
6- Paper roll width adjustment	14 Power connector
7- Out of paper sensor	15- Power switch
8- Drive roller	

Important Things to Note When Using the ReceiptNOW Elite Printer

- Make sure the power is off before plugging or unplugging the communication cable or performing operator maintenance.
- Avoid static discharges when touching the print head or other electrical components on the printer.
- Ensure a minimum time interval of 20 seconds is observed between powering the printer off and on.
- A printer Self Test page identifies the unit's configuration and can be printed by powering on the printer with the paper feed button held down.
- Do not print without paper as this could cause damage to print head and printer roller.
- To maximize print head life it is recommended that the lowest print density that meets the user's print quality requirements should be used.

Self Test Sheet Printout

A printer Self Test page identifies the unit's configuration and can be printed as follows:

- 1) Make sure power cable is connected to the printer and the paper roll is loaded.
- 2) Make sure POWER INDICATOR LIGHT is off and printer is powered off.
- 3) Hold down the paper feed button while turning the printer on. The printer will perform a self-test and then print 'Press and Release FEED key to print characters' and 'Press and Hold FEED key to configure the printer'. The printer will change to holding state and PAPER INDICATOR LIGHT blinks.
- 4) When the self-test page is finished, press the FEED key briefly to print test characters or hold the FEED key down to configure the printer. For specific function and operational approach for using the FEED button to configure the printer.

Sample copy of the ReceiptNOW printer Self Test page (sample print only – actual print may vary)

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***SRN 2PTR TEST FORM***

Boot Firmware      :FV1.010
Main Firmware      :FV1.010

H/W parameters
Flash Memory Size  :4M Bytes
Flash Logos/Fonts  :2M Bytes
Resolution         :203X180DPI
Print Width(max)   :80mm
Fixed LeftMargin   :8mm
Fixed RightMargin  :8mm
Print Speed(Max)   :200mm/s
Dark Scale         :110
Cutter             :Enabled
CRCommand          :Disabled
Current CodePage   :PC437

Interface Type2    :USB_SRN_2PTR_1
Interface Mode     :API Mode
Rx Buffer Size     :64K Bytes
```

SmartSource Troubleshooting Chart

This chart helps identify reasons for a reported problem and provides solutions to correct it. Follow this sequence to use the chart effectively:

1. From a description of the problem, focus on a major area in the Problem Topic column
2. In the second column, identify which condition seems to most resemble the problem description
3. Review each “Possible Cause”, in sequence, to determine which seems most appropriate for the situation
4. Try the appropriate “Corrective Actions” until the problem is resolved. If the problem cannot be identified or resolved, the unit may require service at an authorized service location. Troubleshooting assistance is always available from Digital Check Call Center at 1-847-446-2285.

Problem Topic	Condition/Cause	Possible Cause	Corrective Action
Printer Power Issue	Printer does not power on.	Printer has no power	Ensure that the unit’s power on switch is in the on position.
			Ensure that the power supply green LED is on.
			Check power connections to printer, power supply and AC source supply voltage.
Print Quality Issue	Print is not clear.	Dirty Print Head	Refer to print head cleaning procedure below.
	A vertical print band is not clear.	Dirty Print Roller	Clean Print Roller
		Wrong paper Type	Check for proper thermal paper
		Low Print Density	Adjust print density setting
		Dirty Print Roller	Clean Print Roller
Paper Out Issue	Paper out errors occur with paper roll installed.	Dirty paper out sensor	Refer to paper out sensor cleaning procedure below.
	Out of paper with no out of paper alarm.		
	Cannot identify mark correctly.		
Paper Movement Issue	Erratic Paper feed motion and noise.	Improper Paper Load	Check Paper Roll Loading
		Dirty Print Head	Refer to print head cleaning procedure below.
	Paper Jamming	Paper Obstruction	Open front cover and check track & paper cutter for jammed paper.
		Paper Cutter Malfunction	Open front cover and check cutter for jammed paper.
Paper Cut Issue	Paper Not Cut	Paper Cut Not Configured	Check Paper Cut Configuration

Recovering From Errors

Printer does not work

Issues	Reasons	Solution
POWER INDICATOR LIGHT is off and printer does not work.	Printer has no power.	Connect to power supply
	Power switch is off.	Turn printer power switch on.
	PCBA or power supply is damaged.	Depot Repair

Error Indicator Light and Buzzer Alarm

Issues	Reasons	Solution	Reference
ERROR INDICATOR LIGHT blinks and buzzer beeps	Paper Out	Adjust or replace paper roll	User Manual
	Front cover open	Close front cover	User Manual
	Paper Low	Replace paper roll	User Manual
	Cutter Default	Check cutter operation	
	Printer has a serious fault – 4, 5 or 6 beeps	Depot Repair	

Indicator Light and Buzzer Information

Indicator Light Name	Status	Explanation
Power Indicator Light: Green	Bright	Printer is powered on
	Out	Printer is powered off
Error Indicator Red	Out	Normal Status
	Blink	Error Status or paper low status

Error Indicator Light and Information

Error Type	Error Indicator Light	Buzzer
Paper Low	Flash slowly	No beep
Out of Paper	Flash 2 times then repeat	Beep 2 times
Front cover open	Flash 3 times then repeat	Beep 3 times
Cutter Error	Flash 4 times then repeat	Beep 4 times
Input Voltage Abnormal	Flash 5 times then repeat	Beep 5 times
Overheated Print Head	Flash 6 times then repeat	Beep 6 times

Attention

The ReceiptNOW Elite printer detects print head temperature. If the print head is overheated, a protection circuit will cut off print head power and stop printing. Normal operation is restored when the print head cools down.

Print Head Cleaning Procedure

- Turn off power. Open top cover.
- Wait until print head is totally cooled down.
- Using a lint free cloth, moistened with isopropyl alcohol or ethyl alcohol, wipe off any residual dirt or dust that may have accumulated on the print head. Suitable cleaning swabs may be ordered from Digital Check (order number 757300999 or 751920912)
- Ensure that the print head is completely dry prior to closing top cover and returning unit to operation.

Paper Out Sensor Cleaning Procedure

- Turn off power. Open top cover.
- Using a lint free cloth, moistened with isopropyl alcohol or ethyl alcohol, wipe off any residual dirt or dust that may have accumulated on the paper out sensor. Suitable cleaning swabs may be ordered from Digital Check (order number 757300999 or 751920912)
- Ensure that the paper out sensor is dry prior to closing top cover and returning unit to operation.

Information Needed by Digital Check Support

Additional Items or Information that may be requested by Digital Check Engineering for further problem evaluation.

- Detailed Problem Description.
- Circumstances that exhibit the problem.
- Sample printouts
- Copy of Self test printout sheet from the unit in question.