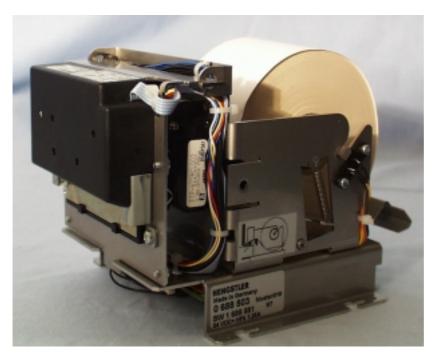
# **HENGSTLER**



2 688 435

**User Manual** 

PIXI Coupon Printer

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Modification number: 290799

We reserve the right to make technical modifications to our products as part of our ongoing policy of Continuous Improvement

# 4. Contents

1. Modifications Lis	sting	1
2. Document Histor	ry	1
2.1 Previous Versions.		1
2.2 Modifications		1
3. Bibliography		1
4. Contents		2
5. Preface		4
6. Safety Advice		5
6.1 Electro-magnetic Co	Compatibility	6
	nation	
7.1 Glossary		8
	tion	
8.1 PIXI Device Descri	iption	9
9. Installation		13
10. Set-Up		13
10.1 Power Supply Cable	le	13
	r	
10.4 Power On		17
•		
11.1 Changing the Pape	21	18
12. Errors & Distur	rbances	19
13. Technical Data	l	20
-		
	cation	
*	S	
_		
	provals	
	provais	

# 2688435e.doc **HENGSTLER**

1	3.1.9	Environment	.23
1	3.1.10		.24
1	3.1.11	Earthingvidual Components	.24
13.2	2 Indiv		.24
			25
15.	Repla	acement Parts & Accessories	26

#### 5. Preface

The PIXI Voucher Printer is a modular constructed build-in printer with thermal print mechanism and integrated paper cutter. An extensive paper sensor system monitors the paper progress.

The paper dispenser is based on a paper roll of up to 100 meters length with a weight of 78 a/m².

Printer applications include voucher printing at Info Point terminals.



The PIXI Voucher Printer User Documentation covers:

- Software Manual
- Service Manual
- as well as this User Manual

This User manual covers topics which are relevant to an operator.

- PIXI Standard Software Manual (SWH 2 688 181\_581)
- PIXI 302 Software Manual (SWH 2 688 181 583)
- User Manual (2 688 435)
- Data Protocol Manual (2 688 259)



This symbol identifies text which gives important advice relating to the correct and safe operation of the unit.

Page 4 of 26 Modification no.: 080799

# 6. Safety Advice



- The PIXI Voucher Printer is a quality product, manufactured according to recognised technology standards. It left the factory in a condition compliant with all safety regulation.
- In order to maintain this condition and to guarantee operation without danger to the User, the advice and warnings contained in this handbook must be followed.
- This unit has been built and tested according to EN 60950 relating to the safety of IT equipment. It has Protection Class III.
- The installation and assembly of electrical devices should only be undertaken by a qualified electrician.
- This unit should only be used once it has been built-in.
- When building equipment in, it must be guaranteed that the device requirements set for the fixture by the corresponding device safety norms are not in any way negatively influenced, leading to a reduction of the equipment safety levels.
- Before switching the unit on, it must be guaranteed that the operating and control voltages connected, do not exceed the values stated in the technical data specifications.
- Control and data lines must only be connected using SELV (separated extra low voltage system) circuits or circuits with power limitation which meet the requirements of EN 60950.
- The power plug connecting to the external power supply must be protected by external fusing. The corresponding socket must be installed, with easy access, close to the unit.

Modification no.: 080799 Page 5 of 26



If you suspect that the device cannot be operated without danger, it must be switched off and put in a condition such that operation cannot accidentally be resumed. This may be the case if:

- damage to the unit is visible;
- the unit has been stored for a long time in unsuitable conditions:
- the unit has been subject to extreme transport demands.

If, as the result of equipment failure or error, there could be a danger of personal accident or damage to property, this must be avoided through additional safety measures, such as the installation of a position switch or a guard or barrier.

## 6.1 Electro-magnetic Compatibility

The unit is deigned for use in domestic, commercial or industrial applications.

Page 6 of 26 Modification no.: 080799

#### 7. Additional Information



#### **Delivery**

Please check that the delivery is complete by reference to the accompanying delivery documentation.

#### Unpacking

Having unpacked the equipment, please check that there has been no damage in shipping. Make sure that all parts, including and accompanying accessories have been removed from the packaging.

#### Claims

Any damage claims caused through transportation are only valid if the delivery company is advised without delay.

A damage report must be completed immediately and sent back to the manufacturer with the defective part(s).

When returning goods, the original packaging should be used if at all possible.

The following information should accompany all returns:

- Name and address of recipient.
- Device, type and serial numbers.
- A damage report with description of the defect.

Modification no.: 080799 Page 7 of 26

## 7.1 Glossary

BoF Bottom of Form sensor
BPZ Block Check Character
cpi Characters per inch
cpl Characters per line

CPOS Cutter position for paper transport

CSC Customer Service Centre
CST Customer Service Terminal
Dot Pin or thermal point printing

dpi Dots per inch

DPOS Print position for paper transport
EMC Electro Magnetic Coupling
ESD Electro Static Discharge
GDI Graphic device interface

Host Host computer

HTp Hengstler thermal print mechanism

lpi Lines per inch lps Lines per second

McbF Mean cycle between Failure Mk Mark Recognition (1, 2, n)

MPOS Mark position for paper transport MTBF Mean time between Failure

MtbSC Mean time between Service Call

MttR Mean time to Repair
PCS Print Contrast Signal
PE Paper End message
pps Pulses per second
PrA Presenter output sensor
PrE Presenter input sensor

PVE "Paper-out pending" message PWE Paper weekend message

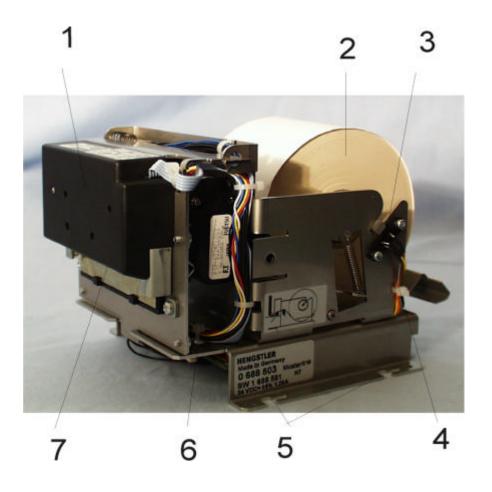
Step Smallest paper advance distance in inches

ToF Top of Form sensor

Page 8 of 26 Modification no.: 080799

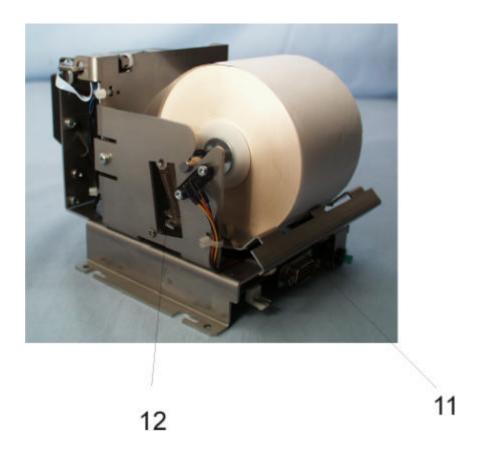
# 8. Version Description

# 8.1 PIXI Device Description



- 1 = Cutter
- 2 = Paper supply
- 3 = Paper spindle position
- 4 = Paper out pending sensor
- 5 = Unit fixing points
- 6 = Thermal print mechanism
- 7 = Paper exit point

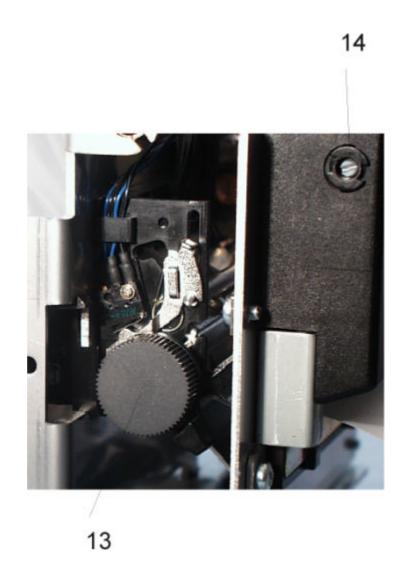
Modification no.: 080799



11 = Paper out pending sensor rocker

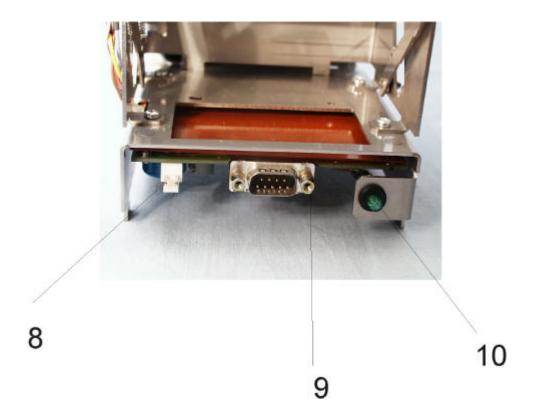
12 = Rocker spring

Page 10 of 26 Modification no.: 080799



13 = Wheel to raise print head manually14 = Screw to turn cutter manually

Modification no.: 080799 Page 11 of 26



8 = Power supply connection

9 = Data connection

10 = Combined "in operation" display and LF key

Page 12 of 26 Modification no.: 080799

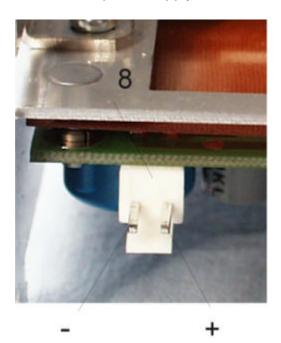
# 9. Installation

See Service Manual

# 10. Set-Up

# 10.1 Power Supply Cable

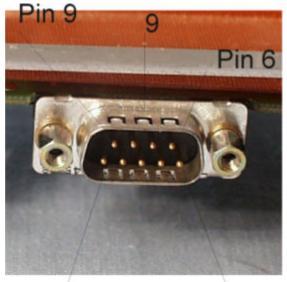
Connect the power supply cable to connector (8).



Modification no.: 080799 Page 13 of 26

# 10.2 Data Cable

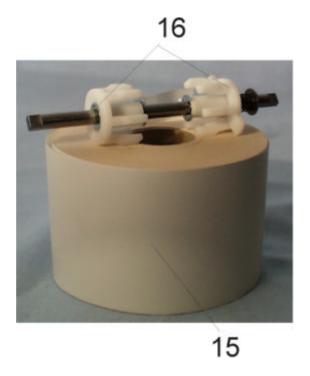
Connect the data cable to connector (9).



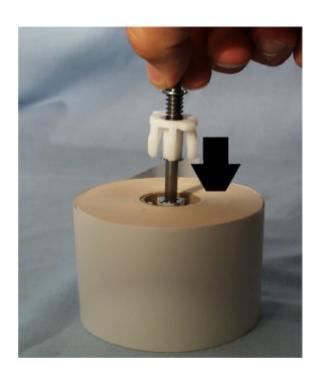
Pin 5 Pin 1

Page 14 of 26 Modification no.: 080799

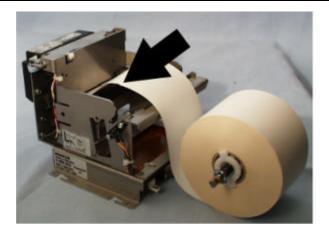
# 10.3 Inserting the Paper



15 = Paper roll with the thermo-sensitive surface on the outside 16 = Paper spindle



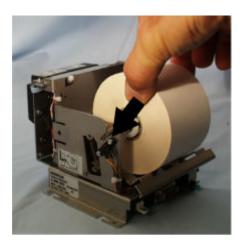
Modification no.: 080799 Page 15 of 26



After the paper spindle has been inserted into the paper roll, the paper must be inserted into the print mechanism with the thermo-sensitive surface inwards.



After the paper has been inserted into the print mechanism as far as it will go, the paper is transported automatically into the unit.



Lay the paper roll in the paper spindle position.

Page 16 of 26 Modification no.: 080799

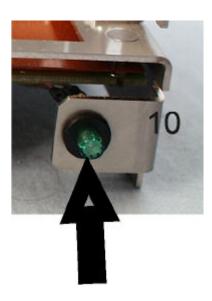
#### 10.4 Power On



The LED will light up to indicate that the power has been connected and switched on correctly.

# 11. Operation

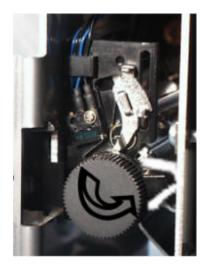
The printer operates solely as a result of commands sent over the interface. These operating commands are described in the corresponding Software Manual. A single press of the LF key advances the paper by one line. If you press the LF key for a longer time, a FF is carried out.



Modification no.: 080799 Page 17 of 26

# 11.1 Changing the Paper

Raise the print head with the lever (13) and remove any paper remaining in the unit.





Print head opened

Print head closed

Close the print head and insert the paper as described in 10.3.

Page 18 of 26 Modification no.: 080799

# 12. Errors & Disturbances

Error description	Cause	Counter measures
No print possible	End of paper reached or no paper available	Insert new paper roll
	Power switched off	Check power connections and/or switch power on.
	Print head is open	Close print head with lever <b>(5)</b> .
	Data interface incorrect	Check data interface; data cable, plug-in connections, etc.
Paper isn't cut	Cutter defective	Call service technician
Paper can't be inserted	Print head open	Close the print head with lever (13)
	Paper remaining in paper route	Remove any residual paper
	Defective sensor in the print mechanism	Request service call



If none of the above solves the problem or if the problem reoccurs, please contact your Service Technician.

Modification no.: 080799 Page 19 of 26

## 13. Technical Data

## 13.1 Complete unit

Print type: Non-impact, parallel Print method: Thermal sensitive

Cutting method: Guillotine

Print width: max. 56 mm at 448 dots

# 13.1.1 Paper Specification

Paper width: 58.. +/- 0.5  $56gsm^2 + /-5$ Paper weight

Roll length: 100m

Roll core internal diameter: 25.4mm (1") Paper roll external diameter: 95mm

Thermo-sensitive surface: Inside Paper manufacturer: Blumberg TF 00 22 00 Paper manufacturers part number: Hengstler part number: 3 810 849

Voucher length: Depends on format

Page 20 of 26 Modification no.: 080799

#### 13.1.2 Paper sensors

#### 13.1.2.1 Paper out

The sensor in the print mechanism identifies paper out when no more paper is detected in front of the sensor.

## 13.1.2.2 Paper out pending sensor

The following calculations are made, based on the above paper specification.

Paper length	Core diameter in	
in metres	millimetres	
0	29.9	
1	31.1	
2	32.3	
3	33.1	
4	34.6	
5	35.4	

The paper out sensor is triggered by a core diameter value of 34.6mm, +/- 4%.

Modification no.: 080799 Page 21 of 26

## HENGSTLER 2688435e.doc

#### 13.1.3 Dimensions

Please refer to Dimensions Sheet 0 688 819

### 13.1.4 Weight

Weight without paper approx. 1010g

#### 13.1.5 Emulations

Details are to be found in the corresponding Software Manual.

# 13.1.6 Tests and Approvals

See Service Manual

## 13.1.7 Packaging

Meets postal requirements. Individual packaging to be defined.

Page 22 of 26 Modification no.: 080799

#### 13.1.8 Environment

Ambient temperature

Operational: 0°C...+ 50°C continuous

Storage: -40°C...+ 70°C

Humidity

Operational: 35%...80% Storage: 10%..90% Temperature modification: 8°K/hour Impact load: 3 AXIS (5 cm)

Vibration stress:  $0.25 \, q$ 

### 13.1.9 Power Supply

Power supply 24 vDC = (SELV) + /-5%Power take-up approx. 2 VA in standby FTP-622 approx. 10 VA during printing

peak 50 VA

Plug JST 2 pin



#### 1.5 AT fuse to be connected

If the print mechanism's power supply is <=30 VA some functions have restricted use since the print ratio within one line can go above 70% which overloads the power unit. In such cases, a power unit delivering 60 VA must be used.

The following functions are affected:

- Underline of more than 128 sequential dots
- Inverse print (see underline)
- Semi-graphic characters from 0B0H to 0DFH (see underline)
- Graphics (see underline)
- Barcode (must be tested)
- n-fold width (must be tested)

128 dots correspond approximately to the following number of characters:

- 8 characters at 12.7 cpi
- 9 characters at 14.5 cpi
- 10 characters at 16.9 cpi
- 12 characters at 20.3 cpi

Modification no.: 080799 Page 23 of 26

#### 13.1.10 Standards

• See Service Manual

### **13.1.11** Earthing



The printer housing must be earthed.

# 13.2 Individual Components

See Service Manual

Page 24 of 26 Modification no.: 080799

# 14. Further Documentation

PIXI Standard & 302 Measurements sheet 0 688 819

PIXI Standard Software manual SWH 2 688 181\_581 PIXI 302 Software manual SWH 2 688 181\_583

User Manual 2 688 435
Data protocol manual 2 688 259
System documentation, PIXI Standard 0 688 825
System Documentation, PIXI 302 0 688 824

Modification no.: 080799 Page 25 of 26

# 15. Replacement Parts & Accessories

See Service Manual

Page 26 of 26 Modification no.: 080799

# Hengstler's Sales Partners in Germany for Printers, Counters & Sensors

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