



SLIDEBEL

Automatic Slide labelling

Slidebel Tools 2.0.21

Order No: SB1-TOOLS

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Read carefully before working with the instrument

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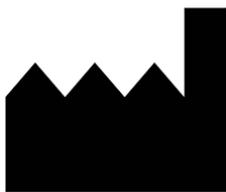
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1. Printing panel

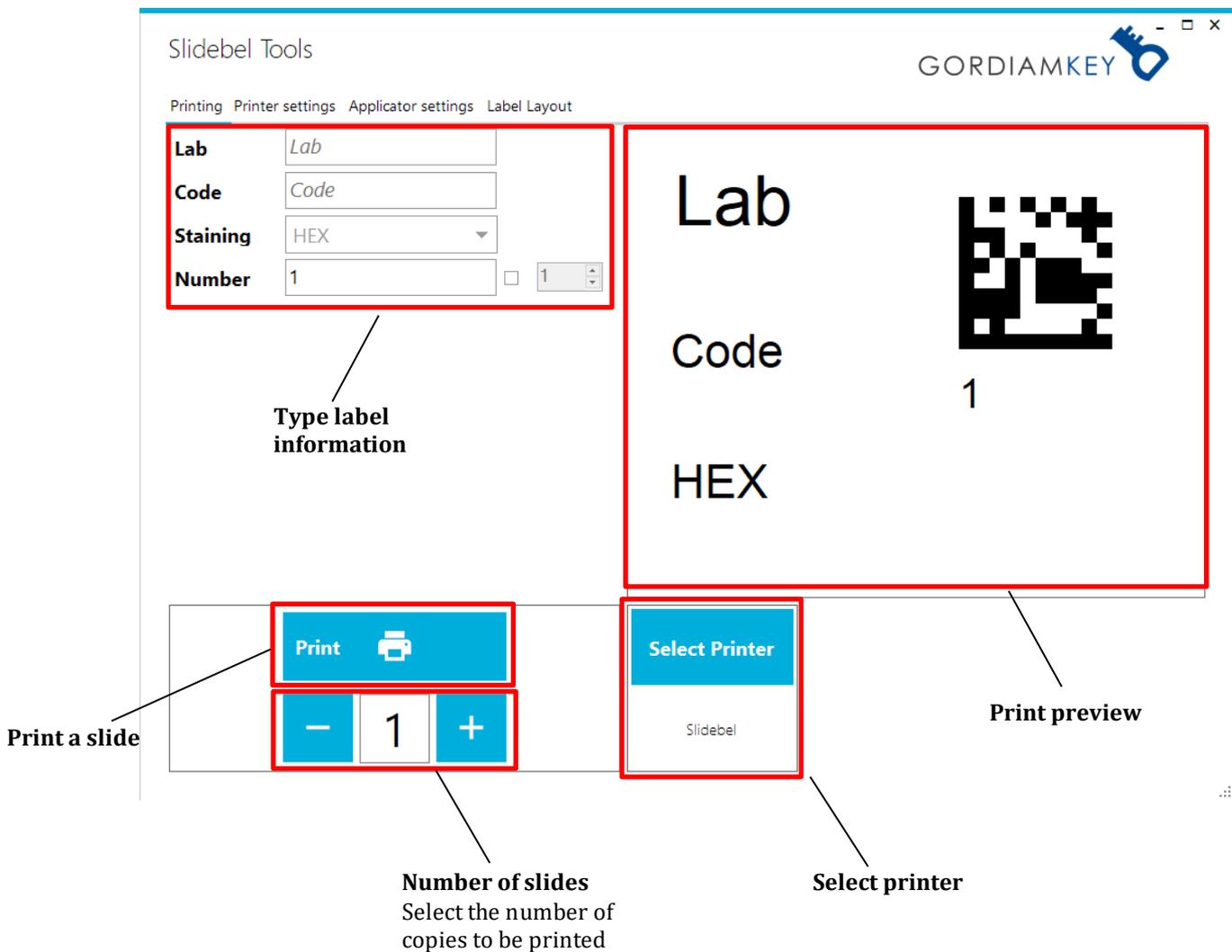
Introduction

There are four main panels in Slidebel Tools:

1. Printing panel, to print label's layout.
2. Printer settings panel, to modify printer settings.
3. Applicator settings panel, to run diagnostics operations and modify basic and advanced settings.
4. Label layout editor panel, to design label's layout.

1 Printing panel

The Printing panel allows to print slides. It is possible to customize the layout in the Label layout editor panel (see Section 4).



1. Printing panel

Type the necessary information in the fields that require manual input. The preview will update as you enter the information.

In this example:

The screenshot shows the printing panel with the following fields and values:

- Lab:
- Code:
- Staining:
- Number:

Red arrows point from the input fields to the corresponding labels in the preview slide:

- Lab field points to the 'Lab' label in the slide.
- Code field points to the 'Code' label in the slide.
- Staining field points to the 'HEX' label in the slide.
- Number field points to the '1' label in the slide.

The preview slide shows a QR code and the text: Lab, Code, HEX, 1.



When the checkbox next to an enumeration field is selected, the number of copies in the print button area disappear. The program automatically prints all the possible combinations of slides (if there are more than one enumeration fields).

The screenshot shows the printing panel with the following fields and values:

- Lab:
- Code:
- Staining:
- Number:

Annotations point to the following elements:

- Enumeration field**: Points to the Staining field.
- Starting number**: Points to the '2' in the Number field, with the text: "Number that will be printed on the first slide of the sequence".
- Enable automatic enumeration**: Points to the checked checkbox in the Number field.
- Number of slides of the sequence**: Points to the '2' in the Number field.

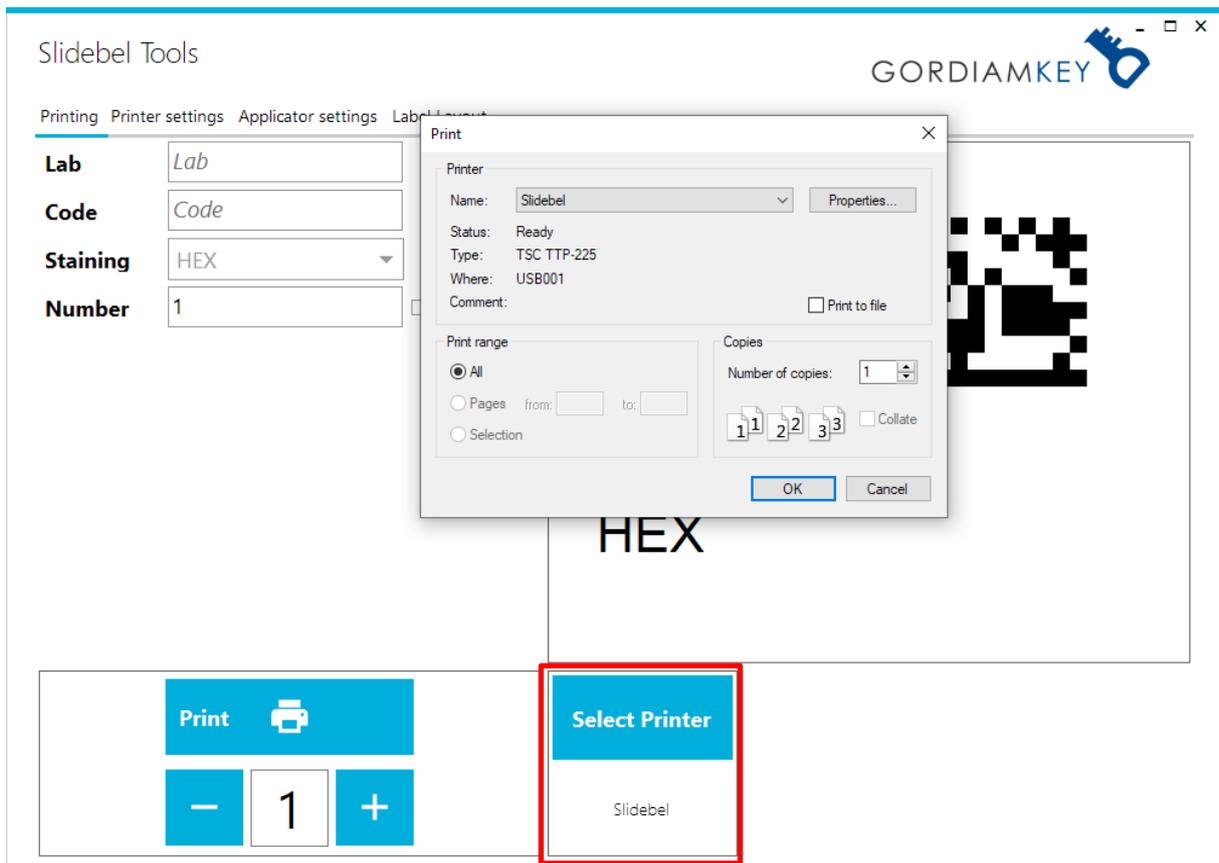
The preview area shows a blue 'Print' button with a printer icon and a 'Reverse' checkbox.

In this example two slides will be printed:

The two preview slides are:

- Slide 1: Lab, Code, HEX, 3
- Slide 2: Lab, Code, HEX, 4

1. Printing panel



“Select Printer” allows to select the target printer from a list of installed printers.

2. Printer settings panel

2 Printer settings panel

Printing Printer settings Applicator settings Label Layout

Printer	Range	Value
Reset Printer		
Clear Queue		
Shift [dot]	[-200 to 200]	<input type="text"/>
Direction		<input type="text"/>
Gap Positioning		
Install Driver		

The Printer settings panel allows to modify basic printer's settings.

- **“Reset Printer”**: restart printer
- **“Clear Queue”**: clear printing queue
- **“Shift [dot]”**: set the print layout shift in order to have the perfect alignment of printout within the label



Conversion factor between dot and mm:
1 dot = 8mm

- **“Direction”**: set the print layout direction
- **“Gap Positioning”**: the printer will perform an internal calibration



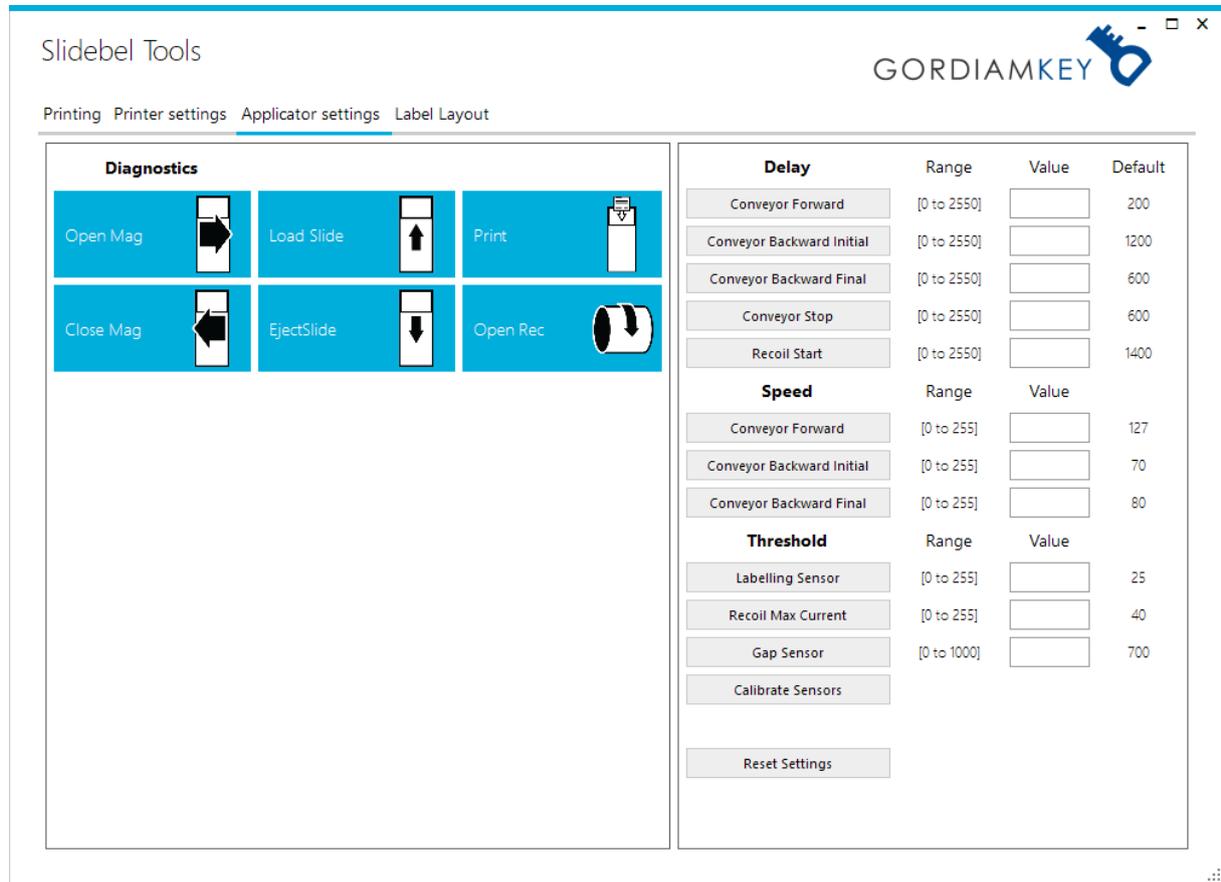
Before performing a **“Gap Positioning”** please remove the applicator from the printer.

- **“Install Driver”**: install driver if not previously installed

3. Applicator settings panel

3 Applicator settings panel

The Applicator settings panel allows to modify basic and advanced printer settings.



The Diagnostics panel and the Settings panel require that Slidebel is in Dump mode before proceeding. To enter Dump mode please do the following:

- i. Switch off the instrument
- ii. Switch on the instrument and immediately keep the LED button pressed until it becomes solid yellow

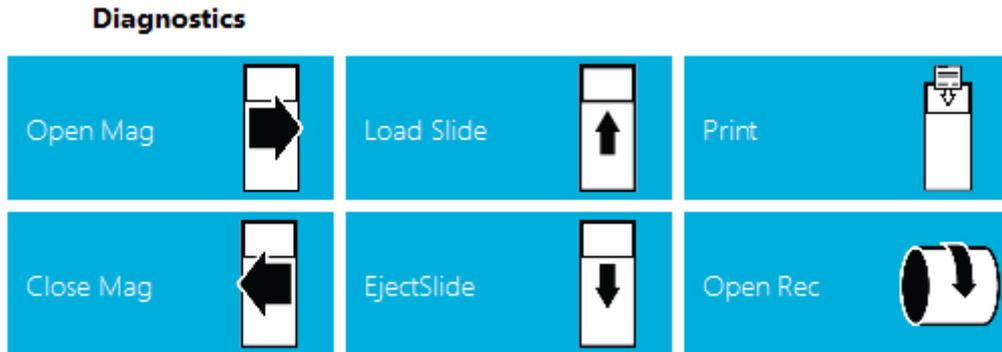


Dump mode is required to edit the applicator's settings. If the LED becomes solid yellow, it means that Slidebel correctly entered Dump Mode. Otherwise, please repeat the above instructions again.

3. Applicator settings panel

3.1 Diagnostics panel

In the Diagnostics panel, it is possible to run single diagnostics actions to verify the functionality of the applicator.



Please be very careful when you operate the instrument in Dump Mode. Many user protection features, such as motor force release on stall won't be available in dump mode. There is both a risk of personal injuries and a risk of damaging the instrument.

- **“Open Mag”**: opens the magazine slide pusher
- **“Close Mag”**: closes the magazine slide pusher
- **“Load Slide”**: activates the conveyor motor until the slide is loaded
- **“Ejects Slide”**: activates the conveyor motor until the slide is ejected
- **“Open Recoil”**: brings the recoil removable in extraction position
- **“Print”**: prints and applies a label on a microscope slide

3. Applicator settings panel

3.2 Settings panel

In the Settings panel, it is possible to edit applicator general settings. These settings will be retained in the instrument memory (EEPROM).



All the settings must be modified one at the time and uploaded by clicking the relative button. Always verify the effect of the modified values one by one. Click "**Reset Settings**" to reset the parameters to factory defaults.

Delay	Range	Value	Default
Conveyor Forward	[0 to 2550]	<input type="text"/>	200
Conveyor Backward Initial	[0 to 2550]	<input type="text"/>	1200
Conveyor Backward Final	[0 to 2550]	<input type="text"/>	600
Conveyor Stop	[0 to 2550]	<input type="text"/>	600
Recoil Start	[0 to 2550]	<input type="text"/>	1400
Speed			
	Range	Value	
Conveyor Forward	[0 to 255]	<input type="text"/>	127
Conveyor Backward Initial	[0 to 255]	<input type="text"/>	70
Conveyor Backward Final	[0 to 255]	<input type="text"/>	80
Threshold			
	Range	Value	
Labelling Sensor	[0 to 255]	<input type="text"/>	25
Recoil Max Current	[0 to 255]	<input type="text"/>	40
Gap Sensor	[0 to 1000]	<input type="text"/>	700
Calibrate Sensors			
Reset Settings			

3. Applicator settings panel

3.2.1 Delay

Delay indicates a specific time frame between different actions. The instrument won't execute any command until the delay time has passed. The delay time is expressed in milliseconds.

- **“Conveyor Forward”**: sets the activation delay of the conveyor belt to move forward after the “print” command.
- **“Conveyor Backward Initial”**: sets the activation delay of the conveyor belt to move backward after the “print” command.
- **“Conveyor Backward Final”**: sets the activation delay of the conveyor belt to move backward, at different speed if required, after the “print” command.
- **“Conveyor Stop”**: sets the deactivation delay of the conveyor belt, at different speed if required, after the labelling phase.
- **“Recoil Start”**: sets the activation delay of the recoil after the “print” command.

3.2.2 Speed

The following settings specify the speed of the conveyor during the printing operations.

- **“Conveyor Forward”**: sets the speed of the conveyor moving forward.
- **“Conveyor Backward Initial”**: sets the initial speed of the conveyor moving backward after printing.
- **“Conveyor Backward Final”**: sets the final speed of the conveyor moving backward after printing.

3.2.3 Threshold

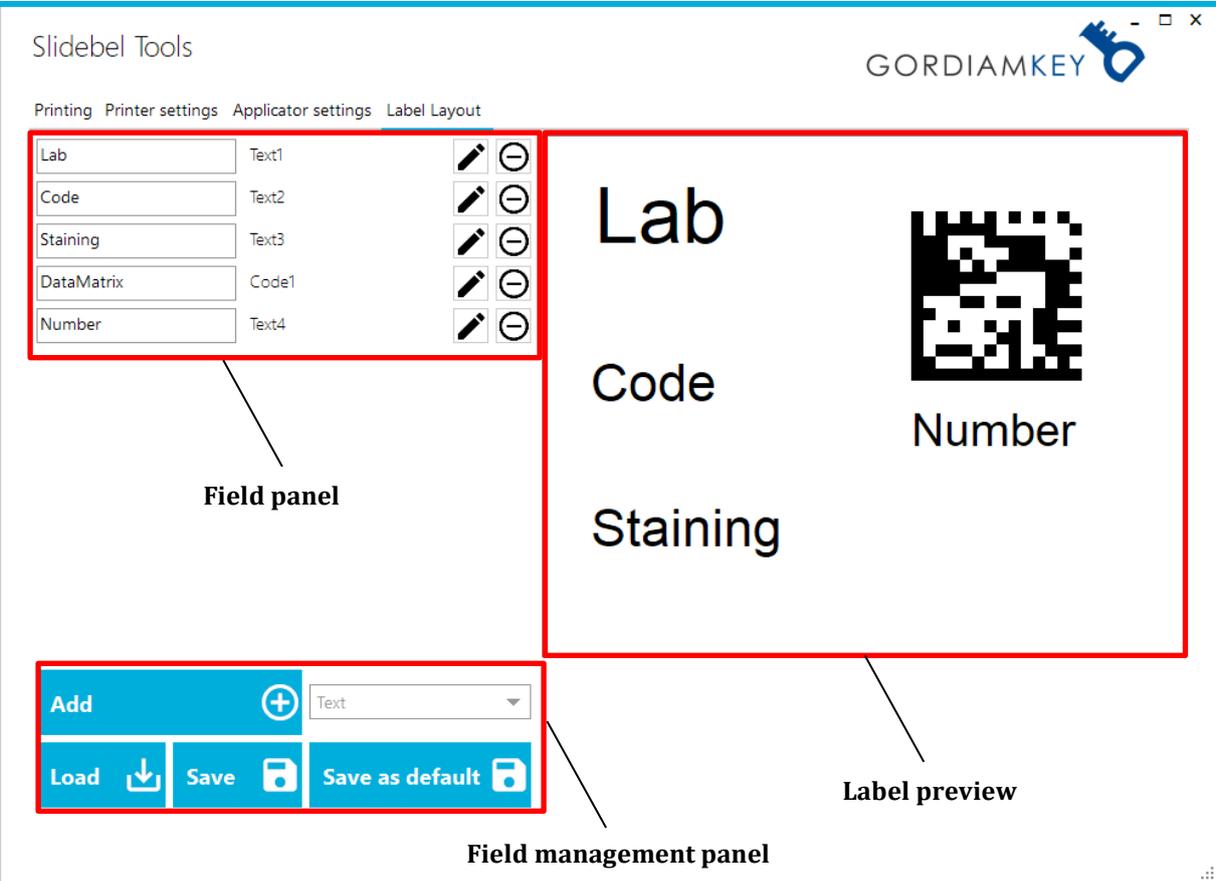
Sensor thresholds are used to detect the slides and the stall of motors.

- **“Labelling Sensor”**: sets the level of labelling sensor threshold.
- **“Recoil Max Current”**: sets the maximum current drawn by the recoil motor.
- **“Gap Sensor”**: sets the level of printer gap sensor threshold.
- **“Calibrate Sensors”**: calibrates Labelling and Release sensors in dump mode operations.

4. Label layout editor panel

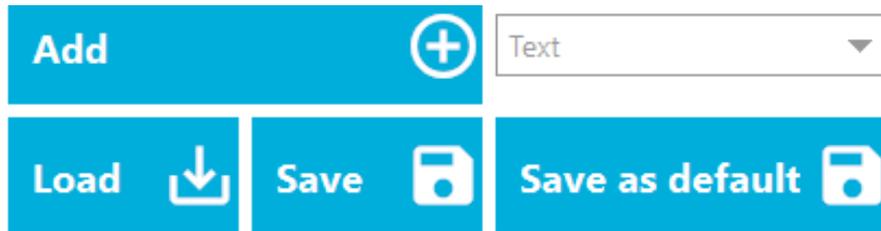
4 Label layout editor panel

The Label layout editor panel allows to customize the label's layout.



4. Label layout editor panel

4.1 Field management panel



- **“Add”** allows the user to add a field in the layout. The field type can be selected in the selection box.

Two types of fields can be selected:

1. **Text**: both numbers and letters can be inserted
2. **Code**: both data matrix code and code 128 can be inserted



A maximum of 9 fields can be added in a single layout. Only two **Code** fields may be used.

- **“Load”**: allows the user to load a previously saved layout. Only files with “.slbl” extension can be opened.
- **“Save”**: allows the user to save the current layout as “.slbl” file.
- **“Save as default”**: allows the user to set the current layout as default. At the next Slidebel Tools start the layout will be automatically loaded.

4. Label layout editor panel

4.2 Label preview

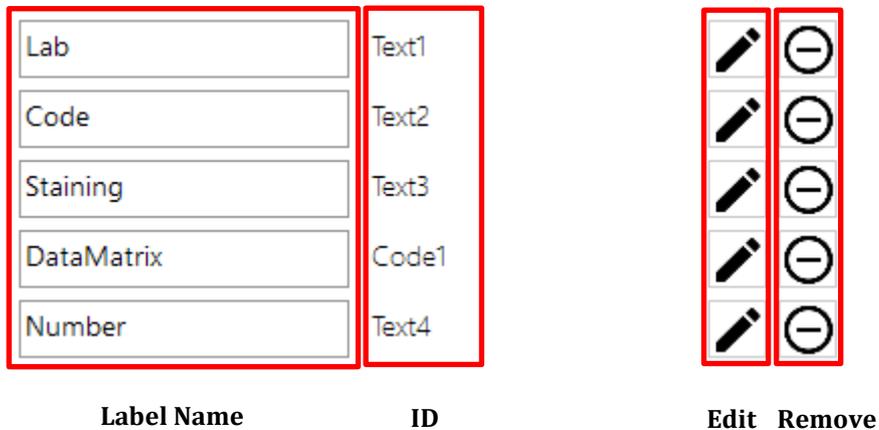
In the Label preview panel the layout of the label is displayed.



4. Label layout editor panel

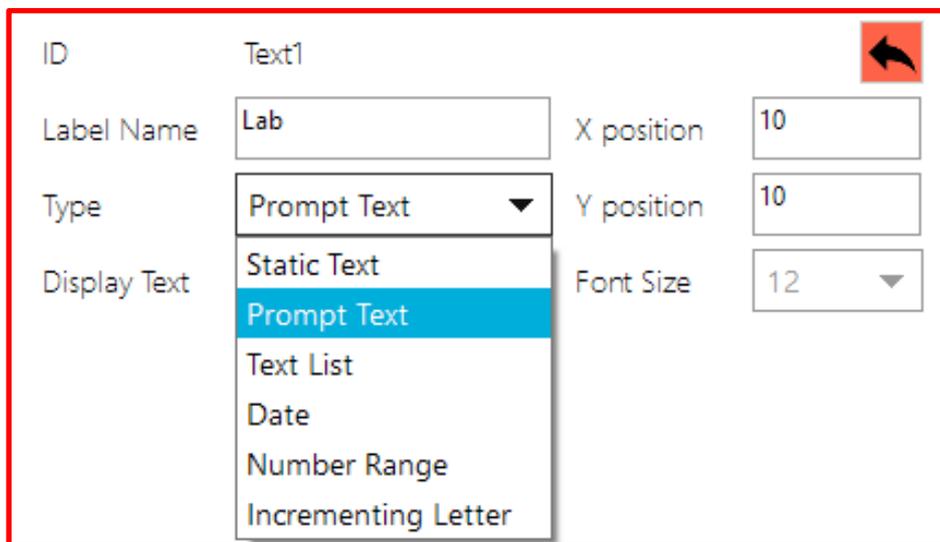
4.3 Field panel

In the Field panel all the fields of the label can be managed.



4.3.1 Edit a text field

In the Edit panel  it is possible to modify all the parameters of the text field.



Edit panel

4. Label layout editor panel

The type of text field is selected among the following:

- **Static text:** text which is fixed, not editable in the Printing panel.
- **Prompt text:** text which needs to be typed in the Printing panel.
- **Text list:** text which can be chosen from a selection box in the Printing panel.
- **Date:** the date is automatically added to the layout
- **Number range:** slide counter which represents the number of the current slide
- **Incrementing letter:** slide counter which represents the letter of the current slide.

The text field to be edited is highlighted in the Label preview panel.

ID	Text1		
Label Name	<input type="text" value="Lab"/>	X position	<input type="text" value="10"/>
Type	<input type="text" value="Prompt Text"/>	Y position	<input type="text" value="10"/>
Display Text	<input type="text" value="Lab"/>	Font Size	<input type="text" value="12"/>
	<input type="checkbox"/> Hide		



The preview panel displays a blue text box containing the word "Lab". To the right of the text box is a QR code. Below the QR code, the words "Code", "Number", and "Staining" are displayed in a large, black, sans-serif font.

4. Label layout editor panel

Prompt Text

- *Label Name*: the title of the prompt text field in the Printing panel
- *Display Text*: the suggested text of the prompt text field in the Printing panel
- *X position*: the horizontal position of the prompt text
- *Y position*: the vertical position of the prompt text
- *Font Size*: the size of the font
- *Hide checkbox*: if selected, the prompt text will not be printed

Edit panel

ID	Text1		
Label Name	Lab	X position	10
Type	Prompt Text	Y position	10
Display Text	Lab Name	Font Size	12

Hide

Printing panel

Lab	Lab Name
Code	Code
Staining	HEX
Number	1

Print preview

Lab Name

Code 1

HEX

Static Text

- *Label Name*: the title of the editor box. In this case no field is visible in the printing panel
- *Display Text*: the text that will be printed
- *X position*: the horizontal position of the static text
- *Y position*: the vertical position of the static text
- *Font Size*: the size of the font
- *Hide checkbox*: if selected, the static text will not be printed

Edit panel

ID	Text1		
Label Name	Lab	X position	10
Type	Static Text	Y position	10
Display Text	Lab Name	Font Size	12

Hide

Printing panel

Code	Code
Staining	HEX
Number	1

Print preview

Lab Name

Code 1

HEX

4. Label layout editor panel

Text List

- *Label Name*: the title of the list field in the Printing panel
- *X position*: the horizontal position of the text
- *Y position*: the vertical position of the text
- *Font Size*: the size of the font
- *Hide checkbox*: if selected, the text will not be printed
- *List*: allows the user to insert the desired elements

ID Text1

Label Name Lab X position 10

Type Text List Y position 10

Font Size 12

Hide

Edit panel

Lab LAB1

Code LAB1

Staining LAB2

Number 1

Printing panel

Value

▶ LAB1

LAB2

List

LAB2

Code 1

HEX

Print preview

4. Label layout editor panel

Date

- *Label Name*: the title of the editor box. In this case no field is visible in the Printing panel
- *X position*: the horizontal position of the text
- *Y position*: the vertical position of the text
- *Font Size*: the size of the font
- *Hide checkbox*: if selected, the text will not be printed
- *Date format*: allows to select the desired date format

ID	Text1								
Label Name	Lab	X position	10	Code	Code				
Type	Date	Y position	10	Staining	HEX				
		Font Size	12	Number	1				
		<input type="checkbox"/> Hide							
Date Format	dd-MMM-yy								

Edit panel

28-Mar-19	
Code	1
HEX	

Print preview

4. Label layout editor panel

Number range

- *Label Name*: the title of the list field in the Printing panel
- *X position*: the horizontal position of the text
- *Y position*: the vertical position of the text
- *Font Size*: the size of the font
- *Hide checkbox*: if selected, the text will not be printed
- *Zero-padding checkbox*: if selected, the number will be zero-padded

The image shows the 'Label layout editor panel' with several sections:

- Edit panel:** Contains fields for 'Label Name' (set to 'Lab'), 'X position' (10), 'Y position' (10), and 'Font Size' (12). There are checkboxes for 'Hide' and 'Zero Padding'.
- Printing panel:** Contains fields for 'Lab' (6), 'Code' (Code), 'Staining' (HEX), and 'Number' (1). The 'Lab' and 'Number' fields have small square icons next to them.
- Print preview:** A preview of the label showing the number '6' in a red box, a QR code, and the text 'Code 1' and 'HEX'.

4. Label layout editor panel

Incrementing letter

- *Label Name*: the title of the list field in the Printing panel
- *X position*: the horizontal position of the text
- *Y position*: the vertical position of the text
- *Font Size*: the size of the font
- *Hide checkbox*: if selected, the text will not be printed

ID	Text1				
Label Name	Lab	X position	10	Lab	5
Type	Incrementing Letter	Y position	10	Code	Code
		Font Size	12	Staining	HEX
	<input type="checkbox"/> Hide			Number	1

Edit panel



Print preview

Printing panel

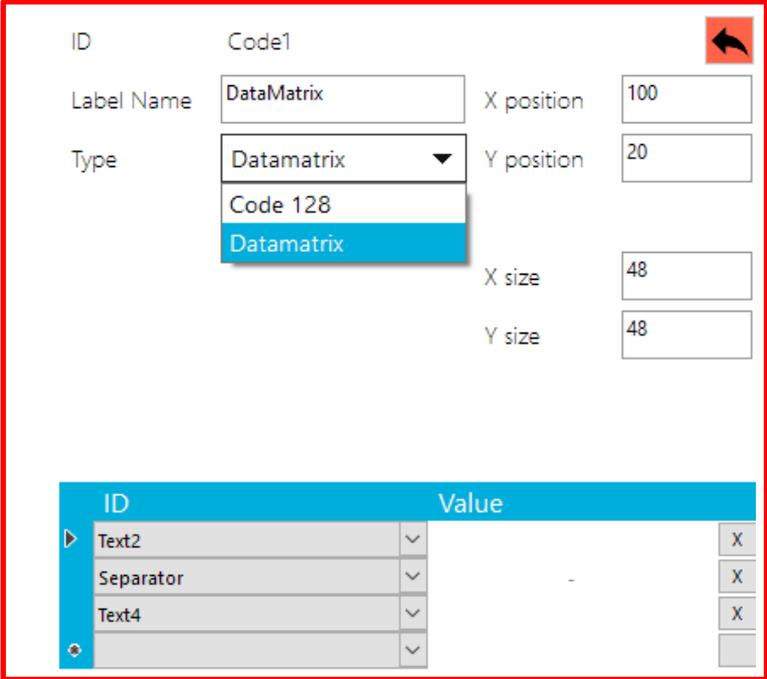
4. Label layout editor panel

4.3.2 Edit a code field

In the Edit panel  it is possible to modify all the parameters of the code field.

It is possible to choose between two different types of code:

- Data Matrix
- Code 128



ID	Code1		
Label Name	DataMatrix	X position	100
Type	Datamatrix	Y position	20
	Code 128	X size	48
	Datamatrix	Y size	48

ID	Value
Text2	X
Separator	X
Text4	X

Edit panel

4. Label layout editor panel

Code (Data Matrix or Code 128)

In the editor it is possible to modify:

- *Label Name*: The title of the selection box in the Edit panel
- *Type*: The type of the code field
- *X position*: the horizontal position of the code
- *Y position*: the vertical position of the code
- *X Size*: the horizontal size of the code
- *Y Size*: the vertical size of the code
- *List*: allows the user to insert the desired elements in the code

It is possible to concatenate different IDs.

It is possible to add “Separator” character or word between two consecutive IDs.

ID Code1 

Label Name X position

Type Y position

X size

Y size

Edit panel

ID	Value	
Text2		X
Separator	/	X
Text4		X

List

Lab

Code → **12345/1**

Staining

Number

Lab 

12345

HEX

1

Printing panel

Print preview

4. Label layout editor panel

ID Code1 

Label Name X position

Type Y position

Y size

Edit panel

ID	Value	
Text2		X
Separator	-	X
Text4		X

List

Lab

Code

Staining

Number

12345-1

Lab 

12345

1

HEX

Printing panel

Print preview



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