Z1 Remote Manager

Instruction Manual

Rel: 1.01
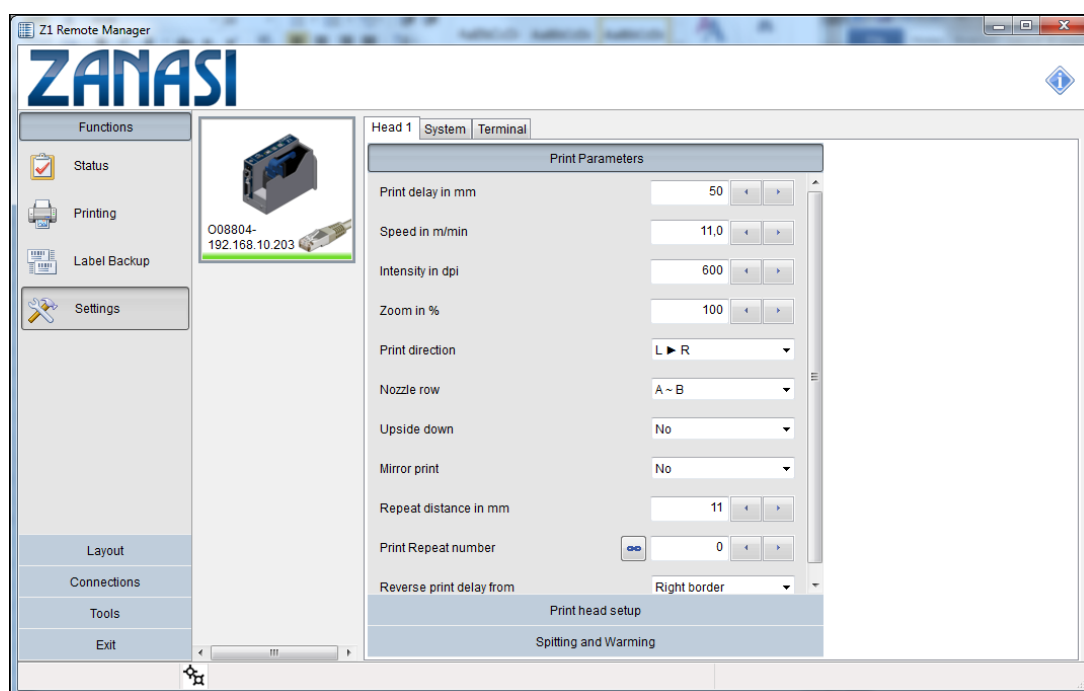
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NOTE!

Zanasi s.r.l. has made every effort to ensure the completeness, topicality and correctness of the information in this manual. Errors in the documentation can nevertheless not be excluded; **Zanasi s.r.l.** therefore excludes any warranty claims based on this information. Changes to the information contained in this documentation are reserved and may be made without notification at any time.

Table of Contents

General

Information on this operating manual

This manual enables safe and effective use of the software.

The manual is a component of the software.

The manual must be available to the staff at all times near the PC on which the software is installed.

The staff working with the software must have studied this manual and be familiar with the content.

Compliance with all safety notes and instructions given in this manual is a basic prerequisite for safe and efficient working.

Illustrations in this manual serve to provide a basic understanding and may differ at times.

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Explanation of symbols

Safety notes

Safety notes are identified by symbols in this manual. The safety notes are preceded by mnemonics signifying the severity of the hazard.

It is imperative to observe the safety notes and to act with care to avoid material damage.

CAUTION!

… points out a possibly dangerous situation which may lead to material damage if not heeded.

Tipps and recommendations

NOTE!

… points out useful tips and recommendations as well as information to ensure effective and trouble-free operation..

Result

… this symbol points out a result, following an action by the operator.

Limitation of liability

All the information and instructions in this manual were compiled based on the current standards and regulations, state of the art technology and our many years of know-how and experience.

The manufacturer is not liable for damages resulting from:

- disregarding the manual
- improper use
- use of untrained staff
- changes to the software

The obligations agreed upon in the supply agreement, the general terms and conditions, the manufacturer's delivery terms and the statutory provisions applicable at the time of conclusion of the contract are applicable.

We reserve the right to make technical changes to improve the performance and in the course of on-going development.

Copyright

This manual is copyright protected and intended for internal use only.

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Offenders will be liable for damages. Rights to further claims are reserved.

Guarantee terms

The guarantee terms are specified in the General terms and conditions of the manufacturer.

Customer service

Please refer to our customer service for technical information.

Our staff is furthermore always interested in new information and experiences arising from the use of the product and which may be valuable information for product improvement.

Intended use

The software has been designed and implemented exclusively for the intended use described herein.

The software serves to develop and administrate print images which are transferred to the Z1 printing system.

Intended use also includes adherence to all the specifications in this manual.

Any use beyond the intended use or any other use is regarded as misuse.

Any claims arising from damages due to misuse will be rejected.

Installation and set-up

System requirements

To install the Z1 Remote Manager software on a PC, the following minimum system requirements must be met:

- Pentium III processor or later
- Windows XP®, Windows Vista, ®, Windows 7
- 512 MB RAM
- 25 to 30 MB hard disk
- SVGA monitor, 256 colors minimum
- PC mouse
- or Touchscreen
- Printer interface
  (either USB, RS 232 , RS 442 or Ethernet)

Install software

The following steps imply that you have an installation file on USB-stick.

Unser this link you'll find always the latest Z1 Remote Manager

software. You'll get further information from the Support.

You'll get the latest software update under the link, specified above or the info button. The latest software includes also the latest firmware versions.

1. Change to the index where you saved the actual Z1 Remote Manager version.
2. Double click the **Setup_Z1_Remote_Manager.exe** file.
3. Click on the **Esegui** button.

Fig. 1 Z1 Remote Manager Setup Assistant
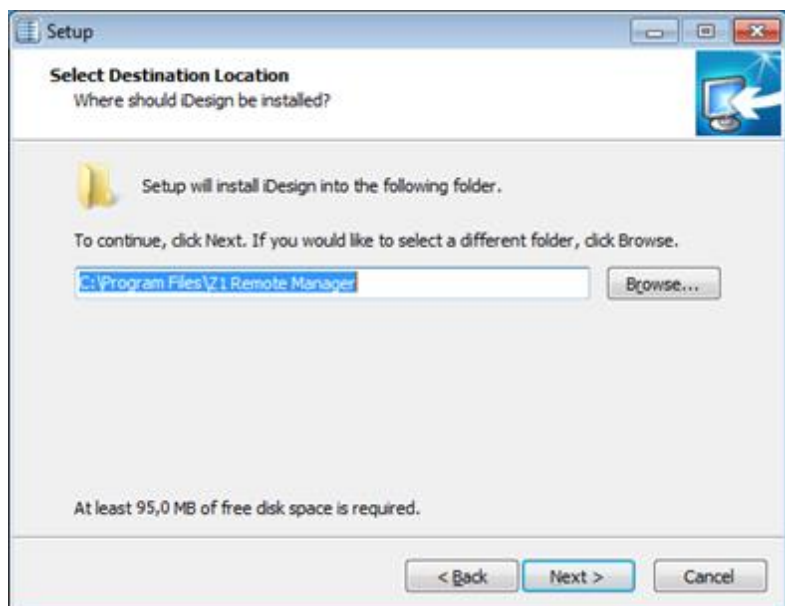
4. Click on the **Next >** button.

Fig. 2: Select destination folder

5. Click on **Change…** button if required and select destination folder.
(default path **C:\Program Files (x86)\Z1 Remote Manager**)
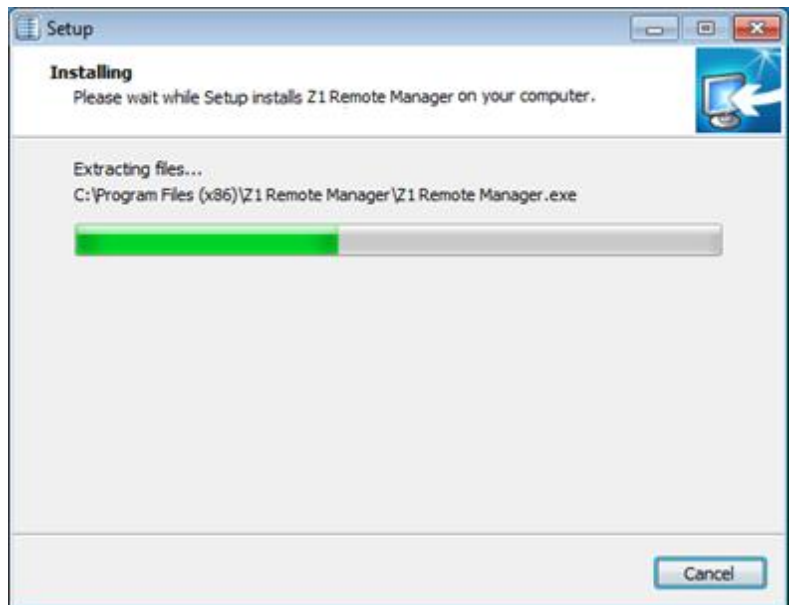
6. Click on the **Next** > button.

Fig. 3: Start installation

Fig. 4: Complete installation

7. Click on **Finish** button.

Fig. 5: Extract the Windows Driver

8.   Finally extract the Windows Driver and start the installation.

Starting and ending software

Start Z1 Remote Manager

1. To start Z1 Remote Manager,

   – Click on the [icon] desktop button

   or:

   – Click the Z1 Remote Manager button in the **Start/Z1 Remote Manager/Z1 Remote Manager** Windows menu bar:

   ⇨ The Start window opens.

Fig. 6: Start window

> ○ *NOTE!*
> ⫿ *The print systems are shown only if they are registered previously.*

2. Alternatively, Z1 Remote Manager Touch can be start optimized for a Touch surface,

- click on the [icon] button on the desktop.

or:

- click the button **Z1 Remote Manager Touch** in the Windows menu bar **Start/Z1 Remote Manager/Z1 Remote Manager Touch**
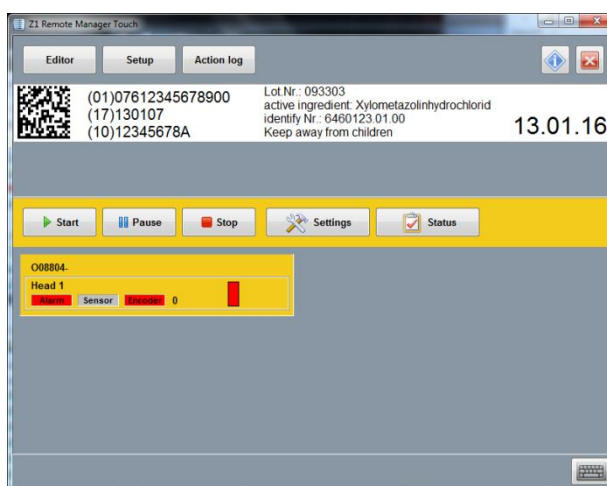
⇨ The start window opens.

Fig. 7: Start window

> **NOTE!**
>
> *The print systems are shown only if they are registered previously.*

End Z1 Remote Manager

1. To end Z1 Remote Manager

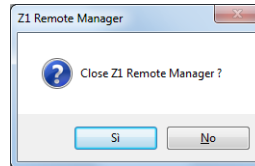   – Click the [X] button in the title bar.

   Fig. 8: End Z1 Remote Manager

   ⇨ The Start window closes

   Or

   – Click on end on the bottom left.

   Fig. 9: End Z1 Remote Manager

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Software design

Home page

The Z1 Remote Manager software is organized in two fields. On the left is the navigation menu and on the right is the information part of the software.

Navigation menu

The navigation menu opens up the functions of Z1 Remote Manager.

Functions

Status messages are shown, print images and parameter are managed and can be sent to the desired system.

Print image

Functions and settings for the print image.
Print images can be created and managed with the editor and can send to one or more systems. Data base connections can be configured and created automatically. Print images can load into the system via the USB stick backup function.

Connections

The connections menu is used to configure connections to the print systems.

Tools

The tools menu is used to make settings for the logging, user management, the language of the software and a system-independent terminal program.

End

To end the Z1 Remote Manager software.

Information dialogue

Click the button top right to select the information dialogue. You can find the complete version number and additional notes for these Z1 Remote Manager version.
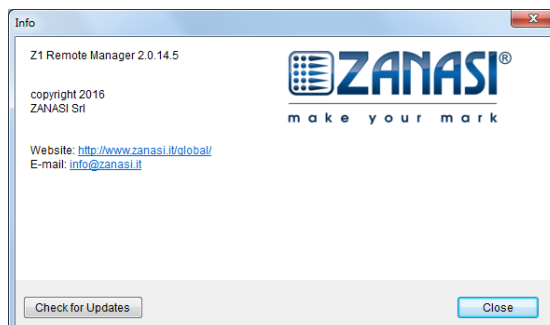

Fig. 10: Finestra di dialogo informativa

Here you can also download the version for a software update.

System tool bar

Fig. 11: System tool bar

The system tool bar contains information to the already configured print systems.

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Fig. 12: System symbol

The illustration of the print systems in the tool bar is made with a picture of the connected system, the name, a status LED and connection information.

If more systems are registered as they can shown, the systems can scrolled with the bar at the lower side.

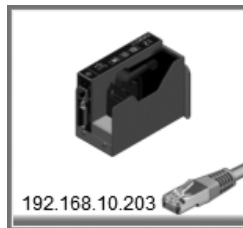Systems, which are registered but aren't available, are shown in grey.

Fig. 13: Not available system

The system can be activated for editing with a click on the icon.

The frame around the icon is then wider than the other icons.

Status LED

The status LED visualizes information about the operating condition of the activated system.

NOTE!

The status signals can have different meanings, depending on the system. For further information have a look to the operating manual.

Symbol	Meaning	Description
	OK	The system is ready for use. It exist no problems.
	Warning	This report is displayed if i.e. a cartridge is nearly empty and should be changed.
	Alarm	The system is in the „Alarm" status and is not ready for print.
	No connection	No connection to the system.

NOTE!

System symbol blinks grey

If more than one PC access the print system, the system flashes grey.

In this case is no configuration of the system over Z1 Remote Manager possible.

Connection information

Depending on the type of connection the status displays two information.

1. The name of the system, if a name has been assigned.
2. Different information, depending on the connection

Connection	Meaning
TCP/IP	Displays the IP-address of the system
USB cable	Displays the chip identification
EIA 232	Displays the used COM-Ports
USB-stick	Displays the serial number

PopUp – *menu of the system symbol*

If you click on a system symbol with the right mouse button, you get the possibility to change diverse settings of the selected system.
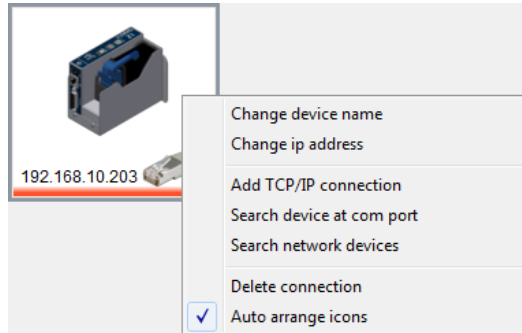

Fig. 14: PopUp menu

The settings include:

Menu item	Available	Description
Save	all systems	Specify an individual name for the system, e.g. production line 3
Change IP address	all systems	Change the IP address of the connected system and in Z1 Remote Manager.
Add TCP/IP connection	Always	Add a new system in Z1 Remote Manager
Search system on the Com Port	Always	Checks the available COM Ports for connected systems
Search system in network	Always	Check the actual network for connected systems
Delete connection	Always	Deletes a system in Z1 Remote Manager
Auto arrange icons	Always	If the check mark is removed, the system icons can be placed anywhere on the screen.

Functions

Description of functions

The status of the connected systems can be shown.

The functions are used to manage print images and parameters and to transfer these to available printers.

The connected printers are shown as symbols on the user interface.

Submenu status

The status menu shows information of the system and whose operating condition, which can call up.

The window is divided in different fields, depending on the print system. These fields can be selected via the top tabs.

Status - Panel

The status – panel shows the status of the print system.

Fig. 15: Status screen

The status – panel is structured in different fields.

1.) System status
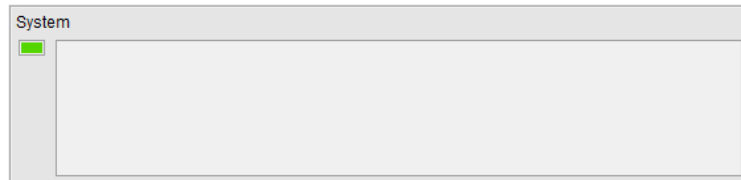
Fig. 16: System status

The system status summarize all status information, it consists of a status LED, which shows the status of the system and a status list, which shows the alarm- and error status of the system.

The system has 3 different statuses generally.

a.) Error – The system isn't ready.
The status LED is red.

b.) Warning – The system isn't print ready or there is a warning (ink nearly empty).
The status LED is yellow.

c.) OK – The system is ready and can print.
The status LED is green.

The status list shows the actual error in form of an own status LED, the print head, which concerns the error information and a textual information of the error.
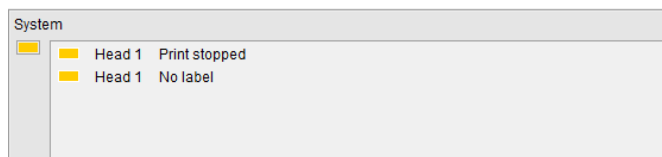

Fig. 17: Example of information in the system status

The information is periodically updated and displayed by the system.

2.) Head status
The head status is displayed below the system status.
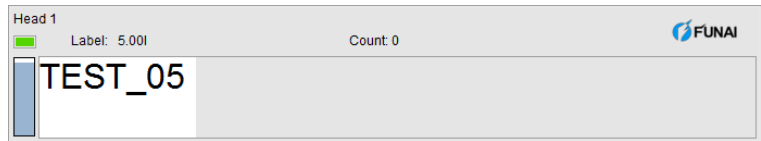This summarizes the information for the print head.

Fig. 18: Head status and preview

You can find:

a.) Name of the Printhead

b.) Status LED
summarizes the head status

c.) Filling level of the cartridge in percent

The cartridges and whose filling levels are displayed at the left edge topdown. The colors of the elements show the status for the specific cartridges.

d.) Label name

Name of the actual print label.

e.) Print counter

Number of the already printed label.

f.) Preview

Real-time preview of the actual printed label. All fields, also variable fields, date fields and barcode fields will be displayed with the actual data.

g.) Head type - pictogram

Shows the print technology with a pictogram.

Cartridges – panel

The cartridges - panel summarizes information for the head and cartridges.

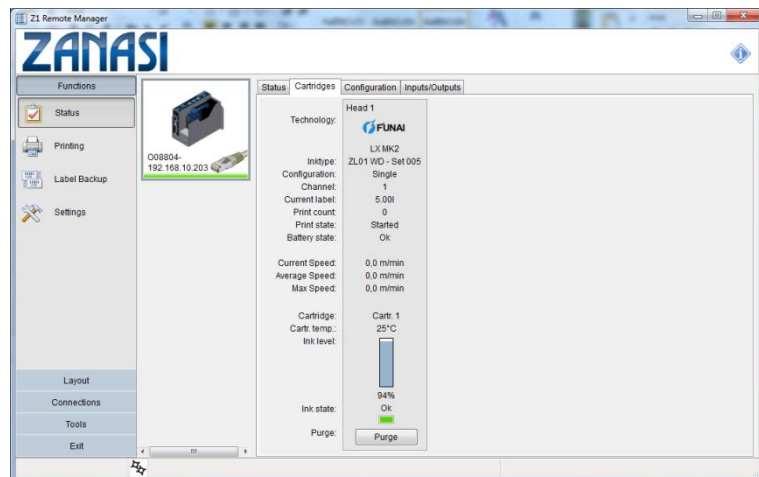On the left side is a legend of the displayed information.

Fig. 19: Cartridge information

The upper part contains information of the head.

There can be seen:

a.) Name of the Printhead

 b.) Printhead technology

   Displayed as pictogram and text

c.) Printhead configuration

d.) The used channel of the Printhead

e.) Name of the actual print image

f.) Counter

   Number of the previously printed labels

g.) Print status

   start, pause, stop

h.) Battery status

Below these information are the cartridge information, for each cartridge separately side by side.

There can be seen:

a.) Cartridge name

b.) Temperature of the cartridges

c.) Filling level of the cartridges
   Graphic and text

d.) Ink status

   Graphic (LED) and text

Configuration – panel

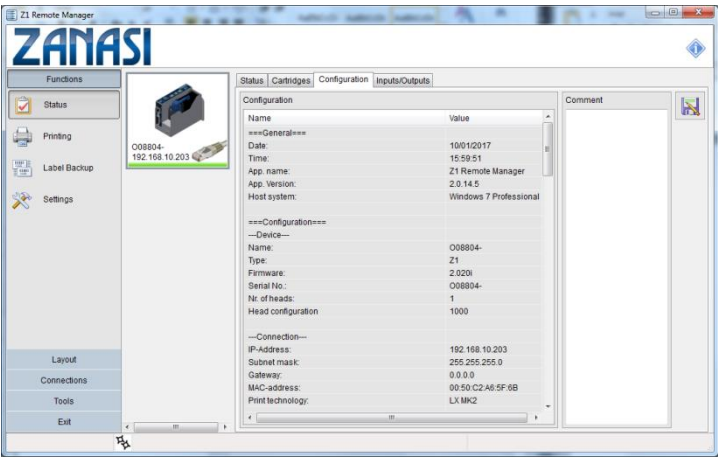The configuration-panel summarizes tabular information of the print system.

Fig. 20: System configuration

There can be seen:

Name	Information	Change
Name	System name	Yes, see **Change name**
Type	System type	No
IP-address	Shows the actual IP-address of the system, also when it isn't connected via TCP/IP	Yes, see **Change IP-address**
Firmware	Shows the actual installed firmware version	Yes, see **Firmware update**
Number of heads	Shows the number of available heads	No
MAC-address	Shows the actual MAC-address of the system, also when it isn't connected via TCP/IP	No

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System configuration	Shows the actual set system configuration (Advanced, Pro)	Yes, see **Change configuration**
Serial number	Shows the serial number of the system	No
Max. Speed.	Shows the maximum print speed of the system	Yes, see **Change configuration**
Date/Time	Shows if the system supports date fields	Yes, see **Change configuration**
Variable fields	Shows if the system supports variable fields	Yes, see **Change configuration**
Barcodes	Shows barcode types, which are supported by the system	Yes, see **Change configuration**
Passwords	Shows if the system is password-saved	Yes, see **Change configuration**
USB Support	Shows if the system supports the USB interface	Yes, see **Change configuration**
Interface	Shows if the system supports the ethernet interface	Yes, see **Change configuration**
Maximum print length	Shows if the head coding is active in the system	Yes, see **Change configuration**
IO Digital 24V	Shows if the system supports the Digital IO interface	Yes, see **Change configuration**

Save the configuration:

1. Click on „Save"
2. Select the folder to save the file.
3. Enter the file name if necessary.
4. Click on „Save".

The configuration is saved and can view with every text editor.

Inputs/Outputs – panel

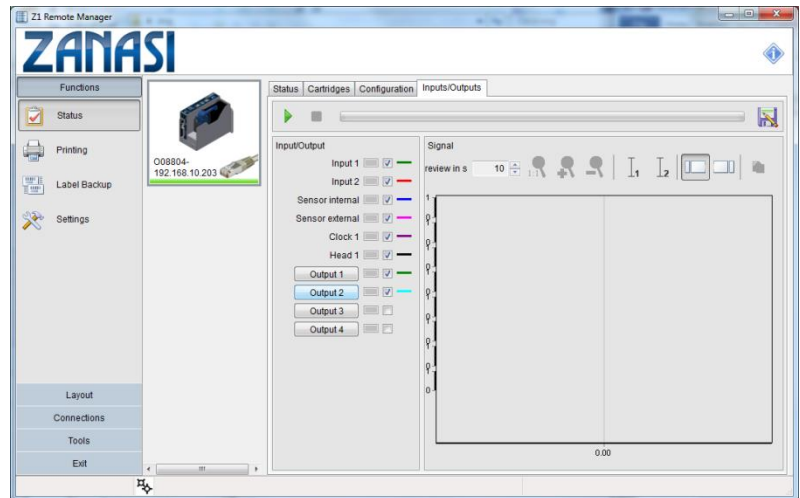The inputs/outputs – panel shows diverse graphical real-time signals

Fig. 21: Visualization of the input- and output signals

On the upper field there are control elements to control the display. These are from left to right:

a.) Start/Stop of the signal preview

This allows a live preview of the signals

b.) Record signals

A file dialogue is shown after a click on this icon. Afterwards the signals will be written as text in a file.

c.) Loupe 1:1

Renew the original size of the live preview.

d.) Loupe +

Zoom in in the live preview.

e.) Loupe –

Zoom out from the live preview again.

f.) Copy to Clipboard

Copies the current display of the live preview to the Windows clipboard. This image can than paste into the image processing software.

g.) Preview in s

The displayed value shows the maximum time interval, which is shown in the line preview.

All signals, which are provided from the system, are listed on the left side. These signals act as legend of the live preview. The display of the legend happen by:

a.) Signal name

b.) LED

> If the signal is active (High), the LED will be light green. If the signal is inactive (Low), the LED will be dark green.

c.) Selection-Checkbox

> Via the checkbox can determine whether this signal should be displayed in the live preview. It's possible to display up to 10 different signals.

d.) Signal color

> The signal color for all signals, which are shown in the live preview, is assigned automatically.

Following signals are visualized:

a.) Inputs

> If the input is active (High), the LED will be light green. If the input is inactive (Low), the LED will be dark green

b.) Sensor

> If the sensor is active (High), the LED will be light green. If the sensor is inactive (Low), the LED will be dark green

c.) Pulse

> If the pulse exist (High), the LED will be light green. If the pulse doesn't exist (Low), the LED will be red.

d.) Active print

> The active print LED of the associated Printhead will be light green during a label print, dark green otherwise.

e.) Outputs

> The outputs can be set in this field explicitly. By pressing a respective button the respective output is set to High for a second, after that to Low for a second and then back to the original value, which was present before the button was pressed.

Submenu Printing
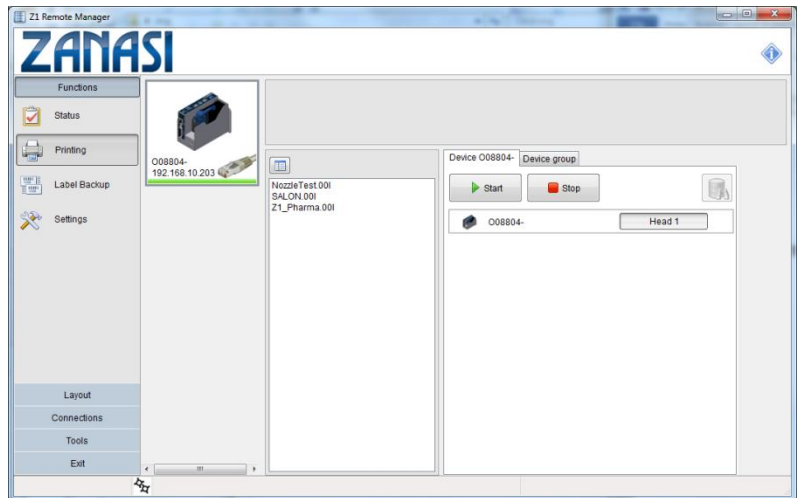
Fig. 22: Z1 Remote Manager user interface

Print start

To select a print image for print on a specific control system, first select a control system. Click the "Print" button in the "Functions" selection field. Select the print image from the list field, bottom right and select one or more print heads, which should receive the print image. The selected print heads are marked blue.

To start printing, click the "Start print" button.

If there are variable fields in the print image, they will query now.

If a data base connection is used, a specified data set can be selected with the search function.

Print stop

Press the „Stop print" button to stop printing.

Submenu Label backup

Z1 Remote Manager sends the created print images from a PC directory via an interface to the memory of a connected printer.

This enables the printer to print these images even without a permanent connection to the PC.

Contrary, print images can be transferred from the memory of a connected printer to the PC, for backup.

Z1 Remote Manager also enables automatic generation and sending of print images from a database.

1. To send one or more print images from a PC to a print system,
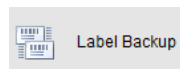
   Click the [Label Backup] button in the Symbol bar.
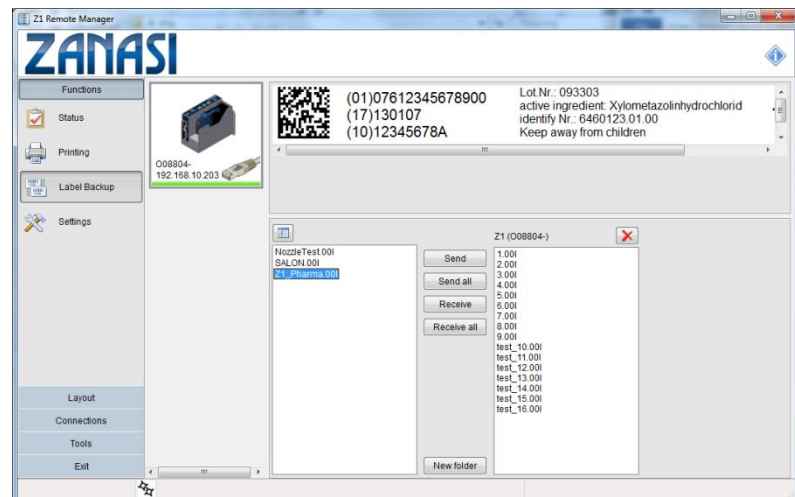
Fig. 23: Backup window

Send print images

1. **.**Select a print image from the list displayed on the left. The "Change directory" button also enables you to search for other print images on your hard disk.

2. Click the **Send >** button or (to send all print images) the **Send all >>** button.
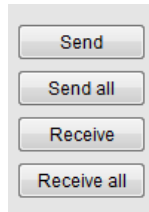
Fig. 24: Backup dialog

Receive print images

1. To transfer print images from the printer to a directory, select the print images from the list displayed on the right.

2. Click the **Receive** button or (to transfer all print images) the **Receive all** button.

Delete print images

1. To delete print images in the printer's memory, select the print images in the right field.

2. Click on the button for deletion.
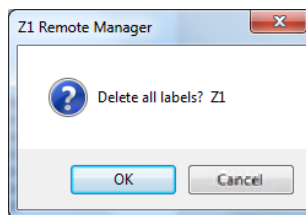
Fig. 25: Delete print images

1. Click **Ok**. to delete the selected print image in the printer's memory.

Or

Click **All** to delete the selected print image in the printer's memory.

Submenu Settings

Tab Print parameter

The print parameters depend on the connected type of printer.

○
ⅰ
NOTE!

Consult the printer manual to set the print parameter.

1. To call up the print parameter, click in the register "Functions" the "Settings" button.
2. Select the "Print parameters" in the selected Printhead menu.
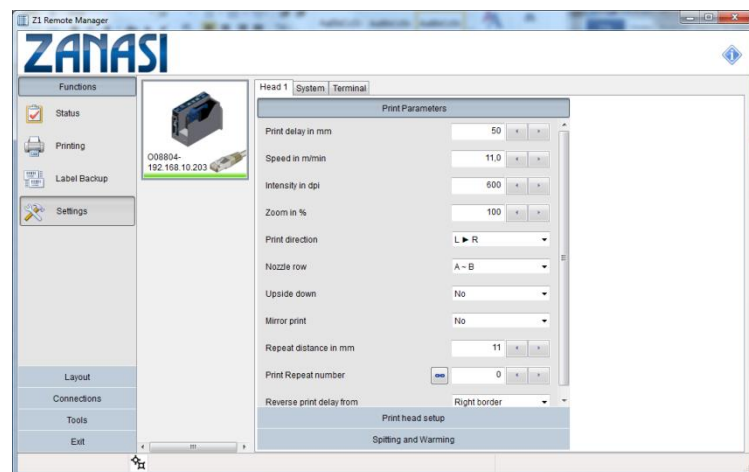
Fig. 26: Print parameter

1. Now change the print parameters to configure the selected system. Any changes are immediately sent to the system.

**Print
Delay**

The parameter **print delay** defines the path distance in mm between the light barrier trigger by the product and start of printing. By setting such a print delay, the position of the print image on the product can be changed. The print delay can be specified for each print head.

Adjustable values: 0 to 999 mm.

1. Press tab **Printhead 1** or **Printhead 2** (depends on the number of the activated print heads) and select the desired print head.

2. Click on the tab **Print parameter**.

3. To set the delay,

– Press arrow keys and set the required delay value.

The value 0 means that printing can be triggered immediately after the light barrier trigger pulse.

> ○
> 工 *NOTE!*
> *The print start delay must not be greater than the distance between 2 products. If a print start is triggered before the last print is finished, it will be ignored.*

Intensity

Print image contrast. If necessary, this parameter may have to be changed to optimize the print image to the product surface. Higher intensity means increased density and slower drying of the ink.

1. Press tab **Printhead 1** or **Printhead 2** (depends on the number of the activated print heads) and select the desired print head.

2. Click on the tab **Print parameter**.

3. To set the resolution,

– Press arrow keys and set the required delay value.

Zoom

This parameter enables an increase or decrease of the number of pixels. This renders the print image wider or narrower.

1. Press tab **Printhead 1** or **Printhead 2** (depends on the number of the activated print heads) and select the desired print head.

2. Click on the tab **Print parameter**.

3. To set the zoom,

– Press arrow keys and set the required delay value.

NOTE!

When printing barcodes, ensure that widening or narrowing occurs only in the correct ratio. Note the optimal print intensity of 300 dpi. Observe the following table!

Barcode width	Permitted zoom factor [%]
1	100, 200
2	50, 100, 150, 200
3	66, 100, 133, 166, 200
4	50, 75, 100, 125, 150, 175, 200
5	60, 80, 100, 120, 140, 160, 180, 200
6	50, 66, 83, 100, 116, 133, 150, 166, 183, ...

Print direction

The **Print direction** parameter specifies the direction in which the product moves on the conveyor belt as viewed from the Printhead side.
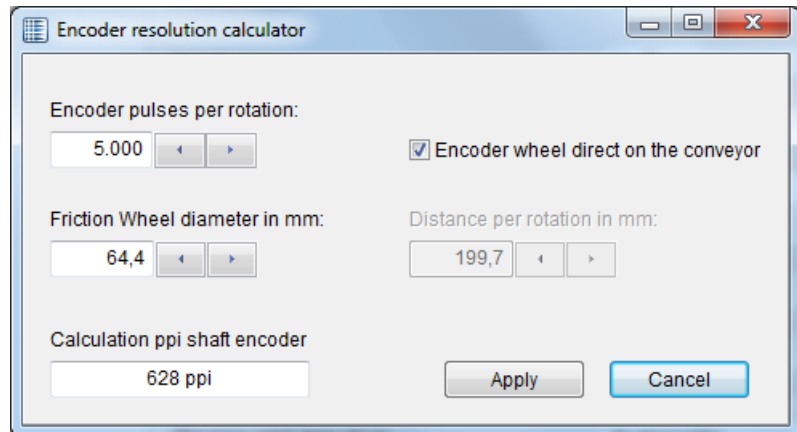
1. Press tab **Printhead 1** or **Printhead 2** (depends on the number of the activated print heads) and select the desired print head.
2. Click on the tab **Print parameter**.
3. Set the direction of the conveyor belt in the dropdown menu **print direction**.

Nozzle row

Each ink cartridge has two nozzle rows (A and B). One nozzle row has 150 nozzles.

The nozzles in row A print the uneven numbers 1, 3, 5, 7 …

The nozzles in nozzle row B print the even numbers 2, 4, 6, 8…

Per nozzle row A ~ B, 300dpi are printed vertical.

In this mode, the nozzles are uniformly stressed and the speed setting is not as critical as with A + B.

If, for instance, using A ~ B, every second print image is of poor quality, nozzle row A or nozzle row B can be activated.

Both nozzle rows print simultaneously with the setting A+B. The vertical resolution is 600 dpi. The print image is dark equal. The speed must be exactly right, because this will cause a shadow or blurred print when the nozzle rows are not print about each other correctly.

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The nozzle rows can set as follows:

Nozzle row	Description
A ~ B	Printing with both nozzle rows, alternating. The first print image is printed with nozzle row A and the second text with nozzle row B.
A + B	Printing with both nozzle rows together. Vertical resolution: 600 dpi
A	Printing only with nozzle row A. Vertical resolution: 300 dpi
B	Printing only with nozzle row B. Vertical resolution: 300 dpi

NOTE!

With setting A + B, the print speed must be accurately set, to produce a good print result. Otherwise the print image is blurred (shadow print).

To select the **Nozzle row**,

1. Press tab **Printhead 1** or **Printhead 2** (depends on the number of the activated print heads) and select the desired print head.
2. Click on the tab **Print parameter**.
3. Set the desired nozzle row setting in the dropdown menu.

Upside down

The setting **Upside Down** causes the print image to be printed upside down.

To select **upside down**,

1. Press tab **Printhead 1** or **Printhead 2** (depends on the number of the activated print heads) and select the desired print head.
2. Click on the tab **Print parameter**.
3. Activate upside down in the dropdown-menu.

Encoder resolution

The encoder resolution is a pilot tool to identify the correct encoder resolution in the print parameter menu.

The encoder resolution is called up with the additional button.

Encoder resolution (0=600ppi, 1=636ppi) 636

Fig. 27: DPI-calculator

To calculate the encoder resolution:

1. First determine the number of pulses, generated by the encoder for a complete rotation and set the value in the field „Encoder pulses per rotation".

2. If the encoder runs direct on the conveyor with a wheel, select the corresponding checkbox.

    Depending on your selection the other needed fields will be activated.

If the encoder wheel runs direct on the conveyor:

3. Determine the diameter of the friction wheel and enter the value in the corresponding field.

If the encoder isn't installed on the conveyor directly:

4. Determine the distance of the conveyor per rotation of the wheel and enter the value in the corresponding field.

5. If you have done all settings, you can see the value below "Calculation dpi Shaft Encoder".

6. Click on „Apply" to adopt the value in the print parameter menu as effective resolution and close the DPI-calculator.

7. A fine tuning of the DPI number is necessary for an optimal print result.

Repeat distance /
Print repeat number

To print several print images on one product, the number of print images and the distance between them must be specified.

The distance between print images is measured from print start to print start.

If you select „5" the print image will be printed 6 times. 1 print plus 5 repeats.

998 prints 999 print images.

Endless printing can be activated with print repeat of „999".

Parameter	Min.	Max.	Unit
Distance between print images	0	9999	mm
Number of print images	0	999	-

To enter the **repeat distance** and the **print repeat number**,

– Press arrow keys and set the required delay value.

– Endless printing can be activated with a click on the button ⚬⚬ at the print repeat number. The value goes to 999 automatically.

Reverse print delay

Is the print direction backward, i.e. the product moves on the Printhead from left to right, the calculation point for the print start delay can set to right or left edge of the print image.

The setting „left border" ensures a consistent left alignment.

It should be noted that the width of the print image needs to be part of the set value.

To select **Reverse print delay**,

1. Press tab **Printhead 1** or **Printhead 2** (depends on the number of the activated print heads) and select the desired print head.

2. Click on the tab **Print parameter**.

3. Select "left border" or "right border" in the dropdown menu **Reverse print delay**.

Print start delay bi-directional

If the setting „print direction" will be used at the input signal, the print start delay applies for the opposite print direction.

Therefore the print is positioned exactly by using the print direction reversal.

The parameter „Reverse print delay" should set to „left border".

NOTE!

These parameter is only visible if one input is set to „print direction".

To select **Print start delay bi-directional**,

1. Press tab **Printhead 1** or **Printhead 2** (depends on the number of the activated print heads) and select the desired print head.

2. Set one input signal to „print direction" in the tab **Input configuration**.

⇨ The parameter „print start delay bi-directional" is shown in the tab **Print parameter.**

3. Press arrow keys and set the required value.

Tab Printhead setup

1. Click on the print parameters tab to select them.
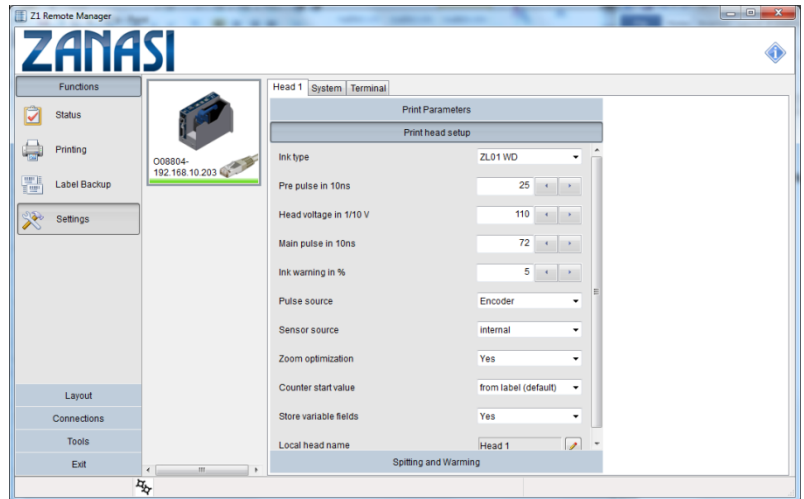
Fig. 28: Printhead setup

2. Change the Printhead setups to configure the desired system. All changes will be send to the system immediately.

NOTA!

The head voltage and fire time will be set automatically, depends on the ink type.

The values should be change carefully and after instruction, otherwise the cartridge can be damaged.

Tab Spitting and Warming

1. Click on the Spitting and Warming button in the head menu to select the spitting and warming settings.
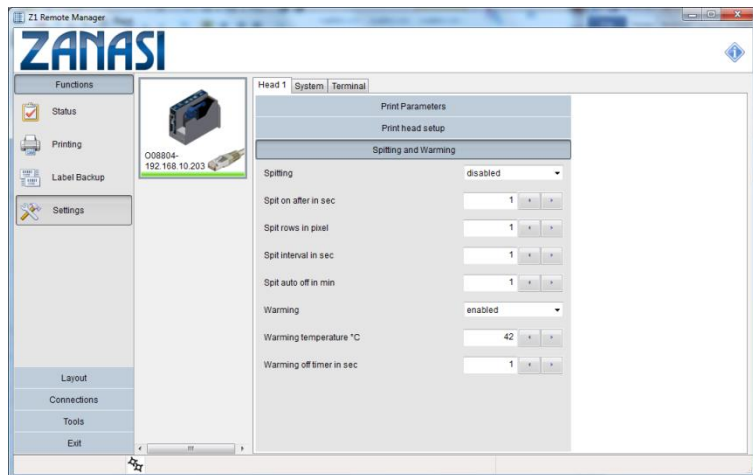
Fig. 29: Spitting and Warming

2. Now change the Spitting and Warming settings to configure the selected device. Any changes are immediately sent to the system.

Tab Calibration

If a twin Printhead or a Printhead with several modules (Triple, Quad, ...) is connected to the controller, the offset between the two print heads must be adjusted, if necessary. If single print heads are connected, a calibration isn't necessary.

○
ⅈ
NOTE!

Before the print heads are calibrated, the print speed or the rotary encoder setting must be correct.

The offset between the two print heads is compensated for by the input of correction factors.

A negative value means that the print image of this cartridge moves to the left side and reverse.

The Printhead must be installed horizontal. There must be neither an overlap nor a gap between the cartridges in the vertical. Test it with a print image over all heads.

The speed must be set optimum. The nozzles must be in one row by printing with A+B. This can be controlled with a loupe. There must be no shadow print be present.

The intensity must be set optimal by a printing with shaft encoder.

To enter the **calibration value**,

– Press arrow keys and set the required value.

Tab Input configuration

The inputs of the print system can configured optional and customer-specific.

It can select between:

- Print direction
- Upside down
- Print pause
- Label selection
- Bulk System
- Shutter Print Head
- Reset ink level.

System settings

In the menu „System" are all system specific adjustments for changing available.

> **!**
> **WARNING!**
> These settings should change from an expert only!
> The function of the system can be disrupted by an incorrect setting.

> ◯
> *NOTE!*
> *Every adjustment will be send immediately to the connected printer.*
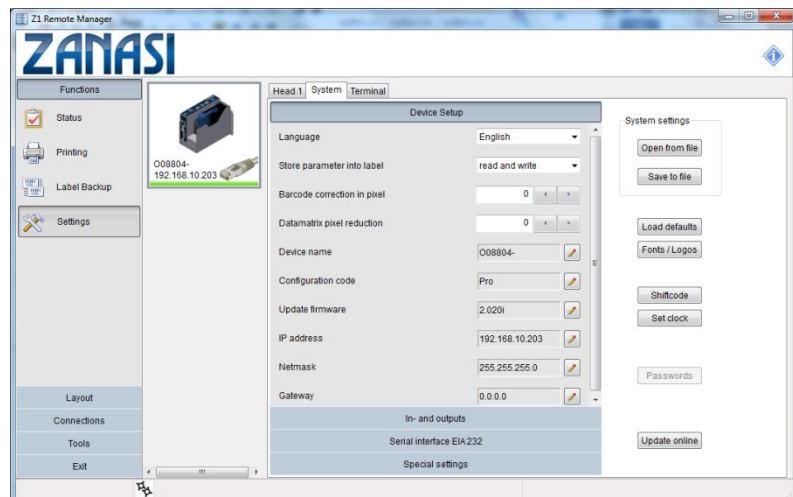
Fig. 30: System settings

Save to file

The print head- and system settings can saved on a PC. These can be used for a later system recovery or be linked to a print image to change system settings depends on the print image.

1. Press the **Save** button to save the settings.

2. Enter the file name in the dialog field.

3. Concluding click on the **Save** button
    The settings are saved below your selected file name

Open from file

1. Click on the **Open** button to load an existing configuration.

2. Select the desired configuration file in the dialog field and confirm with **Open**.

3. Concluding click on the **Send** button to send the loaded configuration to the system.

The saved settings can be linked with a print image. See Editor "connect with set of parameters".

Load defaults

1. Press **Standard value** to reset all settings in the delivery status. Head configuration, ink type and interface values won't be changed.

2. Confirm the dialog field with **OK**

Send fonts and logos

To enable the printer to correctly interpret and display the texts and graphics used in the print images, the respective fonts and logos must be transferred to the printer's memory.

> ○ *NOTE!*
> *Selection of the fonts and logos depends on the connected printer.*

Standard the required fonts and logos for printing will be sent to the system automatically when a print image with fonts and logos will be create in the Z1 Remote Manager editor.

There is the possibility to send the files manually.

Send fonts

1. To send a font to the selected printer, select the "System settings" button in the "Functions" register.
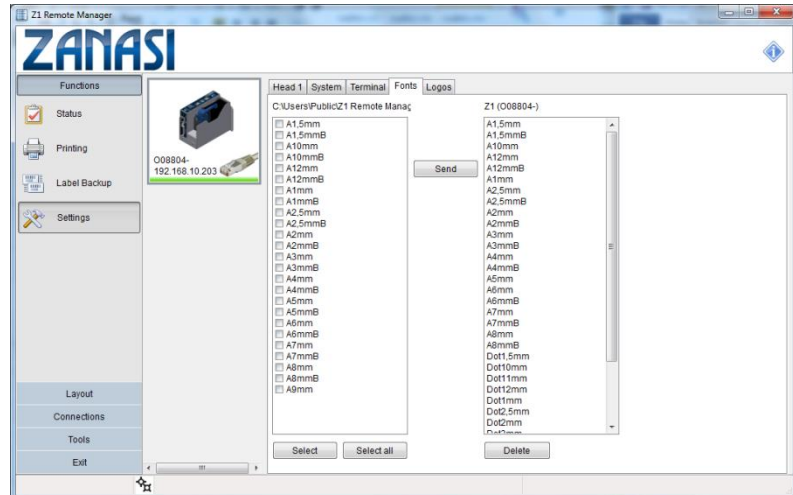
Fig. 31: Send fonts

2. Select the "Font type" tab.
3. In the list displayed on the left, tick (simply click on) all the fonts to be sent

   or:
   – Click the **Select all** button to select all fonts that are not in the print system
4. Click the **Send** button.

   The selected fonts are sent to the printer and are shown in the field.
5. To delete a font in the printer's memory, select the font in the field.
6. Click the "Delete" button.

Send logos

1. Select in the **Function** menu the **System settings** tab to send a logo to the selected system manually.
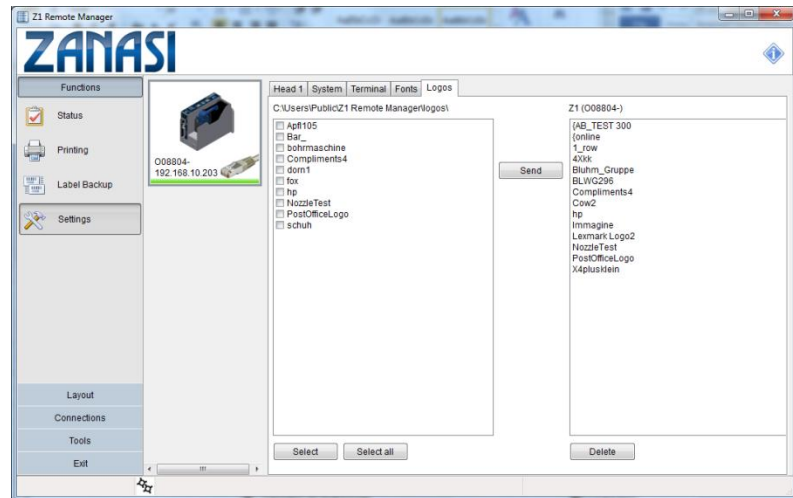
Fig. 32: Send logos

2. Click on the **Logos** tab.

3. To select the logos,

   – Click (tick) the boxes in the list displayed on the left

   or:

   – Click the **Select all** button.

4. Click the **Send** button.

   ⇨ The selected logos are sent to the printer and are shown in the list on the right.

   ⇨ A bar graph shows the sending progress.

5. To delete a logo in the printer's memory, select the logo in the field.

6. Click the **Delete** button or (to delete all logos) the **Delete all** button.

Shift code

Fig. 33: Shift code settings

Shift codes are short strings (1-4 signs), which are active, dependent on the actually time of day, and can integrate in print layouts.

The shift code can be print as date field with the placeholder „t" per sign in the layout.

To activate the shift code:

1. Activate the corresponding shift code line by clicking the checkbox to the left.

2. Following set the start time of the shift.

   (The end time is set by the software automatically)

3. Now type below code the desired marking.

3. Closing click **send**.
   The configured shift codes will be send to the print system

Set clock of the system
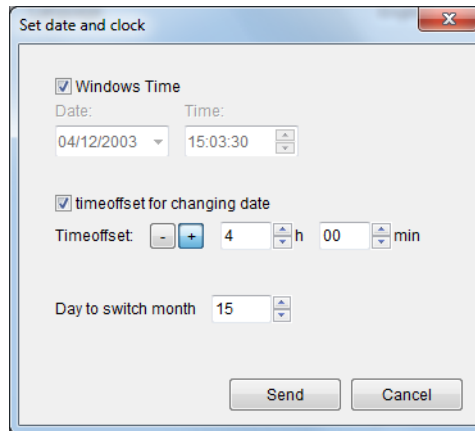
Fig. 34: Date/time dialog

Click on Date/Time to do time adjustments. You have following setting options:

Synchronization with Windows time (standard)

1. Activate the checkbox **„Windows time"** to synchronize the date and time of the control system with the date and time of the PC.
2. Click on **Send** to send the actual time to the control system and close the dialog.

Manual time setting

1. Deactivate the checkbox „Windows time" to set the date and clock manually. The fields to set date and time will be activated.
2. Set the desired date and the desired clock in the corresponding fields.
3. Click on Send and the values will be send to the print system and the dialog closed.

Date offset

The date changes at midnight (00:00 o'clock) exactly. It's possible to set the printed date +/- 24h in the label with Z1 Remote Manager. I.e. if the date should change in the print image with the change of shift at 2 o'clock.

To change the time of the date shift:

1. Activate the checkbox „Time offset for changing date".
2. Set the desired deviation.
3. Click on send to send the values to the print system and to close the dialog.

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Tab Device Setup

Language

The **language** field lists all the installed user languages, in which the user interface of the print system can be displayed.

To select a language,

1. Select the tab **Device setup** in the submenu **System**.

2. Set the desired language in the dropdown menu **Language**.

Store parameter into label

Following functions can select in the field **Store parameter into label**:

- *Disabled:* not selectable.
- *Read only:* The saved parameters of a print label are used.
- *Read and write:* not selectable.

To select **Store parameter to label**,

1. Select the tab **system settings** in the submenu **system**.

2. Set the desired function in the dropdown menu **Store parameter into label**.

Barcode correction in pixel

This option provides the opportunity to improve the readability of a barcode element by widening or narrowing. If, for example, the runs heavily on a coarse fibrillate surface, the readability can be restored by a pixel-wise reduction of the line width.

To make a barcode correction,

1. Select the **Device Setup** in the submenu **System**.

2. Press arrow keys and set the required correction

System configuration

Device name

Click on the icon ![icon] in the column **Device Name:** to change the system name. It opens a dialog where the new name will be asked.
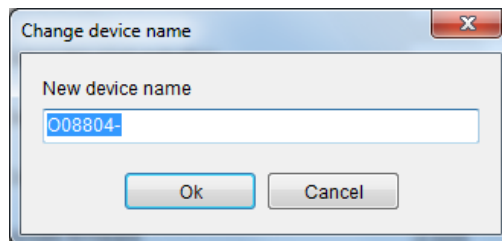
Fig. 38: Dialog to change the system name

Enter the new name in the text field and confirm your input with **OK**.

⇨ The system name will be changed in Z1 Remote Manager.

Configuration code

It's possible to change the system configuration, i.e. the setting if the controller is a Advanced or Pro system.

This is possible via a configuration code. You'll get the configuration code from your local distributor with costs.

1. Please go to:
Settings → System → Configuration code

2. Click on the right icon in the line „configuration code"
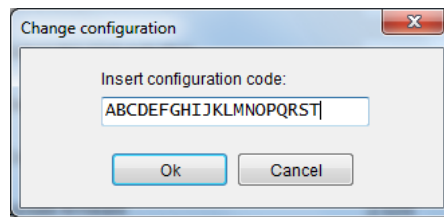
Fig. 39: Dialog: Activation code

3. Insert the activation code in the dialog.

4. Confirm the following dialog with **OK**

⇨ The configuration is now send to the print system.

5. Remove the USB-stick with the Z1 data from the PC.

6. Connect the USB-stick to the Z1 and wait until the system restarts.

Firmware Update

! **WARNING!**
Data loss effected by update!

It can happen a data loss with an update of the system software.

Therefore

Perform a backup before every update (see: "Advanced settings").

1. To update a new print system, click on **System settings** in the menu Options.

2. Select the file card **System**

3. Click in the line „firmware" on the right icon to start the update process.

USB Update (offline)

To make a USB offline update, please follow the manual below Z1 Remote Manager user management.

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Online Update

○
⎕ *NOTE!*
The online update for a print system is only possible with the latest firmware.

! **CAUTION!**
Don't disconnect the power supply voltage of the system and don't switch it off.

Fig. 40: Firmware selection

1. Select the desired firmware file in the file dialog. (file extension: *.IMG*) and click on **Open.**
Use always the highest number when several firmware versions are available.

⇨ An information window opens which shows that the firmware will be sent to the system.
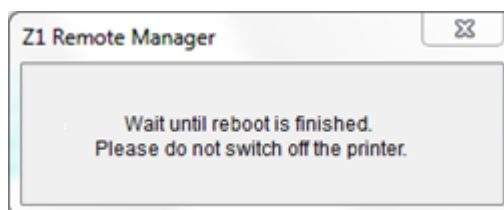
Fig. 41: Information window

⇨ Concluding an information window opens and the system restarts.

Change IP-address

Click on the [icon] icon in the column **IP-address** to change the IP address**:** It opens a dialog where the new IP-address can be entered.
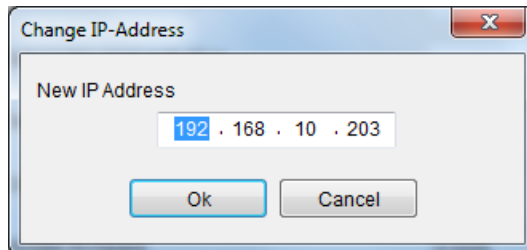
Fig. 45: Dialog for changing the IP address

Enter the new IP address in the entry mask and confirm the input with **OK.**

⇨ Following the IP address of the print system will be changed. If the system was already connected with Z1 Remote Manager by TCP/IP, the IP address will also be changed there,

⇨ If the system wasn't connected by TCP/IP, you will be asked if the system should be added by TCP/IP

Netmask

Change the netmask of the system with this function.

Gateway

Change the gateway address of the system with this function.

!   **CAUTION!**
Consult the system administrator for network settings. Network damages can be caused by incorrect settings.

Stitch device

Connect several Z1 Stitch with this function.

To connect the systems to one Stitch system, please proceed as follows:

1. Click in the menu **Tools** on the submenu **General settings.**

2. Activate the **Stitch function**.

> ○
> ⫯ *NOTE!*
>
> *Only one PC can have access to the Stitch system.*
> *The systems can't address individually, because*
> *they exchange data among themselves.*

> ○
> ⫯ *NOTE!*
>
> *Please note that all systems are registered with*
> *different IP address.*
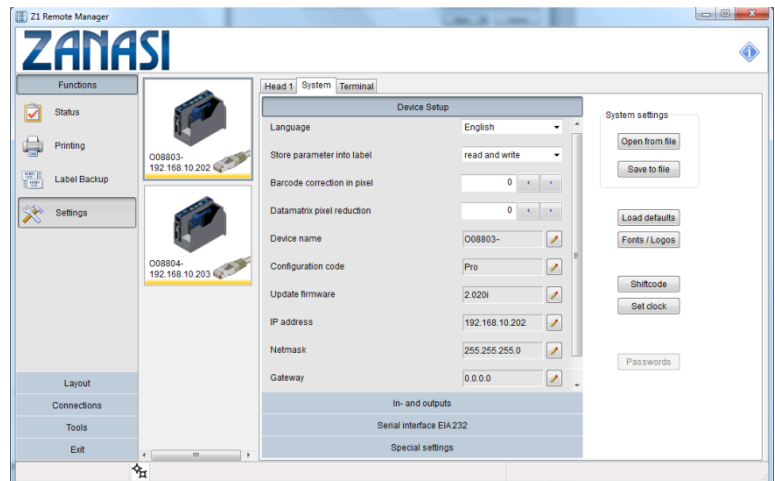
Fig. 46: Different IP address of the Stitch systems

3. To connect the first Z1 Stitch with the second select in the menu **Functions** → submenu **Settings** → tab **System** → **Device setup** → field **Stitch device** the IP address of the next system.
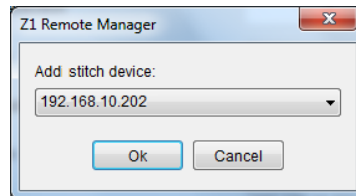
Fig. 47: Connection of the systems (1)

4. Both heads restart and it will displayed the first head with the second in the system only.
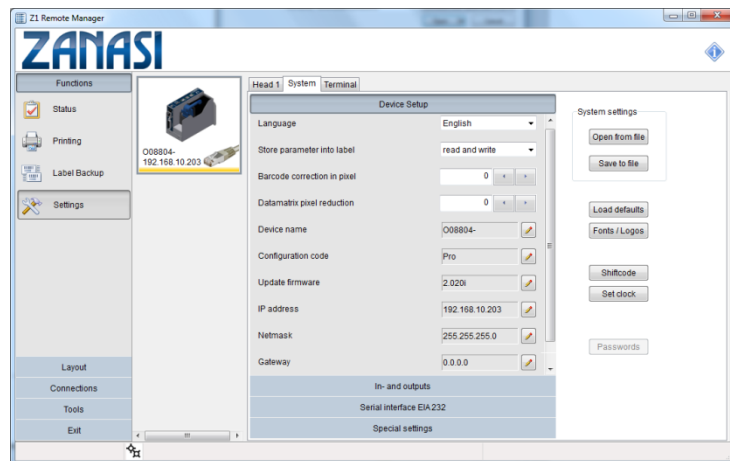
Fig. 48: Connection of the systems (2)

5. Then connect another head to the second one. Repeat this procedure until the number of desired heads is reached.

⇨ The configuration of all connected heads is displayed in the tab **System**.
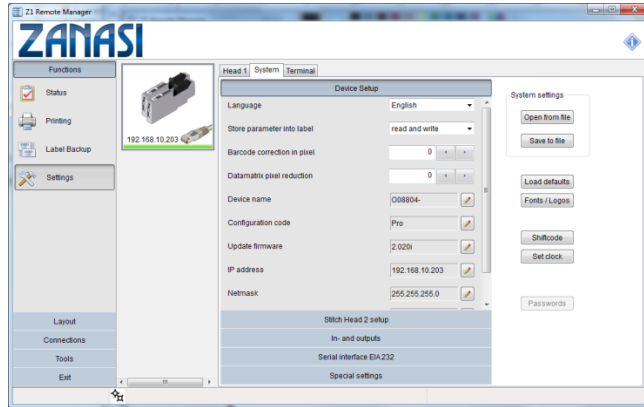
Fig. 49: Stitch configuration

1. The parameters of the Stitch system are displayed and can change for all heads at once in the tab **Print Parameters**.
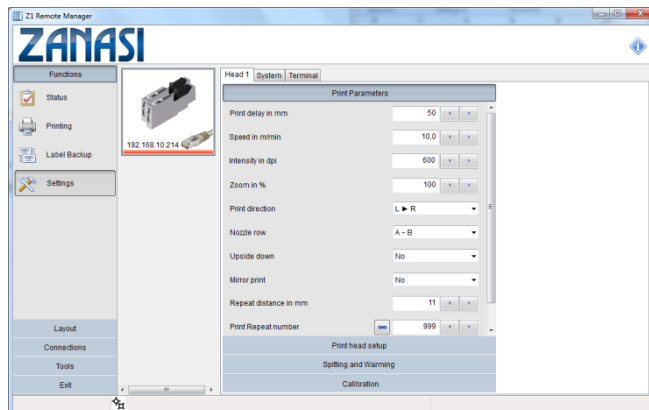
Fig. 50: Parameter of the Stitch system

6. Additional there is the possibility to calibrate the heads to get a vertical line. Click in the tab **Print Parameters** on **Calibration**.

○ *NOTE!*
ⅰ *First the system should set up that the print is okay to 99%. Then the last millimeter should be optimized with the calibration function.*

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7. To use the systems separately again, remove the Stitch connection. Therefore click on the [pencil icon] icon, a dialog window appears, and remove the connection.

   ⇨ The number of the Stitch device is 0.0.0.0 again.

Tab Input Output Configuration

All connected in- and outputs of the system can be set with this function.

A variety of configurations are possible and so the connectors for output of status messages (OK, Warning, Error), cartridge level messages (5% low / empty), print ready and print pulse are possible to use. On the input side signals for heating, spitting, print direction, upside print, stop and text selection are possible.

The inputs are NPN inputs standard. Can be changed to PNP via Z1 Remote Manager software.

To set the in- and outputs,

1. Click in the menu **Settings** on the submenu **System**.

    ⇨ The submenu **System** opens.

2. Click on the tab **Input Output Configuration**.

Fig. 51: Input Output Configuration

Tab Serial Interface EIA232

To configure the serial interface EIA232,

1. Click in the menu **Settings** on the submenu **System**.

⇨The submenu **System** opens.

2. Click on the tab **Serial Interface EIA232**.

3. Select baudrate, data bits,parity and number of stop bits.
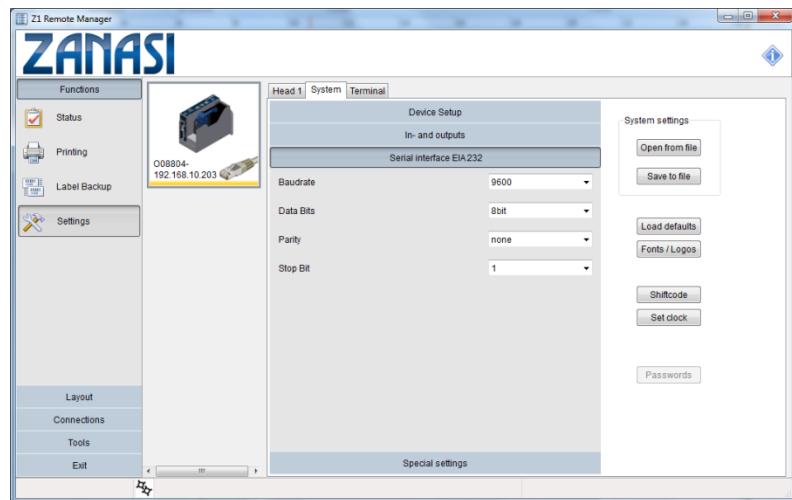
Fig. 52: Serial interface EIA232

Terminal

A direct communication with the coding systems can be done by the terminal. The commands are sent to the system by an existing connection. The answer of the system is shown in the lower window.

> **❗ CAUTION!**
> An incorrect use of the terminal can result data loss or faults of the system.

> **❗ CAUTION!**
> There is no checking of the correct notation of the command by Z1 Remote Manager.

The terminal is so designed that the used control characters will be translate in their byte code before it will be send to the print system.

The control characters will be convert in following syntax for a better write and read ability:

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i.e.

<ESC>*<CR> consists of 3 bytes: decimal. 27, 42, 13

Individual lines can be disabled by setting a // prefixed

// <ESC>*<CR>

Following signs are interpret

1	<SOH>
2	<STX>
3	<ETX>
4	<EOT>
6	<ACK>
9	<TAB>
13	<CR>
10	<LF>
14	<SO>
21	<NAK>
27	<ESC>
127	<DEL>

Input of Hexcodes

It can also use hexcodes in following syntax:

i.e.:

 <0x1B>*<0x0D>

Sent and received control characters are highlighted in red in the communication window.
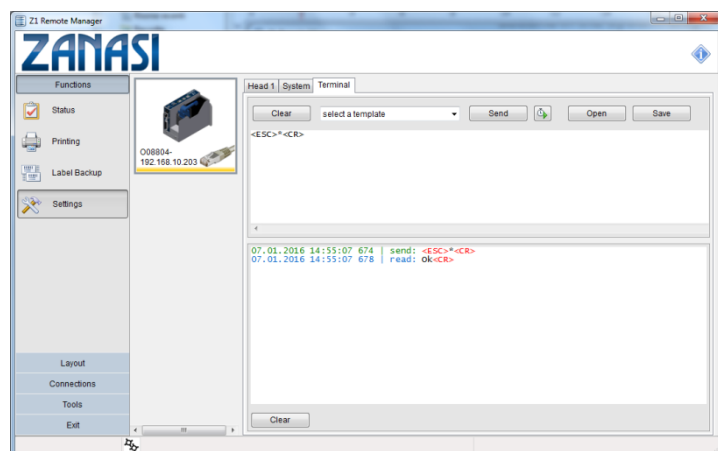
Fig. 53: Terminal window

Send interval

If one or more commands should send continuously, it can start with the icon . The interval length can specified in ms.
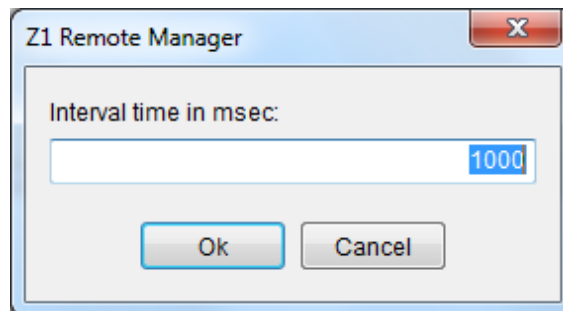
Fig. 54: Send interval

Send command

1. Type the desired command in the command window.
2. Click on **Send**

   … The commands will be send to the coding systems. The answer of the system is shown in the lower window.

Use command templates

1. Select the desired template in the upper **drop-down** menu.

   The included command is added in the upper terminal window.

   NOTE!
   Lines, which begins with „//" are comments and are not send.

2. Click on **Send**

   … The commands will be send to the coding systems. The answer of the system is shown in the lower window.

Load commands

1. To load already saved commands click on **Open**
2. Browse by the file dialog to the desired file.

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> ○
> 〇 *NOTE!*
> ⫙ *The file extension for template files is .ast*

3. **Open** loads the data content of the file in the upper terminal window.
4. Click on **Send** to send the commands to the coding system.

The file „Interface Commands.ast" is in the list.

Save commands

1. Click on **Save** to save the currently shown commands in the upper terminal window.
2. Select the file dialog, a name and a storage location and confirm with **Save**.

Editor – Label design

Description of functions

The Editor is used to create and administrate labels for transfer to one or more printers.

Print images are a combination of text, graphics, barcodes and functional elements (e.g. counters and variables).

The print images can also be created from elements in a database.
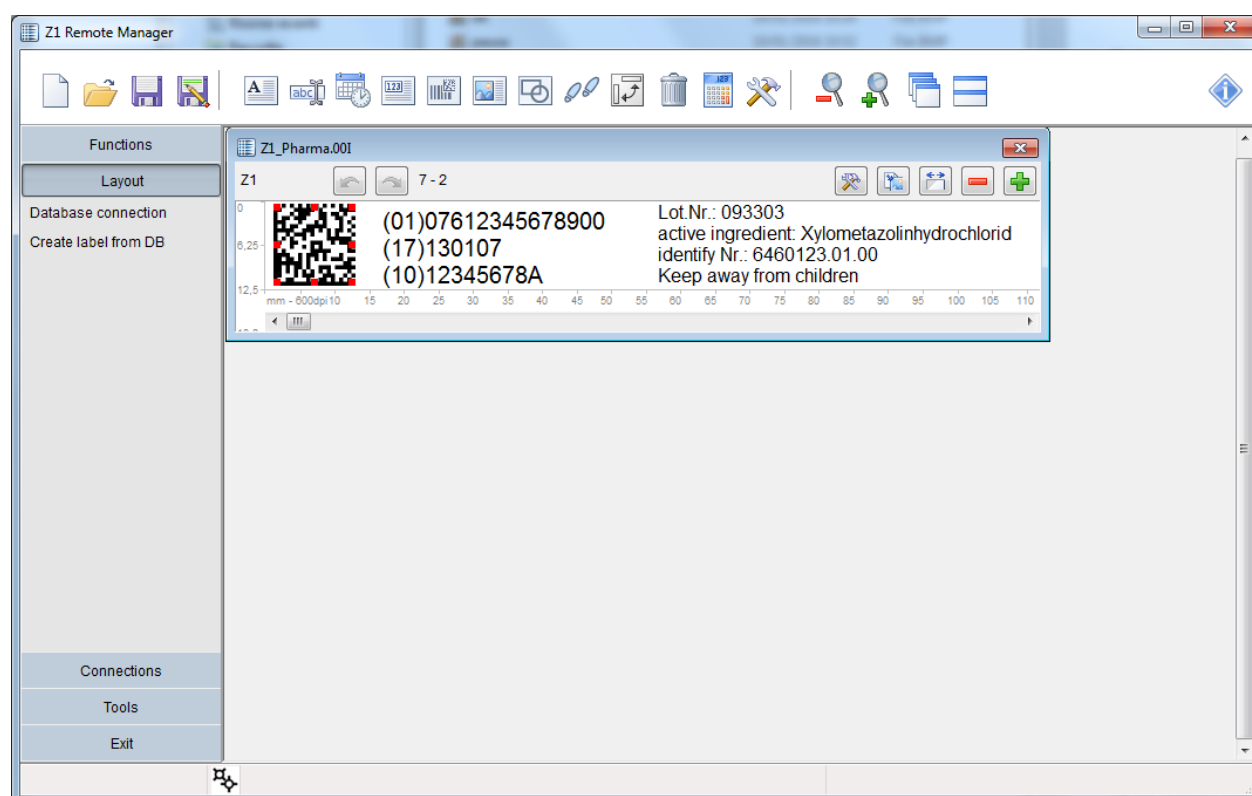
Fig. 63: Structure of the user interface

File symbol bar

Symbol	Meaning	Description
	Create new print image	Opens a new label after the selection of the label type.
	Open existing print image	Opens an existing print image. A preview is displayed.
	Save print image	Saves the current print image. Requests a name if none exists.
	Save print image below…	Saves the actual print image below the specified name.

Window tool bar

Symbol	Meaning	Description
	Cascading	Arranges the present windows diagonal stacked.
	Horizontal	Arranges the present windows parallel.

Design menu bar

Symbol	Meaning	Description
	Text field	Creates a text field to add static text to the print image.
	Variables field	Creates a variables field to add a variable to the print image
	Date field	Creates a date field to add a date to the print image.
	Counter field	Creates a counter field to add a counter to the print image.
	Barcode field	Creates a barcode field to add a barcode to the print image.
	Logo field	For inserting a graph in the print image.
	Incremental	The selected field can be moved pixel by pixel.
	Rotate	The selected field can be rotated in 90° steps.
	Delete	Deletes a field from the label.
	Ink consumption calculator	Determines the number of prints of the desired label, which can be print with a full cartridge.
	Save set of parameters	Links a label with a saved set of parameters.

Print image menu bar

Symbol	Meaning	Description
	Clipboard	Copy a print image in the Windows-clipboard.
	Number of modules	Define the head modules of a print head.

Create print image

A print image comprises of different elements and fields:

- Text
- Date / Time
- Counter
- Barcode
- Variable
- Logo
- Action fields

The following chapters describe the insertion and processing of these elements and fields.

Insert a text field

Enter text

1. To create a text field,

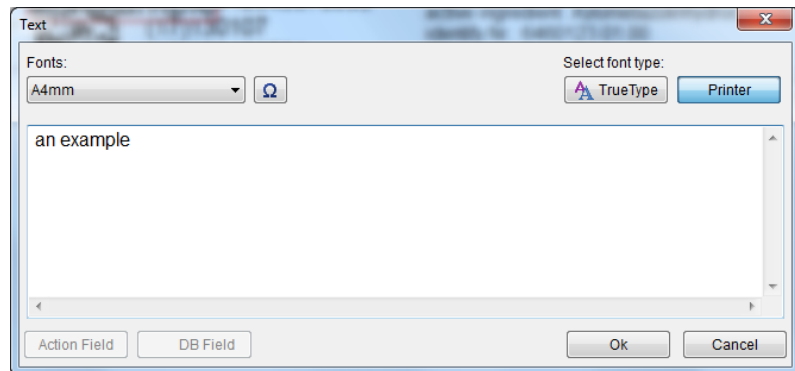– Click on the button in the Edit bar,

⇨ The text dialog opens.

Fig. 64: Text dialog

2. Enter text in the input area.

3. Select the font type at the right side (TrueType or printer fonts)

4. Following select and set up the font type.

Position a text field
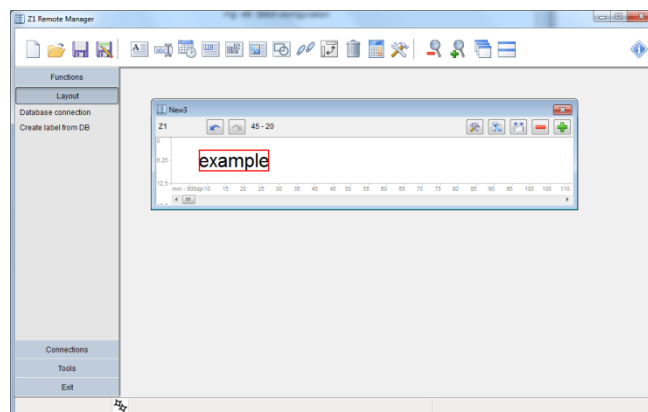
Fig. 65: Text field inserted in a print image

5. To position the text field in the print image, click on the text field and move to required position by pressing and holding the left mouse button.

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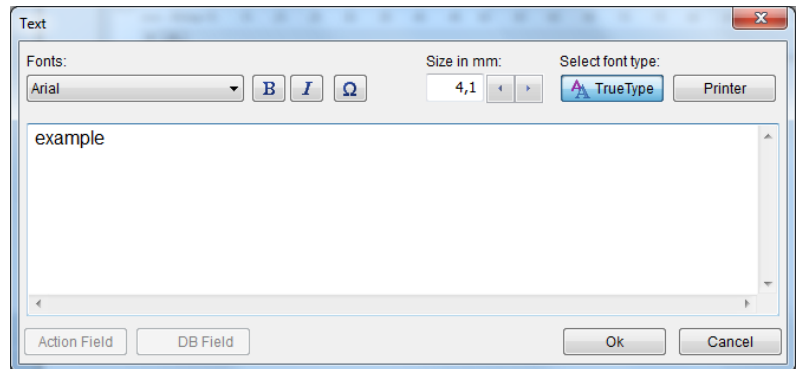
Graphic text field

Fig. 66: Graphic text field

6. To create a graphic text field, click on the button True Type. All fonts types of Windows available now.

7. Height and width are adjustable with the red handle.
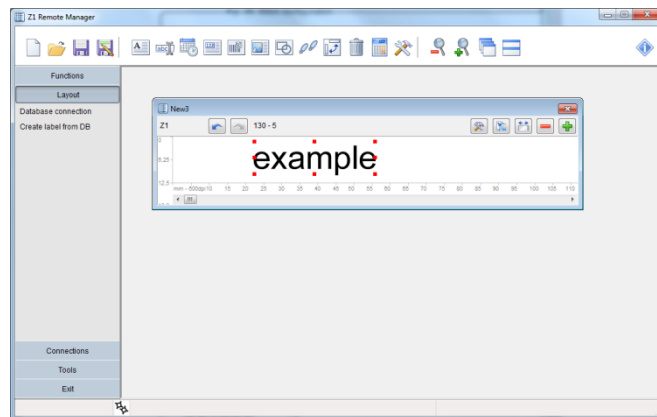
Fig. 67: Change size of the graphic text field

Insert a date field

Date and time are embedded in the print image as a date field.

NOTE!

The function date field is not available for each system configurations.

Depending on the selected Printhead type, the editing area varies in size.

Date fields are not static, but dynamic fields; their display format is defined by variables.

The current date and time are retrieved from the PC clock.

By printing the current date and the current time will be obtained from the system clock. It makes sense to synchronize the system clock with the PC clock.

Any combination of variables can be used to configure the display format. Punctuation marks (e.g. full stop, colon, hyphen, space etc.) can be inserted between the individual codings.

ab.cd.gh are preset.

Preset variable selection:

Variable	Description	Display
ab-cd-gh	Date	22-05-95
efgh	Year	1995
ij:kl:mn	Time	11:20:35
ooo	Month as string	Jan
ppp	Day of the year	135
q	Weekday	4
rr	Calendar week	28
s	Hour as string	k

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Acceptation of the specific variable letters:

Variable	Meaning
a	Day, tens
b	Day, units
c	Month, tens
d	Month, ones
e	Year, thousands
f	Year, hundreds
g	Year, tens
h	Year, ones
i	Hour, tens
j	Hour, ones
k	Minute, tens
l	Minute, ones
m	Second, tens
n	Second, ones
ooo	Month, as string
ppp	Day of the year
q	Weekday
rr	Calendar week
s	Hour as character (0=A, 1=B, …, 23=Z)
t	Shift code (max. 4 digits)
u	Day of the year, hundreds
v	Day of the year, tens
w	Day of the year, ones

Further

Variable	Meaning
A	Day, ones (zero suppression)
B	Day as character (1-9=A, 10-19=B, 20-29=C, ...)
C	Month, tens (zero suppression)
D	Month as character (1=A, 2=B, …, 12=M)
G	Year, tens (zero suppression)
H	Year, units as character (0=C, 1=M, 2=E, 3=A, 4=D, 5=J, 6=O, 7=H, 8=N, 9=S)
I	Hour, tens (zero suppression)
K	Minute, tens (zero suppression)
L	Minutes, tens as character (0=A, 1=B, …, 5=F)
M	Second, tens (zero suppression)
Q	Weekday as character (1=A, 2=B, …, 7=G)

Forward dating, for instance to print a best before date (BBD), can be defined by the offset parameters year, month and day.
.

1. To create a date field,

    –   Click on the [icon] button in the Edit bar.
    ⇨   The date dialog opens.

Enter date/time format
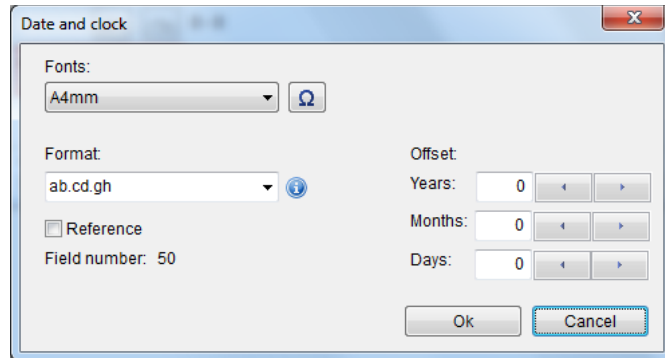
Fig. 68: Enter date/time format

2. Enter date/time format (see Table) or take over default setting.
    You'll get an info list of the specific letters with the info button.
3. Click **OK** button.
    The date field is inserted in the print image.

Edit date/time format

4. Select the format from the drop down menu.
5. Set a best before date (BBD), if required.
    –   Use the arrow keys to select the year.
    –   Use the arrow keys to select the month.
    –   Use the arrow keys to select the day.
6. Select the font from the drop down menu.

    NOTE!

    Only printer, no TrueType fonts

7. Select the date field and, by holding down the left mouse button, position as required inside the print image.

Insert a counter field

The counters are inserted in the print image through counter fields.

> *NOTE!*
>
> *The function is not available for each system configurations.*

Counter fields are inserted to print consecutive numbers on labels.

When starting to print, the counter starting value appears in the first print. When reaching the end count, the counter re-starts at the starting value. If the end value is smaller than the starting value, counting is downward.

Example 1:

Starting value: 01, end value: 10, step size: 2, repeats: 3

Print: 01, 01, 01, 03, 03, 03, 05, 05, 05....

> *NOTE!*
>
> *All zeroes in front of a number are also printed.*
>
> The leading zeroes can be deselect by the checkbox.

Example 2:

Starting value: 10, end value: 1, step size 1, repeats: 0

Print: 10, 9, 8, 7....1, 10, 9, 8, 7....

Insert the counter field

1. To insert a counter field,

   – Click on the [123] button in the Edit bar.
   ⇨ The counter field is inserted in the print image.
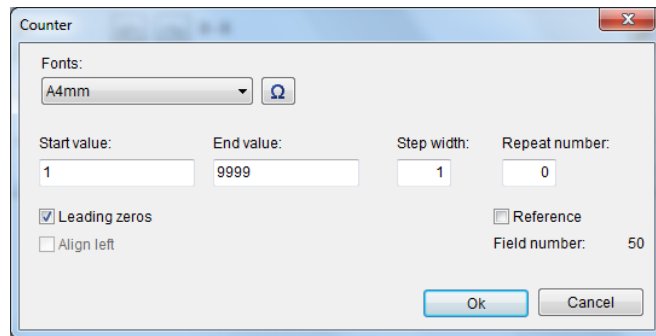
Fig. 69: Counter field inserted in the print image

> **2.** Enter the start value (max. 8 digits).

> **3.** Enter the end value (max. 8 digits).

> **4.** Enter the step width (max. 8 digits).

> **5.** Enter the repeat number (max. 8 digits).

> **6.** Select the font from the drop down menu.

NOTE!
Only printer, no TrueType fonts

> **7.** Click the counter field and position by holding down the left mouse button.

Insert a barcode/ 2D Code

NOTE!
The barcode function is not available for all system configurations.

A barcode is machine-readable writing comprising of parallel lines and gaps of various widths.

The data in the barcode can also be displayed in plain text, legible to humans, in a line of plain text directly below the barcode, If the barcode cannot be read, the data can be evaluated manually.

Z1 Remote Manager offers a range of barcode and 2D Code types, depending on the selected printer:

Barcode type	Meaning	Digits
EAN 8	Numerical commercial barcode; used worldwide.	8
EAN 13	Numerical commercial barcode; used worldwide.	13
EAN 128	Numerical commercial logistics code. Variable fields for date, counter and scale as options.	-
Code 128	Full ASCII barcode; medical-pharmaceutical technology.	-
Code 2 of 5	Numerical industrial (materials-handling) barcode, always with even number of digits. Also designated 2/5 interleaved, ITF 2/5)	min. 2
DUN 14	Numerical industrial barcode (materials-handling)	14
UPC A	**Same as EAN 13,** but special 1st digit code. Is normally set to 0 followed by 11 digit code. The 13th digit is an automatically generated test digit. Used in USA/Canada	13
Code 39	Alphanumeric barcode for industry, electronics, pharmaceutical.	-
UCC	**Same as Code 2 of 5.** For trading in the USA.	14
Data Matrix	A 2D code for the electronics industry and pharmaceutical sector.	-
EAN Data Matrix	A 2D code for the electronics industry and pharmaceutical sector.	-
QR Code	A 2D-Code	

The following options are available:

- Different barcode types
- Barcode width can be changed
- Barcode height can be changed
- GS-1 Builder

1. To create a barcode,

   – Click on the [icon] button in the Edit bar.
   ⇨ The barcode dialog opens:
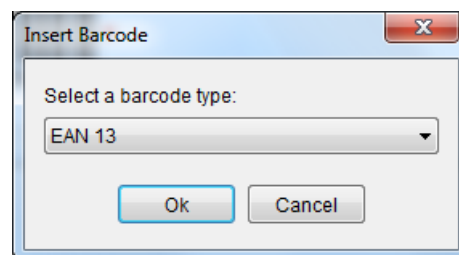
Fig. 70: Barcode dialog

2. Enter the content and parameter by the barcode dialog.
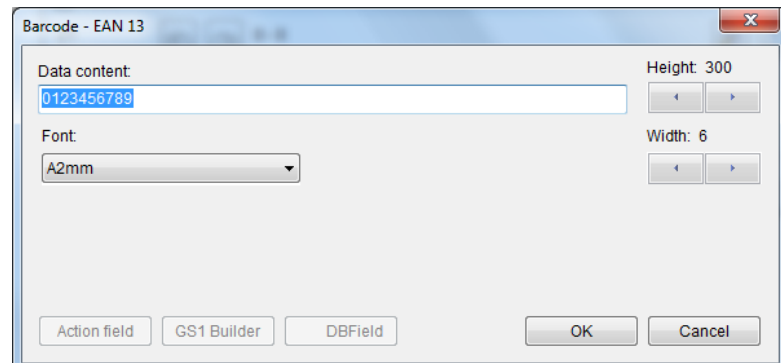
Fig. 71: Barcode Dialog

3. Enter the plain text line in the input field
4. Select the size of the plain text line from the drop down menu
   Select **[none]** if the plain text line should not be shown.
5. Use the arrow keys to select the height of the barcode.
6. Use the arrow keys to select the width of the barcode.

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7. Click the **OK** button

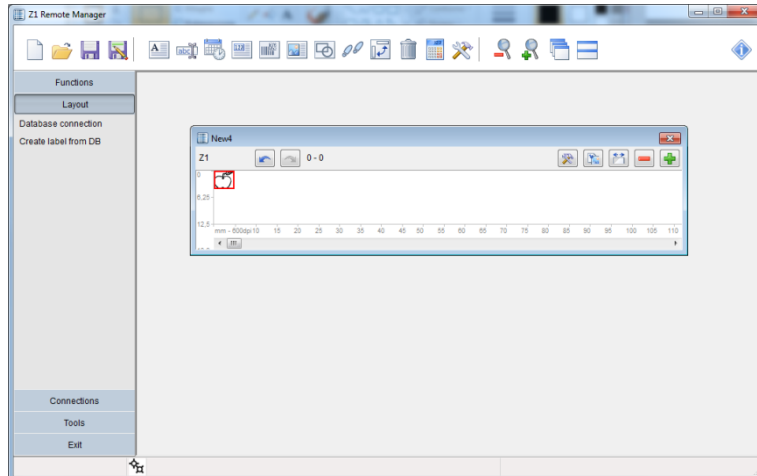⇨ The barcode is inserted in the print image.
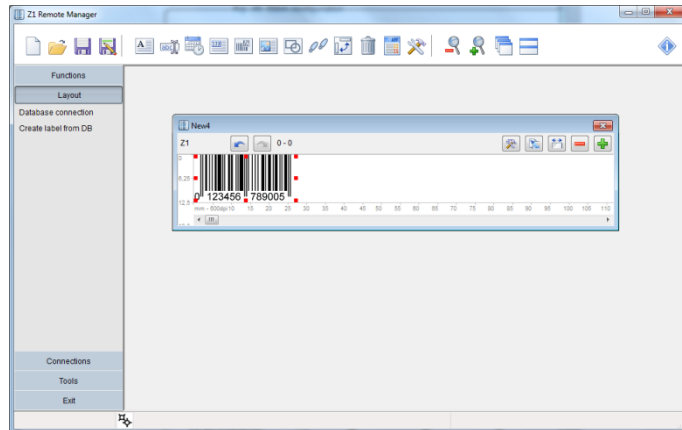
Fig. 72: Barcode inserted in the print image

8. Click on the barcode and position it in the print image whilst holding down the left mouse button.

9. To edit, double-click the barcode.

10. The height and width can set with the red handle.

Insert a variable field

Variables are inserted in the print image by means of variable fields.

> ○ **NOTE!**
> ⅈ The function is not available for all system configurations.

Variable fields are used if a print image contains data (e.g. batch numbers) that change frequently. This can be automated, shortly before the print image is released for printing.

The variable field is queried each time before a print image is called. A dialog window appears, requesting the variable value to be entered. A new text may then be entered, or the old text retained. It is possible to enter several variable fields in a text.

Info text is available as an additional function. This info text (e.g. batch numbers) is displayed during subsequent print call-up requests, to prevent incorrect entries or, in the case of several variable fields in a print image, confusion.

Create a variable field

1. To create a variable field,

   – Click on the [abc] button in the Edit bar.
   ⇨ The Variables dialog opens.
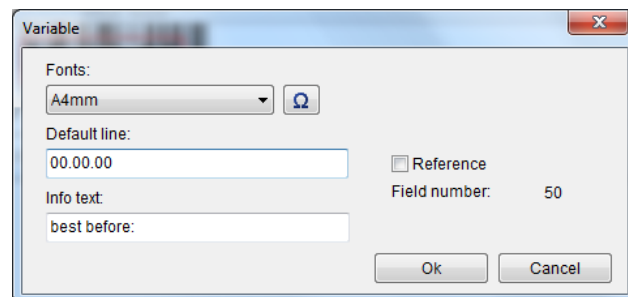
Fig. 73: Enter the variable text

2. Enter the Variable text in the input field.
3. Enter the info text in the input field.
4. Select the font from the drop down menu.

> *NOTE!*
>
> Only printer fonts, no TrueType fonts.

5. Use the arrow keys to select the font width.

6. Click the **OK** button.

⇨ The variable field is inserted in the print image.

7. Click on the Variable field and position whilst holding down the left mouse button.

Insert a logo

Graphics (logos) can be inserted in a print image as logo or bitmap files (max pixel height=300).

Open the logo

1. To insert a logo in a print image,

– Click on the [image] button in the Edit bar.

⇨ The file dialog opens.

2. Select a directory from the drop down menu.

3. Select the logo in the field.

⇨ A preview of the logo is displayed in the field

.

⇨   The bitmap file is shown in the field.

4.   To open a logo,

–   double-click the bitmap file.

⇨   The logo is inserted in the print image.

Fig. 74: Logo inserted in the print image

5.   Click on the logo and position in the print image whilst holding down the left mouse button.

6.   Double-click the logo to edit it.

⇨   The edit program opens.
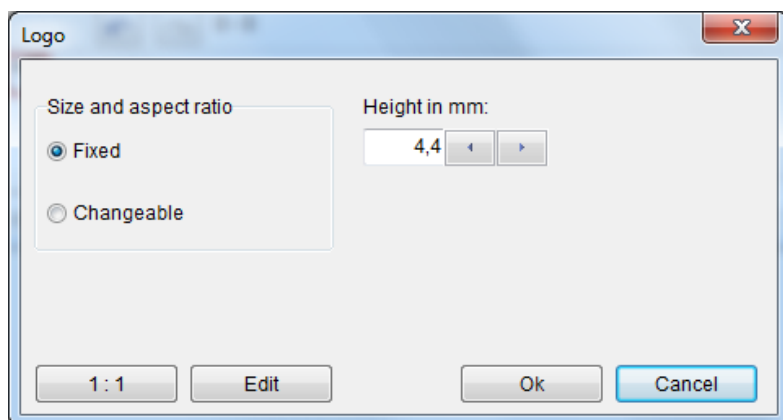
Fig. 75: Edit logo

7.   Click on Edit to edit the logo in MS Paint.
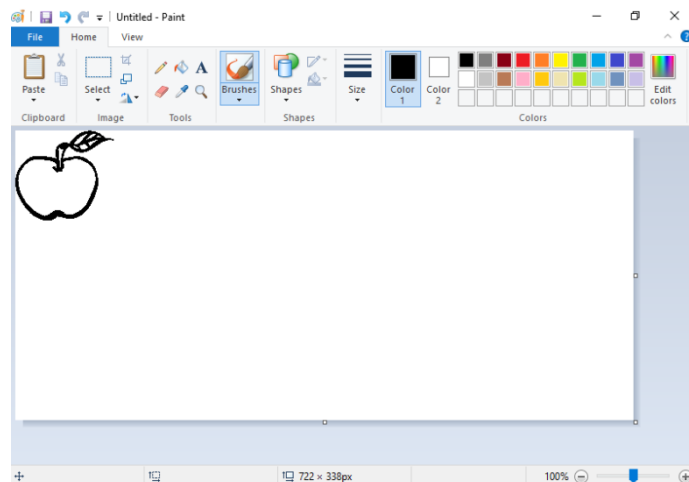
Fig. 76: Modifica logo con MS Paint

8. It can specify whether the logo has a fixed size or whether it should make adjustable. Therefore a height in mm can be entered (aspect ratio remains) or the height can set with the red handle.

> *NOTE!*
>
> *The graphic data with adjustable logo size will be saved with the right format in the print image file. The logo files of a print image with a fixed logo size will be transfer to the system.*
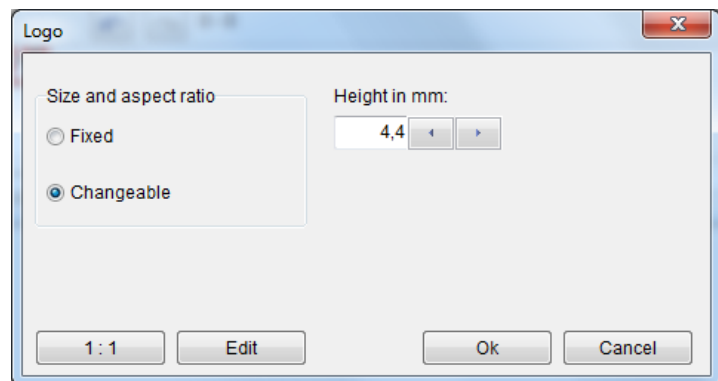
Fig. 77: Setting the size

1. The original size can be restored with 1:1 button.

> *NOTE!*
>
> *The file name is restricted to **8 characters maximum**, excluding special characters. The file name is shortened if there are more than 8 characters. The printer cannot recognize a logo file (*.lgo) that does not comply with this (e.g. after renaming in the system directory)!*

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Insert an action field

Action fields are fields containing variable data. Data is written to these fields externally (manually at the printer or by PC) with each print call.

NOTE!
The function action field is not available for all system configurations.

By allocating the same ID numbers, the same data can be written to several fields with each print call.

The ID number is incremented from 1 by the program automatically, but can be changed.

NOTE!
The ID number must always be bigger than 0.

Action fields are implemented in text fields and barcodes.

To convert a static text field to an action field, the placeholder, e.g. "x" must be enclosed by the tilde character "~" for each variable character (example: Batch: ~xxx~).

The letter variables are pre-allocated. The functions of the variables are shown in the table below.

Variable	Function
a ... w; A ... Q	like clock time function
x	data transfer from interface
z	counter
Z*	Counter as character

* not in all print system types available

Action fields can be interlinked. The use of action fields is explained by some examples below.

Example: 1:

A print image contains a text field and a barcode. Both fields are allocated the same ID number in order to receive the same data with print call.

1. To create the text field,

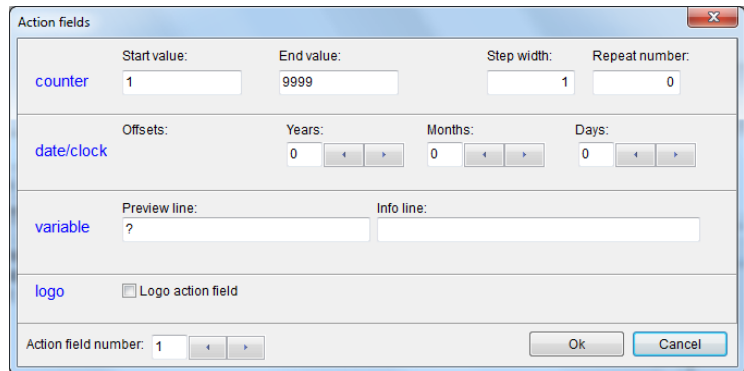– Click on the [ ] button in the Edit bar.

⇨ The text dialog window opens.
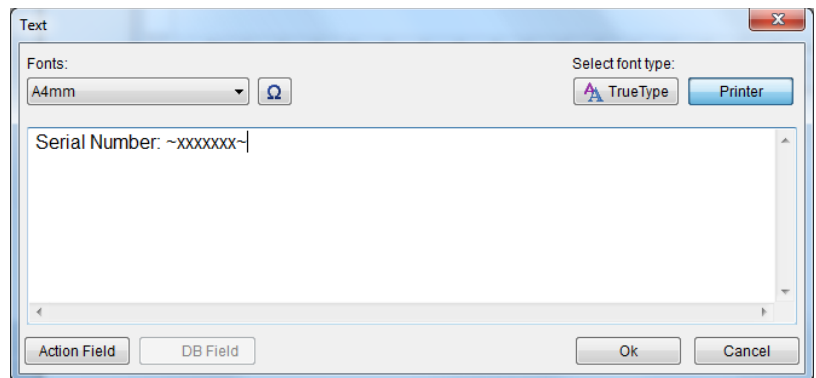
Fig. 78: Enter text

2. Enter the static text **Article no.:** in the text field.

3. Enter the variable text **~xxx~** in the text field.

4. Click on the **Action field** button.

Create an action field
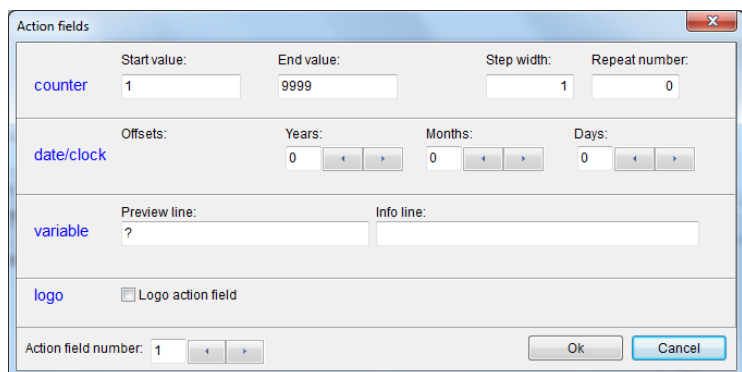
Fig. 79: Action field

5. Use the arrow keys to select ID number **1**.

6. Click the **OK** button and close the text field with **OK**.

7. To create a barcode,

– Click on the [ ] button in the Edit bar.

⇨ The barcode dialog opens:

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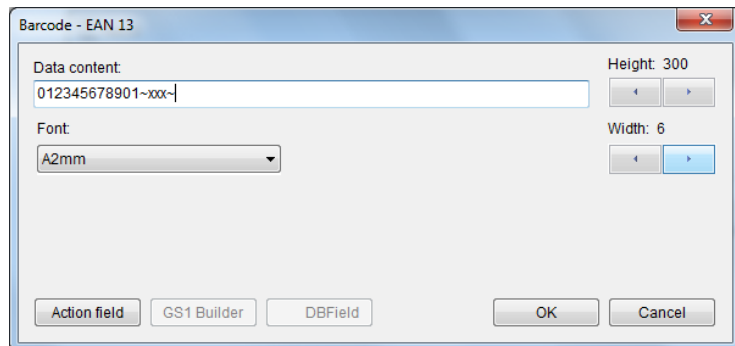
Fig. 80: Enter the barcode

8. Enter the barcode text **~xxx~** in the input field.

9. Click on the **Action field** button.
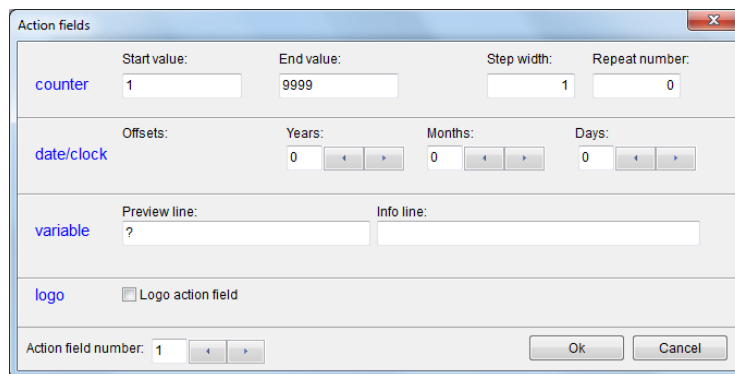
Fig. 81: Action field

10. Use the arrow keys to select ID number **2**.

11. Press **OK** to close the action field and barcode window.
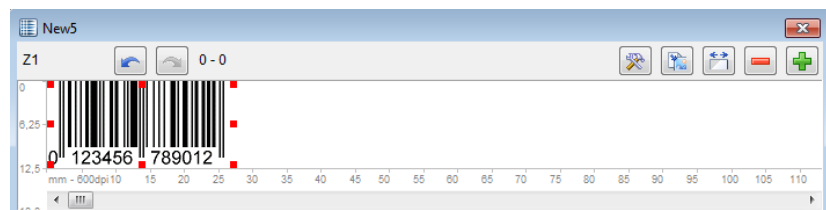
Fig. 82: Action fields in the print image

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The text field and the barcode are now two action fields. The data in the text field are also written to the plain text line of the barcode. The Article no. and the barcode receive the same data.

Example 2:

Linking of action fields

A print image contains a text field and a barcode.
The date (8-digit) must be printed in the text field in the DD.MM.YY format.

The date (6-digit) must be printed in the barcode in YYMMDD format.

With print call, the data should be written in the text field and in the plain text line of the barcode.

Furthermore, a lot number must be printed in barcode and to the text field.

1. To create a text field,

    –   Click on the ⬛ button in the Edit bar.

    ⇨   The text dialog window opens.
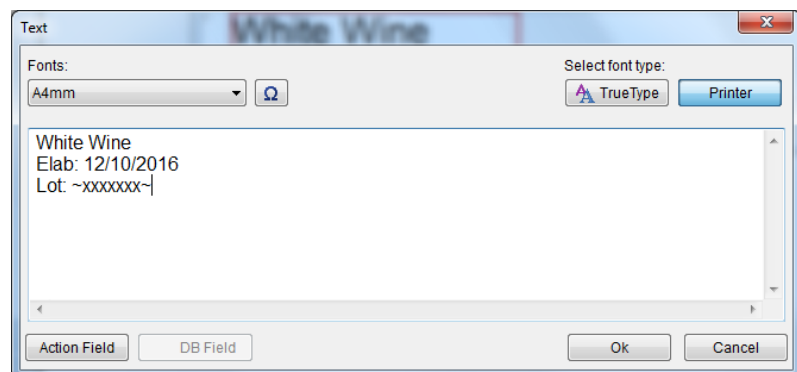
Fig. 83: Enter text

2. Enter the static text **Prod. Date:** in the text field.
3. Enter the variable text **~xxxxxxxx~** in the text field.
    Each x represents a character in date format DD.MM.YY.
4. Click on the **Action field** button and set ID 1
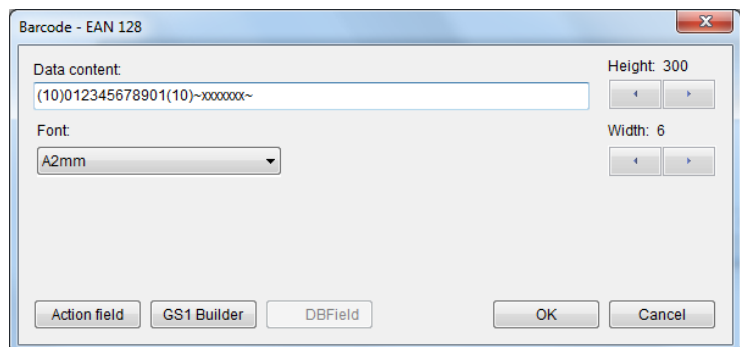
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Fig. 84: Action field

5. Use the arrow keys to select ID number **1**.

6. Click on the **OK** button.

7. To create a barcode,

–   Click on the [barcode button] button in the Edit bar.

⇨   The barcode dialog opens.

Enter the following data:
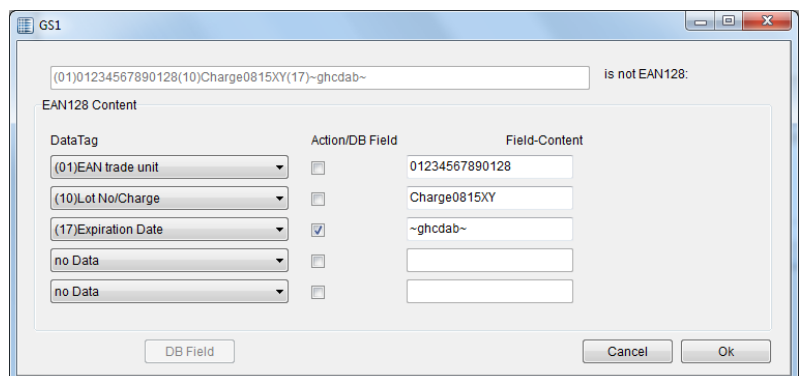
Fig. 85: Enter the barcode

Use the GS 1 builder to check or modify the input.

Fig. 86: GS 1 Builder

8. Enter the plain text line **~xx4xx1xx~** in the input field.
   The number before variable x specifies the position in the date
   format to be provided: 31.12.12 ☐ 071231.

9. Click on the **Action field** button and set ID 2.

10. Use the arrow keys to select ID number **1**.

11. Click on the **OK** button.

Fig. 87: Action fields in the print image

Reference fields

Variable fields, date fields and counter fields can be so designed that they are available in the label layout, but will not print.

It makes sense if you want to revert to information, like a date in a barcode, but this date would not print.
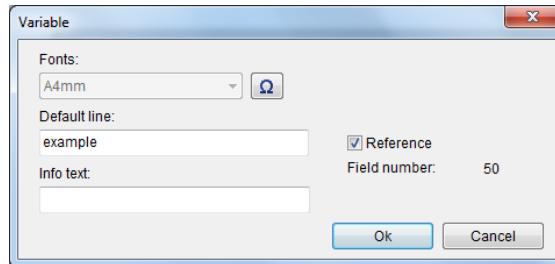
Fig. 88: Reference field selection

Create reference field

Activate the check in the corresponding dialogs in front of the reference.

The corresponding field will be marked grey in the layout and will not print.

Below the reference field is stated a field number. The field can link with this number. The field number will be count from 50 up automatically. The field will be inserted in an action field link with this number.
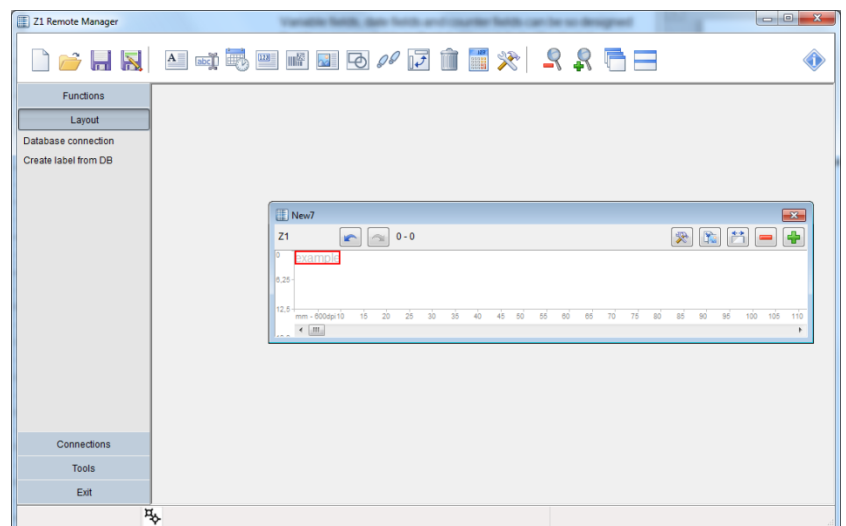
i.e.: ~(50)xxxxxx~

Fig. 89: Reference field preview

Save print image

Depending on the connected printer type, Z1 Remote Manager saves the print images in *.00I format.

1. To save a print image already created,

– Click on the button in the Symbol bar.

Open print image

1. To open a print image already created,

– Click on the [button] button in the Symbol bar.

⇨ The file dialog opens.

2. Select a directory from the drop down menu.

3. Select and mark the print image in the field.

Ink consumption calculator

1. To determine the number of prints per ink cartridge, an already created print image must be open.

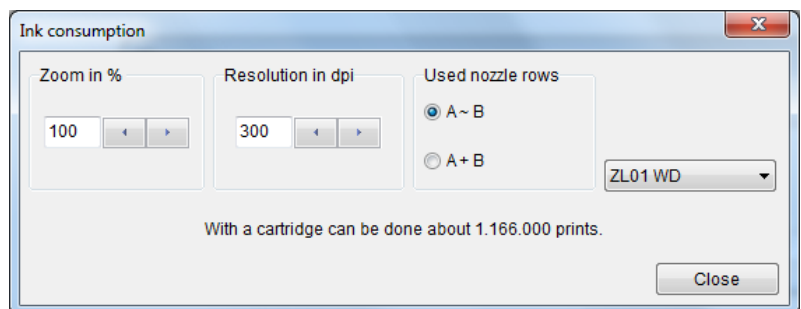To determine the number of prints per cartridge,

– Click on the [button] button in the Symbol bar.

Fig. 90: Ink consumption calculator

⇨ The ink consumption calculator opens.

4. Set the desired parameters (zoom, resolution, nozzle row etc.) in the ink consumption calculator.

5. The text below shows how many labels can be print with one or more full cartridges.

○ *NOTE!*

The number of prints per cartridge is an approximate value. The exact value can be seen after an optimal print image selection.

Database

The following settings are applied in the **Database** submenu:
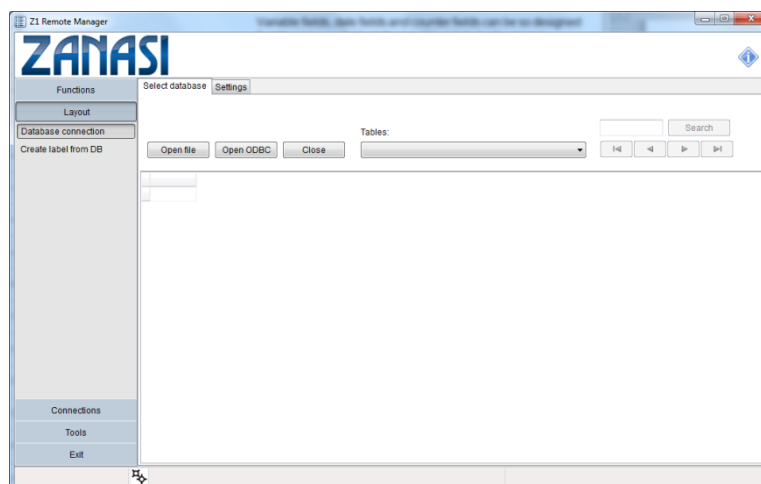
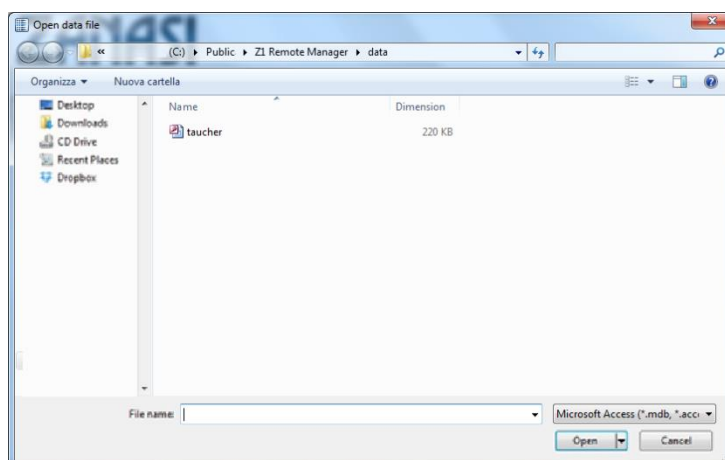■ Database selection

■ Settings

Fig. 91: Database menu

Open file

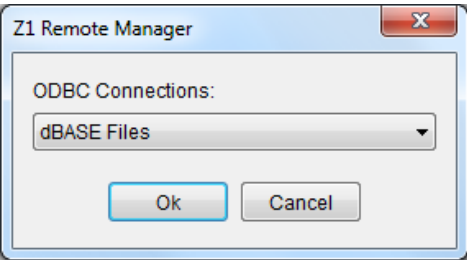*Fig. 92: Open file*

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**Open
ODBC**
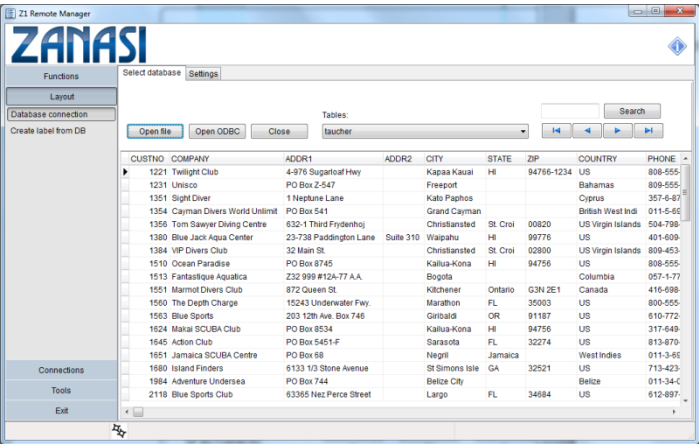

Fig. 93: Open ODBC link

Fig. 94: Open database

Use the "Search" button to find a specific line in the database. The search always references the line entered in "Settings".

The [navigation buttons] buttons are used to navigate in the table. The buttons at each end jump to the beginning (left) and end (right). The two buttons in the centre move the cursor up (left) or down (right) by one position.

The **Settings** tab takes you to the menu item for database settings.
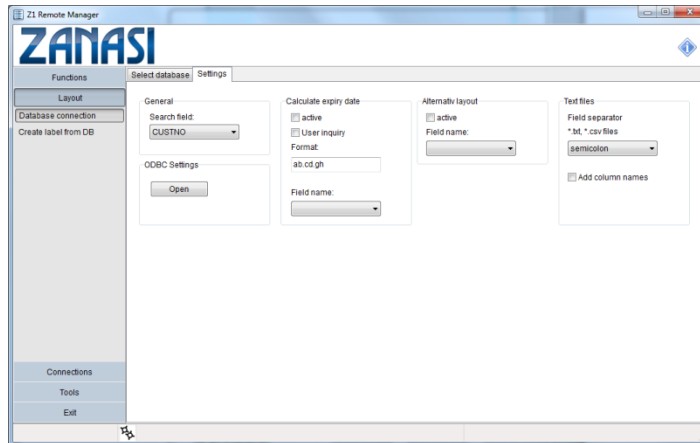.

Settings

Fig. 95: Database settings

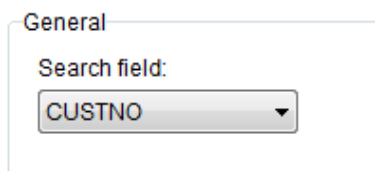The **General** field determines the column used for the search function.

Fig. 96: General field

In the expiry date field, an offset can be assigned to the BBD, determined from the database values. This means that the current date is increased by the number shown in "Field name". The number in the field corresponds to the days added.

By ticking next to "User query", the generated date can be re-checked or changed by the user/operator.
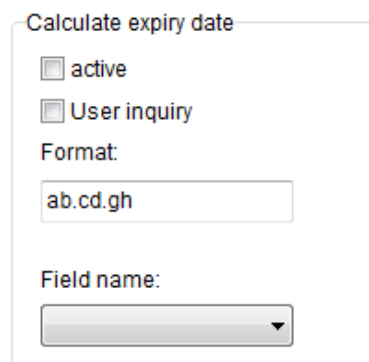

Fig. 97: Calculate the expiry date field

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The "Alternative Layout" field enables download of an alternative layout from the table. The field name for this can be defined here. This function is switched on by ticking "active". The name of the alternative layout must be stored in the table. If the field is empty, the Standard Layout remains in use.
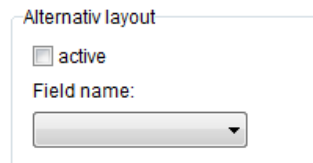

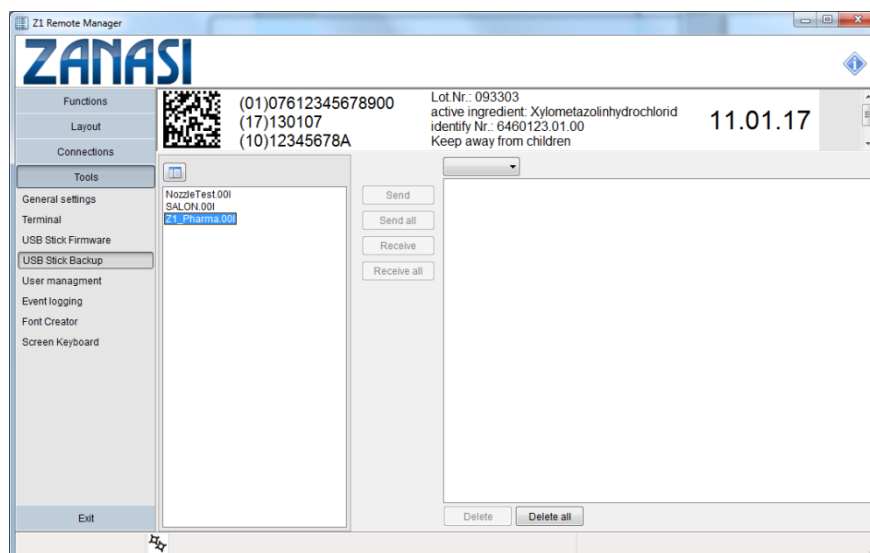*Fig. 98: Alternative layout field*

USB Stick Backup

Fig. 99: USB Stick Backup window:

It's possible to save the created labels on a USB stick in the submenu **USB Stick Backup** and to provide print systems with these data.

In the saved data include:

- Label for the controller

- The fonts of the labels

- The pictures of the labels

So you use this function:

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1. Open Z1 Remote Manager→Editor →USB Stick Backup
2. Click on folder and browse to your local label index.

   ⇨The list of the selected index is shown in the left window.
3. Select the letter of the drive at the right side, which belongs to your USB stick

   ⇨ If there are label on the stick in the right folder structure already, these will be shown in the right window.

Save data on a USB stick

1. Select the desired labels in the left window, which should be saved.
2. Click on **Send** to save the desired label on the USB stick

   or

   Click on **Send all** to save the desired label on the USB stick,

Save data from a USB stick on a control system

1. Select the desired labels in the right window, which should be saved.
2. Click on **Receive** to save the selected label in the local index,

   or

   Click on **Receive all** to save all labels in the local index.

Label from database

With Z1 Remote Manager it's possible to create a label from a database automatically. Thereby the database will be complete systematically and every data set will be filled in a label and saved separately. The created labels can be send to a print system.

To use this function:

1. Open a database and configure it that you can use Z1 Remote Manager.

2. Create or open a label with the database field.

3. Click on **Label from database**

Fig. 100: Choice dialog for label names

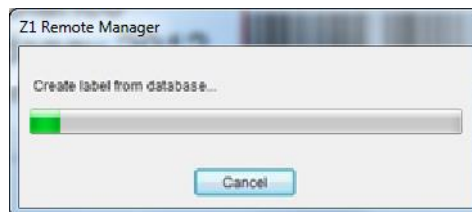4. Select a database field for the label name in the following dialog and confirm your choice with **OK**

Fig. 101: Progress window for the label creation

5. Wait until the label is created and the progress window close automatically.

> *NOTE!*
>
> *The labels will be saved in a subfolder in the standard Z1 Remote Manager label index.*
>
> *The name of the subfolder is identic with the name of the origin label.*

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Connections

Add system

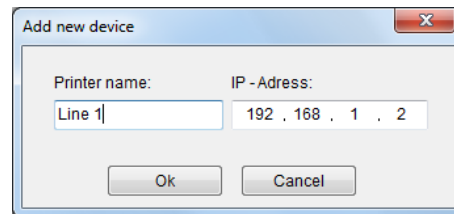**1.** Click on the **Add system** button in the **Connections** register.

Fig. 102: Add system

2. Now enter a unique name and IP address of the new device.

> *NOTE!*
>
> *Manual addition of connections is only required for Ethernet connections. USB connections are detected and shown automatically. Serial connections must be searched for manually using* ***Search at Com Ports***

Search at COM ports

Z1 Remote Manager interrogate the known serial COM-Ports one after another to build up a serial communication to a coding system. If the software find a coding system, this one will be linked to Z1 Remote Manager and can used afterwards.

Add a system to a serial port:
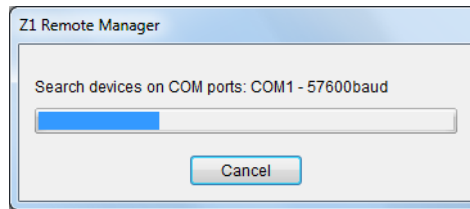
1. Select **Search at Com Ports**

Fig. 103: Search of printers at COM-Ports

⇨ A status window opens where the search for system is shown.

⇨ If a system will be found, it is added to the software and is shown as system symbol.

> *NOTE!*
>
> *The connection persists until the finish of Z1 Remote Manager. The connection is reject by closing Z1 Remote Manager.*
> *If you want to retain the connection please use the*
> ***Save connection** function.*

Save connection

1. Select a system in the system tool bar.

2. Click in the tab **Connections** on the **Save connection**.

3. Enter a name for the system and confirm this with **OK**.

⇨ The selected connection will be saved and is after a Z1 Remote Manager restart available.

> *NOTE!*
>
> *The saving is not for USB-stick connections of the Z1 available.*

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Delete connection

1. Select the system in the system tool bar.

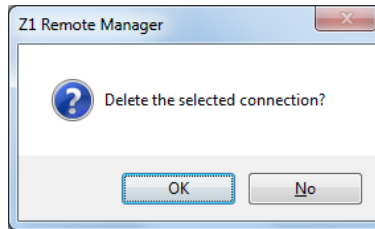2. Select in the **Connection** tab the **Delete connection** button.

Fig. 104: Delete connection dialog

3. Confirm the shown dialog with **OK**

⇨ The connection to the system will be deleted. The system symbol in the system tool bar is removed.

Update firmware

If there was a transmission error during the firmware update and the systems can't identified by Z1 Remote Manager, the firmware update dialog can manually select with the **Update firmware** menu.

Start the update dialog manually:

1. Click in the **Connection** tab on the **Restore Firmware** button.
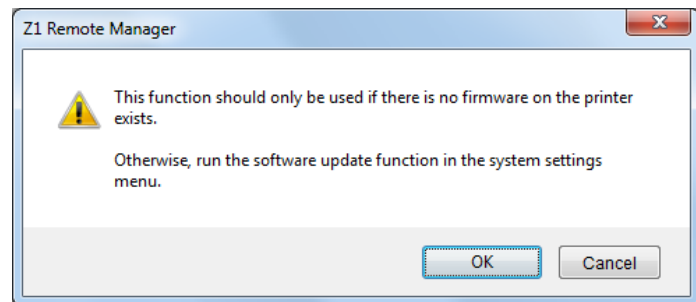

Fig. 105: Finestra di dialogo di avviso

2. Read the warning information and confirm the dialog with **OK**.
3. Select the connected system below printer type.
4. Select the **port** where the system is connected.

Follow the commands for **Load firmware**

Z1 Remote Manager system server

The Z1 Remote Manager system server organizes the connection and communication to the systems.

The server starts with Z1 Remote Manager standard. For service or diagnostics it can be deactivated and again reactivated.

Stop server

1. Click on the **Stop server** button in the **Connection** tab to stop the Z1 Remote Manager server.

⇨ After the shutdown of the Z1 Remote Manager server the gears don't rotate in the upper bar of Z1 Remote Manager

> *NOTE!*
> *The Stop server button is only selectable if the server runs, i.e. if the gears rotate in the status bar.*

Start server

1. Click on the **Start server** button in the **Connection** tab to start the Z1 Remote Manager server.

⇨ The gears rotates in the upper bar of Z1 Remote Manager after a successful start of the Z1 Remote Manager server.

○
ⅱ *NOTE!*

The Start server button is only selectable if the server doesn't run, i.e. the gears don't rotate in the status bar.
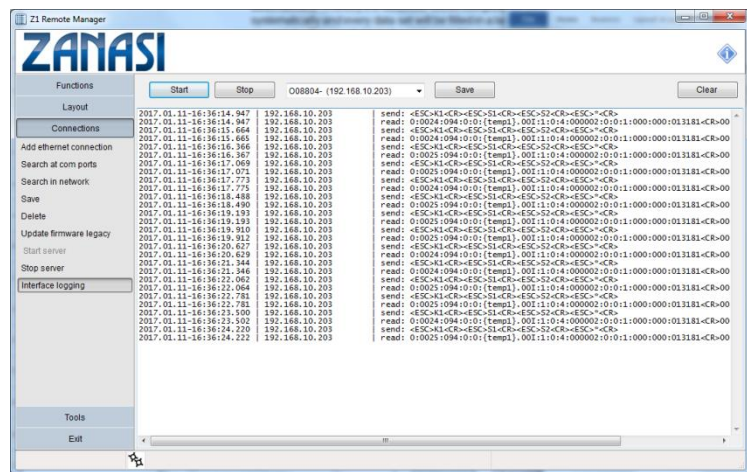
Interface logging

Fig. 106: Interface Logging

The messages, which are generated from Z1 Remote Manager and the commands, which are send from Z1 Remote Manager to the system will be shown in real time and saved in the Log files menu.
.

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Start

1. To start the real time logging,

   – click on the **Start logging** button.

   ⇨ The generated system messages of Z1 Remote Manager are shown in the upper window.

Stop

2. To deactivate the logging,

   – click on the **Stop logging** button.

Delete screen

3. To delete the logo screen,

   – click on the **Delete** button.

Save

1. To save the system messages of Z1 Remote Manager in a file automatically,

   – click on the **Start logging** button.

2. Select a folder and a file name for the log file and confirm with **Save**.

   ○
   ⫘ *NOTE!*

   *The log file is saved in the folder „**Z1 Remote Manager/Log/**" standard.*

   *The standard extension for log files is „**.txt**"*

Select one system or all systems

Select the respective system with the help of the IP address or the name or all systems will be logged.
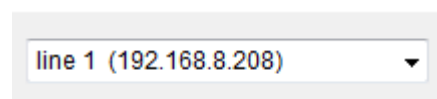
line 1 (192.168.8.208) ▼

Fig. 107: System selection

Virtual systems on a USB-Stick

Z1 Remote Manager offers the possibility to connect virtual systems via a USB- stick. That means, all characteristics and data at the interface are deposit in a special subdirectory. The required directory structure can be create by connecting a USB-stick to a system.

If no system is available, Z1 Remote Manager provide virtual systems in the folder C:\User\Public\Z1 Remote Manager\Zanasi. Therefore the complete folder Zanasi will be copied in the main directory of a USB- stick. The folder Zanasi includes images of all current system types. Not used systems can be deleted by removing the subdirectories. The virtual systems will be inserted in Z1 Remote Manager and will be available for all system-dependent functions by disconnecting and connecting the USB-stick.

This function is especially useful when no data connection is available. All operations, like print start, label backup or also parameter settings can be done on a virtual system to realize the operations by connect the USB-stick on a system.
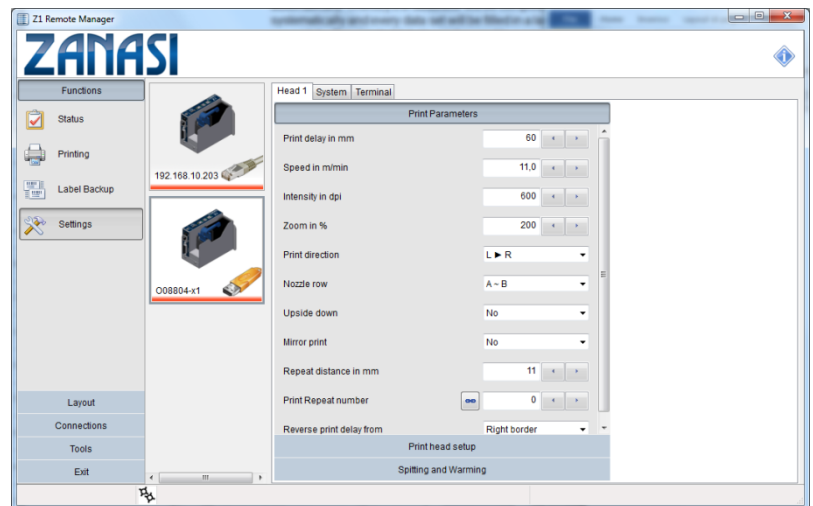

Fig. 108: virtual USB – Stick print system

○
ℹ *NOTE!*

All system-depending functions, also without a connection to the system, can be realized with the assistance of the virtual system function.
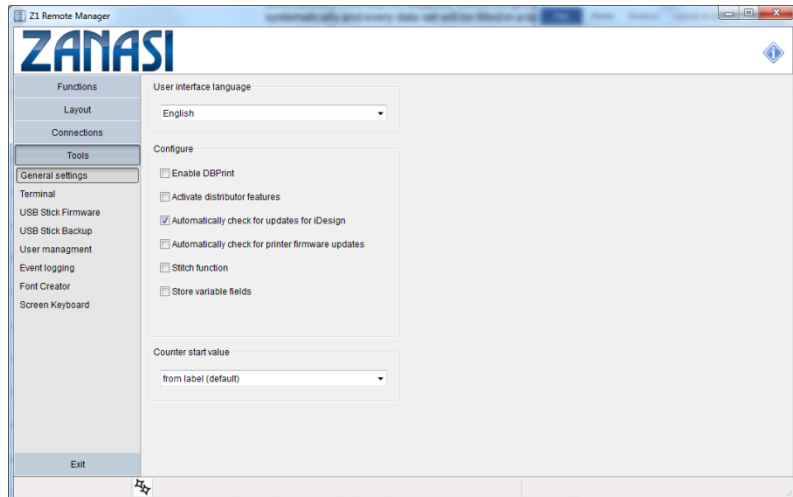
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Tools

General settings

Fig. 109: Impostazioni generali

Set up language

1. To change the actual user language, click on **General settings** in the selection register **Tools**.

2. Select the desired language by mouse click in the list field „user languages". The changes come into effect partly after restart.

○
⊥ *NOTE!*

The changes will be assumed after the Z1 Remote Manager restart.

Configure Z1 Remote Manager

Automatic firmware update

The actually firmware version of the added control system will be checked every time if this function is activated. The user will be informed by a dialog if the firmware version isn't actual. The user is guided to the update process by request.
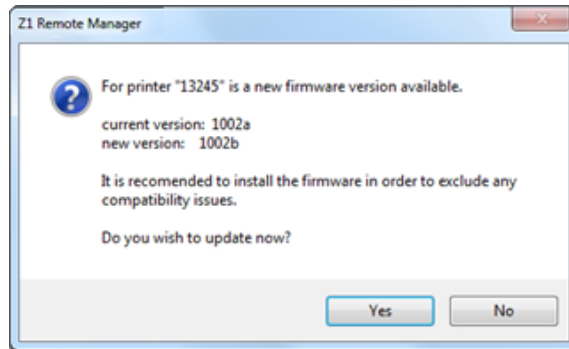
Fig. 110: Firmware update dialog

Store variable fields

This option specifies whether a queried variable field is saved with print request and will be displayed as default line with a new print request. This is useful to enter only the data that has actually changed. Data that hasn't changes can confirm by the Enter-button.

Distributor features

This function is only available for official Zanasi distributors and must be considered separately.

Stitch function

The option connects several Z1 Stitch to one stitch system.

Counter start value

The start value of a counter must be confirmed with print start or rather the desired start value can be entered by using a counter field in a print image with an active function. The last counter value will be saved by a print stop and continued with a new print start.

Which counter start should be written, can be adapted.

Data type	Description
From Label	The defined start value in a label will be used as counter value automatically (standard).
User input	The counter start value will be queried without standard value.
Last value	The current counter value will be saved in the label and used with a new print start.

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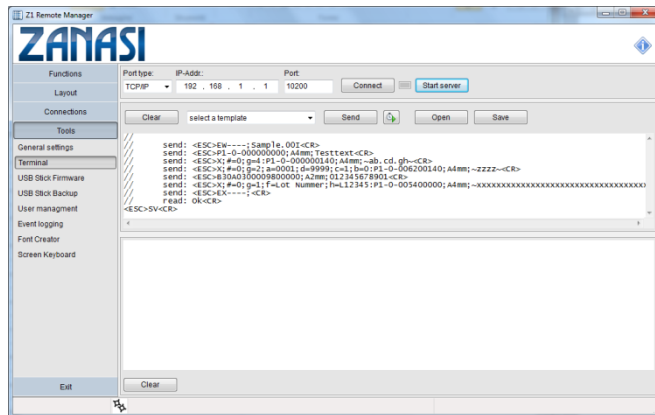| Query last value	The counter start value will be queried from the user. The current counter value is displayed as default line.

Terminale

Fig. 112: Terminal

The terminal in the menu **Tools** can contact any other system (scanner, camera…) and test the communication.

For this a connection is necessary. The connection can be Ethernet (TCP/IP), USB, or EIA232.

Configure a TCP/IP connection

1. Select below port type TCP/IP.
2. Enter the IP address by which you want to connect.
3. Enter the port with which you want to connect.
4. Click on **Connect**

Configure a USB connection

1. Select **USB** below port type
2. Select the desired system below USB.

   ○
   ⫯ *NOTE!*

   If the desired system isn't in the list, click on 🔄 *to refresh the list*

3. Click on **Connect**

Configure a RS232 connection

1. Select the port type **RS232**
2. Select the desired serial port below COM.

   ○
   ⫯ *NOTE!*

   If the desired port isn't in the list, click on 🔄 *to refresh the list*

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3. Select the baud rate, data bits, parity and the number of stop bits.

4. Click on **Connect**.

Connection status

Besides the **Connect** button is a LED, which displays the status of the connection with 3 colors.

Color	Meaning
Grey	No connection
Yellow	Link connection
Green	Establish connection

A direct communication to the print systems is also possible with the terminal. The commands will be sent to the print system via the existing connection.

> **CAUTION!**
> The incorrect use of the terminal can cause data loss and failures of the print system.

> **CAUTION!**
> Z1 Remote Manager didn't check the correct spelling of the commands.

The terminal translated the used control characters of the Zanasi systems into its hexadecimal correspondents automatically before it is send to the print system.

Send interval

If one or more commands should send continuously, it can start with the icon ⏱. The interval length can specified in ms.

Send command

1. Type the desired command in the command window.

2. Click on **Send**

> *… The commands will be send to the coding systems. The answer of the system is shown in the lower window.*

○
ⅉ   *NOTE!*
*The terminal allows the sending of ascii signs. This must be specified in form **<0x01>** (for <SOH>) in hexadecimal spelling.*

Use command templates

1. Select the desired template in the upper **drop-down** menu.

   The included command is added in the upper terminal window.

   ○
   ⅉ   *NOTE!*
   Lines, which begins with „//" are comments and are not send.

2. Click on **Send**

   ⇨   *… The commands will be send to the coding systems. The answer of the system is shown in the lower window.*

Load commands

1. To load already saved commands click on **Open**
2. Browse by the file dialog to the desired file.

   ○
   ⅉ   *NOTE!*
   The file extension for template files is .ast

3. **Open** loads the data content of the file in the upper terminal window.
4. Click on **Send** to send the commands to the coding system.

The file „Interface Commands.ast" is in the list..

Save commands

1. Click on **Save** to save the currently shown commands in the upper terminal window.
2. Select the file dialog, a name and a storage location and confirm with **Save.**

USB Firmware Update
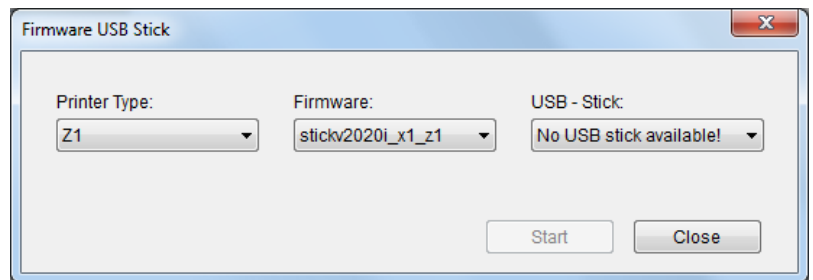
Fig. 113: Terminal

You can program USB memory systems with the USB-firmware update so, that you can make a firmware update on corresponding systems.

Create a USB-Firmware Stick

1. Click on **USB Stick Firmware** in the menu Tools
   ⇨ It opens a dialog to create firmware USB-sticks
2. Select the desired system classification in the menu Printer type.
3. Afterwards select the desired firmware version that should be installed in the menu Firmware.
4. Insert an USB-stick in a free port of the PC.
   ⇨ The drive of the USB-stick is added to the drop-down menu automatically.
5. The drop-down menu **USB-Stick** shows all available removable medium of the system, select your USB-stick here.

> ○ *NOTE!*
> ⫟ *Drive letter of the USB-stick can be look up in the Windows file explorer or rather below desktop*

6. Click on **Start** to start the programming operation**.**
   ⇨ It appears a window that informed about the programming level.
   ⇨ The window closed after a successfully installation.

> ○
> 冫 *NOTE!*
> *Files and folders, which exist on the USB-stick
> already and collide with the actual firmware update,
> will be moved to the folder „MOP_FW_Backup".*

Software-Update of the system unit:

Z1 USB Update (offline)

1. Connect the device to the power supply, press the [Ink]-BUTTON and hold them pressed until the sensor LED flashes green/red.

2. Insert the USB-stick into the USB socket on the top side of the system.

3. The sensor LED flashes yellow/red if the program is load.

4. Confirm it by pressing the start-button and wait until the system restarts.

5. Now remove the USB-stick

User Management

Overview

The Z1 Remote Manager user management facilities allows for access to dedicated features of Z1 Remote Manager based on user name and password identifiers. In this regard, it follows the standard approach, which most users are familiar with, from i.e. the Windows operating system and many more.

However, because there are many different requirements on how to manage user credentials in the field of industrial applications, Z1 Remote Manager comes with three different flavors of user management. The list below provides a short overview of those:

Type	Characteristics
Simple user Management	Three fixed access levels. Passwords are to be chosen at first configuration and can be changed later on. Credentials for each level can be changed as well.

Simple User Management

This type of user management provides three fixed access levels. The passwords, needed to access one of the levels, can be adjusted during activation of the user management. The passwords, as well as credential details, can be changed later on but note that this can only be done by the level "Administrator". Each of the access levels can be configured, except the admin level which is fixed to have all available credentials. This is mainly

Guest credentials

If User Management is activated in Z1 Remote Manager, one has to type in a password in order to do even the most basic tasks. Sometimes, this behavior is too restrictive. You want, for example, a line worker to be able to observe the status of some printers or want them to be able to start and stop print jobs without the need to log in each time. This can be achieved by setting up the standard user as a guest account. If this option is enabled, the standard user is automatically in logged in state after Z1 Remote Manager is started and it has no password assigned. However, you can still restrict some of the more sensible features of Z1 Remote Manager using the admin and super user access levels.

Setup the Simple User Management
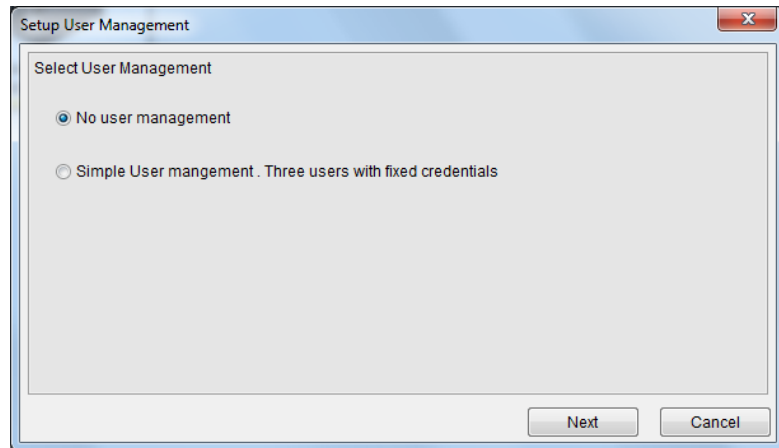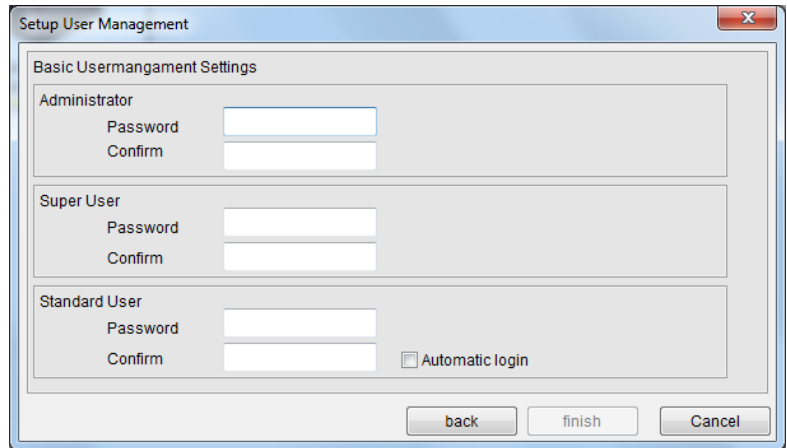
Fig. 114: User management

1. Start Z1 Remote Manager
2. Select the menu "tools"
3. Press button "user management".

4. A new window will appear. Select the choice "simple user management".
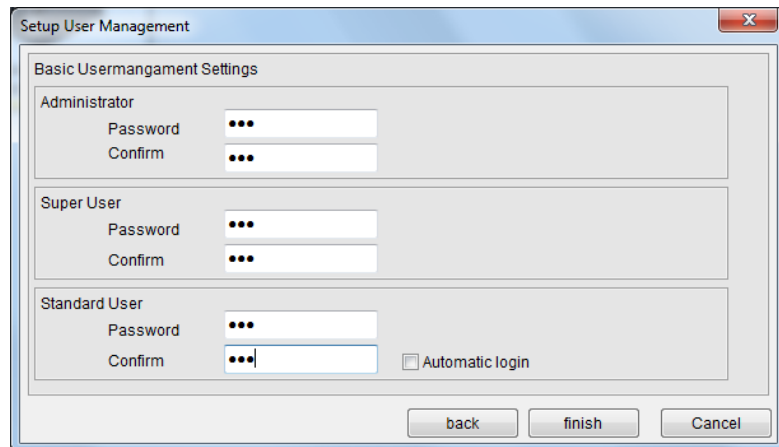
5. Press "Next"

Fig. 115: User management

6. Now, you need to insert three passwords. You will need to enter each password twice. If you typed all the passwords correct, the "next" button is enabled. If you cannot press this button, that means that one of the passwords is not typed correctly.

7. If everything went well, press "next". Z1 Remote Manager will shut down and restart.

Setup the Simple User Management with guest user.

1. Start Z1 Remote Manager

2. Select the menu "tools"

3. Press button "user management".

4. An new window will appear. Select the choice "simple user management".

5. Press "Next"

Fig. 116: User management

6. Now, type in the passwords for the admin user and super user. You can leave the entries for the standard user blank. You will note, that you need to type each of the passwords twice.

7. Tip the automatic login checkbox inside the standard user group box.

8. Click the finish button. Z1 Remote Manager will restart.

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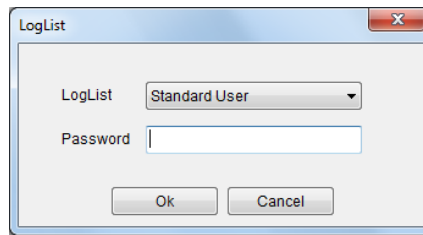**Using Z1 Remote Manager with Simple User Management enabled Login after start**

Fig. 117: Login

1. Start Z1 Remote Manager. You will notice that most buttons and controls are in gray color and that they don't react on mouse clicks.
2. To log in press the button at top right side of the main screen as shown in the image above.
3. In the dialog window that will appear now, select first the kind of access level that you want to enter.
4. After that type the password in the input field below.
5. Press ok to log in.

Log out

1. Press the small black arrow near the login button.
2. On the menu that will appear then, select logout.
3. You will be asked if you really want to log out. Confirm by pressing the Ok button.

Further Configuration of the Simple User Management

Make sure that the Simple User Management is activated. If the Simple User Management is activated, then start Z1 Remote Manager and log in to Z1 Remote Manager with the access level admin. Then proceed as follows:

1. From the main menu select the strip "tools"

2. Select "user management". Z1 Remote Manager should look like the image below now. If this is not the case than you have probably not the Simple User Management activated.
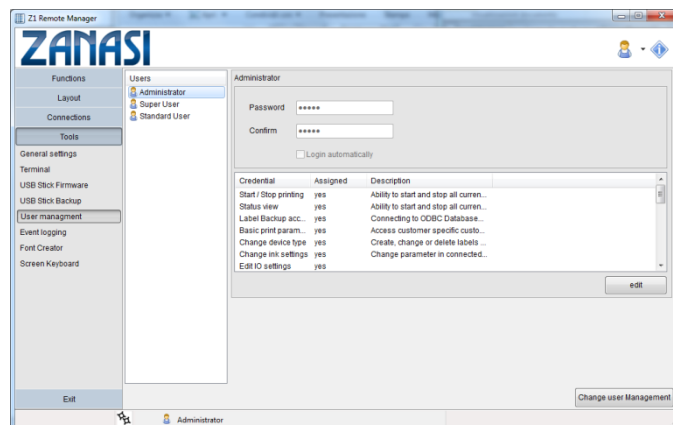

Fig. 118: Configuration User management

Change a Password
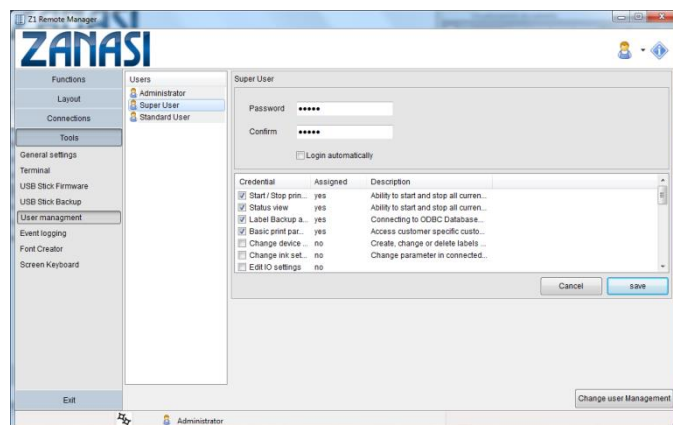
Fig. 119: Change Password

1. Select an access level (admin, super user or standard user) from the list at left.

2. Click the edit button below the list of credentials.

3. Type the new password to the input fields above. Note, that you need to type the new password twice. Confirm your settings by pressing the Save button.

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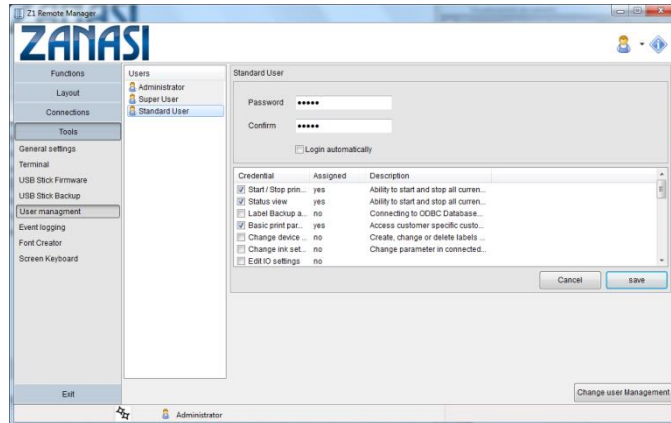
Fig. 120: User management settings

Change the credentials

1. Select an access level (admin, super user or standard user) from the list at left.
2. Click the edit button below the list of credentials.
3. To add a new credential to the selected access level, click on the check box near the description of the credential. To remove already assigned credentials remove the tick in the box by a mouse click.
4. Confirm your changes by pressing the Save button.

NOTE:

It is not possible to add or to remove any credentials from the admin access level.

Select an access level as guest level

1. Select an access level
2. Click the edit button.
3. Tick the login automatically check box.
4. Confirm your changes by pressing the Ok button.

Appendix

List of available credentials

Print Start / Stop	Access to the "Print" button of the "functions" menu
Status view	Access to the "Status" button of the "functions" menu
Label backup	Access to the "Label Backup" button of the "functions" menu.
Basic Device Settings	Access to the "Print Parameters" settings strip in the "settings" form of the "functions" menu.
Change Device Type	Access to the "Device Setup" slider in the "settings" form of the "functions" menu.
Change Ink Settings	Access to the "Spitting and Warming" slider in the "settings" form of the "functions" menu.
Change Head Setup	Access to the "Head Setup" slider in the "settings" forms of the "functions" menu.
Change IO Settings	Access to the "IO Output" slider in the "settings" forms of the "functions" menu.
Database Settings	Access to the "Database Connection" button in the "Layout" menu.
Edit Labels	Access to the "Editor" button in the "Layout" menu.
USB Backup	Access to the "USB Backup" button in "Layout" menu.
Labels from DB	Access to the "Create labels from DB" button in the "Layout" menu.
Add Devices	Access the buttons "Add ethernet connection", "search network", "search com ports", "Save" and "Delete" on the "Connections" menu.
Start / Stop server	Access the buttons "Start server" and "Stop server" on the "Connections" menu.
Update Firmware	Access the button "Update Firmware (Legacy)" on the "Connections" menu.
General Settings	Access the button "General Settings" in the "Tools" menu.
Logfiles	Access the button "Interface logging" on the "Tools" menu.

Terminal	Access the button "Terminal" on the "Tools" menu.
USB Firmware	Access the button "USB Stick Firmware" on the "Tools" menu.
Event log	Access the button "Event logging" on the "Tools" menu.
User management	Access the button "User Management" on the tools menu

Event Logging

If the user management is active, all user inputs are listed in the event logging.

Font Creator

The font creator is used to generate Zanasi print fonts from Windows TrueType fonts. The delivered standard character set of the print system can add with new sizes and fonts, like i.e. Cyrillic.
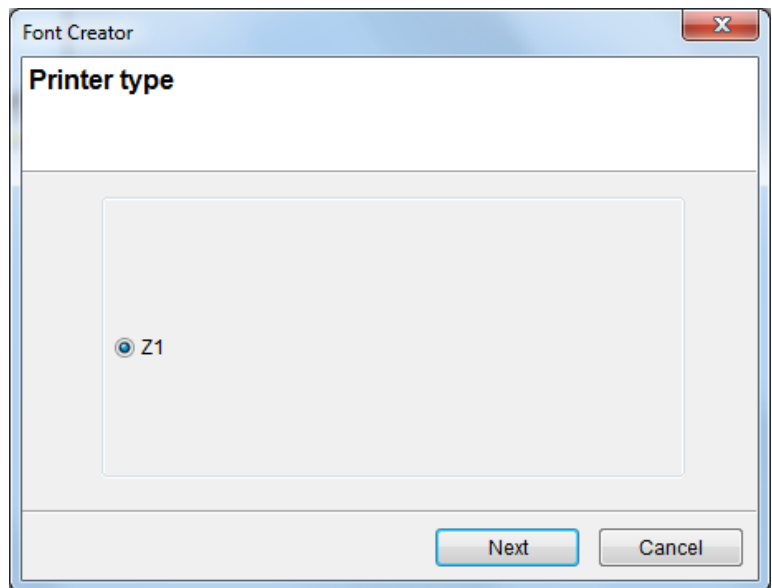
Fig. 140: Font Creator

Procedure:

1. To start the font creator, click in the menu **Tools** on the submenu **Font Creator**.
2. Select the required printer type, i.e. Z1.
3. Click on the button **Next**.

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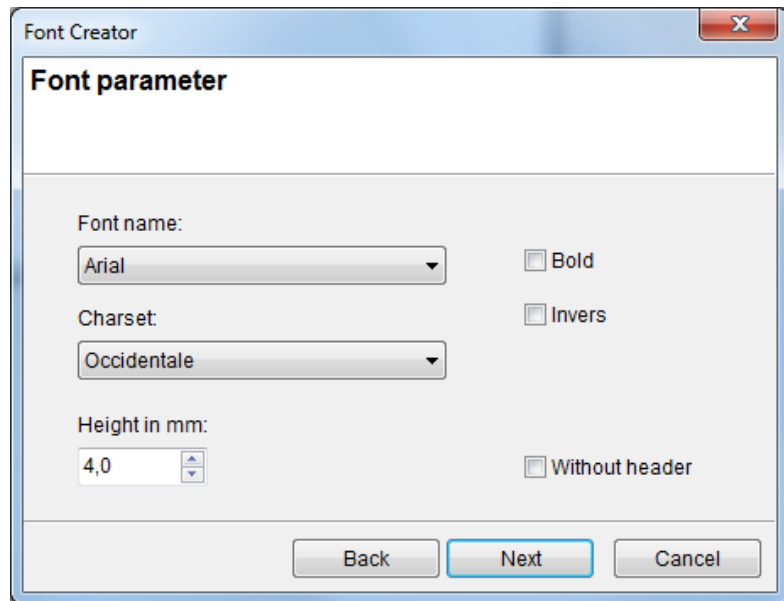
Fig. 141: Font parameter

1. Select the font name and height in mm. It can also select an international character set.

2. Click on the button **Next**.
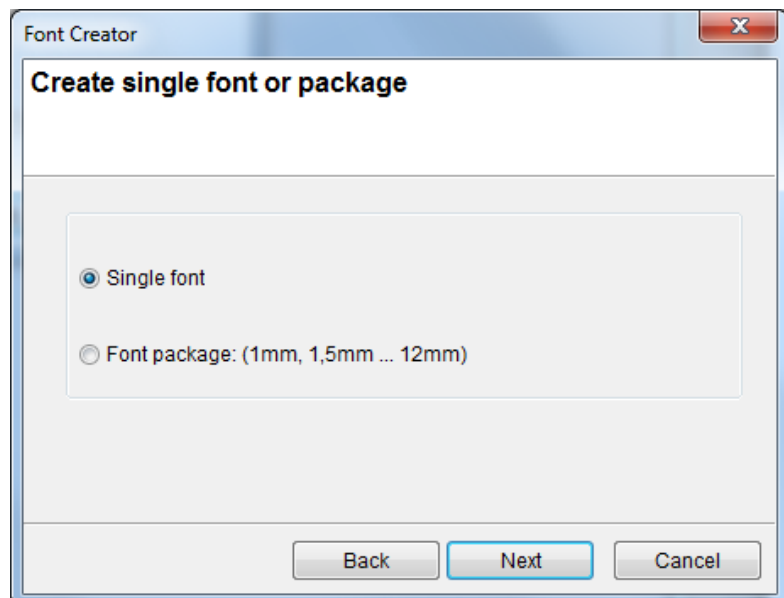
Fig. 142: Font Creator package

3. Now you have the possibility to select, whether a single font or a font package with all sizes should create for the selected printer type.

4. Click on the button **Next**.

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Single font

With the option single font you have the possibility to edit the character set with Paint.

Therefore click the button **Edit**.
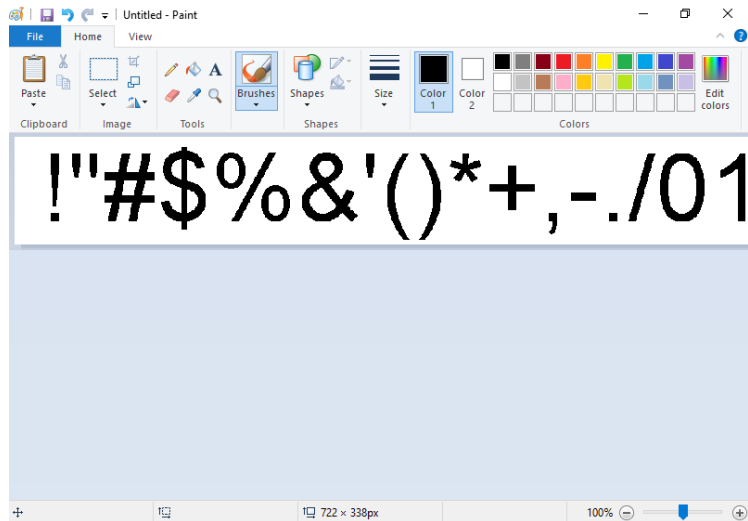
Fig. 143: Edit with Paint

1. Click on the button **Next** to save the character set.
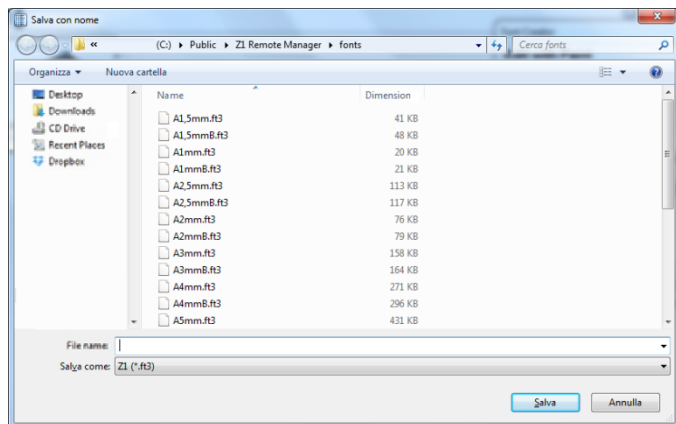
Fig. 144: Save single font

Font package

Specify a name for a new font package by enter a name code for the first segment. A letter is therefore enough. The second segment is provide with the height information automatically by the creation. Following there is the possibility for an addition like, i.e. B for bold.
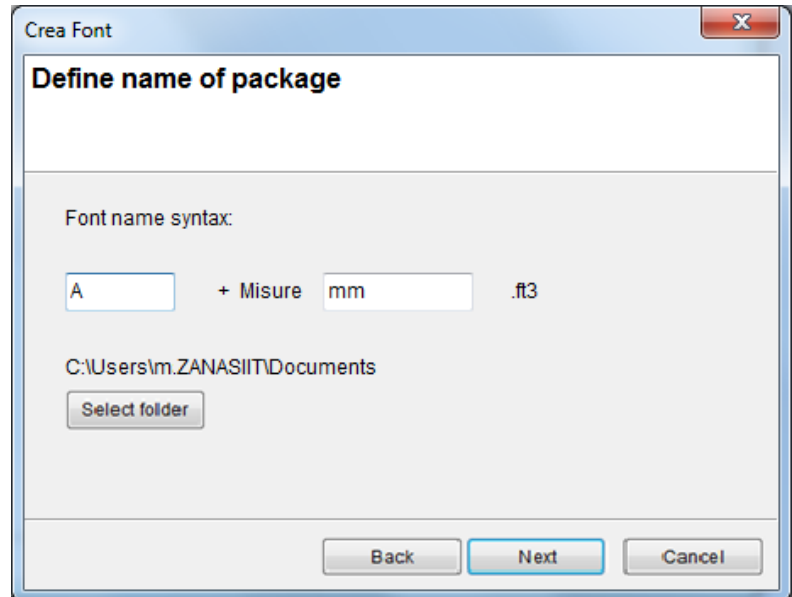
Fig. 145: Define a name for a font package

NOTE!

The fonts can also save in other folder, but are available for the print image creation.

Create and save

Specify a name for the new font package by enter a name code for the first segment. A letter is therefore enough. The second segment is provide with the height information automatically by the creation. Following there is the possibility for an addition like, i.e. B for bold.

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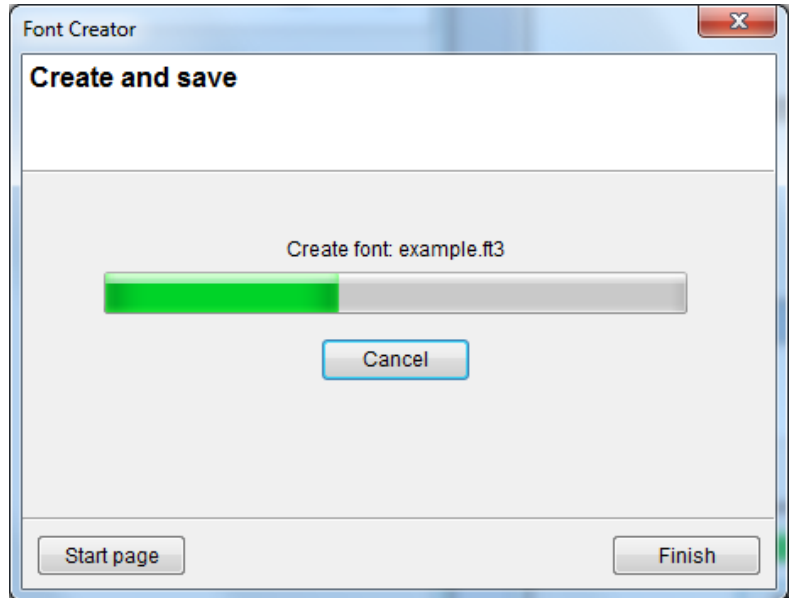
Fig. 146: Create and save

> ○
> 𝕚 **NOTE!**
>
> *The new created fonts can used for the print image creation now.*

> ○
> 𝕚 **NOTE!**
>
> *It isn't necessary to copy the new fonts in the print system manually. The new fonts will send automatically with the print start of Z1 Remote Manager or by sending the print image in the print system.*
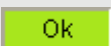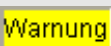
Z1 Remote Manager Touch structure
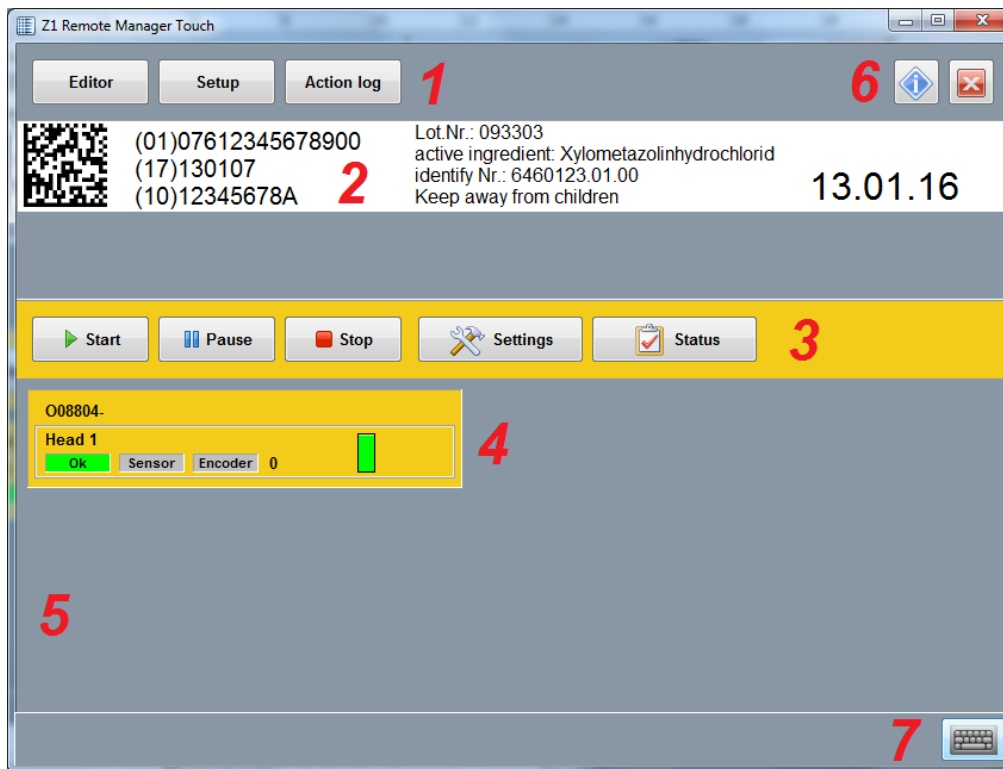
Main menu

Fig. 147: Z1 Remote Manager Touch structure, Main menu

1	Z1 Remote Manager Touch functions	5	Field for screen keyboard / systems
2	Field for print image	6	Stop program /switch off / version info Back button if you are in a submenu
3	System functions	7	Call up screen keyboard
4	Status display / Signal lamps		

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Status displays / Signal lamps
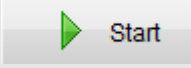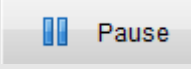
Symbol	Function	Description
Ok	Ok	Print mode started up and ready to print.
Warnung	Warning	Print mode interrupted (pause). Ink cartridge only 5 % full.
Alarm	Alarm	Print mode not ready to print. Ink cartridge is empty.
▯▯	Cartridges	Fill level of the cartridges

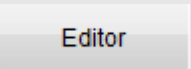The presentation of the print systems in the toolbar happens with the IP address and a status display.
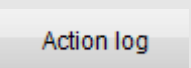
Arrow keys

Symbol	Function	Description
←	Arrow key left	Move highlighted field in print image to the left, pixel by pixel. Move the cursor in a text to the left.
↑	Arrow up	Move highlighted field in print image up, pixel by pixel. Move up the cursor in a text.
↓	Arrow key down	Move highlighted field in print image down, pixel by pixel. Move down the cursor in a text.
→	Arrow right	Move highlighted field in print image to the right, pixel by pixel. Move the cursor in a text to the right.

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System functions

Symbol	Function	Description
Start	Start	Activate the print mode. Call the layout up for print.
Pause	Pause	Print pause, variables and counter will be retained, by pressing this button again, printing is resumed.
Stopp	Pause / Stop	Interrupt print mode. The print storage will be deleted.
Settings	Settings	Settings of the selected system
Status	Status	Information of the operation status of the corresponding system

Z1 Remote Manager Touch functions

Symbol	Function	Description
Editor	Menu **Editor**	Calls up the Editor menu where the print images are created.
Setup	Menu **Setup**	Calls up the **Setup** menu where basic pre-settings are performed.
Action log	Menu **Action log**	Calls up the **Action log** menu – shows the action protocol of the system.

Toogle functions

Symbol	Function	Description
	Close	Terminates application and switches off the controller.
	Back	Returns to main menu.
	Maximize	Maximize the display of the Editor-print range
	Minimize	Minimize the display of the Editor-print range

Call up the screen keyboard

An on-screen keyboard, that can be faded in or out as required, is available for the entry of text and parameters.

The on-screen keyboard can be used like a normal PC keyboard and is available in each menu.

○ *NOTE!*

If the on-screen keyboard is faded in, the status displays are not visible.

To call up the on-screen keyboard,

1. Select the button.

⇨ The on-screen keyboard is faded in at the bottom half of the screen.
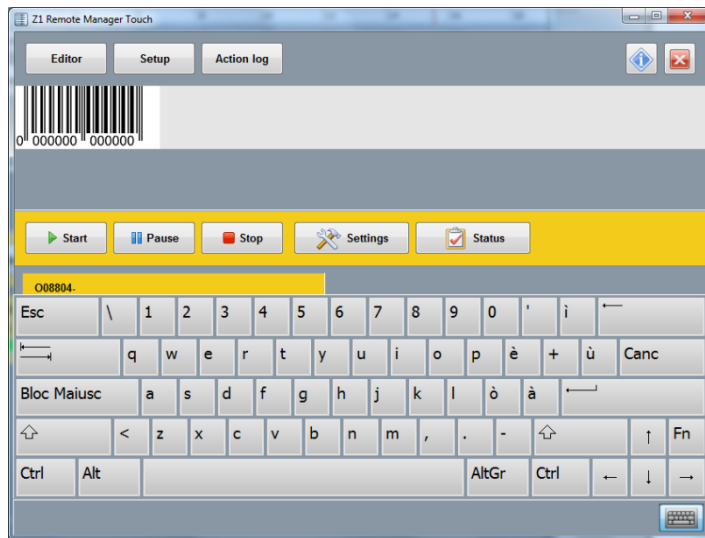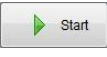
Fig. 148: Main menu with screen keyboard

System functions

Load print image

The print image in print memory is printed on the product surface by the print heads after each impulse from the light barrier.

To load a print image into the print memory,

1. Touch the [▶ Start] button in the main menu.

    ⇨ The file dialog opens.

Fig. 149: File dialog

2. In the **Open file** field, press the print image and highlight.

    Alternatively, the required print image name can be entered in the File name field and confirmed with ENTER

    ⇨ The print image appears in the Preview window.

3. Confirm with **Ok**.
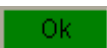
⇨ The print image is loaded into print memory and displayed in the main menu.

For systems with multiple heads, a print image can start on all heads: **All Heads**

Print Start

NozzleTest.00I
SALON.00I
Z1_Pharma.00I

File name:

Head 1   All Heads   Cancel

Fig. 150: Print start

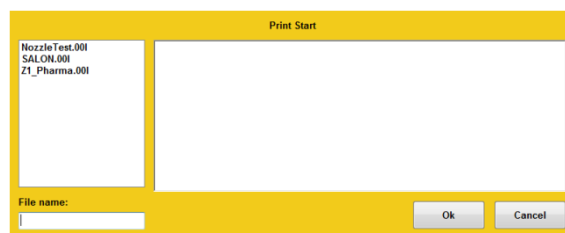⇨ The **Ok** signal lamp lights up and the status display shows the current print mode.

The print mode is terminated by pressing the **Pause** button. By pressing this button again, printing is resumed. Entered variable values and counter statuses are retained.

If **Start** is pressed after **Pause** the most recently printed text is re-loaded; variables must be re-entered; the counters re-start with the starting value.

With pressing the „Stop" button the print buffer will be cleared. By pressing the "Start" button a new print image can be selected and printed.

Display print storage

On the main-screen you see the actual print image that is printed. This image is a direct capture from the print storage. This image will be printed.
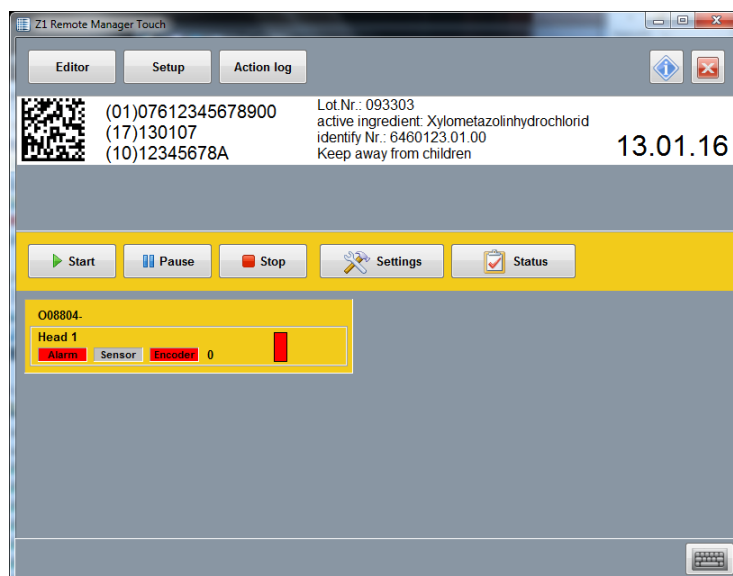
Fig. 151: Print storage

Menu Settings

Basic parameterization must be performed in the **Settings** menu before the print system is able to print.

The **Settings** menu has the following submenus:

Submenu	Description
Print heads	To specify the print parameter, Printhead settings, spitting and warming, calibration and configuration of the inputs.
System	System settings, setting of the in- and outputs and interface EIA232.
Logging	Messages, which are generated from Z1 Remote Manager and commands, which are send from Z1 Remote Manager to the system will be shown in real time and saved in the Log files menu.

Submenu print heads

In the sub-menu **Cartridges** the following parameters can be modified:

- Print parameter
- Printhead setup
- Spitting and Warming
- Calibration
- Input configuration

To display the **Printhead** submenu,

1. Select the [⚙ Settings] button in the main menu.

    ⇨ The **Settings** menu opens.

2. Click in the **Settings** menu the submenu **Print head**.
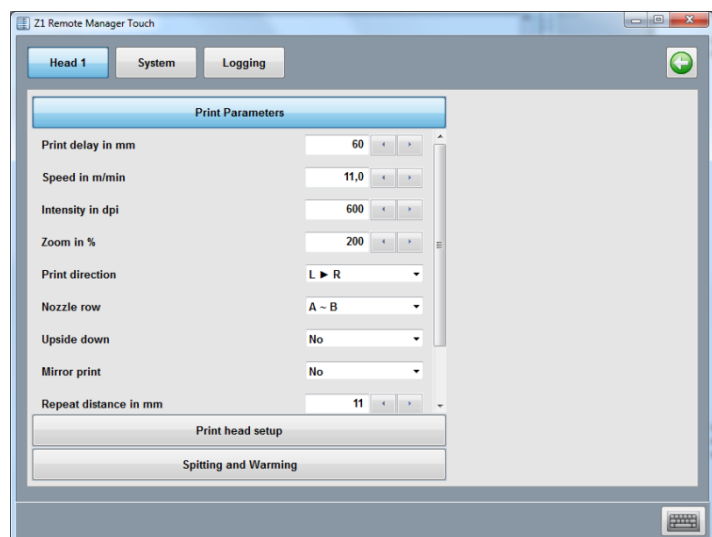
Fig. 152: Submenu Print heads

Tab Print parameter

Print delay

The parameter print delay defines the path distance in mm between the light barrier trigger by the product and start of printing. By setting such a print delay, the position of the print image on the product can be changed. The print delay can be specified for each print head.

Adjustable values: 0 to 999 mm.

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The value 0 means that printing can be triggered immediately after the light barrier trigger pulse.

1. Press tab Printhead 1 or Printhead 2 (depends on the number of the activated print heads) and select the desired print head.

2. To set the delay,

   – Press arrow keys and set the required delay value.

   ⇨ The value is accepted as soon as the arrow keys are released

   or:

   – Enter the delay value via the on-screen keyboard and confirm with the Enter key on the keyboard

   ⇨ The figures originally displayed in red are displayed in black after confirming with the Enter key.

NOTE!

The print start delay must not be greater than the distance between 2 products. If a print start is triggered before the last print is finished, it will be ignored.

Speed in m/min / Intensity / Zoom

The print speed of the print heads must match the conveyor belt speed, otherwise print images may be distorted.

There are 2 ways to match the print speed to the conveyor belt speed:

- Internal constant print speed.
- External variable print speed via rotary encoder

.

If no rotary encoder is connected to the controller, the conveyor belt speed must be measured or estimated and the determined value entered as a parameter. A test image can then be used for fine-tuning the print speed. The set print speed is applicable for the selected Printhead group.

For single heads head 1 and 2 have the same setting and can't set separately.

The following parameters must be entered:

- **Print speed**

  Print speed = Conveyor belt speed. The conveyor belt speed must remain constant!

- **Intensity**

  Print image contrast. If necessary, this parameter may have to be changed to optimize the print image to the product surface. Higher intensity means increased density and slower drying of the ink.

- **Print width/Zoom**

  This parameter enables an increase or decrease of the number of pixels. This renders the print image wider or narrower.

○ *NOTE!*

When printing barcodes, ensure that widening or narrowing occurs only in the correct ratio. Note the optimal print intensity of 300 dpi. Observe the following table!

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Barcode width	Permitted zoom factor [%]
1	100, 200
2	50, 100, 150, 200
3	66, 100, 133, 166, 200
4	50, 75, 100, 125, 150, 175, 200
5	60, 80, 100, 120, 140, 160, 180, 200
6	50, 66, 83, 100, 116, 133, 150, 166, 183, ...

Parameter	Min.	Max.	Unit
Print speed	1,0	400,0	m/min
Intensity	50	900	dpi
Zoom	10	900	%

To enter the **print speed**, the **print intensity** and the **print width / zoom**,

– Press arrow keys and set the required value.

⇨ The values are accepted as soon as the arrow keys are released.

or:

– Press and highlight the input field.

– Enter the values via the on-screen keyboard and confirm with the Enter key on the keyboard.

⇨ The figures originally displayed in red are displayed in black after confirmation with the Enter key.

Print direction

The **Print direction** parameter specifies the direction in which the product moves on the conveyor belt as viewed from the Printhead side.

1. Press tab **Printhead 1** or **Printhead 2** (depends on the number of the activated print heads) and select the desired print head.

2. Specify the direction of the conveyor in the dropdown menu

Nozzle row

Each ink cartridge has two nozzle rows (A and B). One nozzle row has 150 nozzles.

The nozzles in row A print the uneven numbers 1, 3, 5, 7 …

The nozzles in nozzle row B print the even numbers 2, 4, 6, 8…

Per nozzle row A ~ B, 300dpi are printed vertical.

In this mode, the nozzles are uniformly stressed and the speed setting is not as critical as with A + B.

If, for instance, using A ~ B, every second print image is of poor quality, nozzle row A or nozzle row B can be activated.

Both nozzle rows print simultaneously with the setting A+B. The vertical resolution is 600 dpi. The print image is dark equal. The speed must be exactly right, because this will cause a shadow or blurred print when the nozzle rows are not print about each other correctly.

Activate the nozzle rows as follows:

Nozzle row	Description
A ~ B	Printing with both nozzle rows, alternating. The first print image is printed with nozzle row A and the second text with nozzle row B.
A + B	Printing with both nozzle rows together. Vertical resolution: 600 dpi
A	Printing only with nozzle row A. Vertical resolution: 300 dpi
B	Printing only with nozzle row B. Vertical resolution: 300 dpi

NOTE!

With setting A + B, the print speed must be accurately set, to produce a good print result. Otherwise the print image is blurred.

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To select the nozzle row,

1. Press tab **Printhead 1** or **Printhead 2** (depends on the number of the activated print heads) and select the desired print head.

2. Select the desired **nozzle row** setting in the dropdown menu.

Upside Down

The setting **Upside Down** causes the print image to be printed upside down.

To select upside down,

1. Press tab **Printhead 1** or **Printhead 2** (depends on the number of the activated print heads) and select the desired print head.

2. Activate **upside down** in the dropdown-menu.

Repeat distance / Print repeat number

To print several print images on one product, the number of print images and the distance between them must be specified.

The distance between print images is measured from print start to print start.

If you select „5" the print image will be printed 6 times. 1 print plus 5 repeats.

998 prints 999 print images.

Endless printing can be activated with print repeat of „999".

Parameter	Min.	Max.	Unit
Distance between print images	0	9999	mm
Number of print images	0	999	-

To enter the **repeat distance** and the **print repeat number**,

– Press arrow keys and set the required delay value.

⇨ The values are accepted as soon as the arrow keys are released.

or:

5. Press and highlight the input field.

– Enter the values via the on-screen keyboard and confirm with the Enter key on the keyboard

– Endless printing can be activated with a click on the button at the print repeat number. The value goes to 999 automatically.

⇨ The figures originally displayed in red are displayed in black after confirmation with the Enter key.

Reverse print delay

Is the print direction backward, i.e. the product moves on the Printhead from left to right, the calculation point for the print start delay can set to right or left edge of the print image.

The setting „left border" ensures a consistent left alignment.

It should be noted that the width of the print image needs to be part of the set value.

To select **Reverse print delay**,

1.   Press tab **Printhead 1** or **Printhead 2** (depends on the number of the activated print heads) and select the desired print head.

2.   Click on the tab **Print parameter**.

3.   Select "left border" or "right border" in the dropdown menu **Reverse print delay.**

Tab Printhead setup

○
ⅱ *NOTE!*

*Please read the operator manual of the print
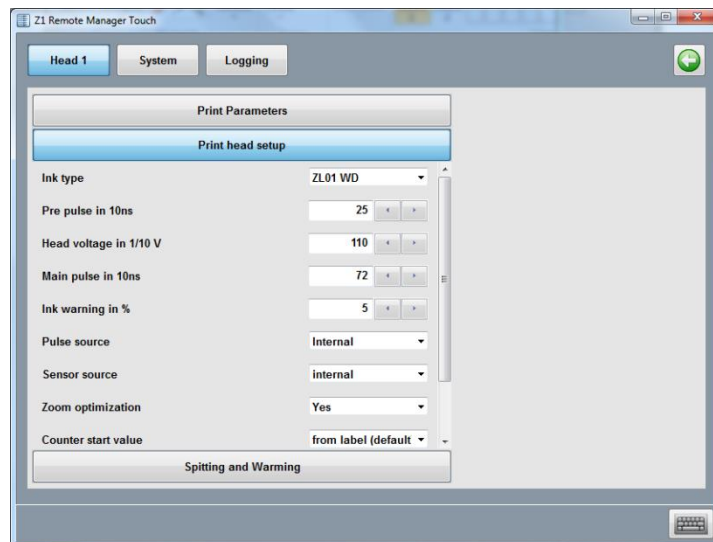system to set the print parameter.*

Fig. 153: Printhead setup

1. Click on the print parameters tab to select them.

2. Change the Printhead setups to configure the desired system.
All changes will be send to the system immediately

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Tab Spitting and Warming

After extended periods of no printing, it may be necessary to rinse the ink cartridges to open up clogged nozzle ducts again.

During rinsing (spitting), all ink cartridge nozzle ducts are addressed to eject some ink.

To prevent the nozzles from drying up, an automatic cleaning impulse can be triggered before the first print. Note that ink consumption will increase and that the Printhead environment may be affected.

If you notice a slightly dropping image quality after 20 seconds, you can activate the spitting function to improve the quality of the print.

Recommended for this scenario is 10 impulses after 15 seconds.

If no product is passing within 15 seconds spitting is active with the next print impulse.

If a product is passing inside the 15 seconds no spitting is active.

The following parameters must be defined:

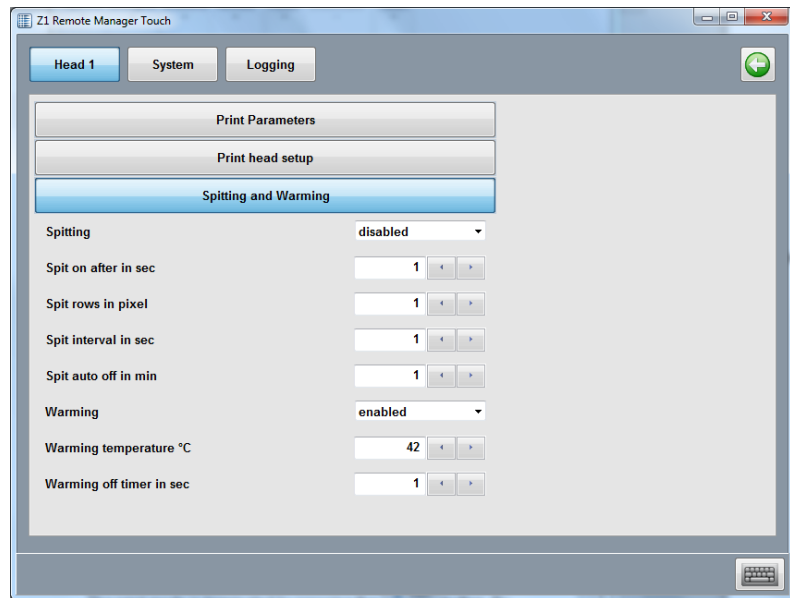| Parameter	Min.	Max.	Unit
Time between the last print and the spitting process	1	999	s
Number of impulses (lines) printed during spitting.	5	100	Impulses

Fig. 154: Spitting and Warming settings

1. Now change the Spitting and Warming settings to configure the selected device. Any changes are immediately sent to the system.

Tab Calibration

If a twin Printhead is connected to the controller, the offset between the two print heads must be adjusted, if necessary. If single print heads are connected, a calibration isn't necessary.

> *NOTE!*
>
> *Before the print heads are calibrated, the print speed or the rotary encoder setting must be correct.*

The offset between the two print heads is compensated for by the input of correction factors.

A negative value means that the print image of this cartridge moves to the left side and reverse.

The Printhead must be installed horizontal. There must be neither an overlap nor a gap between the cartridges in the vertical. Test it with a print image over all heads.

The speed must be set optimum. The nozzles must be in one row by printing with A+B. This can be controlled with a loupe. There must be no shadow print be present.

The intensity must be set optimal by a printing with shaft encoder.
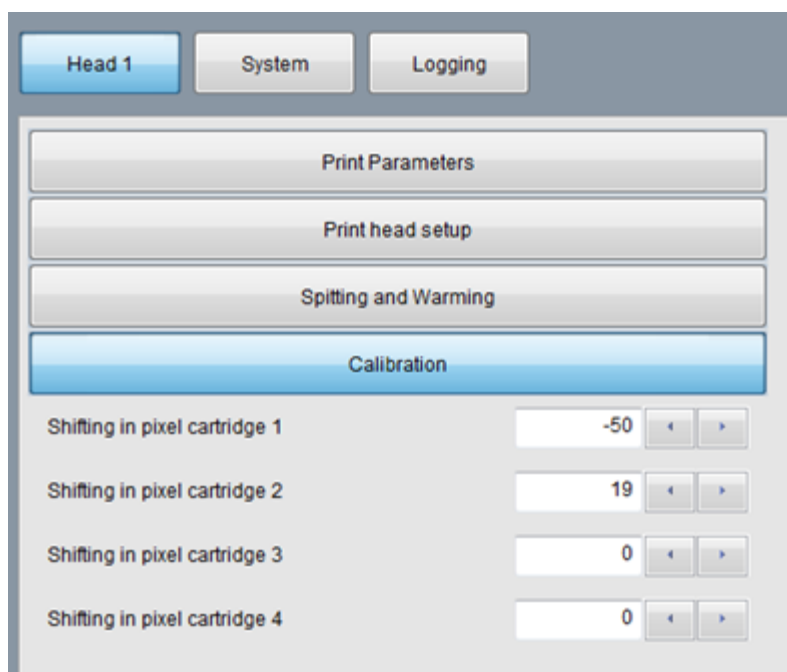
Parameter	Min.	Max.	Unit
Correction factor	-50	50	-

Fig. 155: Calibration

To enter a **calibration value**,

– Press arrow keys and set the required value.

⇨ The values are accepted as soon as the arrow keys are released.

or:

– Press and highlight the input field.

– Enter the values via the on-screen keyboard and confirm with the Enter key on the keyboard.

⇨ The figures originally displayed in red are displayed in black after confirmation with the Enter key.

⇨ I valori vengono accettati non appena i tasti freccia vengono rilasciati.

Tab Input configuration

The inputs of the print system can configured optional and customer-specific.

It can select between:

- Print direction
- Upside down
- Print pause
- Label selection
- Bulk System
- Shutter Print Head
- Reset ink level

Fig. 156: Possible configuration of the inputs

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Submenu System

Following settings can be made in the submenu **System**:

- Device Setup
- Input Output Configuration
- Serial interface EIA232

To display the submenu **System**,

1. Click on the button   in the main menu.

⇨ The menu **Settings** opens.

2. Click in the menu **Settings** on the submenu **System**.

⇨ The submenu **System** opens.

Tab Device Setup

In the tab „Device Setup" are all system specific adjustments for changing available.

> **!** **WARNING!**
> These settings should change from an expert only!
> The function of the system can be disrupted by an incorrect setting.

> ○ *NOTE!*
> ⅃ *Every adjustment will be send immediately to the connected printer.*

The elements of the parameter section can be different depending on the type of system which is connected.
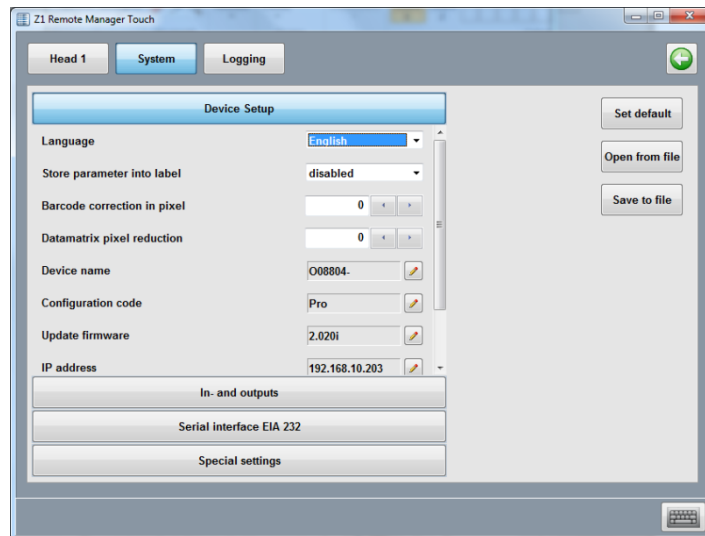
Fig. 157: Device Setup

Set default

1. Press **Set default** to reset all settings in the delivery status. Head configuration, ink type and interface values won't be changed.

2. Confirm the dialog field with **OK**.

Save set of parameter

If an already saved set of parameter should be changed,

1. Click in the submenu **Device Setup** on the button

    Open from file.

    ⇨ A dialog for the text selection opens.

2. Select the desired text over the drop down menu and confirm with **OK**.

    ⇨ The settings of the set of parameters opens.
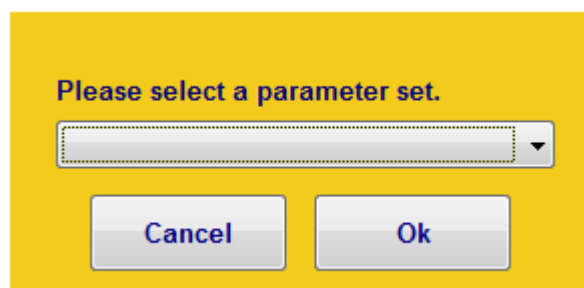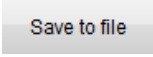
Fig. 158: Text selection

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3. Make the changes as desired and save it under the same or modified name.

To save a set of parameters,

1. Make the settings as desired in the **Device Setup** submenu.

2. Touch the [Save to file] button to save the set of parameters.

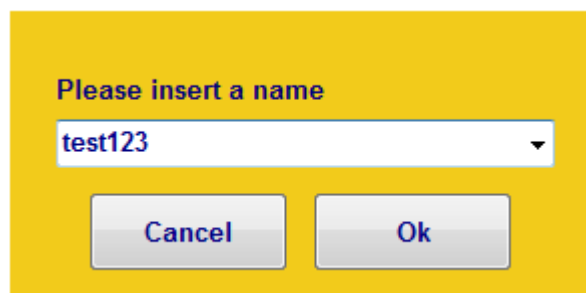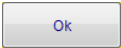> ⇨ The dialog opens to enter the name under which the set of parameters should be stored.

Please insert a name

test123

Cancel   Ok

Fig. 159: File name

3. Confirm with **OK** [Ok].

Language

Language lists all the installed user languages, in which the user interface of the print system can be displayed.

To select a user language,

1. Select the tab **Device Setup** in the submenu **System**.

2. Set the desired language in the dropdown menu.

Store parameter into label

Following functions can select in the field **Store parameter into label**:

- *Disabled:* The parameters, which are set in the system, are used, even if the print label parameters are saved.
- *Read only:* The saved parameters of a print label are used.
- *Read and write:* The changed parameters of the actual printed label can be saved.

To select **Store parameter to label**,

1. Select the tab **system settings** in the submenu **system**.

2. Set the desired function in the dropdown menu **Store parameter into label**.

Barcode correction in pixel

This option provides the opportunity to improve the readability of a barcode element by widening or narrowing. If, for example, the runs heavily on a coarse fibrillate surface, the readability can be restored by a pixel-wise reduction of the line width.

To make a barcode correction,

1. Select the **Device Setup** in the submenu **System**.

2. Press arrow keys and set the required correction

Device name

Change the device name of the system.

Configuration code

It's possible to change the system configuration, i.e. the setting if the controller is a Advanced or Pro system.

Update firmware

> **!** *WARNING!*
> *Data loss effected by update!*
> *It can happen a data loss with an update of the system software.*
>
> *Therefore*
> *Perform a backup before every update (see: "Advanced settings").*

1. To update a new print system, click on **Settings** in the main menu.
2. Click in the submenu **System** on the tab **Device Setup**.
3. Click in the line „Update firmware" on the 🖉 icon to start the update process.

⇨ You will guided through the update process depending on the system.

IP Address

Change the IP address of the system with this function.

Netmask

Change the netmask of the system with this function.

Gateway

Change the Gateway-address of the system with this function.

! **CAUTION!**

Consult the system administrator for network
settings. Network damages can be caused by
incorrect settings.

Tab Input Output Configuration

All connected in- and outputs of the system can be set with this
function.

A variety of configurations are possible and so the connectors for
output of status messages (OK, Warning, Error), cartridge level
messages (5% low / empty), print ready and print pulse are
possible to use. On the input side signals for heating, spitting, print
direction, upside print, stop and text selection are possible.

The inputs are NPN inputs standard. Can be changed to PNP via
Z1 Remote Manager software.

To set the in- and outputs,

1. Click in the menu **Settings** on the submenu **System**.

   ⇨ The submenu **System** opens.

2. Click on the tab **Input Output Configuration**

Fig. 161: Input Output configuration

Tab Serial interface EIA232

To configure the serial interface EIA232,

1. Click on the [Settings] button in the main menu.
2. Click in the menu **Settings** on the submenu **System**.
3. Click on the tab **Serial Interface EIA232**.
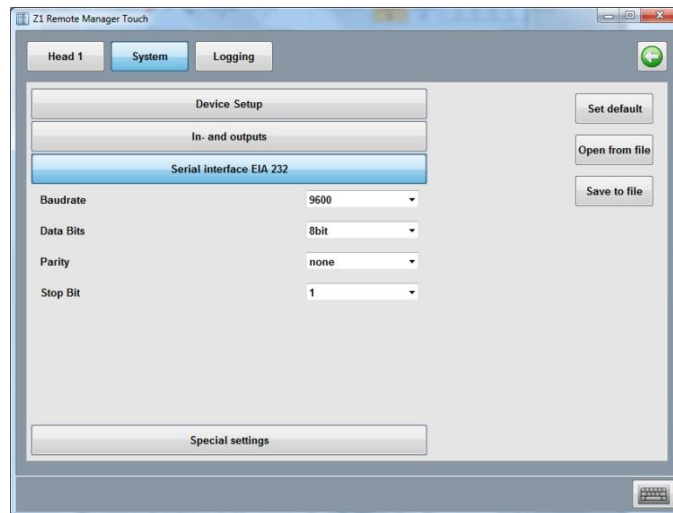4. Select baudrate, data bits,parity and number of stop bits.

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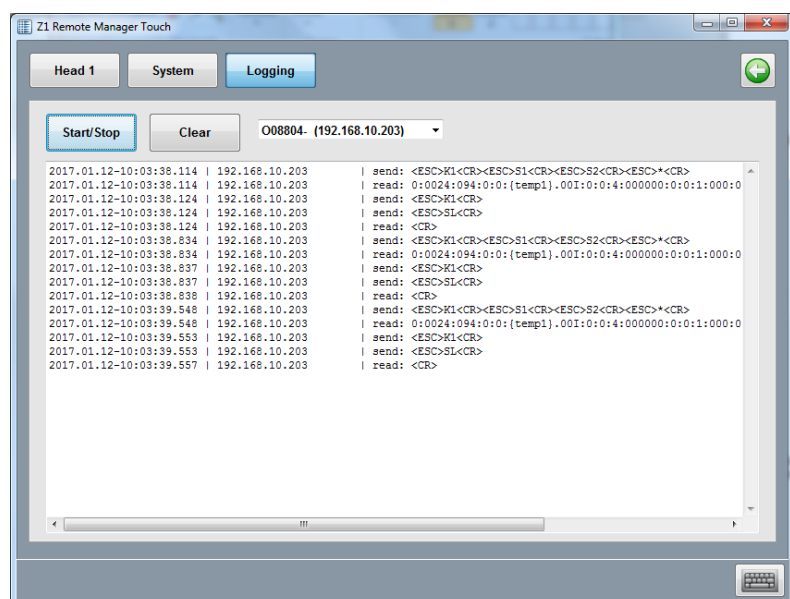*Fig. 162:* Serial interface EIA232

Submenu Logging

Fig. 163: Logging

The messages, which are generated from Z1 Remote Manager and the commands, which are send from Z1 Remote Manager to the system will be shown in real time and saved in the Log files menu.

Start

1. To start the real time logging,
   – click on the **Start/Stop** button.
   ⇨ The generated system messages of Z1 Remote Manager are shown in the upper window.

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Stop

2. To deactivate the logging,
   – click on the **Start/Stop** button.

Delete screen

3. To delete the logo screen,
   – click on the **Clear** button.

Menu Status

The status menu shows information of the system and whose operating condition, which can call up.

The window is divided in different fields.

Z1 Remote Manager Touch functions

Menu Editor

The print images are created via the Editor menu. The menu provides the following functions:

Symbol	Function	Description
New	Create new print image	Empties the editing area to create a new print image.
Open	Open print image	Opens an existing print image. A preview is displayed.
Save	Save print image	Saves the current print image. Requests a name if none exists.
Save as …	Save print image as…	Saves the current print image under another name.
	Text field	Creates a text field to enter static text in the print image.
	Date / Time field	Creates a field to enter a date or time in the print image.
	Barcode field	Creates a barcode field to add a barcode to the print image.
	Counter field	Creates a counter field to enter a counter in the print image
	Variable field	Creates a variable field to enter a variable in the print image.
	Graphic	Inserts a graphic in the print image.
	Delete field	A marked field in the print image or a complete print image is deleted.
	Import / Export	Import / export all label and logos from / to a free selectable storage location
	Ink consumption calculator	Determines the number of prints of the desired label, which can be print with a full cartridge.
	Incremental	The selected field can be moved pixel by pixel.

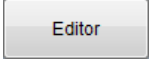| Symbol	Function	Description
	Assign a set of parameters to a text	Assignment of a set of parameters to an opened print image in the Editor
	Rotate field	A marked field in the print image is rotated clockwise in 90° steps.
	Maximize	Maximize the display of the Editor-print range
	Minimize	Minimize the display of the Editor-print range

Create print image

A print image may consist of different elements and fields:

- Text
- Date/Time
- Barcode
- Counter
- Variable
- Graphic
- Data base

The following chapters describe the insertion and processing of these elements and fields.

To create a print image, the Editor menu must be called up and the on-screen keyboard faded in:

1. Select the [Editor] button in the main menu.
   ⇨ The **Editor** menu opens.

2. Select the [⌨] button to fade in the screen keyboard.
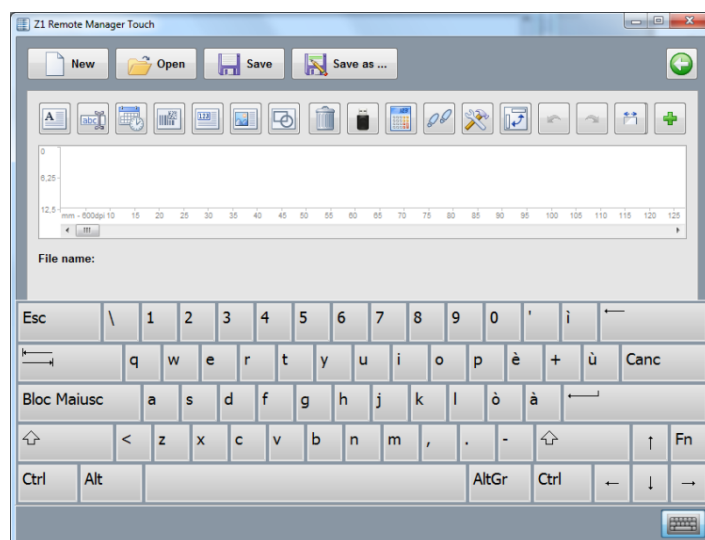   ⇨ The screen keyboard is faded in.

Fig. 164: Editor menu with screen keyboard

Insert a text field

Static text is inserted in the form of text fields in the print image.

To create a text field,

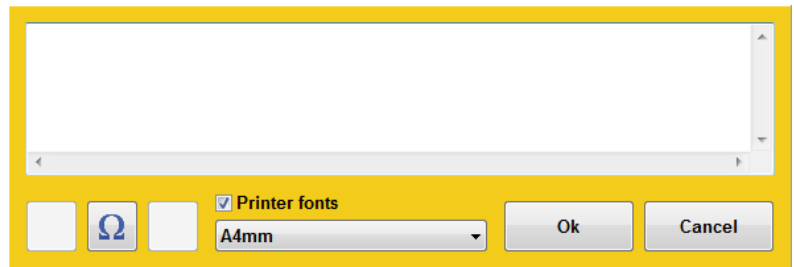**1.** Select the button in the Editor menu.

⇨ The editing window opens.

Fig. 165: Edit window text

2. Enter text via the on-screen keyboard.

2. Edit the type format if needed (Printer fonts or Windows fonts).

3. Select **OK** button.

⇨ The text field is inserted into the print image.

1. To position the text field in the print image,

– Position your cursor on the text field and drag it across the screen to the required position.

or:

– Select the text field and highlight.

– Select the arrow keys and move the text field to the required position.

A text field inserted in the print image may be edited and changed at any time:

1. Double click on the text field.

⇨ The editing window opens.

Insert a date field

Date and time are embedded in the print image as a date field.

Date fields are not static but dynamic fields; their display format is defined by variables.

The current date and current time are retrieved from the PC clock.

Optional combinations of variables can be used to configure the display format. Punctuation marks (e.g. stop, colon, hyphen, space etc.) can be inserted between the individual codes. **ab.cd.gh** are preset.

Pre-dating to, for instance, print a best before date, can be defined by setting the offset parameters year, month and day.

To create a date field,

1. Select the button in the **Editor** menu.

⇨ The editing window opens.

Fig. 166: Edit window date

2. Select the **Format** drop down menu and select the Date/Time format with the scroll bar or accept the default setting.

3. Set a best before date, if required. To do this, select the year/month/day figures using the arrow keys.

4. If necessary, adjust the font format.

5. Confirm with **OK**.

⇨ The date field is inserted in the print image.

6. To position the date field in the print image,

– Position your cursor on the date field and drag it across the screen to the required position.

or:

– Select the date field and highlight.

– Select the arrow keys and move the date field to the required position.

A date field inserted in the print image may be edited and changed at any time:

1. Double click on the date field.

⇨ The editing window opens.

Insert a barcode

A barcode is machine-readable "text" comprising parallel lines of various widths, and gaps.

The information content in the barcode can also be displayed in writing legible to people in a plain text row directly below the barcode, If the barcode cannot be read, the information can be read manually.

The following barcode types are available:

Barcode Type	Description	Digits
EAN 8	Numerical commercial barcode; used worldwide.	8
EAN 13	Numerical commercial barcode; used worldwide.	13
EAN 128	Numerical commercial logistics code. Variable fields for date, counter and scale as options.	-
Code 2 of 5	Numerical industrial (materials-handling technology) barcode, always with even digits. (also marked as: 2/5 interleaved, ITF 2/5)	min. 2
DUN 14	Numerical industrial and commercial barcode.	14
UPC A	Same as EAN 13, but 1st digit in special code, normally set to 0 followed by 11 digit code. The 13th digit is an automatic test digit. Application: USA/Canada.	13
Code 128	Full ASCII barcode; medical-pharmaceutical technology.	
Code 39	Alphanumeric barcode for industry, electronics, pharmaceutical.	-
Data Matrix	A 2D code for the electronics industry and pharmaceutical sector.	-
EAN Data Matrix	A 2D code for the commercial and pharmaceutical sector.	-
QR Code	Quick Response, 2D Barcode	

To create a barcode,

1.   Select the button in the **Editor** menu.
     ⇨   The selection window opens.
2.   Select the **Type** drop down menu and select the barcode type and confirm with **OK.**
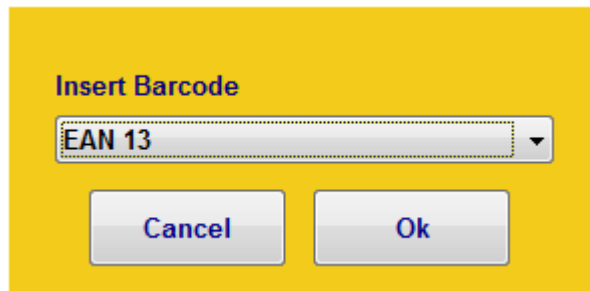   ⇨   The editing window opens.

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Fig. 167: Barcode selection

Fig. 168: Edit window Barcode

3. Enter the plain writing row in the input field.

4. Set the barcode height, size and width using the arrow keys.

5. Confirm with **OK**.

⇨ The barcode is inserted in the print image.

6. To position the barcode in the print image,

– Position your cursor on the barcode and drag it across the screen to the required position.

or:

– Select the barcode and highlight.

– Select the arrow keys and move the barcode to the required position.

A barcode inserted in the print image may be edited and changed at any time:

1. Double click on the barcode.

⇨ The editing window opens.

Insert a counter field

The counter is inserted in the print image by means of counter fields. Counter fields are inserted to print consecutive numbers on packaging or labels.

At the start of printing, the starting value of the counter appears in the first print. When reaching the counter end value, counting starts at the starting value again. If the starting value is smaller than the end value, counting is downward.

Example 1:

Starting value: 01, end value: 10, step size: 2, repeats: 3

Print: 01, 01, 01, 03, 03, 03, 05, 05, 05....
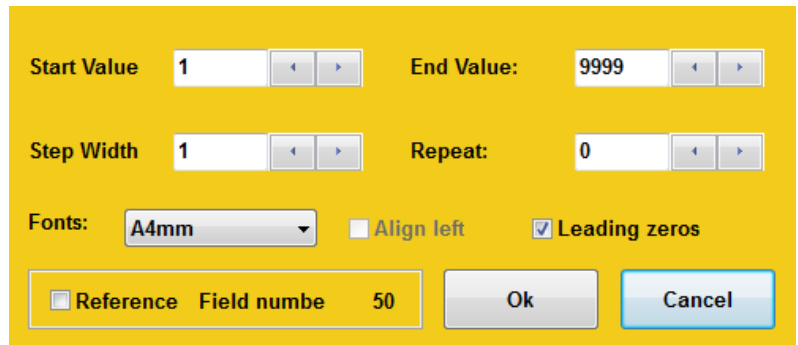
Example 2:

Starting value: 10, end value: 1, step size 1, repeats: 0

Print: 10, 9, 8, 7....1, 10, 9, 8, 7....

To create a counter field,

1. Click on the button in the **Editor** menu.

⇨ The editing window opens.

Fig. 169: Edit window Counter

2. Select the **Start value** input field and enter the start value via the screen keyboard.

3. Select the **End value** input field and enter the end value via the screen keyboard.

4. Select the **Step width** input field and enter the step size via the screen keyboard.

5. Select the **Repeats** input field and enter the repeat rate via the screen keyboard.

6. To print zeros preceding a number as well, select the checkbox and tick.

7. If necessary, adjust the font format.

8. Confirm with **OK**.

⇨ The counter field is inserted in the print image.

9. To position the counter field in the print image,

– Position your cursor on the counter field and drag it across the screen to the required position.

or:

– Select the counter field and highlight.

– Select the arrow keys and move the counter field to the required position.

A counter field inserted in the print image may be edited and changed at any time:

1. Double click on the counter field.

⇨ The editing window opens.

Insert a variable field

Variables are inserted in the print image through variable fields.

Variable fields are inserted if a print image contains data (e.g. batch numbers) that change frequently. This can be performed automatically, shortly before the print image is released for printing.

The variable field is queried before each print image is called up. A dialogue window appears, requesting the variable value to be entered. A new text may be entered or the old text retained. It is possible to enter several variable fields in a text.

Informative text is available as an additional function. This text (e.g. batch numbers) is displayed at subsequent print requests, to prevent incorrect entries or mistakes in variable fields in a print image.

To create a variable field,

1. Click the button in the **Editor** menu.

⇨ The editing window opens.

Fig. 170: Edit window Variable

2. Select **Default line** input field and enter the variable text via the screen keyboard.

3. Select the **Info text** input field and enter the info text via the screen keyboard.

4. If necessary, adjust the font format.

5. Confirm with **OK**.

⇨ The variable field is inserted in the print image.

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6. To position the variable field in the print image,

– Position your cursor on the variable field and drag it across the screen to the required position.

or:

– Select the variable field and highlight.

– Select the arrow keys and move the variable field to the required position.

A variable field inserted in the print image may be edited and changed at any time:

1. Double click on the variable field.

⇨ The editing window opens.

Insert a graphic

Graphics can be inserted in a print image as bitmap files.

To insert a graphic in a print image,

1. Select the button in the **Editor** menu.

⇨ The **Open file** window opens.
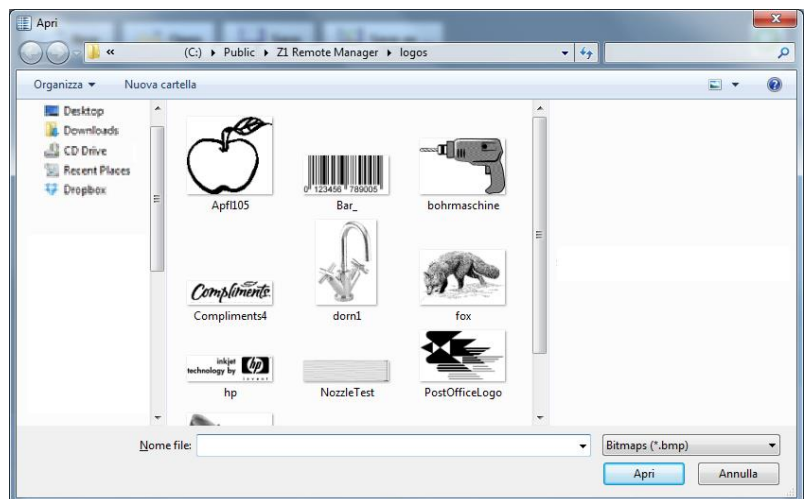
Fig. 171: Open file

2. Select the drop down menu and select a directory.

3. Select a graphic in the field and highlight.

⇨ A preview of the graphic is displayed in the field.

4. To open the graphic,

– Double click the bitmap file.

or:

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– Select the bitmap file and highlight.

– Click the "OPEN" button.

⇨ The graphic is inserted in the print image.

5. To position the graphic in the print image,

– Position your cursor on the graphic and drag it across the screen to the required position.

or:

– Select the graphic and highlight.

– Select the arrow keys and move the graphic to the required position.

Assign a set of parameters to a print image

There is the possibility to assign a pre-saved set of parameters to a print image and to print them with the saved settings.

To assign a set of parameters to a print image,

1. Open the desired print image in the editor and touch the button.

⇨ A dialog for text selection opens.

Connect parameter to label

[None]

Cancel   Ok
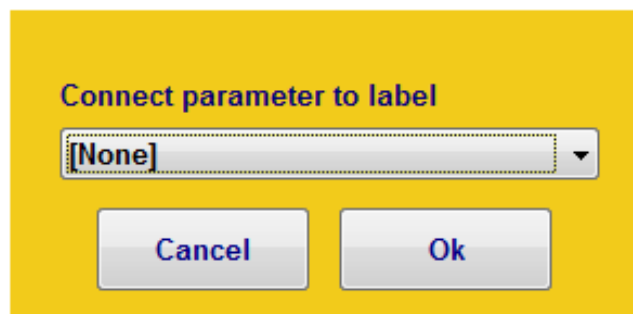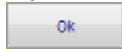
Fig. 172: Print parameter set

2. Select the desired parameter set in the drop down menu and confirm with **OK**.

3. Save the print image by touching the **Save** button.

4. Select the pre-saved print image by touching the **Start**

button in the main menu.

⇨ The print image will be printed with the assigned parameter set now.

○
ĬĬ   *NOTE!*

If the parameter values will be changed during printing, this have no effects for the saved parameter set of the print image.

*Viz. if the print image call up with the **Start** button again, it will be print with the saved parameter set.*

Data base

To use the data base function, the data base must be opened.

An opened data base is identified by this symbol .
A text field for creation will be opened in the editor.

Fig. 173: Text field with open data base

Select the button for the data base .

Select a random column from the data base, over the field name.

Fig. 174: Field name selection

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Confirm after selection and add further fields in the same procedure.

The field names are place holder in the label now and will be identified by the line |Field name|.
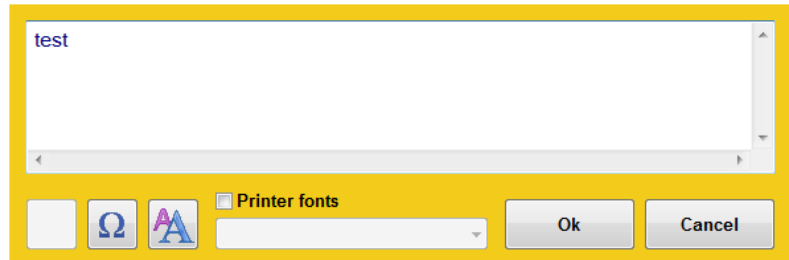
Fig. 175: Text field

To open a specific row from the data base press the [database icon] button by the print start. The information will be insert in the label automatically.

Edit the font format
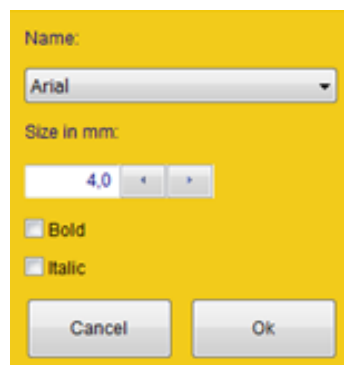
1. Select the [font icon] button in a field's editing window.

Fig. 176: Edit window

2. Select the **Name** drop down menu and select the font type using the scroll bar.

3. Use the arrow keys to select the font width.

4. Confirm with **OK**.

Save print image

To save a print image already created

1. Select the [Save] button in the **Editor** menu.

2. To save the print image under another name, select the [Save as ...] button.

⇨ The file dialog opens.

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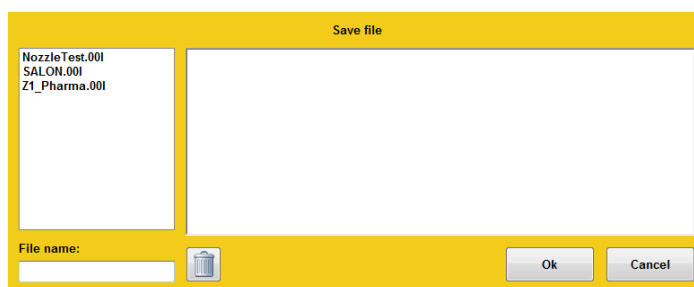
Fig. 177: File dialog

3.   Enter the file name in the **File name** field via the on-screen keyboard or select the file to be overwritten in the **Save file** field.

> ◯ *NOTE!*
> ⅉ The file automatically receives a .00I extension.

4.   Confirm with **OK**.

⇨   The print image is saved.

Open print image

To open a print image already created,

1.   Select the [Open] button in the **Editor** menu.
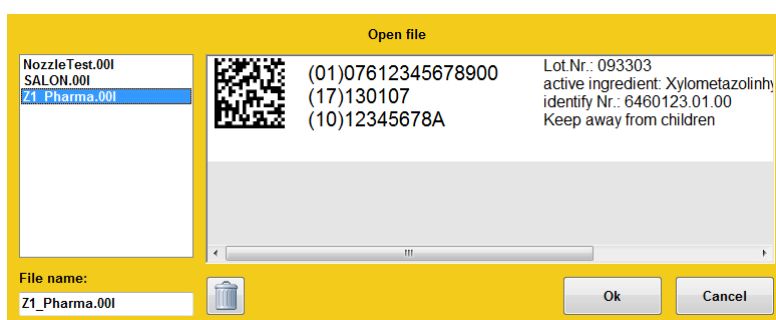
⇨   The file dialog opens.

Fig. 178: File dialog

2.   In In the **Open file** field, press the print image and highlight.

⇨ The print image appears in the Preview window.

3.   Confirm with **OK**.

⇨ The print image is opened.

Delete print image

1.   To delete a print image already created,

– Select the [Open] button in the **Editor** menu.

⇨ The file dialog opens.

2.   In the **Open file** field, press the print image and highlight.

⇨ The print image appears in the Preview window.

3.   Select the [🗑] button to delete the print image.

4.   Confirm with **OK**.

⇨ The print image is deleted.

Menu Setup

The menu **Setup** includes following submenus:

- System
- Interface
- Database
- Directories

Submenu System

To display the **System** submenu,

1.   Select the [Setup] button in the main menu and click on the submenu **System**.
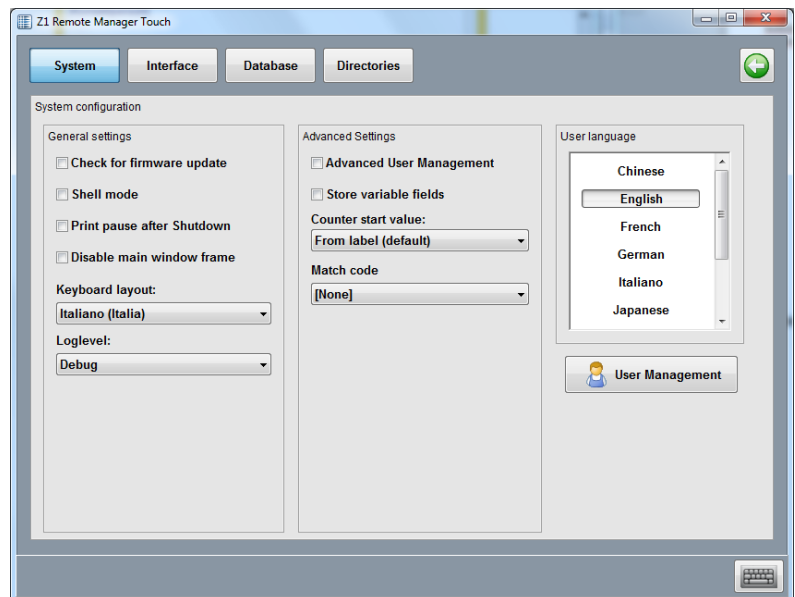
⇨ The submenu **System** opens.

.

Fig. 179: Submenu System

Specify start parameter

If the **Windows Shell Interface** (user interface) is activated, the program starts automatically and the system shuts down when closing the program.

This function is active standard.

If the function is deactivated, the program must be started manually via the desktop; Windows will not shut down when the program is closed.

> ! **CAUTION!**
>
> **Malfunctions due to incorrect Windows system settings!**
>
> The Windows system may malfunction due to incorrect settings in the print system.
>
> Therefore:
>
> – Settings may only be applied by specialized staff.

To deactivate the Windows Shell Interface, go to the submenu **Settings**, to the tab **System** and **General**

1.   Select the checkbox and untick.

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Adjust Event log

During printing, all the operating data are captured by the system and recorded in a log file. This file can be displayed as an event log.

The data file will be saved in the index Z1 Remote Manager / Log below the date automatically.
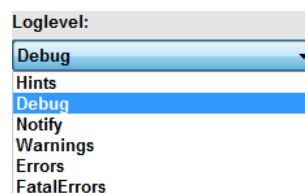
I.e.: 2017-01_01.txt

The data that should be recorded in the log file can be selected.

Type of data	Description
No data	No data are logged.
Diagnostics	All data are logged.
Notes	Texts and notes are logged.
Errors	Errors arising are logged.

To adjust the event log,

1. Select the **Log level** drop down menu.

2. Choose the required option from the list and select.

User language

The **User language** field lists all the installed user languages.

To select a user language, go to the menu **Setup**, to the submenu **System**

1. Select a language.

⇨ The user interface is immediately shown in the selected user language.

mostrata nella lingua utente selezionata.

Fig. 180: User language

Counter start value

The start value of a counter must be confirmed with print start or rather the desired start value can be entered by using a counter field in a print image with an active function. The last counter value will be saved by a print stop and continued with a new print start.

Which counter start should be written, can be adapted.

Data type	Description
From Label	The defined start value in a label will be used as counter value automatically (standard).
User input	The counter start value will be queried without standard value.
Last value	The current counter value will be saved in the label and used with a new print start.
Query last value	The counter start value will be queried from the user. The current counter value is displayed as default line.

To activate the function,

1. Click on **Setup** in the main menu and on the submenu **System**.

   ⇨ The submenu **System** opens.

2. Click on the dropdown menu **Counter start value**.

3. Select the desired option.

Check for firmware update

If this function is enabled, the firmware version of an added print system will be checked whether the firmware is up to date. If this isn't the case, the user is informed by a dialog and is guide through the update process on request.

Print pause after Shutdown

If the system is shut down with an active print, it will not be print automatically with a restart, the system is in a pause mode. This prevents an automatic print start after switch-on. The safety function can disabled.

Disable main window frame

For a higher-level software, in which Z1 Remote Manager Touch should be embed, the window frame of the main application can switched off.

Keyboard layout

The field keyboard layout list all installed keyboard layouts.

To select a keyboard layout,

1. Click in the menu **Settings** on the submenu **System**.

2. Select the desired layout.

    ⇨ The keyboard is shown in the desired keyboard layout directly.

Store variable fields

This option specifies whether a queried variable field is saved with print request and will be displayed as default line with a new print request. This is useful to enter only the data that has actually changed. Data that hasn't changes can confirm by the Enter-button.

User Management

To activate the user management, please proceed as follows:

1. Click in the main menu on the button **Settings** and the submenu **System**.

    ⇨ The submenu **System** opens.

2. Click on the button and select the desired user management.

Submenu Interface

If the print system is connected to and controlled by a machine control point or PC via an external interface, such interface must be set up.
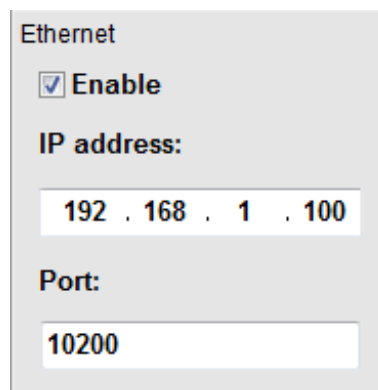
The following interfaces are available for selection:
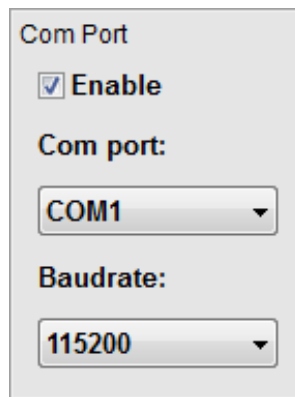
■ Ethernet interface RJ45

■ Serial interface RS232

Ethernet interface

To set up the Ethernet interface, go to the menu **Setup** and submenu **Interface**

1. Check the box „Enable".

2. Using the screen keyboard, enter the enabled data port (standard: 10200) in the activated input field.

```
Ethernet
  ☑ Enable
IP address:
  192 . 168 . 1 . 100
Port:
  10200
```

Serial interface RS232

To set up the Ethernet interface, go to the menu **Setup** and submenu **Interface**

1. Check the box „Enable".

2. Select and click on the com port address in the dropdown menu **Com Port**.

> ○ *NOTE!*
> *The selected port address must correspond to the port address of the Windows interface. By default it is COM1.*

Com Port

☑ Enable

Com port:

COM1

Baudrate:

115200

3. Select and click on the baudrate in the dropdown menu **baudrate.**

⇨ The serial interface is set up.

> **NOTE!**
>
> *The selected baud rate must correspond to the baud rate of the connected PC!*

Submenu Data base

The data connection can setup in this submenu. The data connection can i.e. an excel chart or also an ODBC connection to an external data base. If this connection is setup and opened, it will be closed after program end and will be automatically re-established with a restart.

You can change the following settings in submenu **Data base**:

■   Open/Close data base

■   Database settings

1.   Press the [Setup] button in the main menu.

2.   Click on the submenu **data base**.
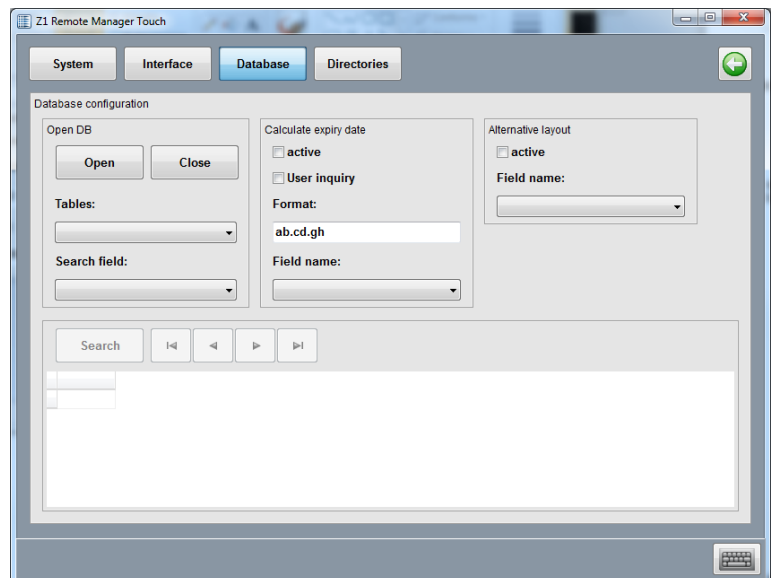
Fig. 181: Submenu Data base

Select data base

To select / activate a database press the [Open] button
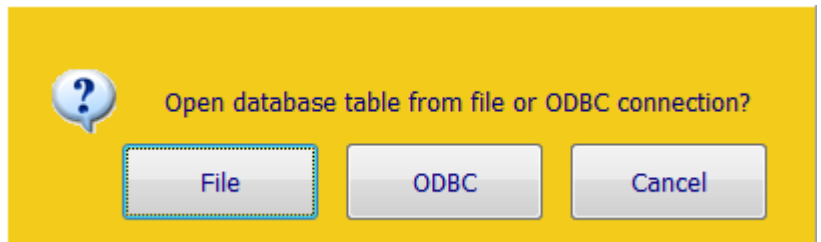
Fig. 182: Data source selection

Database from file,
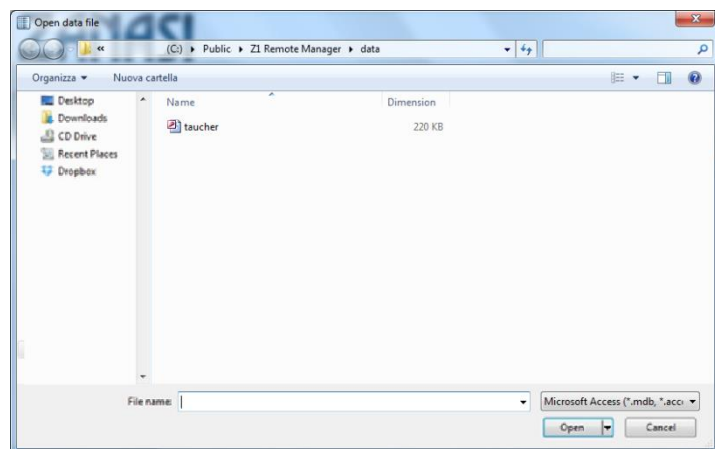
Fig. 183: Open data base

or select ODBC database connection.
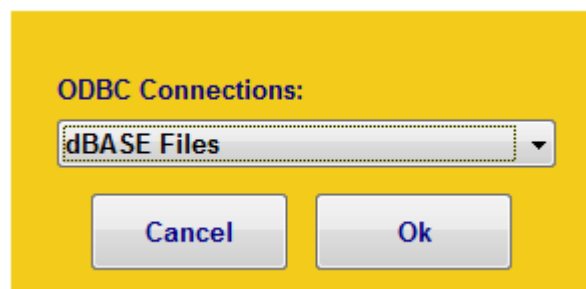
Fig. 184: ODBC data base connection

If a data base connection is established, one of the charts must select for use. An access to multiple charts at once isn't possible.

You´ll see in Z1 Remote Manager software the database

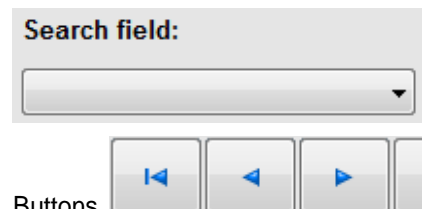connection tool In the print operation mode this button is also a search function.
Within label design of Z1 Remote Manager it will change properties.

With pressing Close the database will closed / disconnected.

If a database connection is not closed explicitly, Z1 Remote Manager restore it with a program start automatically.

Search

With the button [Search] a line / entry can be triggered. The search function is always fixed to the previously defined index field.
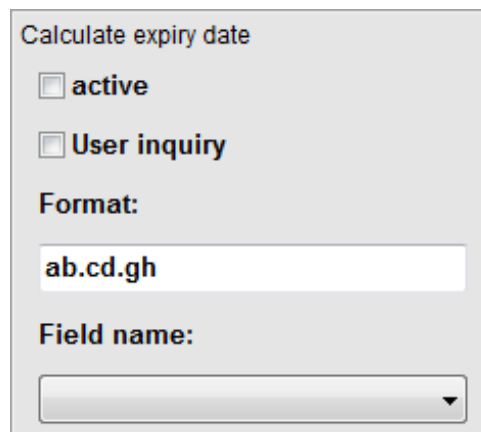
Search field:

Buttons [|◀] [◀] [▶] [▶|] allows navigation in the database. The outer buttons (left) first entry and (right) end of database. Both middle buttons allows scroll in between the database entry.

Settings

Calculate MHD offers the possibility for to have an automated offset function for the date function which is calculated from defined field of a database. This function takes the actual date and adds the offset entered in "field name" Therefore the date field will be added by the value defined in "field name" by days.

There´s a double check possibility activating the checkbox „User inquiry". The generated date can be controlled and changed by the operator. If the checkbox is "active", the option can turned on or off.

Calculate expiry date

☐ active

☐ User inquiry

Format:

ab.cd.gh

Field name:

Fig. 185: Calculate the best before date

The "Alternative Layout" field enables download of an alternative layout from the table. The field name for this can be defined here. This function is switched on by ticking "active". The name of the alternative layout must be stored in the table. If the field is empty, the Standard Layout remains in use.
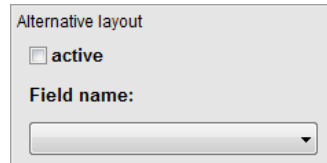

Fig. 186: Field Alternative Layout

Submenu Directories

In the settings menu directories you have to register the possibility existing label directories. Sign up is that this subdirectory is displayed in the file selection dialog.
"Subdirectory include" means that all subdirectories of a registered folder are also displayed for selection.

Menu Action log

In the **Event log** submenu, all printed print images, events and warnings and alarms that have arisen are listed in chronological order. The data to be displayed can be selected.

To display the Event log,

1. Select the [Action log] in the main menu.
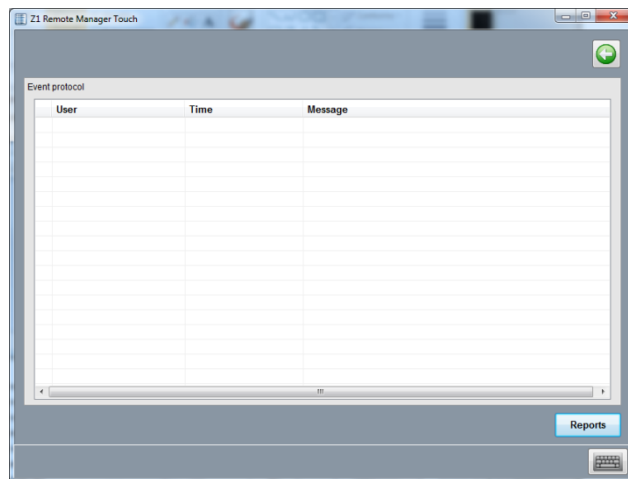
⇨ The Event log opens.

Fig. 187: Action log

Appendix

Directory structure

The Z1 Remote Manager software has the following directory and sub-directories:

[data]	Example database
[firmware]	Includes firmware files for the coding systems
[fonts]	Include fonts
[label]	Print images
[local]	Include language files.
[logos]	Include the logos for the labels.
[settings]	Include temporary configuration files.
[terminal]	Include saved terminal notes.
[log]	Include saved log files.