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Carl Valentin printing systems comply with the following safety guidelines:

- Low-Voltage Directive (2014/35/EU)
- Electromagnetic Compatibility Directive (2014/30/EU)



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## 1 Introduction

## 1.1 General Instructions

Basic information and warning references with the corresponding signal words for the danger level are as follows specified in this manual:



**DANGER** identifies an extraordinarily great and immediate danger which could lead to serious injury or even death.



**WARNING** identifies a possible danger could lead to serious bodily injury or even death if sufficient precautions are not taken.



**WARNING** of cutting injuries. Pay attention that cutting injuries caused by blades, cutting devices or sharp-edged parts are avoided.



**WARNING** of hand injuries. Pay attention that hand injuries caused by closing mechanical parts of a machine/equipment are avoided.



**WARNING** of hot surfaces. Pay attention so as not to come into contact with hot surfaces.



**CAUTION** indicates a potentially dangerous situation which could lead to moderate or light bodily injury or damage to property.



**NOTICE** gives you tips. They make a working sequence easier or draw attention to important working processes.



\*

Gives you tips on protecting the environment.



- Optional accessories, special fittings
- Date Information in the display

## 1.2 Intended Use

The printing system is solely intended to print suitable media which have been approved by the manufacturer. Any other or additional use is not intended. The manufacturer/supplier is not liable for damage resulting from misuse. Any misuse is at your own risk.

Intended used includes heeding the operating manual, including the maintenance recommendations/regulations specified by the manufacturer.

The printing system may only be used while in proper working order and for the intended purpose. Users must be safe, aware of potential dangers and must comply with the operating instructions. Faults, in particular those which affect safety, must be remedied immediately.

The printing system is a state-of-the-art device which complies with the recognized safety-related rules and regulations. Despite this, a danger to life and limb of the user or third parties could arise and the printing system or other property could be damaged while operating the device.

## 1.3 Safety Instructions



#### WARNING!

The print mechanics is designed to be integrated into a machine. It is essential to ensure that national safety regulations are observed. Particular attention must be paid to the following points:

- ⇒ The print mechanics must be secured so that it is not possible to reach into the working area during the printing process.
- ⇒ It must be ensured that the required fire-protection device according to IEC 62368-1 is given (see chapter 6.4 in the IEC 62368-1).

The printing system is configured for a voltage from 110 ... 240 V AC. It has to be plugged into a grounded socket only.



NOTICE!

The protective earthing conductor of the socket is to be examined by a qualified technician.

The printing system may only be operated in the commercial area by persons over the age of 14 who have been instructed in its use.

Couple the printing system to devices using extra low voltage only.

Before making or undoing connections, switch off all devices involved (computer, printer, accessories etc.).

Operate the printing system in a dry environment only and do not get it wet (sprayed water, mist etc.).

Do not operate the printing system in explosive atmosphere and not in proximity of high voltage power lines.

Operate the printing system only in an environment protected against abrasive dust, swarf and other similar impurity.

Maintenance and servicing work can only be carried out by trained personnel.

Operating personnel must be trained by the operator on the basis of the operating manual.

Depending on use, ensure that clothing, hair, jewellery and similar personal items do not contact the exposed rotating parts and/or the moving parts.

The print unit and parts of it (e.g. motor, printhead) can get hot during printing. Do not touch the printhead during operation. Cool down the print unit before changing material, removal or adjustment.

Never use highly inflammable consumables.

Carry out only the actions described in these operating instructions. Any work beyond this may only be performed by the manufacturer or upon agreement with the manufacturer.

Unauthorized interference with electronic modules or their software can cause malfunctions.

Other unauthorized work or modifications to the printing system can endanger operational safety.

There are warning stickers on the printing systems that draw your attention to dangers. Therefore the warning stickers are not to be removed as then you and others cannot be aware of dangers and may be injured.



#### DANGER!

Danger to life and limb from power supply!

 $\Rightarrow$  Do not open the casing.



#### CAUTION!

Two-pole fuse.

⇒ Before opening the housing cover, disconnect the device from the mains supply and wait for a moment until the power supply unit has discharged.

## 1.4 Decommissioning and Dismantling



#### NOTICE!

The decommissioning of printing system can only be carried out by trained staff.



#### CAUTION!

Danger of injury by imprudent handling when lifting or placing the printing system. Risk of crushing by unexpected linear movement of the printing carriage.

- $\Rightarrow$  Do not underestimate the weight of the printing system (11... 13 kg).
- $\Rightarrow$  Protect the printing system against uncontrolled movement.

## 2 Machine Overview

Flexible labelling of packaging foil is effected either by means of Windows printer driver or by our proven design software Labelstar Office.

With eight vector fonts, six bitmap fonts and six proportional fonts the printing system has a large selection at different font types. It can be printed inverse, in italic format or 90 degrees turned fonts.

The handling of our durable printing system is easy and comfortable. The device settings can be made by the integrated, intuitive touchscreen display.

By using most modern printhead technology, we ensure a high standard of print quality.

Time-saving firmware update is possible by interface. As default, the printing system is equipped with a serial, USB and Ethernet interface. Additionally, the printing system is equipped with an USB Host that permits the connection of an external USB keyboard and/or an USB memory stick. The print module automatically recognizes by which interface it is controlled.

Thanks to the large number of options and variations the printing system can be adapted to each task.

#### 2.1 Print Mechanics



The printing system can be damaged by noncompliant winders.

- $\Rightarrow$  Attach only winders of Carl Valentin.
- B Connecting cable connection print mechanics – control unit



## 2.2 Control Unit (Panel Enclosure)

#### Figure 3

- A = Function keys
- B = Touch panel
- C = Status LED
- D = Slot for CF card
- E = Connecting cable connection print mechanics – control unit
- F = USB port
- G = Ethernet interface
- H = USB host for USB keyboard and USB stick
- I = External inputs/outputs
- J = Serial interface RS 232
- K = Mains connection
- L = Grounding bolt
- M = Power switch

## 2.3 Control Unit (Desktop Enclosure)





#### Figure 4

- A = USB host for USB keyboard and USB stick
- B = Touch panel
- C = Power switch
- D = Slot for CF card
- E = Connecting cable connection print mechanics – control unit
- F = USB port
- G = Ethernet interface
  - 1 LED green
    - Lighting = Speed 100 Mbit
    - Off = Speed 10 MBit 2 - LED orange Lighting = Connection active
    - Flashing = Data transfer
  - Off = No connection
- H = USB host for USB keyboard and USB stick
- I = External inputs/outputs
- J = Serial interface RS 232
- K = Mains connection

#### 3 **Operating Conditions**

Before initial operation and during operation these operating conditions have to be observed to guarantee save and interferencefree service of our printing systems.

Therefore please carefully read these operating conditions.

Shipment and storage of our printing systems are only allowed in original packing.

Installation and initial operation of printing systems is only allowed if operating conditions were fulfilled.

Initial operation, programming, operation, cleaning and service of our printing systems are only recommended after careful study of our manuals.

Operation of printing systems is only allowed by especially trained persons.



#### NOTICE!

Carry out regular training courses. The content of the training are the chapters 3 (Operating Conditions), chapter 6 (Flat Type - Load Media), chapter 7 (Corner Type - Load Media) and chapter 9 (Maintenance and Cleaning).

These indications are also valid for someone else's equipment supplied by us.

Only use original spare and exchange parts.

Please contact the manufacturer with respect to spare/wear parts.

Conditions for installation place	The installation place of the printing system should be even, free of vibration and currents of air are to be avoided.				
	The printing systems have to be installed to ensure optimal operation and servicing.				
Installation of power supply	The installation of the power supply to connect our printing systems has to be effected according to the international rules and regulations, especially the recommendations of one of the three following commissions:				
	International Electronic Commission (IEC)				
	<ul> <li>European Committee for Electro technical Standardisation (CENELEC)</li> </ul>				
	Verband Deutscher Elektrotechniker (VDE)				
	Our printing systems are constructed according to VDE and have to be connected to a grounded conductor. The power supply has to be equipped with a grounded conductor to eliminate internal interfering voltage.				

SPE II

Technical data of	Power line voltage and power line frequency: See type plate				
power supply	Allowable tolerance of power line voltage: +6 %10 % of nominal value				
	Allowable tolerance of power line frequency: +2 % … −2 % of nominal value				
	Allowable distortion factor of power line voltage: $\leq 5 \%$				
Anti-interference measures	In case your net is infected (e.g. by using thyristor controlled machines) anti-interference measures have to be taken. Please use one of the following possibilities:				
	• Provide separate power supply to our printing systems.				
	<ul> <li>In case of problems please connect capacity-decoupled isolation transformer or similar interference suppressor in front of our printing systems.</li> </ul>				
Stray radiation and	Emitted interference according to EN 61000-6-3: 01-2007				
disturbance	Immunity according to EN 61000-6-2: 03-2006				
	<b>NOTICE!</b> This is a machine of type A. This machine can cause interferences in residential areas; in this case it can be required from operator to accomplish appropriate measures and be responsible for it.				
Connecting lines to external machines	All connecting lines have to be guided in shielded lines. Shielding has to be connected on both sides to the corner shell.				
	It is not allowed to guide lines parallel to power lines. If a parallel guiding cannot be avoided a distance of at least 0.5 m has to be observed.				
	Temperature of lines between: -15 +80 °C.				
	It is only allowed to connect devices which fulfil the request 'Safety Extra Low Voltage' (SELV). These are generally devices which are checked corresponding to EN 62368-1.				
Installation of data lines	The data cables must be completely protected and provide with metal or metallised connector housings. Shielded cables and connectors are necessary, in order to avoid radiant emittance and receipt of electrical disturbances.				

Installation of	Allowable lines				
data lines	Shielded line:	4 x 2 x 0,14 mm² ( 4 x 2 x AWG 26) 6 x 2 x 0,14 mm² ( 6 x 2 x AWG 26) 12 x 2 x 0,14 mm² (12 x 2 x AWG 26)			
	Maximum cable length:	Interface V 24 (RS-232C) - 3 m (with shielding) USB - 3 m Ethernet - 100 m			
Air convection	To avoid inadmissible hea	ting, free air convection has to be ensured.			
Limit values	Protection according IP: 2 Ambient temperature °C ( Ambient temperature °C (	0 operation): Min. +5 Max. +40 transport, storage): Min. −25 Max. +60			
	Relative air humidity % (operation): Max. 80				
	Relative air humidity % (tra (bedewing of printing syste	ansport, storage): Max. 80 ems not allowed)			
Guarantee	We do not take any respo	nsibility for damage caused by:			
	Ignoring our operating	conditions and operating manual			
	<ul> <li>Incorrect electric insta</li> </ul>	llation of environment			
	Building alterations of	our printing systems			
	Incorrect programming	and operation			
	Not performed data pr	rotection			
	Using of not original si	pare parts and accessories			
	Natural wear and tear				
	When (re)installing or prog control the new settings by avoid faulty results, report	gramming our printing systems please y test running and test printing. Herewith you s and evaluation.			
	Only specially trained staf	f is allowed to operate the printing systems.			
	Control the correct handling of our products and repeat training.				
	We do not guarantee that all models. Caused by our improvement, technical da	all features described in this manual exist in efforts to continue further development and ata might change without notice.			
	By further developments of examples shown in the marked model.	or regulations of the country illustrations and anual can be different from the delivered			

Please pay attention to the information about admissible print media and the notes to the printing system maintenance, in order to avoid damages or premature wear.

We endeavoured to write this manual in an understandable form to give and you as much as possible information. If you have any queries or if you discover errors, please inform us to give us the possibility to correct and improve our manual.

# 4 Technical Data

	SPE II 106/12	SPE II 106/24	SPE II 107/12	SPE II 108/12	SPE II 160/12	SPE II 162/12
Print resolution	300 dpi	600 dpi	300 dpi	300 dpi	300 dpi	300 dpi
Max. print speed	350 mm/s	100 mm/s	350 mm/s	350 mm/s	300 mm/s	300 mm/s
Print width	105.7 mm	105.6 mm	106.6 mm	108.4 mm	160 mm	162.6 mm
Passage width	116 mm	116 mm	116 mm	116 mm	176 mm	176 mm
Printhead	Flat Type	Flat Type	Corner Type	Flat Type	Corner Type	Flat Type
Acoustic Emission (measuri	ng distance 1	m)				
Average sound power level	66,4 dB(A)	62,3 d(B)A	63,7 dB(A)	68,4 dB(A)	67,8 dB(A)	65,1 dB(A)
Labels	1					
Labels, continuous rolls or fan-fold	paper, cardb	oard, textile, s	synthetics			
Material weight	max 220 g/m	n² (larger on de	emand)			
Min label width	25 mm	25 mm	25 mm	25 mm	25 mm	50 mm
Min label height	15 mm	15 mm	15 mm	15 mm	15 mm	15 mm
Max label height	3000 mm	750 mm	3000 mm	3000 mm	2000 mm	2000 mm
Label sensors		-		-		
Standard	transmission	1				
Option	transmission ultrasonic ph	and reflexion	from bottom, t	transmission a	nd reflexion fro	om top,
Transfer ribbon						
Ink	außen/innen					
Roll diameter	Ø 90 mm					
Core diameter	25,4 mm / 1'	,				
Ribbon length	450 m	450 m	450 m	450 m	450 m	450 m
Ribbon width	110 mm	110 mm	110 mm	110 mm	163 mm	170 mm
Dimensions in mm (width x l	height x depth	)				
Print mechanics	245 x 300 x	317			245 x 300 x 3	377
Control unit	panel enclos desktop enc	ure: 314 x 230 osure: 287x12	) x 80 (without 27x250 (withou	connection linut connection linut	ies) nes)	
Weight						
Print mechanics	approx 11 kg	)			approx 13 kg	]
Control unit	panel enclos desktop enc	ure: approx. 5 osure: approx	.5 kg (without 4.5 kg (withou	connection lin at connection l	es) ines)	
Connecion cable	approx 0.85	kg (print mech	anics – contro	ol unit)		
Electronics						
Processor	High Speed	32 Bit				
RAM	16 MB					
Slot	for Compact	Flash card Ty	pe I			
Battery cache	for Real-Tim	e clock (storag	ge of data with	shut-down)		
Warning signal	acoustic sigr	nal when error				
Interfaces						
Serial	RS-232C (up	o to 115200 Ba	aud)			
USB	2.0 High Spe	ed Slave				
Ethernet	10/100 Base	T, LPD, Rawl	P-Printing, DH	ICP, HTTP, F	ГР	
2 x USB Host	connection for external USB keyboard and memory stick					

Operatation data	SPE II	SPE II	SPE II	SPE II	SPE II	SPE II	
Devee events	100/12	106/24	10//12	108/12	160/12	162/12	
Power supply	100 240 V AC / 50-60 Hz						
Power consumption	400 VA						
	4 2 A	\/					
	2x 14A 250	V					
	540 C		<u></u>				
Operation Banal (touch a	max 80 % (i	ion condensin	<u>g)</u>				
Operation Panel (louch-s		notion monu	nomon cord r	rint start tast	print food ob	aut manu	
Operating functions	Tavorites, fur	nction menu, n	nemory card, p	orint start, test	print, reed, ab	out menu	
	800 x 480 pi	xei, screen siz	2e 7				
Settings				( ()			
	label and de password pr	vice paramete otection, varia	language settir ers, interfaces, ibles	ngs (others on	demand)		
Monitoring							
Stop printing if	end of ribbo	n / end of labe	ls				
Status report	extensive st	atus print with	information ab	oout settings e	.g. print length	counter,	
	runtime cour printout of a	nter, photocell Il internal fonts	interface and and all suppo	network paran	neters s		
Fonts							
Font types	6 Bitmap for other fonts c	nts; 8 Vector fo	onts/TrueType	fonts; 6 propo	ortional fonts		
Character sets	Windows 12	50 up to1257,	DOS 437, 850	), 852, 857, U	TF-8		
	all West and	l East Europea	an Latin, Cyrilli	c, Greek and <i>i</i>	Arabic (option)	characters	
	other charac	30 Ster sets on de	mand				
Bitmap fonts	size in width and height 0.8 5.6						
	zoom 2 9 orientation 0	)°. 90°. 180°. 2	270°				
Vector fonts/TrueType fonts	size in width and height 1 99 mm						
	variable zoom						
	orientation 0	)°, 90°, 180°, 2	270°				
Font attributes	depending on character font bold, Italic, Inverse, Vertical						
Font width	variable						
Bar Codes							
1D bar codes	CODABAR, 93, EAN 13, Pharmacode	Code 128, Co EAN 8, EAN <i>i</i> e, PZN 7 Code	ode 2/5 interlea ADD ON, GS1 e, PZN 8 Code	ved, Code 39 -128, Identcoc , UPC-A, UPC	, Code 39 exte de, ITF 14, Lei :-E	ended, Code tcode,	
2D bar codes	Aztec Code, CODABLOCK F, DataMatrix, GS1 DataMatrix, MAXICODE, PDF 417, QR Code			DE, PDF			
Composite bar codes	GS1 DataBar Expanded, GS1 DataBar Limited, GS1 DataBar Omnidirectio GS1 DataBar Stacked, GS1 DataBar Stacked Omnidirectional, GS1 DataBar Truncated			lirectional, DataBar			
	all bar codes 180°, 270°. Optionally w	s are variable i <i>r</i> ith check digit	in height, mode and human re	ule width and i adable line.	ratio. orientatio	on 0°, 90 °,	
Software							
Configuration	ConfigTool						
Process control	NiceLabel						
Label software	Labelstar Of	fice Lite					
	Labelstar Of	fice					
Windows driver	Windows 7®	) - Windows 10 erver 2008® (F	0® 32/64 Bit, V 2) - Windows	Vindows 11® Server 2022®	)		

#### Standard equipment

- 7" touch display
- Internal lighting of the print mechanics
- Left or right type
- Real time clock with printout date and time Automatic daylight saving time Storage of data with shut-down
- Variables: link field, counter, date/time, currency and shift variable, CF data
- Ribbon savings (107/12 and 160/12 only)
- Thermal or thermal transfer version
- Control input/output
- USB host for connection of an external USB keyboard and an USB memory stick
- Ethernet interface
- CVPL protocol and ZPL II<sup>®</sup> protocol
- Label photocell (transmission)
- Slot for CF card

#### **Optionale equipment**

- External rewinder for the carrier material
- External label unwinder
- Dispenser unit
- Reflexion photocell
- Ultrasonic photocell
- Labelstar Office

## 4.1 Control Inputs and Outputs

By means of a maximum of 16 control inputs and outputs which, in the following, are also referred to as ports, different functions of the printing system can be triggered and operating states can be displayed.

The ports are provided by means of a D-Sub bushing (26pin HD) at the rear panel of the printing system and are galvanically isolated from protective earth (PE) by means of an optocoupler semi-conductor route.

Each port can be configured as input and as output. This function however, is predefined in the printer software and cannot be changed by the user.

The following parameters can be changed and set by using the menu: debounce times and high or low active.



Figure 5

#### Configuration of D-Sub socket



## Figure 6

#### **Cable identification**

1	white
2	brown
3	green
4	yellow
5	grey
6	pink
7	blue
8	red
9	black
10	violet
11	grey-pink
12	red-blue
13	white-green
14	brown-greed
15	white-yellow
16	yellow-brown
17	white-grey
18	grey-brown
19	white-pink
20	pink-brown
21	white-blue
22	brown-blue
23	white-red
24	brown-red
25	white-black
26	brown-black

SPE II

Identification	Pin	Description / Function
Port 1	10	Print start (Input)
Port 2	1	Reprint last printed label (Input)
Port 3	11	Counter Reset (Input)
Port 4	2	No assigned function
Port 5	12	Error reset (Input)
Port 6	3	Cancel all print jobs (Input)
Port 7	13	Label end sensor (Input)
Port 8	4	External release signal (Input)
Port 9	15	Error (Output)
Port 10	6	Print order activ (Output)
Port 11	16	Dispenser photocell: Label exists at dispenser photocell (Output)
Port 12	7	Single print (Output)
Port 13	17	Ready (Output)
Port 14	8	No assigned function
Port 15	18	No assigned function
Port 16	9	Prior warning for transfer ribbon end (Output)
COM/VDC for Inputs	19	Common reference potential of all control inputs. 'COM/VDC for Inputs' is usually connected with the (-) terminal of the control voltage and the control inputs are switched to active (+). By means of the option '2nd LED', 'COM/VDC for Inputs' can optionally be connected with the (+) terminal of the control voltage. Then, the control inputs are switched to active (-).
VDC for Outputs	20	Common supply connection of all control outputs. 'VDC for Outputs' must be connected with the (+) terminal of the control voltage. Never leave 'VDC for Outputs' open even if no output is used.
COM for Outputs	5,14 21,22	Common reference potential of all control outputs. 'COM for Outputs' must be connected with the (-) terminal of the control voltage. Never leave 'COM for Outputs' open even if no output is used.
GND-PE	23,24	'GND-PE' is the reference potential of the '+5 VDC EXT' and '+24 VDC EXT' voltages provided by the printing system. 'GND-PE' is printer internally connected with protective earth (PE).
+ 5 VDC EXT	25	5 Volt DC output for external use. Max. 1 A. This voltage is provided from printing system and can be used e.g. as control voltage. Never apply any external voltage to this output.
+ 24 VDC EXT	26	24 Volt DC output for external use. Max. 1 A. This voltage is provided from printing system and can be used e.g. as control voltage. Never apply any external voltage to this output.

Port 1 to Port 16 = Assignment for I/O Profile Std\_Label

SPE	Ш
	••

Identification	Pin	Description / Function
Port 1	10	Print start and cut (Input)
Port 2	1	Error reset (Input)
Port 3	11	Number of the file to load Bit 0 (Input)
Port 4	2	Number of the file to load Bit 1 (Input)
Port 5	12	Number of the file to load 2 (Input)
Port 6	3	Number of the file to load 3 (Input)
Port 7	13	Number of the file to load 4 (Input)
Port 8	4	Number of the file to load 5 (Input)
Port 9	15	Error (Output)
Port 10	6	Print order active (Output)
Port 11	16	No function
Port 12	7	Printing (Output)
Port 13	17	Ready (Output)
Port 14	8	No function
Port 15	18	No function
Port 16	9	Transfer ribbon prior warning (Output)

Port 1 to Port 16 = Assignment for I/O Profile *StdFileSelLabel* 

## Port 1 to Port 16 = Assignment for I/O Profile APL

Identification	Pin	Description / Function
Port 1	10	Print start (Input)
Port 2	1	Reprint last printed label (Input)
Port 3	11	Counter reset (Input)
Port 4	2	Option applicator only: Start application (Input)
Port 5	12	Error reset (Input)
Port 6	3	Cancel all print jobs (Input)
Port 7	13	No function
Port 8	4	No function
Port 9	15	Error (Output)
Port 10	6	Print order active (Output)
Port 11	16	No function
Port 12	7	Printing (Output)
Port 13	17	Ready (Output)
Port 14	8	Option applicator only: Ready for application (Output)
Port 15	18	Option applicator only: Pad is in printing position (Output)
Port 16	9	Transfer ribbon prior warning (Output)

#### **Technical data**

Plug Connector				
Туре	D-Sub connector High Density 26-pin. / connector			
Manufacturer	W+P-Products			
Reference number	110-26-2-1-20			
Output Voltages (connected with GND-PE)				
+ 24 V / 1 A	Fuse: Polyswitch / 30 V / 1 A			
+ 5 V / 1 A	Fuse: Polyswitch / 30 V / 1 A			
Port 1 - 15				
Input				
Tension	5 VDC 24 VDC			
Impedance	47Ω + (100nF    10 kΩ)			
Output				
Tension	5 VDC 24 VDC			
Impedance	47Ω + (100nF    10 kΩ    47Ω)			
Current max.	High +15 mA Low   -15 mA			
Port 16				
Input				
Tension	5 VDC 24 VDC			
Impedance	100nF    10 kΩ			
Output				
Tension	5 VDC 24 VDC			
Impedance	100nF    10 kΩ			
Current max.	High +500 mA (Darlington BCP56-16) Low - 500 mA (Darlington BCP56-16)			
Optocoupler				
Output	TCMT4106, CTR 100 % - 300 %, Vishay or TLP281-4(GB), CTR 100 % - 600 %, Toshiba			
Input	TCMT4106, CTR 100 % - 300 %, Vishay or TLP281-4(GB), CTR 100 % - 600 %, Toshiba			
Input Option 2nd LED	TCMT4600, CTR 80 % - 300 %, Vishay or TLP280-4, CTR 33 % - 300 %, Toshiba			

#### Example 1



#### Figure 7



Device connection to a operating panel.





#### Example 3

Device connection version if 'Option: 2. LED'.





#### Precautions

When connecting a reed contact with a control input, the contact must have a switching capacity of min. 1 A in order to prevent the contact from sticking due to the inrush current. As an alternative, a suitable resistor can be connected in series.

If one of the printer's internal voltages '+5 VDC EXT' or '+24 VDC EXT' is used, an external fuse e.g. 0.5 AF, should be additionally installed to protect the printer electronics.

In the event of an inductive load, an antiparallel connected diode, for instance, must be used to discharge the induction energy.

In order to minimise the influence of leakage currents at control outputs, a resistor must, depending on what is connected, be installed in parallel with the load.

In order to avoid any damages to the printing system, the max. output currents must not be exceeded or outputs shorted.

## 5 Installation

- $\Rightarrow$  Lift the printing system on the bottom and remove the printing system from the carton.
  - $\Rightarrow$  Check the print mechanics and control unit for transport damages.
  - $\Rightarrow$  Check delivery for completeness.

#### **Scope of delivery** • Print mechanics.

- Control unit with cable.
- Connecting cable.
- I/O accessories (mating connector for I/O).
- 1 transfer ribbon roll.
- Empty core, mounted on transfer ribbon rewinder.
- Printhead cleaning foil.
- Product Safety Guide.

## NOTICE!

Retain original packaging for subsequent transport.

#### 5.1 Install/Attach the Printing System at Machines



#### NOTICE!

Only trained and qualified technical personnel may carry out mounting, maintenance and repair work in accordance to this instruction.



#### CAUTION!

The printing system and the print media can be damaged by moisture and water.

- ⇒ Set up the printing system only in a dry place protected from sprayed water.
- $\Rightarrow$  Set up the print mechanics on a level, vibration-free and air draught-free surface.
- $\Rightarrow$  Open the cover of print mechanics.
- $\Rightarrow$  Remove the foam transportation safeguards near the printhead.

SPE II

Unpack the

printing system

# Attachment of printing system



#### Figure 10

⇒ The printing system (C) is mounted on a suitable supporting structure (A) with five M5 fixing screws.



#### CAUTION!

Damage to the printing system due to insufficient fastening. There is a danger that the printing system will fall out of the supporting structure – if the printing system is not properly attached. This can cause injuries.

- $\Rightarrow$  For proper operation, the printing system must be attached on a supporting sctructure.
- $\Rightarrow$  Use suitable screws that can support the weight of the printing systam.

## 5.2 Install the Control Unit (Panel Enclosure)

- At the side panels of the control unit (A) are two threads M5 which can be used for the attachment of the control unit at a machine. The maximum thread depth is 6 mm.
- At the back panel of control unit (A) are four threads M6 (C) in distance of 57 x 57 mm which can be used for the attachment of the control unit at a machine. The maximum thread depth is 8 mm.
- Ex works optionally a mounting bracket (E) is offered which can be used to the pivoting support of control unit (A) to the threaded holes (B). The mounting bracket can be fastened standing or hanging with four screws M6 (D) at a machine.
- Ex works optionally a fixing flange Ø 30 mm or a base clamp Ø 30 mm are offered which can be used to the support of the control unit (A) at the threaded holes (C). The clamping pieces (F) can be integrated into a piping system Ø 30 mm.





## 5.3 Install the Control Unit (Desktop Enclosure)

- On the underside of the control unit (A) there are four support feet (B), which are used to place the control unit on a flat surface.
- On the underside of the control unit (A) there are four M6 threads (D) at a distance of 57 x 57 mm, which can be used to attach the control unit to a machine. The maximum thread depth is 8 mm.
- A flange clamp piece Ø 30 mm or a foot clamp piece Ø 30 mm are optionally available ex works, which serve to accomodate the control unit (A)at the threaded holes (D). The clamping parts (C) can be integrated in a pipe system Ø 30 mm.



Figure 12

# 5.4 Install the Protective Cover for the Control Unit (Panel Enclosure)



#### NOTICE!

By mounting the optional protective cover, the protection class IP 65 according to DIN EN 60529 is achieved for the control unit of SPE II.



Figure 13

- 1. Successively remove the four screws (C) on the back on the control unit (A), slide on the sealing rings (B) and screw in the screws (C) again.
- 2. Connect the connection cable print mechanics/control unit (F) to the control unit (A).
- If necessary, connect a connection cable for external inputs/outputs to the appropriate socket of the control unit (A).
- If necessary, connect an Ethernet or USB data cable to the control unit (A).
- Insert the USB data cable (E) on the inside of the protective cover (E) into the USB socket.
- Guide the open end of the connection cable print mechanics / control unit (F) through the opening of the protective cover (G). The plug must be tilted sideways. Then guide the power cable (D) and if necessary, the data and I/O cable through the opening of the protective cover (G).
- Guide the protective cover (G) in the direction of the control unit (A) until the USB data cable (E) can be connected to the control unit (A).
- 8. Screw the protective cover (G) to the control unit (A) with the four screws (I) and the sealing rings (H).
- 9. Remove the upper part of the cable entry strip (K) after removing the both screws (J).
- Remove the cable grommets (M) that fit to the respective connection cables from the cable entry strip (K) and enclose the cables two to three centimeters in front of the protective cover (G).
- 11. Place the cable entry strip (K) in front of the protective cover and insert the cable grommets (M) with connection cables into the slots. The connection cable print mechanics/control unit (F) must be placed in the upper right corner and the power cable (D) should be placed on the bottom left (see Fehler! Verweisquelle konnte nicht gefunden werden.).



#### NOTICE!

The side of the cable entry strip (K) with the seal injected must point in the direction of the protective cover (G).

The smooth, even sides of the grommets (M) must face each other in the middle of the entry strip.

Unnecessary cable grommets (M) must be closed with the enclosed suitable plugs (N).

- 12. Fix the upper part of the cable entry strip (K) with the screws (J), so that the connecting cables are still movable.
- 13. Fix the cable entry strip (K) to the protective cover (G) with the screws (L).
- 14. Screw tight the upper part of the cable entry strip (K).



#### NOTICE!

Check that all cables are safely enclosed by the grommets (M) so that no water or dust can enter. Too large grommets and loose cables lead to entering of impurities into the case. Suitable cable grommets in different sizes are available ex works. The size (diameter) is indicated on the respective grommet.



#### Figure 14

For loading of print data, the integrated USB interface (O) is accessible from the outside.



## NOTICE!

The protection class IP 65 is only achieved if the cap of the interface is firmly closed, i.e. no USB stick or data cable is inserted.

Do not bend the connection cable (D, F and others) directly at the cable entry strip (K).

Connect to power supply

## 5.5 Connect the Printing System

The printing system is equipped with a versatile power supply unit. The device may be operated with a mains voltage of 240 V AC / 50-60 Hz without any adjustments or modifications.

## CAUTION!

The printing system can be damaged by undefined switchon currents.

 $\Rightarrow$  Set the power switch to '0' before plugging in the printing system.

 $\Rightarrow$  Insert the power cable into the power connection socket.

 $\Rightarrow$  Insert the plug of power cable into a grounded electrical outlet.

Connect to a computer or to a computer network

## NOTICE!

Insufficient or missing grounding can cause faults during operation.

Ensure that all computers and connection cables connected to the printing system are grounded.

⇒ Connect the printing system to a computer or network with a suitable cable.

## 5.6 Initial Operation of the Printing System

#### Before initial operation

- $\Rightarrow$  Mount the print mechanics.
- $\Rightarrow$  Connect all cables between the print mechanics and control unit and protect the cables against unintentional unscrewing.
- $\Rightarrow$  Connect the control unit and PC by interface.
- ⇒ Connect the control unit and packaging machine by inputs and outputs.
- $\Rightarrow$  Connect the power cable of control unit.
- $\Rightarrow$  After all connections are completed, switch on the control unit.
Insert material

- $\Rightarrow$ Insert label material and transfer ribbon (see chapter 6. Flat Type – Load Media, page 39 or see chapter 7. Corner Type – Load Media, page 43).
- Go to menu Menü Label Settings and select the menu item  $\Rightarrow$ Measure label to start the measuring process.



### NOTICE!

To enable a correct measuring, at least two complete labels have to be passed through (not for continuous labels).

During measuring the label and gap length small differences can occur. Therefore the values can be set manually in menu Label Settings/Label length and Gap length.

### Installation

## 6 Flat Type – Load Media

### 6.1 Load Label Roll

### NOTICE!

As for the electrostatic unloading the thin coating of the thermal printhead or other electronic parts can be damaged, the label material should be antistatic.

The use of wrong materials can lead to printer malfunctions and the guarantee can expire.





### Figure 15

- 1. Open the cover of print module.
- 2. Open the printhead (H) by turning the pressure lever (I) anticlockwise.
- Lead the label material below the label guiding (B) and printhead (H) and take care that the labels run through the photocell (A).
- 4. Move the printhead (H) down by turning the pressure lever (I) in clockwise direction until it locks.
- 5. Adjust the adjusting rings (C) of the label guiding to the width of material.
- 6. Turn the locking lever (F) upwards in clockwise direction while turning the dispenser whip (D) downwards.
- 7. Remove some labels from the supporting paper and feed the material over the dispensing edge (G) and between the groove plastic roller (E) and the shaft of the dispensing whip (D).
- 8. Press again the dispensing whip (D) to the top and lock it.

- 9. Lead the supporting paper backwards and fix it at the rewinding unit.
- 10. Enter the offset value in menu Dispenser I/O.
- 11. Close the cover of print module.



#### Figure 16

- 1. Open the cover of print module.
- 2. Open the printhead (D) by turning the pressure lever (E) anticlockwise.
- Lead the label material below the label guiding (B) and printhead (D) and take care that the labels run through the photocell (A).
- 4. Move the printhead (D) down by turning the pressure lever (E) in clockwise direction until it locks.
- 5. Adjust the adjusting rings (C) of the label guiding to the width of material.
- 6. Close the cover of print module.

### 6.2 Load Transfer Ribbon

## NOTICE!

For the thermal transfer printing method it is necessary to load a ribbon, otherwise when using the printing system in direct thermal print it is not necessary to load a ribbon. The ribbons used in the printing system have to be at least the same width as the print media. In case the ribbon is narrower than the print media, the printhead is partly unprotected and this could lead to early wear and tear.







# NOTICE!

Before a new transfer ribbon roll is loaded, the printhead must be cleaned using printhead and roller cleaner (97.20.002). For detailed information, please see page 84. The handling instructions for the use of Isopropanol (IPA) must be observed. In the case of skin or eye contact, immediately wash off the fluid thoroughly with running water. If the irritation persists, consult a doctor. Ensure good ventilation.

- 1. Open the cover of print module.
- 2. Open the printhead (C) by turning the pressure lever (D) anticlockwise.



#### CAUTION!

Risk of scraping when inserting the transfer ribbon res. when removing the used transfer ribbon!

- $\Rightarrow$  Be careful with the spring steel plate edges!
- 3. Load the transfer ribbon roll (A) with outer winding onto the unwinding roll (B).
- 4. Place an empty ribbon roll on the winding roll (E).
- 5. Lead the transfer ribbon below the printhead (C).
- Fix the beginning of the transfer ribbon with an adhesive strip to the empty core of the rewinding roll (E). It is important to pay attention to the rotation direction of the transfer ribbon rewinding.
- 7. Move the printhead (C) down by turning the pressure lever (D) in clockwise direction until it locks.
- 8. Close the cover of print module.



### NOTICE!

As for the electrostatic unloading the thin coating of the thermal printhead or other electronic parts can be damaged, the transfer ribbon should be antistatic. The use of wrong materials can lead to malfunctions and the guarantee can expire.



### CAUTION!

Impact of electrostatic material on people!

⇒ Use antistatic transfer ribbon because electrostatic discharge can occur when removing.

## 7 Corner Type – Load Media

### 7.1 Load Label Roll

## NOTICE!

As for the electrostatic unloading the thin coating of the thermal printhead or other electronic parts can be damaged, the label material should be antistatic.

The use of wrong materials can lead to printer malfunctions and the guarantee can expire.



Figure 18

- 1. Open the cover of print module.
- Open the printhead (I) by turning the pressure lever (J) anticlockwise.
- 3. Pull up the latch of the bearing rail to open the bearing rail (A).
- Lead the label material below the label guiding (B) and printhead (I) and take care that the labels run through the photocell (C).
- 5. Press the bearing rail (A) down again until it engages.
- 6. Move the printhead (I) down by turning the pressure lever (J) in clockwise direction until it locks.
- 7. Adjust the adjusting rings (D) of the label guiding to the width of material.
- 8. Turn the locking lever (G) upwards in clockwise direction while turning the dispenser whip (E) downwards.
- Remove some labels from the supporting paper and feed the material over the dispensing edge (H) and between the groove plastic roller (F) and the shaft of the dispensing whip (E).

SPE II

Load label roll in dispenser mode

- 10. Press again the dispensing whip (E) to the top and lock it.
- 11. Lead the supporting paper backwards and fix it at the rewinding unit.
- 12. Enter the offset value in menu Dispenser I/O.
- 13. Close the cover of print module.



### Figure 19

- 1. Open the cover of print module.
- 2. Open the printhead (E) by turning the pressure lever (F) anticlockwise.
- 3. Pull up the latch of the bearing rail to open the bearing rail (A).
- Lead the label material below the label guiding (B) and printhead (E) and take care that the labels run through the photocell (C).
- 5. Press the bearing rail (A) down again until it engages.
- 6. Move the printhead (E) down by turning the pressure lever (F) in clockwise direction until it locks.
- 7. Adjust the adjusting rings (D) of the label guiding to the width of material.
- 8. Close the cover of print module.

Load label in passing mode

### 7.2 Load Transfer Ribbon

#### NOTICE! F

For the thermal transfer printing method it is necessary to load a ribbon, otherwise when using the printing system in direct thermal print it is not necessary to load a ribbon. The ribbons used in the printing system have to be at least the same width as the print media. In case the ribbon is narrower than the print media, the printhead is partly unprotected and this could lead to early wear and tear.



Figure 20



### NOTICE!

Before a new transfer ribbon roll is loaded, the printhead must be cleaned using printhead and roller cleaner (97.20.002). For detailed information, please see page 84. The handling instructions for the use of Isopropanol (IPA) must be observed. In the case of skin or eye contact, immediately wash off the fluid thoroughly with running water. If the irritation persists, consult a doctor. Ensure good ventilation.

- 1. Open the cover of print module.
- 2. Open the printhead (C) by turning the pressure lever (D) anticlockwise.



#### CAUTION!

Risk of scraping when inserting the transfer ribbon res. when removing the used transfer ribbon!

- $\Rightarrow$  Be careful with the spring steel plate edges!
- 3. Load the transfer ribbon roll (A) with outer winding onto the unwinding roll (B).
- 4. Place an empty ribbon roll on the winding roll (E).
- 5. Lead the transfer ribbon below the printhead (C).
- 6. Fix the beginning of the transfer ribbon with an adhesive strip to the empty core of the rewinding roll (E). It is important to pay attention to the rotation direction of the transfer ribbon rewinding.
- 7. Move the printhead (C) down by turning the pressure lever (D) in clockwise direction until it locks.
- 8. Close the cover of print module.



### NOTICE!

As for the electrostatic unloading the thin coating of the thermal printhead or other electronic parts can be damaged, the transfer ribbon should be antistatic. The use of wrong materials can lead to malfunctions and the guarantee can expire.



### CAUTION!

Impact of electrostatic material on people!

⇒ Use antistatic transfer ribbon because electrostatic discharge can occur when removing.

## 8 Function Menu

## 8.1 Menu Structure (Touch-Screen)



Export the latest menu structure from ConfigTool. Printer settings --> Configuration --> Export

Dispenser I/O	I/O Port Parameter 1-8	Input print start
	1	Input reprint label
		Input reset counter
		Input continue applying (applicator)
		Input reset error
		Input cancel all printjobs
		Inable
		Input print release
	I/O Port Parameter 9-16	Output error
		Output print job active
		Outpput label in dispenser photocell
		Output printing
		Output print-ready
		Output applicator ready for applying
		Output warning scanner NoRead
		Output ribbon end prior warning
	Dispenser Photocell	Dispenser photocell level
		Dispenser photocell status
		Dispenser photocell trigger level
		Dispenser photocell PWM
	General Parameters	Operating mode
		Offset
		I/O profile
		Debounce
		Start delay
		Save start signal
		I/O protocol port
Ribbon Saving	On/Off	
	]	
Network	IP address	
	Netmask	
	Standard Gateway	
	Speed/Duplex	
	DHCP	
	Printer name	

MAC address

10.23



Service Functions	Photocell Service	Transmission photocell level
		Transmission photocell min level
		Transmission photocell max level
		Transmission photocell trigger level
		Transmission photocell PWM
		Reflexion photocell level
		Reflexion photocell min level
		Reflexion photocell max. level
		Reflexion phocell trigger level
		Reflexion photocell PWM
		Ribbon photocell status
	Device Status	Paper counter printhead
		Paper counter printing system
		Heater resistance
		Printhead temperature
		Online/Offline
	Print Optimization	Zero Y-adjustment
		Zero X-adjustment
		Print length correction
		Printhead sensor
		Motor acceleration
		Motor brake delay
	Ribbon Service	Length and ink side
		Prewarning
		Current diameters
	I/O Status	Print start interrupt counter
	1/O Status	
		Ignored print start counter
		Reset counter
		I/O test output
		I/O test output state
	General Parameters	Print examples
		Write log files to MC
		Delete job and spool

Password	Operation	<u> </u>	Password
			Password configuration menu
			Password protection configuration menu
			Password favorites
			Password protection favorites
			Password memory card
			Password protection memory card
			Password printing
			Password protecion printing
		1	
	Network		Password
			Password protection HTTP
			Password protection Telnet
			Passwort protection remote access
		1	
Maintenance	Print Preview	<u> </u>	Preview available
Maintenance	Print Preview		Preview available Zoom
Maintenance	Print Preview		Preview available Zoom Preview rotated
Maintenance	Print Preview		Preview available Zoom Preview rotated Preview interval
Maintenance	Print Preview		Preview available Zoom Preview rotated Preview interval Show process data
Maintenance	Print Preview		Preview available Zoom Preview rotated Preview interval Show process data
Maintenance	Print Preview		Preview available     Zoom     Preview rotated     Preview interval     Show process data     Backlight
Maintenance	Print Preview		Preview available         Zoom         Preview rotated         Preview interval         Show process data         Backlight         Orientation
Maintenance	Print Preview     LCD     System Settings		Preview available     Zoom     Preview rotated     Preview interval     Show process data     Backlight     Orientation     Printer type
Maintenance	Print Preview     LCD     System Settings		Preview available         Zoom         Preview rotated         Preview interval         Show process data         Backlight         Orientation         Printer type         Reset paper counter printhead
Maintenance	<ul> <li>Print Preview</li> <li>LCD</li> <li>System Settings</li> </ul>		Preview available         Zoom         Preview rotated         Preview interval         Show process data         Backlight         Orientation         Printer type         Reset paper counter printhead         Reset paper counter device
Maintenance	<ul> <li>Print Preview</li> <li>LCD</li> <li>System Settings</li> </ul>		Preview available         Zoom         Preview rotated         Preview interval         Show process data         Backlight         Orientation         Printer type         Reset paper counter printhead         Reset paper counter device         Set default values
Maintenance	Print Preview     LCD     System Settings		Preview available         Zoom         Preview rotated         Preview interval         Show process data         Backlight         Orientation         Printer type         Reset paper counter printhead         Reset paper counter device         Set default values         OEM customer ID
Maintenance	<ul> <li>Print Preview</li> <li>LCD</li> <li>System Settings</li> </ul>		Preview available     Zoom     Zoom     Preview rotated     Preview interval     Show process data     Backlight     Orientation     Printer type     Reset paper counter printhead     Reset paper counter device     Set default values     OEM customer ID     Customized info field

Process Data

List of selected parameters

## 8.2 Menu Structure (LCD)

Print Settings	Sp	eed
	Cc	ontrast
	Rit	obon control
	— Y (	offset
	— X (	offset
	Те	ar-off offset
Label Layout	Lat	pel length
	Ga	p length
	Col	umn printing
	Me	asure label
	Lab	pel type
	Ma	terial selection
	Pho	otocell
	Sca	an position
	Lat	pel error length
	Syr	nchronisation
	Flip	label
	Rot	ate label
	Rot	tate label (in °)
	Alig	gnment
	]	
Device Settings	Fie	eld handling
		odepage
	Ex	ternal parameters
	Bu	Izzer
	La	nguage
	Ke	yboard
		istomized entry
	Ho	otstart
	— Au	itoload
	— Ma	anual reprint
	Ва	ickfeed
	De	alay
	— La	bel confirmation
	Sta	andard label
	— Sy	nchronisation at switch on
	CN	/II length

Export the latest menu structure from ConfigTool. Printer settings --> Configuration --> Export

Dispenser I/O	Operating modes
	Offset
	I/O port 1-8
	I/O port 9-16
	Debounce
	Start signal delay
	I/O protocol
	Save signal
	IO profile
Ribbon Saving	On/Off
Network	IP address
	Netmask
	Standard Gateway
	Speed/Duplex
	DHCP
	Printer name
	MAC address
Deserve	On caration
Password	
	Network
Interface	COM1
	Baud
	Parity
	Data bits
	Stop bit
	Start sign
	Stop sign
	Stop sign     Data memory
	Stop sign     Data memory     Port test
	Stop sign     Data memory     Port test
	Stop sign     Data memory     Port test
Emulation	Stop sign     Data memory     Port test     Protocol
Emulation	Stop sign     Data memory     Port test     Protocol     Printhead resolution
Emulation	Stop sign     Data memory     Port test     Protocol     Printhead resolution     Drive mapping

Date/Time	Set date/time
	Summertime
	Start of summertime - format
	Start of summertime - date
	Start of summertime - time
	End of summertime - format
	End of summertime - date
	End of summertime - time
	Time shifting

Service Functions	Label parameters
	Photocell settings
	Photocell/sensors
	Paper counter
	Heater resistance
	Printhead temperature
	Motor ramp
	Print examples
	Input/Output
	Online/Offline
	Transfer ribbon prior warning
	Zero point adjustment
	Print length +/-
	Write log files to memory card

CF Card / USB Stick	Load layout	
	Change directory	
	Load file	
	Save layout	
	Save configuration	
	Delete file	
	Formatting	
	Copying	
	Firmware update	

# 8.3 Operation Panel



Display	The header of the display indicates the device type.
	The display provides information about the status of the printing syste and the print job, indicates errors and displays the device settings in the menu.
•	No function.
	Pause and resume the current print job.
	Print job active, not stopped: Manual print start.
	Print job active, stopped: Reprint.
	Power LED
	Printing system is switched On.
	Message LED
N	No function.
	Error LED
	The printing system is in error mode. The display shows the error number (see chapter 10, page 95).



## NOTICE!

The order of the functions described can be different depending on the display (touch-screen or LCD).

8.4	Print	Settings
-----	-------	----------

Print speed	Indication of print speed in mm/s. The print speed can be determined for each print order anew. The setting of print speed affects also the test prints.
Contrast	Indication of value to set the print intensity when using different materials, print speeds or printing contents.
Ribbon control	Examination if the transfer ribbon roll is to end or if the ribbon was torn at the unwinding roll. The current print order is interrupted and an Error Message appears at the display of printing system.
	<b>Off:</b> The ribbon control is deselected, i.e. the printing system continues without an error message.
	<b>On, weak sensibility (default):</b> The printing system reacts at approx. 1/3 more slowly to the end of the transfer ribbon.
	<b>On, strong sensibility:</b> The printing system reacts immediately to the end of the transfer ribbon.
Y displacement	Indication of initial point displacement in mm. Displacement of the complete print in paper direction. With positive values the print in paper direction starts later.
X displacement	Displacement of the complete print transverse to the paper direction. The displacement is possible only up to the edges of the printing zone and is determined by the width of the focal line in printhead.
Tear off displacement	Indication of value to which the last label of a print order is moved forward and is moved back to the beginning of label at a new print start. Labels can be torn off after terminating the print order without a label loss by tearing up.

## 8.5 Label Settings

## 8.5.1 Label Layout

Number of columns	Indication how many labels are sidy by side on the liner. With column printing, the label width is to be changed to the width of the layout (see chapter 11.1, page 105).
Material	Selection of the used label and transfer ribbon material.
Flip label	The axis of reflection is in the middle of the layout. If the label width was not transferred to the printing system, automatically the default label width i.e. the width of the printhead is used. It is recommended to use labels with the same width as the printhead. Otherwise this can cause problems in positioning.
Rotate label	According to standard the label is printed ahead with a rotation of 0°. If the function is activated, the label is rotated by 180° and printed in reading direction.
Rotate label (in °)	Corresponding to the parameter Rotate label, the label can be turned in 90° steps.
	NOTICE!
	Only printer internal objects (text, lines and barcodes) can be turned. The rotation of graphics is not possible.
Alignment	
	The adjustment of label is effected only after <i>Flip/Rotate label</i> , i.e. the adjustment is independent of the functions <i>Flip label</i> and <i>Rotate label</i> . <b>Left:</b> The label is aligned at the left-most position of printhead. <b>Centre:</b> The label is aligned at central point of printhead. <b>Right:</b> The label is aligned at right-most position of printhead.
	8.5.2 Label Recognition
Label type	Selection of adhesive labels or continuous material is used in the printing system. As default, adhesive labels is set. If the menu item <i>Label length/Gap length</i> contains a gap value, this value is added to the label length.

Function Menu	SPE			
Photocell	Selection of the used photocell. The selection of one of the following photocell types is possible: transmission photocell normal and inverse, reflexion photocell normal and inverse (option), ultrasonic photocell (option) (see chapter 11.4, page 109).			
Label synchronization position	Entry of percental label length by that the label end is searched. Marks onto the label can be skipped.			
Error length	If no new label can be recognized, indication after how many mm a message appears in the display.			
Synchronization	<b>On:</b> If no new label is recognized, it is not printed. The new data remains in the memory. <b>Off:</b> Although no new label is recognized, the next data is printed ar removed from the memory.			
	8.5.3 General Parameters			
Label length	Indication of label length in mm.			

- Gap length Indication of distance between two labels in mm (not for continuous labels).
- Label width Indication of label width in mm.

Measure label Press the key to start the measuring process. The printing system stops automatically after termination of measuring. The determined values are displayed and saved.

## 8.6 Device Settings

## 8.6.1 Print Job

Field handling	<ul> <li>Off: The complete print memory is deleted.</li> <li>Keep graphic: A graphic res. a TrueType font is transferred to the printing system once and stored in the printing system internal memory. For the following print order only the modified data is transferred to the printing system. The advantage is the saving of transmitting time for the graphic data.</li> <li>The graphic data created by the printing system itself (internal fonts, bar codes,) is generated only if they were changed. The generating time is saved.</li> <li>Delete graphic: The graphics res. TrueType fonts stored in the printer-internal memory is deleted but the other fields are kept.</li> <li>Restore graphic: At the end of the print order the printed order can again be started at the printing system. All graphics and TrueType fonts are again printed.</li> </ul>
	<b>NOTICE!</b> <b>Exception:</b> With column printing always full columns must be printed (number of pieces always multiple of the columns). Deleted columns are not restored.
External parameters	<ul> <li>Label dimension only: The parameters for label length, gap length and label width can be transferred by the interface of the printing system. All other parameter settings were ignored at the interfaces and are to be made directly at the printing system.</li> <li>On: Parameters such as print speed and contrast can be transferred to the printing system with our Labelstar Office. Parameters which are set directly at the printing system before are no longer considered.</li> <li>Off: Only settings made directly at the printing system were considered.</li> </ul>
Customized entry	<ul> <li>Off: No question appears at the display. In this case the stored default value is printed.</li> <li>On: The question referring the customized variable appears once before the print start at the display.</li> <li>Auto: The questions referring the customized variable and the quantity query appear after every printed layout.</li> <li>Auto without quantity query: The question referring the customized variable appears after every layout without additional query for the quantity.</li> </ul>

Autoload	<b>On:</b> A layout loaded once from CF card, can be reloaded after a restart of the printing system automatically.				
	<b>Procedure:</b> The used label is saved onto CF card. The label is loaded from CF card and printed. After switching the printing system Off and again On, the label is loaded from CF card automatically and can be printed again.				
	NOTICE!				
	The last loaded label from CF card is always again loaded after a restart of printing system.				
	<b>Off:</b> After a restart of printing system the last used label must be again loaded manually from CF card.				
	NOTICE!				
	A common use of the functions Autoload and Hotstart is not possible. For a correct Autoload procedure the Hotstart must be deactivated in the printing system.				
Hotstart	<ul><li>On: A discontinued print order can be continued after switching on the printing system anew.</li><li>Off: After switching off the printing system the complete data is lost (see chapter 11.2, page 106).</li></ul>				
Codepage	Indication of the font used in the printing system. The following possibilities are available:				
	Codepage 1252 West European (former ANSI)				
	Codepage 437 English				
	Codepage 850 Western European				
	Codepage 852 Slavic				
	Codepage 857 Turkish				
	Codepage 1250 Central and East European				
	Codepage 1251 Cyrillic				
	Codepage 1253 Greek				
	Codepage 1254 Turkish				
	Codepage 1257 Baltic				
	WGL4				
	Please find the tables referring to the above mentionned character sets on www.carl-valentin.de/Downloads.				

### 8.6.2 Print Control

Backfeed	<b>Backfeed mode:</b> The backfeed was optimised in the operating modes dispenser (optional) and cutter (optional). Now, when driving into the offset, the following label is 'pre-printed' if possible and therefore the backfeed of label is no necessary and time can be saved.				
	<b>Auto backfeed delay:</b> The adjustable delay time is only important with mode 'backfeed automatic' (see chapter 11.3, page 107.				
Manual reprint	<b>On:</b> If the printing system is e.g. in stoppin mode after an error, the last printed label can be reprinted with the key 'Reprint'. <b>Off:</b> Only empty layouts are moved forward.				
CMI length	If the print is interrupted in the label, at the printhead this could lead to a small interruption in the printout, showing a fine white line onto the label. To avoid this, a value for the minimum backfeed can be set $(0 - 1 \text{ mm})$ at which the label material is moved backwards. At the next print start the free range is overprinted. The setting of CMI length has only an influence at the selection of backfeed mode 'optimised backfeed'.				
Label confirmation	<b>On:</b> A new print order is only printed after confirmation at the device. An already active continuing print order is printed as long as the confirmation is effected at the device. <b>Off:</b> No query appears at the display of control unit.				
Standard label	On: If a print order is started without previous definition of label, the standard label is printed.          POS 108/12 R       How				
Buzzer	<b>On (1-7):</b> An acoustic signal is audible when pressing a key. <b>Off:</b> No signal is audible.				

## 8.6.4 General Parameters

Language	Selection of language in which you want to display the text in the display of printing system. At the moment the following languages are available: German, English, French, Spanish, Finnish, Czech, Portuguese, Dutch, Italian, Danish, Polish, Greek, Hungarian, Russian, Chinese (option), Ukrainian, Turkish, Swedish, Norwegian, Estonian.
Keyboard layout	Selection of region for the desired keyboard layout. The following possibilities are available: German, English, French, Greek, Spanish, Swedish, US American, Russian.
Synchronization at power on	<ul> <li>Off: The synchronization is disabled, i.e. the measuring and label feed have to be released manually.</li> <li>Measure: After switching on the printing system, the loaded label is automatically measured.</li> <li>Feed: After switching on the printing system the label is synchronized to the beginning of label. For this one or multiple labels are fed.</li> </ul>

### 8.7 Dispenser I/O



## NOTICE!

In order to operate the printing system in dispenser mode a print order has to be started and the printing system has to be in 'waiting' mode.

### 8.7.1 I/O Port Parameter 1-8

Input print start (and cut) Input reprint label Input reset counter Input applicator continue apply Input reset error Inactive Inactive Input external print release (default: disabled)

## 8.7.2 I/O Port Parameter 9-16

Output error Output print order active Output label under dispenser photocell Output printing Output print-ready Output applicator ready for apply Output warning scanner no read Output Ribbon end prior warning

Operating modes	<b>Off:</b> It is printed without the labels are dispensed.
	<b>I/O static:</b> The input signal evaluated, i.e. it is printed as long as the signal exists. The number of labels which was entered at the print start is printed. The set dispenser offset is not taken into consideration.
	<b>I/O static continuous:</b> For description of this operating mode, see I/O static. Continuous means that it is printed as long as new data is transferred via interface The set dispenser offset is not taken into consideration.
	<b>I/O dynamic:</b> The external signal is evaluated dynamically, i.e. is the printing system in 'waiting' mode a single label is printed at each signal changing. After the print the set dispenser offset is executed, i.e. a backfeed is effected.
	<b>I/O dynamic continuous:</b> For description of this operating mode, see I/O dynamic. Continuous means that it is printed as long as new data is transferred via interface.
Dispenser offset	Setting the dispenser offset, i.e. the distance from printhead focal line to the dispensing edge.

### SPE II

#### I/O profile

Selection of the available configurations *Std\_Label* (factory setting), *StdFileSelLabel* or *APL*.

List of registered	1	Print start (Input)		
functions for Std_Label	2	Reprint last printed label (Input)		
	3	Counter reset (Input)		
	4	Option applicator only: Start application (Input)		
	5	Error reset (Input)		
	6	Cancel all print jobs (Input)		
	7	No function		
	8	No function		
	9	Error (Output)		
	10	Print order active (Output)		
	11	Dispenser photocell: Label exists at dispenser photocell (Output)		
	12	Printing (Output)		
	13	Ready (Output)		
	14	Option applicator only: Ready for application (Output)		
	15	No function		
	16	Transfer ribbon prior warning (Output)		
List of registered	1	Print start and cut (Input)		
functions for StdFileSelLabel	2	Error reset (Input)		
	3*	Number of the file to load Bit 0 (Input)		
	4*	Number of the file to load Bit 1 (Input)		
	5*	Number of the file to load 2 (Input)		
	6*	Number of the file to load 3 (Input)		
	7*	Number of the file to load 4 (Input)		
	8*	Number of the file to load 5 (Input)		
	9	Error (Output)		
	10	Print order active (Output)		
	11	No function		
	12	Printing (Output)		
	13	Ready (Output)		
	14	No function		
	15	No function		
	16	Transfer ribbon prior warning (Output)		

\* The files must be saved onto the CF card in the user directory.

The files must start with 1 or 2 digits (1\_Etikett.prn, 02\_Etikett.prn).

The files can be saved with a file extension.

In the printing system status 'ready', 'waiting' or 'stop', a new file can be loaded. The print order will be started after charging and an already existing print order will be deleted.

The input signal 000000 does not charge a file and does not delete an already existing print order.

List of registered	1	Print start (Input)			
functions for APL	2	Reprint last printed label (Input)			
	3	Counter reset (Input)			
	4	Option applicator only: Start application (Input)			
	5	Error reset (Input)			
	6	Cancel all print jobs (Input)			
	7	No function			
	8	No function			
	9	Error (Output)			
	10	Print order active (Output)			
	11	No function			
	12	Printing (Output)			
	13	Ready (Output)			
	14	Option applicator only: Ready for application (Output)			
	15	Option applicator only: Pad is in printing position (Output)			
	16	Transfer ribbon prior warning (Output)			
Debounce	Indication of debounce time of the dispenser input. The setting range of the debounce time is between 0 and 100 ms. In case the start signal is not clear then you can debounce the input by means of this menu item.				
Start delay	Indication in time per second of the delay for the start signal. Value range: 0.00 9.99.				
Save signal	<ul> <li>On: The start signal for the next label can already be released during printing the current label. The signal is registered from the printing system. The printing system starts printing the next label immediately after finishing the current one. Therefore time can be saved and performance be increased.</li> <li>Off: The start signal for the next label can only be released if the current label is printed to the end and the printing system is again in 'waiting' state (output 'ready' set). If the start signal was released already before, so this is ignored.</li> </ul>				
I/O protocol port	Indicat	ication of interface at which the modifications of input signals (I/O)			

### 8.8 Ribbon Saving

Ribbon save = maximum utilisation of transfer ribbon

Label



Transfer ribbon w/o ribbon saving



Transfer ribbon with ribbon saving



Procedure

In principle the ribbon save is achieved by the way that the transfer ribbon in phases in those no printing is effected stopped or decelerated. If sufficient time is available, the transfer ribbon which was not used for printing can be retracted to print on it afterwards. The possibilities of ribbon save and in this way of the print quality are to be connected with the available time which is needed for decelerating and accelerating of transfer ribbon.

The above example clearly illustrates that the transfer ribbon consumption is much lower when using the ribbon save mode 'Standard'.

In the ribbon save mode 'Off', the printhead is not moved up, i.e. no reduction of transfer ribbon is effected.

	8.9	Network	ζ	
IP address (DHCP)	Each participant must have a 32 bit adress. The IP address is separated by full stops and arranged into four parts. Each part has a number range of 0 255.			
Network mask (DHCP)	In connection with the IP address of the printing system, the netmask determines which IP addresses this device searches in the own network.			
Standard gateway (DHCP)	The IP address of the network gateway. If the IP address was referred by DHCP then DHCP is indicated in brackets.			
Speed and duplex	Auton	natic:	Default setting. The speed is recognized automatically. Normally this procedure is reliable. In most cases it is not necessary to change the settings.	
	10 Mt	oit half:	Speed 10 Mbit/s in the half-duplex transmission method.	
	10 Mt	oit full:	Speed 10 MBit/s in the full-duplex transmission method.	
	100 Mbit half: Speed 100 MBit/s in the half-duplex transmission method.			
	100 N	1bit full:	Speed 100 MBit/s in the full-duplex transmission method.	
DHCP	DHCP permits the automatic referring of the network parameters IP address, network mask and standard gateway of a DHCP server which must be installed in the network.			
Printer name	The name of the installed printing system in the network. The printing system name in connection with DHCP can be used to respond the printing system. If DHCP is active and the name of the printing system is changed, the printing system logs out itself at the DHCP server and afterwards the printing system logs in again. After changing the name of printing system, the printing system can have a new IP address.			
MAC address	The MAC address (Media Access Control) is the hardware address of each individual network adapter and serves for the clear identification of the printing system in network.			

## 8.10 Interface

## 8.10.1 COM1

COM1 mode	Off: serial interface Off On (mode 1): serial interface On On (mode 2): serial interface On; no error message appears in case of a transmission error
Baud rate	Indication of bits which are transferred per second (speed of data transfer). Value range: 1200, 2400, 4800, 9600, 19200, 38400, 57600 and 115200.
Parity	None: No parity Even: Even parity Odd: Odd parity
Data bits	Setting of data bits. Value range: 7 or 8 Bits.
Stop bits	Indication of stop bits between bytes. Value range: 1 or 2 stop bits.
	8.10.2 General Parameters
SOH/ETB	<b>SOH:</b> Start of data transfer block $\rightarrow$ Hex format 01 <b>ETB:</b> End of data transfer block $\rightarrow$ Hex formal 17
	Two different start / en signs can be set. The settings are normally $SOH = 01$ HEX and ETB = 17 HEX. Several host computers cannot process these signs and therefore SOH = 5E HEX and ETB = 5F cannot be set.
Data memory	<b>Off:</b> After starting a print order no more data is received. <b>Standard:</b> After starting a print order the printing system buffer receives data as long as it is filled. <b>Advanced:</b> During a current print order data is received and processed.
Port test	Check whether the data are transferred via the interface.

## 8.11 Emulation

Protocol	<b>CVPL:</b> Carl Valentin Programming Language <b>ZPL:</b> Zebra <sup>®</sup> Programming Language Change between CVPL protocol and ZPL II <sup>®</sup> protocol.				
	The printing system performs a restart and ZPL II <sup>®</sup> commands are transformed into CVPL commands internally by the printing system and then executed by the printing system.				
Printhead resolution	At activated ZPL II <sup>®</sup> emulation the printhead resolution of the emulated printing system must be set, e.g. 11.8 Dot/mm (= 300 dpi).				
	NOTICE!				
	If the printhead resolution of the Zebra <sup>®</sup> printing system differs from that of the Valentin printing system, then the size of objects (e.g. texts, graphics) complies not exactly.				
Drive mapping	The access to Zebra <sup>®</sup> drives B: CF card E: Flash drive R: RAM disk (standard drive, if not indicated)				
	is rerouted to the corresponding Valentin drives A: CF R: RAM disk U: USB stick				
	This can be necessary if the available space on the RAM disk (at present. 512 KByte) is not sufficient or if bitmap fonts are downloaded to the printing system and be stored permanently.				
	NOTICE!				
	As the printing system build-in fonts in Zebra <sup>®</sup> printing systems are not available in Valentin printing systems, this can cause small differences in the text image.				
PJL (Printer Job Language)	The processing of PJL commands (Hewlett Packard <sup>®</sup> Print Job Language) can be switched On/Off. Status information relating to the print order can be queried.				

	8.12 Date/Time					
	8.12.1 Dayliç	ght Saving Tin	ne (DST)			
Daylight saving time	<b>On:</b> Printing system automatically adjust clock for daylight saving changes					
	Off: Summertime	e is not automatica	ally recognized and adjusted.			
DST difference (HH:MM	Indication of time difference in hours and minutes for summer/winter time changeover.					
	8.12.2 Start	Daylight Savir	ng Time			
DST start (format)	Selection of form (European forma	at to enter the sta t).	rt of the daylight saving time			
	DD = day	WW = week	WD = weekday			
	MM = month	YY = year	NWD = only next day is taken into consideration			
DST start date (week)	Selection of the v	week when the da	ylight saving time should begin.			
DST start date (weekday)	Selection of weekday when the daylight saving time should begin.					
DST start date (month)	Selection of month when the daylight saving time should begin.					
DST start time (HH:MM)	Selection of time when the daylight saving time should begin.					
	8.12.3 End Daylight Saving Time					
DST end (format)	Selection of format to enter the end of the daylight saving time. The example shows the standard settings (European format).					
DST end date (week)	Selection of the week when the daylight saving time should end.					
DST end date (weekday)	Selection of the weekday when the daylight saving time should end.					
DST end date (month)	Selection of the month when the daylight saving time should end.					
DST end time (HH:MM)	Selection of time when the daylight saving time should end.					
	8.12.4 Gener	ral Parameters	5			
Date (DD.MM.YY)	Indication of current date.					
Time (HH:MM:SS)	Indication of current time.					

## Function Menu

## 8.13 Service Functions

## 8.13.1 Photocell Service

Transmission photocell level	Indication of current level at the transmission photocell. No adjustment possible.
Min transmission photocell level	Indication of the lower level at the transmission photocell. No adjustment possible. The value is determined during the procedure 'measure label'.
Max transmission photocell level	Indication of the upper level at the transmission photocell: No adjustment possible. The value is determined during the procedure 'measure label'.
Transmission photocell trigger level	This value defines the level at the limit between label and liner and should be approx. 1,0 V above the level. The value is determined during the 'measure label' procedure and can be readjusted manually, if necessary.
Transmission photocell PWM	Setting the contrast of transmission photocell. With particularly strong, opaque liners, the label recognition can be improved.
Reflexion photocell level	Indication of the current level at the reflexion photocell. No adjustment possible.
Min. reflexion photocell level	Indication of the lower level at the reflexion photocell. No adjustment possible. The value is determined during the procedure 'measure label'.
Max. Pegel Reflexion Lichtschranke	Indication of upper level at the reflexion photocell. No adjustment possible. The value is determined during the procedure 'measure label'.
Reflexion photocell trigger level	This value defines the level at the limit between mark and liner and should be approx. 1,0 V above the ninimum level. The value is determined during the 'measure label' procedure and can be readjusted manually, if necessary.
Reflexion photocell PWM	Setting the contrast of reflexion photocell. With problematic marks (color), the label recognition can be improved.
### 8.13.2 Device Status

Paper counter printhead	Indication of printhead performance in meters.
Paper counter printing system	Indication of printing system performance in meters.
Heater resistance	To achieve a high print quality, the indicated Ohm value must be set after replacing the printhead.
Printhead temperature	Indication of printhead temperature. The printhead temperature corresponds normally to the room temperature. In case the maximum printhead temperature is exceeded, the current print order is interrupted and an error message appears at the display of printing system.
Online / Offline	This function is activated e.g. if the transfer ribbon is to be changed. It is avoided that a print order is processed although the module is not ready. The respective state is indicated in the display.
	Standard: Off
	<b>Online:</b> Data can be received by interface. <b>Offline:</b> The keys of the foil keyboard are still active but received data are not processed. If the module is again in Online mode then new print orders can be again received.

# 8.13.3 Print Optimization

Zero Y adjustment	Indication of value in 1/100 mm. After replacing the printhead - the print cannot be continued at the same position on the label, the difference can be corrected in printing direction.	
	<b>NOTICE!</b> The value for zero point adjustment is set ex works. After replacing the printhead, only service personnel are allowed to set this value anew.	
Zero X adjustment	Indication of value in 1/100 mm. After replacing the printhead - the print cannot be continued at the same position on the label, the difference can be corrected across the printing direction.	
	NOTICE!	
	The value for zero point adjustment is set ex works. After replacing the printhead, only service personnel are allowed to set this value anew.	
Print length correction	Indication of print layout correction in percent. By mechanical influences (e.g. label roll size) the print layout can be printed increased and reduced to its original size.	
Printhead sensor	The printing system (printer-dependent) recognizes automatically whether the printhead is attached correctly. No adjustment possible.	
Motor acceleration	This function is often reqquired when using high print speeds, since this prevents the tearing of transfer ribbon. The higher the value is set, the more slowly is the feed motor accelerated.	
Motor brake delay	This function is often reqquired when using high print speeds, since this prevents the tearing of transfer ribbon. The smaller the value is set, the faster the feed motor is braked	

### 8.13.4 Ribbon Service

Length and ink side	Selection of the used transfer ribbon length.
	Selection of the coating side of transfer ribbon, either outside or inside. Default: Coating outside
Prewarning	<b>Ribbon prior warning:</b> Before the end of transfer ribbon, a signal is send by the control output.
	<b>Ribbon prior warning diameter:</b> Setting of transfer ribbon advance warning diameter. In case you enter a value in mm then a signal appears via control output when reaching this diameter (measured at transfer ribbon roll).
	<ul> <li>Ribbon prior warning mode:</li> <li>Warning: When reaching the transfer ribbon advance warning diamter, the corresponding I/O output is set.</li> <li>Reduced print speed: Speed on which the printing speed is to be reduced.</li> <li>Error: The printing system stops when reaching the transfer ribbon advance warning diameter with the message 'too less ribbon'.</li> </ul>
	<b>Speed:</b> Setting of the reduced print speed in mm/s. This can be set in the limits of the normal print speed.
Current diameters	<b>Roll diameter:</b> Indication how much transfer ribbon is still on the transfer ribbon roll. For a correct display some labels must be reprinted.
	<b>Time left:</b> Indication during a current print order, how long it can be printed with the existing transfer ribbon.

### 8.13.5 I/O Status

Relevant results are counted and registered in RAM memory. The protocole get lost after switching off the device.

PrtStrtIntsReal = Real Interrupts

The start input impulses are counted directly at the Interrupt.

#### PrtStrtIntsDebounced = Debounced

The start input impulses that are longer than the set debounce time are counted. Only these start impulses can lead to a print. If a start impulse is too short, no print is released. This is recognized by the fact that RInt is counted, Dbnc not.

#### PrtStrtIntsNoPrint = Not Printed

The debounced start input impulses that have not lead to a print are counted. Causes: no active print order, print order stopped (manually or because of an error) or the printing system ist still active with the processing of a print order.

**PrtStrtReset** = The counters are reset.

**PrtStrtTime** = Measured length of the last start impulse in ms.

I/O status input	Indica	tion	of input signal level	
	0 = Low			
		gn		
	Port		Function	
	1	=	Print start	
	2	=	Reprint label	
	3	=	Reset counter	
	4	=	Applicator continue apply	
	5	=	Reset error	
	6	=	Delete print jobs	
	7	=	No function	
	8	=	External print release (default: disabled)	
I/O status output	Indica 0 = Lo	tion w	of output signal level	
	1 = Hi	gh		
	Port		Function	
	9	=	Error	
	10	=	Print order active	
	11	=	Label available at dispenser photocell – with dispenser photocell	
	12	=	Printing	
	13	=	Ready	
	14	=	Applicator ready for apply	
	15	=	Warning scanner no read	
	16	=	Ribbon end prior warning	

### 8.13.6 General Parameters

Print examples	<ul> <li>Settings: Printout of all printing system settings such as speed, label and transfer ribbon material.</li> <li>Bar codes: Printout of all available bar code types.</li> <li>Fonts: Printout of all available font types.</li> </ul>
Write log files to memory card	The printing system logs different events internally. In case of service, the error cause can be located faster.
	With this command, different log files are saved on an existing storage medium (memory card or USB stick). After the 'Finish' message the storage medium can be removed.
	The files are in directory 'log':
	LogMemErr.txt: Logged errors with additional information such as date/time and file name/line number (for developers). LogMemStd.txt: Logging of selected events. LogMemNet.txt: Data latest send via port 9100. Parameters.log: All printing system parameters in human readable form. TaskStatus.txt: Status of all printing system tasks.
	The files <i>LogMemErr.txt</i> and <i>LogMemStd.txt</i> are written in circle, i.e. old contents are overwritten. The entry logged last is marked with ""

### 8.14 Password

With a password different functions can be blocked for the operator. There are different applications with which such a password protection can be used reasonably. To receive a most flexible password protection, the printing system functions will be divided into several function groups.

Because of these different function groups the password protection is very flexible. The printing system can be adjusted best to its actual order, as only certain functions are blocked. Function Menu

	8.14.1 Operation	
Password	Entering a 4-digit numeric password.	
Protection configuration	Settings of printing system can be changed (contrast, speed, operating mode,). The password protection prevents modifications at the settings.	
Protection favorites	The password protection prevents the access to the favorites.	
Protection memory card	With the functions of the memory card, labels can be stored, loaded, etc. The password protection has to decide if no access or only readable acces on CF card is allowed.	
	No protection: No password protection Userview only: Only reading access Protected: Access blocked	
Protection Printing	In case the printing system is connected to a PC, it can be useful, that the user is not able to produce a print manually. So the password protection prevents that prints can be produced manually.	
	In order to execute a blocked function, first of all the valid password has to be entered. If the correct password is entered then the desired function can be executed.	
	8.14.2 Network	
Password	Entering a 15-digit password. The password can consists of alphanumeric and special characters.	
Protection HTTP	The communication by HTTP can be avoided.	
Protection Telnet	The settings of the Telnet service cannot be changed.	
Protection remote access	The password protection prevents the remote control of the printing system.	
	In order to execute a blocked function, first of all the valid password has to be entered. If the correct password is entered then the desired function can be executed.	

SPE II

# 8.15 Maintenance (depending on printing system)

### 8.15.1 Print Preview

Preview available	With activ shown or empty.	With activated print preview a picture of the currently printed layout is shown on the display. If the function is not activated, the field remains empty.			
Zoom	Selection preview.	Selection of a certain zoom value for the representation of print preview.			
	Label:	The complete layout is fit to the indication zone.			
	Fields:	Only the print range is fit to the indication zone.			
	1 8:	Manual zoom factor to scale the complete layout down.			
Preview rotated	The displ display. <b>On:</b> The <b>Off:</b> The	ay of label preview can be rotated on the touch-screen label preview is shown rotated by 180° on the display. label preview is represented in read direction.			
Preview interval	During a interval.	running print order the preview is refreshed in the set			
Show process data	With activ the displa In order to before in	vated print preview, the currently printed layout is shown on ay. Wipe to the right to change to the process data view. o show the process data, the parameter must be activated the menu <i>Maintenance/Print preview</i> .			

### 8.15.2 LCD

Backlight	Setting of contrast of background lighting.
LCD orientation	<b>Landscape 180°:</b> The display is represented turned by 180 degres to the function 'Landscape'.
	<b>Landscape:</b> The display is represented turned by 90 degres to the reading direction.
	Portrait: The display is represented in reading direction.
	<b>Portrait 180°:</b> The display is represented turned by 180 degres.

### 8.15.3 System Settings



#### NOTICE!

All settings and modifications in system settings require the respective password.

The following system settings can be made:

- Printing system type
- Reset paper counter printhead
- Reset paper counter printing system
- Set default settings
- OEM client ID
- Customized info field

#### 8.16 Memory Card Menu

**Load:** The selected layout is loaded. After the number of copies have been entered, the print order is started.

Administrative tools: Switching to the file manager (File Explorer).

File explorerThe file explorer is the management system of the printing system.<br/>The main functions for the memory menu surface is provided in the<br/>file explorer.

The following functions can be selected:

- Load file
- Change drive/directory
- Save current label
- Create new folder
- Save current configuration
- Format memory card
- Create user directory

Context menu

By long pressing (> 3 s) on a folder, the context menu is opened. The selected folder can be deleted or selected as **User directory** (key: set).

By long pressing (> 3 s) on a file, the context menu to **Delete**, **Rename** or **Load** is opened.

## 9 Maintenance and Cleaning



#### DANGER!

Risk of death by electric shock!

⇒ Before opening the housing cover, disconnect the printing system from the mains supply and wait for a moment until the power supply unit has discharged.



#### NOTICE!

When cleaning the printing system, personal protective equipment such as safety goggles and gloves are recommended.

Maintenance task	Frequency
General cleaning (see chapter 9.1, page 82).	As necessary.
Clean the transfer ribbon drawing roller (see section 9.2, page 82).	Each time the transfer ribbon is changed or when the printout is adversely affected.
Clean the pressure roller (see chapter 9.3, page 82).	Each time the label roll is changed or when the printout and label transport are adversely affected.
Clean the printhead (see chapter 9.4, page 84).	Each time the transfer ribbon is changed or when the printout is adversely affected.
Clean the label photocell (see chapter 9.5, page 85).	When replacing the label roll.
Replace printhead (see chapter 9.6, page 86).	When errors in the printout occur.

Maintenance plan



#### NOTICE!

The handling instructions for the use of Isopropanol (IPA) must be observed. In the case of skin or eye contact, immediately wash off the fluid thoroughly with running water. If the irritation persists, consult a doctor. Ensure good ventilation.



### WARNING!

Risk of fire by easily inflammable label soluble!

 $\Rightarrow$  When using label soluble, dust must be completely removed from the printing system and cleaned.

### 9.1 General Cleaning



### Abrasive cleaning agents can damage the printing system!

- $\Rightarrow$  Do not use abrasives or solvents to clean the outer surface of the printing system.
- ⇒ Remove dust and paper fuzz in the printing area with a soft brush or vacuum cleaner.
- $\Rightarrow$  Clean the outer surfaces with an all-purpose cleaner.

### 9.2 Clean the Transfer Ribbon Drawing Roller

A soiled print roll can lead to reduced print quality and can affect transport of material.

- 1. Open the cover of printing system.
- 2. Remove the transfer ribbon from the printing system.
- 3. Remove deposits with roller cleaner and a soft cloth.
- 4. If the roller appears damaged, replace it.
- 5. Reload the transfer ribbon.
- 6. Close the cover of the printing system.

### 9.3 Clean the Pressure Roller

A soiled pressure roller can lead to reduced print quality and can affect transport of material.



Pressure roller can be damaged!

 $\Rightarrow$  Do not use sharp or hard objects to clean the pressure roller.



#### Figure 21

- 1. Open the cover of printing system.
- 2. Turn the lever (A) counter clockwise to lift up the printhead (B).
- 3. Remove labels and transfer ribbon from the printing system.
- 4. Remove deposits with the roller cleaner and a soft cloth.
- 5. Turn the roller (C) manually step by step to clean the complete roller (only possible when the printing system is switched off, as otherwise the step motor is full of power and the roller is kept in its position).
- 6. Reload labels and transfer ribbon.
- 7. To move the printhead down, turn the pressure lever in clockwise direction until it locks.
- 8. Close the cover of the printing system.

SPE II

### 9.4 Clean the Printhead

Printing can cause accumulation of dirt at printhead e.g. by colour particles of transfer ribbon, and therefore it is necessary to clean the printhead in regular periods depending on operating hours, environmental effects such as dust etc.



#### CAUTION!

Printhead can be damaged!

- ⇒ Do not use sharp or hard objects to clean the printhead.
- $\Rightarrow$  Do not touch the protective glass layer of the printhead.



#### Figure 22

- 1. Open the cover of printing system.
- 2. Turn the lever (A, Figure 21) counter clockwise to lift up the printhead.
- 3. Remove labels and transfer ribbon from the printing system.
- 4. Clean the printhead surface with a special cleaning pen or a cotton swab dipped in pure alcohol.
- 5. Before using the printing system, let the printhead dry for about two to three minutes.
- 6. Reload labels and transfer ribbon.
- 7. To move the printhead down, turn the lever (A, Figure 21) in clockwise direction until it locks.
- 8. Close the cover of the printing system.

### 9.5 Clean the Label Photocell



#### CAUTION!

Label photocell can be damaged!

 $\Rightarrow$  Do not use sharp or hard objects or solvents to clean the label photocell.

The label photocell can be soiled with paper dust. This may affect the label detection.



#### Figure 23

- 1. Open the cover of printing system.
- 2. Turn the lever counter clockwise to lift up the printhead.
- 3. Remove labels and transfer ribbon from the printing system.
- 4. Blow out the photocell (A) with pressure gas spray. Observe strictly the instructions on the spray can!
- 5. Clean the label photocell (A) additionally with a cleaning card (B) before soaked in pure alcohol. Move the cleaning card from one side to the other (see illustration).
- Reload labels and transfer ribbon (see chapter 6 Flat Type Load Media, page 39 or chapter 7 Corner Type – Load Media, page 43).
- 7. To move the printhead down, turn the lever in clockwise direction until it locks.
- 8. Close the cover of the printing system.

10.23

### 9.6 Replace the Printhead (General)



### NOTICE!

The printhead (D) is preinstalled on a head plate (A) and aligned at the factory.



#### Figure 24

- A Head plate
- B Plug connection signal
- C Plug connection tension
- D Printhead
- E Focal line
- F Guiding
- G Knurled screw



#### CAUTION!

The printhead can be damaged by static electricity discharges and impacts!

- ⇒ Ground your body, e.g. by wearing a grounded wristband.
- $\Rightarrow$  Do not touch the contacts on the plug connections (B, C).
- $\Rightarrow$  Do not touch the printhead (D) with hard objects or your hands.

0

¥XCe

А



С

# 9.7 Replace the Printhead (Flat Type)

СВ

### Figure 25

Remove the printhead	1.	Remove labels and transfer ribbon from the printing system.
	2.	When the printhead is closed, loosen the screws (C).
	3.	Turn the lever (A) counter clockwise to lift up the printhead (B).
	4.	If the printhead (B) is not disengaged on the pressure roller, continue loosen the screws (C).
	5.	Remove the printhead carefully to the front until you can reach the plug connections.
	6.	Remove the plug connections and then remove the printhead (B).
Install the printhead	1.	Attach the plug connections.
	2.	Position the printhead (B) in the printhead mounting bracket in such a way that the pin is secured in the corresponding hole in the head plate.
	3.	Lightly keep the printhead mounting bracket on the pressure roller with one finger and check for correct positioning of the printhead.
	4.	Tighten again the screws (C).
	5.	Reload labels and transfer ribbon (see chapter 6 Flat Type – Load Media, page 39).
	6.	To move the printhead (B) down, turn the lever (A) in clockwise direction until it locks.
	7.	Check the resistance value on the type plate of printhead and if necessary change the value in the <i>Service functions/heater resistance</i> .

### 9.8 Adjust the Printhead (Flat Type)



#### Figure 26

#### Parallelism

An important characteristic for a high quality print is the parallelism of the focal line of the thermal printhead to the pressure roll. Because of the fact that the position of focal line of the printhead depends on fluctuations caused by production, it is necessary to adjust the parallelism.

- 1. Loosen the screws (G) with a hexagon key by approx. <sup>1</sup>/<sub>4</sub> rotations.
- Adjust the parallelism with the adjusting screws (H). Clockwise = printhead moves backwards Counter clockwise = printhead moves forwards
- 3. Adjust the parallelism as long as the printing result comes up to your full expectation.
- 4. Tighten again the screws (G).
- 5. Start a print order with approx. 10 labels and control the correct passage of transfer ribbon.





After adjusting parallelism and no even strong pressure exists over the complete print width, by means of a plate (B) you can set the balance as follows:

- 1. Loosen the screw (C) with a screwdriver by approx. <sup>1</sup>/<sub>4</sub> rotations.
- 2. In order to achieve a pressure balance, turn the excentric bolt (D) as long as the printing result comes up to your full expectation.
- 3. Tighten again the screw (C).
- 4. Start a print order with approx. 10 labels and control the correct passage of transfer ribbon.

Pressure balance

right/left

#### Pressure

Increasing the head contact pressure leads to an improvement of the print image density on the corresponding side and to a shifting of the ribbon feed path in the corresponding direction.



Damage of printhead by unequal use!

 $\Rightarrow$  Only change the factory settings in exceptional cases.

The selection of the smallest value can optimise the life cycle of printhead.

- 1. Turn the pressure screws (A, Figure 27) to change the pressure of printhead.
- 2. Turning the pressure screws (A, Figure 27) as far as they will go in clockwise direction results in a pressure increase of 10N in contrast to the factory setting.
- 3. Turning the pressure screws (A, Figure 27) from the limit stop counter clockwise to the corresponding scale value (see table) result in the factory settings.

Printhead	Scale value
SPE II 106, 108, 162	6
SPE II 107, 160	12



#### NOTICE!

It is important that the knurled button which is coated with protective lacquer is not removed from the pressure screw as otherwise the above mentioned settings are faulty.



# 9.9 Replace the Printhead (Corner Type)

### Figure 28

Remove the printhead	1.	Remove labels and transfer ribbon from the printing system.
	2.	When the printhead is closed, loosen the hex (Allen) screws (C).
	3.	Turn the lever (A) counter clockwise to lift up the printhead (B).
	4.	If the printhead (B) is not disengaged on the pressure roller, continue loosen the hex (Allen) screws (C).
	5.	Remove the printhead carefully to the front until you can reach the plug connections.
	6.	Remove the plug connections and then remove printhead (B).
Install the printhead	1.	Attach the plug connections.
	2.	Position the printhead in the printhead mounting bracket in such a way that the pin is secured in the corresponding hole in the head plate.
	3.	Lightly keep the printhead mounting bracket on the pressure roller with one finger and check for correct positioning of the printhead.
	4.	Tighten again the screws (C).
	5.	Reload labels and transfer ribbon (see chapter 7 Corner Type – Load Media, page 43).
	6.	To move the printhead (B) down, turn the lever (A) in clockwise direction until it locks.
	7.	Check the resistance value on the type plate of printhead and if necessary change the value in the <i>Service functions/heater resistance</i> .

### 9.10 Adjust the Printhead (Corner Type)



#### Figure 29

Parallelism

An important characteristic for a high quality print is the parallelism of the focal line of the thermal printhead to the pressure roll. Because of the fact that the position of focal line of the printhead depends on fluctuations caused by production, it is necessary to adjust the parallelism.

The form of the CornerType printhead needs the setting of parallelism in direction of the adjusting angle and in horizontal position. It needs a little bit of experience to know in which direction you have to adjust the printhead to receive a high quality printing.

- Loosen the screws (H or I) with a hexagon key by approx. ¼ rotations.
- Adjust the parallelism with the adjusting screws (G or J). Clockwise = printhead moves backwards Counter clockwise = printhead moves forwards
- 3. Adjust the parallelism as long as the printing result comes up to your full expectation.
- 4. Tighten again the screws (H or I).
- 5. Start a print order with approx. 10 labels and control the correct passage of transfer ribbon.



#### Figure 30

# Pressure balance right/left

After adjusting parallelism and no even strong pressure exists over the complete print width, by means of a plate (B) you can set the balance as follows:

- 1. Loosen the screw (C) by approx. 1/4 rotations.
- 2. In order to achieve a pressure balance, turn the excentric bolt (D) as long as the printing result comes up to your full expectation.
- 3. Tighten again the screw (C).
- 4. Start a print order with approx. 10 labels and control the correct passage of transfer ribbon.

#### Pressure

Increasing the head contact pressure leads to an improvement of the print image density on the corresponding side and to a shifting of the ribbon feed path in the corresponding direction.



Damage of printhead by unequal use!

 $\Rightarrow$  Only change the factory settings in exceptional cases.

The selection of the smallest value can optimise the life cycle of printhead.

- 1. Turn the pressure screws (A, Figure 30) to change the pressure of printhead.
- 2. Turning the pressure screws (A, Figure 30) as far as they will go in clockwise direction results in a pressure increase of 10N in contrast to the factory setting.
- 3. Turning the pressure screws (A, Figure 30) exactly one rotation from the right stop position counter clockwise results in the factory settings.



#### NOTICE!

It is important that the knurled button which is coated with protective lacquer is not removed from the pressure screw as otherwise the above mentioned settings are faulty.

# 10 Error correction

Error	message	Cause	Remedy
1	Line too high	Line rises up completely or partly over the upper edge of label.	Move line down (increase Y value).
			Check rotation and font.
2	Line too low	Line rises up completely or	Move line up (reduce X value).
		label.	Check rotation and font.
3	Character set	One res. several characters of	Change text.
		in the selected font.	Change font.
4	Unknown BC type	Selected code is not available.	Check code type.
5	Illegal rotation	Selected rotation is not available.	Check rotation.
6	CV font	Selected font is not available.	Check font.
7	Vector font	Selected font is not available.	Check font.
8	Measuring label	While measuring no label was found.	Check label length and if labels are inserted correctly.
		Set label length is too large.	Restart measuring anew.
9	No label found	No label available.	Insert new label roll.
		Soiled label photocell.	Check if labels are inserted
		Labels not inserted correctly.	Clean the label photocoll
10	No ribbon	During the print order the ribbon roll becomes empty	Change transfer ribbon.
		(front printhead).	(service functions).
		Defect at the transfer ribbon photocell (front photocell).	
11	COM FRAMING	Stop bit error.	Check stop bits.
			Check baud rate.
			Check cable (printer and PC).
12	COM PARITY	Parity error.	Check parity.
			Check baud rate.
			Check cable (printer and PC).
13	COM OVERRUN	Loss of data at serial interface	Check baud rate.
		(KS-232).	Check cable (printer and PC).

Error	message	Cause	Remedy
14	Field number	Received line number is invalid.	Check sent data. Check connection PC - printer.
15	Length mask	Invalid length of received mask statement.	Check sent data. Check connection PC - printer.
16	Unknown mask	Transferred mask statement is invalid.	Check sent data. Check connection PC - printer.
17	Missing ETB	No end of data found.	Check sent data. Check connection PC - printer.
18	Invalid character	One res. several characters of the bar code is res. are not valid.	Change bar code data. Change font.
19	Invalid statement	Unknown transferred data record.	Check sent data. Check connection PC - printer.
20	Invalid check digit	For check digit control the entered res. received check digit is wrong.	Calculate check digit anew. Check code data.
21	Invalid SC code	Selected SC factor is invalid for EAN res. UPC.	Check SC factor.
22	Invalid number of digits	Entered digits for EAN res. UPC are invalid < 12; > 13.	Check number of digits.
23	Type check digit	Selected check digit calculation is not available in the bar code.	Check calculation of check digit. Check bar code type.
24	Invalid extension	Selected zoom factor is not available.	Check zoom factor.
25	Offset sign	Entered sign is not available.	Check offset value.
26	Offset value	Entered offset value is invalid.	Check offset value.
27	Printhead temperature	Printhead temperature is too high. Defective printhead sensing device.	Reduce contrast. Change printhead.
28	Cutter error	With cut an error occurred. Paper jam.	Check label run. Check cutter run.
29	Invalid parameter	Entered data do not correspond to the characters allowed from the application identifier.	Check code data.

Erro	or message	Cause	Remedy
30	Application Identifier	Selected application identifier is not available in GS1-128.	Check code data.
31	HIBC definition	Missing HIBC system sign.	Check definition of HIBC code.
		Missing primary code.	
32	System clock	Real Time Clock function is	Change battery.
		empty.	Change RTC component.
		Defective RTC.	
33	No CF interface	Interrupted connection CPU - CF card.	Check connection CPU - CF card interface.
		Defective CF card interface.	Check CF card interface.
34	No print memory	Not enough print memory available.	Check CF assembly on CPU.
35	Printhead open	At start of a print order the printhead is open.	Close the printhead and start print order anew.
36	BCD invalid format	BCD error	Check entered format.
		Invalid format for the calculation of Euro variable.	
37	BCD overflow	BCD error	Check entered format.
		Invalid format for the calculation of Euro variable.	
38	BCD division	BCD error	Check entered format.
		Invalid format for the calculation of Euro variable.	
39	FLASH ERROR	Flash component error.	Run a software update.
			Change CPU.
40	Length command	Invalid length of the received	Check data sent.
			Check connection PC - printer.
41	No drive	CF card not found / not correctly inserted.	Insert CF card correctly.
42	Drive error	Impossible to read CF card (faulty).	Check CF card, if necessary change it.
43	Unformatted	CF Card not formatted.	Format CF card.
44	Delete directory	Attempt to delete the actual directory.	Change directory.
45	Invalid path	Too long indication of path.	Indicate a shorter path.

Erro	r message	Cause	Remedy
46	Drive write- protected	Memory card is write-protected.	Deactivate write protection.
47	Directory not file	Attempt to indicate a directory as file name.	Correct your entry.
48	File already open	Attempt to change a file during an access is active.	Select another file.
49	No file/directory	File does not exist on CF card.	Check file name.
50	Invalid file name	File name contains invalid characters.	Correct entry of name, remove special characters.
51	Internal file error	Internal file system error.	Please contact your distributor.
52	Root full	The max. number (64) of main directory entries is reached.	Delete at least one main directory entry and create subdirectories.
53	Drive full	Maximum CF capacity is reached.	Use new CF Card, delete no longer required files.
54	File/directory exists	The selected file/directory already exists.	Check name, select a different name.
55	File too large	During copying procedure not enough memory space onto target drive available.	Use a larger target card.
56	No update file	Errors in update file of firmware.	Start update file anew.
57	Invalid graphic file	The selected file does not contain graphic data.	Check file name.
58	Directory not empty	Attempt to delete a not empty directory.	Delete all files and sub- directories in the desired directory.
59	No CF interface	No CF card drive found.	Check connection of CF card drive.
			Contact your distributor
60	No media	No CF card is inserted.	Insert CF card in the slot.
61	Webserver error	Error at start of web server.	Please contact your distributor.
62	Wrong PH FPGA	The direct print module is equipped with the wrong FPGA.	Please contact your distributor.
63	End position	The label length is too long. The number of labels per cycle is too much.	Check label length res. the number of labels per cycle.

Erro	r message	Cause	Remedy
64	Zero point	Defective photocell.	Change photocell.
65	Compressed air	Pressure air is not connected.	Check pressure air.
66	External release	External print release signal is missing.	Check input signal.
67	Column too wide	Wrong definition of column width res. number of columns.	Reduce the column width res. correct the number of columns.
68	Scanner	The connected bar code scanner signals a device error.	Check the connection scanner/printer.
			Check scanner (dirty).
69	Scanner NoRead	Bad print quality.	Increase contrast.
		Printhead completely soiled or defective.	Clean printhead or replace (if necessary).
		Print speed too high.	Reduce print speed.
70	Scanner data	Scanned data does not correspond to the data which is to print.	Replace printhead.
71	Invalid page	As page number either 0 or a number > 9 is selected.	Select a number between 1 and 9.
72	Page selection	A page which is not available is selected.	Check the defined pages.
73	Undefined page	The page is not defined.	Check the print definition.
74	Format user guiding	Wrong format for customized entry.	Check the format string.
75	Format date/time	Wrong format for date/time.	Check the format string.
76	Hotstart CF	No CF card found.	If option hotstart was activated, a CF card must be inserted.
			Switch off the printer before inserting the memory card.
77	Flip/Rotate	Selection of print of several columns and also mirror/rotate.	It is only possible to select one of both functions.
78	System file	Loading of temporary hotstart files.	Not possible.
79	Shift variable	Faulty definition of shift times	Check definition of shift times.
		(overlapping times).	
80	GS1 Databar	General GS1 Databar error.	Check definition and parameter of GS1 Databar code.
81	IGP error	Protocol error IGP.	Check sent data.

Error	message	Cause	Remedy
82	82 Time generation Printing creation was still active at print start.	Reduce print speed.	
		at print start.	Use printers' output signal for synchronization.
			Use bitmap fonts to reduce generating time.
83	Transport protection	Both DPM position sensors	Displace zero point sensor
		(stanzend) are active.	Check sensors in service functions menu
84	No font data	Font and web data is missing.	Run a software update.
85	No layout ID	Layout ID definition is missing.	Define layout ID onto the label.
86	Layout ID	Scanned data does not correspond to defined ID.	Wrong label loaded from CF card.
87	RFID no label	RFID unit cannot recognize a label.	Displace RFID unit or use an offset.
88	RFID verify	Error while checking programmed data.	Faulty RFID label.
			Check RFID definitions
89	RFID timeout	Error at programming the RFID label.	Label positioning.
			Faulty label.
90	RFID data	Faulty or incomplete definition of RFID data.	Check RFID data definitions.
91	RFID tag type	Definition of label data does not correspond with the used label.	Check storage partitioning of used label type
92	RFID lock	Error at programming the RFID	Check RFID data definitions.
		label (locked fields).	Label was already programmed.
93	RFID programming	Error at programming the RFID label.	Check RFID definitions.
94	Scanner timeout	The scanner could not read the bar code within the set timeout time.	
		Defective printhead.	Check printhead.
		Wrinkles in transfer ribbon.	Check transfer ribbon.
		Scanner wrong positioned.	Position scanner correctly,
		Timeout time too short.	feeding.
			Select longer timeout time.

Erro	r message	Cause	Remedy
95	Scanner layout difference	Scanner data does not correspond to bar code data.	Check adjustment of scanner. Check scanner settings / connection.
96	COM break	Serial interface error.	Check settings for serial data transmission as well as cable (printer-PC).
97	COM general	Serial interface error.	Check settings for serial data transmission as well as cable (printer-PC).
98	No software printhead FPGA	No printhead-FPGA data available.	Please contact your responsible distributor.
99	Load software printhead FPGA	Error when programming printhead-FPGA.	Please contact your responsible distributor.
100	Upper position	Option applicator: Sensor signal up is missing.	Check input signals / compressed-air supply.
101	Lower position	Option applicator: Sensor signal down is missing.	Check input signals / compressed-air supply.
102	Vacuum plate empty	Option applicator: Sensor does not recognize a label at vacuum plate.	Check input signals / compressed-air supply.
103	Start signal	Print order is active but device not ready to process it.	Check start signal.
104	No print data	Print data outside the defined label. Selection of wrong module type (design software).	Check selected module type. Check selection of left/right version.
105	Printhead	No original printhead is used.	Check the used printhead. Contact your distributor.
106	Invalid Tag type	Wrong Tag type. Tad data do not match the Tag type in the printer.	Adapt data or use the correct Tag type.
107	RFID inactive	RFID module is not activated. No RFID data can be processed.	Activate RFID module or remove RFID data from label data.
108	GS1-128 invalid	Transferred GS1-128 bar code is invalid.	Verify bar code data (see GS1- 128 bar code specification).
109	EPC parameter	Error at EPC calculation.	Verify data (see EPC specification).

Erro	message	Cause	Remedy
110	Housing open	When starting the print order the housing cover is not closed.	Close the housing cover and start the print order anew.
111	EAN.UCC code	Transferred EAN.UCC code is invalid.	Verify bar code data (see corresponding specification).
112	Print carriage	Printing carriage does not move.	Check gear belt (possibly broken).
113	Applicator error	Option applicator:	Check applicator.
		Error while using applicator.	
114	Left position	Option applicator: Left final position switch is not in correct position.	Check LEFT final position switch for correct function and position.
			Check function of pneumatics for cross traverse.
115	Right position	Option applicator:	Check RIGHT final position
		Right final position switch is not	position.
			Check function of pneumatics for cross traverse.
116	Print position	Option applicator:	Check TOP and RIGHT final
		The applicator is not in the print position when trying to print a label.	function and position. Check pneumatics for function
117	XML parameter	The parameters in the XML file are not correct.	Please contact your responsible distributor.
118	Invalid variable	Transferred variable is invalid with customized entry.	Select correct variable without customized entry and transfer it.
119	No ribbon	During the print order the	Change transfer ribbon.
		ribbon roll becomes empty (rear printhead).	Check transfer ribbon photocell
		Defect at the transfer ribbon photocell (rear photocell).	
120	Wrong directory	Invalid target directory when copying.	Target directory must not be within the source directory.
			Check target directory.
121	No label PH2	No label found at the rear	Insert new label roll.
		printnead (DUOPrint).	Clean the label photocell.
		Labels not inserted correctly.	Check if labels are inserted correctly.
122	IP occupied	The IP address was already assigned.	Assign a new IP address.

Erro	r message	Cause	Remedy
123	Print asynchronous	The label photocell do not work in the order as it is expected according to print data.	Check label size and gap size.
		The settings of the photocell are not correct.	Check label photocell settings.
		Settings of label size and gap size are not correct.	Check correct loading of label material.
		No label found at the rear printhead.	Insert new label roll.
		Soiled label photocell.	Clean the label photocell.
		Labels not inserted correctly.	Check if labels are inserted correctly.
124	Speed too low	The print speed is too slow.	Increase the speed of customers' machine.
125	DMA buffer	Communication problem HMI.	Restart the printer.
126	UID conflict	Configuration RFID programming faulty.	Run RFID initialising.
127	Module not found	RFID module not available.	Check the RFID module connection.
			Please contact your responsible distributor.
128	No release signal	No print release by higher-level control (customer machine).	Activate release signal at the higher-level control.
129	Wrong firmware	Firmware does not match the used printer type.	Use firmware that fits to the printer type.
			Please contact your responsible distributor.
130	Language missing	Language file for the set printer language is not available.	Please contact your responsible distributor.
131	Wrong material	Label material does not fit to printing data.	User label material with suitable label and/or gap length.
132	Invalid mark-up tag	Invalid mark-up formatting characters in text.	Correct the formatting characters in the text.
133	Script not found	LUA script file not found.	Check the file name.

Error	message	Cause	Remedy
134	Script failure	LUA script is incorrect.	Check the script.
135	Script user error	Error in LUA script user input.	Correct the input value.
136	No reprint available	No label data for reprinting available.	Send new label data to the printer.
137	Printhead short	Electrical short at the printhead.	Check the used printhead.
	CIICUIL		Please contact your distributor.
138	Too less ribbon	Transfer ribbon ends.	Change transfer ribbon.
139	Rewinder error	Label band is torn	Load a new label roll.
			Stick together the label band.
140	Rewinder motor blocked	External rewinder motor is blocked.	Switch off the printing system and check mechanical resistance. Change the full label roll.
1.4.1	TT		
141	naruware error	A nardware component could not be found.	rease contact your responsible distributor.
142	No print mechanics	No print mechanics connected.	Check connection (print mechanics – control unit)

# **11 Additional Information**

### **11.1 Column Printing**

With this printing system several columns can be printed, i.e. the information of one column can be printed several times (depending on its width) on a label. Caused by this the use of the complete print width is possible and the generating time is enormously reduced.

For example four columns with a width of 25 mm or two columns with a width of 50 mm can be printed onto a label with a width of 100 mm. Please note that the first label is always the one with the largest x coordinate, i.e. it has the largest distance to the printhead.



### 11.2 Hotstart



#### NOTICE!

The data is saved onto CF card. Therefore the CF card is a condition for the *Hotstart* menu item.

The function *Hotstart* contains e.g. that in case of a power failure the currently loaded label can be further processed without any loss of data. Moreover a print order can be interrupted and to be continued after switching on the printing system anew.



# NOTICE!

At an active *Hotstart* all necessary data is stored on the CF card therefore do not remove the card during operation. When removing during operation, this causes the loss of all data on the CF card.

Save current label	In case the <i>Hotstart</i> function is set to on, at the start of a print order the data of the current label is saved to the corresponding directory of the CF card. However the following conditions have to be fulfilled:
	• CF card inserted in drive A.
	Enough free storage space onto CF card.
	An error message appears in case these conditions are not fulfilled.
Save print order state	At switching off the printing system the state of the current print order is saved to the corresponding directory of the CF card. However the following conditions have to be fulfilled:
	• CF card inserted in drive A.
	Enough free storage space onto CF card.
Load label and print order state	When restarting the label printing system (if the function <i>Hotstart</i> is activated) the saved label data and the status of print order were loaded from the corresponding file on the CF card. Because of this reason, when switching on the printing system a CF card has to be inserted in the appropriate drive. If the data cannot be loaded an error message appears.

Start print order In case at switching off the printing system a print order was active, then a print start is released automatically and the required res. actual number of printed labels is refreshed. In case the print order was stopped at switching off the printing system, it is again set to the stopped mode after switching on the printing system anew. In case a customized entry was active during switching off the printing system, the window for the first customized variable is displayed. As in the intended file only the start values of the counter are saved, **Refresh variable** counter they are refreshed at a new start of the print order by means of the number of printed labels. Each counter is counted corresponding from its start value. Afterwards the position of the current and the next counter update are correctly set by means of the update intervals.



### NOTICE!

Make sure that in case graphics are onto the label they have to be saved onto CF card.

Additional Information

#### 11.3 Backfeed/Delay

In continuous dispenser mode (IO dynamic continuous) no optimised **Backfeed modes** backfeed is possible. Because of the fact when changing the print order, then the current label in the offset sector is already printed from the old print order. In the sector that is printed when preprint the following label, no date/time variable should be existing, because this could be refreshed before the next start impulse. Standard After printing the label, it is driven into the dispenser offset and waited there, until the label was removed (photocell) or a new start signal is given (IO dynamic). Afterwards it is again backtracked to the beginning of label and then the next label is printed. After printing the label it is driven into the dispenser offset and then **Automatic** backtracked to the beginning of label either immediately or after the set delay time. When releasing a new start signal (IO dynamic) the next label is immediately printed. No backfeed After printing the label it is driven into the dispenser offset and there waited. When releasing a new start signal (IO dynamic) then the next label is immediately printed. Because of the fact that the label is already in the offset, the label is only printed from beginning of offset position, i.e. at the definition of label an accordingly large range must be left free at the top margin of label, because these data are otherwise not printed. **Optimized backfeed** After printing the label, during driving into dispenser offset the following label is 'pre-printed', if this is already available (generated). When releasing a new start signal (IO dynamic) the already 'preprinted' label is printed to the end and when driving into the dispenser offset the following label is again 'pre-printed'. In case the following label is not yet available or at the last label of a print order, the dispenser offset is driven as until now, and then for the next label before printing the backfeed to the beginning of label is executed.
### **11.4 Photocells**

	NOTICE!
	When using reflection photocells you should observe that the printing system cover is closed and in this way other light (e.g. working lamp) on the photocell is prevented.
Transmission photocell normal	For this photocell type the transmitter is at the top res. the receiver at the bottom, i.e. the infra-red light is sent from the top. In this way the label detection is also from the top. This photocell type is used for standard adhesive labels with gap.
Reflexion photocell normal	For this photocell type the transmitter and receiver are at the bottom, i.e. the light is reflected by the label and taken over from the receiver. This photocell type is used for white (light) continuous labels with a black (dark) bar. The bar is the separator, i.e. it indicates the position of gap and in this way the label start.
Transmission photocell inverse	For this photocell type the transmitter is at the top res. the receiver at the bottom, i.e. the infra-red light is sent from the top. The label detection is, same as for the <b>transmission photocell normal</b> , from the top. However, it is printed differently as for normal photocells, in the translucent place; the printing system recognizes the opaque place as gap. This photocell type is used frequently when printing foils.
Reflexion photocell inverse	For this photocell type the transmitter and receiver are at the bottom, i.e. the light is reflected by the label and taken over from the receiver. This photocell type is used for black (dark) continuous labels with a white (light) bar. This bar is the separator, i.e. it indicates the position of gap and in this way the start of label.



## NOTICE!

When using transmission photocells inverse, the printing system must measure a difference of 2.5 V and for reflexion photocells inverse 1 V between translucent and opaque material. Otherwise the printing system does not recognize a difference between label and gap (bar).

### 11.5 Ultrasonic photocell (option)

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elb



### NOTICE!

The ultrasonic photocell must be adjusted on the currently used label material.

This photocell type is particularly suitable for the use of transparent labels on transparent backing paper.

Adjustment of switching point in 'light-switching' mode: The switching output Q is active if the backing paper is detected between the labels (gap detection).

Position the label between the active surface of the fork sensor (see arrow on sensor). With key = and/or + adjust until the switching output indicator is off.

Position the backing paper in the active area of the fork sensor. The switching output indicator (yellow) must light up again. Otherwise increase the sensitivity with + until the switching threshold is correctly adjusted.

If necessary, adjust the switching point slightly in the other direction.

Adjustment of photocell

Sensitivity setting	Slow setting: Press key + and/or - once. The red LED lights with each key press.		
	Fast setting: Press key + and/or - permanently. The red LED flashes after 2 seconds.		
Light (L) / dark (D)	Press key + and - simultaneously for 6 seconds.		
switching	The yellow LED changes status and the red LED flashes slowly.		
	Release keys + and		
Locking the keys	Press keys + and - simultaneously for 3 seconds to enable/disable the key lock.		
	Locking the keys: The red LED goes off after 3 seconds. Release keys + and - and the red LED lights permanently.		
	Unlocking the keys: The red LED lights after 3 seconds. Release keys + and - and the red LED goes off.		

# 12 Touch Screen Display

### 12.1 Touch Screen Display Structure

The touch-screen display shows an intuitive graphic user interface with well-defined symbols and buttons.

The touch-screen display informs about the current device status and status of the print order, alerts in case of an error and indicates the device settings in the menu.

The desired settings are made by selecting the buttons on the touchscreen display.



Display favorites list
Select parameter settings
Access to memory card menu
Start print job
Start test print
Start layout feed
List of the installed components

### 12.2 Indication of Menus

Indication of main menus

Indication of submenus

Valentin DRUCKSYSTEME	☆ Favourites	Configuration	Memory Card			
Print Settings	» Label Layout					
Label Settings	Label Recognition					
Device Settings	Label Length		80.0 mm			
» Cutter	Gap Length 2.0 mm					
Dispenser	Label Width	Label Width 104.0 mm				
Network	[START] Measure Label					
» Scanner						
» Interface						
Emulation						
IDLE						

The selected (active) menu is highlighted on orange background.

If a selected menu contains so-called submenus, these are blue highlighted.

	숫 Favourites	:= Configuration	Memory Card
> Label Layout	Label Type		Adhesive Labels
Label Recognition	Photocell		Transmission Normal
	Label Synchronization Posi	tion	10 %
	Error Length	150 mm	
	Synchronization	On	
	_		
IDLE	<b>Configuration</b>		

#### Different parameters are combined in a submenu.

The left display side shows the available submenus. The currently selected (active) submenu is highlighted on orange background.

Press K to return one level.

## 12.3 User-Defined Info Field

From the predefined contents, the user can define the display of the user-defined info field (green).

	숫 Favourites	Config	uration	Memory Card
LabelPrt01 10.102.3.72	Iso-Propa снасна(он)сна	anol 🛞 🤇	€	
 ℃	Activitativecies: IIII: An of a transmission of the Activity of the activity of the activity of the activity of the Activity of the activity of the activity of the activity of the Activity of the activity of the activity of the activity o	Geterr Stohenholtenhuwelse: P210 Stohenholtenhuwelse: P210 Stohenholtenhuwelse: P210 Stohenholtenhuwelse: P220 Stohenholtenhuwelse: P221 Stohenholtenhuwelse: P221 Stohenholtenhuwelse: P221 Stohenholtenhuwelse: P221 Stohenholtenhuwelse: P223 Stohenhuwelse: P223 Stohenhuwelse: P223 Stohenhuwelse: P223 Stohenhuwelse: P233 Stohenhuwelse: P234 Stohenhuwelse: P234 Stohenhuwelse: P234 Stohenhuwelse: P234 Stohenh	namin Gr. Lington Virango Martino Mart	
IDLE	Print	Test Print	Formfeed	i Info

Select the menu *Maintenance/System settings/User-defined info field* to specify what is to be displayed in the user-defined info field.

	ूरे Favourites	E Configuration	Hemory Card
Print Preview	Userdefined Infofield		Default
» LCD			
System Settings			
IDLE	<b>Configuration</b>		

#### **Selection of parameters**



Standard:	Horizontale display orientation: Empty info field		
	Vertical display orientation: Indication of job info (label name and number of printed labels)		
Job info:	Indication of label names and the number of already printed		
IP configuration:	Indication of IP address and MAC address of printing system		
Printed labels:	Indication of printed labels as enlarged text output		

# Display of predefined configuration



### 12.4 Favorites List

Add parameters to favorites

	숫 Favourites	Configuration	Memory Card
Print Settings	Print Speed		100 mm/s
Label Settings	Contrast		100 %
Device Settings	Ribbon Control		Sensib. Weak
Vutter	Y-Displacement		0.0 mm
Dispenser	X-Dis Add to Favorites	XX Quit	0.0 mm
Network	Tear-off Displacement		22.0 mm
Scanner			
Interface			
Emulation			
IDLE			

Press long (2 s) on a parameter (e.g. print speed) to display the appropriate selection.

Press Add to favorites to add the selected parameter to the favorites list.

	ि Favourites	:= Configuration	Memory Card
Favorites	Contrast		100 %
	Print Speed		100 mm/s
IDLE			

Remove parameters from favorites



Press long (2 s) on a parameter (e.g. print speed) to display the appropriate selection. Press *Remove from favorites* to remove the selected parameter from the favorites list.

### 12.5 Parameter Input

### Parameter input

CVV valentin DRUCKSYSTEME	ूरि Favourites	E Configuration	Memory Card			
Print Settings	Print Speed		100 mm/s			
Label Settings	Contrast		100 %			
Device Settings	Ribbon Control		Sensib. Weak			
» Cutter	Y-Displacement	Y-Displacement 0.0 mm				
Dispenser	X-Displacement 0.0 mm					
Network	Tear-off Displacement		22.0 mm			
Scanner						
Interface						
Emulation						
IDLE						

### **Numeric input**

CV valentin DRUCKSYSTEME		کی Favourites		E Configuration		Memory Card
Print Settings	Pr	int Speed				100 mm/s
▶ Label Settings		Print Sp	eed [502	50 mm/s]	≍	100 %
Device Settings	1	2	з			Sensib. Weak
♥ Cutter	4	5	6	+10		0.0 mm
Dispenser				150		0.0 mm
Network	7	8	9	_		22.0 mm
Scanner		0	del	-10		
➢ Interface			~	/		
Emulation						
IDLE						

In the header of input dialog the name of the parameter and the permissible value range are shown. The input is checked for validity. If the entered value is not permissible, the button  $\checkmark$  is blocked.

### Selection from list

CVV Valentin DRUCKSYSTEME	☆ Favourites	E Configuration	Memory Card
Print Settings	Print Speed		100 mm/s
> Label Settings	Contrast		100 %
Device Settings	Ribbon Cor <sub>Ribbon</sub> Contro	<b>□</b>	Sensib. Weak
➢ Cutter	Y-Displacer Off		0.0 mm
Dispenser	X-Displacen Sensib. Weak		0.0 mm
Network	Tear-off Di Sensib. Strong		22.0 mm
⋟ Scanner	✓		
Interface			
➢ Emulation			
IDLE			

Select the parameter for which you want to change the selection. The currently selected value is highlighted on orange background. Press 🐼 to confirm the selection.

CV				☆ III Favourites Configuration						Memory	) / Card
Print S	ettings		IP Ad	ldress						10.1	02. 3.74
Note: Note: State St				Р	rinter Nar	ne				*	.255. 0
	LabelPrt	01_									
Device	q	w	е	r	t	У	u	i	o	р	2. 3. 1
➢ Cutter	а	-	а		a	h		k		ä	utomatic
➢ Dispen:	u	3	u	· ·	9		,	~	<u> </u>	u	Off
Networ	企	z	x	с	v	b	n	m		X	belPrt01
IN Scanne	\$13	23								70:eb:7a	
▶ Interfa					~	/					
➢ Emulati	on										
	IDLE										

The alphanumeric input is shown in the header of input dialog.

Press  $\checkmark$  to confirm the selection.

## Alphanumeric input

Г

### **12.6 Navigation Zones**

	کم Favourites	:= Configuration	Memory Card
▶ Print Settings	Print Speed		100 mm/s
Label Settings	Contrast		100 %
Device Settings	Ribbon Control		Sensib. Weak
Vutter	Y-Displacement		0.0 mm
Dispenser	X-Displacement		0.0 mm
Network	Tear-off Displacement		22.0 mm
» Scanner			
▶ Interface			
Emulation			
IDLE			

The respective navigation zone can be moved with an appropriate swipe movement from top to bottom or from the bottom up.



### NOTE!

With the used resistive touch screen variant a certain pressure on the display is needed. It is not possible to navigate on the display with the swipe

movement to the left and right with a finger (well-known from smartphones).

The position indications signalise the detail of the total list currently visible. If no position indication is visible then the total list can be displayed on the display. A swipe movement from top to bottom and/or from the bottom up is not possible.

### 12.7 Maintenance Zone

Different settings for the display indication can be done.

Maintenance - Print preview		숫 Favourite	i Configuration	Memory Card
	▶ Test Function	Preview Available		On
	Print Preview	Zoom		Fields
	» LCD	Preview rotated		Off
	▶ Printer Info	Preview Interval		3
	IDLE	<b>Configuration</b>		

# Print preview activated On/Off

With activated print preview a picture of the currently printed layout is shown on the display. If the function is not activated, the field remains empty.

	ूर् Favourites	Con	iii figuration	Memory Card
LabelPrt01 10.102.3.74	ISO-Pro снзснз(он)снз	panol	Gefahr	!>
1/1 3⁄2	Gefahrenhinweise: H223 H338	Sicher 2.530 2.530 P280 P280 P280 P280 P339+	heitkahinweise: Vor 1 razkinweiten Hars Obersteiner - Bir Kaussen och einer State Kaussen och einer State State in State State in State State in State Kaussen och einer State State in State State State in St	nmai - suggi Jangen S. Prigo S.
IDLE	<b>F</b> rint	Test Print	Formfee	d Info

#### Print preview – Zoom

Selection of a certain zoom value for the representation of print preview.



Label: The complete layout is fit to the indication zone.

Fields: Only the print range is fit to the indication zone.

1 .. 8: Manual zoom factor to scale the complete layout down.

uispiay.			
	숫 Favourite	:= Configuration	Memory Card
▶ Test Function	Preview Available		On
▶ Print Preview	Zoom		Fields
» LCD	Preview rotated		Off
♥ Printer Info	Preview In Off Off		3
IDLE	<b>Configuration</b>		

# Print preview – PreviewThe display of label preview can be rotated on the touch-screen<br/>display.

On: The label preview is shown rotated by 180° on the display.Off: The label preview is represented in read direction.

#### Print preview – Interval

During a running print order the preview is refreshed in the set interval.



Value range: 0 .. 10 seconds

Maintenance - LCD In the LCD maintenance sector, different parameters to the touchscreeen display can be set.

Valentin DRUCKSYSTEME	숫 Favourite	Configuration	Memory Card
▶ Test Function	Calibration		
▶ Print Preview	Backlight		0 %
» LCD	LCD orientation		Landscape
⋟ Printer Info			
IDLE	<b>Configuration</b>		

### LCD – Backlight

Setting the brightness of background lighting.

	کی Favourite	:= Configuration	Memory Card
▶ Test Function	Calibration		
Print Preview	Backlight		0 %
» LCD	LCD orientation		Landscape
» Printer Info	Backlight [0100 0 	+	
IDLE	<b>Configuration</b>		

Value range: 0 .. 100 %.

### LCD - Orientation

	숫 Favourite	Configuration	Memory Card
	Calibration		
Print Preview	Backlight		0 %
» LCD	LCD orientation		Landscape
⋟ Printer Info	Landscape 18	0°	
	Landscape		
	Portrait		
	Portrait 180°		
	~		
IDLE	Configuration		

**Landscape 180°:** The display is represented turned by 180 degres to the function 'Landscape'.

**Landscape:** The display is represented turned by 90 degres to the reading direction.

Portrait: The display is represented in reading direction.

Portrait 180°: The display is represented turned by 180 degres.

Maintenance - System settings

	숫 Favourite	Configuration	Memory Card
Test Function	Printer Type		
Print Preview	Reset Paper Counter Print	head	
» LCD	Reset Paper Counter Mach	nine	
Printer Info	Set Default Values		
	OEM Customer ID		0
IDLE	<b>Configuration</b>		

Different system settings such as set type of printing system, reset paper counter etc. can be made.

However, for the settings the corresponding password is necessary.

Valentin DRUCKSYSTEME	숫 Favourite			Confi	guration	Memory Card
▶ Test Function	Printer T	уре			_	
Print Preview	Reset Pa	Enter F	Password	×		
» LCD	Reset Pa	- 1	2	3		
Printer Info	Set Defa	4	E	6		
	OEM Cus	4	3	0		0
		7	8	9		
		±	0	del		
			✓			
IDLE	<b>4</b> Config	guration				

### 12.8 Process Data

Activation of display for process data

		E Configuration	Memory Card			
▶ Print Preview	Preview Available	On				
	Zoom Label					
System Settings	Preview rotated	Off				
	Preview Interval		3			
	Show Process Data 0					
IDLE	<b>Configuration</b>					

In order to show the process data, the parameter must be activated before in the menu *Maintenance/Print preview*.

# Add parameter to process data

	Fav	Favourites Confi		<b>H</b> guration	Memo	Ty Card	
Network	)≫ Day	light Saving 1	ime				
Scanner	)≫ DST	» DST - Start					
» Interfi な Add to Favo	ourites	tes Add to Process Data		XX Quit		2.10.17	
Emulation	Time (H					16:25:07	
Date/Time							
IDLE							

Press long (2 s) on a parameter (e.g. current time) to display the appropriate selection.

Press *Add to process data* to add the selected parameter to the process data list.

	ूरे Favourites	E Configuration	Memory Card
Service Functions	Job Name		GHS-lso-
Password	Labels Printed		0
Maintenance	Time (HH:MM:SS)		16:25:44
Process Data			
IDLE			

# Remove parameter from process data

	JCKSYSTEME	∽ Favourites	Configuration	Me	mory Card
⋟ Service Fui	nctions	Job Name			GHS-lso-
▶ Password		Labels Printed			0
▶ Maintenand	Remove	from Process Data	XX Quit	16:26:25	
Process Da	ta				
IDLE					

Press long (2 s) on a parameter (e.g. current time) to display the appropriate selection. Press *Remove from process data* to remove the selected parameter from the process data list.

Change of display vies	With activated print preview, the display shows a picture of the
Process data – Print	currently printed layout. The change to the process data view is
preview	effected by wiping to the right.

With activated print preview on the display a picture of the up-to-date printed layout is shown.

### 12.9 Memory Menu

Compact Flash Card USB Stick

On the left side, the content of the currently selected directory is shown one below the other.

The preview zone in on the right side is. If available, the preview of the selected layout is shown.

CV valentin DRUCKSYSTEME	숫 Favourites	Configuration	Hemory Card
Etikett1.prn	A:\STANDARD\Vario_GHS-Is	so-Propanol_105x74.prn	
Flexi.prn			
fuchs.prn	_		
GHS-Iso-Propanol_105x74.prn	ISO- CHaCHa	Propanol	
save	Calabara	Gefahr	
test4-2	64000-6600 1425 7 Konyo 1919 - 93, 93 1939 - 62, 93 1930 - 62, 93 1939 - 62, 93 1930 -	anweites: of end and the international sector of the international sector and the international sector of the inte	ner fragsvær Invætir : Rufsk felt up: Savar andensk
Vario_GHS-Iso-Propanol_105- x74.prn		Hold And And And And And And And And And An	MACCAN Entop In 1 Victur Ordöfficken nech Wehr dokte nekemis, kölsben Mer mauchen
ZPL1.prn	Gewin	cht: 500mi Piss Anternet of Salatine	
ZPL2.prn			
IDLE	Load	Ad	ministrative Tools

Load:	The selected layout is loaded. After the number of copies have been entered, the print order is started.
Admininstrative tools:	Switching to the file manager (File Explorer).

Gewicht								500r	nl 🔀
q	w	e	r	t	у	u	i	o	р
	a	S	d	f	g	h	j	k	I
Û	*	z	x	с	v	b	n	m	
<u>6123</u>	,	ins		d	el (		•		- D

The user query can be entered at the cursor position. Press 🖶 to change to the input of number of copies.



Enter the number of layouts to be printed.

## Number of copies

### 12.10 Information Zone

Valentin DRUCKSYSTEME	숫 Favourite	Config	uration	Memory Card		
LabelPrt01 10.102.1.119	Printer Type			71 DC D-84 2201		
	Firmware Time of E	Juild	v	May 17 2017		
	IP Address			10.102. 1.119		
-	Printer Name			LabelPrt01		
<u></u>	SVN Version			8689		
	Hardware Version			OS 2 HW 67		
	HMIVersion		4.026			
0/1	Version Bitmap Fon	t	B-Font: V5.01			
0/1	Version TrueDoc Fo	nt		V-Font: V91.00		
	Version FPGA			FPGA V:5.70.0.102		
	Memory Configurati	on		8MB F/16MB RAM		
*0	Version Atmel 1			NO Response		
<i>9</i> <sup>.</sup>	Version Atmel 2			NO Response		
	Version Atmel 3			NO Response		
IDLE	<b>e</b> Print	Eii Test Print	<b>全</b> Formfeed	i Info		

By pressing the **Info** button the versions of the installed components are displayed.

By pressing the **Info** button once more, the **Home** view is again displayed.

## 12.11 Change to Foil Keyboard

Press long (> 3 s) on the company logo left above, and the display changes to the indication of a conventionalized foil keyboard. The settings can be done by the standard operating panel. Press 🗴 to change to the previous view.

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q	S	d	f	g	h	j	k	Т	m
Û		w	x	с	v	b	n		+
								С	Е



# 13 Environmentally-Friendly Disposal

Manufacturers of B2B equipment are obliged to take back and dispose of old equipment that was manufactured after 13 August 2005. As a principle, this old equipment may not be delivered to communal collecting points. It may only be organised, used and disposed of by the manufacturer. Valentin products accordingly labelled can therefore be returned to Carl Valentin GmbH.

This way, you can be sure your old equipment will be disposed of correctly.

Carl Valentin GmbH thereby fulfils all obligations regarding timely disposal of old equipment and facilitates the smooth reselling of these products. Please understand that we can only take back equipment that is sent free of carriage charges.

The electronics board of the printing system is equipped with a battery. This must only be discarded in battery collection containers or by public waste management authorities.

Further information on the WEEE directive is available on our website www.carl-valentin.de.

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