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Chapter 1 Introduction

What is Spark?

Spark is made with one purpose; design and print labels. Labels are important in the laundry-world and are mainly used to identify items like garments. To retrieve the owner of a garment, it is necessary to use an identification-system like a label that is attached to a garment. For example, this label can contain information like the name of the owner, the inset date and a barcode.

Designing labels

What information should be printed on a label is entirely up to the user, this is called the design of the label and is done via Spark-Print that gives you the ability to design one or more labels that conforms to your ideas. The contents of a label can be something like fixed information – such as a logo or a company name – but can also consist of field-information. The contents of this field-information can be created by another application. It is also possible for the user to enter information manually, after which you can print one or more labels. Another possibility is to import information that was created by something like a spreadsheet-program, after which one or more labels can be printed for each item.

Printing labels

A separate product, that is called Spark-Engine, does the actual printing of the labels. This part of the program is checking for the existence of print-commands. If these exist, they will be processed and printed on different printers. This has the advantage that you can set each printer to a specific label-format. Problems like printing a label on the wrong format are eliminated in this way. During the printing the Windows-environment is used, which implies that you do not have to wait until the labels have been printed. Another advantage is, that you can make use of network-printers; in that case the printer can be in a different location.

Control

Spark is made in such a way that the control over it is kept rather simple. This has the advantage that you can use the product very quickly. With the use of clear icons, you have full control.

Framework of the manual

Chapter 1, Introduction Here you will find global information about what you can do with the program.

Framework of the manual gives you an overview of the chapters.

Chapter 2, Quick start shows you the way about installing the program and how to use it in an easy way.

Chapter 3, Global workings explain the global workings of the program.

Chapter 4, Labels and different modes explain how to use labels in different modes.

Chapter 5, Designing labels explains how you can design labels.

Chapter 6, SparkPrint explains how you can print labels in the manual mode and how to design labels in different modes.

Chapter 7, SparkEngine explains how SparkEngine processes the labels and how to change the system-settings.

Chapter 8, Configurations explains how to set the configuration for the modes like 'ABS-Legacy', 'ABSSolute', 'ABSSolute PWB' 'ABSSolute ORS'.

Chapter 9, Multi Design Folders explains how to make use of multi-design-folders, if you want to use Spark on a Server with more than one network-printer. This can only be used in the ABSSolute-mode and ABSSolute PWB-mode.

Appendix, here you find information about how to use Spark in combination with several printers.

Chapter 2 Quick start

Spark works in combination with Microsoft® Windows® Vista, 7, 8 or 10. The PC must be a regular type that is currently available on the market.

Spark is suitable for use in a network or on a stand-alone PC.

Installation

Spark can be installed from the Spark cd-rom or from a zip-file that contains the installation files.

Insert the Spark cd-rom in the cd-rom drive of the PC, or start the setup via the zip-file.

Start the installation by clicking on Setup. After the setup has been started:

- Follow the instructions on screen
- You will get a choice for what (external) application(s) you want to use Spark. Only mark the application(s) that apply before you continue with the installation. For example, if you only want to use Spark for 'ABSSolute' and 'ABSSolute PWB', then only mark these options. Note: Afterwards it also possible to change this via SparkEngine and system configuration.
- After the installation there are two icons (SparkPrint and SparkEngine) placed on the desktop. There is also added a menu-option named Spark, which have the same two icons.

Quick guide

This chapter will explain the basics you will need to get started, like:

- Selecting a label-design
- Printing labels in the manual mode
- Changing a label-design

After the installation you can choose from two icons named 'SparkPrint' and 'SparkEngine'. A short description will follow:

SparkPrint – With this program you can design and change labels. You can also enter labels manually with the option to see an example on screen or print them.

SparkEngine – This program is responsible for the actual printing of the labels. It processes the print-commands that have been given by SparkPrint (via Manual mode) or by an external application.

Starting Spark



SparkEngine Icon

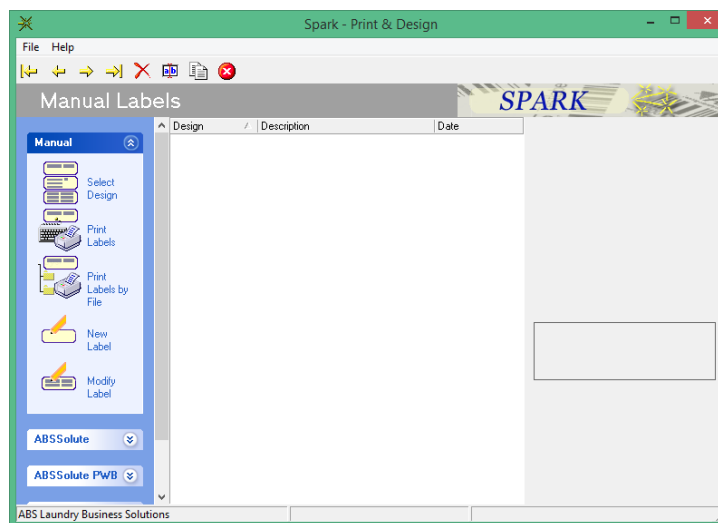
Spark consists of two parts: SparkPrint and SparkEngine. If you want to print labels, first SparkEngine should be started, this is the part that processes the print-commands and takes care that each label will be sent to the correct printer. You start SparkEngine with the icon that is on the desktop, or by using the menu, under the option Spark. As soon as SparkEngine has been started, an icon will appear in the taskbar. An explanation about SparkEngine will follow later, at this moment you only need to know SparkEngine should be started, if you want to print labels.

SparkEngine can also be started *after* you have given some print-commands, because each print-command is stored in a label-file. In the same way you can start the other part named SparkPrint, by selecting the icon on the desktop or by the menu-option. This part will be explained first.

Making a label design

Here we make a simple label design that is used for the Manual Mode where it is possible to print label from SparkPrint itself. To enable the Manual Mode you have to make sure option 'Manual' has been marked in SparkEngine -> System Settings -> Modes. Also, to be able to print labels, you must be sure SparkEngine has been started.

After you have started SparkPrint you will see the following:

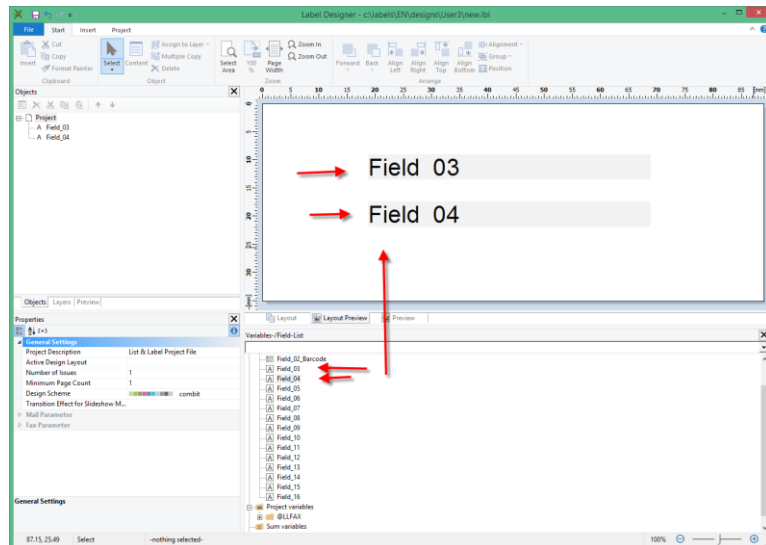


You should see an empty list at Manual Mode. First we make a new label via option 'New Label'.

Do the following:

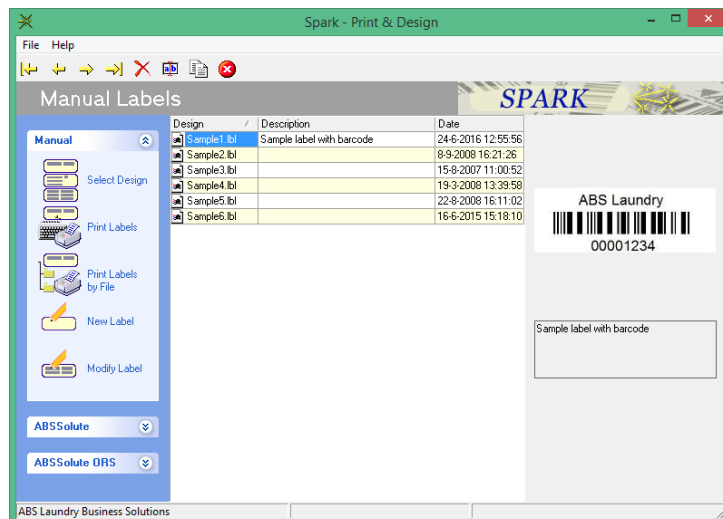
1. Click option 'New Label'.
2. Enter a name for the label, or use the default one.
3. A wizard will start for the new label. In the second page you can define the label-printer and the paper-format you want to use. NOTE: See the appendix about how you can install and configure a label-printer.
4. Click Next until you see the label design dialog.
5. In the label design dialog, drag and drop two fields from the lower part (Field_3 and Field_4) to the design-part (see also picture below).

- Click the save button (via the button at the upper left) and close the dialog.



Selecting a label design

After you have started SparkPrint you will see the following:



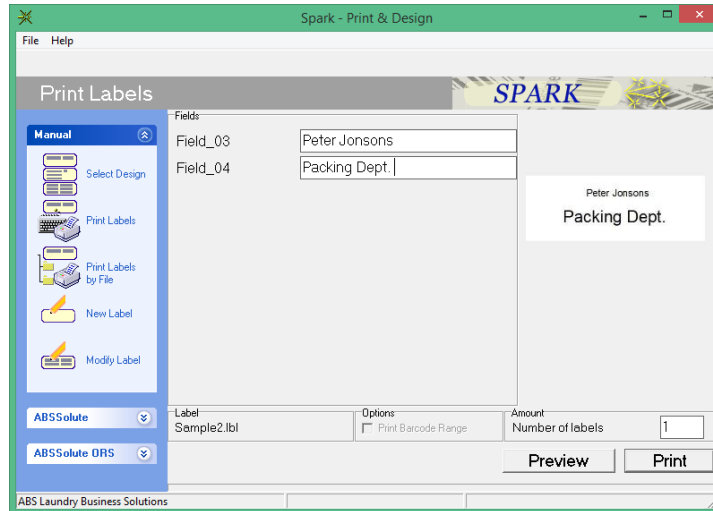
This shows you an overview of the available labels. Each label has a name like 'C01.lbl', a description and the date is shown when it was last created or changed. At the right side of the list an example is shown of the label-design. Each label is a design that can be created and changed as you like. By creating label designs you can decide what information should appear on a label.

With a mouse-click you can select a label. You can also use the arrow-keys to select one of the labels. The selected label will be blue. For each selected label an example will be shown. This example gives you an impression of the label-design.

Manually printing a label



If you have selected one of the labels you press the icon 'Print Labels' which is shown at the left part of the window. The window will change. See figure:



At the right of this window you will see an example of the label-design. In the middle, the fields that appear in the design are shown. Depending on the label-design, one or more fields will be shown. *Later on we will see how to create a design.* What you can do here is entering text in the fields. Suppose you want to print name-labels, with on each label the name of a person and the department the person belongs to. You simply enter this information after which you enter the number of labels you want to print, with a default of 1. By pressing the button labeled 'Print' you can print the labels.

An example:

1. Click in the first field.
2. In the first field you type: Peter Jonsons.
3. Press the TAB-button, or click in the second field.
4. In the second field you type: Packing Dept.
5. Enter the number of labels: 5 (or leave it to 1)
6. Click on the Print-button.

Remark: For this example you can also click on the Preview-button instead of the Print-button. In that case only an example on screen will be shown, nothing will be printed. To close the Preview-window, you press the cross at the top-right of the window, or you press the door-icon, after which you return to the previous window.

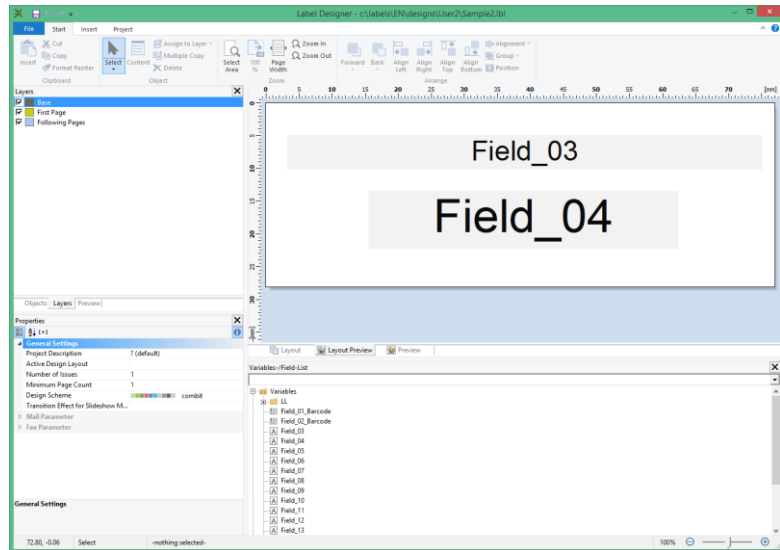
Changing a label-design

With a label-design you can decide what to print on a label. Here it will be explained briefly how to change a label-design. In another chapter this will be explained in more detail.

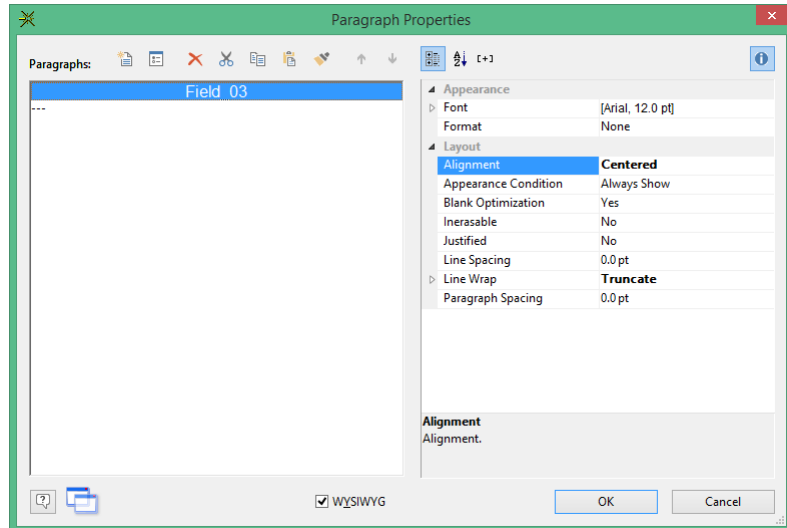
As a (simple) example we will change a label-design in such a way that the first field will get a different font.



For this example you first must start the SparkPrint-program. Select the label named 'name.lbl' and click on the icon 'Modify label', this is the last icon in the vertical menu at the left. Another window will be shown, the design-window.



The design is shown enlarged and contains rectangles that indicate the contents. You select a rectangle by clicking on it, after which a shadow is shown around it. Be sure the top rectangle is selected by clicking on it once. Double-click on the selected rectangle. You will see the following window:



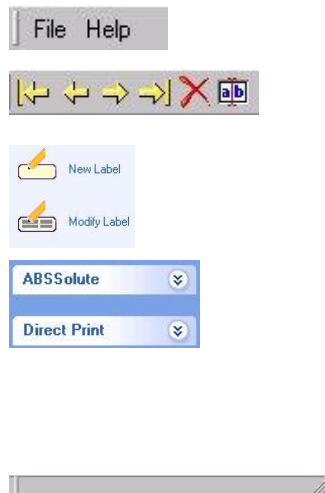
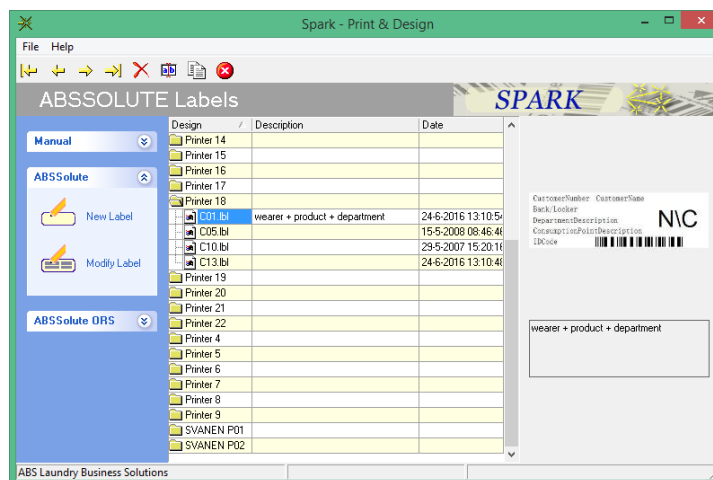
At the top of this window you see the field that is used in the rectangle. Under this part you see information about the font and font size that is used. You can change the font by clicking on the gray rectangle at the right of the current font. A list of possible fonts will be shown (it shows the fonts that are installed on your windows-system). Suppose the current font is 'Arial', change it to a font like 'Times New Roman'. Select this font from the list and click on it. By pressing the OK-button afterwards, you confirm your action and you will return to the previous window. Check if the font has changed in the layout.

You can save the design-changes by clicking on the 'Save'-icon, or by clicking on the close-icon and selecting 'Yes' at the question 'Save changes?'

Chapter 3 Global workings

This chapter will explain the global workings of Spark. The contents of each window will be described and the workings will be explained. An exception are the screens for the label-design, these will be explained in the next chapter.

Screen-contents and control

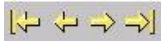


Each screen of Spark has a fixed content, an overview follows::

- At the top of the screen is a menu. With this menu you can leave Spark with the option 'File' and 'Exit'. With the option 'Help' you can get help about the program.
- Below the menu are a number of buttons, which vary with the contents of the screen. For example, if the screen is showing a list, there will be navigation-buttons. With these buttons you can navigate through the list.
- At the left side of the screen, icons can be seen. By clicking on an icon a specific part of the program can be started. This side-menu is divided in modes. In Spark there are the modes named 'Manual', 'ABS-Legacy', 'Legacy', 'ABSolute', 'ABSolute PWB' and 'ABSolute ORS'. You change a mode by clicking on one of these mode-names. What modes are visible can be configured in SparkEngine.
- At the bottom of the screen a status bar can be seen. Depending on the situation extra information will be shown here about the current status of the program. This will mainly be used in SparkEngine, where you can see if the program is in the pause-mode.

Choosing from a list

If a list is shown on the screen, you can – depending on the program-part – do the following:



- If the list is not empty, you can make a choice by using the arrow keys of the keyboard, or by using the navigation buttons at the top of the screen, or with the mouse. The chosen item will be blue.
- If there are other buttons shown – apart from the navigation buttons – you can do the following:



- Press the delete-button to delete a selected item. Be careful, with this button you can delete a label-design! Once deleted, you cannot get it back, unless you had made a backup!
- Press the rename-button to rename the selected item. In this case you are renaming a label-design, only do this in the Manual-mode. In the ABS-Legacy-, ABSolute-, ABSolute PWB-, ABSolute ORS it is not recommended to do this, because external software is depending on these names.
- Press the copy-button to create a copy of a label-design. After entering a name a copy will be created.
- Press the 'delete printer settings'-button to delete these settings from the selected label-design. This is about the label-printer and label-format that is assigned to the label-design. Afterwards you have to assign these again to the label-design. You need this option when the windows-label-printer-driver-settings have been changed. Reason: The label-printer-settings are stored for each label-design, so when you change the settings later in the label-printer-driver, there can be a difference compared with the settings for the label-design. To solve this you can first delete them and afterwards assign them again.

Chapter 4 Labels and different modes

In the next chapter we will explain how you can design labels. The design of a label is responsible for the contents of the label you want to print. You can think of a label that contains the name of an employee and his/her function name. Another label can be needed for marking garments, with information on it like the name of the wearer, the issue-date and the barcode.

Fields

In this chapter we will use the term Fields. Fields can be used in a label-design. You can see fields like fill-in boxes that are placed on a label-design. The fill-in boxes are empty, but can be filled-in before the label is printed. In that way it is possible – for example - to print employee-labels, with the name of the employee on each label.

Labels for each mode

Spark makes use of different modes for which labels can be designed. These modes are named like 'Manual', 'ABS-Legacy', 'Legacy', 'ABSSolute', 'ABSSolute PWB' and 'ABSSolute ORS'. Each mode has its own set of label-designs. The type of information that can appear on a label is different for each mode.

Manual

In this mode the information on the design can be entered manually. It is also possible to import the information from a text file.

ABS-Legacy

The labels in this mode receive their information from legacy ABS-software like BKL. The fields on the design are filled-in by information which is delivered by external software

Legacy

The labels in this mode will receive their information from external software that previously made use of a program named Labserv. Labserv is legacy-software, which could print labels. The information that Labserv expected is in a special format that's incompatible with other formats. For this special purpose the Legacy-mode can be used.

ABSSolute / ABSSolute PWB / ABSSolute ORS

The labels in this mode receive their information from ABSSolute (PWB/ORS)-software. The fields on the design are filled-in by information which is delivered by external software.

Solar

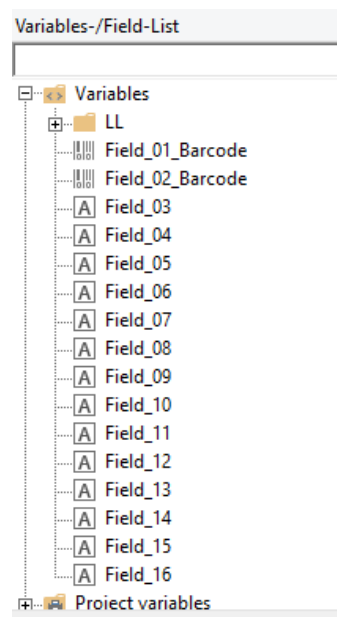
The labels in this mode receive their information from Solar-software. The fields on the design are filled-in by information which is delivered by external software.

Manual mode

The manual mode is made to give the option to print manual labels. This can be used when you need many labels with on each label the same information (like the name of an employee + department) that can be entered before you print them. These label can be printed from SparkPrint itself via SparkEngine for the actual printing. The contents of the labels – the fields – can either be filled-in manually or filled-in by using an import-file. This import-file can be created – for example – with a spreadsheet program.

Overview fields

In the manual mode, the following fields can be used, see figure:



The first two fields are reserved for barcodes, so can only be used to print a barcode on a label. The other fields are text-fields, and can contain letters, numbers and punctuation marks. The font that has been chosen in the design limits the length of a text-field.

ABS-Legacy Mode

The ABS-Legacy mode gives the possibility for legacy ABS-software like BKL to interact with Spark. The contents of the fields will be filled-in through files that are created by external ABS-software. The format of these files and the fields that can be used are put in a protocol that will be explained here.

Overview fields

In the ABS-Legacy mode the following fields are used:

AdministrationNumber	AlterationCode	ArticleDescription
ArticleNumber1	ArticleNumber2	CompartmentNumber
ContractEndDate	DebitorNumber	DeliveryAddressRelation
Department	DepartmentDescription	DepartmentNumber
DepartmentRemark	FirstInsetDate	FixedText
FunctionCode	FunctionDescription	GarmentCode
Gender	IDCodeNumberBKL	IDCodeNumberPWB
InsetQuality	LastInsetDate	LockerNumber
MinimumQuality	ProcessNumber	Quality
RelationName	RelationNameShort	RelationNumber
RentNumber	ResidentFreeText	ResidentName
ResidentNumber	ResidentSearchName	RoomNumber
SetSequenceNumber	SizeCode	SizeDescription
SortingNumber	SortingStation	SortingStationDescription
SystemDate	TextFromConfiguration	WashProcessBKL
WashProcessPWB	WearerName	WearerNameShort
WearerNumber	WearerRemark	

Two fields have a special function; they are used to print a barcode on a label. These fields that start with 'Barcode', will get the same contents as the fields that contain the barcode number.

File format

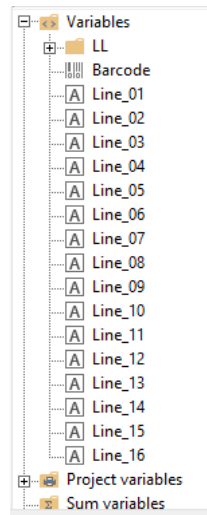
The filling of the fields can only be done through a file that is created by external ABS-software. See for further information the chapter titled 'Configuration for ABS-Legacy mode' on page 63.

Legacy Mode

The Legacy Mode is made for software that previously used Labserv to print labels. The filling of the fields can only be done through files that are created by external software. The format of this file is different compared to the ABS-mode.

Overview fields

In the legacy mode the following fields are used:



The fields should be seen as lines, because of the way the designs are made in the Legacy mode. The information in the files is line-based; the fields in such a line cannot be separated. You should keep this in mind during the label-design.

Fileformat

The contents of the fields/lines will always be delivered through a file by the Legacy-software. See for further information the chapter titled ‘Configuration for Legacy mode’ on page 66.

ABSSolute Mode

The ABSSolute mode gives the possibility for ABSSolute-software to interact with Spark. The contents of the fields will be filled-in through files that are created by external ABSSolute-software. The format of these files and the fields that can be used are put in a protocol that will be explained here.

Overview fields

In the ABSSolute mode the following fields are used:

Bank	BarcodeIDCode	BarcodeSecondaryIDCode
BillToCustomer Number	BusinessUnitCode	Businessunit Description
City	ConsumptionPoint Description	ConsumptionPoint Number
CurtainLength (*)	CurtainRoomNumber (*)	CurtainWeight (*)
CurtainWidth (*)		
CustomerMarkIn Garment	CustomerName	CustomerNumber
CustomerOwned	CustomerSearchName	DataMatrixIDCode
DataMatrixSecondary IDCode	DeliveryPointCode	DeliveryPointDescription
DepartmentCode Legacy	DepartmentDescription	DepartmentNumber
EmblemTemplateCode	EmploymentNumber	EndContractDate
EndDateFullRent RefWeek	FabricCode	FabricDescription
FinishingMethodCode	FinishingMethod Description	FirstIssueDate
FunctionCode	FunctionDescription	GarmentDispenser
GarmentSequence Number	IDCode	InventoryRemark
InvoiceBusinessUnitCode	InvoiceBusinessUnit Description	
IssueReferenceWeek	LastIssueDate	Locker
MinimumQuality GradeCode	ModificationCode1	ModificationCode2
ModificationCode3	PlantCode	PlantName
ProductCode	ProductDescription	QualitygradeCode
RouteCode	RouteCodeOnLabel	RouteDrivingDay
RouteDrivingDayNumber	RouteNumber	RouteStop
RouteStopSortSequence	SecondaryIDCode	Sex
SizeCode	SizeDescription	Street
StyleCode	StyleDescription	WashProcessCode
WashProcessSortCode	WearerAdminNumber	WearerEmblemName
WearerFirstName	WearerName	WearerNumber
WearerRemark	WearerSearchName	Zipcode

*) For fields starting with ‘Curtain’ you have use ‘U’ as first code for the design, for example ‘U01’, ‘U02’, ‘U03’, etc.

Barcodes and DataMatrix fields

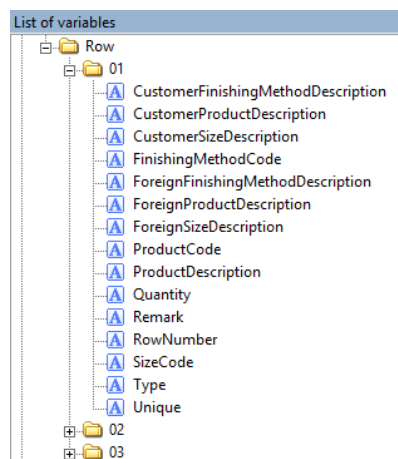
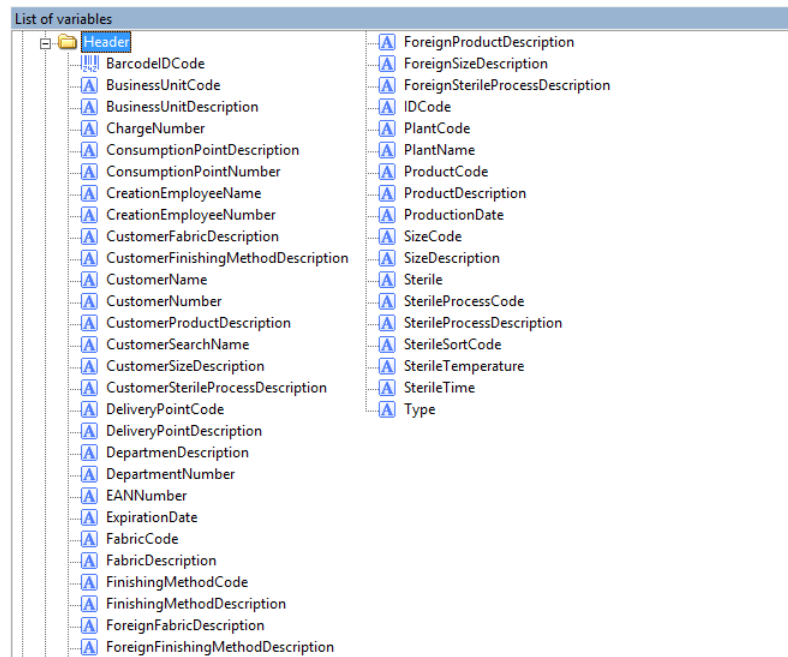
Some fields have a special function; they are used to print a Barcode or a Datamatrix on a label. The fields are named BarcodeIDCode, BarcodeSecondaryIDCode, DataMatrixIDCode and DataMatrixSecondaryIDCode.

File format

The filling of the fields can only be done through a file that is created by external ABSSolute-software. See for further information the chapter titled 'Configuration for ABSSolute mode' on page 69.

ABSSolute ORS Mode

The ABSSolute ORS (Operation Room Services) mode gives the option to print label for ORS-module in ABSSolute. Because of that a different set of fields is used in the layout of Spark, divided over a header-part and a row-part. The header is about the pack itself and the rows are about the products in the pack. A maximum of 30 rows can be used.



ABSSolute PWB Mode

The ABSSolute PWB mode gives the possibility for ABSSolute PWB-software to interact with Spark. The contents of the fields will be filled-in through files that are created by external ABSSolute PWB-software. The format of these files and the fields that can be used are put in a protocol that will be explained here.

Overview fields

In the ABSSolute PWB mode the following fields are used:

BarcodeIDCode	BarcodeSecondaryIDCode	BusinessUnitCode
BusinessUnitName	ClientAdminNumber	ClientFirstName
ClientLabelName	ClientName	ClientNumber
ClientSearchName	ConsumptionPointDescription	ConsumptionPointNumber
CustomerLabelName	CustomerName	CustomerNumber
CustomerSearchName	DataMatrixIDCode	DataMatrixSecondaryIDCode
DeliveryPointCode	DeliveryPointDescription	DepartmentDescription
DepartmentNumber	FinishingMethodCode	FinishingMethodDescription
IDCode	LabelTextPerClient	PlantCode
PlantName	PreSortNumber	ProductCode
ProductDescription	RoomNumber	RouteDrivingDate
RouteNumber	RouteStop	SecondaryIDCode
SizeCode	SizeDescription	WashProcessDescription
WashProcessNumber		

Barcodes and DataMatrix fields

Some fields have a special function; they are used to print a Barcode or a Datamatrix on a label. The fields are named BarcodeIDCode, BarcodeSecondaryIDCode, DataMatrixIDCode and DataMatrixSecondaryIDCode.

File format

The filling of the fields can only be done through a file that is created by external ABSSolute PWB-software. See for further information the chapter titled 'Configuration for ABSSolute mode' on page 69.

Chapter 5 Designing labels

If you want to design a label, you must consider the following:

- For which mode do you want to design a label? This is important, because the fields used are different for each mode. See also the explanation in the previous chapter.
- For what printer do you want to design a label? The format of the paper can differ for each printer.

Designing a new label

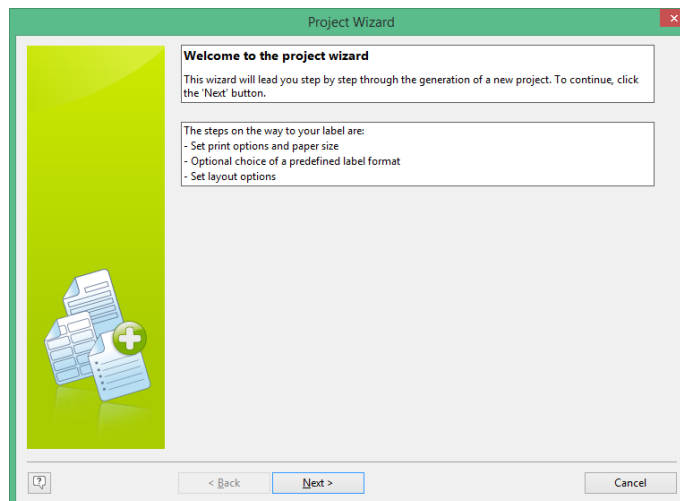
If you want to design a new label you can do this as follows:

1. Start the program SparkPrint
2. Select the mode (Manual, ABS-Legacy, Legacy, ABSOLUTE, ABSOLUTE PWB, ABSOLUTE ORS)
3. Select the option New Label
4. Enter a filename for the new label. This can be a name without extension (the extension 'lbl' will be appended automatically), otherwise append the extension '.lbl' yourself. Example: 'names.lbl'.

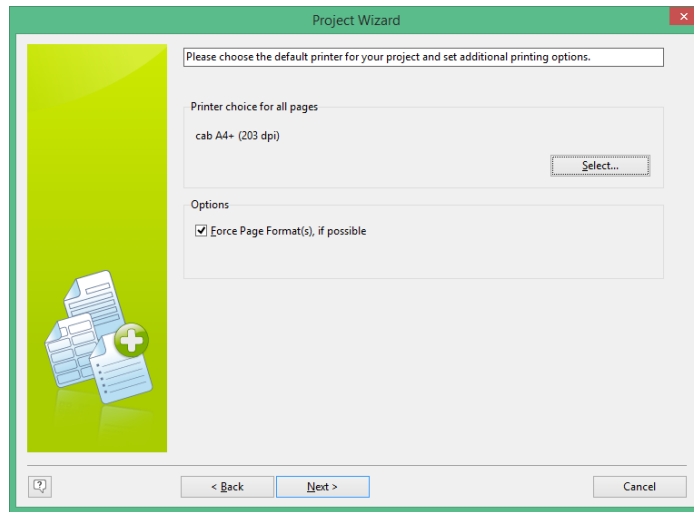
After this a window will open where you can design your label.

Properties of the label

Before you can design a label, you first have to enter the properties. This is done with a Wizard that will guide you through the properties. What you have to enter is:

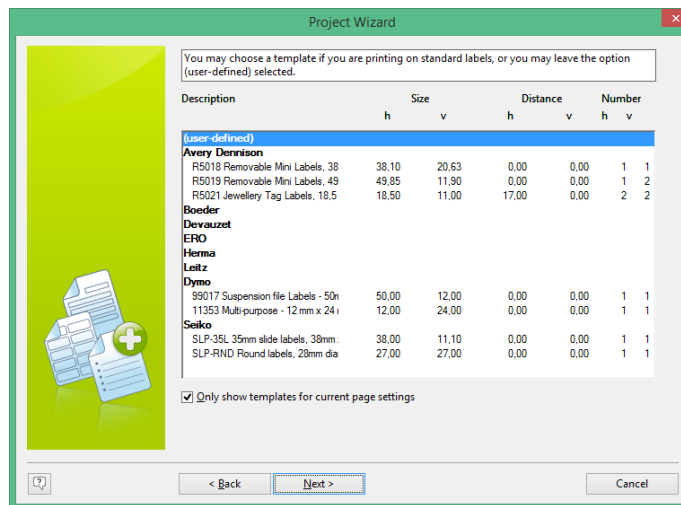


The first window is called 'Welcome to the project wizard'. Press the 'Next' button.



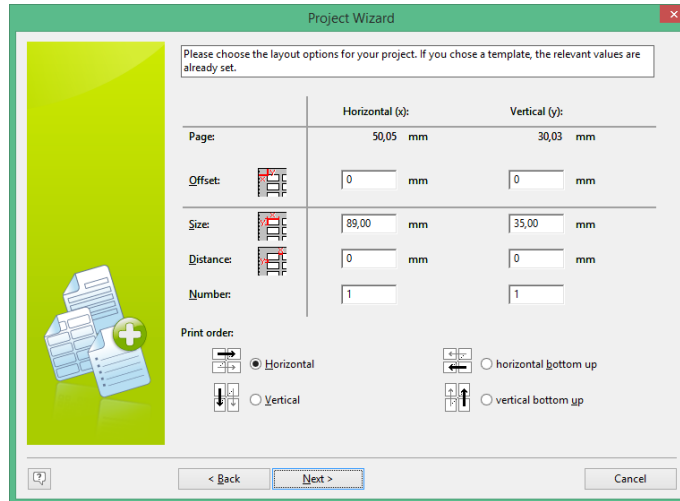
Printer choice

In the next window there will be asked what type of printer you want to use for your label. As a default the default-printer will be used. By pressing the button 'Choice', you can also choose another printer. The type of printer is dependent on the label format you choose. Press the next button.



Label format

The format of the label must be set, this default is set to 'user defined'. Keep this setting and press 'Next'.



Label sizes

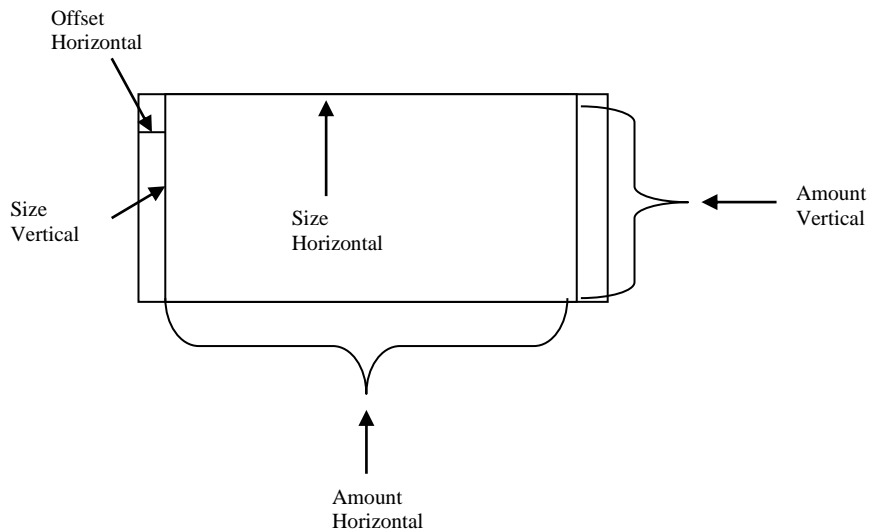
Now you can enter the size of the label (default it takes the size based on the paper-format you have defined in the label-printer-driver). You can enter values for the height and width, the space between the labels and how many labels appear on a sheet of paper. Of course, this depends on the printer and paper size you are using. Enter the size and press ‘Next’. *The following gives an explanation about the label-sizes.*

Explanation of the labels sizes

Depending on the type of printer and label format you are using, you enter the label sizes.

Example 1

Suppose you have a printer that is using a label tape, where the printer cuts each label. In this case the printer will produce just one label at a time. See figure:



Now you can enter the following:

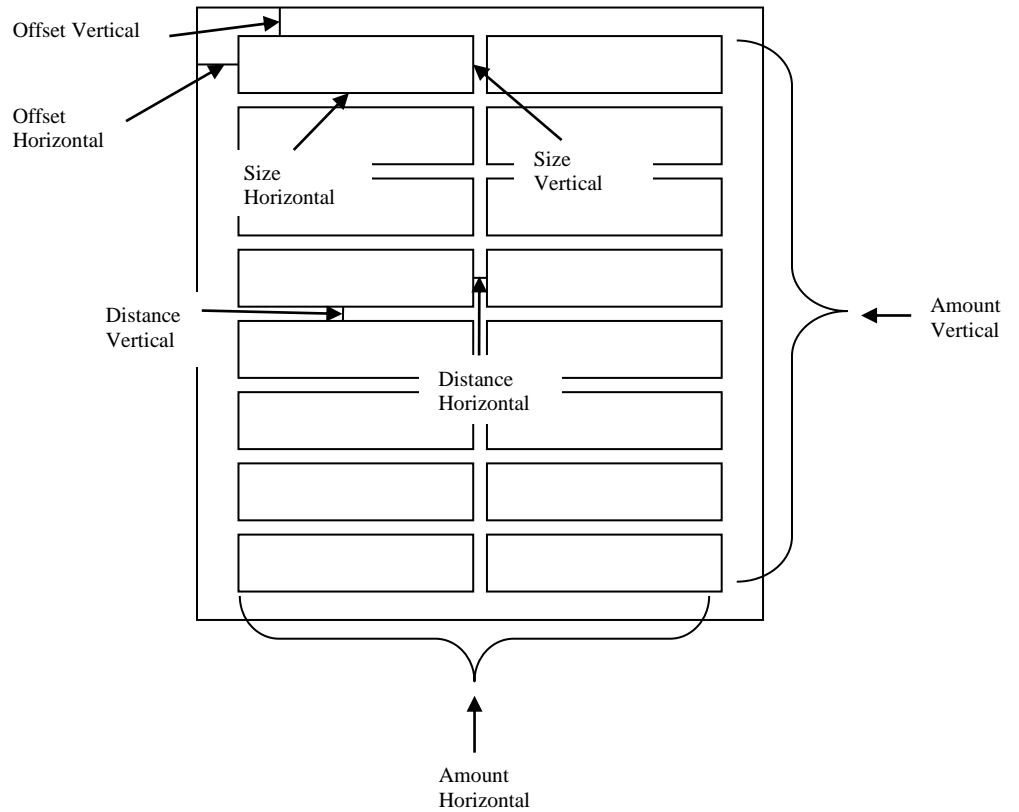
<i>Page</i>	<i>Horizontal</i>	<i>Vertical</i>
Offset	2.0	0.0
Size	80.0	40.0
Distance	0.0	0.0

Amount	1	1
--------	---	---

Remark: In this case there is no vertical offset, because all labels appear under each other. Also there is no need to set values for horizontal and vertical distance. This is different from the next example.

Example 2

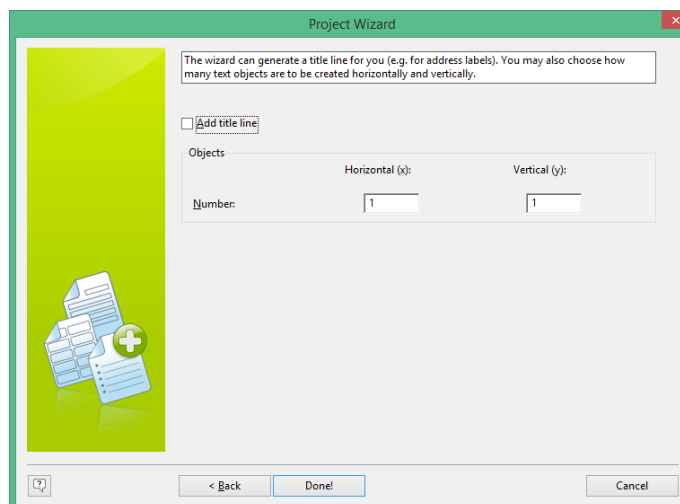
Suppose you are using labels on a A4-paperformat. On each page there can appear 16 labels. This would look like this:



The arrow indicates what has to be entered. An example of the values is:

<i>Page</i>	<i>Horizontal</i>	<i>Vertical</i>
Offset	5.0 mm	3.0 mm
Size	63.0 mm	24.0 mm
Distance	2.0 mm	2.0 mm
Amount	2	8

Finishing the wizard



In the last dialog unmark the checkbox named 'Add title line' and click Done!-button to finish the wizard. After this you enter the Label Design-dialog.

Designing the label

After you have set the properties of the label, you will enter the design-part. Here you can decide what information you want to print on the label. This information can consist of fixed and variable information.

Variable information

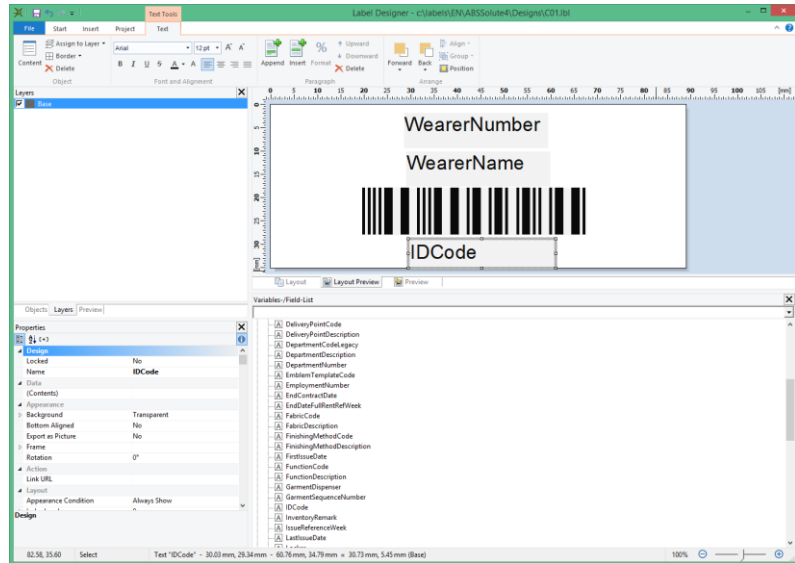
To put variable information on a label, you place fields on it. These fields will be filled in during the process of the labels, so before they will be printed. In this way, each label can contain variable information.

Fixed information

To put fixed information on a label, you place so called objects on it. An object can represent text or graphical information. For example, you can put the name of your company on each label, or your company-logo. You can also combine this with variable information.

Overview of the design-window

The design-window is divided in the following parts:



Design

The main part of the window consists of the design-part. If you create a new label-design, this will be empty, that is why you only see a white rectangle. This rectangle is showing enlarged what the design will look like. Horizontal and vertical rulers surround the rectangle; they indicate how large the label-design is.

Variables-/Fields-list

A separate window named ‘Variables-/Fields-list’ shows the fields you can put on the label-design. The content of this list depends of the mode you have chosen. See the previous chapter for an explanation of the different modes. If this window is not showing, you can activate it with menu-option ‘Project’ and place a mark before the option ‘Variables/Fields’.

Layout/Layout Preview/Preview

Under the design there are 3 tabs that can be used to show the layout, a preview of the layout or the preview. In Layout-tab you can work on the layout without seeing the contents of the layout-elements. In Layout preview-tab you can also work on the layout but it will also show the contents of the layout-elements. In Preview-tab you will see a preview of the label, this is how it will look like when you print the label.

Creating a design with fields

You can place a field on the design by selecting a field in the window 'Variables-/Fields-list' and dragging it to the design. You do this as follows:

1. Select a field from the window 'Variables-/Fields-list' by clicking on it with the mouse.
2. Keep the mouse-button pressed and move the mouse-arrow to the design.
3. Release the mouse-button. Now a rectangle is shown in the design.

Overview of used terms

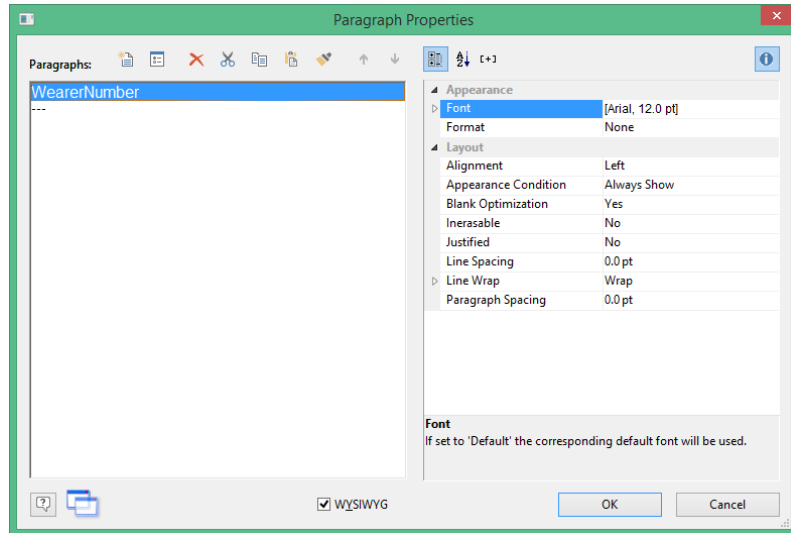
During the design of your labels you will be presented with some terms, which will not all be clear from the start. These are terms like 'Object', 'Paragraph' and 'Expression'. To make things more clear, we will first cover these terms in a short overview.

<i>Term</i>	<i>Explanation</i>
Object	A house is made of parts. A part can be a window, a door, a roof or a wall. A window can be made of parts itself, like glass and woodwork. A design is also made of parts, which are called objects. An object can be a text, a barcode or a picture. A text itself can be made of parts itself, like a field or a fixed text.
Paragraph	A paragraph is part of an object. An example is a text-object, which can consist of a paragraph with two fields, and a paragraph with a fixed text.
Expression	An expression is like a calculation with a result. In the design it is used – as an example - to append texts. If you want to append a first name with a last name separated by a space, you can use an expression to accomplish this.
Field	A field is like an input-field that you can put on a design. This input-field is filled in as soon as it is being printed.

Objects

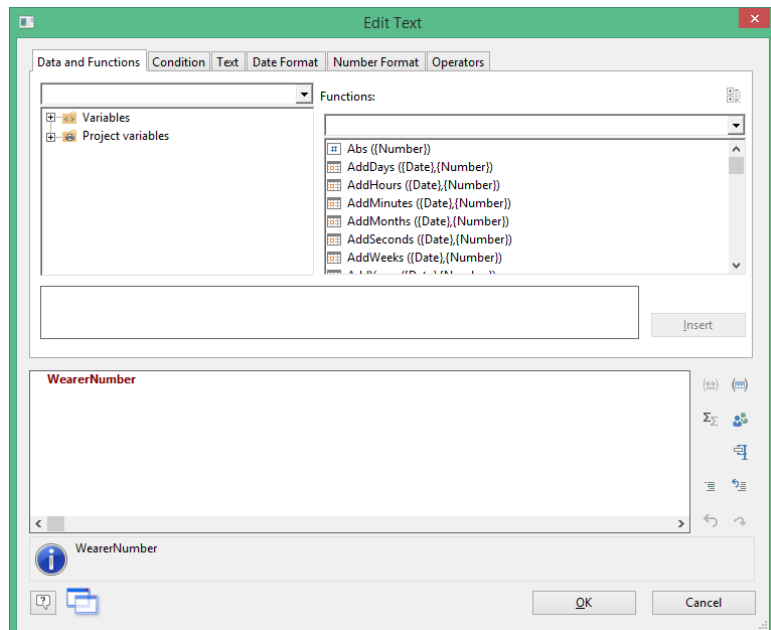
The rectangle that appears on the design is called an object. You can change the size of this object, move it or delete it. There can appear more than one objects on the design. You select an object by clicking on it with the mouse.

An object is of a certain type, for example, it can be a text-object or a barcode-object. A text-object can only contain text, and a barcode-object can only contain a barcode. Other objects are also possible, like a rectangle-object or a picture-object.



Changing text-properties

You can change the properties of a text-object by selecting the object using the mouse after you double-click it. Depending on the object-type (like text or barcode) you can change the properties that belong to it. If you have selected a text-object then you can change - for example - the font. By pressing the 'OK'-button afterwards, the changes you have made will be kept. Otherwise press the 'Cancel'-button to cancel the changes.



Changing a paragraph in a text-object

Inside an object there are paragraphs. A paragraph can consist of one or more parts. A part can be a field, a fixed text, a formula or a combination of this. In the upper part of the Object-window, you see the paragraphs that belong to it. By double-clicking on a paragraph you can change the properties of it. Another window will be shown named 'Edit Text' if it was a text-object. At the top of this window, there are tab-pages, with these tab-pages, you can select what you want to use in the paragraph. For example, this can be a formula or a text.

Using expressions in a design

Changing an expression

We will concentrate on the first tab-page in the window named 'Edit text', that is already selected when shown. This tab-page is named 'Variables and functions'. At the top of this window two lists are shown. The left one is showing the variables you can use in the paragraph. The right one is showing functions. At the bottom is a section that shows the contents of the paragraph. This content represents an expression that can also be entered manually. An expression is a combination of fields/functions and operators. An operator like '+' can be used to combine two fields.

In the first tab-page there also can be found the fields under the heading 'variables'. You can look at the fields by pressing the '+'. When the fields are shown, you can also drag them to the section at the bottom of the window. If there is already a field in this section, and you drag another one to it, the two will be combined with a plus-sign between them, like 'field_03 + field_04'. This means that the contents of these two fields will appear on the label, without a separator between them. To add a separator you can change the expression manually to something like 'field_03 + " " + field_04'.

Some examples with expressions:

```
field_03 + " " field_03 + " " + field_04
field_05 + " - " field_08
"Laundry Keystone"
"Function: " + field_06
```

Under the space where you fill in the expression, a message will appear about this expression. If the expression is correct, you will see the result of the expression. If the expression is not correct, an error message will be shown. An expression is not correct if you have typed a field that does not exist, or if you have misspelled something. You can compare it when you're typing a text that can contain spelling-errors. Try to make no mistakes!

An expression with a function

With a function you can change the contents of a field. This will be explained with an example. Suppose you have the following expression:

Field_05

...the result of this expression will always be the complete contents of this field. Suppose this field represents an administration number, where the first 2 positions represent a location number. You can achieve this with the expression:

```
Left$(Field_05, 2)
```

You can enter this expression manually or in the following way, from the window named 'Edit Text':

1. Select – from the right list titled 'Functions' – for 'String-functions' and press the '+' that appears at the left side. A list of functions will be shown.
2. Select the function named 'Left\$({String},{Number}) -> {String}' and double-click on it.. The function will be shown in the expression-space below.

Left\$({String}, {Number})

Left\$({String}, {Number})

Left\$(Field_05, {Number})

3. Be sure that the first part of the Left\$-expression – in the expression-space – is selected: {String}. If this is selected, drag the field named ‘field_05’ from the top-left-list to this selected part. Now you must have: ‘Left\$(Field_05, {Number})’.
4. Be sure that the second part of the Left\$-expression – in the expression-space – is selected: {Number}. If this is selected, type the number ‘2’ from the keyboard. Now you must have: Left\$(Field_05, 2).

Overview functions

The following is an overview of functions that can be useful. This is just a selection of all possible functions that are present. In practice you only need a small set of functions for use in your labels.

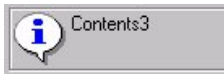
<i>Function</i>	<i>Description</i>	<i>Example</i>
Left\$({String}, {Number})	Gets a substring from the given string, from the left side of the string, with a maximum of (number) characters.	Left\$(Field_04, 2) If the contents of Field_04 is ‘259654’ the result will be ‘25’
Lower\$({String})	Converts a string to lowercase.	Lower\$(Field_02) If the contents of Field_02 is ‘Shirt’ the result will be ‘shirt’
Upper\$({String})	Converts a string to uppercase.	Upper\$(Field_02) If the contents of Field_02 is ‘Shirt’ the result will be ‘SHIRT’
Rtrim\$({String})	Removes the spaces at the end of the string.	Rtrim\$(Field_02) If the contents of Field_02 is ‘Shirt ’ the result will be ‘Shirt’
Ltrim\$({String})	Removes the spaces at the beginning of the string.	Ltrim\$(Field_02) If the contents of Field_02 is ‘ Shirt’ the result will be ‘Shirt’
Mid\$({String}, {Number}, {Number})	Gets a substring from the given string. The second argument is the begin position (if negative: from the end), argument 3 is the number of characters (default is 255). Note: The begin-position starts at 0.	Mid\$(Field_03, 4, 2) If the contents of Field_03 is ‘20050430’ the result will be ‘04’

Other examples:

<i>Example</i>	<i>Description</i>
Str\$(Val(Field_03) + Val(Field_04), 0, 0)	This will add two numeric values. If Field_03 is '1000' and Field_04 is '50' the result will be '1050'.
Left\$(Field_03, 4) + "-" + Mid\$(Field_03, 4, 2) + "-" + Mid\$(Field_03, 6, 2)	This can be used for showing a date-field in a specific format. Suppose the Field_03 is '20040325' it will be shown as '2004-03-25'. See also the following example.
Date\$(Date(Field_03), "%m/%d/%y")	This can be also used for showing a date-field in a specific format. Suppose the Field_03 is '20040325' it will be shown as '3/25/2004'.
If(Field_03 = "Y", "Hello", "")	This can be used for comparing the contents of a field and show something different. If the Field_03 is 'Y' the text 'Hello' will be shown. If not, nothing will be shown.
Date\$(Today(), "%m/%d/%y")	This shows the current date on the label. For example: 4/23/2005
Str\$(WOy(Date(Field_03), 1), 2, 0)	This will show the week of the year. The contents of field Field_03 will be shown as the week of the year. For example '20050227' will be shown as 9.
If(Chr\$(Val(Mid\$(Field_03, 4, 2)) + 64) = '@', "", Chr\$(Val(Mid\$(Field_03, 4, 2)) + 64))	This will show the month of the date '20050325' as a character. It will show the first month as 'A', the second as 'B', the third as 'C', etcetera. If the date is empty, it will show nothing. Example: If date is '20050325' it will show: C

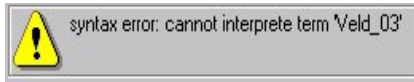
Remark 1: These examples can also be used in other modes, for example in the ABSolute-mode, with other fields. For example instead of Field_03 you can use FirstIssueDate.

Remark 2: During entering the expression, you can also enter a string instead of the field-name. So, instead of Field_03 you can enter "20050325", to check the result.



Be sure the expression is correct!

If you enter an expression, it will be shown if it is correct. The character I (Information), is showing you that it is correct, otherwise an exclamation mark will be shown, with an error message. Please, be sure you always enter correct expressions! Otherwise you will errors during the printing of the labels.



Saving the design

As soon as your design is ready, you can save it. You can do this as follows:



Saving with the menu

Choose from the menu for 'File' and 'Save', after which the design will be saved. To exit the design-window, you choose for 'File' and 'Exit'.



Saving with the toolbar-buttons

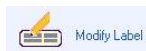
From the toolbar-buttons at the top of the window, choose for the disk-button. You can exit the design-window, by clicking on the button with the door.



Saving during exit

Another method is to exit the design-window, after which the question 'Save changes?' will appear. By answering 'Yes' your design will be saved, and you will exit the design-window. By answering 'No' your design will not be saved.

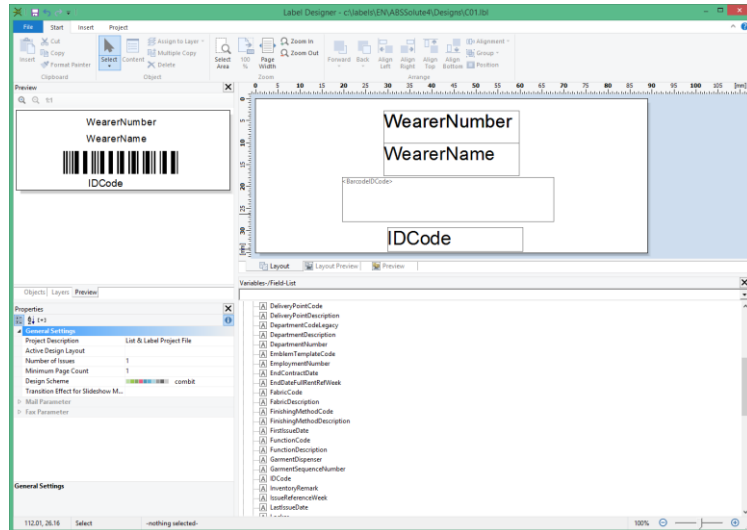
Modify a design



If you want to modify a design, you can do this in the following way:

1. Start the SparkPrint-program
2. Select the mode, Manual, ABS-Legacy, Legacy, ABSolute, ABSolute PWB or Solar
3. Select a design you want to modify
4. Press the button – in the left-side menu – with the description 'Modify design'
5. Now the design-window will be shown, where you can modify the design

The following screen will be shown:

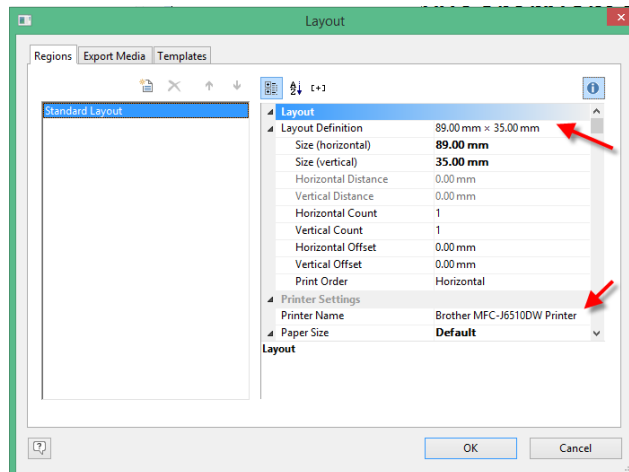
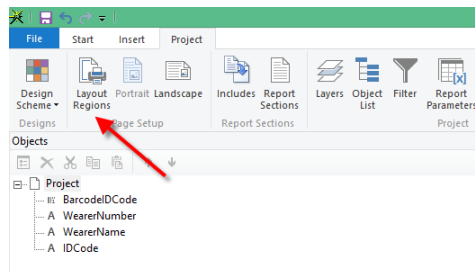


See the paragraph named ‘Creating a design with fields’ on page 28 for an explanation on how to modify a label.

Changing the properties of a design

During the creation of a new design you can enter the properties like the label-printer to use and the paper-size. If you want to change this later, you can do this as follows:

1. Start the SparkPrint program
2. Choose the right mode
3. Select the label design that you want to change
4. Choose for option Modify Label



Now you have started the design-window. Here you choose the menu option 'Project' and then 'Layout Regions'. You get a window where you can change the printer via the property named Printer Name and the paper-size via the property named Paper Size. Also the dimensions of the label can be changed here at property Layout definitions. By clicking at the right-part of these properties a sub-dialog will be shown where you can make changes. After you have made your changes, press the OK-button to confirm them.

Options to ensure the contents fit in the field

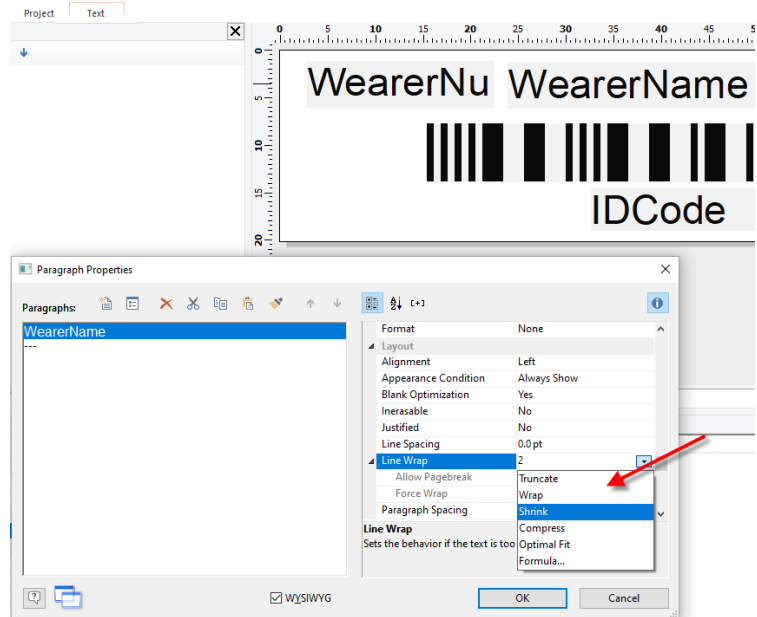
For each field you place in the design, there exists a configuration. To change the configuration, you have to open the 'paragraph properties'-dialog. You can do this by selecting the field in the design and double-click on it via the mouse.

In the 'paragraph properties'-dialog there is an option called 'Line Wrap'. This option determines what to do when the contents of the field is longer than the width of the field in the design.

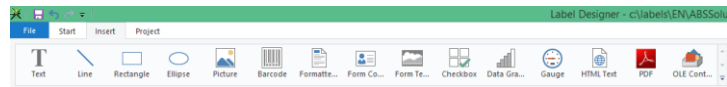
This option can be needed for certain fields like 'wearer name' or 'customer name' that can differ in length. For example via 'Shrink' it will automatically shrink the contents to be sure it fits. This means the font will get smaller. Of course, when the contents is very long, it is possible the font gets so small it will not be readable anymore.

Overview of Line Wrap Options:

<i>Line Wrap Option</i>	<i>Description</i>
Wrap	The content will be wrapped; it will start a next line when it does not fit. To prevent longer words from getting truncated, you can use the option 'Force Wrap' to force a wrap after the last fitting character. This is the default for this option.
Truncate	The contents is truncated to fit the width of the field. The part that does not fit is not shown.
Shrink	This will shrink the contents when needed, so that the contents can be displayed completely without a wrap. Note: This is the recommended option.
Compress	The character spacing will be decreased if needed so that the paragraph can be displayed completely without a wrap.
Optimal Fit	The font size will be increased or decreased until the contents is filling the field (vertical/horizontal).
Formula...	A formula (expression) can be used to determine what to do when the contents does not fit.



Placing a figure in a design



We will explain how you can place a figure in a design. A figure can be something like a line, a rectangle, a circle or a picture. With an example we will explain this. For this example we will modify an existing design, but you can also first create a new design.

Do the following:

1. Start the SparkPrint program
2. Select a label
3. Select the option 'Modify label'

Now you have opened the design-dialog. Choose for option Insert. Now at the top several options will be shown that can be inserted in the design.

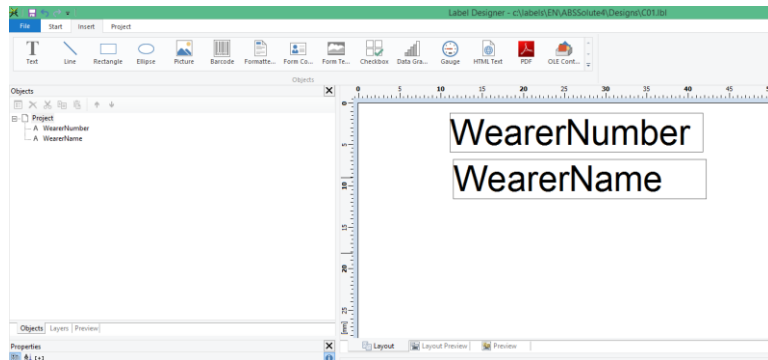
With these insert-options, you can place an object in your design; see for an explanation about objects the start of the chapter. With these options you can do the following:

Button	Description
Text	With this button you can create a text-object. This is an object that can contain a text, variable or formula.
Line	If you want to have a line in your design, you can choose this object.
Rectangle	With this object you can place a rectangle.
Ellipse/ Circle	If you want to have an ellipse or circle in your design, you can choose this object.
Picture	With this button you can place a picture in your

	design. A picture can be a file that can be read from the disk. For example, you can place your <u>company-logo</u> in your design.
Barcode	If you want to have a barcode in your design, you choose this one.
Formatted text	If you have created a formatted text, with a program like MS-Word, you can use your design with this button.
Others	There are also other options, but these are not all suitable to use in a label-design.

Placing a rectangle in a design

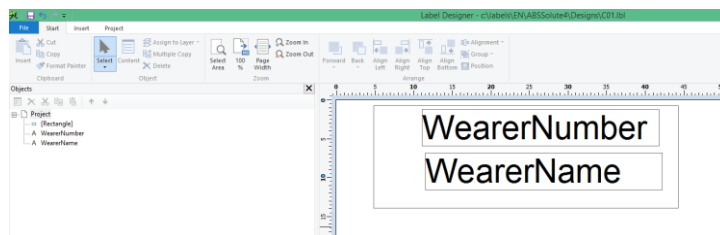
As an example we will place a rectangle in a design. To do this you first create a new design, or open an existing one. A part of the screen will look this:



Do the following:

1. Select from the Insert toolbar the 3rd button from the left, and click on it.
2. Move the mouse-arrow to the design-part. The mouse-arrow will change to a plus. Now you can decide where the left-top-position of the object will start. Press the mouse-button to confirm this position.
3. Now you have to decide where the right-bottom-position should end by moving the mouse. By again pressing the mouse the object is placed – as a rectangle – in the design.
4. You can always move the object or change it in size, with the help of the mouse.

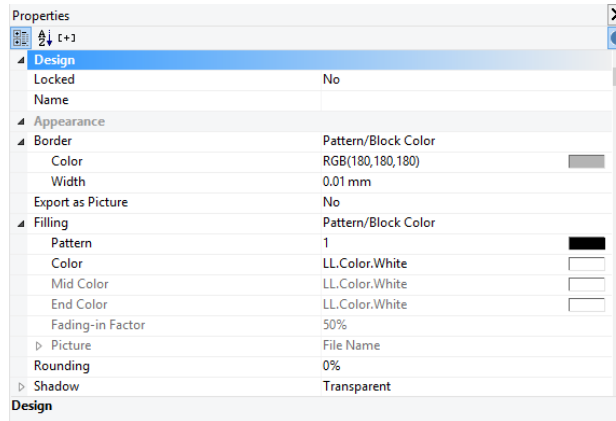
You will see the following:



By clicking the window named 'Preview' you can see a preview on screen. You will see that for each label you will only see a rectangle, the fields are hidden behind it. That is why we have to

change the properties for the rectangle-object. You do this as follows:

1. Be sure the rectangle-object has been selected; you can select it by clicking on it with the mouse.
2. Double-click on the object. You will see this window:



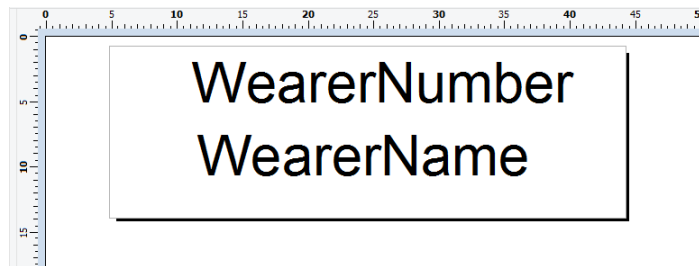
You can now change the following properties:

Property	Description
Border	Do you want to have a line around the rectangle? By setting the Width to a value higher than 0 you will get a line around it.
Filling	You can select the filling color of the rectangle and the fill-pattern. If you have chosen 'Transparent', the rectangle will be transparent; otherwise, all that is underneath it will be hidden.
Shadow	With this option you can create a shadow at the bottom-right of the rectangle. In that way it looks like the rectangle is floating. For this shadow you can also set a filling-color and a pattern.

For our example we'll do the following:

1. For the property 'Filling' be sure you have chosen 'Transparent'.
2. For the property 'Shadow' you set the width to 0,30 mm.

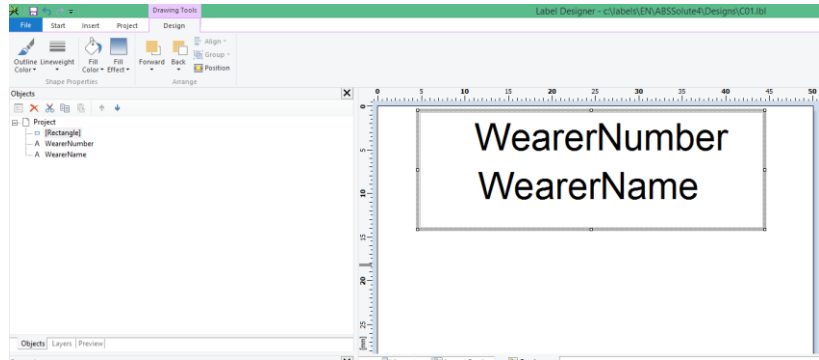
If you press OK-button, you see the following in the 'Preview'-window:



Placing a picture in a design

In the following example we are going to place a picture in a design. You can think of a company-logo that can be included in the design. This logo must be present as a file on your computer, with extension .BMP.

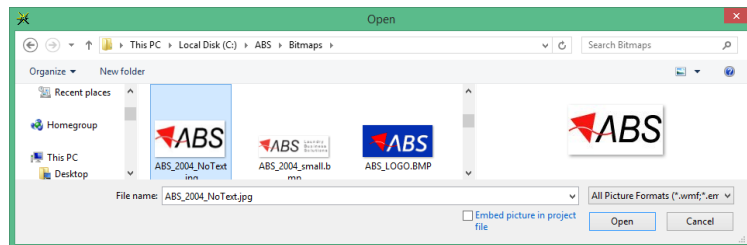
It is assumed that you already have opened an existing design. Part of the screen will look like this:



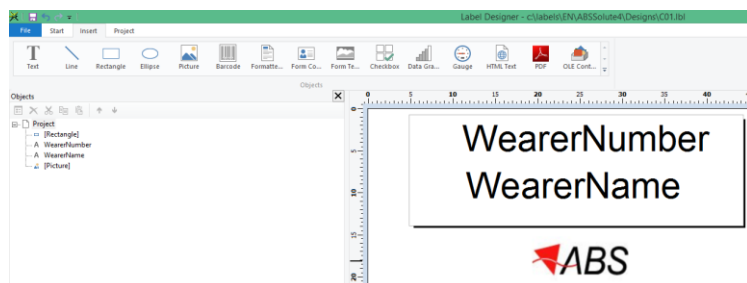
Do the following:

1. From the Insert-options, select the 5th button from the left, and click on it. This button will stay gray, until you have placed the object on the design.
2. Move the mouse to the design. The mouse-pointer will change to a plus sign. Now you can decide where the top-left-part will start of the object. Click the mouse.
3. You'll see a shading which indicate the size of the object. Now you can decide where the bottom-right-part will end of the object, by moving the mouse. By clicking the mouse again, the object will be placed on the design.

After placing the picture-object in the design, it will open a dialog where you can browse for a picture-file. Choose the picture-file and optionally mark the checkbox 'Embed picture in project file' (when marked it will include the picture in the design, otherwise it will always read it from the file itself, in the latter case you must be sure the picture-file it always available). After clicking Open it will open the picture-file and put it in the design.



Afterwards the design looks like this:



As you see in this preview, the picture can have color. But it depends on the printer you are using, if this color can be printed out. Also the quality of the printout is dependent of the type of printer

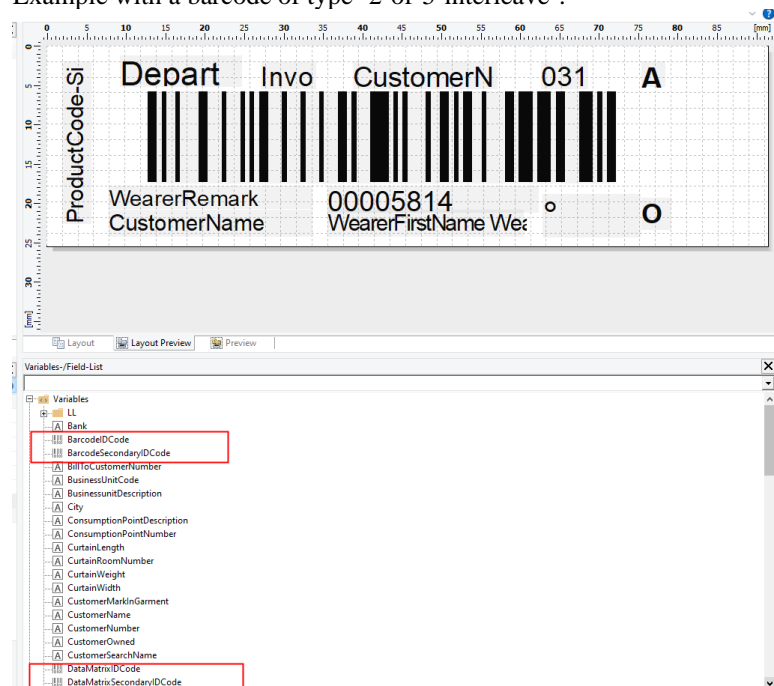
you are using. If you are using pictures in your design, this will be more critical.

Placing a barcode in a design

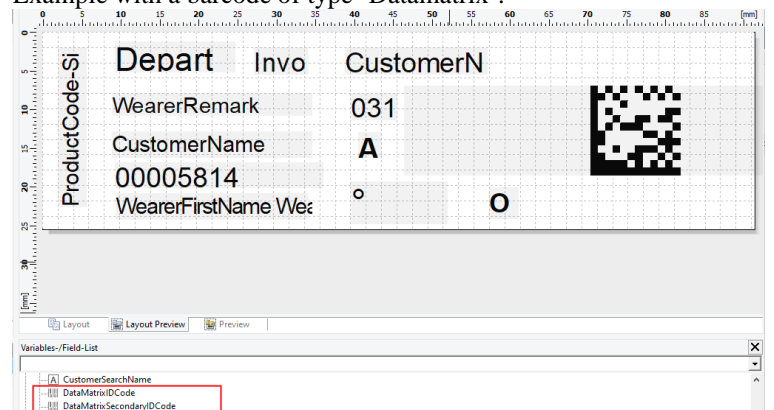
In the following example we are going to place a barcode in a design.

In the first example, see picture below, a design is made in ABSolute-mode. Here we have the option to add 2 types of barcodes in the design, one is the barcode of type '2-of-5-interleave' and another is the barcode of type 'datamatrix'. These barcodes can be selected from the list of fields that is shown below the design. To add a barcode, just drag and drop it in the design.

Example with a barcode of type '2-of-5-interleave':

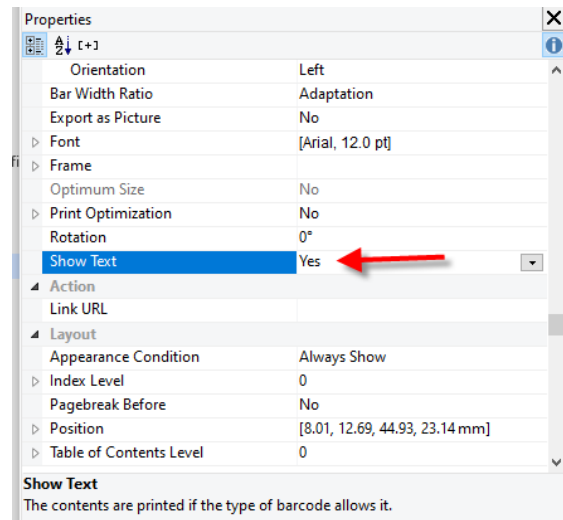


Example with a barcode of type 'Datamatrix':

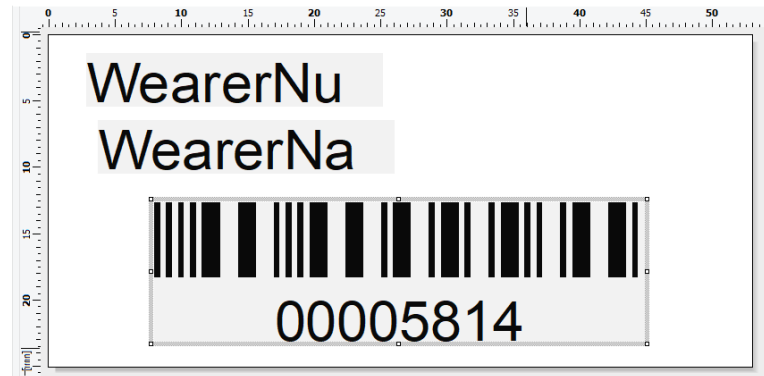


Via the properties of the barcode, you can make the choice to show the ID or not. This can be done via the property named 'Show Text' (Yes or No). Default it is set to No. When changed to 'Yes', it

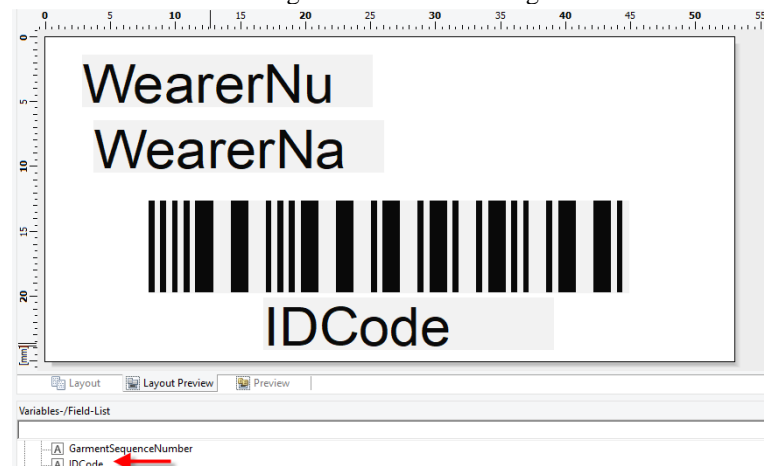
shows the ID of the barcode. Via property 'Font' you can change the font and also the size of the font. See example below. It is also possible to set the 'Show Text' to 'No' and show the ID by adding the IDCode-field to the design.



Show Text = Yes



Show Text = No and using IDCode-field in design.

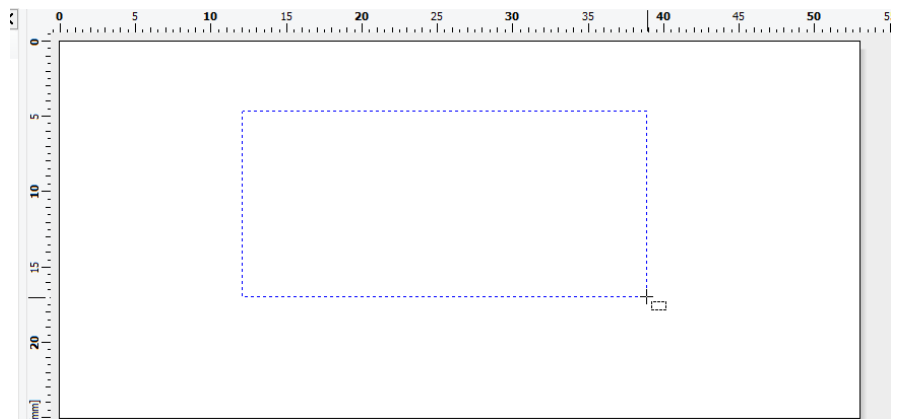
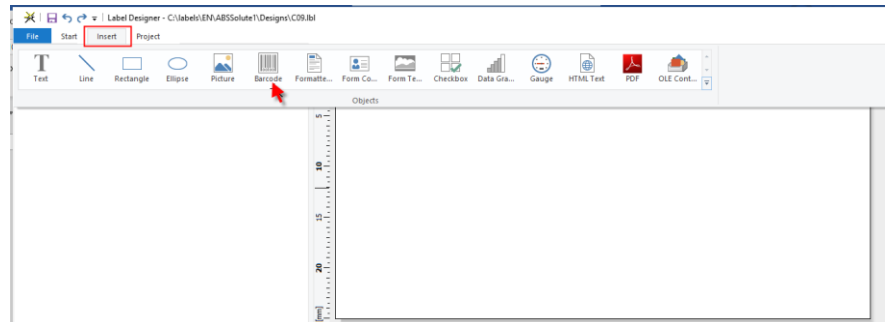


Using other types of barcodes in the design

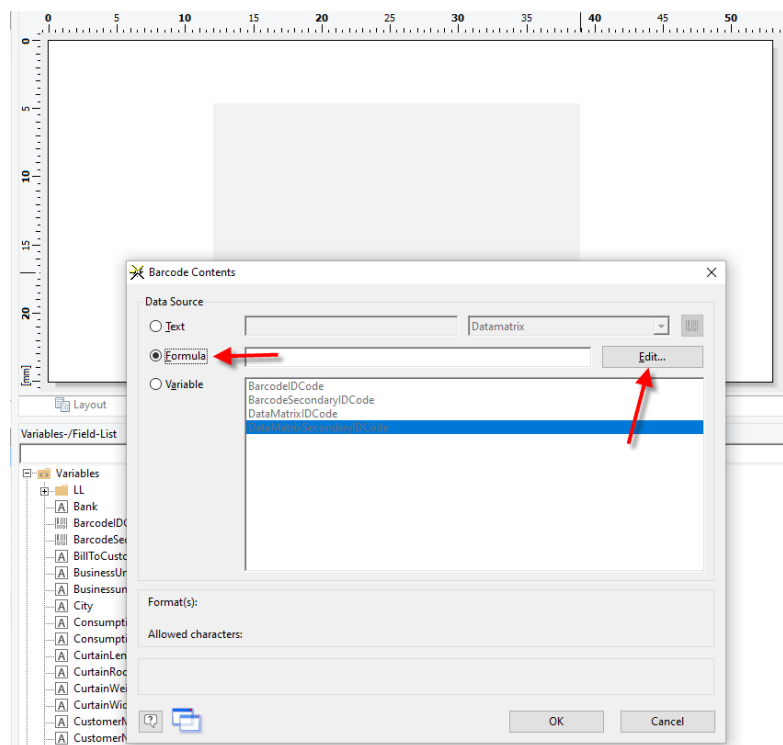
As mentioned in previous paragraph, there are 2 types of barcodes available via the fields that can be used in the design. Apart from

that it is also possible to add a different type of barcode in the design. Here it will be explained how this can be done.

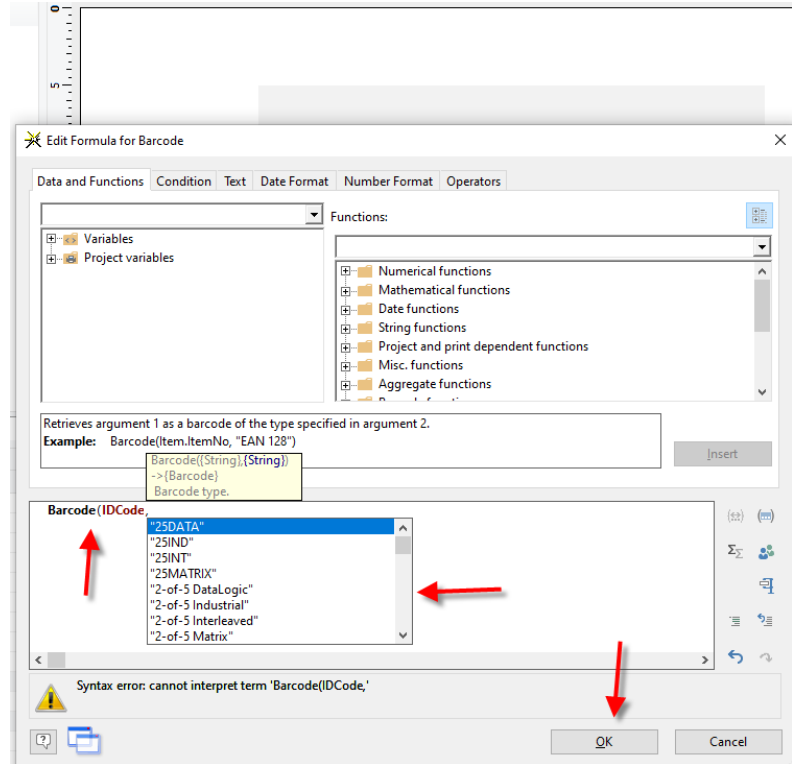
Step 1. First place a barcode-shape to the design, via Insert-Tab and by clicking on the Barcode-icon and after that by clicking in the design and by indicating a rectangle (size) for the barcode.



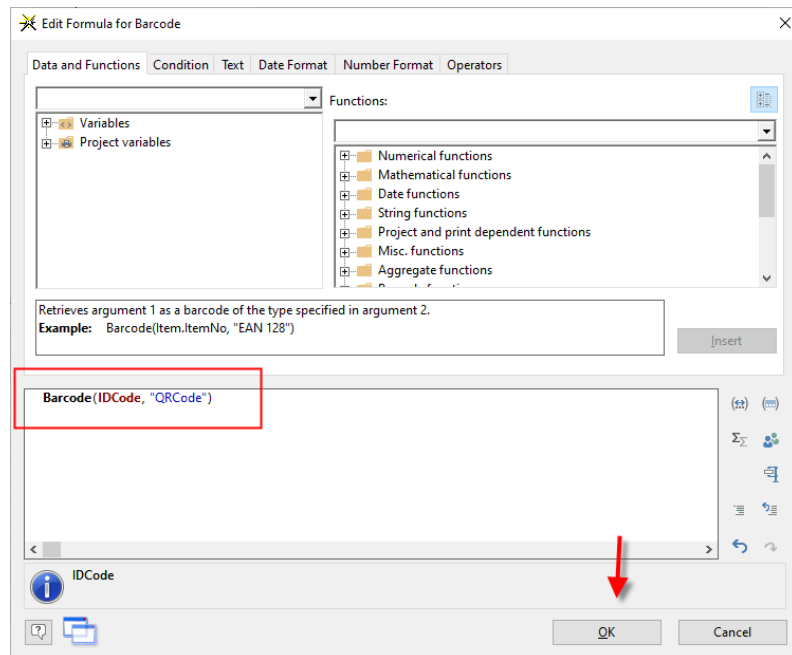
Step 2. After that it will automatically open the Barcode Contents-dialog. Select 'Formula' and click the Edit-button.



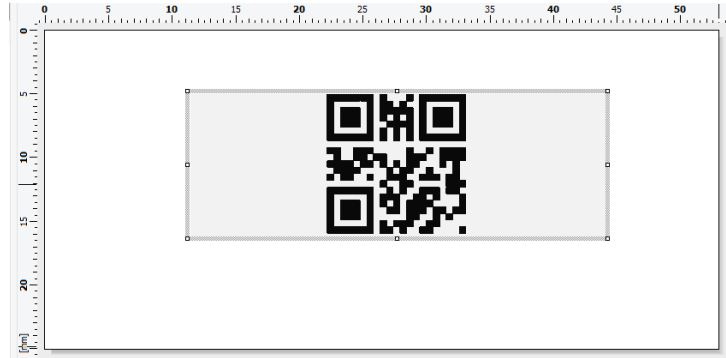
Step 3: The 'Edit Formula for Barcode'-dialog opens. Enter 'Barcode(IDCode,' or 'Barcode(SecundaryIDCode,' (when available from the list of fields), and after that you will get a choice via a list of barcodes. You can scroll through the list and when the barcode is selected, click on it to add it in the formula.



Step 4: At the end be sure to add a ')' to the formula and click OK-button when finished. See example below.



Here the barcode of the selected type is added to the design. Any properties of the barcode can be changed via the properties-section.



In case you want to change the type of barcode, then double-click on the barcode-shape in the design after which you can change the type via the formula.

Chapter 6 SparkPrint

This chapter explains what you can do with the SparkPrint-program.

SparkPrint

You can do the following with SparkPrint:

- Design and modify labels for each mode
- Manually fill-in labels by keyboard and print them
- Fill-in labels by file and print them

Starting SparkPrint

SparkPrint can be started in the following way:

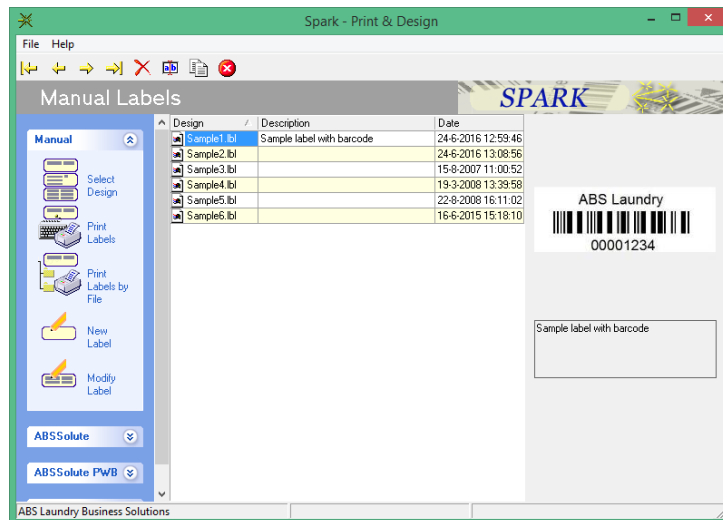
Through the desktop

From the desktop, double-click on the icon named 'SparkPrint'

By menu

From the menu, select the option Start, Programs and Spark. Click on the icon named 'SparkPrint'

When the program is started, you'll see the following screen:



Selecting labels

When SparkPrint has been started, you will see a window from where you can select labels. You will see a list of available label-designs with at the right an example of the label. For each label you'll see the name and the creation/last modified- date. You can select a label by use of the mouse or keyboard.

Toolbar

At the top is a toolbar, with this toolbar you can navigate through the labels. You can also delete a selected label, rename it, or copy a label. For each function there exists a button.

Sort

It is possible to sort the list of labels on name or on date. By pressing the label 'Design' you can sort the list on name. By pressing the label 'Date' you can sort on date.

Manual mode

After you have started SparkPrint you will see the selection window for the manual mode. At the top of the window the title 'Manual Mode' will be shown. If you want to switch to another mode, you press on one of the labels – named 'Manual', 'ABS-Legacy', 'Legacy', 'ABSSolute', 'ABSSolute PWB', 'ABSSolute ORS' and 'Solar' - at the left-side menu.

In the manual mode you can do the following:

- Design labels and modify them
- Print labels by entering the contents manually
- Print label by entering the contents through a file

Creating a new label design

You create a new label design by pressing the button 'New label' in the left side menu. You'll be asked for a name for the new label. See for a further explanation the chapter titled '

Designing labels’.

Changing an existing label design

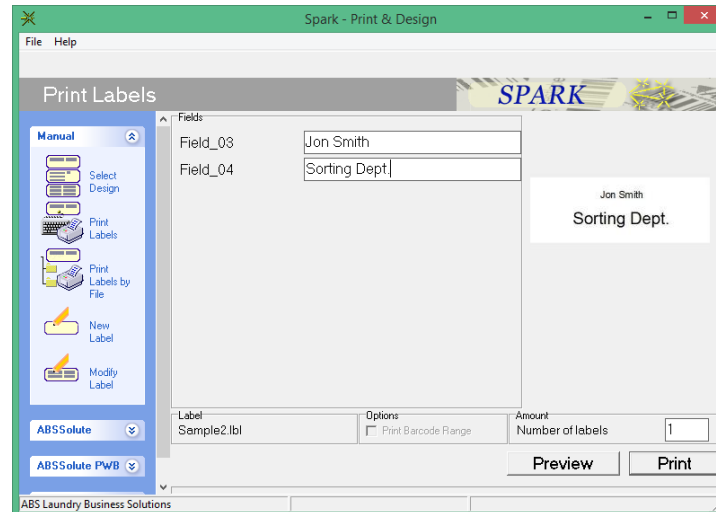
You change an existing label design by first selecting the label from the list of label, after which you press the button ‘Modify label’ at the left side menu. See for a further explanation the chapter titled ‘

Designing labels’.

The option Print Labels

Print Labels

By selecting the option ‘Print Labels’ in the left side menu, you can manually fill-in a label and print it. As soon as you have selected this option, the following window can be seen:



At the right part of this window, you see an example of the contents of the label you had selected. The fields that are part of this label can be filled-in manually in the middle part of the window. Suppose you want to print labels with the name and department of employees on each label. For each employee you can fill-in the name and department, after which you enter the number of labels you need, after which you press the Print-button.

Field

Dependent on the design of the label, you can fill-in one or more fields manually. Because all fields are numbered, you will see fieldnames like ‘Field_01_Barcode’, ‘Field_02_Barcode’, ‘Field_03’, ‘Field_04’, etc. There is a maximum of 16 fields, but this will be sufficient for most cases. The first two fields are reserved for barcode-fields. From field 3 and higher are text-fields. Keep this in mind when you design your labels..

It depends on the size of the label and the font you use, how many fields can be put on a label, but in most cases, two or three fields will be enough.

Entering fields

You can enter fields by clicking in a field or by pressing the TAB-key until you have reached the desired field, after which you can enter the contents by keyboard. During typing you can see at the right of the window how the contents will look like in the label. Dependent on things like the width of the label, the length of the field in the design and the font, you can enter a long or short text in the field.

Entering the amount of label

You can enter the amount of labels you need in the field named ‘Number of labels’. You can do this by a mouse-click in this field,

or by using the TAB-key until you have reached this field, after which you can enter the amount. A maximum of 99 can be entered.

Printing labels

As soon as you have entered the fields and the amount of labels you need, you can print labels by clicking the Print-button, after which a print-command will be created. As an indication of this, you only will see a blue progress bar, under the Print-button, the actual printing will take place if SparkEngine has been started and is active. See also the chapter 'SparkEngine'. In all cases the print-command will be created and stored, regardless if SparkEngine is active or not.

Note: After you have pressed the Print-button, the progress bar will be present a short time, it is possible that you didn't see it. In that case, don't press the Print-button again; otherwise it will result in an extra print-command.

Preview on screen

As soon as you have entered the fields and amount you need, you can also see a preview on screen. You can get a preview by pressing the Preview-button. In that case a print-command will not be created. You close the preview-window by clicking the cross at the top right of the window.

Printing a barcode range

Printing barcodes

Suppose you need labels with a barcode range, where each barcode is incremented and stored automatically. With the option 'Print Labels' it's possible to print labels with a barcode. You only need to create a label design that includes the field 'Field_01_Barcode'. By checking the option 'Print Barcode Range' this field will be filled in. The last barcode will be shown automatically in the field 'Field_01_Barcode', so you only need to fill in the rest of the fields. All labels you print will include an incremental barcode.

Entering the last barcode

In SparkEngine you can see and set the last barcode. This barcode will be taken as soon as you start printing a barcode-range. You can do this with the option 'System settings' and 'Barcode settings'. It's important you set it to a barcode, which is not in use yet in your company. This applies also to all barcodes above this last barcode.

Creating a label design with a barcode field

To print barcode ranges, you need one or more label design that contains the field 'Field_01_Barcode'. Once this field is part of the design, you can check the option 'Print Barcode Range'. Other fields you need in the design depend on the use of the label. Suppose you want to label items in your stock, then – in most cases – you'll only need a label with only the barcode (and number) on it. You also can decide to include your company-name on the label.

Printing a barcode-range

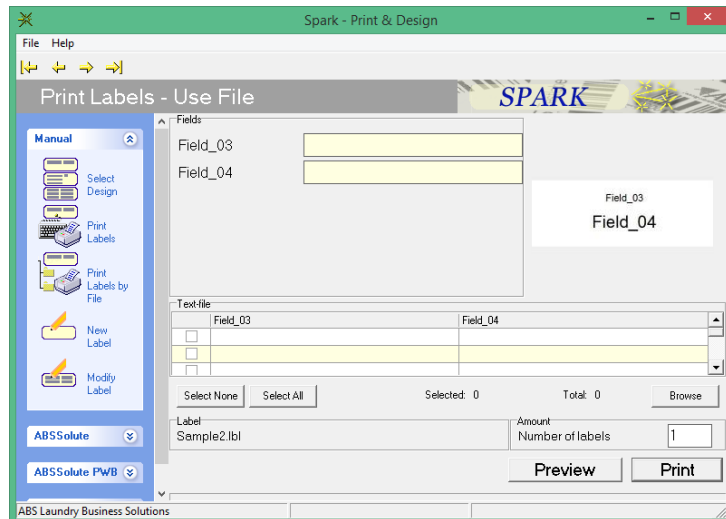
Do the following to print labels with a barcode-range:

- Start SparkPrint
- Select the label you want to use and contains at least the field 'Field_01_Barcode'
- Select the option 'Print Labels'

- Check the option 'Print Barcode Range', the last barcode will be shown in the field 'Field_01_Barcode'
- If there are any other fields, fill them in
- Enter the number of labels you want to print
- Press the Print-button, after which the barcode-range will be printed. Afterwards the last barcode will be shown in the field 'Field_01_Barcode'

The option Print Labels by File

With the option 'Print Labels by File' you also can print labels like the option 'Print Labels' with the difference that you don't enter the fields manually, but through a file. After you have started this option, you'll see the following:



In this window you see at the right an example of the label you had selected. In the middle-part of the window you see the fields that are part of the label. These fields cannot be entered manually. You can make use of a file to fill-in the fields. This file can be created with a program like Microsoft® Excel.

File specification

The file you can use to fill-in the fields must be of a special format:

```
<field_01_barcode>;<field_02_barcode>;<field_03>;<field_04>;
```

So a semicolon must separate each field. The contents of each field can be filled in freely; with the exception of the first two fields, these are reserved for barcodes. If you don't want a barcode, the first two fields can be left empty. There is a maximum of 16 fields.

The following is an example of such a file (without a barcode):

```
;;Anderson;C;Kitchen;
;;Peterman;B;Restaurant;
;;Salvador;M K;Kitchen;
;;Rubenstein;S;Kitchen;
```

An example with a barcode:

```
00003415;;Anderson;C;Kitchen;
00004433;;Anderson;C;Kitchen;
```

```
00001331;;Anderson;C;Kitchen;  
00003144;;Peterman;B;Restaurant;  
00003145;;Peterman;B;Restaurant;
```

File location

The location of the file is default set to 'c:\labels\user\textfile'. This can also be changed to another location with SparkEngine. See also the paragraph 'Setup of ' on page 59.

The Browse-button

You read a file by clicking on the Browse-button, after which a list will be shown with files. You select the file and press the OK-button. The file will be read and the contents will be shown in the list above this Browse-button. The number of fields you'll see is dependent on the design you are using.

Selecting lines

When you have read a file, the contents will be shown on screen as a list. Default all lines will be selected, so for each line there can be printed a label. This will happen when you press the Print-button. You can also de-select lines by clicking on the checkbox at the left of each line. With the checkbox you can select or de-select a line. You can also first press the 'Select none'-button to de-select all, after which you can select lines you want to include. To select all lines, you can press the 'Select all'-button.

Number of labels

The field 'Number of labels' can be used to enter the number of labels. This amount will be used for each line you have selected. For example, if you have selected 20 lines and the 'number of labels' has been set as 5, the total number of labels will be $20 \times 5 = 100$.

Be sure to set the 'number of labels' to 1 if you are going to print labels with barcodes. Otherwise you will get multiple (the same) barcodes.

Printing labels

When you have selected the lines you want to print, you press the Print-button to create a print-command. Depending on the number of lines you have selected and the number of labels you have entered, a print-command for number of lines x number of labels will be created. A progress-bar will be shown to indicate the creation of the print-command. The actual printing will take place when SparkEngine has been started. The print-command only creates a file. SparkEngine does the actual printing. See also the chapter 'SparkEngine'.

Note: After you have pressed the Print-button, the progress bar will be present a short time, it is possible that you didn't see it. In that case, don't press the Print-button again; otherwise it will result in an extra print-command.

Preview on screen

When you have selected the lines and entered the number of labels you need, you can also get a preview, by pressing the Preview-button. In that case no print-command will be created, but a preview will be shown. To create a print-command you must press the Print-button. You close the preview-window by pressing the cross at the top-right of the screen.

ABS-Legacy mode

If you start SparkPrint you always begin in the Manual Mode. At the top you will see the title 'Manual Mode'. If you want to select another mode, you can do this by selecting one of the gray menu-items at the left side of the window. These items are named 'Manual', 'ABS-Legacy', 'Legacy', 'ABSolute', 'ABSSolute PWB' and 'Solar'. Here the ABS-Legacy mode will be presented.

In the ABS-Legacy mode you can do the following:

- Create and modify label designs

There are no other options in the ABS-Legacy mode. The reason is: in this mode the print-commands are expected from external software. That's why you can only create and modify label designs.

Creating a new label

You create a new label by pressing the button 'New label' at the left-sided menu. The name for the new label will be asked for. For a further explanation see the chapter '

Designing labels’.

Modifying an existing label

You modify an existing label by first selecting the label you want to modify, after which you press the button ‘Modify label’ at the left-sided menu. For a further explanation see the chapter ‘

Designing labels’.

Legacy mode

If you start SparkPrint you always begin in the Manual Mode. At the top you will see the title ‘Manual Mode’. If you want to select another mode, you can do this by selecting one of the gray menu-items at the left side of the window. These items are named ‘Manual’, ‘ABS-Legacy’, ‘Legacy’, ‘ABSSolute’, ‘ABSSolute PWB’ and ‘Solar’. Here the Legacy-mode will be presented..

In the Legacy mode you can do the following:

- Create and modify label designs

There are no other options in the Legacy-mode. The reason is: in this mode the print-commands are expected from external software. That’s why you can only create and modify label designs.

Creating a new label

You create a new label by pressing the button ‘New label’ at the left-sided menu. The name for the new label will be asked for. For a further explanation see the chapter ‘

Designing labels’.

Modifying an existing label

You modify an existing label by first selecting the label you want to modify, after which you press the button ‘Modify label’ at the left-sided menu. For a further explanation see the chapter ‘

Designing labels’.

ABSSolute mode

In the ABSSolute mode you can do the following:

- Create and modify label designs

There are no other options in the ABSSolute-mode. The reason is: in this mode the print-commands are expected from external software. That's why you can only create and modify label designs.

Creating a new label

You create a new label by pressing the button 'New label' at the left-sided menu. The name for the new label will be asked for. For a further explanation see the chapter '

Designing labels’.

Modifying an existing label

You modify an existing label by first selecting the label you want to modify, after which you press the button ‘Modify label’ at the left-sided menu. For a further explanation see the chapter ‘

Designing labels’.

ABSSolute ORS mode

In the ABSSolute ORS mode you can do the following:

- Create and modify label designs

There are no other options in the ABSSolute ORS-mode. The reason is: in this mode the print-commands are expected from external software. That’s why you can only create and modify label designs.

Creating a new label

You create a new label by pressing the button ‘New label’ at the left-sided menu. The name for the new label will be asked for. For a further explanation see the chapter ‘

Designing labels’.

Modifying an existing label

You modify an existing label by first selecting the label you want to modify, after which you press the button ‘Modify label’ at the left-sided menu. For a further explanation see the chapter ‘

Designing labels’.

ABSSolute PWB mode

In the ABSSolute PWB mode you can do the following:

- Create and modify label designs

There are no other options in the ABSSolute PWB-mode. The reason is: in this mode the print-commands are expected from external software. That’s why you can only create and modify label designs.

Creating a new label

You create a new label by pressing the button ‘New label’ at the left-sided menu. The name for the new label will be asked for. For a further explanation see the chapter ‘

Designing labels’.

Modifying an existing label

You modify an existing label by first selecting the label you want to modify, after which you press the button ‘Modify label’ at the left-sided menu. For a further explanation see the chapter ‘

Designing labels’.

Chapter 7 SparkEngine

In this chapter there will be explained what the 'Print Engine' is, how you can start it and what options you can use.

The Print Engine

The program SparkEngine is the so-called 'Print Engine' and is responsible for processing the print-commands. For example, if you want to print labels in the manual mode and have pressed the Print-button, there will be created a print-command, a file that contains the print-commands. If you have started SparkEngine, this file will be read and processed, which result in the printing of a label.

Starting the Print Engine

The 'Print Engine' is called SparkEngine and can be started in the following way:

From the desktop

From the desktop you double-click on the icon named SparkEngine.

From the menu

Select the menu-options Start, Programs and Spark. Select the option named SparkEngine.

You can also start the program during the start of the computer, by including the menu-option SparkEngine in the menu-option 'Startup' in the Windows-menu.



When the program has been started for a short moment a window will be shown after which it will disappear. The program will be active and you will see an icon in the taskbar. You will see a flashing icon in the colors red and yellow. This indicates that the program is active and can process print-commands. If this icon is gray, then the program is in a pause-mode and will not process print-commands.

Closing or hiding the Print Engine

You can close (and end) the program in the following way:

- Be sure the program is shown as a window by double-clicking on the taskbar-icon. Click on the cross at the top-right of the window (or select the option 'File' and 'Exit'). The question 'End or hide application' will be asked. Answer with 'end'.

You can hide the program as follows:

- See the previous description for closing the program, but at the question 'End or hide application', you answer with 'hide'. In

that case the program will remain active, but is only shown as a taskbar-icon.

- Point to the taskbar-icon and press the right-mouse-button. A small menu will be shown, select the 'Hide'-option.

Processing print-commands

As soon as the program is active and the taskbar-icon flashes, it can process print-commands. The following will be done.

Check on print-commands

The program is checking if there are any print-commands. A print-command is a file that contains label-information and can be created in different modes. If the file is created in the ABS-Legacy-, ABSolute-, ABSolute PWB- and Legacy-mode, then external software is responsible for the print-commands. If the file is created in the manual-mode, then SparkPrint has been used to create it.

Processing a print-command

When a file could be found which contains a print-command, this file will be read and processed. From the file information is extracted like the name of the label design, the number of labels that should be printed and also the contents of the fields that are included in the label design. Also there will be decided which printer must be used and how many labels fit on one page.

When will the print-command be processed?

A print-command that has been received will be processed by SparkEngine – which results in printed labels – if one of the following criteria is true:

Is the number of labels that fit on one page greater than one?

If this is the case, the following will happen:

- The Engine will wait until enough labels have been received to fill one page
- After a specific time-period the printing will start automatically, regardless the number of labels that has been received
- The user decides to print the labels
- The user end the program, after which the labels will be printed directly

Is the number of labels that fit on one page exactly one?

If this is the case, the printing will start immediately.

Was there an error during the process of the print-command?

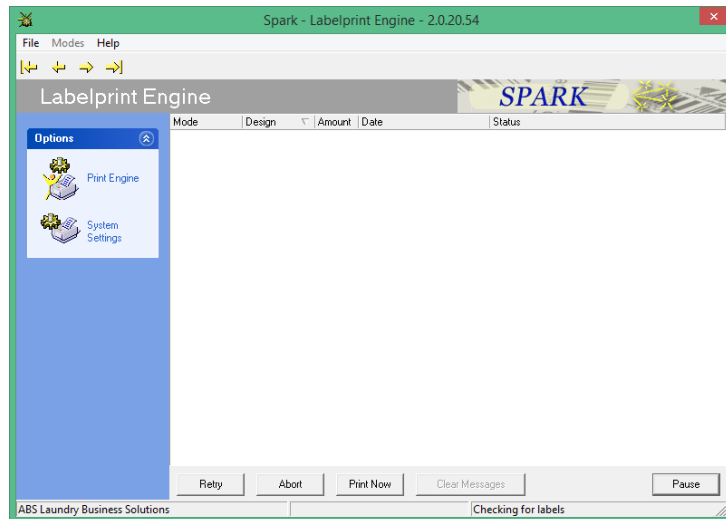
If the design contains an error – in that case the fields could not be processed correctly – or during another error, the print-command will be saved. An error-message will be shown, but the user can try to print the label at another time, after the problem has been solved.

Executing print-requests

The actual printing of the labels will not be done directly, but through the operating system. Each print-request will be send to the operating system to the appropriate printer, after which this print-request will be put in the print-queue. When the print-request can be answered, the label will be printed.

Control of the mainscreen

Normally SparkEngine will work without the need to control it. But, if an error occurred, it will be necessary to interfere. As soon as SparkEngine has been started, you'll only see an icon in the taskbar. The main screen can be called by double-click the icon. The following screen will appear:



The main part of the screen will consist of a white rectangle. In this rectangle the print-commands will be shown as a list. The list is divided in the following columns:

Mode

To which mode does the print-command belong? This will be shown as 'Manual', 'ABS-Legacy', 'Legacy', 'ABSSolute', 'ABSSolute PWB' and 'ABSSolute ORS'. The Print Engine can process the print-commands for each mode simultaneously.

Design

This is the name of the label design, without extension. Each print-command belongs to one label design.

Amount

This is the number of labels that will be printed. This will be indicated in a special format: Amount / AmountOnOnePage. For example, the notation '2/4' indicates a print-command for 2 labels to print on a page that can have a maximum of 4 labels.

Date

The date and time the print-command was received.

Status

The status of the print-command. This indicates the status of the print-command and will be shown as a message. Messages in red will indicate an error-message, and will stay in the list, until you restart the program. Messages in black, which have been processed, will stay only temporarily in the list. The following messages are possible:

New print task

This message will be shown if there is a new print task.

Labels added to task

A new print-task will be added to an existing print-task. This will only happen if there can be printed more than one label on one page. The labels will then first be assembled before they get printed.

Printed to <printrname> (label setting)

This message will be shown if the label(s) could be printed without errors. The printer which was used will be shown and also the printer setting.

Not printed

This message will be shown if an error occurred. In that case a backup will be made of the print-command, so you can try to print the label again when you have solved the problem..

Control of the buttons

In the main-window several buttons can be found at the bottom of the window. The control of these buttons will now be explained.

The pause-button

With the pause-button you can set the Engine to a pause-mode. In this mode the Engine will not search for print-commands. This can be necessary if an error occurred, and you need to search for the problem.

As soon as the Engine is set to the pause-mode, the status bar will show the text 'Pause'. Also the taskbar-icon will have changed to gray and will not flashing anymore.

Also, the description on the pause-button will have been changed to 'Resume'. By pressing again on this button, the pause-mode will be cancelled and the Engine will resume its work. The text in the status bar will change to 'Checking for labels' and the taskbar-icon will flash again in the colors red/yellow.

The retry-button

With this button you can check if there are any print-commands that are not processed due to an error. This can happen – for example – if a label-design contains an error. By pressing this button, a window will be shown with an overview of print-commands. For each mode (Manual, ABS-Legacy, Legacy, ABSolute, ABSolute PWB) there will be shown the number of print-commands. If all is set to '0' then no print-commands are left, otherwise you can try to print the labels by pressing the Retry-button, delete the print-commands by pressing the Delete-button or press the Cancel-button to close the window.

The abort-button

With this button you can cancel all print-commands, which are not already shown in the list. First there will be shown how many print-commands are present, after which you can press the Delete-button to delete all print-commands, press the Backup-button to store them as a backup – so you can print them later with the Retry-button – or press the Cancel-button to close the window.

The print-now-button

With this button you can print labels that appear in the list as ‘Added to task’. These are print-commands that only get printed if the page is full, so with more than one label on one page. If you don’t want to wait until the page is full, you can press this button, after which the labels get printed.

Note: You can also set a time-period, that is the time it will take until the labels are printed automatically. See also the paragraph about system-settings.

The clear-messages-button

If there are error-messages (in red) shown in the list, they will stay there to enable you to find out what the problem is. To clear these error-messages you can click this button. An alternative way to clear this list is to restart SparkEngine.

Note: This button is only ‘clickable’ if there are one or more error-messages shown in red. Normal messages (in black) will be cleared automatically within a minute.

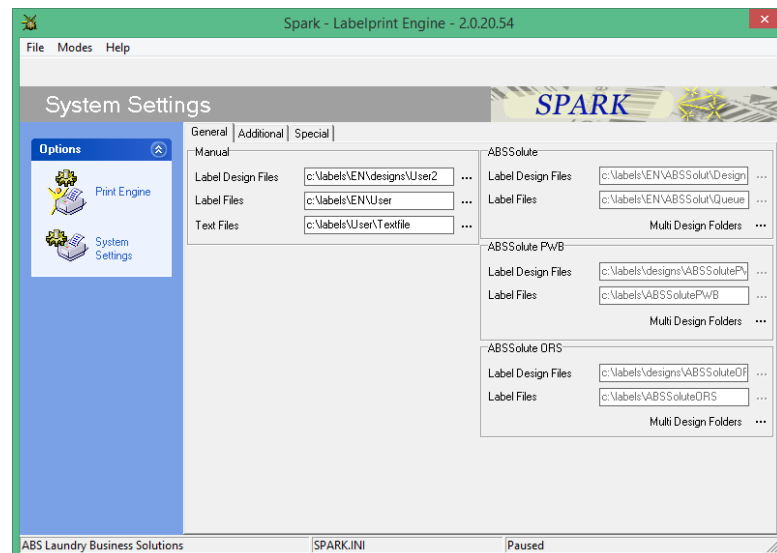
System settings

As stated, SparkEngine expects all print-commands in file-form. For each mode there must exist a location/directory. Default locations on the local hard disk will be set and used, but in a network-environment it can be necessary to change this to an external drive. The setup of these locations and other settings can be done with the option ‘System settings’.

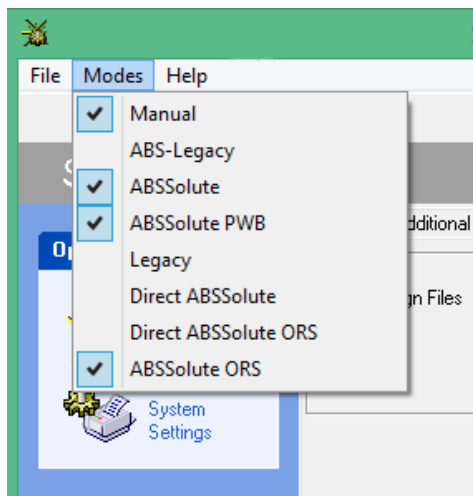
You can start the option ‘System Settings’ as follows:

1. Start SparkEngine
2. Double-click on the SparkEngine-icon in the taskbar, after which the main window will be shown.
3. Click on the option ‘System Settings’ at the left side menu.

The following window will be shown:



All system settings can be done in this window. The settings are divided in several categories. An explanation will follow.



Modes

With the menu-option Modes you can decide which modes are visible in SparkPrint. In that way you can simplify the use of SparkPrint and SparkEngine, because only the modes you really want to use will be shown. For example, if you only want to use the 'Manual'- and 'ABSolute'-mode you check these two modes, and de-check the other modes. When you are using SparkPrint and SparkEngine, you will only see these two modes. The other modes are hidden.

Setup of file locations

File locations for each mode

For each mode (Manual, ABS-Legacy, Legacy, ABSolute, ABSolute PWB) you can make settings about the locations of the files. These locations are divided for each mode, so there cannot be any confusion about where they belong. When you install Spark all locations will be set – as a default – to the local hard disk. If you want to use Spark in a network-environment, then it's possible that you want to change these locations. In practice, the setup of these locations has to be done only once, during the setup of the system. You also have to be aware of file-locations that are used by external software, for example during the ABS-Legacy-, ABSolute- and Legacy-mode.

File locations for each type

For each type there exist the following file locations:

Label-design files

The default file location for this type is 'c:\labels\designs\mode' where mode can be: User, ABS-Legacy, Legacy, ABSolute, ABSolute PWB or ABSolute ORS.

Each label design you create is saved in the appropriate directory. This location is used by SparkPrint to save each design you create or modify. SparkEngine also uses this location to read the design that belongs to the print-command.

In a network-environment where more than one user is using the Spark-software, it is recommended to use a central location for this

design-file location. In that way each label-design needs to be created only once.

Label files

The default location for this type is 'c:\labels\mode' where mode can be: User, ABS-Legacy, Legacy, ABSolute, ABSolute PWB or ABSolute ORS.

Each print-command must be stored as a file in this location. SparkPrint uses this location when used in the Manual Mode, during the printing of labels. SparkEngine uses this location to read the print-commands. If you are using external software for the ABS, ABSolute, ABSolute PWB, ABSolute ORS and Legacy modes, then you must be sure that this software is saving the print-commands in this location.

In a network-environment it can be necessary to set this location to a network-location.

Text files

This location is only used in the Manual Mode and the option 'Print Labels By File'. It's the location of the import-files that are read in this option. This file can be used to fill in the fields of the selected label design.

The default location is 'c:\labels\user\textfile'. This implies that files which are created with a program like Microsoft® Excel – for use in SparkPrint – should be saved in this location.

Barcode settings

Note: *The settings for the Barcode are only relevant for the Manual-Mode.*

Barcode length

Here you can set the maximum length for the barcode you want to print on a label. This is only relevant for the barcode itself, not for the barcode-number. Default this length is set to 8. You can select for a length of 6, 8, 10 or 12. What it should be depends also on the scanners you are using to read the barcodes, these have to be set to a specific length to insure a correct read of the barcode.

Last barcode

Here the last barcode is shown that's being used during the printing of a barcode range. See also the chapter about SparkPrint. You can change the last barcode. Be sure you enter a barcode that's not in use in your company. This is the same with numbers above the given barcode number!

Check digit

Here you can enter the check digit you want to use for the barcode. With this method the last number of a barcode can be used as a check digit. See also the document of the scanner you're using. By setting 'NONE', no check digit is used, and barcodes will look like '0000031', '0000032' and '0000033'. With a check digit like 'MOD10', you'll get barcodes like '0000318', '0000326' and '0000334'.

Additional settings

Delay finishing print job

During the design of a label, it's possible to set the number of labels that fit on one page; this is also printer-dependent! Suppose you use pages that can contain 16 labels, SparkEngine will start printing when it has received 16 labels. By setting this option 'delay finishing print job' it's possible to set the time (in minutes) after which the page must be printed, regardless if the page is full.

Note: If you are using printers, which can only print one label at a time, then this setting is ignored.

Example

If you set this delay to 5 minutes, then the printing will start if 5 minutes has past, after the last label was added to the print job. Suppose there where 14 labels added to the print job, but the page can contain 16 tables, it will take 5 minutes before the page will get printed. The last 2 labels on the page will remain blank.

Labelfile separator

Here you can select the separator for the labelfiles. This is used to separate the fields that are stored in the labelfile. Default this is a comma, but you can also select another separator. Be sure you set it to a separator that's the same as the one that's used by the external software that creates the labelfiles, otherwise you will get an error from SparkEngine, like: '1,11,3481,3399,5544,,,,,13,,,,,414,,' is not a valid integer value.

Backup

With this option you can turn the creation of backup-files on or off. If you turn it on, each labelfile that is read by SparkEngine to print labels, is stored in a folder named '\Backup'. For example they will be stored in 'C:\Labels\Absolut\Backup' if the 'Absolute'-mode is used. The backup-files will get a filename that's 'timestamped', to ensure each file has a unique filename.

Note: If there was an error, there will always be a backup of the labelfiles in a folder named '\Error'. For example in 'C:\Labels\Absolut\Error' if the 'Absolute'-mode is used. This means that label-files will either be stored in the backup- or in the error-folder, but not in both folders at the same time. This is the case if the backup-option is turned on. If the backup-option is turned off, then only a backup will be made in the 'Error'-folder during an error. Files that are stored in the 'Error'-folder can always be used again with the 'Retry'-button in SparkEngine.

Log Settings

Please see the Appendix named 'Appendix – Log Messages' for an explanation of this option.

Secondary Print Engine

The option 'Secondary Print Engine' can be used if you want to use a second Spark-PC that only prints labels when the first Spark-PC is not printing for a certain period. This can happen when the first Spark-PC is not functioning anymore in which case the second Spark-PC will take its place and continues with the printing. It is also possible the first Spark-PC is very busy with printing and has troubles printing all labels within the expected time.

To configure this you need an extra PC where you install Spark and keep that active all the time. This second Spark-PC should be configured so it will find all designs, label-files and label-printers in order to print the labels just as the first Spark-PC is doing.

There are two options that define the second Spark-PC as a 'Secondary Print Engine'. First you have to mark the option 'Act as secondary print engine'. Option 'For labels older than' must be set to the number of seconds with a default of 30 seconds. When set to 30 seconds, it means it will only start printing when it finds a label-file that is older than 30 seconds. Otherwise it is assumed the first Spark-PC has already printed it.

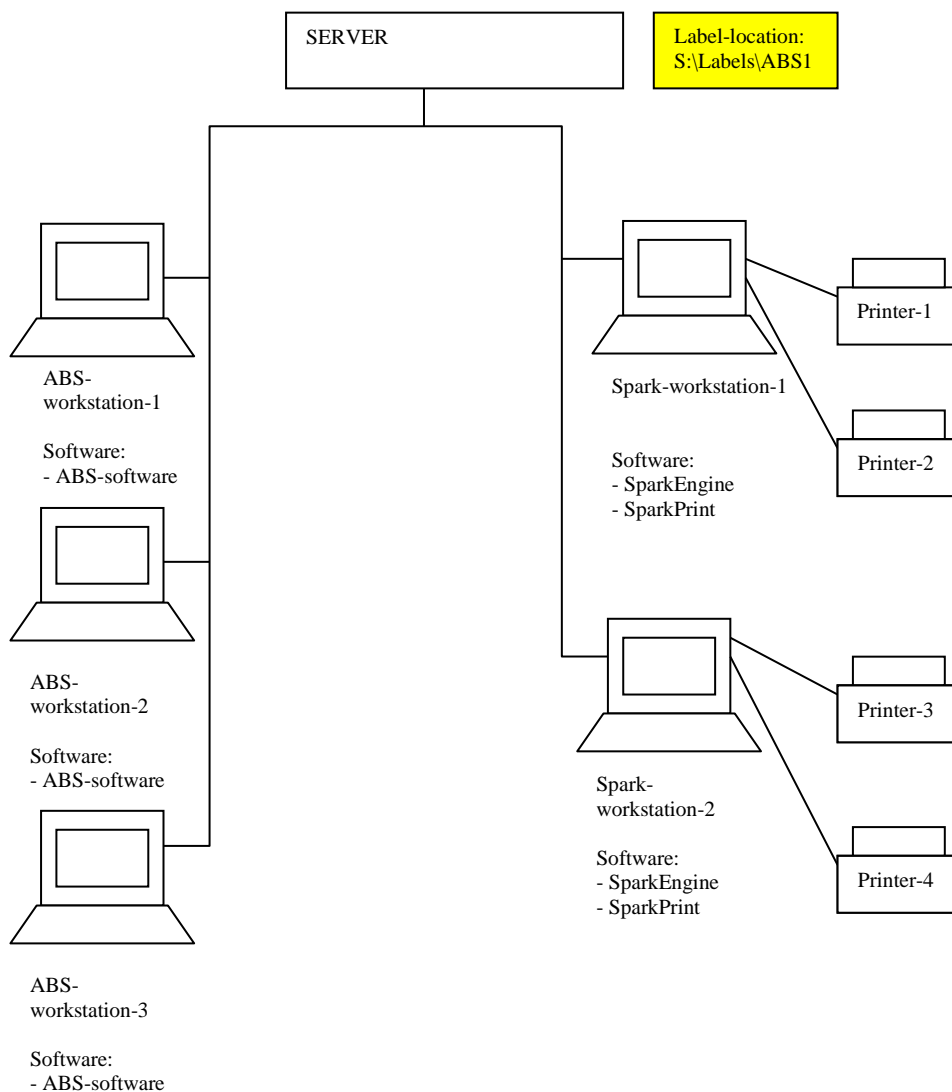
Chapter 8 Configurations

This chapter will describe the configurations for the ABS-Legacy, ABSolute and Legacy modes.

Configuration for ABS-Legacy mode

The ABS-Legacy mode can be used to combine legacy ABS-software with Spark in such a way the ABS-software can send print-commands to Spark. The sending of these print-commands will always be done through files.

The following shows a diagram of a configuration. To keep it simple a strict separation has been kept between the ABS- and Spark-workstations, but this isn't necessary, it's also possible to combine the two.



Setting the label location

First you must set a label location that is the same on both sides. This location is the directory where the print-commands are stored by the ABS-software and where Spark can find it. You have to set this location on both sides. It's recommended to use a network-location, for example: S:\Labels\ABS.

How you set this location is dependent on the ABS-software. In Spark you can do this with the option 'System setup' which is part of SparkEngine.

Setup of design location

The design location is the location where Spark is keeping the label designs. This location is only used by the Spark-software, not by the ABS-software. If you are using one SparkEngine only, then this location can be local, for example: c:\labels\designs\ABS.

If more than one SparkEngines are used, you can better set this to a network-location, like: s:\labels\designs\ABS. In this way you only have/need one version of each design.

File format print-command

The file format for the print-command must be in a specific format, in a textfile with extension .ASC:

<number of labels>,<labeldesigncode>,<field-01>,<field-02>,...,

Explanation for each part:

<number of labels>

The number of labels that must be printed for each label-line. As a default this must be set to 1. If you set this to – for example – 5, then for each line in the file, 5 labels will be printed..

<labeldesigncode>

This is the code of the design without extension. This can only consist of a maximum of 2 numeric characters, in the reach of '1' to '99'. For example '1', '46' and '82' are valid labeldesigncodes.

<field-01>,<field-02>,...,

This is the contents of the fields which can appear in the label, depending on the labeldesign. In the labeldesign these fields have names like 'FunctionDescription', 'RelationNumber', 'RelationName', etc. Independent how many fields are expected in the label-design, you still have to put all fields in each line, and also in the same sequence. Each field can be separated by a comma or semi-colon, you have to set this in SparkEngine (System Settings). Empty fields contain a space(s) or nothing.

Example

An example of the contents is (not all fields are shown):

1,15,038,A0102.06056,L79,,,ZL,1,P,01-07,

Setup of label designs

For each ABS-print-command you have to include a `labeldesigncode`. In Spark a design with the given code should exist.. `SparkPrint` and the option `'ABS 'en' New Label` are for the creation of the designs. A comparison should be made between the labels which are made in the ABS-software, so all fields which appear in these labels, will also appear in the Spark-designs. You also have to make sure the label-sizes are the same.

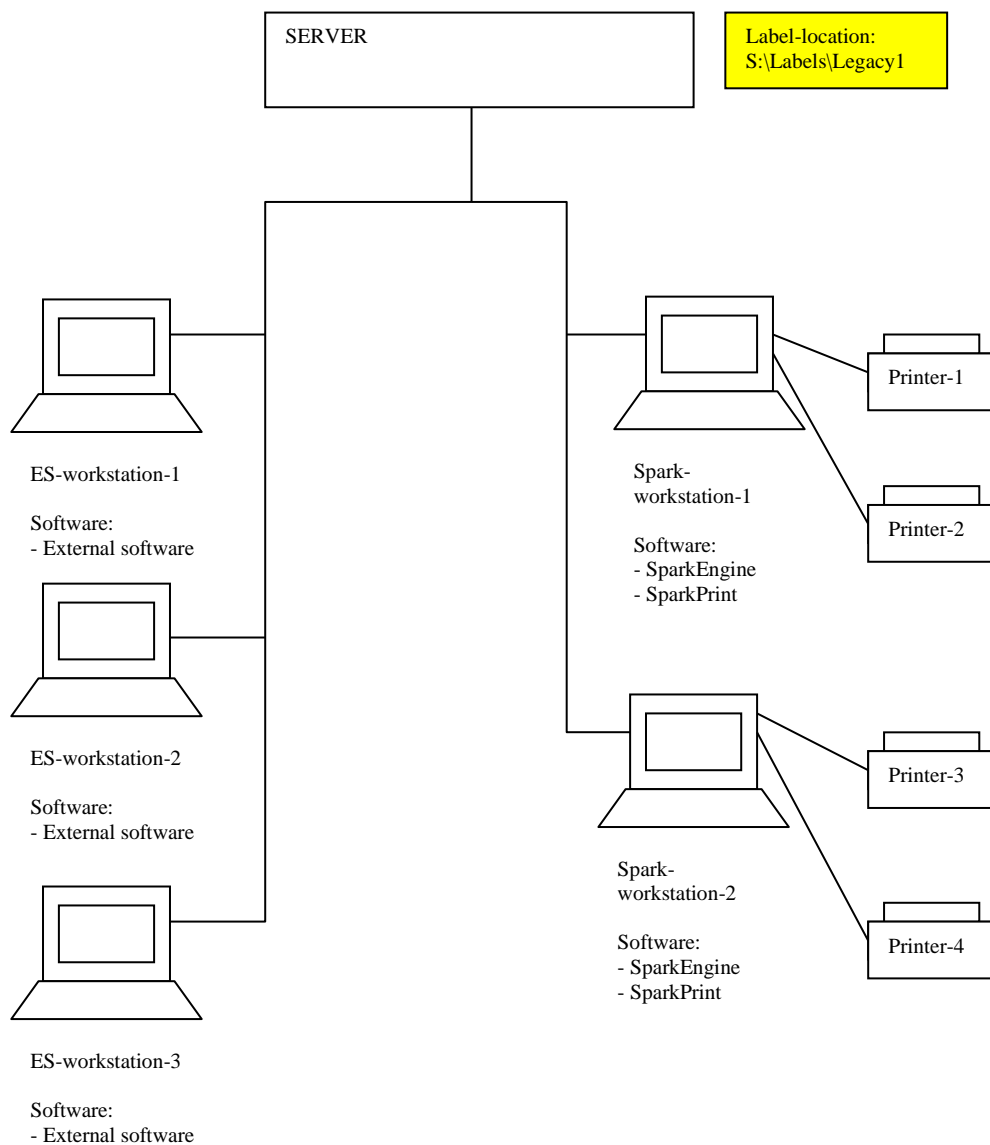
Example

Suppose there exist label-designs in the ABS-software with design codes `'11'`, `'12'`, `'15'` and `'20'`, then at the Spark-side you need to create designs with the same names. These will get the extension `.lbl`. Suppose in ABS-design `'11'` the fields `'RelationNumber'` and `'RelationName'` appear, then these fields should also appear in the Spark-design. Also the label size (height and width) should be the same.

Configuration for Legacy mode

The Legacy mode can be used to combine external software with Spark. External software can create print-commands and send them to Spark. The sending of these print-commands will always be done through files.

What follows is a diagram that shows a configuration for this mode. To keep things simple a strict division is kept between external software and Spark, but you can also combine the two.



Setting the label location

First you have to set a label location that is the same on both sides. This is the directory where the external software should save the print-commands and where Spark can find them. Settings this location should be done on both sides. It's recommended to use a network location like: S:\Labels\Legacy.

How you can set this location depends on the external-software. In Spark you can do this in SparkEngine, with the option 'System Settings'.

Setup of design location

The design location is the location where Spark saves the designs and can find them back. Spark only uses this location and is also not by the external software. If you only use one SparkEngine, this location can be local like: c:\labels\designs\Legacy.

If more than one SparkEngines are used, it's recommended to use a network location, like: s:\labels\designs\Legacy, in this way each label design, is stored only once.

File format print-command

The file format for the print-command must be in a specific format, in a textfile with extension .LBF:

[<Start><Number of labels><Designcode>][<LineInfo>...]
[<End>]

Explanation for each part:

Part	Description
<Start> <End>	This indicates the start and end of each line, and should contain the characters: ***
<Number of labels>	This stands for the number of labels that should be printed for the given line. It should consist of numeric characters. For example: 1.
<Designcode>	This is the code of the design. It must contain two numeric characters, in the reach of '01' to '99'. For example: 04.
<LineInfo>	For each line that should appear in the label, there must exist a 'lineinfo' definition. This definition itself is divided in several parts: <TypeOfCode><LineLength><Fontcode><Densitycode><Aligncode> A maximum of 12 lines can be used. The following explain the parts:
Part	Description
<TypeOfCode>	Use '/' for text and 'B' for a barcode.
<LineLength>	The length of the line, always use 2 positions, for example '05' for a length of 5.
<Fontcode>	This is a code that indicates the font type. Use codes: 1-8 en A-H. <i>Spark ignores this part.</i>
<Densitycode>	This is a letter that stands for the density. Use letters: n, N, e, E, p, P, q, Q. <i>Spark ignores this part.</i>
<Aligncode>	This is a code that indicates how the line is aligned. Use: '0' for left, '1' for centered and '2' for right alignment. <i>Spark ignores this part.</i>

Exception

The following parts are ignored by Spark, but should be included in each line:

- <Fontcode>
- <Densitycode>
- <Aligncode>

Example

A few examples:

```
***0105/12AN1Jameson P.A./07BN1Nursery***
***0112/14AE1Olivers MarshaB08AE100003930/08AE100003930***
```

Setup of label designs

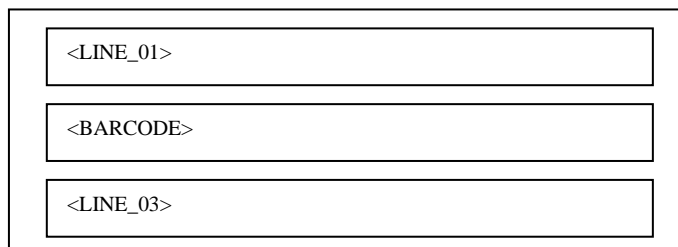
For each print-command a design code is used, therefore it's important these design have been created with Spark. The creation of these designs can be done with SparkPrint and the option 'Legacy' and 'New Label'. A comparison must be made with the label-designs that are used in the external software, so each line of the label will be included in the design. Also the format of the label must be the checked.

Including a barcode in a design

If the print-command contains a barcode, then this must be included in the design. For this purpose there is a special variable with the name 'Barcode'. Suppose you are sending the following print-command:

0112/14AE1Olivers MarshaB08AE100003930/08AE100003930

This consists of 3 lines, the first and third line consists of text and the second line consists of a barcode. In Spark you'll need to create a label design – named '12.lbl' - like the following::



Example

Suppose you have created label designs in the external software with design-code '03', '04', '05' and '06', then for each design you must create a design in Spark (each design will have extension .lbl), like: '03.lbl', '04.lbl', '05.lbl' and '06.lbl'. If the external design '03' contains three lines, then these lines should also be included in the Spark-design. You also must check the size of the label (width and height).

Configuration for ABSSolute mode

The ABSSolute mode can be used to combine ABSSolute-software with Spark in such a way this software can send print-commands to Spark. The sending of these print-commands will always be done through files.

See the diagram at the paragraph 'Configuration for ABS-Legacy mode' for an example of the configuration.

Setting the label location

First you must set a label location that is the same on both sides. This location is the directory where the print-commands are stored by the ABSSolute-software and where Spark can find it. You have to set this location on both sides. It's recommended to use a network-location, for example: S:\Labels\ABSSolut. How you set this location is dependent on the ABSSolute-software. In Spark you can do this with the option 'System setup' which is part of SparkEngine.

Setup of design location

The design location is the location where Spark is keeping the label designs. This location is only used by the Spark-software, not by the ABSSolute-software. If you are using one SparkEngine only, then this location can be local, for example: c:\labels\designs\ABSSolut.

If more than one SparkEngine is used, you can better set this to a network-location, like: s:\labels\designs\ABSSolut. In this way you only have/need one version of each design.

File format print-command

The file format for the print-command must be in a specific format, in a textfile with extension .LBL:

```
<number of labels>,<labeltype>,<labeldesigncode>,<field-01>,<field-02>,...,
```

Explanation for each part:

<number of labels>

The number of labels that must be printed for each label-line. As a default this must be set to 1. If you set this to – for example – 5, then for each line in the file, 5 labels will be printed..

<labeltype>

This is a lettercode to indicate what type of labeldesign is used. This can be either 'C' for code-label or 'N' for name-labels. You can also use 'U' for Curtain-labels.

<labeldesigncode>

This is the code of the design without extension and will be combined with the labeltype to form the labeldesign-name. This can only consist of maximum 2 numeric characters, in the reach of '1' to '99'. For example '7', '46' and '82' are valid labeldesigncodes. The combined labelname will (excluding extension) will appear like 'C01', 'C02', 'C03' ... 'C99' and 'N01', 'N02', 'N03' ... 'N99', 'U01' ... 'U99'.

<field-01>,<field-02>,...,

This is the contents of the fields which can appear in the label, depending on the labeldesign. In the labeldesign these fields have names like 'FunctionDescription', 'WearerName', 'CustomerName', etc. Independent how many fields are expected in the label-design, you still have to put all fields in each line, and also in the same sequence. Each field can be separated by a comma or semi-colon, you have to set this in SparkEngine (System Settings). Empty fields contain a space(s) or nothing.

Example

An example of the contents is (not all fields are shown):
1,C,15,038,A0102.06056,L79,,,ZL,1,P,01-07,

Setup of label designs

For each ABSSolute-print-command you have to include a labeldesigncode. In Spark a design with the given code should exist. SparkPrint and the option 'ABSSolute' and 'New Label' are for the creation of the designs. A comparison should be made between the labels which are made in the ABSSolute-software, so all fields which appear in these labels, will also appear in the Spark-designs. You also have to make sure the label-sizes are the same.

Example

Suppose there exist label-designs in the ABSSolute-software with design codes 'C11', 'C12', 'N15' and 'N20', then at the Spark-side you need to create designs with the same names. These will get the

extension .lbl. Suppose in ABSolute-design 'C11' the fields 'WearerNumber' and 'WearerName' appear, then these fields should also appear in the Spark-design. Also the label size (height and width) should be the same.

Chapter 9 Multi Design Folders

This chapter will describe the use of multi-design-folders. By using multi-design-folders you can set more than one location for the design- and label-files. In that way, you can install Spark on a Server and manage all printers in one central place. This can only be used in the ABSSolute-, ABSSolute PWB and ABSSolute ORS-mode in combination with printers that can be set up as network-printers.

Creating folders

The first thing you have to do is create the folders that are needed for the printers you are going to use, these are the folders where the design- and label-files are stored. For each printer a separate folder is needed. Also for each printer a separate folder for the design- and for the label-files is needed.

For example, if you want to use 3 different printers, you have to create folders like:

K:\Labels\P1\Designs
K:\Labels\P1\Labels

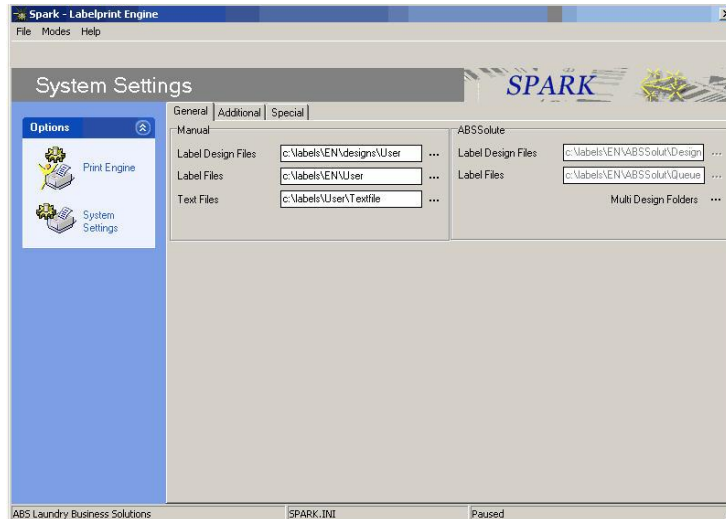
K:\Labels\P2\Designs
K:\Labels\P2\Labels

K:\Labels\P3\Designs
K:\Labels\P3\Labels

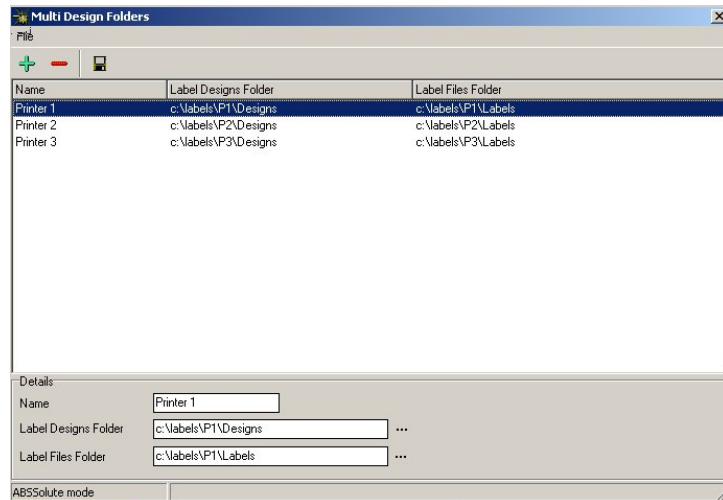
In this example 'K' refers to a network-drive.

Entering the folders in Spark

The folders you have created should be entered in SparkEngine with the option 'System Settings'. By doing this, Spark knows about these locations and will look in the entered folders for designs and labels. So, start SparkEngine and double-click on the Spark-icon in the task-bar. The window will open. Click on 'System Settings'.



At the part named 'ABSSolute' there is an option named 'Multi Design Folders'. Click on the button at the right of this. A window will open.



You can enter the folders by doing the following:

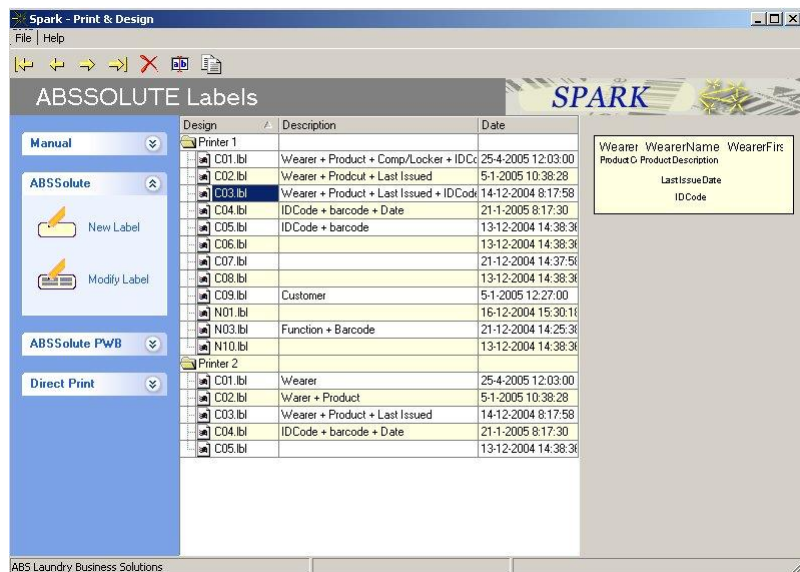
1. Click on the '+'-button.
2. Enter a name (description) for the folder.
3. Select the folder for the 'designs' by pressing the browse-button and selecting the correct folder.
4. Select the folder for the 'label-files' by pressing the browse-button and selecting the correct folder.

Repeat this for all the folders you want to add.
 Afterwards, press the 'save' button to save the list and close the window.

Additional information:
 You can delete a location with the '-'-button.

Creating designs in Spark

When the folders have been entered in SparkEngine, you have to create the designs in Spark. You do this with SparkPrint and the option 'ABSSolute' (or ABSSolute PWB / ORS).



When you have started SparkPrint and selected the option 'ABSSolute', you will see the names/descriptions of the printer-locations you had created. Now you have to create the designs that are needed. The simplest way to do this is create them only in the first location ('Printer 1' in this example), and copy them to the other locations with the 'copy'-button.

So do the following:

1. Select the first location at the top.
2. Click on 'New label' and create a new label.
3. Click on the design you've created and then click on the 'copy'-button.
4. A window will be shown where you can select the location you want to copy the design to. Select the location and press the OK-button.

Now the design will appear in two different locations. You can do this with all designs you create and copy them to one or more locations.

Changing printers for each location

After you have created all necessary designs and copied them to the other locations, they will all refer to the same printer. So the next thing you have to do is set the designs for each location to the correct printer.

Changing the printer for a design:

1. You change the printer by selecting a design and click on the button 'Modify Label'.
2. In the design-window press the menu-option 'Project' and 'Layout Regions'.
3. In tab-page 'Regions' you can change the printer.

An example:

<i>Location</i>	<i>Folders</i>	<i>Design</i>	<i>Printer</i>
Printer 1	K:\Labels\P1\Designs K:\Labels\P1\Labels	C01.LBL	\\ABS_1\HIQ_NR1
		C02.LBL	\\ABS_1\HIQ_NR1
		N01.LBL	\\ABS_1\HIQ_NR1
Printer 2	K:\Labels\P2\Designs K:\Labels\P2\Labels	C01.LBL	\\ABS_2\HIQ_NR2
		C02.LBL	\\ABS_2\HIQ_NR2
		N01.LBL	\\ABS_2\HIQ_NR2
Printer 3	K:\Labels\P3\Designs K:\Labels\P3\Labels	C01.LBL	\\ABS_3\HIQ_NR3
		C02.LBL	\\ABS_3\HIQ_NR3
		N01.LBL	\\ABS_3\HIQ_NR3

This example shows you the following:

1. There are 3 locations named 'Printer 1', 'Printer 2' and 'Printer 3'. They have separate folders for storing the design- and label-files.
2. Each location has 3 designs, named 'C01.LBL', 'C02.LBL' and 'N01.LBL'.
3. Each location refers to a different network-printer, named '\\ABS_1\HIQ_NR1', '\\ABS_2\HIQ_NR2' and '\\ABS_3\HIQ_NR3'.

This is just an example. You are not restricted to 3 designs for each location, and you can also have designs in one location, that doesn't have to appear in another location.

Of course, at the 'ABSolute'-side you must also make the correct settings, so the designs will refer to the correct locations/folders that have been set in Spark.

Appendix - Spark & label printers

The appendix-chapters will explain how you can use Spark with a specific label printer. For each label printer you need to know how it must be configured to function correctly with Spark. So please look at the appendix related to the label-printer you are using for information about the configuration.

Spark & printer drivers

Please be sure you install the correct printer-driver for the label-printer you are going to use. The latest driver can be found on the web-site of 'Seagull Scientific'. Look for windows-printer-drivers and the brand-name of the label-printer you are using. For example, if you are using Thermopatch-label-printers then look for that brand-name.

Spark & label printers

After the correct printer driver has been installed it should be configured. This includes the configuration of the paper-sizes that you need and that is possible with the label-printer you have. Because this can differ per brand and type of label-printer it is explained for each printer separately. See the next chapters for more details per printer.

Appendix – Spark & HIQ-1 printer

Preface

This appendix 'Spark & HIQ-1 printer' will explain how you can use Spark combined with a printer of type HIQ-1 (trademark of Thermopatch). This is a thermotransfer-printer where each label is printed through a label-roll. The big advantage of this type of printer is that each label can have a different height and can be cut to the correct size. Afterwards the label can be patched to a garment.

Setup of printer driver

Before you can use the printer, you have to install and setup the appropriate printer-driver. See the documentation that is included by your printer for instructions how to install the printer-driver. To do a setup of the printer-driver, select the option 'printers' and choose the right printer. With a right-click of the mouse, a menu will be shown. Then choose Properties. A window that is divided into tab-pages will be shown. On each tab-page there are settings. Some of them will be shown in this appendix, tab-pages that are not shown are not important.

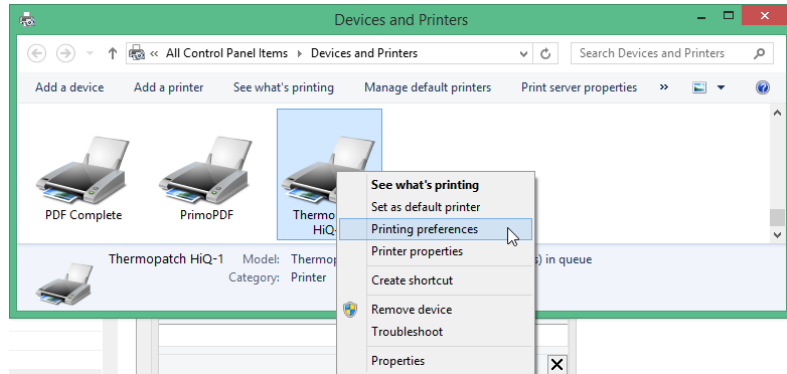
Please be sure you install the correct printer-driver. The latest driver can be found on the web-site of 'Seagull Scientific'. Look for windows-printer-drivers and Thermopatch.

Special note!

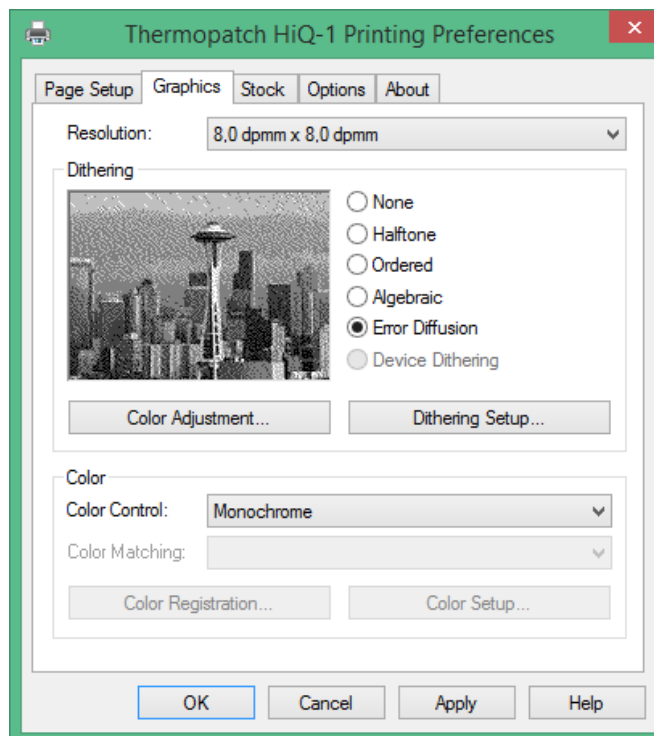
If you are going to use Spark in a network-environment combined with this type of printer, you must be sure the printer-configuration is the same for each computer! This is important if you are storing the label designs at one central location. A difference in the configuration can result in problems during the change of a printer-specific property of the label design, like the label-size; this change will then not be taken over on another computer.

Be sure you use the same sequence as shown here. It is strongly recommended to use the same settings:

- Open the Devices and Printers Dialog
- Right click on the HIQ-1 Printer and select Printing Preferences.



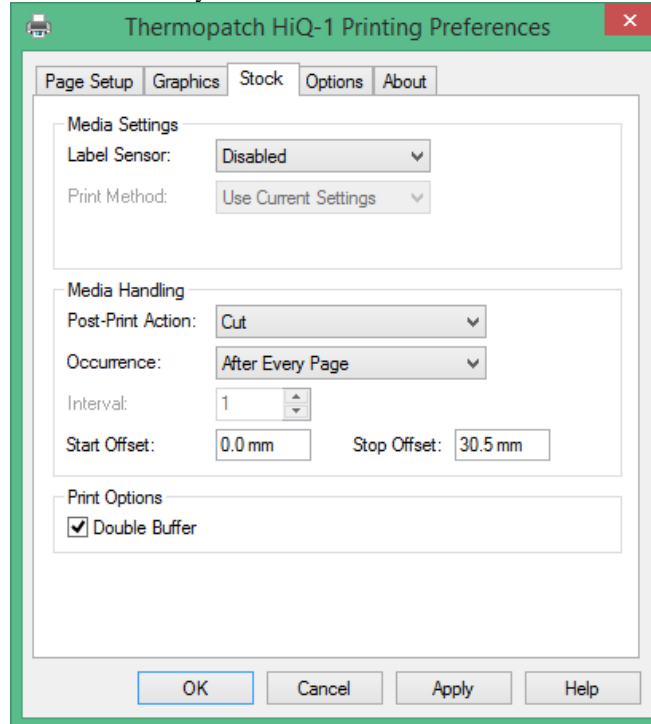
- Select tab-page Graphics



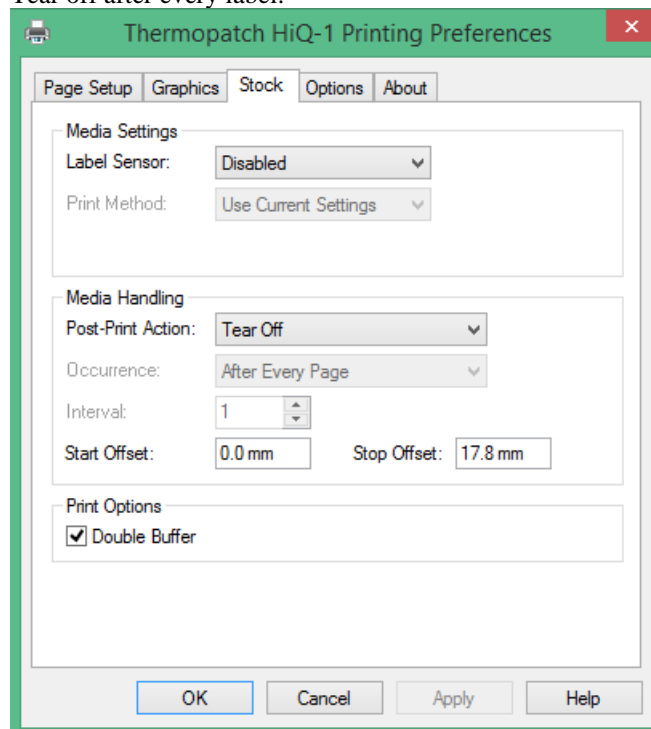
- Select tab-page Stock

When labels should be cut after every page use the settings as shown below. There is also option 'tear off' to tear off each label after each page. When using a label sensor to detect the end of a label, you have to use option 'Label Sensor: Label Gap' or 'Label Sensor: Label Mark', this depends if gaps or marks are used on the label.

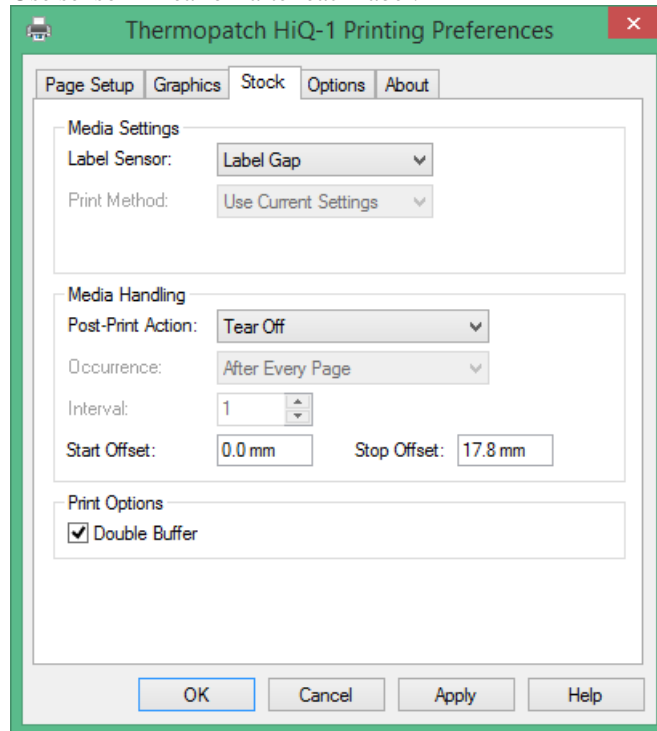
Cut off after every label:



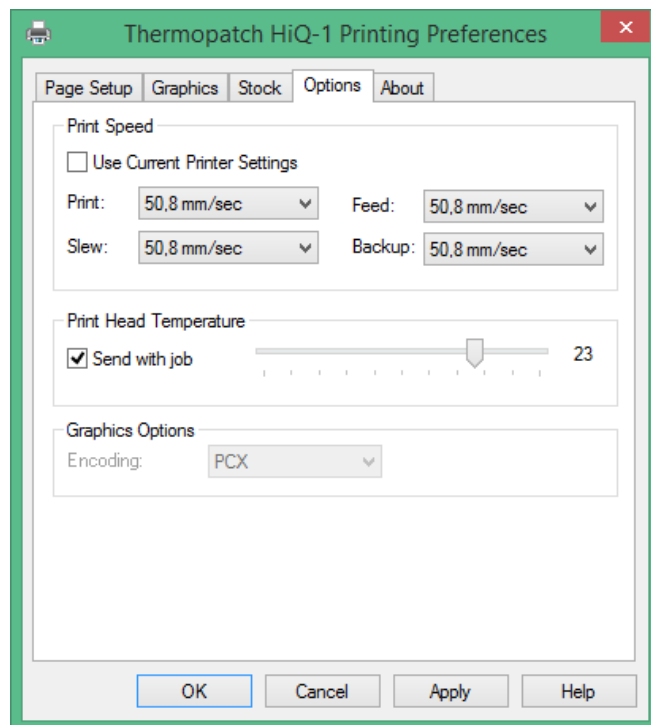
Tear off after every label:



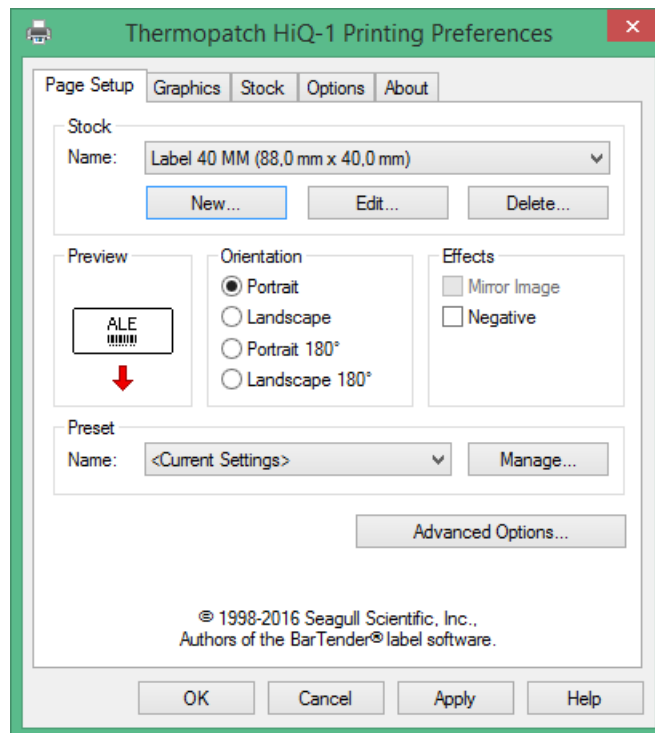
Use sensor + Tear off after each label:



- Select tab-page Options



Setup of label sizes



Tab-page Page Setup

Tab-page 'Page Setup' is used to set the sizes of the labels you want to use. Because of Spark it is important to decide beforehand what label sizes you want to use. This depends on arguments like:

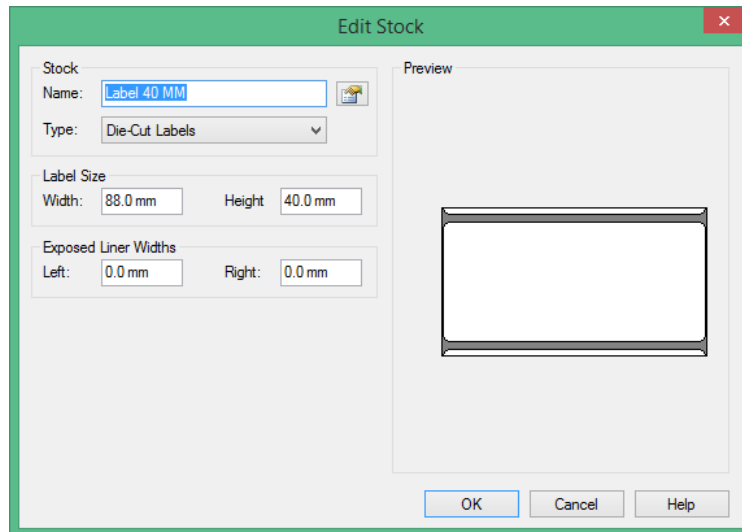
- Where do you want to patch the label? If the labels are used as collar-labels, then it should be as small as possible.
- What kind of information do you want to print on the label? If you want to print much information on each label, you'll need larger sizes.

For example you can define sizes like:

- LABEL 20 MM (88 mm x 20 mm)
- LABEL 25 MM (88 mm x 25 mm)
- LABEL 30 MM (88 mm x 30 mm)
- LABEL 35 MM (88 mm x 35 mm)
- LABEL 40 MM (88 mm x 40 mm)

By creating some label sizes beforehand, you can choose a specific size during the creation of the label-designs. You can do this in the following way:

In tab-page 'Page Setup' you choose for 'New'. A new window will be shown:



What you enter here are the sizes for each label. You enter the following information:

Name

Here you enter a name for the label size. For example, enter 'Label-40' to indicate this label has a height of 40 mm. The name you enter can be used in Spark to select a label size, so be sure you enter a significant name.

Label Size

Here you enter the sizes of the label. 'Width' is used to enter the width in millimeters, this depends on the width of the label-roll you are using, and therefore will be the same for each label. For example, enter '88,0 mm' if the label-width is 88 mm. 'Height' is used to set the height of the label in millimeters. Suppose you need a height of 25 mm, in that case you can enter '25,0 mm'.

Exposed Liner Width

This is a margin that extends outside of the surface that can be printed. For both values you can enter '0,0 mm', because for this type of printer, you can use the complete width.

When you are done, press the OK-button. If you want to create another label size, press the New-button again.

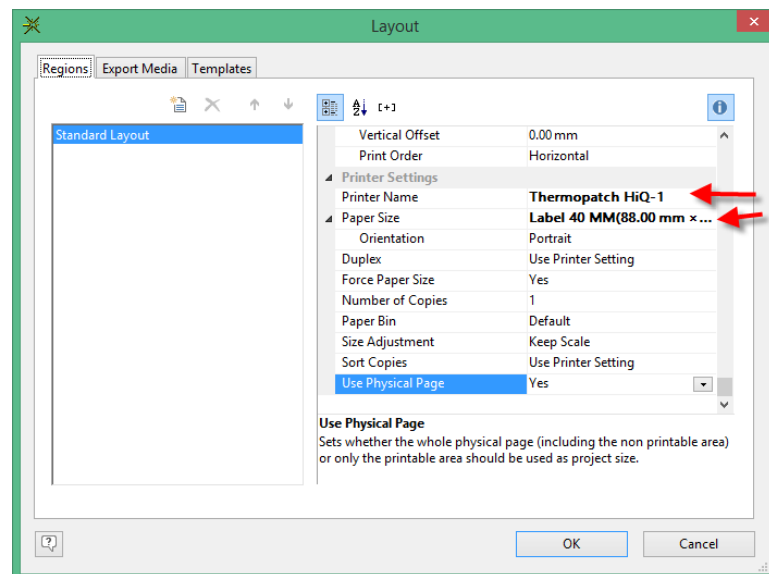
Setting the printer for each label in Spark

As soon as you have created the label sizes, you can create the labels in SparkPrint for the right printer. Specific for this printer, the following settings are recommended.

Printer Selection

In the option 'Project' and 'Layout Regions' and tab-page 'Regions' (in SparkPrint) the following settings are important:

- The printer you select should be 'HIQ-1', you can do this with the drop-down-button shown at the right. When you have selected the correct printer, in the option 'Paper Size' you select the correct size. Here you can select the sizes you have created in the 'Printer Driver'. For an explanation see the previous paragraph of this appendix.
- Be sure the option 'Use physical paper size, and not the printable area' has been selected.

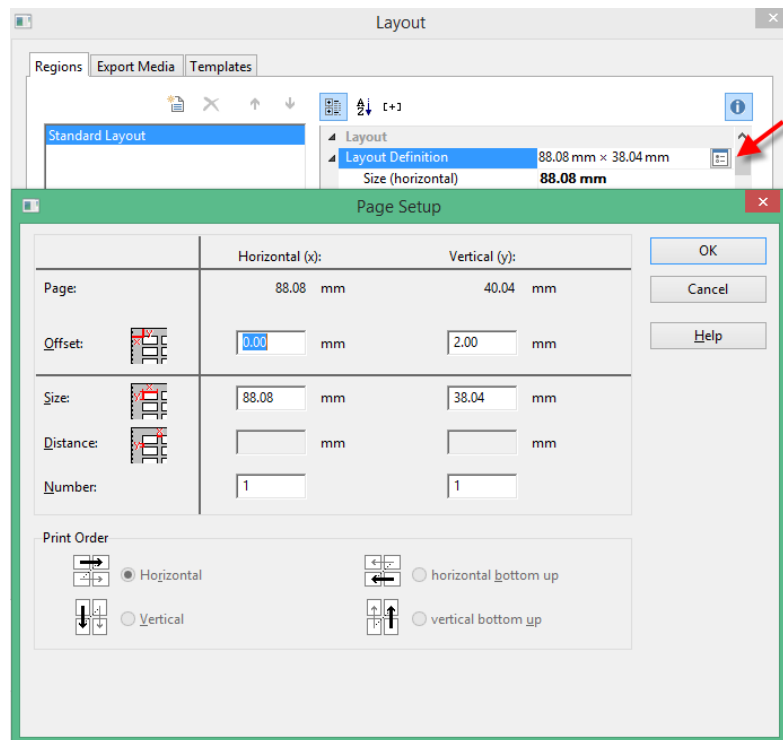


Page Setup

In option 'Project' and 'Layout Regions' and tab-page 'Regions' (in SparkPrint) click on the button at the right of 'Layout Definition'.

Enter the following:

- Page Offset: Here you enter the distance from the label-edge to the surface that is printable. It's recommended to enter '0.0 mm' for the horizontal offset, and '2.0 mm' for the vertical offset.
- Page Size: Here you enter the width and height of the label. For the horizontal size you enter the width of the label-roll you are using in millimeters. Enter the vertical size for the height of the label; use the same value you have selected for the label size in the tab-page 'Printer Selection'. The value of the vertical offset should be decremented. Suppose you have selected a label size of 40 mm and a vertical offset of 2 mm, then you enter as vertical size 38 mm.
- Page Distance: This is the distance between the labels. Enter '0.0 mm'.
- Page Number: The number of labels on a page. Enter 1.



Special note!

Be sure – for each layout – vertical offset of 2 mm! Otherwise it can result in printing of labels with a wrong size (in most cases it will be too big).

HIQ-1 printer and pre-printed label

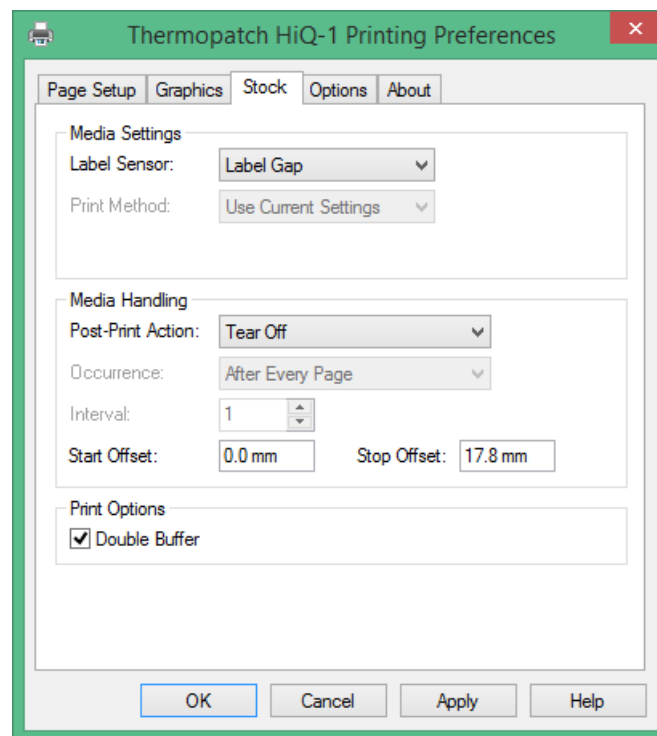
If you want to use pre-printed labels in combination with a HIQ-1 labelprinter, the following must be checked.

Printer and Sensor-position

The HIQ-1 printer has a sensor for use with pre-printed labels. The sensor can detect a mark that appears on the label-roll. In that way each label will be cut with the same size. If you want to make use of the sensor, you must be sure it is positioned at the right location. For example, if the mark on the pre-printed label is located at the left edge of the label-roll, the sensor must also be positioned at the left. You can position the sensor by turning a wheel. If you want to check and change the sensor, you must first open the hood of the printer. Also the printer-mechanism must be opened. By turning a wheel you can change the sensor-position. See also the picture at the inside of the printer in order to find the sensor.

Printer-driver settings

The HIQ-1 printer-driver settings must also be changed in order to make use of the sensor. First open the printer-properties. The following pictures will show the settings:



Remark

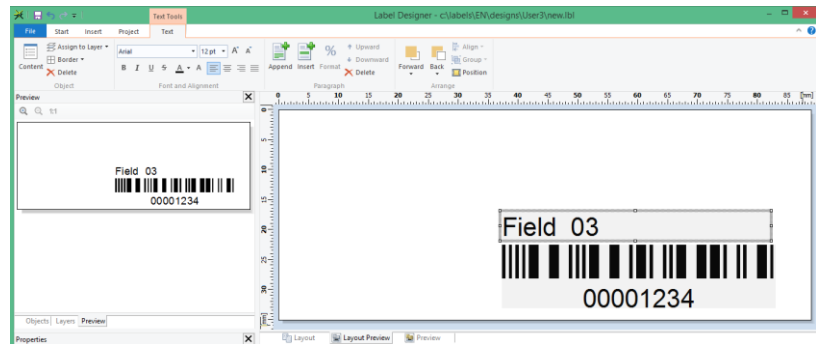
The values at *Start Offset* and *Stop Offset* are responsible for the position of the label-contents. In this example the *Stop Offset* has been set to '30.48 mm' in combination with a pre-printed label with a height of 40 mm and a label-design with a height of 25 mm. In that way the label-contents will be printed at the lower part of the label.

See example below:



SparkPrint – Label design

The following is an example of a label-design. In this case a label-height of 35 mm (top-margin is 2 mm) has been used.



Special note: If you already had created some label-designs and want to use them in combination with pre-printed labels, you must change/check the printer-settings for each individual label-design! The reason for this is, that the settings you made at 'Printers' for the HIQ-1, are not automatically overtaken for each existing label. You change the printer-settings for a specific label in SparkPrint in this way:

1. Select the label you want to change
2. Click the button 'Delete printer settings'
3. Start SparkPrint via Modify Label
4. Select the option: Project > Layout Regions > Tab-page Regions
5. At Printer Settings > Printer name you can assign the correct printer and paper-size

Appendix – Spark & HIQ-2 printer

Preface

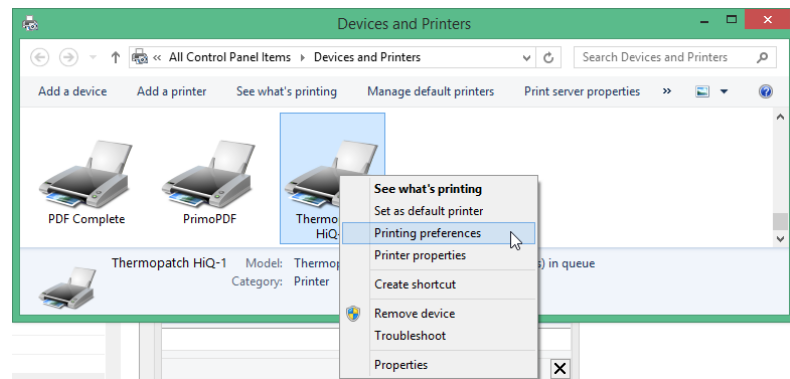
This appendix 'Spark & HIQ-2 printer' will explain how you can use Spark combined with a printer of type Godex EZ-2200, the HIQ-2-printer (trademark of Thermopatch). This is a thermotransfer-printer where each label is printed through a label-roll. The big advantage of this type of printer is that each label can have a different height and will be cut to size. Afterwards the label can be patched to a garment.

Setup of printer driver

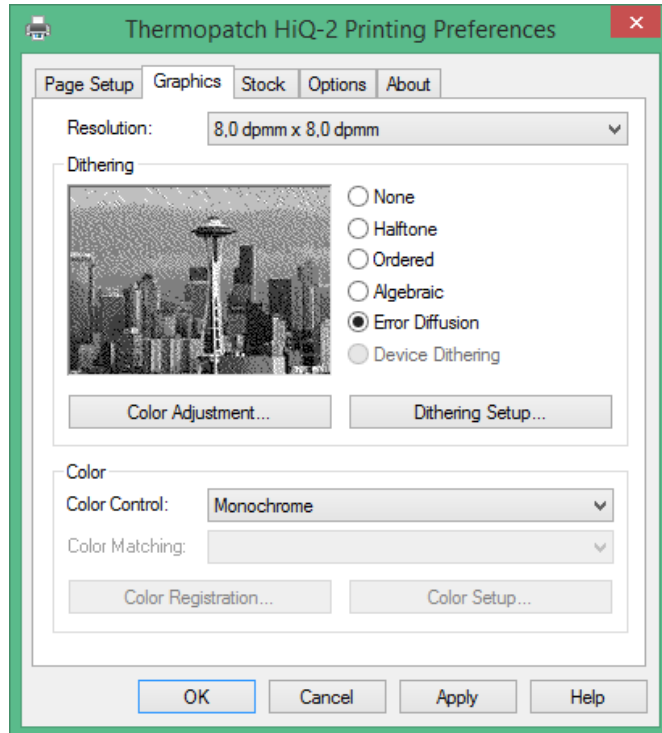
Please be sure you install the correct printer-driver. The latest driver can be found on the web-site of 'Seagull Scientific'. Look for windows-printer-drivers and Thermopatch.

The following shows how you can make the necessary printer-driver-settings:

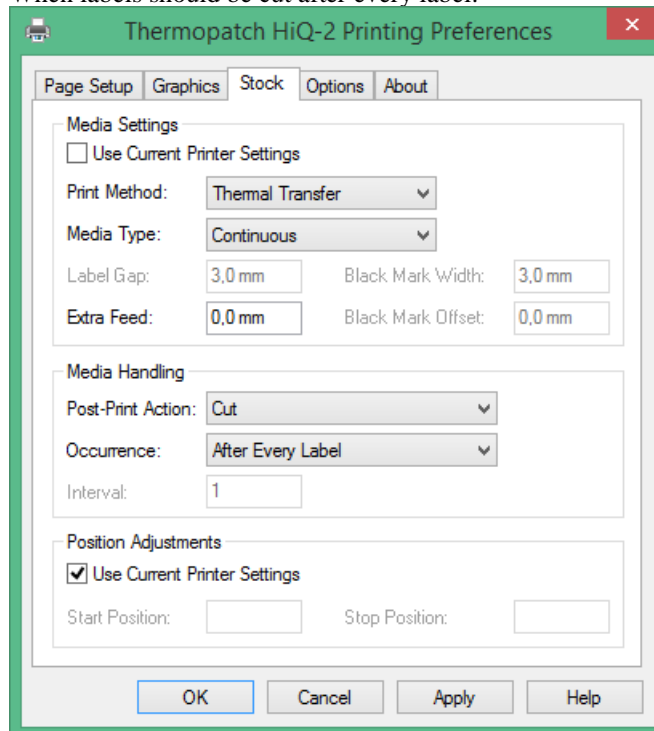
- Open the Devices and Printers Dialog
- Right click on the HIQ-2 Thermopatch Label Printer and select Printing Preferences



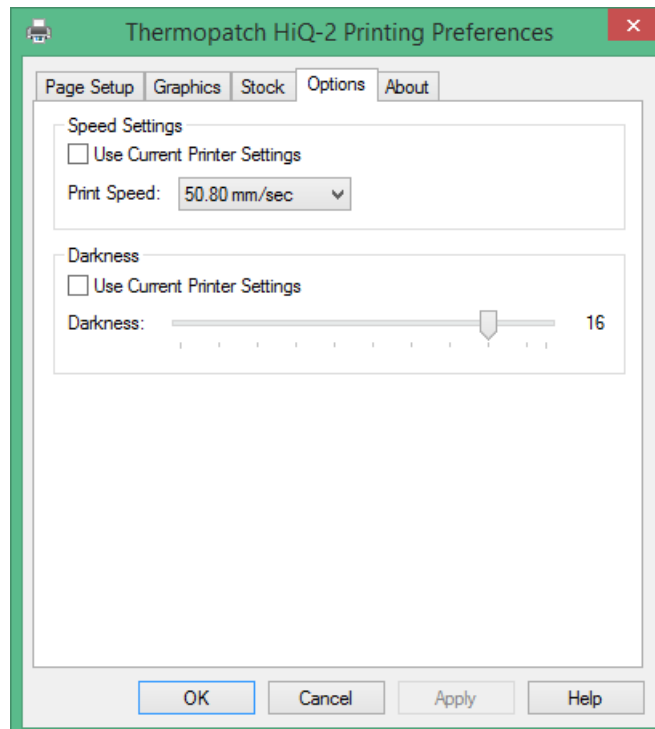
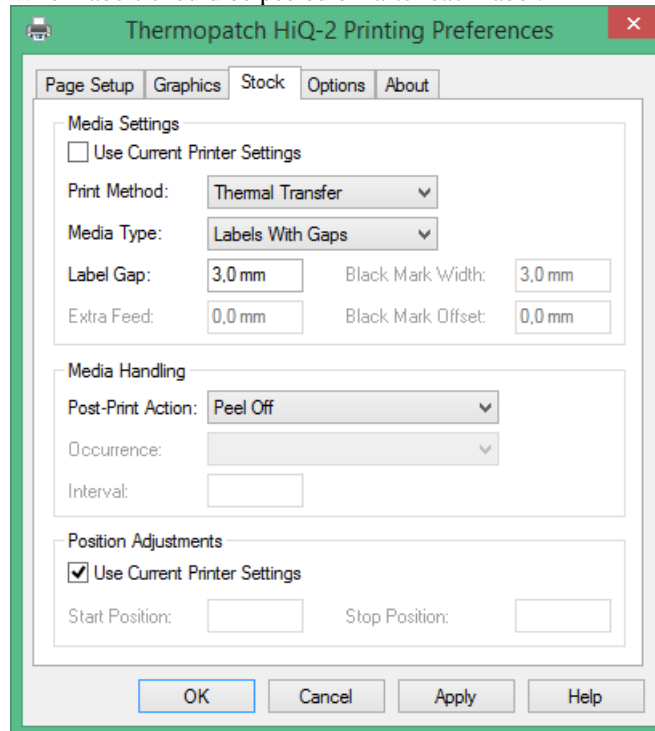
For recommended settings, see pictures below.



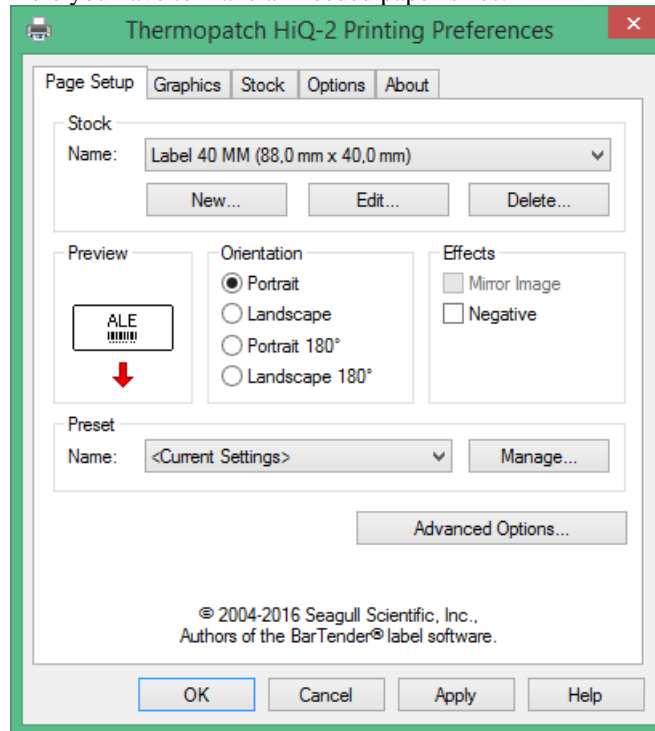
When labels should be cut after every label:



When labels should be peeled off after each label:



Here you have to make all needed paper-sizes:



After you made the printer-driver settings, you can start making the label designs via SparkPrint. Be sure to connect each design to the correct label-printer and label-size.

See also the Appendix Spark & HIQ-1 for more information about printer-driver settings and label designs.

Appendix – Spark & HIQ-a3 printer

Preface

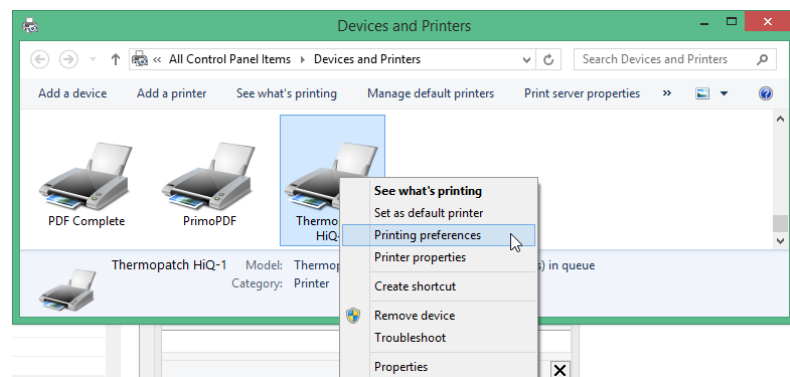
This appendix will explain how you can use Spark combined with a printer of type HIQ-a3-CAB-printer (trademark of Thermopatch and CAB). This is a thermotransfer-printer where each label is printed through a label-roll. The big advantage of this type of printer is that each label can have a different height and will be cut to size. Afterwards the label can be patched to a garment.

Setup of printer driver

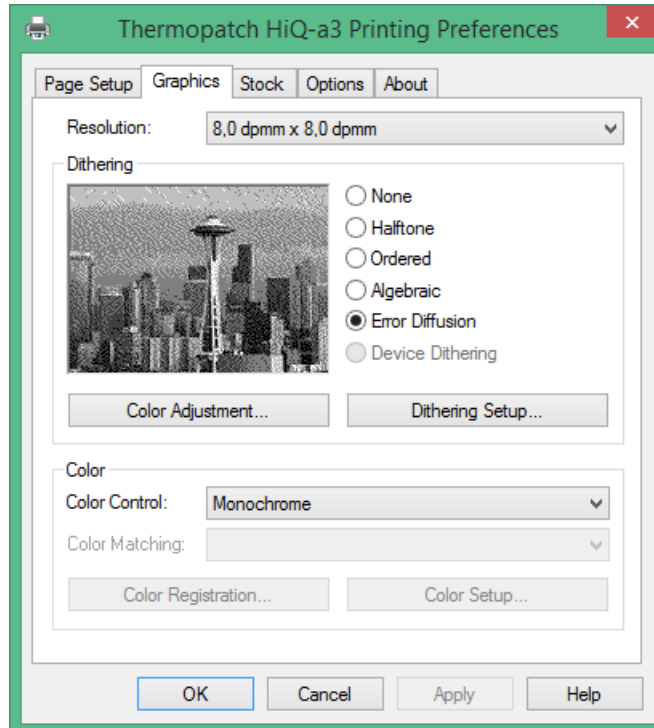
Please be sure you install the correct printer-driver. The latest driver can be found on the web-site of 'Seagull Scientific'. Look for windows-printer-drivers and Thermopatch.

The following shows how you can make the necessary printer-driver-settings.

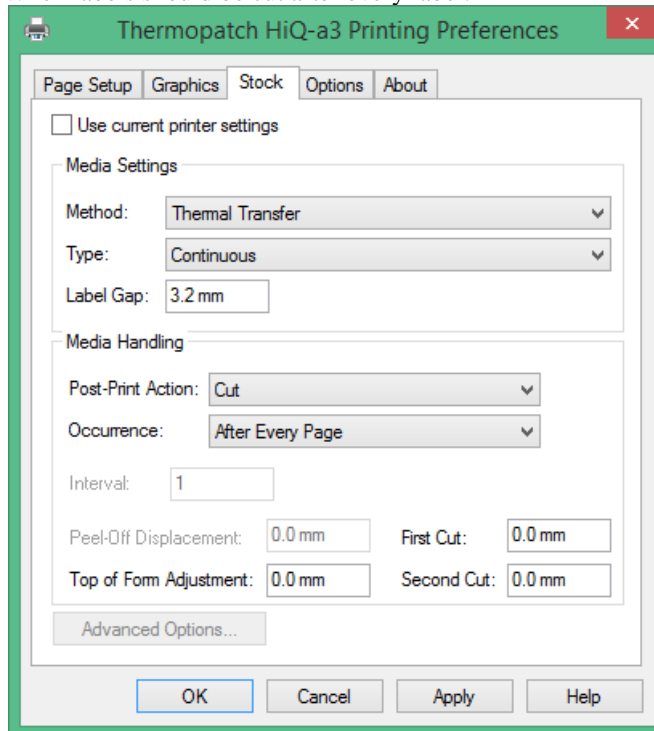
- First select the printer-driver in the 'Devices and Printers'-dialog, then press the right-mouse-button and from the popup-menu select the option 'Printer Preferences'



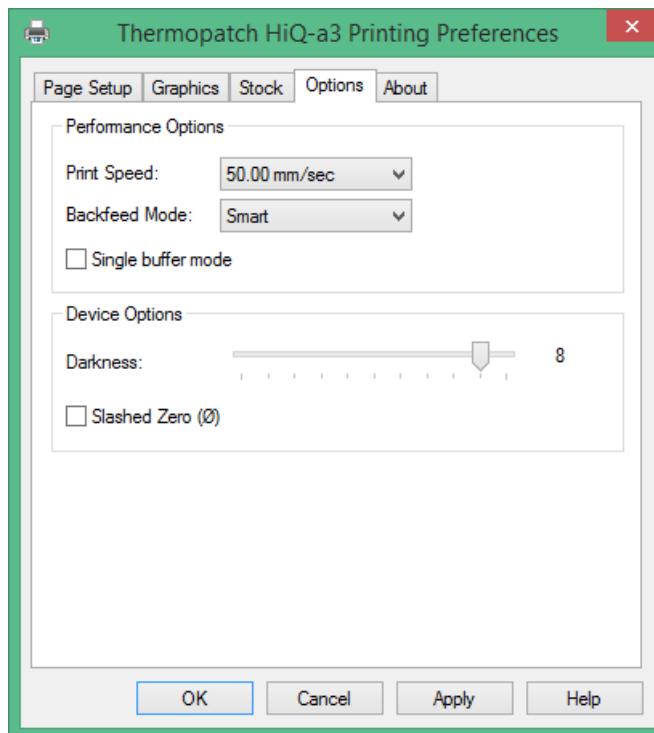
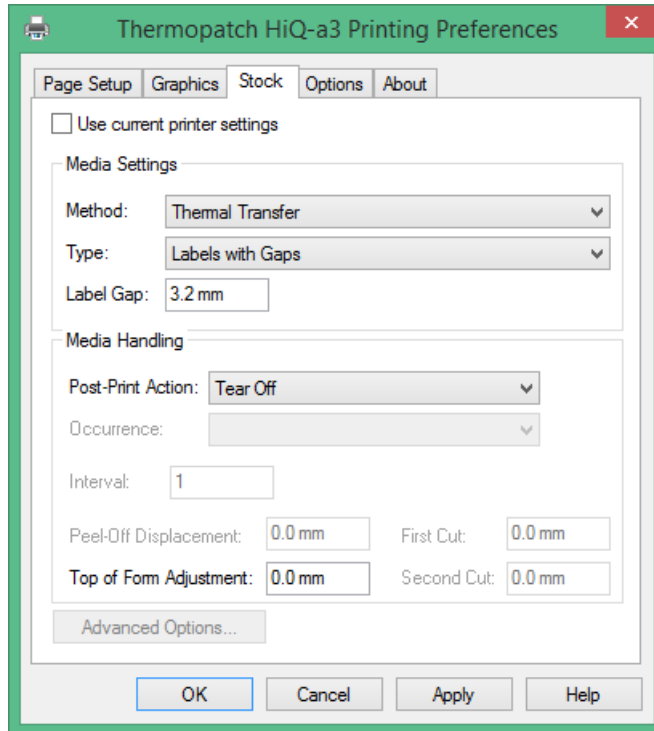
For recommended settings, see pictures below.



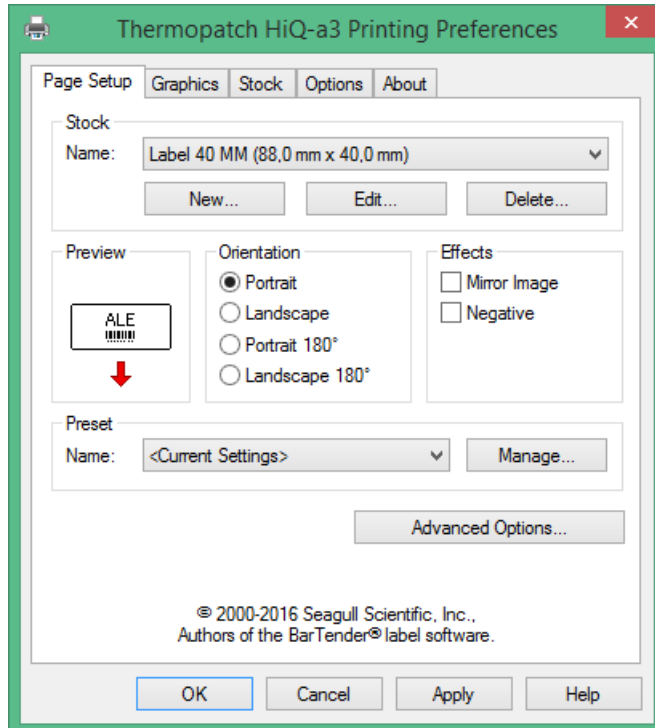
When labels should be cut after every label:



When labels should be torn off after every label:



Here you have to make all needed paper-sizes:



After you made the printer-driver settings, you can start making the label designs via SparkPrint. Be sure to connect each design to the correct label-printer and label-size.

See also the Appendix Spark & HIQ-1 for more information about printer-driver settings and label designs.

Appendix – Spark & HIQ-a4+ printer

Note

The 'HIQ-a4+' is a printer from the company Thermopatch.

Please be sure you install the correct Thermopatch HIQ-a4+ printer-driver. The latest driver is included on the Spark-Setup-CD. See the folder named 'Printer Drivers\Thermopatch'.

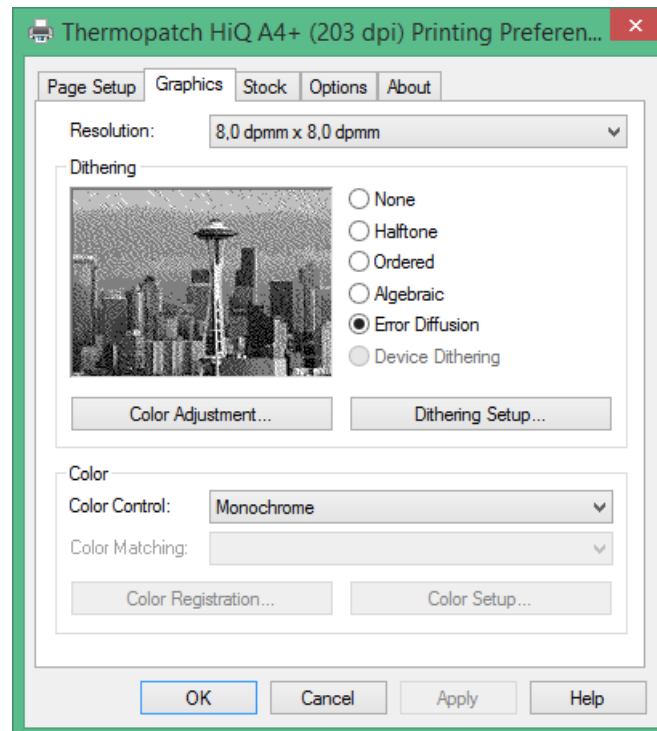
For this type of printer there are two different printer-drivers:

Thermopatch HIQ A4+ (203 dpi)

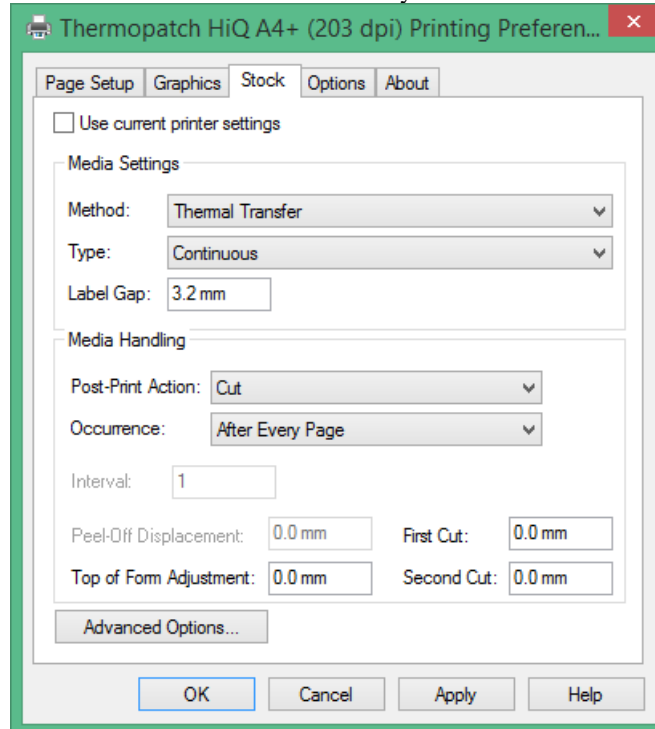
Thermopatch HIQ A4+ (300 dpi)

Be sure you install the printer-driver that matches the DPI of the printer you have.

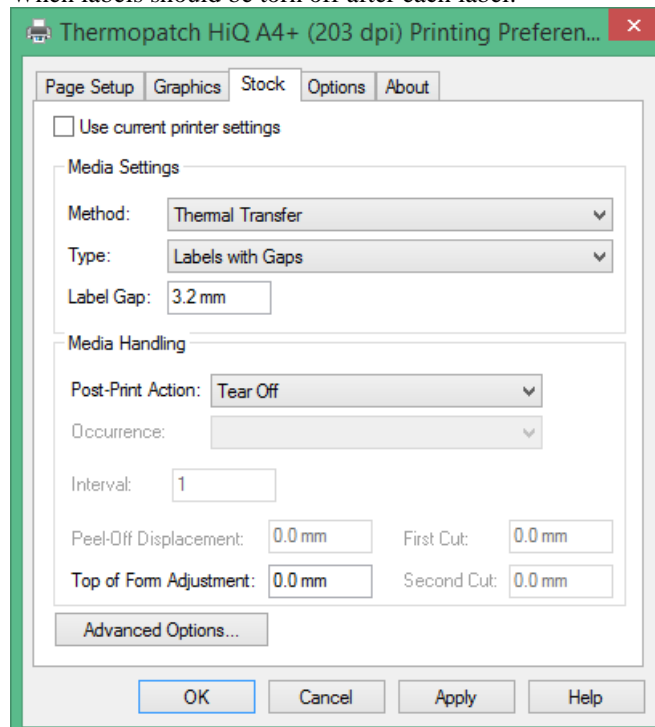
For recommended settings, see pictures below.

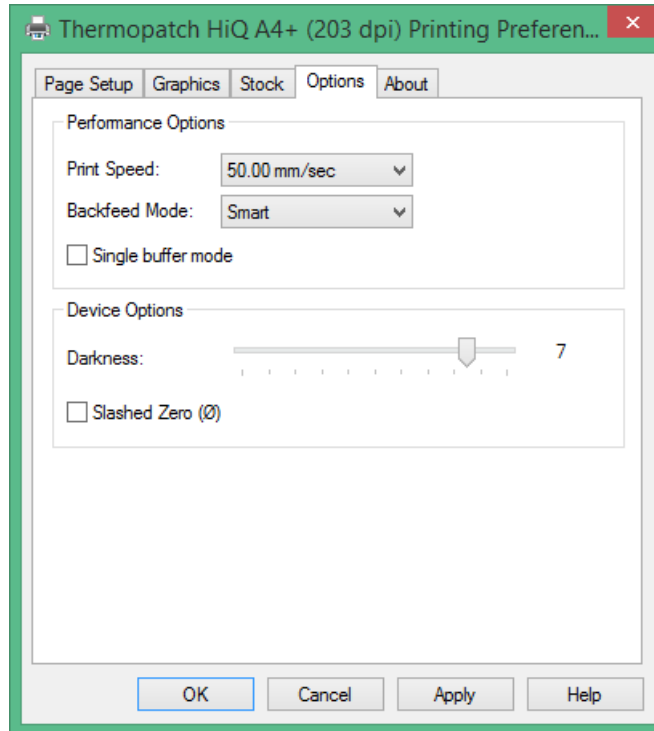


When labels should be cut after every label:

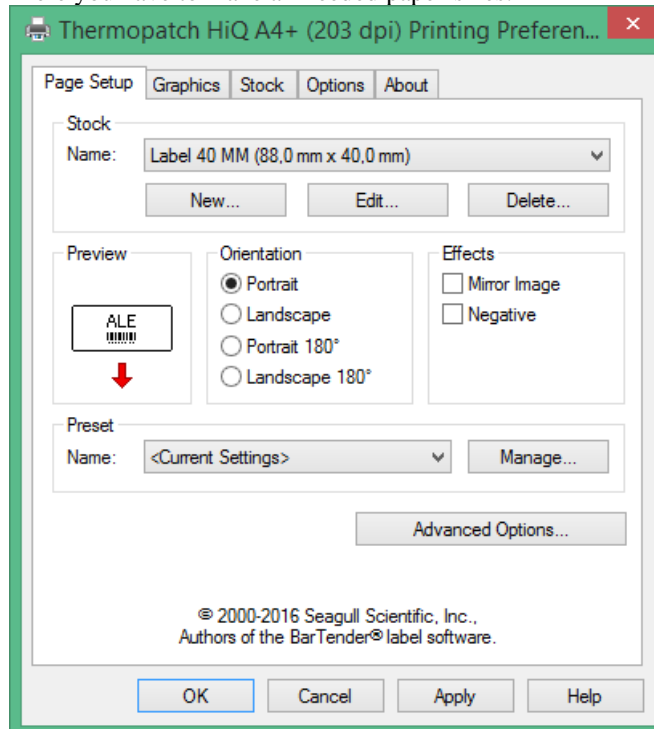


When labels should be torn off after each label:





Here you have to make all needed paper-sizes:



After you made the printer-driver settings, you can start making the label designs via SparkPrint. Be sure to connect each design to the correct label-printer and label-size.

See also the Appendix Spark & HIQ-1 for more information about printer-driver settings and label designs.

Appendix – Spark & HIQ EOS1 printer

Note

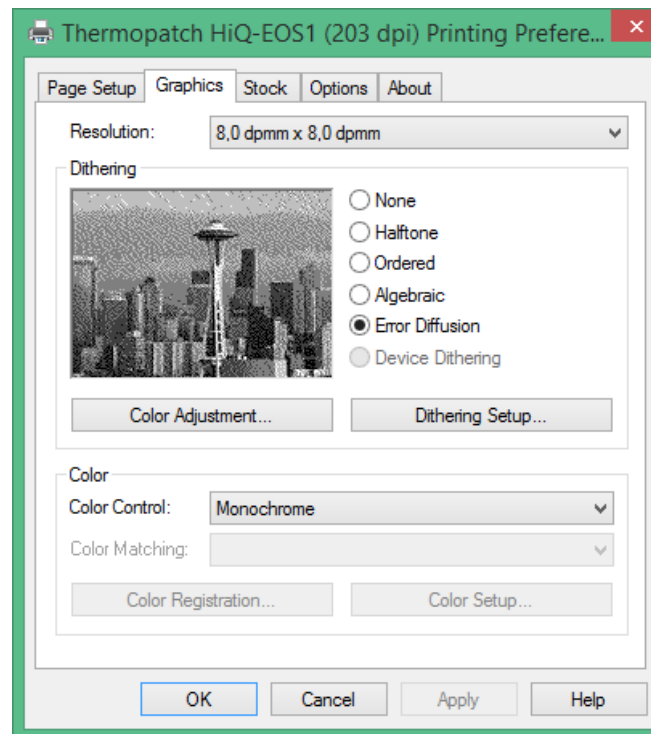
The printer of type 'HIQ EOS1' is a printer from the company Thermopatch.

Please see Appendix Spark & HIQ-A4+ for general info about setup.

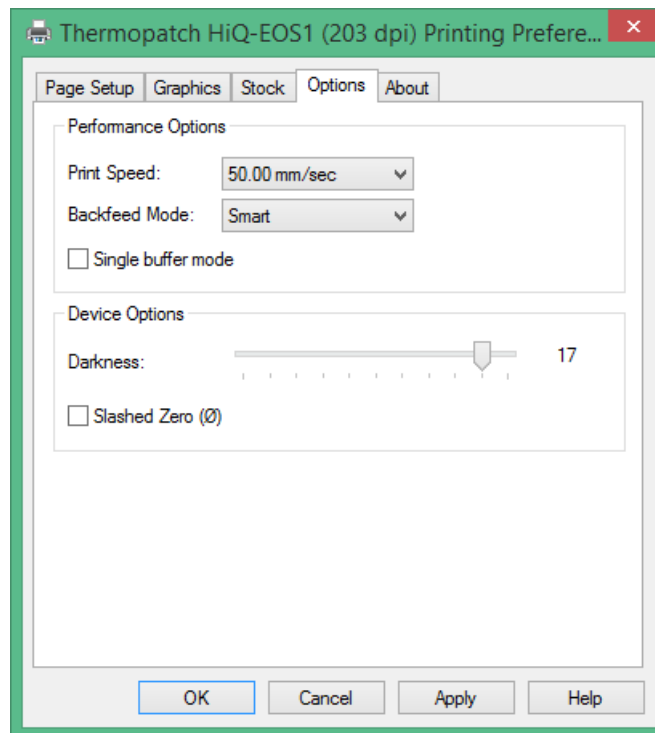
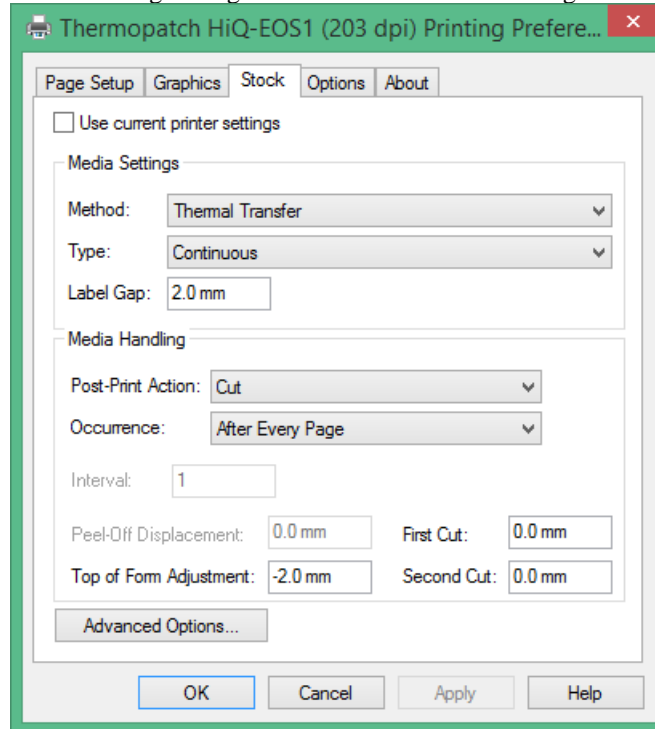
Setup of printer

Install printer-driver Thermopatch HIQ (CAB) EOS1 from Seagull Scientific. Depending on the printer itself be sure to use the correct DPI-version (203 dpi or 300 dpi).

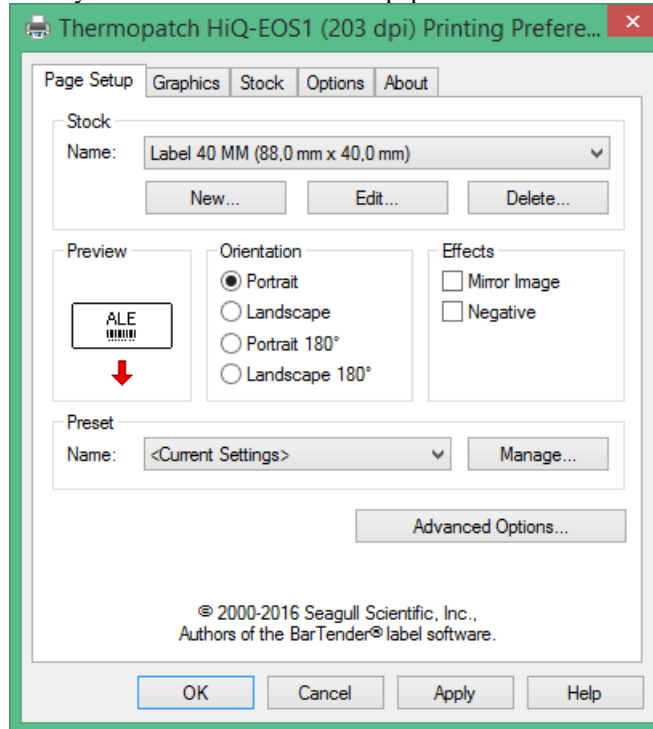
Setup of printer driver



The following settings are recommended when using a cutter:



Here you have to make all needed paper-sizes:



After you made the printer-driver settings, you can start making the label designs via SparkPrint. Be sure to connect each design to the correct label-printer and label-size.

See also the Appendix Spark & HIQ-1 for more information about printer-driver settings and label designs.

Appendix - Spark & Zebra ZT230 300dpi

Preface

This appendix will explain how you can use Spark combined with a printer of type Zebra ZT230-printer. This is a thermo Direct printer where each label is printed through a label-roll. The big advantage of this type of printer is that each label can have a different height and will be cut to size. Afterwards the label can be patched to a garment.

Setup of printer driver

Please be sure you install the correct printer-driver. After you have installed the correct printer-driver, the printer settings must be defined. See the screen-shots below for an example of these settings.

🏠 ZDesigner ZT230-300dpi ZPL

Manage your device

This device has a few different functions. Pick one to manage settings for that function.

ZDesigner ZT230-300dpi ZPL ▾

Printer status: Idle

Open print queue

[Print a test page](#)

[Run the troubleshooter](#)

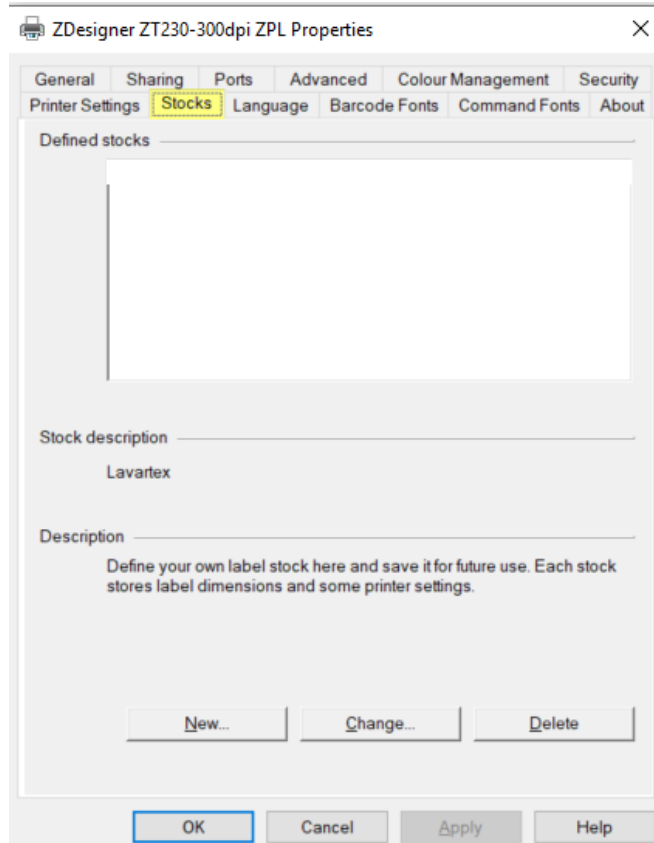
[Printer properties](#)

[Printing preferences](#)

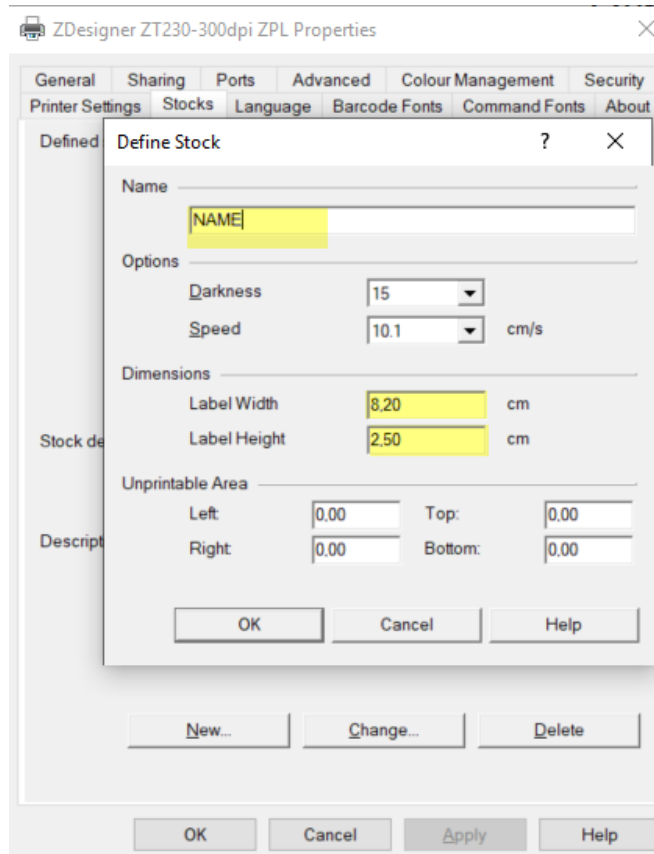
[Hardware properties](#)

Printing preferences

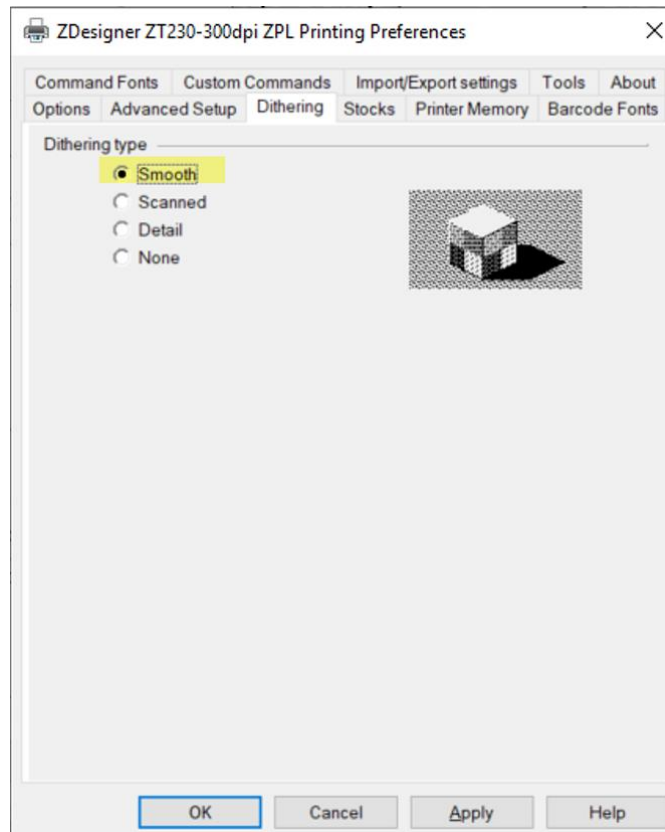
Page Setup: Depending on what label-sizes you need, you have to define one or more label-sizes. Use 'New' to create a new label-size.



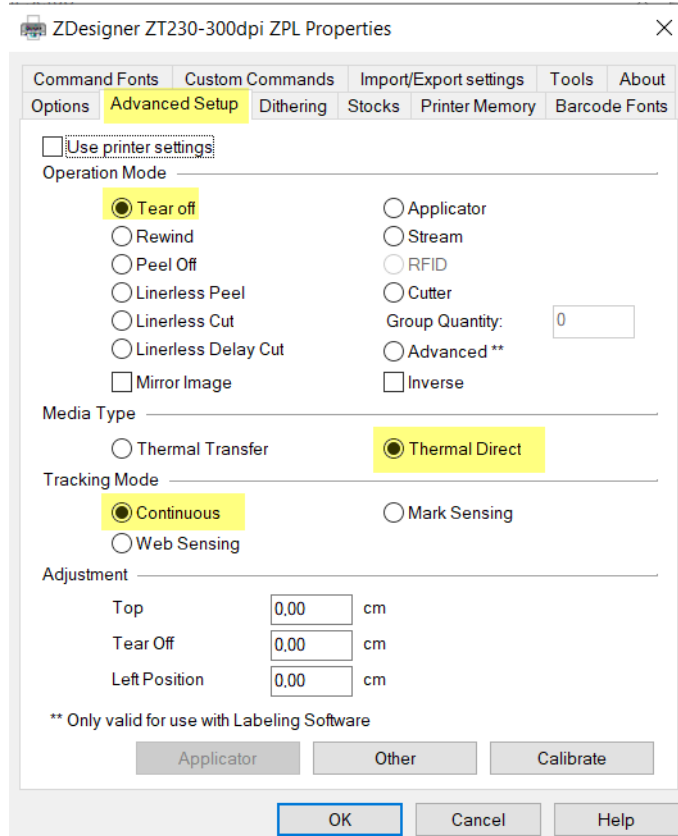
During the definition of a label-size, you have to enter a Name, Width and Height for the label.



Dithering (in the tab printer settings/preferences): Select option 'Smooth'.

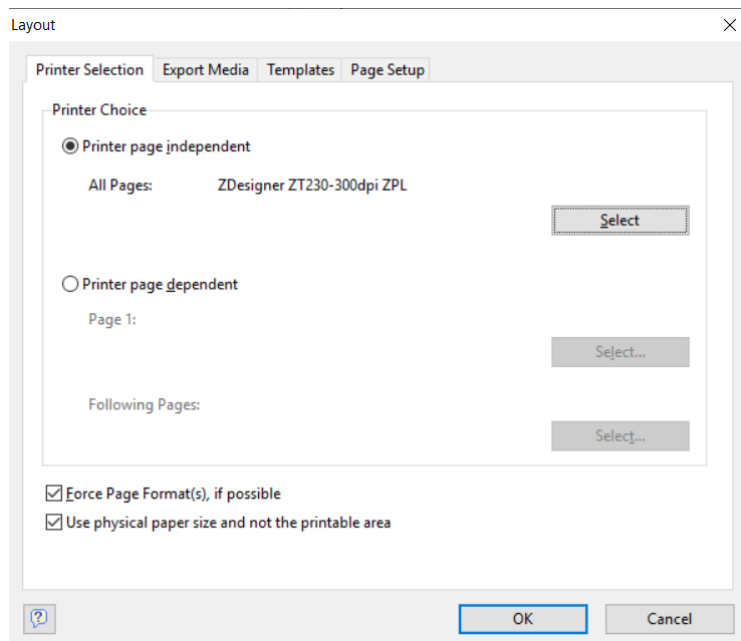


Advanced Setup: Depending on the label-material you are using, you have to define the correct settings here.



Creating a layout in Spark

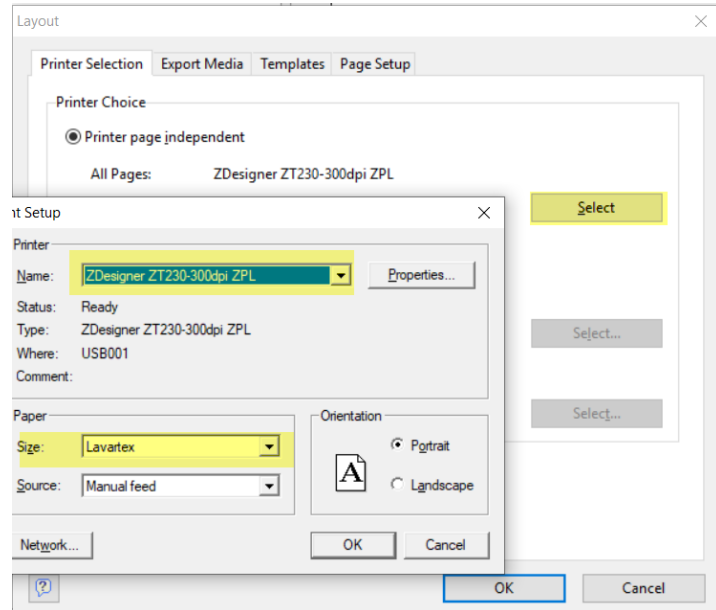
During the creation of a label-layout in Spark, you must specify what printer and label-size you want to use. The following gives an example of what you have to set in order to make use of the Zebra ZT230 printer with a specific label-size.



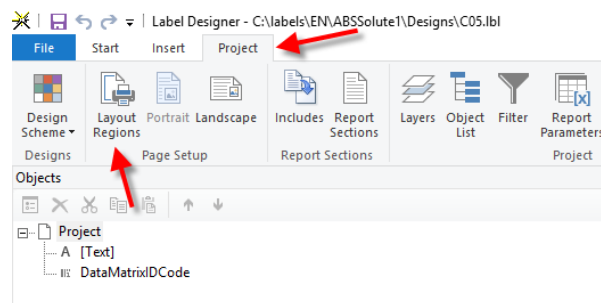
Print Setup

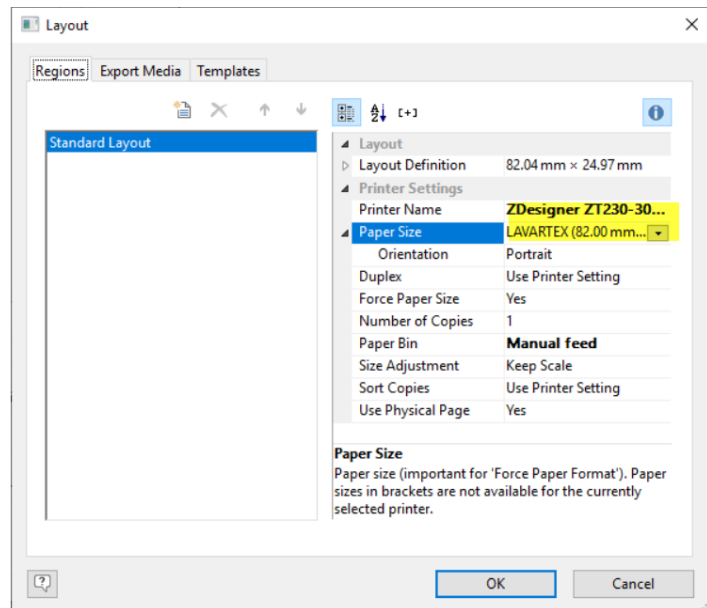
If you press the Select-button in the option 'Layout' and tab-page 'Printer Selection', the window 'Print Setup' will appear. Do the following:

- The printer you select should be Zebra ZT230. When you have selected the correct printer, in the option 'Paper' and 'Size' you select the correct size. Here you can select the sizes you have created in the 'Printer Driver'. For an explanation see the previous paragraph of this appendix.

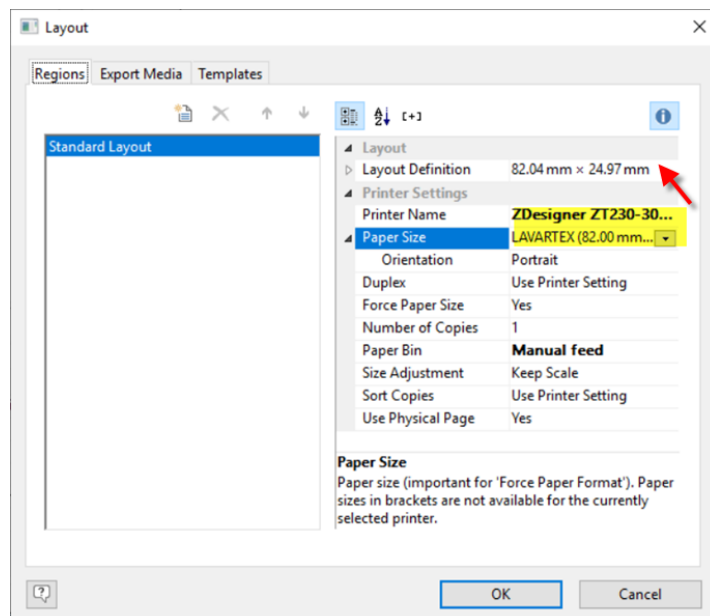


In the Layout-designer of SparkPrint, you can also click on menu-option 'Project' and after that click option 'Layout Regions' to select the printer and paper size. See below for an example.





Page Setup

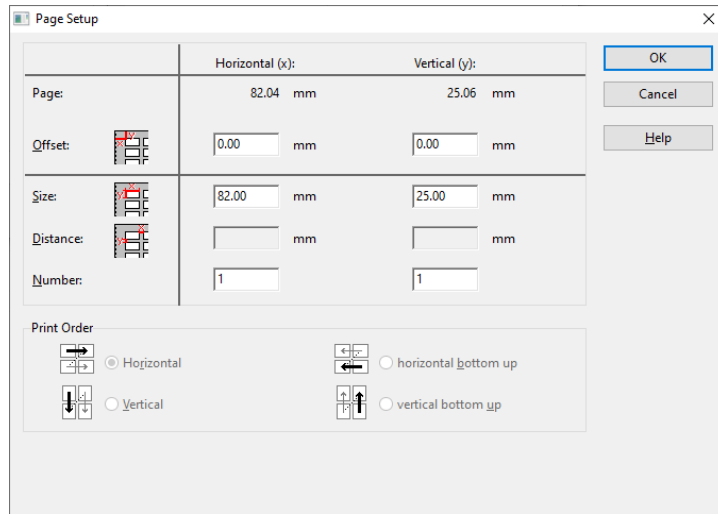


Via option 'Project' and 'Layout Definition' enter the following:
 - Page Offset: Here you enter the distance from the label-edge to the surface that is printable. Enter '0.0 mm' for the horizontal offset, and '0.0 mm' for the vertical offset.

- Page Size: Here you enter the width and height of the label. For the horizontal size you enter the width of the label-roll you are using in millimeters. Enter the vertical size for the height of the label; use the same value you have selected for the label size in the tab-page 'Printer Selection'. The value of the vertical offset should be decremented. Suppose you have selected a label size of 30 mm and a vertical offset of 2 mm, then you enter as vertical size 28 mm.

- Page Distance: This is the distance between the labels. Enter '0.0 mm' (when needed).

- Page Number: The number of labels on a page. Enter 1.



Appendix – Spark & Logomatic 2000

Preface

This appendix 'Spark & Logomatic 2000' will explain how you can use Spark combined with a printer of type Logomatic 2000 from the company Thermo-Tex. This is a 9-dots matrix-printer where each label is printed through a label-roll. The big advantage of this type of printer is that each label can have a different height and will be cut to size. Afterwards the label can be patched to a garment.

Please see the chapter named 'Appendix – Spark & Direct Print' for further instructions about this printer.

Appendix – Spark & Logomatic 3000

Preface

This appendix 'Spark & Logomatic 3000' will explain how you can use Spark combined with a printer of type Logomatic 3000 from the company Thermo-Tex. This is a 24-dots matrix-printer where each label is printed through a label-roll. The big advantage of this type of printer is that each label can have a different height and will be cut to size. Afterwards the label can be patched to a garment.

Setup of printer

The Logomatic 3000-printer itself should be set to the so-called 'WIN-Modus'. See the manual of the printer for instructions. This mode will always be shown on the printer's display, after you have switched on the printer, so you can easily check if the mode is correct. No other settings have to be made.

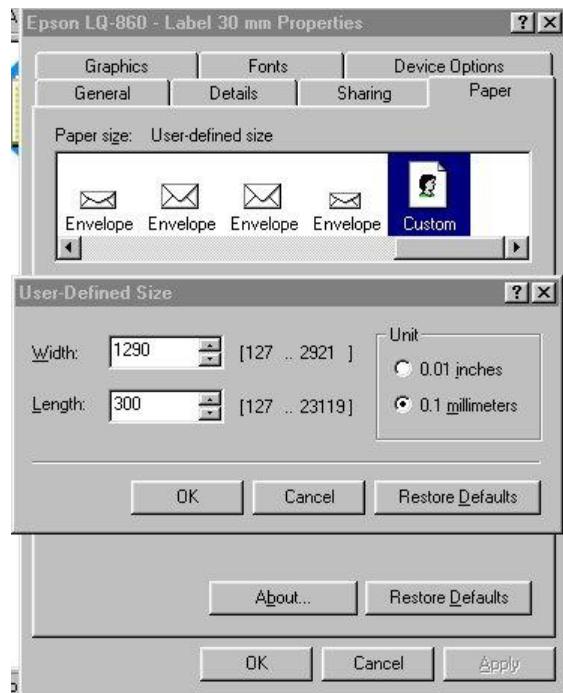
Setup of printer driver

Before you can use the printer, you have to install and setup the printer driver for this printer. This must be an Epson LQ-860 printer-driver. This driver is included with MS-Windows. You install the driver by selecting the menu-option 'Start', 'Settings' and 'Printers'. By double-clicking the option 'Add Printer' a wizard will be started. Please follow the suggestions of the Wizard. Be sure you do not print a test-page.

<p>Important: It is recommended to add an extra printer that is set as 'default printer'. This may also be a generic printer. Only then the use of labels with different heights will be handled without problems.</p>

Creation of a custom paper size

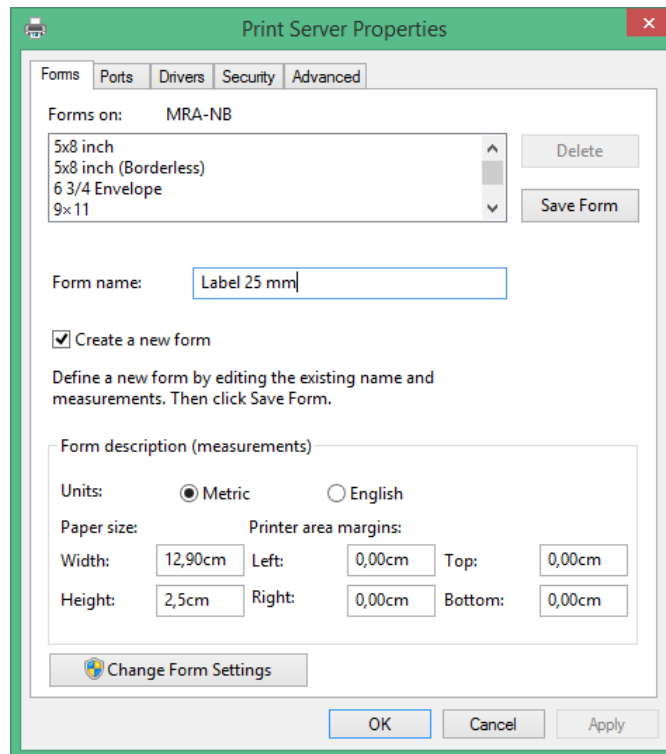
After you have installed the Epson LQ-860 printer driver, you must create a custom paper size. By doing this, you can print labels with a specific height.



Instructions for Windows 9x

- Select the option 'Start', 'Settings' and 'Printers'.
- Select the printer named Epson LQ-860 and press the right-mouse-button. A menu will appear.
- From the menu, select the option 'Properties'.
- Select tab-page 'Paper'.
- In the part named 'Paper size', select the item named 'Custom'. Click on this option. A window will appear.
- From the window named 'User-defined Size' set the width and height you prefer. This must be set in 1/10 of millimeters. If you want to print labels with a width of 89 mm and a height of 30 mm, you enter '1290' and '300'. Be sure you always add 40 mm to the width, this is a fixed left-margin for the Logomatic 3000.
- Click OK.
- Click Apply.

Special note: You can set only **one** custom-size. In order to print labels of different heights, for example 20, 25 and 30 mm, you must install more than one Epson LQ-860-printer driver. By giving them names like 'Epson LQ-860 20 mm', 'Epson LQ-860 25 mm' and 'Epson LQ-860 30 mm' you can easily recognize them.



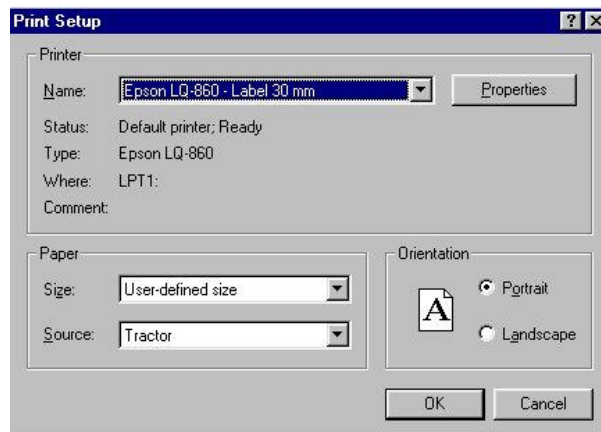
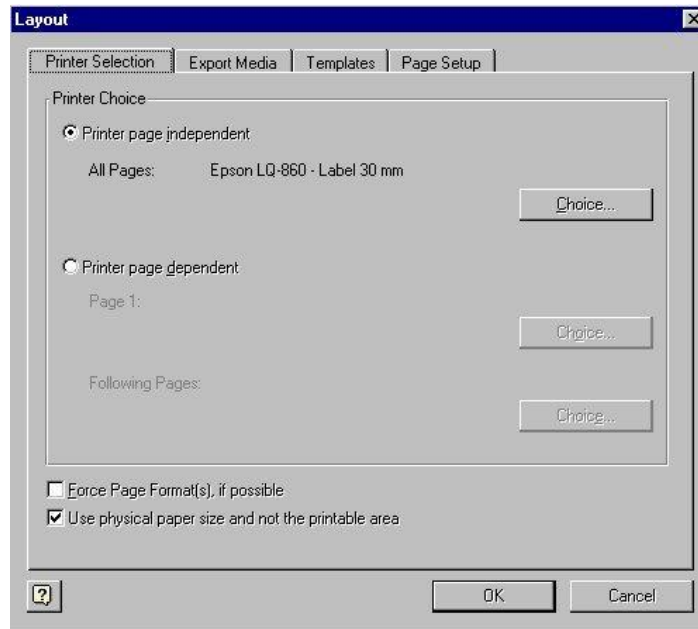
Instructions for Window Vista and higher

- You create a custom paper size with the option 'Device and Printers'. Select the menu-option 'File' and 'Server Properties'.
- Select tab-page 'Forms'.
- Set a mark in the option 'Create a New Form'.
- At the option 'Form Description for' you can enter a description for the size. Enter something like 'Label 30 mm'.
- At 'Width' you enter the width of the label. Enter '12,90cm' for a width of 8,90 cm where a left-margin is added of 4,00 cm (the Logomatic-3000 printer has a fixed left-margin of 4,00 cm).
- At 'Height' you enter the height of the label. Enter '3,00 cm' for a height of 3 cm. At 'Left', 'Right', 'Top' and 'Bottom' you can set the value to '0,00cm'.
- Click on the button named 'Save Form'.
- Click 'Apply' and 'OK'.

Special note: In this way you can set more than one custom-size. But only the first you entered can be used in the printer-driver. Due to a limit in the Epson LQ-860 printer-driver you can only select the first custom-size you entered! This means all labels you want to print are limited to one specific height! The only solution to this is to use Windows 9x as operating system for your printer-pc. See also the previous paragraph.

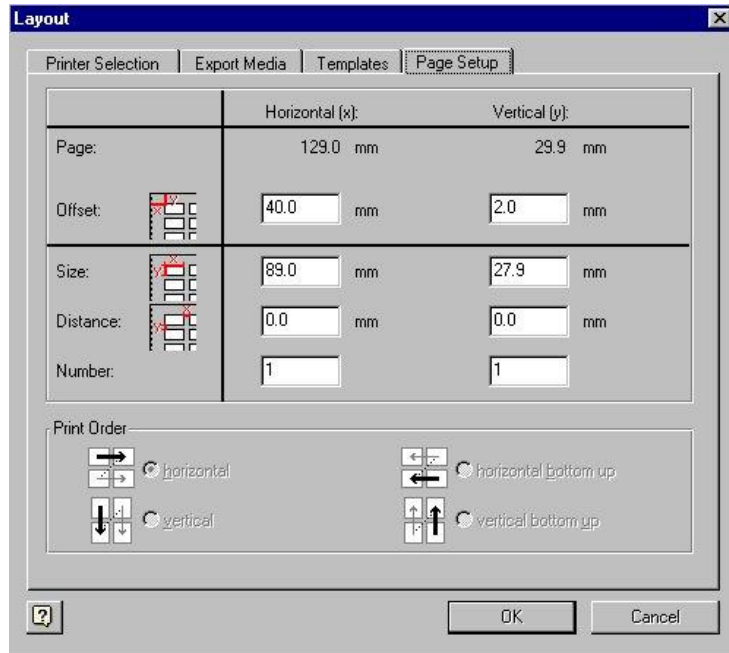
Creating a layout in Spark

During the creation of a label-layout in Spark, you must specify what printer and size you want to use. The following gives an example of what you have to set in order to make use of the Epson LQ-860-printer with a specific label-size.



Printer Selection

In this window, click the Choice-button to set the printer and printer-size. For example, you select the printer named 'Epson LQ-860 30 mm' and as a size you select the size 'User-defined size' if you use Windows 9x. If you use Windows NT/2000 you can only select one printer named 'Epson LQ-860' and as a size you can only select one size with a name like 'Label 30 mm'. See also the explanation in the previous paragraph.



Page Setup

In this window you must set the dimensions of the label-layout you want to use. Be sure you set a horizontal offset of 40 mm and a vertical offset of 2 mm. This means the horizontal size must be the width of the label minus 40 mm and the vertical size must be the height minus 2 mm. See the picture above for an example.

Appendix – Spark & ThermoTex TT1

Preface

This appendix 'Spark & TT1' will explain how you can use Spark combined with a printer of type TT1 (from the company ThermoTex). This is a thermotransfer-printer where each label is printed through a label-roll. The big advantage of this type of printer is that each label can have a different height and will be cut to size. Afterwards the label can be patched to a garment.

Setup of printer

Please be sure you install the correct printer-driver. The latest driver can be found on the web-site of 'Seagull Scientific'. Look for windows-printer-drivers and ThermoTex.

For this type of printer there are two different printer-drivers:

ThermoTex TT-1 (203 dpi)

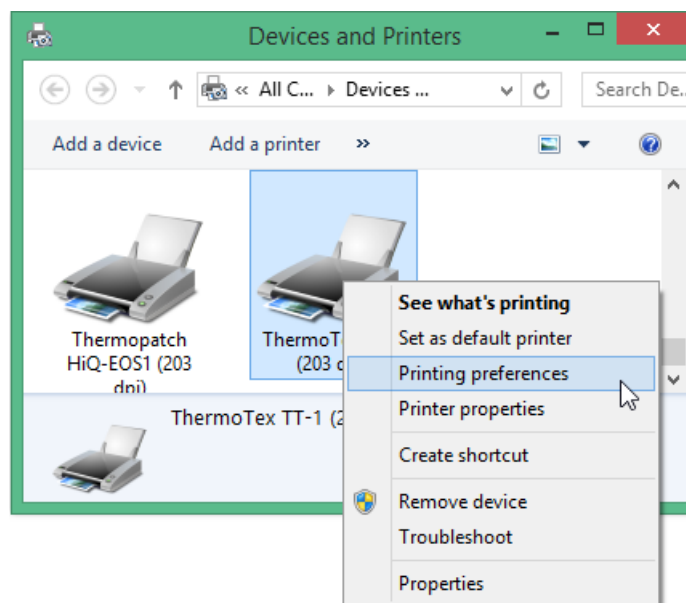
ThermoTex TT-1 (300 dpi)

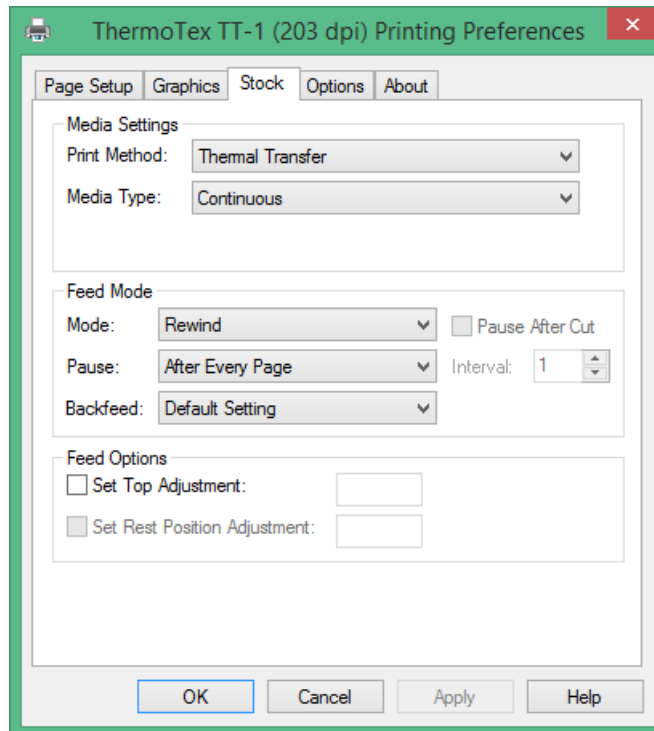
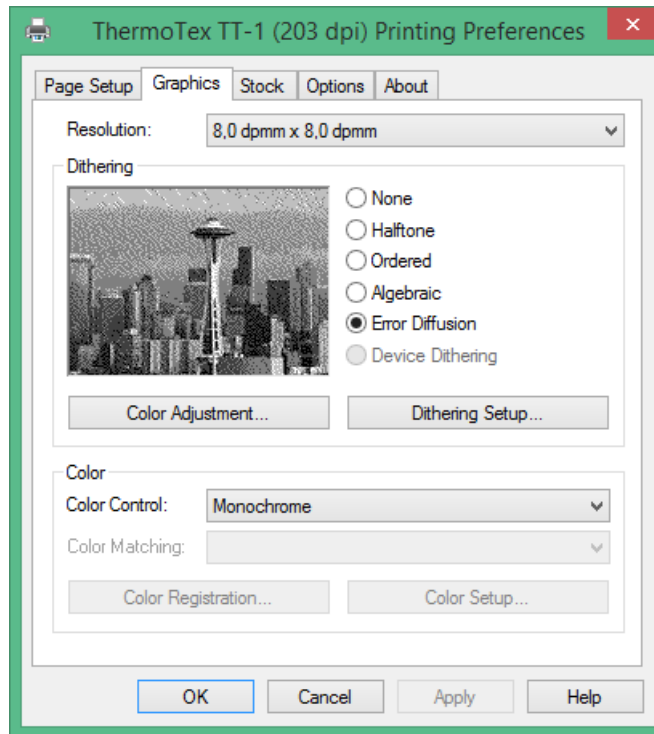
Be sure you install the printer-driver that matches the DPI of the printer you have.

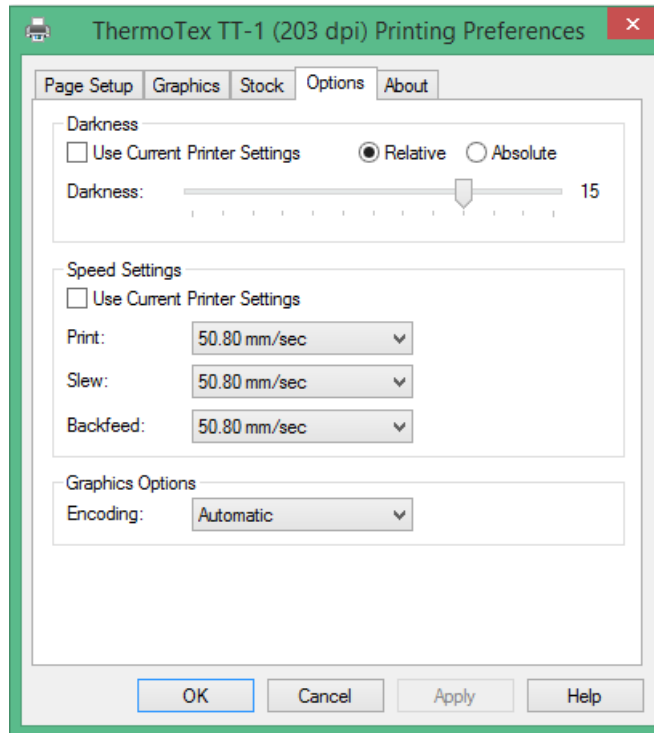
Setup of printer driver

Before you can use the printer, you have to install and setup the printer driver for this printer. This driver must be the 'ThermoTex TT1'. The following pictures show the settings you should make, please use the same settings as shown here.

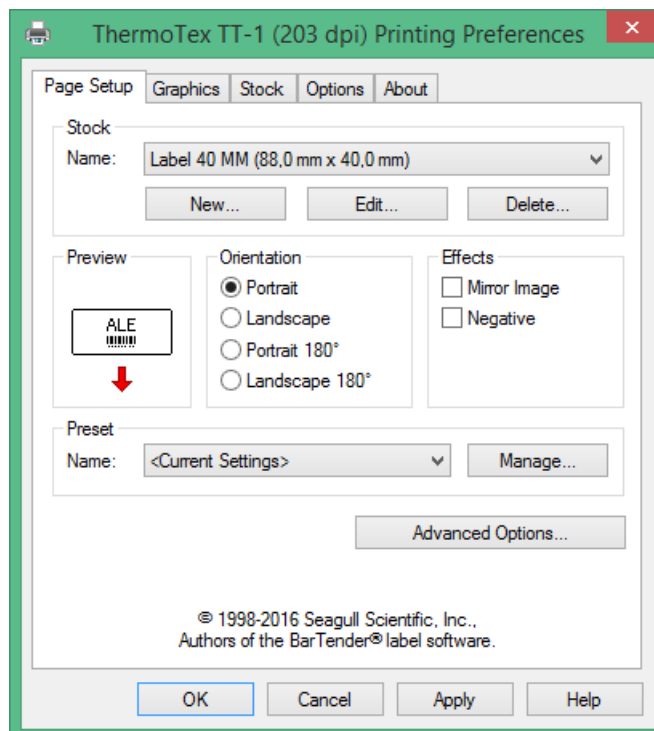
- First select the printer-driver in the 'printers'-window, then press the right-mouse-button and from the popup-menu select the option 'Printer Preferences'







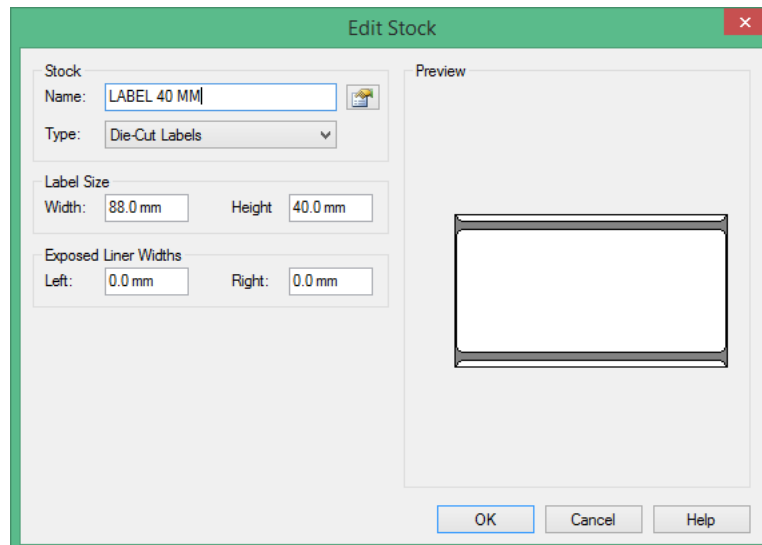
Setup of label sizes



Tab-page Page Setup

Tab-page 'Page Setup' is used to set the sizes of the labels you want to use. Because of Spark it's important to decide beforehand what label sizes you want to use. This depends on arguments like:

- Where do you want to patch the label? If the labels are used as collar-labels, then it should be as small as possible.
 - What kind of information do you want to print on the label? If you want to print much information on each label, you'll need larger sizes.
- In tab-page 'Page Setup' you choose for 'New'. A new window will be shown



What you enter here are the sizes for each label. You enter the following information:

Name

Here you enter a name for the label size. For example, enter 'Label-40' to indicate this label has a height of 40 mm. The name you enter can be used in Spark to select a label size, so be sure you enter a significant name.

Label Size

Here you enter the sizes of the label. 'Width' is used to enter the width in millimeters, this depends on the width of the label-roll you are using, and therefore will be the same for each label. For example, enter '88,0 mm' if the label-width is 88 mm. 'Height' is used to set the height of the label in millimeters. Suppose you need a height of 25 mm, in that case you can enter '25,0 mm'.

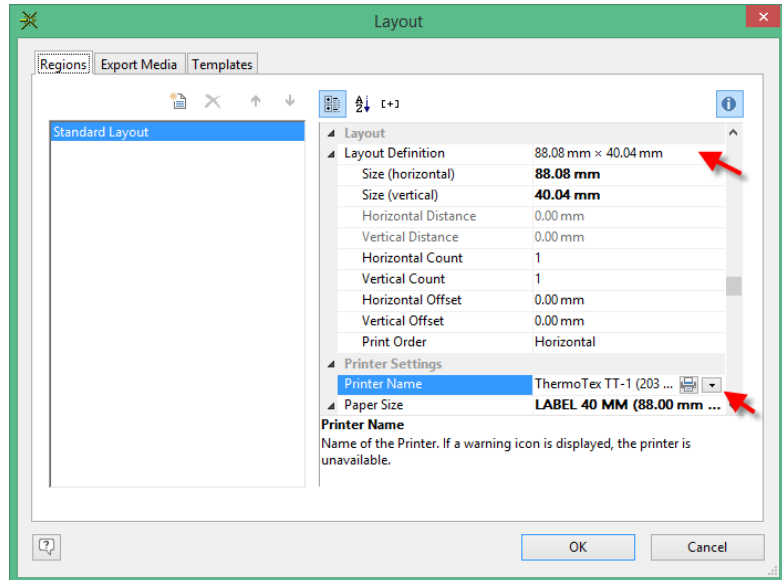
Exposed Liner Size

This is a margin that extends outside of the surface that can be printed. For both values you can enter '0,0 mm', because for this type of printer, you can use the complete width.

When you are done, press the OK-button. If you want to create another label size, press the New-button again.

Creating a layout in Spark

During the creation of a label-layout in Spark, you must specify what printer and size you want to use. The following gives an example of what you have to set in order to make use of the TT1 printer with a specific label-size.



Print Setup

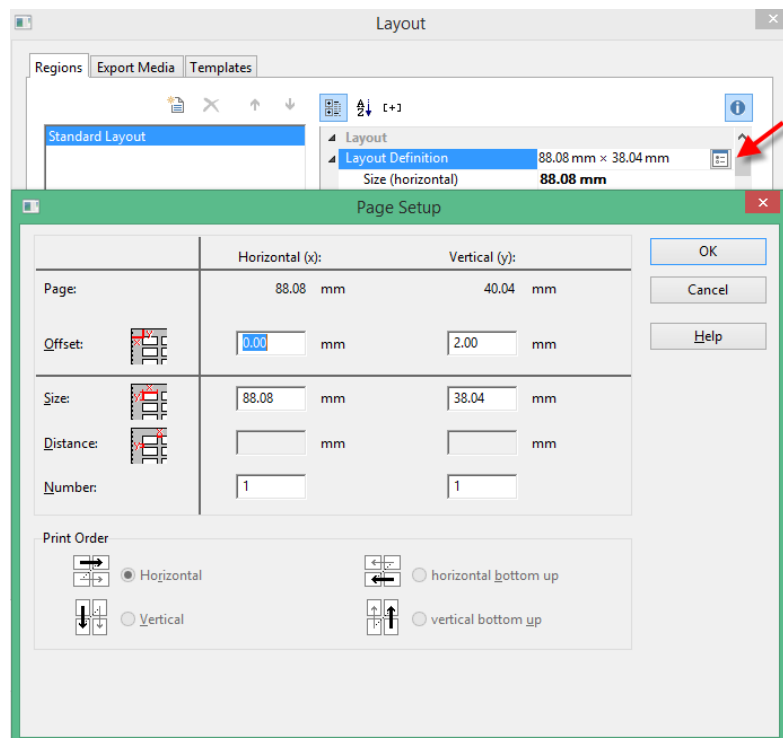
In the option 'Project' and 'Layout Regions' and tab-page 'Regions' (in SparkPrint) the following settings are important:

- The printer you select should be TT1. When you have selected the correct printer, in the option 'Paper Size' you select the correct size. Here you can select the sizes you have created in the 'Printer Driver'. For an explanation see the previous paragraph of this appendix.

Page Setup

In option 'Layout' and tab-page 'Page Setup' enter the following:

- Page Offset: Here you enter the distance from the label-edge to the surface that is printable. It's recommended to enter '0.0 mm' for the horizontal offset, and '2.0 mm' for the vertical offset.
- Page Size: Here you enter the width and height of the label. For the horizontal size you enter the width of the label-roll you are using in millimeters. Enter the vertical size for the height of the label; use the same value you have selected for the label size in the tab-page 'Printer Selection'. The value of the vertical offset should be decremented. Suppose you have selected a label size of 30 mm and a vertical offset of 2 mm, then you enter as vertical size 28 mm.
- Page Distance: This is the distance between the labels. Enter '0.0 mm'.
- Page Number: The number of labels on a page. Enter 1.



Appendix – Spark & ThermoTex TT3

Note

The 'TT3' is also a printer from the company ThermoTex.

Please be sure you install the correct printer-driver. The latest driver can be found on the web-site of 'Seagull Scientific'. Look for windows-printer-drivers and ThermoTex.

For further information, please see the appendix 'Appendix Spark & ThermoTex TT1'.

Appendix – Spark & ThermoTex TT4

Note

The 'TT4' is also a printer from the company 'ThermoTex'.

Please be sure you install the correct printer-driver. The latest driver can be found on the web-site of 'Seagull Scientific'. Look for windows-printer-drivers and ThermoTex.

For this type of printer there are two different printer-drivers:

ThermoTex TT-4 (203 dpi)

ThermoTex TT-4 (300 dpi)

Be sure you install the printer-driver that matches the DPI of the printer you have.

For further information, please see the appendix 'Appendix Spark & ThermoTex TT1'.

Appendix – Spark & Thermo-Ident 2

Note

The 'Thermo-Ident 2' is also a printer from the company 'ThermoTex'.

Conditions

For a correct working of this printer with Spark the following must be taken into account:

- You have to use this printer in 'Graphics-mode'. You can only do that when the printer is connected to the network. When you use a different connection (USB or Serial) then this is not possible.
- You have to use a printer-driver of type CAB A4+ (300 dpi) from Seagull Scientific.
- You can only print *one* label at a time. After each label you have to patch the label, and only after that you can print the next label.
- Settings about label-size, printing-speed and heat must be done in printer-driver, not on the machine itself.
- Be sure you made the following setting on the printer itself: Via menu 3 select option 'Netzwerk/Grafik'.
- The printer must have firmware-version 4.02 or higher. If this is not the case, you have to update the firmware.

Setup of printer

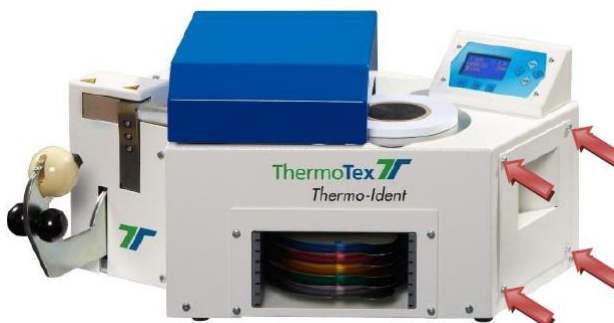
For this type of printer you have to install printer-driver:

CAB A4+ (300 dpi)

This driver is available on the web-site of Seagull-Scientific.

Setup as network printer

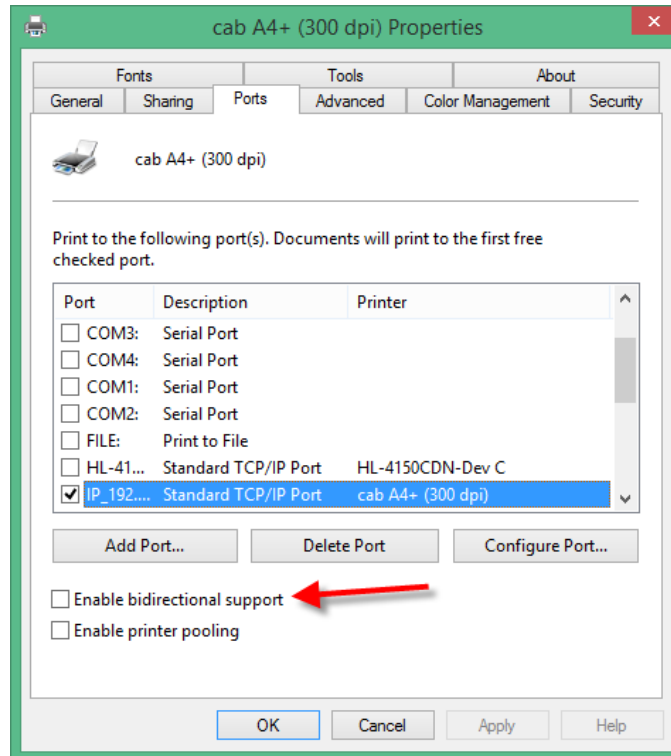
You have to use this printer in network-mode. For this, you have to set an IP-address on the printer itself. This must be done via the internal setup-panel in the printer itself. To reach that you have to unscrew a panel on the printer itself.



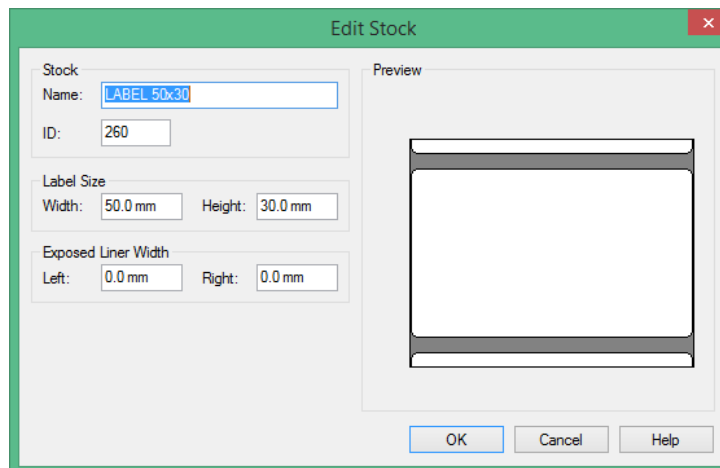
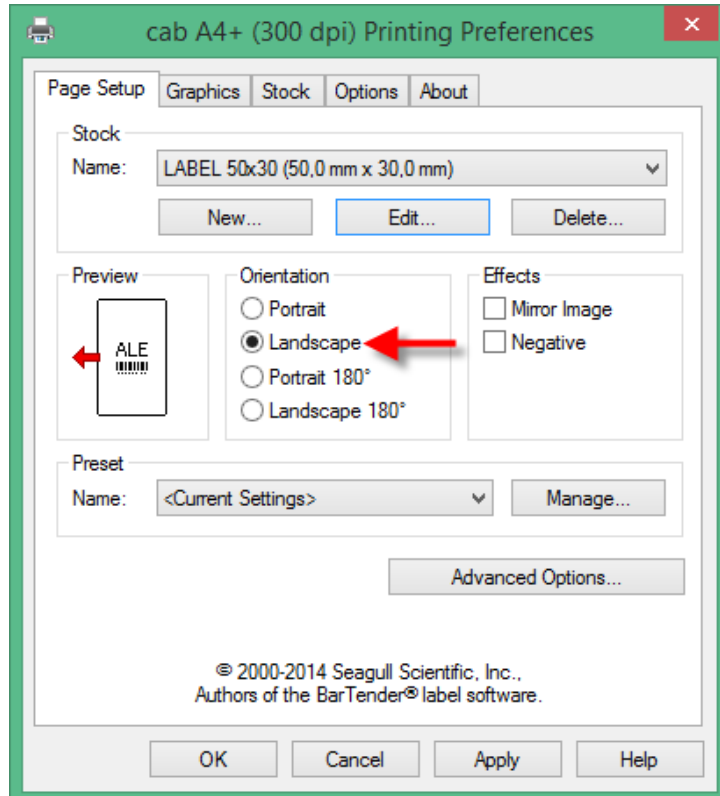
- At setup-panel: Click Cancel for so long till the ABS-program has stopped.
- In menu 'Schnittstellen/Ethernet': Turn off DHCP en enter the IP-address you want to use (PIN: 0001).
- Turn off the printer, wait 5 seconds and turn it on again.

Setup of printer driver

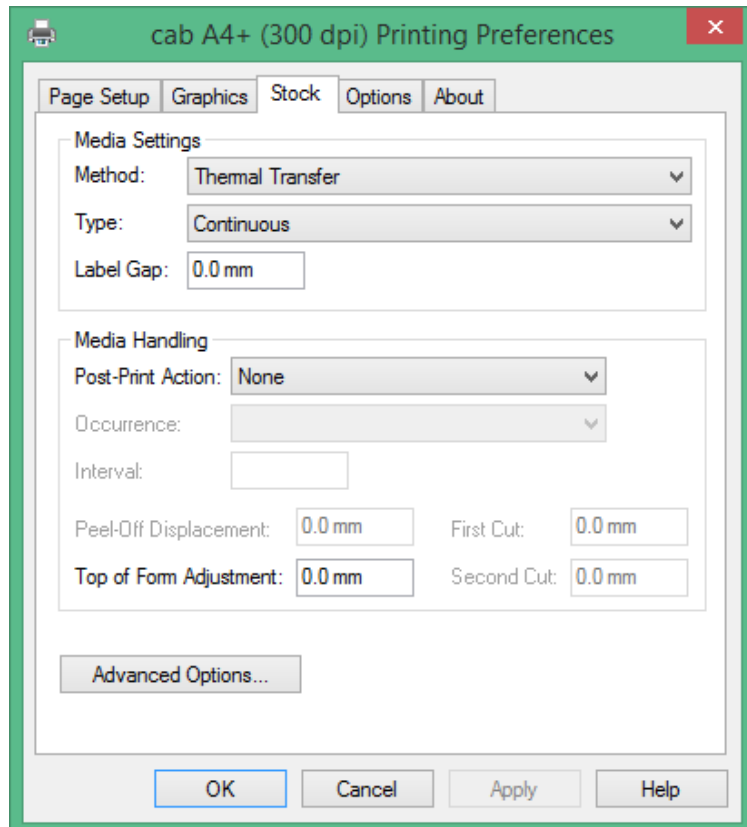
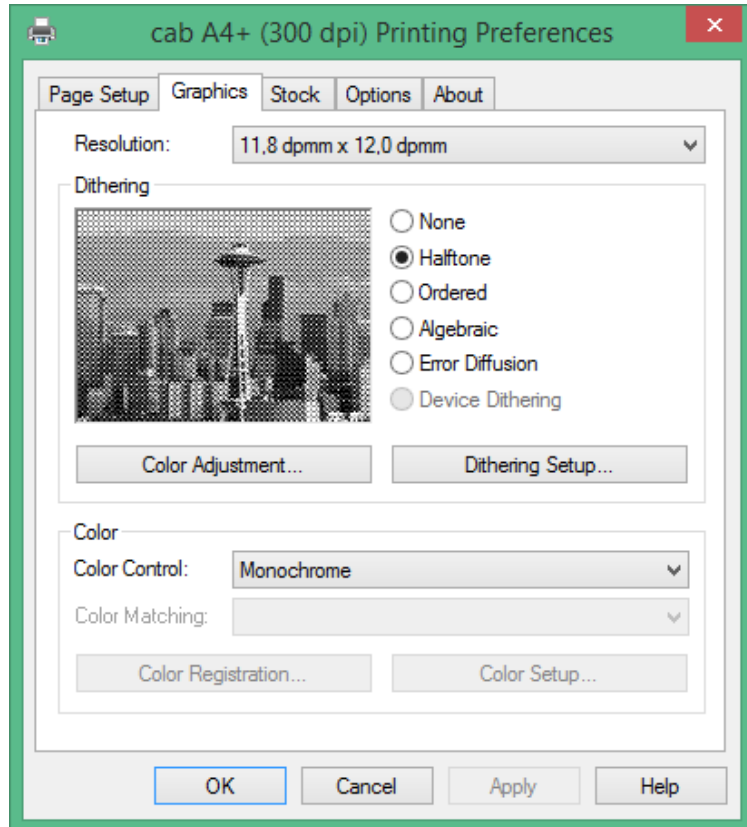
Be sure you turn 'Enable bidirectional support' *off*:

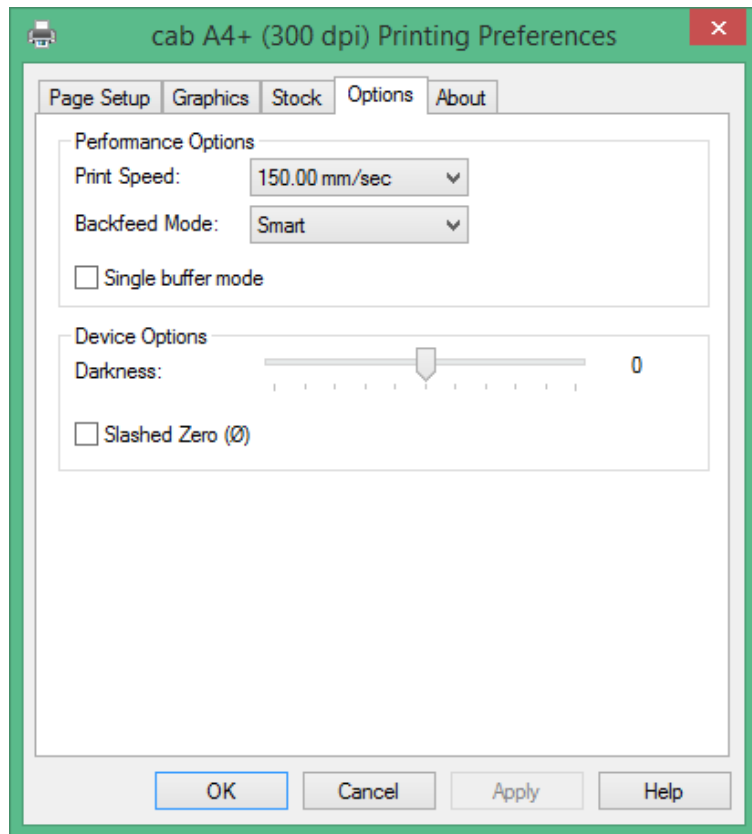


You have to define the label-size via Page Setup. This must be set to *Landscape*-orientation:



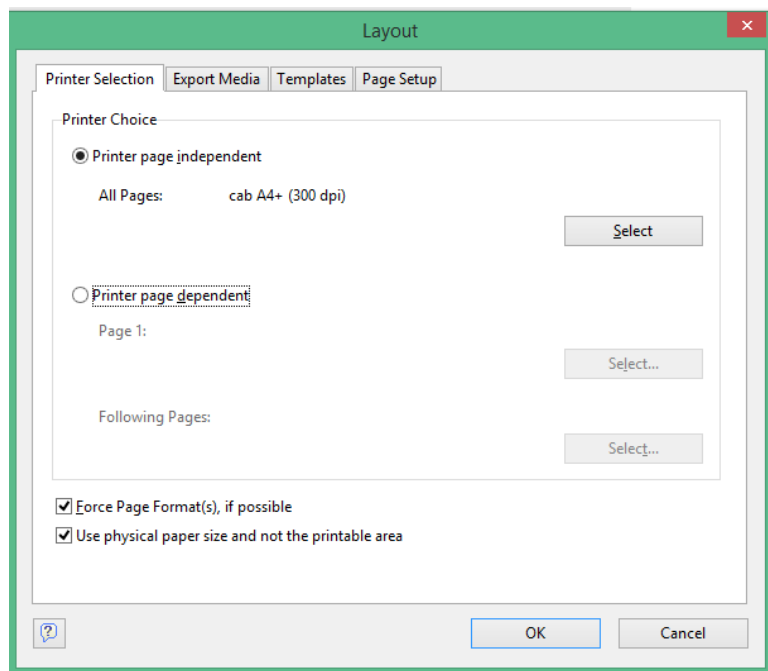
Other recommended settings:

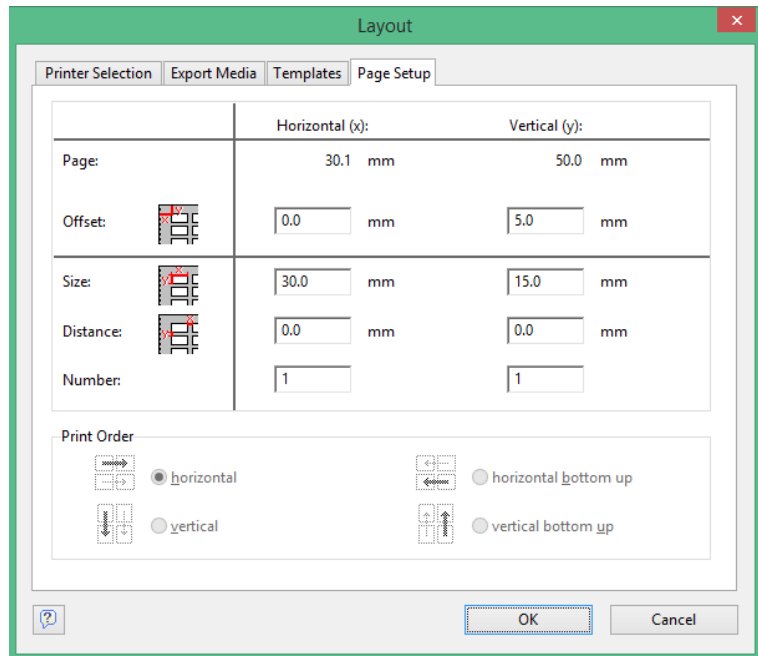
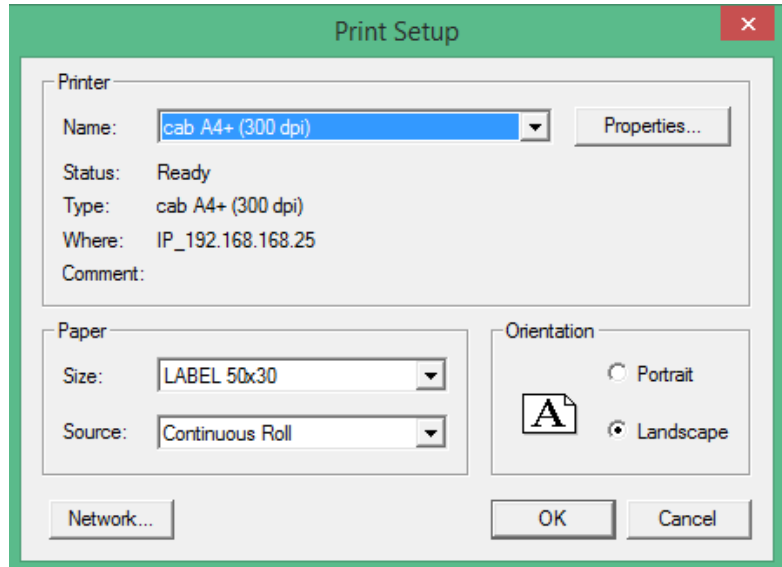




Creating a layout in Spark

During the creation of a label-layout in Spark, you must specify what printer and size you want to use. The following gives an example of what you have to set in order to make use of the CAB A4+ (300 dpi) printer-driver with a specific label-size.





Appendix – Spark & Monarch 9855

Preface

This appendix will explain how you can use Spark combined with a printer of type Monarch 9855-printer (trademark of PENN). This is a thermotransfer-printer where each label is printed through a label-roll. The big advantage of this type of printer is that each label can have a different height and will be cut to size. Afterwards the label can be patched to a garment.

Setup of printer driver

Please be sure you install the correct printer-driver. The latest driver can be found on the web-site of 'Seagull Scientific'. Look for windows-printer-drivers and Monarch.

For this type of printer there are two different printer-drivers:

Monarch 9855 (203 dpi)

Monarch 9855 (300 dpi)

Be sure you install the printer-driver that matches the DPI of the printer you have.

Create one or more page formats. This depends on the page formats you need for the labels you want to print.

For example, if you need a format of '88 mm x 20 mm' and '88 mm x 25 mm', you must add these formats using the tab-page named 'Page Setup'. Use 'New' to create a new page format.

NOTE: It is strongly recommended to add ALL page formats you need before you are going to use SPARK.

Via Windows-option 'Printers & Scanners' you choose the Monarch 9855-printer. In this example we use the 300 dpi-version.

← Settings

🏠 Monarch 9855 (300 dpi) ←

Manage your device

Printer status: Idle

Open print queue

Set as default

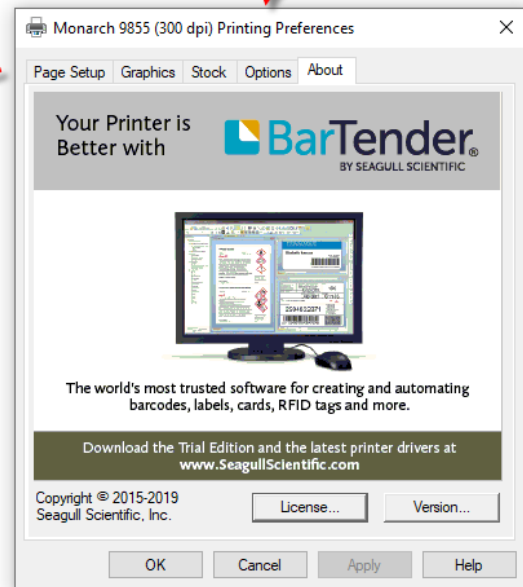
[Print a test page](#)

[Run the troubleshooter](#)

[Printer properties](#)

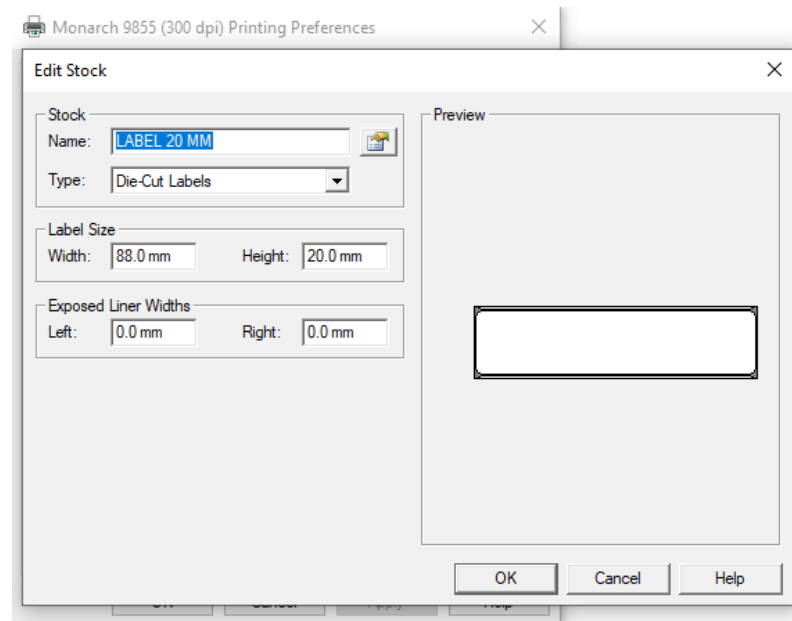
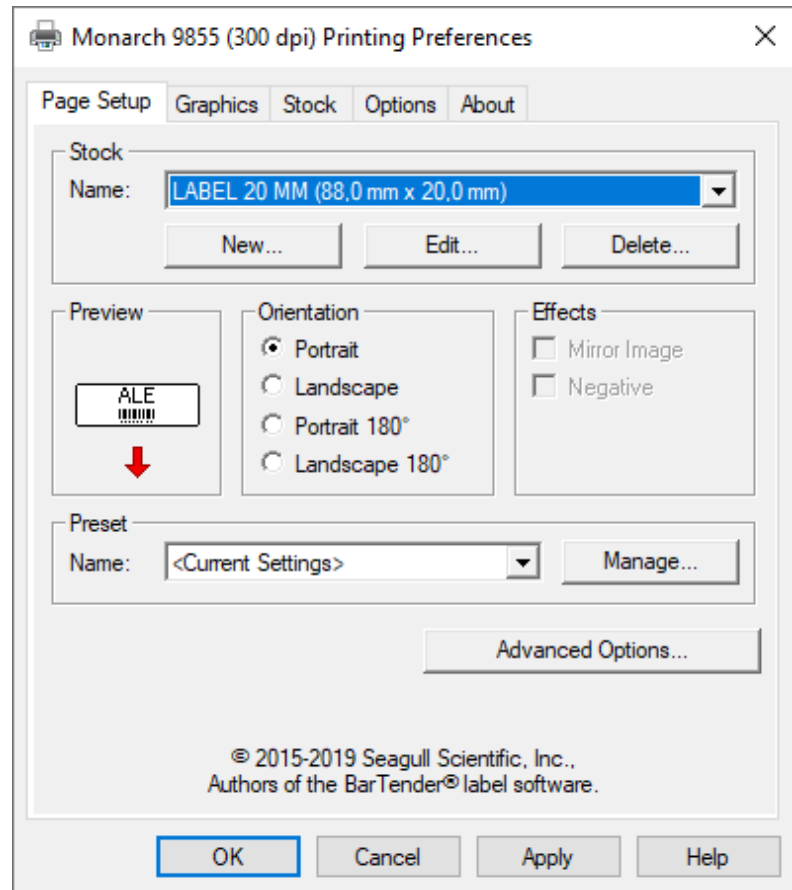
[Printing preferences](#) ←

[Hardware properties](#)



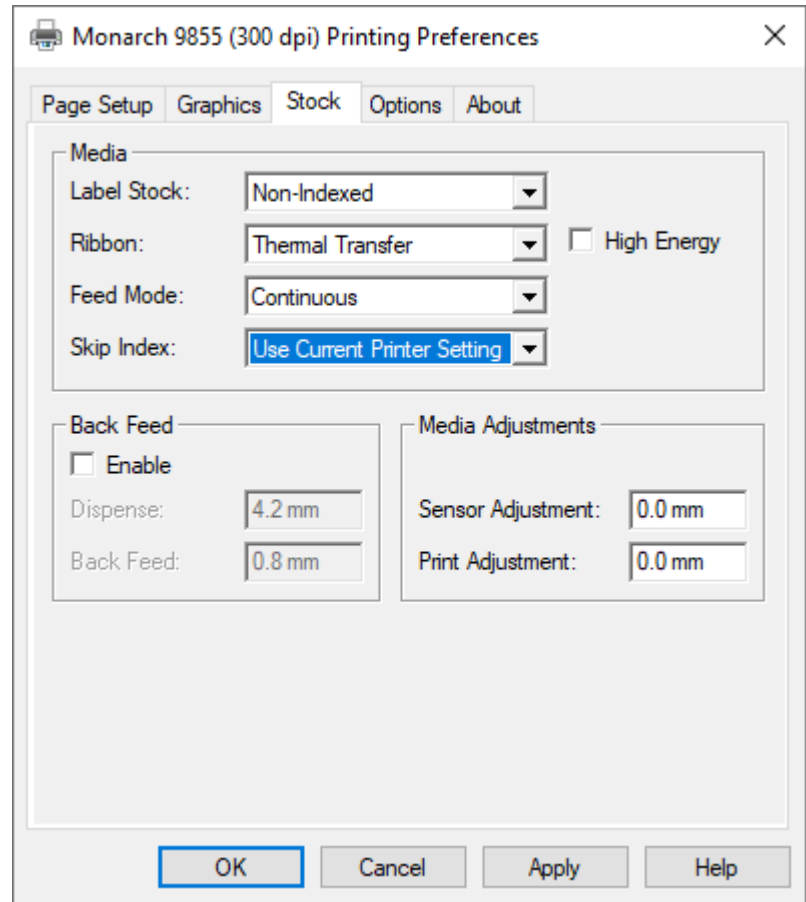
Define label-sizes via 'Page Setup'.

Via 'Page Setup' you have to define the label-sizes you are going to use. Via 'New' you can define a new label-size. Via 'Edit' you can make changes to an existing label-size definition, and via 'Delete' you can delete it. It is recommended to define all needed label-sizes here before you create layouts in Spark.



Set options via 'Stock'.

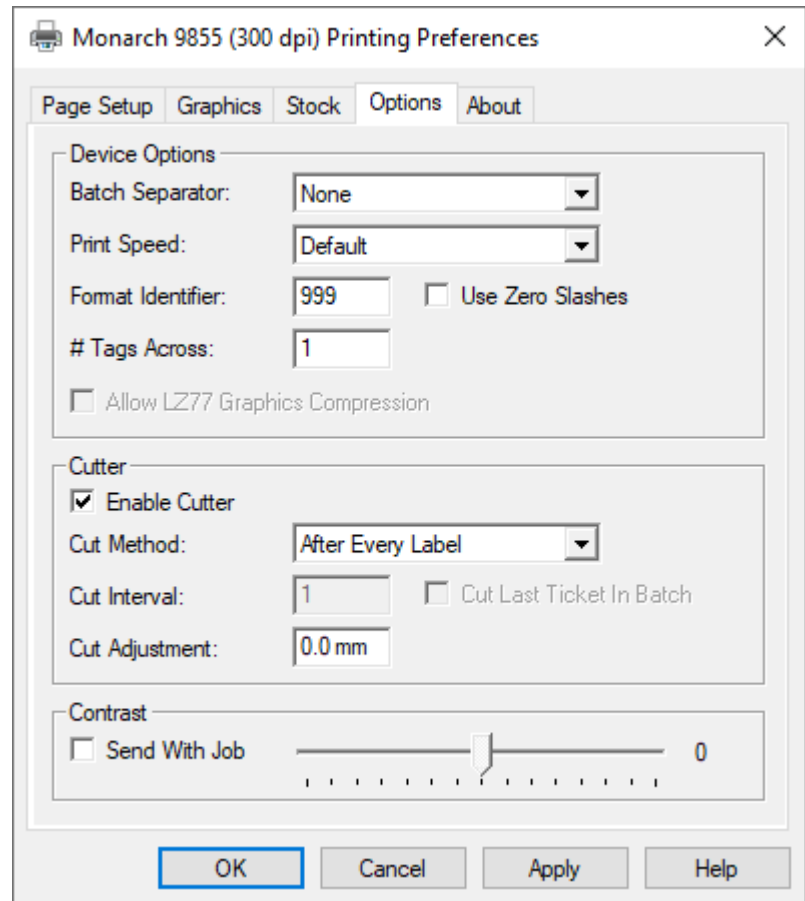
Use 'Help'-button for an explanation of the options.



Set options at 'Options'. If you are using label-material that should be cut, use the shown options.

Note: If the print-quality is too light, mark option 'Contrast' and change the setting at 'send with job'.

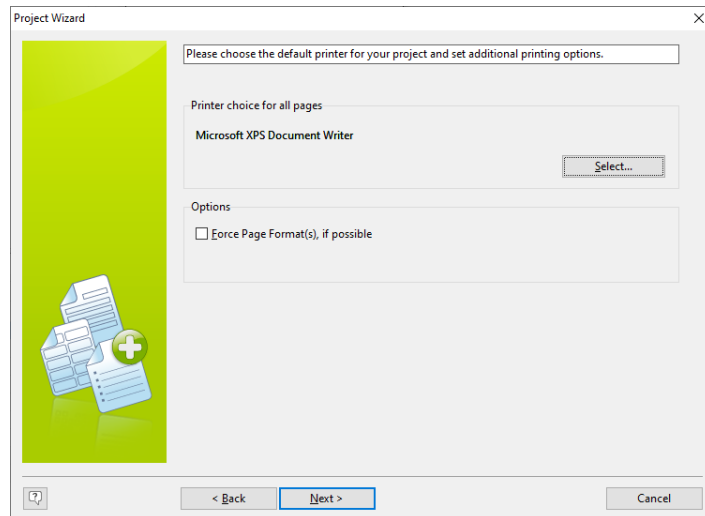
Use the 'Help'-button for an explanation of the options.



Creating a layout in Spark

During the creation of a label-layout in Spark, you must specify what printer and size you want to use. The following gives an example of what you have to set in order to make use of the Monarch 9855 printer with a specific label-size.

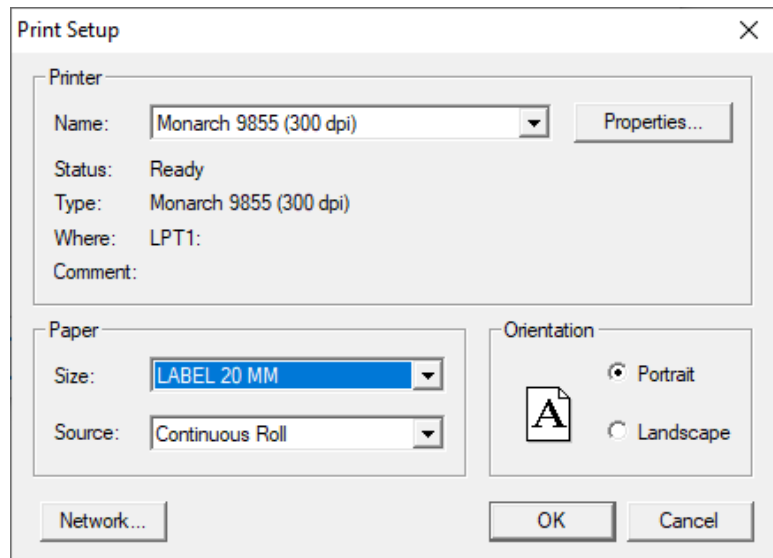
The Project Wizard will appear when you create a new label-layout via SparkPrint.



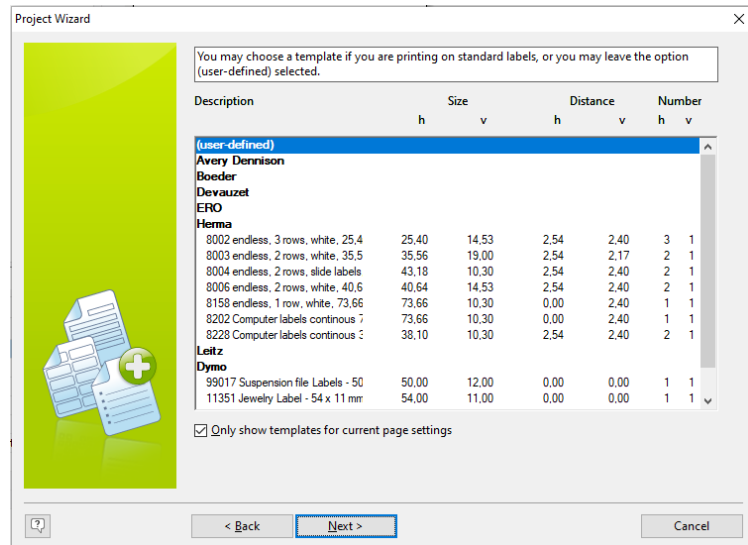
Print Setup

If you press the Select-button in 'Project Wizard'-dialog, the window 'Print Setup' will appear. Do the following:

- The printer you select should be Monarch 9855. You can do this via a drop-down-list. When you have selected the correct printer, in the option 'Paper' and 'Size' you select the correct size, via a drop-down-list. Here you can select from the sizes you have created in the 'Printer Driver'. For an explanation see the previous paragraph of this appendix.
- Click OK when done and click Next to go to the next dialog of the wizard.



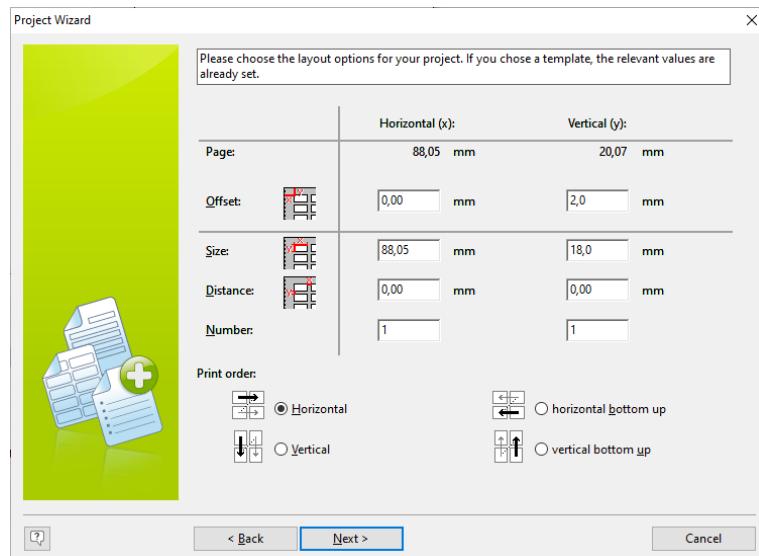
In next dialog choose 'user defined' and click Next.



Page Setup

Via Project Wizard a dialog will be shown where you can define the layout:

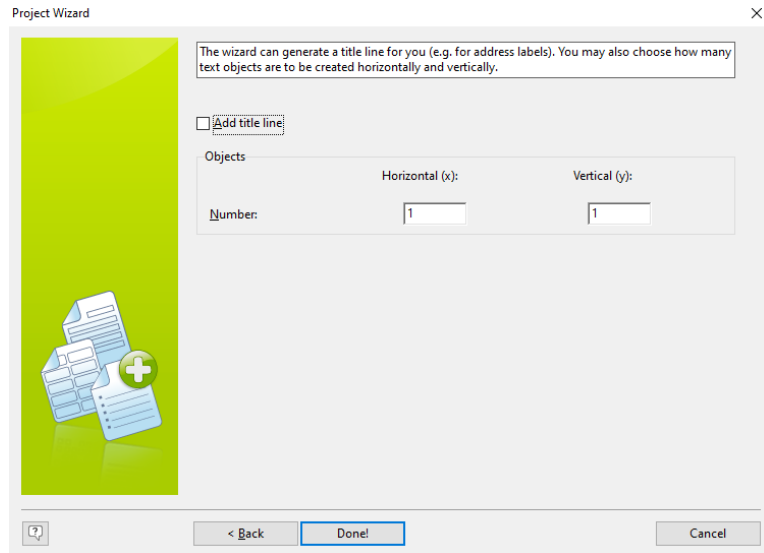
- Page Offset: Here you enter the distance from the label-edge to the surface that is printable. It's recommended to enter '0.0 mm' for the horizontal offset, and '2.0 mm' for the vertical offset.
- Page Size: Here you enter the width and height of the label. For the horizontal size you enter the width of the label-roll you are using in millimeters. Enter the vertical size for the height of the label; use the same value you have selected for the label size in the tab-page 'Printer Selection'. The value of the vertical offset should be decremented. Suppose you have selected a label size of 20 mm and a vertical offset of 2 mm, then you enter as vertical size 18 mm.
- Page Distance: This is the distance between the labels. Enter '0.0 mm'.
- Page Number: The number of labels on a page. Enter 1.
- Click Next to continue.



Special note!

Be sure – for each layout – you set a vertical offset of 2 mm!
Otherwise it can result in printing of labels with a wrong size (in most cases it will be too big).

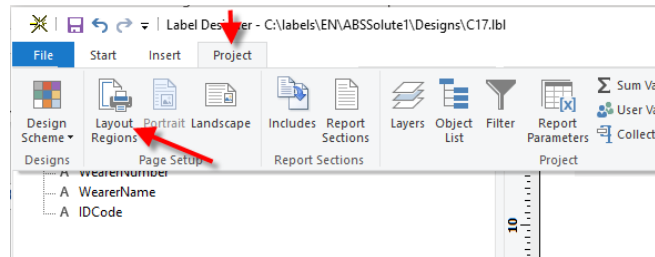
Via Project Wizard, in next dialog, uncheck the checkbox named ‘Add title line’ and click Done!-button.



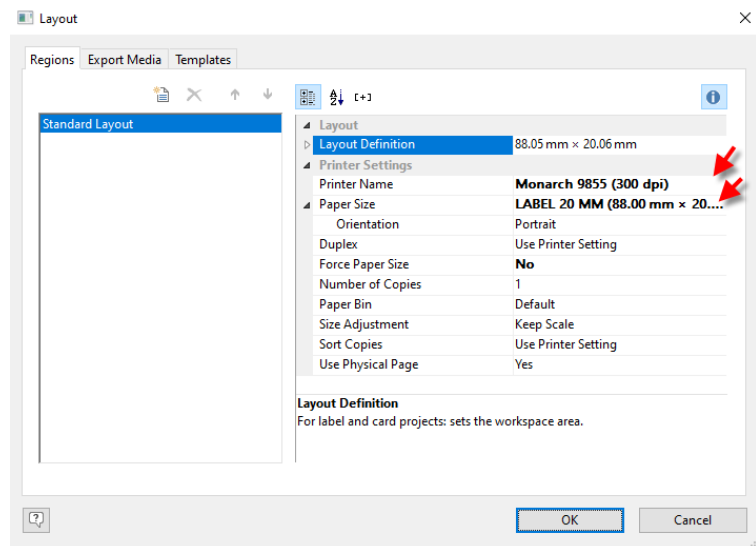
Modify printer settings in Spark

Via SparkPrint and Modify label, to change the printer/paper-size for an existing layout:

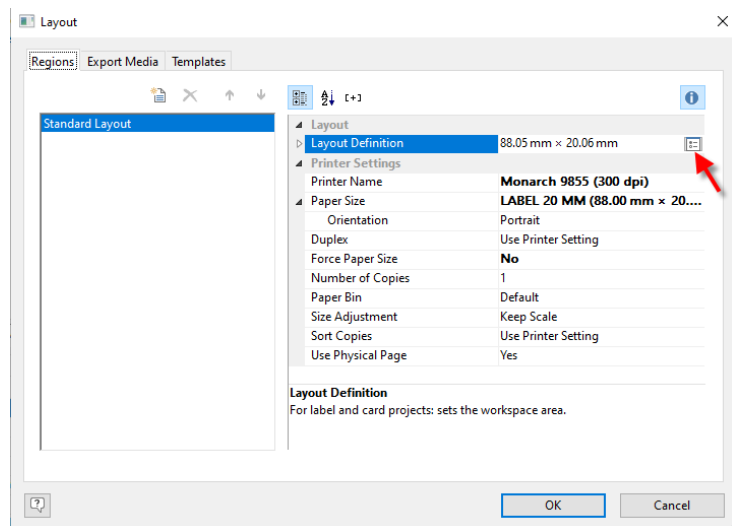
Choose menu-option 'Project' and option 'Layout Regions'. This will open the Layout-dialog.

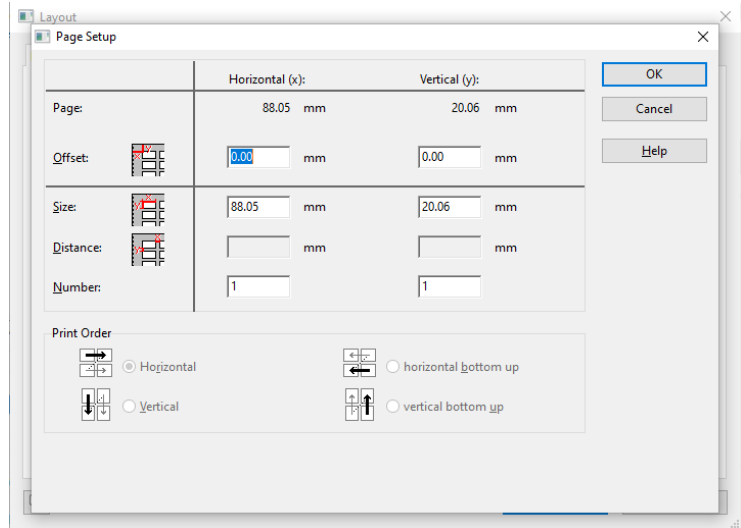


Via Layout-dialog, you can set the printer and page size.



Via Layout-dialog and 'Layout Definition', you can open the Page setup-dialog.





Appendix – Spark & Minilogic E

Preface

This appendix 'Spark & Minilogic E' (E for Epson) will explain how you can use Spark combined with a printer of type 'Minilogic E' from the company Thermopatch. This is a 24-dots matrix-printer where each label is printed through a label-roll. The big advantage of this type of printer is that each label can have a different height and will be cut to size. Afterwards the label can be patched to a garment.

Setup of printer

No settings have to be made for the printer itself. However, the printer should have an up-to-date system-version to ensure it will print correctly with MS-Windows-software.

Setup of printer driver

Before you can use the printer, you have to install and setup the printer driver for this printer. This must be an Epson LQ-870 ESC P/2 printer-driver. This driver is included with MS-Windows. You install the driver by selecting the menu-option 'Start', 'Settings' and 'Printers'. By double-clicking the option 'Add Printer' a wizard will be started. Please follow the suggestions of the Wizard. Be sure you do not print a test-page.

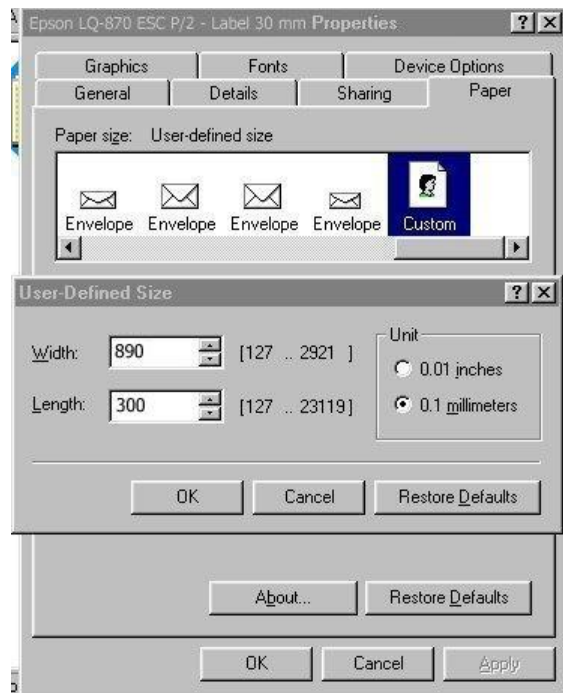
Special note:

When using Windows 2000/XP in combination with Spark + Minilogic E, please note the following:

- Set the print-quality to '360 x 180' in the printer-driver. If not the barcodes will be printed very badly!
- The printer must also have a recent hardware-version if you want to use it in combination with Windows 2000/XP. The EPROM should have a version of 5.6 or higher!

Creation of a custom paper size

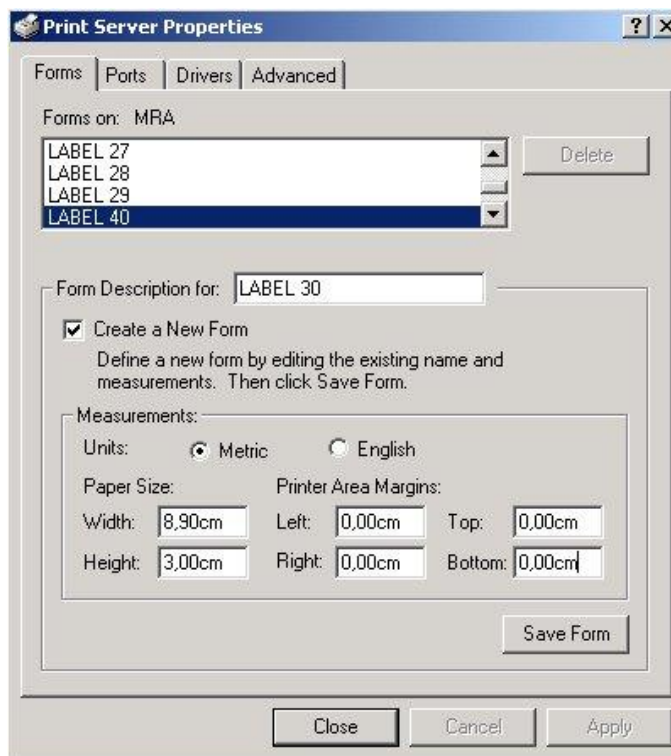
After you have installed the Epson LQ-870 ESC P/2 printer driver, you must create a custom paper size. By doing this, you can print labels with a specific height.



Instructions for Windows 9x

- Select the option 'Start', 'Settings' and 'Printers'.
- Select the printer named Epson LQ-870 ESC P/2 and press the right-mouse-button. A menu will appear.
- From the menu, select the option 'Properties'.
- Select tab-page 'Paper'.
- In the part named 'Paper size', select the item named 'Custom'. Click on this option. A window will appear.
- From the window named 'User-defined Size' set the width and height you prefer. This must be set in 1/10 of millimeters. If you want to print labels with a width of 89 mm and a height of 30 mm, you enter '890' and '300'.
- Click OK.
- Click Apply.

Special note: You can set only **one** custom-size. In order to print labels of different heights, for example 20, 25 and 30 mm, you must install more than one Epson LQ-870 ESC P/2-printer driver. By giving them names like 'Epson LQ-870 ESC P/2 - 20 mm', 'Epson LQ-870 ESC P/2 - 25 mm' and 'Epson LQ-870 ESC P/2 - 30 mm' you can easily recognize them.



Instructions for Windows Vista and higher

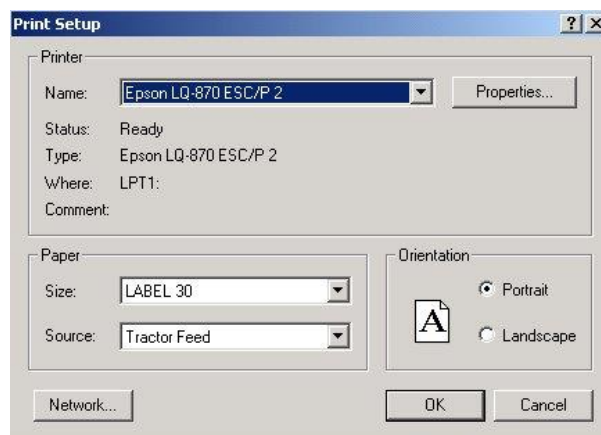
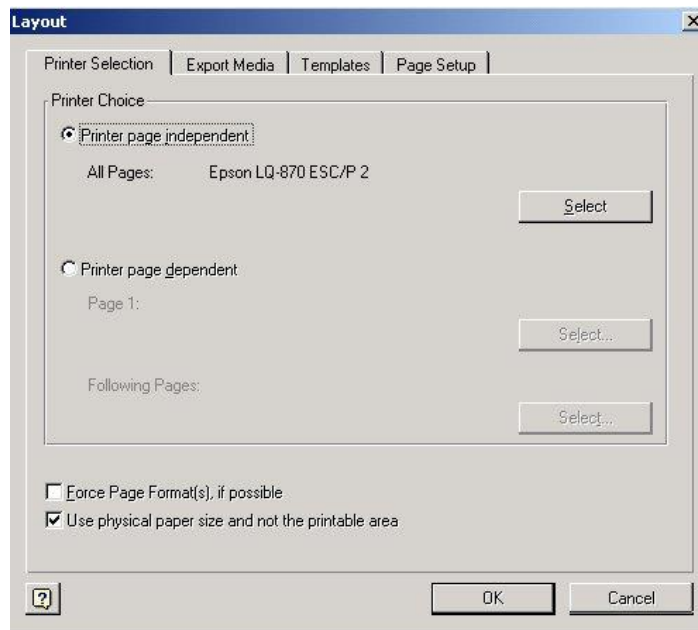
- You create a custom paper size with the option 'Start', 'Settings' and 'Printers'. Select the menu-option 'File' and 'Server Properties'.
- Select tab-page 'Forms'.
- Set a mark in the option 'Create a New Form'.
- At the option 'Form Description for' you can enter a description for the size. Enter something like 'Label 30 mm'.
- At 'Width' you enter the width of the label. Enter '8,90cm' for a width of 8,90 cm.
- At 'Height' you enter the height of the label. Enter '3,00 cm' for a height of 3 cm. At 'Left', 'Right', 'Top' and 'Bottom' you can set the value to '0,00cm'.
- Click on the button named 'Save Form'.
- Click 'Apply' and 'OK'.

In this way you can define one or more label-sizes. For example, a label-size with a height of 26, 30 and 35 mm and descriptions like 'LABEL 26 MM', 'LABEL 30 MM' and 'LABEL 35 MM'.

Special note: The minimum label/paper-height for Windows NT/2000/XP is 25.4 mm (1 inch). Smaller will not be accepted by the printer-driver. For Windows 98 the minimum height is 12.6 mm.

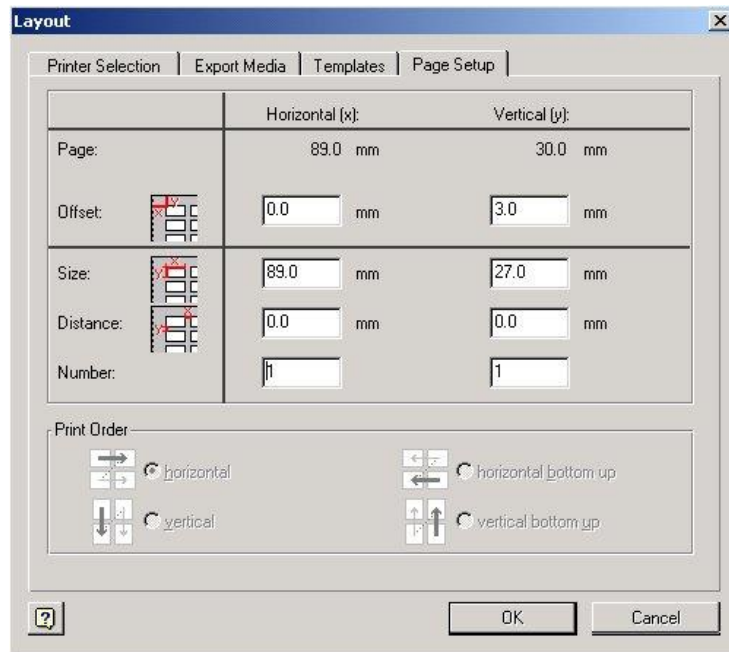
Creating a layout in Spark

During the creation of a label-layout in Spark, you must specify what printer and size you want to use. The following gives an example of what you have to set in order to make use of the Epson LQ-870 ESC P/2-printer with a specific label-size.



Printer Selection

In this window, click the Choice-button to set the printer and printer-size. For example, you select the printer named 'Epson LQ-870 ESC P/2 30 mm' and as a size you select the size 'User-defined size' if you use Windows 9x. If you use Windows NT/2000 you can only select one printer named 'Epson LQ-870 ESC P/2' and as a size you select a size with a name like 'Label 30 mm'. As source you select 'Tractor Feed'. See also the explanation in the previous paragraph.



Page Setup

In this window you must set the dimensions of the label-layout you want to use. It's recommended to set a 'vertical offset' of 2 to 3 mm to prevent problems during printing. See the picture above for an example.

Appendix – Spark & Pentade

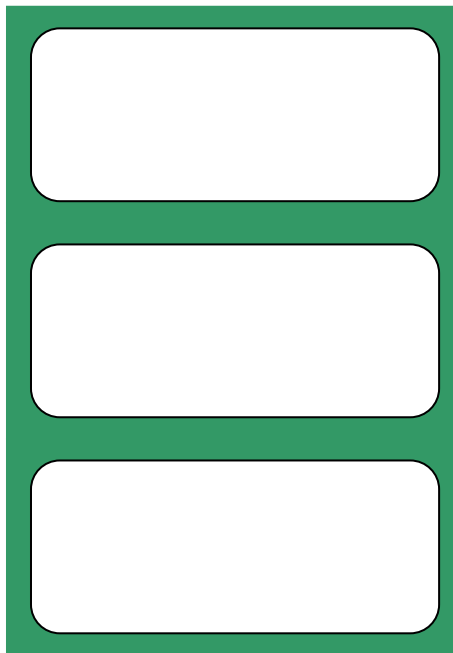
Preface

This appendix 'Spark & Pentade' will explain how you can use Spark combined with a printer of type 'Pentade' from the company Thermopatch. This is a 24-dots matrix-printer where each label is printed through a label-roll. The big advantage of this type of printer is that each label can have a different height and will be cut to size. Afterwards the label can be patched to a garment.

Setup of printer

If you want to make use of pre-printed marking tape, please read the printer-manual about how you can configure the photo-sensor(s). For this purpose the printer has two photo-sensors and these have to be configured on the printer itself.

Example of pre-printed marking tape:



Setup of printer driver

Before you can use the printer, you have to install and setup the printer driver for this printer. This must be an Epson LQ-870 ESC P/2 printer-driver. This driver is included with MS-Windows. You install the driver by selecting the menu-option 'Start', 'Settings' and 'Printers'. By double-clicking the option 'Add Printer' a wizard will be started. Please follow the suggestions of the Wizard. Be sure you do not print a test-page.

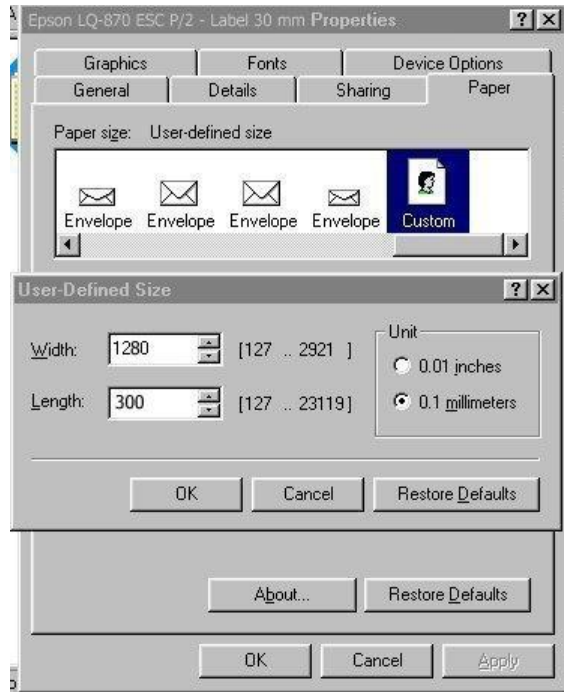
Special note:

Please note the following:

- Set the print-quality to '180 x 180' in the printer-driver. If not the barcodes will be printed very badly!

Creation of a custom paper size

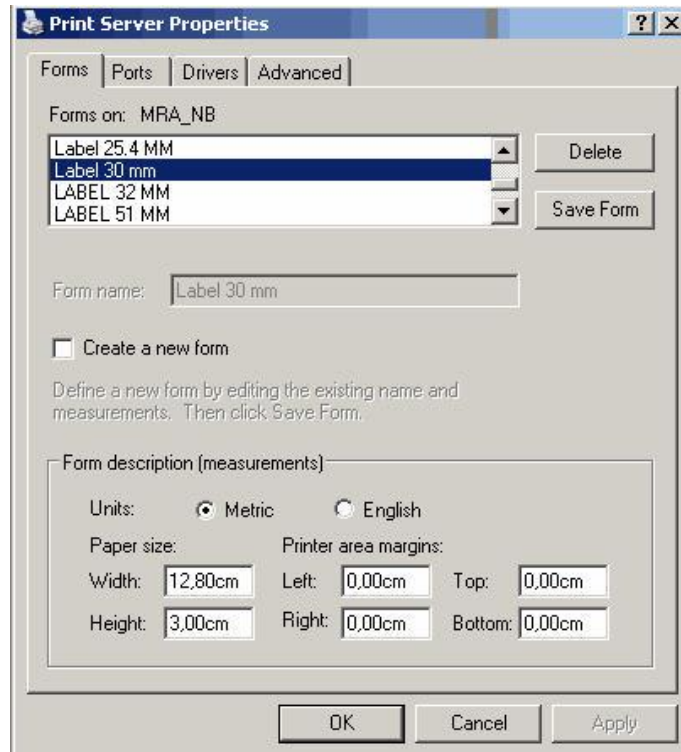
After you have installed the Epson LQ-870 ESC P/2 printer driver, you must create a custom paper size. By doing this, you can print labels with a specific height.



Instructions for Windows 9x

- Select the option 'Start', 'Settings' and 'Printers'.
- Select the printer named Epson LQ-870 ESC P/2 and press the right-mouse-button. A menu will appear.
- From the menu, select the option 'Properties'.
- Select tab-page 'Paper'.
- In the part named 'Paper size', select the item named 'Custom'. Click on this option. A window will appear.
- From the window named 'User-defined Size' set the width and height you prefer. This must be set in 1/10 of millimeters. If you want to print labels with a width of 88 mm and a height of 30 mm, you enter '1280' and '300'.
- **Note:** You must add a left margin for the 'width' to ensure the printer is starting at the correct position. In this example a left margin of '40 mm' is added. If this is too less or too much you have to correct this.
- Click OK.
- Click Apply.

Special note: You can set only **one** custom-size. In order to print labels of different heights, for example 20, 25 and 30 mm, you must install more than one Epson LQ-870 ESC P/2-printer driver. By giving them names like ‘Epson LQ-870 ESC P/2 - 20 mm’, ‘Epson LQ-870 ESC P/2 - 25 mm’ and ‘Epson LQ-870 ESC P/2 - 30 mm’ you can easily recognize them.



Instructions for Windows Vista and higher

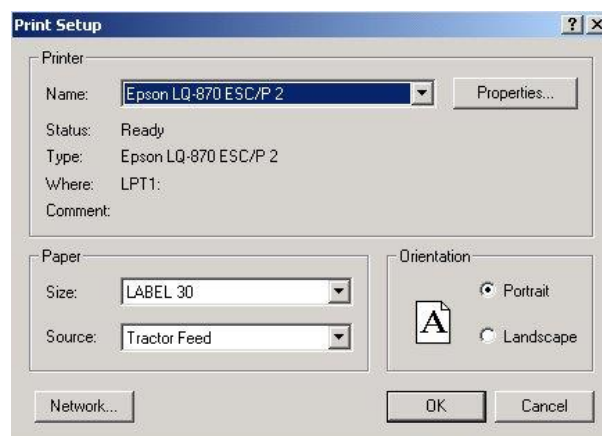
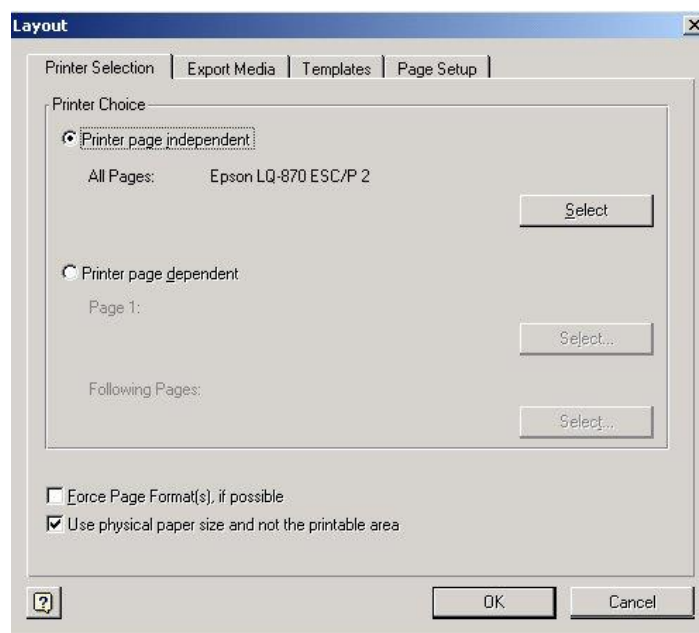
- You create a custom paper size with the option ‘Start’, ‘Settings’ and ‘Printers’. Select the menu-option ‘File’ and ‘Server Properties’.
- Select tab-page ‘Forms’.
- Set a mark in the option ‘Create a New Form’.
- At the option ‘Form Description for’ you can enter a description for the size. Enter something like ‘Label 30 mm’.
- At ‘Width’ you enter the width of the label. Enter ‘12,80cm’ for a width of 8,80 cm.
- **Note:** You must add a left margin for the ‘width’ to ensure the printer is starting at the correct position. In this example a left margin of ‘4 cm’ is added. If this is too less or too much you have to correct this.
- At ‘Height’ you enter the height of the label. Enter ‘3,00 cm’ for a height of 3 cm. At ‘Left’, ‘Right’, ‘Top’ and ‘Bottom’ you can set the value to ‘0,00cm’.
- Click on the button named ‘Save Form’.
- Click ‘Apply’ and ‘OK’.

In this way you can define one or more label-sizes. For example, a label-size with a height of 26, 30 and 35 mm and descriptions like ‘LABEL 26 MM’, ‘LABEL 30 MM’ and ‘LABEL 35 MM’.

Special note: The minimum label/paper-height for Windows NT/2000/XP is 25.4 mm (1 inch). Smaller will not be accepted by the printer-driver. For Windows 98 the minimum height is 12.6 mm (1/2 inch).

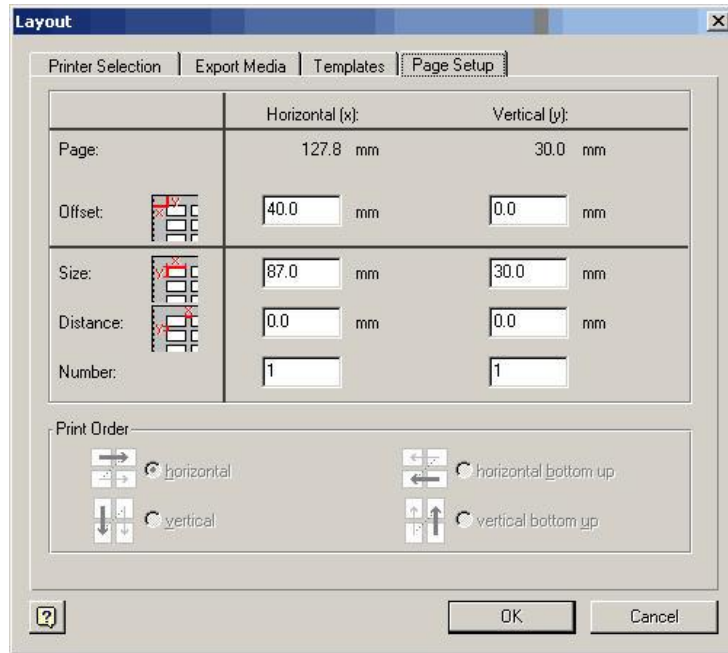
Creating a layout in Spark

During the creation of a label-layout in Spark, you must specify what printer and size you want to use. The following gives an example of what you have to set in order to make use of the Epson LQ-870 ESC P/2-printer with a specific label-size.



Printer Selection

In this window, click the Choice-button to set the printer and printer-size. For example, you select the printer named 'Epson LQ-870 ESC P/2 30 mm' and as a size you select the size 'User-defined size' if you use Windows 9x. If you use Windows NT/2000 you can only select one printer named 'Epson LQ-870 ESC P/2' and as a size you select a size with a name like 'Label 30 mm'. As source you select 'Tractor Feed'. See also the explanation in the previous paragraph.



Page Setup

In this window you must set the dimensions of the label-layout you want to use.

Example

Enter the following if you want to use a label with dimensions:

- Label width: 88 mm
- Label height: 30 mm

	<i>Horizontal</i>	<i>Vertical</i>	<i>Remark</i>
<i>Offset</i>	40.0	0.0	Left and top margin.
<i>Size</i>	87.0	30.0	Width and height of the label.
<i>Distance</i>	0.0	0.0	Distance between the labels.
<i>Number</i>	1	1	Number of labels horizontal and vertical.

Note: Because the printer needs a left margin of about 40 mm, you have to enter this here! See also the paragraph about creating a custom paper size.

Appendix – Spark & Star LC7211/8211

Note

The printer of type Star LC7211/8211 can be used in Spark using the so-called Special Mode. This is explained in the appendix named Appendix & Special Mode.

Appendix – Spark & Epson FX-890

Preface

This appendix 'Spark & Epson FX-890' will explain how Spark works in combination with a printer of type Epson FX-890. This is a dot-matrix printer that can print on label-material that's transported by tractor-feed.

Setup of printer driver

The printer-driver that must be used in combination with Spark is the **Epson FX-870**. This driver is included with each Microsoft Windows version. Only with **this** driver you're able to define a custom paper size that's small enough to print labels with Spark.

Using Spark with this printer

Depending on the size of the label-material you are using, you can print in the following **two** ways.

Labels are one at a row and higher than 2.54 cm

If the labels you are using are one at a row and the height of each label is at least 2.54 cm, then you can print labels like this:

- Define one or more custom sizes with the option 'printers' of Windows. For example a custom size of '8 cm x 3 cm' and another custom size of '6 cm x 2.7 cm'.
- In SparkPrint you define each layout you want to use and set it to the 'Epson FX-870' printer-driver and the correct paper-size. For example you define layout 'C01' and set it to 'Epson FX-870' and custom size '8 cm x 3 cm'.

For further information, see the Appendix named 'Spark & Minilogic E' and the paragraph about 'creating a custom paper size' and the paragraph about 'defining a label-layout in Spark'.

Labels are more than one at a row and/or smaller than 2.54 cm

If the labels you are using are more than one at a row and/or the height of each label is smaller than 2.54 cm, then you can print labels like this:

- You define just **one** custom size of '22 cm x 5.1 cm' with the option 'Printers' of Windows, for the 'Epson FX-870'.
- In SparkEngine you turn the 'special mode' on. You also set the label-size to the size you want to use, for example '8 cm x 2 cm x 2'.
- **Important:** To ensure a correct working you must make use of 2 tractor-feed transport mechanisms. One at the input and one at the end of the label-material. Only then the transport of the label-material will work without problems.

For further information, see the Appendix named 'Spark & Special Mode'.

Appendix – Spark & Epson LQ-680

Preface

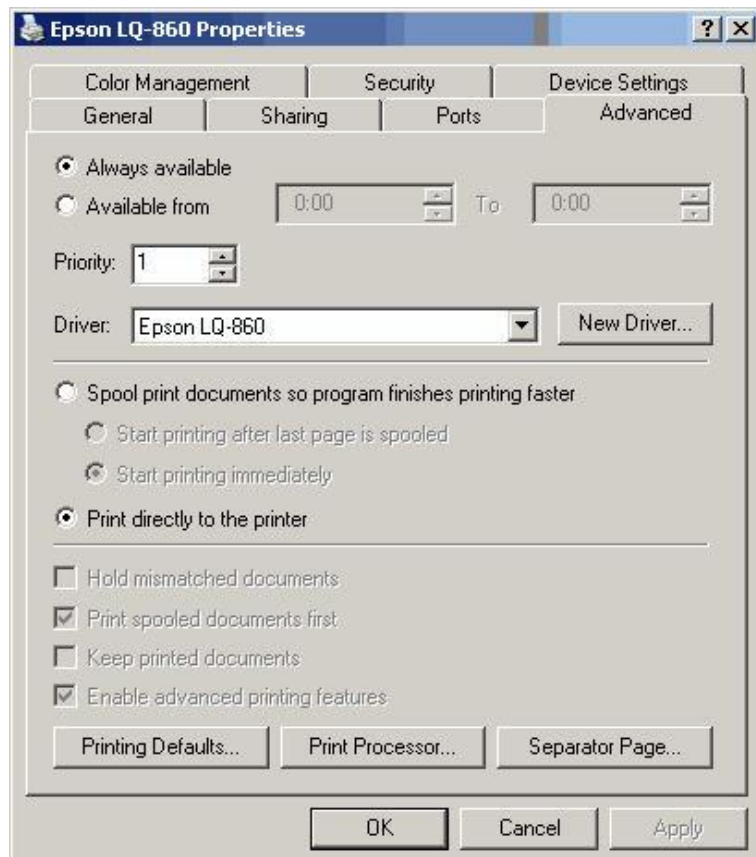
This appendix will explain how Spark works in combination with a printer of type Epson LQ-680 (one of the suppliers is Thermopatch). This is a dot-matrix printer that can print on label-material that is transported by tractor-feed. It can be used – for example - in combination with plytex-material (trademark of Thermopatch).

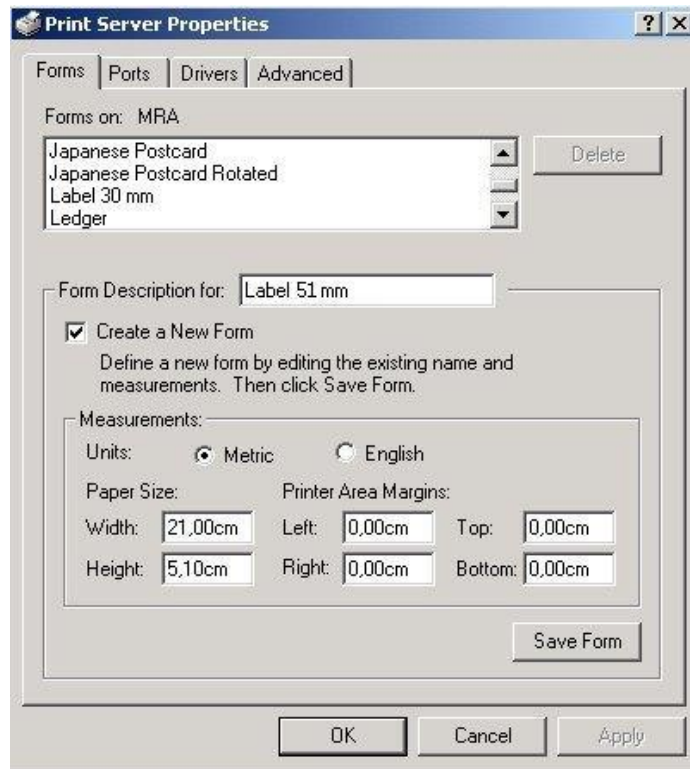
Setup of printer driver

The printer-driver that must be used in combination with Spark is the **Epson LQ-860**. This driver is included with each Microsoft Windows version. Only with **this** driver you're able to define a custom paper size that is small enough to print labels with Spark.

Please be sure the following settings has been made for this printer-driver:

- Print directly to the printer.
- Paper-format should be 210 x 51 mm.



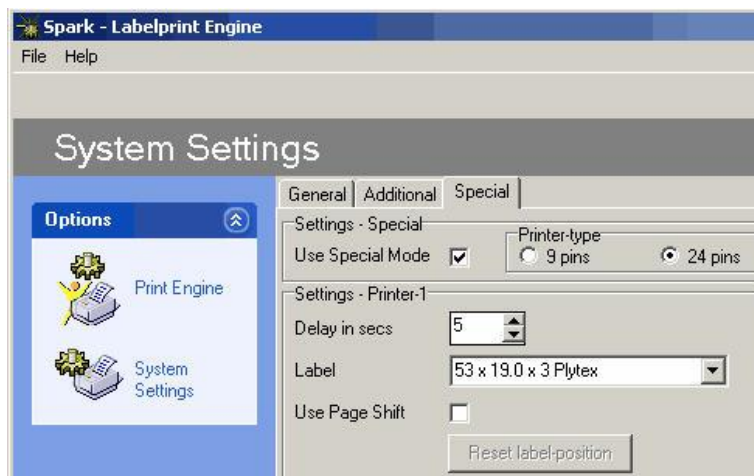


Using Spark with this printer

The printing itself is done using the so-called 'special mode'. This mode should be enabled in option 'System Settings' and tab-page 'Special' in the SparkEngine-application.

Please be sure you make the following settings:

- Mark the option named 'Use Special Mode'.
- Mark the option named '24 pins'.
- Select the label-format you are going to use.
- Unmark the option 'Use Page Shift'.



NOTE: This printer has a button 'Tear off/Bin' that can be used to shift the paper forwards/backwards when you want to fetch a plytex label from the label-sheets.

For further information please see the appendix named 'Appendix - Spark and Special Mode' in this manual.

Appendix – Spark & Special Mode

Preface

This appendix ‘Spark & Special Mode’ will explain how this mode works. In this mode you can print labels on a matrix-printer like the ‘Star LC-7211’ or ‘Star LC-8211’ (trademark of Micronics) or ‘Epson FX-890’ or ‘Epson LQ-680’ using Plytex (trademark of Thermopatch) and other labels on paper. During printing of these types of labels, Spark can shift the paper forwards - after the last label has been printed – to enable the user to tear-off the label. As soon as the next label has to be printed, Spark will shift the paper backwards and resumes printing. During this, Spark will also keep track of the last label-position, to ensure all labels will be printed that appear on paper, without skipping a label.

Setup of printer driver

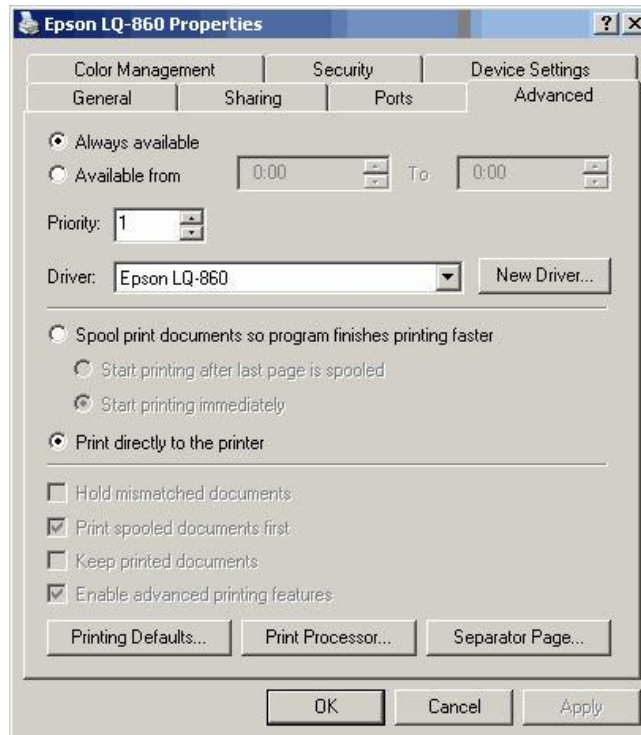
In the ‘Special Mode’ matrix-printers of type ‘Star LC-7211’ and ‘Star LC-8211’ (trademark of Star Micronics) and ‘Epson FX-890’ and ‘Epson LQ-680’ can be used. In order to use these printers you first have to install the printer-driver. In most cases these printer drivers are included with the operating system. If it is not included with the operating system you are using, please ask your printer-supplier for the correct printer-drivers. In combination with Spark, use the printer-driver that is shown in the following list:

<i>Printer</i>	<i>Printer-driver</i>	<i>Type of printer</i>
Star LC-7211	Epson FX-870	9-pins
Epson FX-890	Epson FX-870	9-pins
Star LC-8211	Epson LQ-860	24-pins
Epson LQ-680	Epson LQ-860	24-pins

Note: Please use the printer-drivers that are shown here. Only these printer-drivers ensure a correct working with Spark.

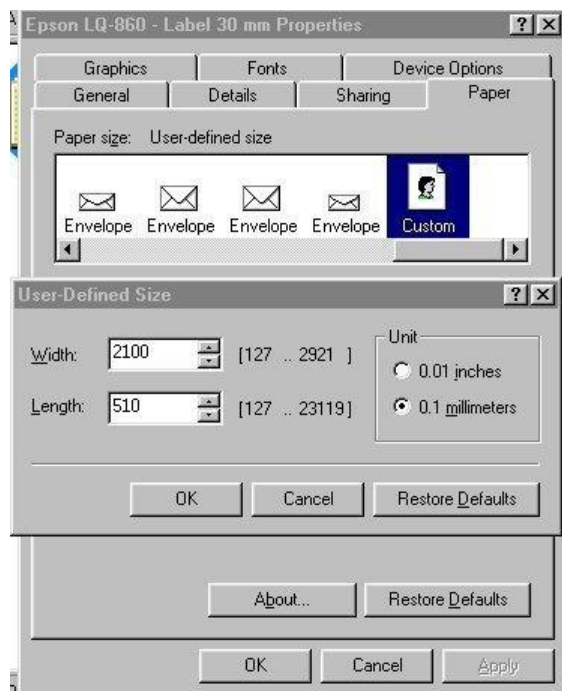
Please be sure the following settings have been made for the printer-driver:

- Print directly to the printer.
- Paper-format should be 210 x 51 mm.



Creation of a custom paper size

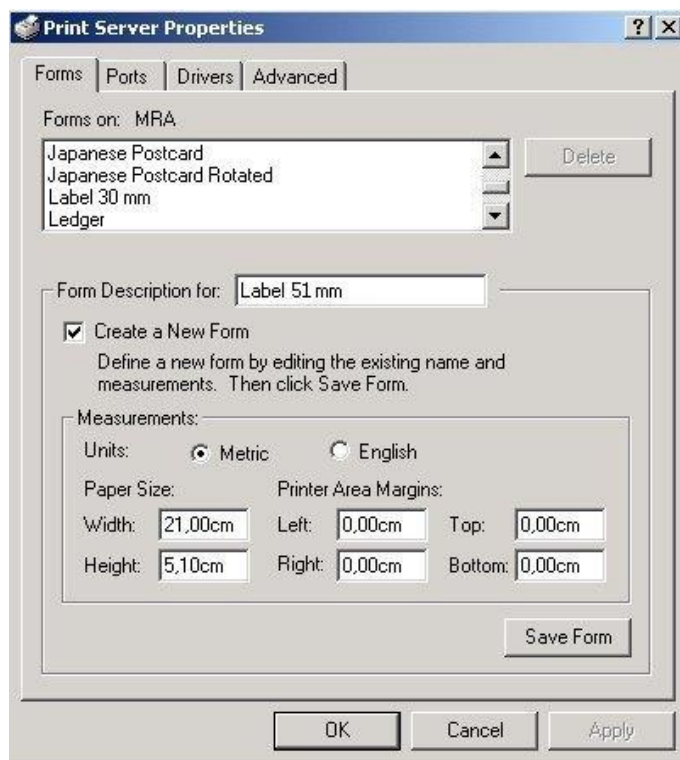
After you have installed the printer driver, you must create a custom paper size. By doing this, you can print labels with a specific height. In the 'special mode' you only have to create just one customer paper size, with a width of 210 mm and a height of 51 mm.



Instructions for Windows 9x

- Select the option 'Start', 'Settings' and 'Printers'.
- Select the printer-driver you installed and press the right-mouse-button. A menu will appear.
- From the menu, select the option 'Properties'.
- Select tab-page 'Paper'.
- In the part named 'Paper size', select the item named 'Custom'. Click on this option. A window will appear.
- From the window named 'User-defined Size' set the width to '2100' and the height to '510'. This must be set in 1/10 of millimeters. Click OK.
- Click Apply.

Special note: You have to set **one** custom-size with the width and height that is shown. In order to print labels of different widths and heights, depending on the label-material you are using, you have to define a different label-layout for this. You also must select the correct label-format you're going to use in 'system-settings' and option 'Special'. See also the following paragraphs for an explanation.



Instructions for Window Vista and higher

- You create a custom paper size with the option 'Start', 'Settings' and 'Printers'. Select the menu-option 'File' and 'Server Properties'.
- Select tab-page 'Forms'.
- Set a mark in the option 'Create a New Form'.
- At the option 'Form Description for' you can enter a description for the size. Enter something like 'Label 51 mm'.
- At 'Width' you enter the width of the label. Enter '21,00cm'.
- At 'Height' you enter the height of the label. Enter '5,10 cm'.
- At 'Left', 'Right', 'Top' and 'Bottom' set the value to '0,00cm'.

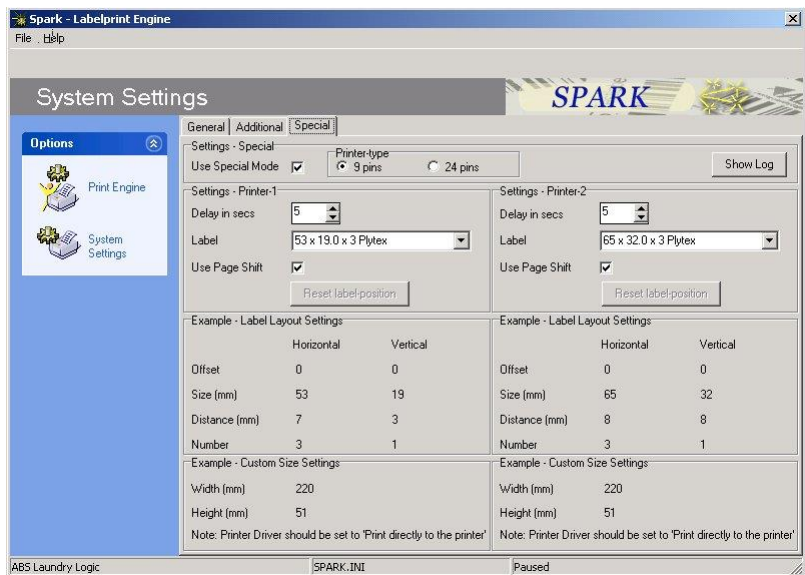
- Click on the button named 'Save Form'.
- Click 'Apply' and 'OK'.

Special note: You have to set **one** custom-size with the width and height that is shown. In order to print labels of different widths and heights, depending on the label-material you are using, you have to define a different label-layout for this. You also must select the correct label-format you're going to use in 'system-settings' and option 'Special'. See also the following paragraphs for an explanation.

System Settings for Special Mode

In SparkEngine you have to make some settings for the 'Special Mode'. For example, you have to turn this mode on. Also you have to select the specific label-format you are going to use, depending on the label-material you have.

After you have started SparkEngine, double-click on the icon that appears in the taskbar. A window will appear. Select the option 'System Settings' and then select tab-page 'Special'. The following will be shown.



To use the 'Special Mode' you first have to mark the checkbox named 'use special mode'. As soon as it is enabled, you can also change the settings in this screen

There are two sections where you can change settings. One section is named 'Settings – Printer-1' and the other 'Settings – Printer-2'. This means you can use one or two printers for printing labels. For example: one printer for printing name-labels and the other for printing code-labels.

Special note: Printer-1 will always print to a printer-device named 'LPT1'. Printer-2 will always print to a printer-device named 'LPT2'.

The following settings can be made:

<i>Settings</i>	<i>Description</i>	<i>Example</i>
Use Special Mode	This turns this mode on/off.	Checked
9 pins or 24 pins	Use 9 pins for a Star LC-7211/Epson FX-890 printer. Use 24 pins for a Star LC-8211/Epson LQ-680 printer.	9 pins checked
Delay in secs	After a label is printed, the page will move forwards to allow the user to tear-off the label. Afterwards it will move backwards when the following label is printed. To prevent this will happen after each label, you can set a delay.	5 seconds
Label	Depending on the label-material you have, you can select the label-format you are going to use. It is important this is exactly the same as the label-material you have. Also, the label-layout must be set to the same settings. An example for the layout will be shown on screen.	53 x 19 x 3
Use page shift	After a label is printed, the page will move forward/backward to allow the user to tear-off the label. If you do not need this option, you can also turn it off.	Checked
Reset label-position	The last label-position will be stored, to ensure that next time you are going to print, it will start at the correct position. By pressing this button you can reset the label-position to the start-position. This can be necessary if you have changed the label-material. If this button cannot be pressed, it is already at the stat-position.	-

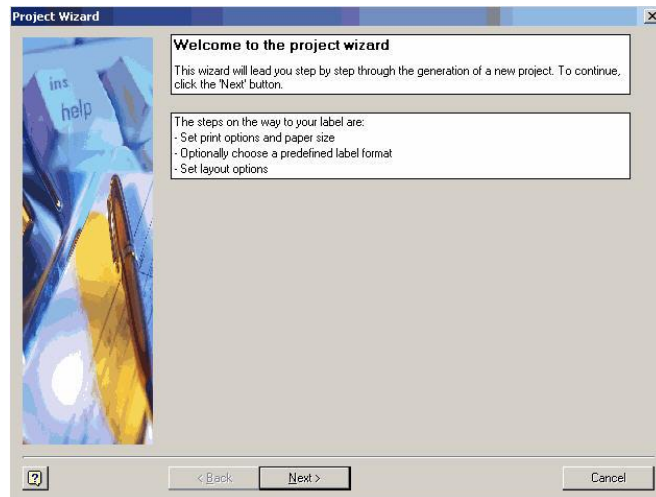
Creating a layout in Spark

During the creation of a label-layout in Spark, you must specify what printer and size you want to use. The following gives an example of what you have to set in order to make use of the Special Mode with a specific label-size.

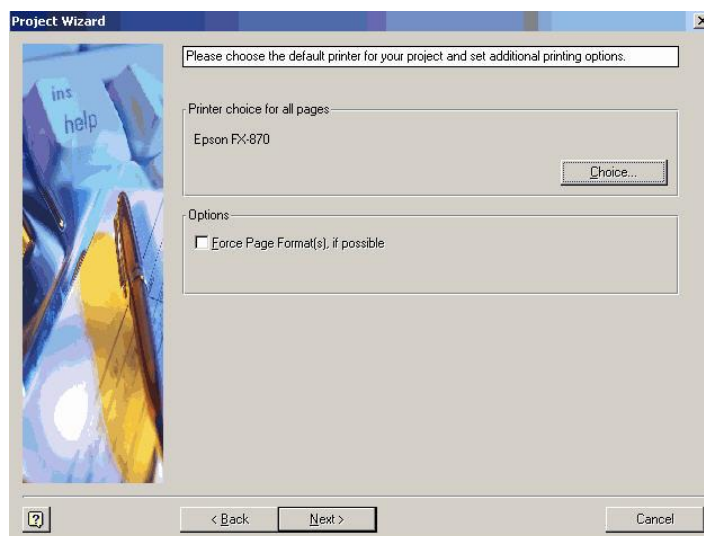
In this example the printer you are going to use is a Star LC-7211 or Epson FX-890 and the plytex-format is '53 x 19 x 3'.

Do the following to create a new layout:

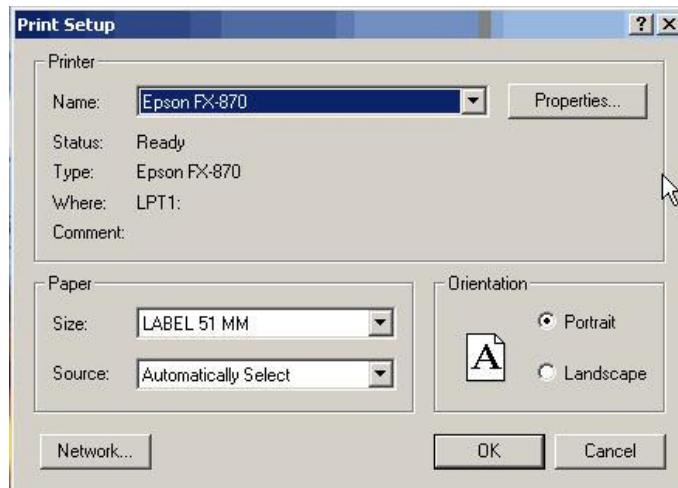
- Start SparkPrint
- Select the mode you are going to use, for example the 'ABSSolute' mode
- Select the option 'New Label'
- Enter a code for the label, for example '01.lbl'
- A wizard will be shown, see the instructions below



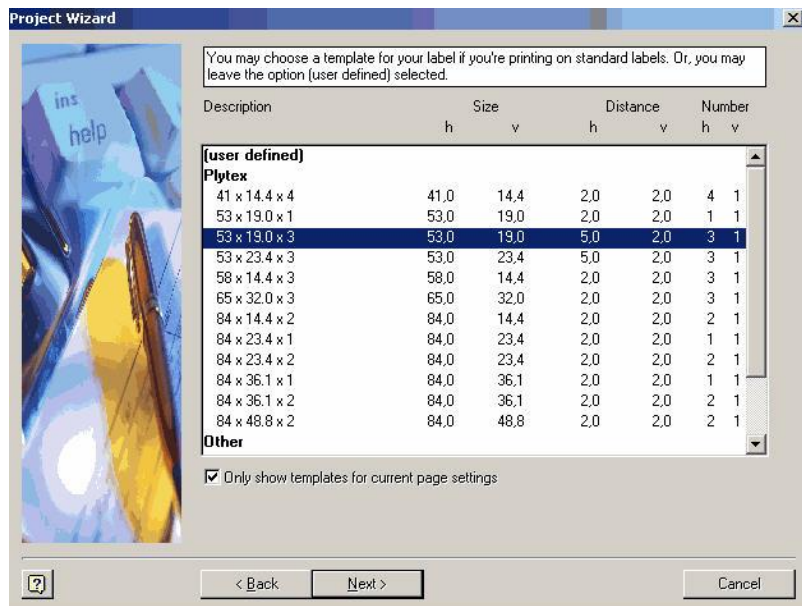
Click the Next-button.



Click the Choice-button to set the correct printer-driver and paper-format.

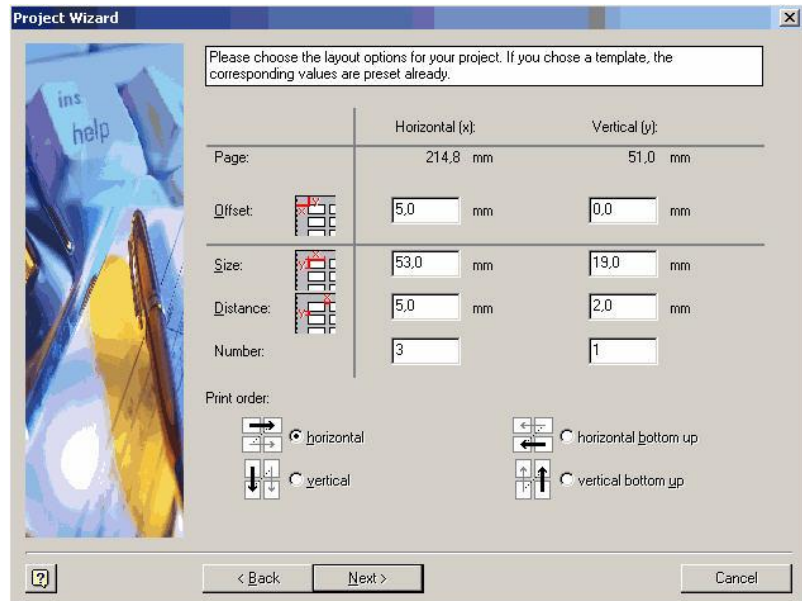


Select the correct printer-driver and paper-size. As printer you select – in this example - the Epson FX-870. The paper-size must always be '210 x 51 mm'. This paper-size must be created during the setup of the printer-driver. This is already explained in this Appendix.



Select the plytex-format you are going to use. For example, select '53 x 19.0 x 3'. If the plytex-format you are going to use is not available in the list, select one that is almost similar and change the settings in the following dialog.

Note: The plytex-format you select here must be the same you selected in SparkEngine and System Settings. This is already explained in this Appendix.



If the plytex-format was not available in the previous dialog, you have to change the settings here.

Note: Default, the horizontal offset will be 0, but you can change it to – for example – 5.0 mm if the printer is printing too much to the left of the paper. You have to test this during printing.

After this you can make and save the layout.

Some tips for testing the printer:

- Always print from the application that is used combined with Spark. For example, print from the ABSolute-application if you are using the ABSolute-mode. Do **not** print from the option 'Print Sample' that is available in the layout-screen in SparkPrint, because then the paper will not shift forwards and backwards.
- If the printer is printing too much to the left of the paper, first adjust the paper to solve this. If this does not fix the problem, you can change the 'horizontal offset' in SparkPrint, in the layout-screen at 'page setup'. From the layout-screen select the menu-option 'Project' and 'Page Setup'. For example, enter a horizontal offset of 5.0 mm.
- If the printer is not shifting forwards/backwards, check if the printer-driver is set to 'print directly to the printer'. Also, it is possible you have to use another printer-cable.
- If during printing the labels are not printed on the correct vertical position, please contact the ABS-helpdesk.

Appendix – Spark & Direct Print Mode

Preface

In the 'Direct Print Mode' you can print labels on a matrix-printer like the 'Logomatic 2000' (trademark of ThermoTex) or the 'Minilogic E' (trademark of Thermopatch). The method of printing is different compared to the other modes of Spark. The following lists the features for this mode:

- Printing is done using the command-set of the printer. You have to tell the printer exactly what to do. This means you have total control of the printer.
- Printing is done without making use of a Windows-printer-driver. The advantage is that printing is not dependent of the operating system you are using.
- Text will be printed using of the fonts of the printer. This means printing will be faster.

For this 'Direct Mode' you have to tell the printer exactly what to do. The design you make must be a list of commands for the printer. It depends on the printer what commands and fonts can be used. This means it is more complicated to make a design compared to the other modes of Spark. But as soon as you have made one design you can use this as a template.

Note: Actual printing can be done in the same way as the 'Absolute'-mode.

See also the chapters 'Appendix – Direct Print Mode & Logomatic 2000' and 'Appendix – Direct Print Mode & Minilogic E'.

Creating a design

In the 'Direct Print'-mode the design will be a list of commands for the printer. It depends on the printer what commands are available. In SparkPrint and the 'Direct Print'-mode you have the options to create and modify a label.

You can make a new label by pressing the 'New Label'-button, after which you have to enter the name for the design. This must be a name that is in the range of 'C01' to 'C99' and 'N01' to 'N99'.

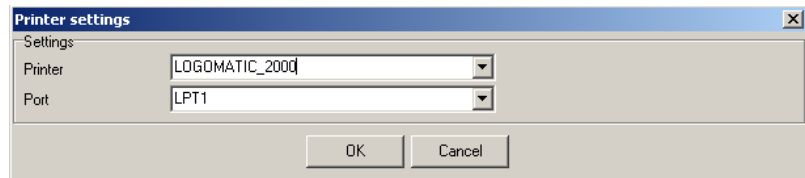
After pressing the OK-button, a dialog will be shown where you can select printer you want to use and the printer-port.

The printers you can select are:

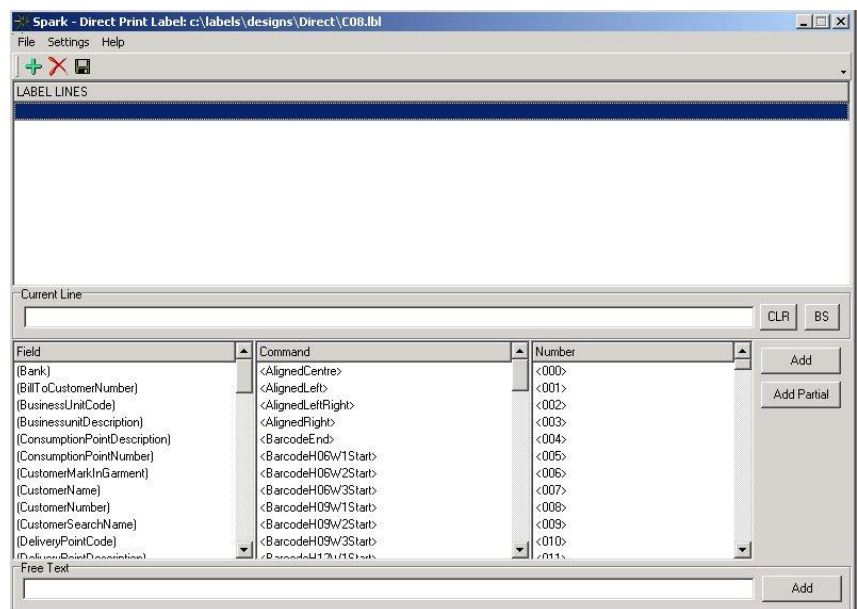
- Logomatic 2000
- Minilogic E

The ports you can select are:

- LPT1
- LPT2
- LPT3



After this the design-screen will be shown.



The top-half of the screen will show the commands that you create. This will be kept and shown in a list that is named 'label lines'. The bottom-half of the screen will show the following:

Current line

This shows the current line of the list-of-commands of the design. At the right-part of this line there are two buttons. With 'CLR' you can clear the current line. With 'BS' (backspace) you can clear the last part of the line.

Field

This shows a list of (Absolute-)fields. The fields can be used in the design. For example, if you want to print wearernames on the label, you can select the field 'WearerName' and press the 'Add' button. You can also mouse-double-click to add the field. With the button 'Add Partial' you can restrict the length of the name by entering a 'from' and 'length'-value. This can be necessary to prevent printing names that are too long to fit on the label. Example:

<(WearerName,1,12)>.

With 'Add Partial' you can also set the alignment for the field. You have the options 'None', 'Left', 'Right' and 'Zero':

- None: no alignment
- Left: [ABC] will be aligned to [ABC]
- Right: [ABC] will be aligned to [ABC]
- Zero: [123] will be aligned to [000123]

If you use an alignment, it will be shown in the syntax as

<(FieldName,From,Length,AlignCode)>, where AlignCode is:

- 1=Left
- 2=Right
- 3=Zero

For example: <(WearerName,1,12,1)> means: Align the field to the left from position 1, over a length of 12.

Command

This shows a list of printer-commands. These tell the printer what to do. By pressing the 'Add'-button you can add the command to the design. You can also mouse-double-click to add it. An example is: <AlignedLeft>. An explanation of the commands will follow.

Number

This shows a list of numbers, from 0 to 255. Some printer-commands need an argument. For example the command 'ShiftForwardN' needs an argument; the number of shift-positions the printer should shift forward. Example: <ShiftForwardN><038>. By pressing the 'Add'-button you can add the number to the design. You can also mouse-double-clicking to add the number.

Free Text

Here you can enter free text and add it to the design. For example if you want some space between 2 fieldnames, like:

<(WearerNumber)><> "><(WearerName)>

By pressing the 'Add'-button you can add the text or with a mouse-double-click.

Save

You save the design by pressing the save-button from the toolbar at the top, or by selecting 'File' and option 'Save' from the menu.

+

By pressing the '+'-button from the toolbar at the top, you can add or insert an empty line to the command-list. Be sure you don't leave empty lines between the commands, this can give problems during printing.

x

By pressing the 'x'-button you can delete a line from the command-list. You always have to confirm this action.

Settings

Menu-option 'Settings' and 'Printer-settings' gives you the option to change the settings for the printer and port. These settings are the same you entered during the creation of a new label-design.

Appendix – Direct Print Mode & Logomatic 2000

Preface

Please see the chapter ‘Appendix – Spark & Direct Print Mode’ for an introduction to the ‘Direct Print Mode’.

Design for Logomatic 2000

If you want to make a design for the Logomatic 2000-printer (trademark of ThermoTex), the following structure must always be used.

Remark: See paragraph ‘Design for Minilogic E’ if you want to make a design for the Minilogic E-printer (trademark of Thermpatch).

Basic structure

Each label should look like:

```
<LabelStart>  
[<TextStart><TextEnd>]  
[<BarcodeStart><BarcodeEnd>]  
<LabelEnd>
```

So each design should always start with <LabelStart> and end with <LabelEnd>.

Each line of text you want to print use be put between the commands <TextStart> and <TextEnd>.

Each line that should contain a barcode must be put between the commands <BarcodeStart> and <BarcodeEnd>.

The printer will do cutting of the label and repositioning automatically.

Print Commands

There are a large number of print commands (not all will be covered here). These can be divided in several categories like ‘Initialization’, ‘margins’ and ‘font settings’. Basically you have to tell the printer how/where and what to print. With ‘how’ you tell the printer how the output should look like. For example, what font should be used and if want to show text in bold, italics or underlined. With ‘where’ you tell the printer at what position (horizontal and vertical) you want to print. With ‘what’ you tell the printer what to print (the text or barcode).

How to print?

The following shows the commands that tell the printer 'how to print', how it should look like.

Initialise

To be sure that commands are not kept in the printer from previous print-actions, it is recommended to start or end the label-design with the 'initialise'-command.

<Initialise>

Font

With the font-commands, you indicate the font you want to use for the text you want to print. The following can be used.

<Courier>
<Sanserif>
<Courier2>
<Script>
<Orator>

Apart of the font, you can set the appearance of them, for example with 'BoldOn' you can make the characters bold.

Character spacing

<NLQOn> (Near Letter Quality)
<DraftOn>
<BoldOn>
<BoldOff>
<ItalicsOn>
<ItalicsOff>
<UnderlineOn>
<UnderlineOff>

Commands that influence the size of the characters and the character-spacing.

<PicaOn> (10 CPI, characters per inch)
<EliteOn> (12 CPI)
<SemiSmallOn> (15 CPI)
<SmallOn>
<SmallOff>
<WidthOn>
<WidthOff>
<ProportionalOn>
<ProportionalOff>

Where to print?

You have to tell the printer where the text/barcode should be printed; the horizontal and vertical position.

Horizontal position

Commands for the horizontal position are:

<LeftMarginN><013> (left start position in character-units)
(in this example the position is set to '13').
The position can be a value from 0 to 255.

The position is dependent on how you are printing the text, for example if you use 'PicaOn' (10 CPI), then characters are taking more space on each line than when you use 'EliteOn' (12 CPI).

<RightMarginN><043> <right end position in character-units>
(in this example the position is set to '43').
The position can be a value from 0 to 255.

This command can be important if you want to center text.

There are also alignment commands, that also influence the horizontal position of the text on the label.

<AlignedLeft>
<AlignedRight>
<AlignedCentre>
<AlignedLeftRight> (block alignment)

Apart of this you can also use spaces to align the text. For example (including fieldnames):

<(WearerName)><" "><(WearerFirstName)>
or:
<" "><(WearerName)>

Vertical position

There is only one command that can influence the vertical position, but it must be used before and after each line you want to print. Otherwise the label will stay on the same position, and all will be printed on one line.

<ShiftForwardN><038>
(the value '38' is just an example)
The position can be a value from 0 to 255.

With this command the label will be moved forwards vertically over a distance of 38 units. The distance of the unit is dependent on the printer you are using. But for the Logomatic 2000 (9 pins) one unit is 1/216 inch. For a Logomatic 2000 (24 pins) this is 1/180 inch.

To get some space at the top the label you have to start with this command, before you are going to print the data you want. Also to get some space at the bottom of the label you have to end with this command, after the data you have printed.

What to print?

What you want to print you can decide yourself, but for most printer of this type, there are only two types of data you can print: Text and barcodes.

Printing text

All text you want to print on one line must always be between the commands:

<TextStart>
<TextEnd>

For example:

```
<TextStart>  
<(WearerNumber)><” “<(WearerName,1,12)>  
<TextEnd>
```

If you want, you can also put this on one line in the design, like this:

```
<TextStart><(WearerNumber)><”  
“<(WearerName,1,12)><TextEnd>
```

This will always just print one line on the label, starting from the current position of the printhead. Afterwards you must use the <ShiftForwardN><N> command to move the label to the following position.

Special note: Please be sure the textlines you are printing will fit on the label (on **one** line). If not (if the textline gets too long), the printer will resume on the next line, with the result that the cutting of the label will be wrong. With the option 'add partial' you can restrict a field to a given length, for example:
<(WearerName,1,12)>

Printing barcodes

When you want to print a barcode on a line, this must always be put between the commands:

```
<BarcodeStart>  
<BarcodeEnd>
```

For example:

```
<BarcodeStart>  
<(IDCode)>  
<BarcodeEnd>
```

If you want, you can also put this on one line in the design, like this:

```
<BarcodeStart><(IDCode)><BarcodeEnd>
```

This will always just print one line on the label, starting from the current position of the printhead. For the barcode, an automatic 'shift forward' will be done. But it's recommended to use a 'shift forward' to get some space below the barcode.

Example for Logomatic 2000

To conclude this chapter an example will be shown. This example will print 4 lines:

```

<LabelStart>
<Initialise>
<LeftMarginN><014><RightMarginN><043>
<ShiftForwardN><020>
<AlignedLeft>
<NLQOn>
<TextStart>
<(CustomerNumber)><" ">
<(FirstIssuedate,3,4)> <" "><(WearerNumber)>
<TextEnd>
<ShiftForwardN><034>
<AlignedLeft>
<BarcodeH09W2Start>
<(IDCode)>
<BarcodeEnd>
<ShiftForwardN><010>
<NLQOn>
<TextStart>
<(Bank)><"/"><(Locker)><" "><(ProductDescription,1,10)>
<TextEnd>
<ShiftForwardN><034>
<NLQOn>
<TextStart>
<(WearerName,1,12)><","><(WearerFirstName,1,5)>
<TextEnd>
<ShiftForwardN><034>
<LabelEnd>

```

Appendix – Direct Print Mode & Minilogic E

Preface

Please see the chapter ‘Appendix – Spark & Direct Print Mode’ for an introduction to the ‘Direct Print Mode’.

Design for Minilogic E

If you want to make a design for the Minilog Eprinter (trademark of Thermopatch), the following structure must always be used.

Remark: A restriction with the ‘Direct print mode’ and the ‘Minilogic E’ is that you cannot print barcodes, so only text. If you want to print barcodes on labels, see chapter ‘Appendix – Spark & Minilogic E’.

Basic structure

Each label should look like:

```
<Initialise>  
...  
...  
<CutLabel>
```

So each design should always start with <Initialise> and end with <CutLabel>.

Afterwards the printer will cut and reposition the label.

Print Commands

There are a large number of print commands (not all will be covered here). These can be divided in several categories like ‘Initialization’, ‘margins’ and ‘font settings’. Basically you have to tell the printer how/where and what to print. With ‘how’ you tell the printer how the output should look like. For example, what font should be used and if want to show text in bold, italics or underlined. With ‘where’ you tell the printer at what position (horizontal and vertical) you want to print. With ‘what’ you tell the printer what to print (what text).

Initialise

To be sure that commands are not kept in the printer from previous print-actions, it is recommended to start or end the label-design with the ‘initialise’-command.

```
<Initialise>
```

Font

With the font-commands, you indicate the font you want to use for the text you want to print. The following can be used.

<Courier>
<OCR-B>
<Orator>
<Orator-S>
<Prestige>
<Roman>
<Sanserif>
<Script>
<Script-C>

Font Size

The size of the font can be changed with the commands:

<Point1_08>
<Point1_10>
<Point1_10.5>
<Point1_12>
<Point1_14>
<Point1_16>
<Point1_18>

The number at the end stands for the size of the font. The higher the number, the larger will be the font.

New Line

After each line you print a 'new line' command must be used:

<10><13>

Character spacing

<NLQOn> (Near Letter Quality)
<DraftOn>
<BoldOn>
<BoldOff>
<ItalicsOn>
<ItalicsOff>
<UnderlineOn>
<UnderlineOff>

Commands that influence the size of the characters and the character-spacing.

<PicaOn> (10 CPI, characters per inch)
<EliteOn> (12 CPI)
<SemiSmallOn> (15 CPI)
<SmallOn>
<SmallOff>
<WidthOn>
<WidthOff>
<ProportionalOn>
<ProportionalOff>

Where to print?

You have to tell the printer where the text/barcode should be printed; the horizontal and vertical position.

Horizontal position

Commands for the horizontal position are:

<LeftMarginN><013> (left start position in character-units)
(in this example the position is set to '13').
The position can be a value from 0 to 255.

The position is dependent on how you are printing the text, for example if you use 'PicaOn' (10 CPI), then characters are taking more space on each line than when you use 'EliteOn' (12 CPI).

<RightMarginN><043> <right end position in character-units>
(in this example the position is set to '43').
The position can be a value from 0 to 255.

This command can be important if you want to center text.

Apart of this you can also use spaces to align the text. For example (including fieldnames):

<(WearerName)><" "><(WearerFirstName)>
or:
<" "><(WearerName)>

Vertical position

There is only one command that can influence the vertical position, but it must be used before and after each line you want to print. Otherwise the label will stay on the same position, and all will be printed on one line.

<ShiftForwardN><038>
(the value '38' is just an example)
The position can be a value from 0 to 255.

With this command the label will be moved forwards vertically over a distance of 38 units.

To get some space at the top the label you have to start with this command, before you are going to print the data you want. Also to get some space at the bottom of the label you have to end with this command, after the data you have printed.

What to print?

What you want to print you can decide yourself, but there is only one type of data you can print: Text.

Printing text

To print text use a command like the following:

<(WearerNumber)>

<" ">
<(WearerName,1,12)>

Or on one line:

<(WearerNumber)><" "><(WearerName,1,12)>

This will always just print one line on the label, starting from the current position of the printhead. Afterwards you must use the <ShiftForwardN><N> command to move the label to the following position.

Printing barcodes

Printing barcodes is *not* possible using the 'Direct Print Mode' and the Minilogic E-printer. If you want to print barcodes on labels, see chapter 'Appendix – Spark & Minilogic E'.

Example for Minilogic E

The following example will print a label with 3 lines.

```
<Initialise>  
<ShiftForwardN><020>  
<NLQOn><BoldOn>  
<Roman>  
<Point1_14>  
<LeftMarginN><005>  
<(CustomerNumber)><" "><(CustomerName)>  
<010><013>  
<ShiftForwardN><010>  
<LeftMarginN><005>  
<(WearerNumber)><" "><(WearerName)>  
<010><013>  
<ShiftForwardN><010>  
<Point1_12>  
<LeftMarginN><005>  
<(IDCode)>  
<CutLabel>
```

Appendix – Logging messages

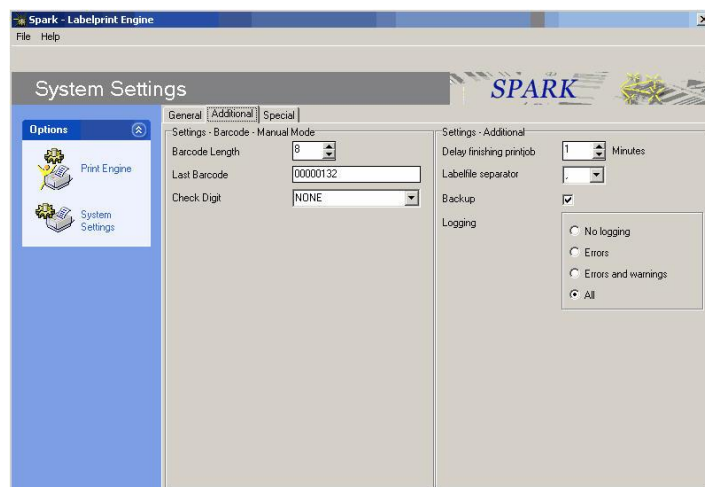
Preface

This chapter will explain how you can use logging in Spark. Logging can be used to keep track of what Spark is doing. All messages that appear in SparkEngine during print-actions can be stored in files when logging is activated. So if there were any problems during printing these log-files can be used during research.

Activate logging

You activate the logging-mechanism in Spark in the following way:

1. Start SparkEngine
2. Double-click on the blinking spark in the task-bar, the main-window will appear.
3. Select the option 'System Settings'.
4. Select the tab-page named 'Additional'.
5. At the entry 'Logging' choose one of the options (None, Errors, Errors + Warnings and All).
6. Close SparkEngine – Hide or Exit - and save the settings.



Logging options

The following options are available for logging:

<i>Option</i>	<i>Description</i>
No logging	Logging is disabled
Errors	Only log error-messages
Errors and Warnings	Only log error-messages and warnings.
All	Log all messages, even if there was no error or warning.

Location of log files

When logging is activated the log-files will be saved in the folder 'Log' located in the Spark-folder. For example, if the Spark-folder is located in:

C:\Program Files\ABS\Spark

Then the log-files will be stored in the folder:

C:\Program Files\ABS\Spark\Log

This folder will automatically be created when logging has been activated, as soon a file is created.

File names for log files

The log files that are created will have a file name like:

STOCKSPARKLOG_200601.txt

The file name itself contains the following parts:

<COMPUTERNAME><SPARKLOG_><YEAR><WEEK><.txt>

<i>Part</i>	<i>Description</i>
COMPUTERNAME	Name of the computer or workstation where Spark is used.
SPARKLOG_	A fixed name.
YEAR	The year when the log was created.
WEEK	The week when the log was created.
.txt	The extension of the log-file.

This means for each computer or workstation where Spark is used a separate log-file will be created. Also per year and week a new log-file will be created. So for each week of the year all messages will be stored in one file.

Contents of the log file

The contents of the log file will look like the following:

```
12-1-2006 11:14:50 - ABSSOL,C01,0/1,New printer task,1,1
12-1-2006 11:14:50 - ABSSOL,C01,1/1,Labels added to
task,1,1
12-1-2006 11:14:56 - ABSSOL,C01,1/1,Printed to HIQ,0,1
12-1-2006 11:14:56 - ABSSOL,C01,0/1,New printer task,1,2
12-1-2006 11:14:56 - ABSSOL,C01,1/1,Labels added to
task,1,2
12-1-2006 11:15:01 - ABSSOL,C01,1/1,Printed to HIQ,0,2
12-1-2006 11:15:01 - ABSSOL,C01,0/1,New printer task,1,3
12-1-2006 11:15:01 - ABSSOL,C01,1/1,Labels added to
task,1,3
12-1-2006 11:15:02 - ABSSOL,C01,1/1,Printed to HIQ,0,3
12-1-2006 11:15:02 - ABSSOL,C01,0/1,New printer task,1,4
12-1-2006 11:15:03 - ABSSOL,C01,1/1,Labels added to
task,1,4
12-1-2006 11:15:07 - ABSSOL,C01,1/1,Printed to HIQ,0,4
12-1-2006 11:15:07 - ABSSOL,C01,0/1,New printer task,1,5
12-1-2006 11:15:07 - ABSSOL,C01,1/1,Labels added to
task,1,5
12-1-2006 11:15:09 - ABSSOL,C01,1/1,Printed to HIQ,0,5
```

All lines are comma-separated, so you can also use an application like 'Excel' to view the contents.

Each line is composed in the following way:

```
<TIMESTAMP><MODE><LAYOUTCODE>
<NUMBER/TOTAL><STATUS><STATUSCODE>
<SEQUENCENUMBER>
```

<i>Part</i>	<i>Description</i>
TIMESTAMP	The date and time Spark processed the print-command.
MODE	The mode of the label, for example 'ABSOLUTE' or 'ABS'.
LAYOUTCODE	The layout code that was used.
NUMBER/TOTAL	The number of the label/total number of labels on one sheet.
STATUS	A description of the print-command (status)
STATUSCODE	A number that indicates the status. For errors, this will be a negative number.
SEQUENCENUMBER	The sequence number of the print-command from the moment SparkEngine was started. Each time SparkEngine is (re-) started this will be reset to 1.

Appendix – Troubleshooting

Preface

This chapter will explain how to solve any problems during the printing of labels. Problems can arise from different sources. The type of problems you can expect depends on the layouts you want to create, the type of printer you are using, the printer-driver, the operating system and the network-environment.

<i>Problem</i>	<i>Solution</i>
Spark-Engine shows you the following error-message: '1,11,3481,3399,5544,,,,,13,,,,,4 14,,' is not a valid integer value	Start 'System-settings' in Spark-Engine. Change the option 'labelfile separator' from ';' to ','. Save the changes.
Printer HIQ Citoh S4 or HIQ-2 is printing a label that is higher than the label you have selected.	Please check if all settings of the printer-driver are still the same (option Start, Settings and Printers). See also the appendix for an overview of all the required settings. This printer can loose one or more settings if you had to re-connect it. Note: if one setting in this printer-driver is wrong it can result in change results. Note 2: There MUST be a space of 2 MM at the top of the label! (Vertical offset in layout of Spark).
Print-out of label-layout is not what you intended.	You can check the print-out of your layout from SparkPrint and the option 'Modify Layout' by pressing the print-button that's located in the toolbar. There are two buttons: the button 'Print sample with frame' prints the layout with a rectangle around it, the other button prints without a rectangle. Note: This cannot be used for labels that are printed using the 'special mode'.
There are labels defined with different heights, but they all are printed with the same height.	Add an extra printer under Windows and set this as 'default printer'. This can also be a 'generic' printer. After this, check all label-layouts and set them again to the correct printer and size.
The barcode on the label is difficult to read or cannot be read during scanning.	If you are printing barcodes on a label, be sure there is enough space at the left- and right-side of the barcode. A space of at least 7 mm is strongly recommended.
There are errors during start	It is recommended to use

about access violations, or during opening of a design.	'compatibility mode' with setting 'Windows XP-SP-3' to prevent these problems.
---------------------------------------------------------	--------------------------------------------------------------------------------