



# **Labelstar Office Lite**

## **User Manual**

© Carl Valentin GmbH, 2024. All rights reserved.

Unauthorized reproduction of this manual, the software or the firmware supplied with the printer is subject to both criminal and civil prosecution and may result in severe fines and/or imprisonment in accordance with the laws and regulations in force in the relevant country. Copyright infringements will be prosecuted under civil law.

All brand names, product names or trademarks referenced in this manual are the property of their respective trademark owners.

### **Copyright Notice**

This manual contains information protected by copyright. This copyright-protected information may not be used, reproduced or disclosed to third parties for any purpose without express written consent.

### **Disclaimer**

The descriptions in this manual do not constitute warranted qualities in the legal sense or in the sense of product liability. The authors reserve the right to make changes to the manual or software without obligation to notify anyone of such changes. We make no warranty as to the accuracy of the contents of this manual. Despite all efforts, the manual may contain errors. We therefore welcome suggestions and tips that can improve the quality of our products.

**Labelstar Office Lite**  
**Version 7.70**  
**User manual**  
**01/19/2024**

Carl Valentin GmbH  
Neckarstrasse 78-86 u. 94  
78056 Villingen-Schwenningen, Deutschland

[www.carl-valentin.de](http://www.carl-valentin.de)

Phone +49 7720 9712-0  
Fax +49 7720 9712-9901  
Email [info@carl-valentin.de](mailto:info@carl-valentin.de)

# Contents

<b>About This Manual.....</b>	<b>3</b>
Document Conventions .....	4
<b>Installation .....</b>	<b>5</b>
System Requirements .....	5
First-Time Installation .....	5
Program Variants .....	6
<b>Getting Started .....</b>	<b>8</b>
User Interface.....	8
Program Options.....	10
Program Options - General .....	10
Program Options - Printing .....	10
Program Options - File Locations .....	11
Program Options - Language .....	11
<b>Create Your First Label .....</b>	<b>12</b>
Step 1: Create Label .....	13
Step 2: Create Objects.....	14
Insert Text .....	14
Insert Horizontal Line .....	15
Insert Barcode.....	16
Insert Image.....	17
Step 3: Align Objects .....	18
Step 4: Use Variable Data .....	19
Insert Counter .....	19
Step 5: Print Label.....	20
<b>Barcodes.....</b>	<b>21</b>
Codabar.....	21
Code 128.....	21
Code 2/5 Interleaved .....	22
Code 39 .....	23
Code 39 Extended.....	23
Code 93 .....	24
Code 93 Extended.....	24
Deutsche Post Identcode .....	25
Deutsche Post Leitcode.....	25
EAN-13, GTIN-13.....	26
EAN-8, GTIN-8.....	27
ITF-14, SCC-14.....	27
Pharmacode.....	28
PZN-8.....	28
UPC-A, GTIN-12.....	29
UPC-E .....	29
<b>Variables.....</b>	<b>30</b>
General Structure .....	31
Print Out Dollar Sign .....	31
Syntax Conventions .....	32
Counter.....	33
Date/Time.....	34
Standard Date Formats .....	35
Custom Date Formats.....	35
User Input .....	36
<b>Technical Support.....</b>	<b>38</b>

# About This Manual

This documentation provides you with useful information and tips on how to use the Carl Valentin GmbH.

## Who Should Read This Manual





This manual is intended for end users of Labelstar Office Lite and provides a general description of the application.

## How This Manual Is Organized

- [Installation](#) - This section identifies the system requirements and walks you through the program installation.
- [Getting Started](#) - This section provides information about the user interface and instructions on working with the basic functions of the Labelstar Office Lite.
- [Create Your First Label](#) - Here you will find a step-by-step guide explaining how to create a simple label with Labelstar Office Lite.
- [Barcodes](#) - This section gives you an overview of the supported barcode types.
- [Variables](#) - This section gives you an overview of the supported variable types.

# Document Conventions

The following symbols and text conventions are used in this documentation:

Symbol/Convention	Description
	WARNING - Provides a critical warning. You should always read warnings, like this one. They will help you avoid making serious mistakes, or wasting your time.
	IMPORTANT - Provides clarifying information or specific instructions. It is recommended that you read the text or follow the link.
	NOTE - Provides a tip, guidance, or advice, emphasizes important information, or provides a reference to related information.
	EXAMPLE - Provides references to sample files.
<b>Save</b>	Name of buttons, windows, menu items and other program interface elements.
<b>[CTRL]</b>	Keyboard keys.
C:\Windows\	Name of files and folders, code examples.
<UserName>	Placeholders.
<a href="#">Appendix A</a>	Cross-references to other locations in the document or internal hyperlinks to web pages.

# Installation

This section identifies the system requirements and walks you through the program installation.



Before installing Labelstar Office Lite - Please check if your computer fulfills the [system requirements](#). This ensures that the installation can be completed correctly.

## System Requirements

### Operating System

- Windows 10/11
- Windows Server 2016/2019/2022

### .NET Framework

- .NET Framework 4.7.2 or later
- The installer will automatically install all required .NET Framework components
- Active internet connection to update .NET Framework

Click the link below for instructions on installing the latest version of the .NET Framework on your computer:

- [Install the .NET Framework on Windows 10 and Windows Server 2016 and later](#)

## First-Time Installation



Administration rights are required for the installation.

1. Download the current program version from [www.labelstar-lite.carl-valentin.de](http://www.labelstar-lite.carl-valentin.de).
  2. Run the downloaded file as administrator and follow the instructions on the screen.
- ✓ The program is now installed on your computer and can be used.



If an older version of Labelstar Office Lite is already installed, you can just install the new version over it. There is no need to uninstall the old version first. Your existing settings will be retained.

# Program Variants

Labelstar Office comes in two variants - the **Lite** and the **Standard** version.

The free Lite version, which lacks many features compared to the Standard version, is intended to design simple labels. For professional requirements, use the Standard version.

If you'd like to try it out, you can download a free trial of the Standard version from here: [www.labelstar.carl-valentin.de](http://www.labelstar.carl-valentin.de)

	STANDARD	LITE
<b>Text Objects</b>		
TrueType fonts	✓	✓
Printer fonts	✓	
Text formatting (markup tags)	✓	
Curved text	✓	
<b>Barcode Objects</b>		
<a href="#">1D Barcodes</a>	✓	✓
2D Barcodes	✓	
GS1 Barcodes	✓	
Post Barcodes	✓	
HIBC Barcodes	✓	
<b>Images</b>	More than 90 graphic and vector formats (e. g. TIFF, GIF, JPEG, PNG, WMF, BMP, ICO, and many more)	Limited (BMP only)
PFD import	✓	
<b>Variables</b>		
<a href="#">System variables</a>	More than 30 variables (e. g. counter, date, time, user input, field link, check digit calculation, if...else statement, and many more)	Limited ( <a href="#">date</a> , <a href="#">time</a> , <a href="#">counter</a> , and <a href="#">user input</a> only)
Printer variables	✓	
<b>Databases</b>	✓	
<b>Logging</b>	✓	
<b>Memory Card Support</b>	✓	
<b>Symbols</b>	✓	
<b>Label Export</b>		
SAPscript ITF print template	✓	
PDF files	✓	
Image files	✓	
<b>Printing</b>		
Internal printer protocol (CVPL)	✓ <a href="#">(Valentin printer driver Version 2.4.1 or later)</a>	✗ (Data is transferred graphically.)
Print preview	✓	

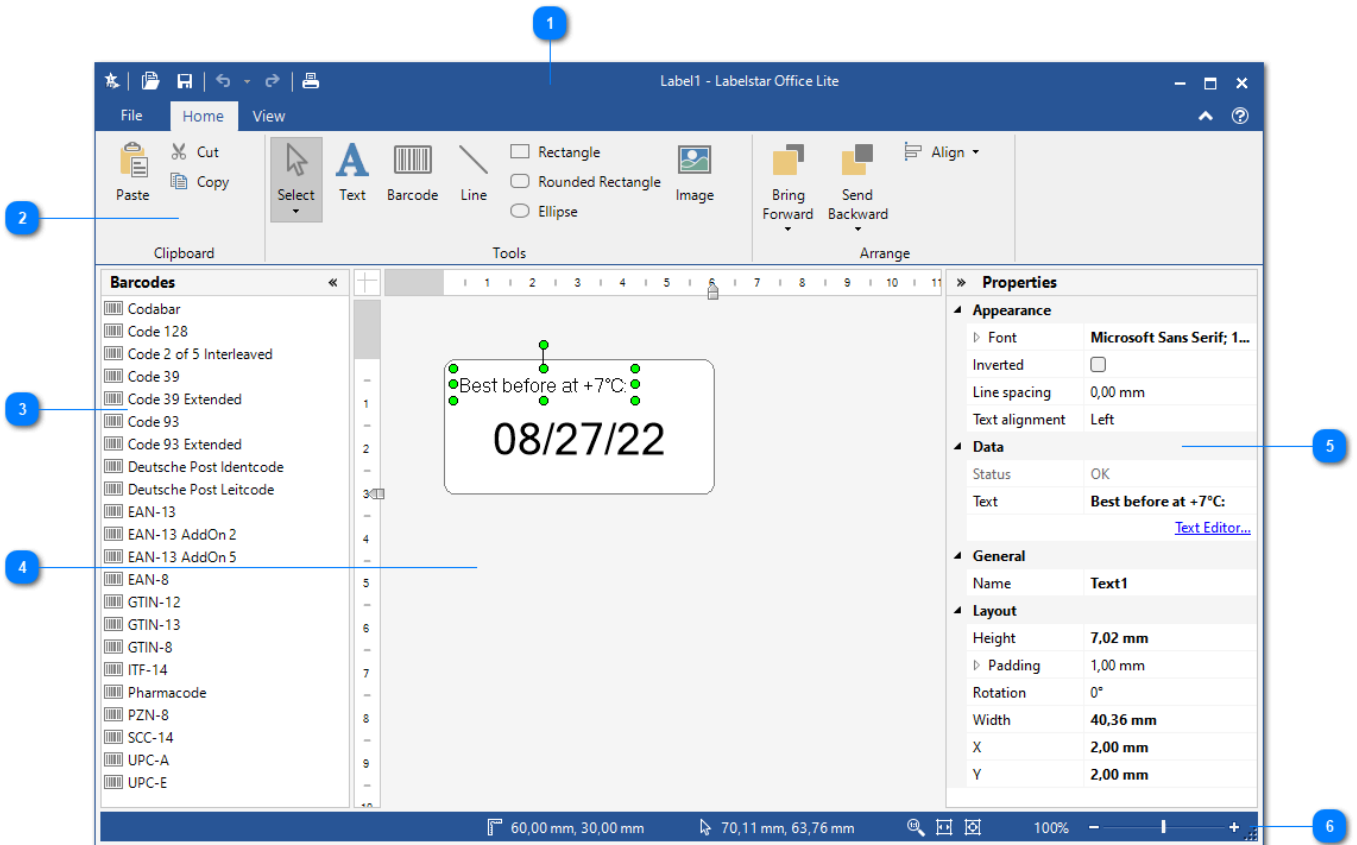
Column printing	✓	
Two-color printing	✓	
<b>API</b>	LSOffice.dll	
<b>Import Labelstar Plus/Lite Labels</b>	✓	
Label Converter	✓	
<b>Program Modules</b>		
Label Designer	✓	✓
Print Manager (batch processing)	✓	
Quick Print	✓	
Print Form	✓	
Folder Monitor	✓	



# Getting Started

This section describes the main window and the basic functions of Labelstar Office Lite.

## User Interface



### 1 Title Bar

The title bar displays the program name and the label name that is currently being edited.

On the left side of the title bar, the Quick Access Toolbar lets you perform common tasks with just one click:

- Open label
- Save label
- Undo last command
- Redo last command
- Print label

The **Minimize**, **Maximize/Restore** and **Close** window control buttons are grouped on the right side of the title bar.

### 2 Ribbon

The ribbon gives you access to all functions of Labelstar Office Lite. For a better overview, the ribbon is divided into tabs. In each tab, you can find groups that are related to each other. Each group consists of features and buttons, which are designed for similar tasks.

3

**Barcodes**

Shows a list of the available [barcode types](#). To add a barcode to the label, select an entry and drag it onto the label.

4

**Work Area**

This area shows the label that you are currently editing.

5

**Properties**

Displays the properties of the object that is currently being selected.

6

**Status Bar**

In this area you will find information about:



- Label size



- Location of the selected object.

On the right side of the status bar are the zoom buttons and slider:



- Zoom 100%



- Zoom label width



- Zoom whole label



- Zoom in and out

# Program Options

The Labelstar Office Lite has a large number of setting options with which you can customize the program to your personal requirements.

It is a good idea to check through these settings before you start working with the Labelstar Office Lite. You may be surprised at all the things you can adjust and configure!

## To Change the Program Options

1. Select the **File** tab, and then click **Options**.  
The **Options** dialog opens.
  2. Select a tab and change the desired settings.
  3. Click **OK**, to close the dialog.
- ✓ Settings are saved.



All settings marked with an asterisk (\*) take effect at the next application startup.

## Program Options - General

### Settings

**Save label without prompt.** Select this check box if the label should be saved without confirmation prompt.

### At program startup

Select how Labelstar Office Lite should behave at program startup:

- **Blank label.** Opens a blank label.
- **Open recent label.** Shows the recently opened label.
- **Open label.** Opens a particular label. Click [...] to choose a label file.
- **Show File Open dialog.** Displays the **Open File** dialog box to choose a label.

## Program Options - Printing

### Settings

**Default printer.** You can select the default printer for Labelstar Office Lite here. Labelstar Office Lite initially uses the Windows default printer, but you can select a different default printer for the print output. The Windows default printer and the Labelstar Office Lite default printer are independent of one another. If you change one of the defaults, this does not affect the other one.

## Program Options - File Locations

### Folder Settings

**Default labels location.** Specifies the folder used by default to open or save a label. Leave this field blank to use the default directory %UserProfile%\Documents\Labelstar Office Lite\Labels.

**Default image location.** Specifies the image folder. Leave this field blank to use the default directory %UserProfile%\Documents\Labelstar Office Lite\Images.

## Program Options - Language

You can change the language of the menus and dialog boxes used in Labelstar Office Lite.

### Settings

Select an entry from the list of available languages. If the entry **(Same as the system)** is selected, the system language (if language available, otherwise English) is used as program language.



If you have changed the language, you must quit and restart Labelstar Office Lite.

## Create Your First Label

The best way to learn how to design a label is to actually create one. In this section, we explain (step by step) how to design a simple label using Labelstar Office Lite.

**When you finish, your label will look like this:**



The corresponding label file can be found at the following location: %Public%\Documents\Labelstar Office Lite\Samples\Sample.lblx

# Step 1: Create Label

- 1. Open Labelstar Office Lite.
- 2. Click **File > New**.
- ✓ A new blank label is created with the standard dimensions 100 mm x 60 mm.

## Change Label Width to 60 mm

Grab the slider on the horizontal ruler with the mouse and move it to 60 mm.



or


Go to **Properties > Layout**, and change **Label width** to 60 mm.

▲ <b>Appearance</b>	
Border type	Rectangle
Bore diameter	0.00 mm
Corner radius	2.50 mm
▲ <b>Layout</b>	
Label height	60.00 mm
Label width	60.00 mm
▲ <b>Printing</b>	
Label rotation	0°

## Step 2: Create Objects

In this step you will learn how to add fixed objects on the label.

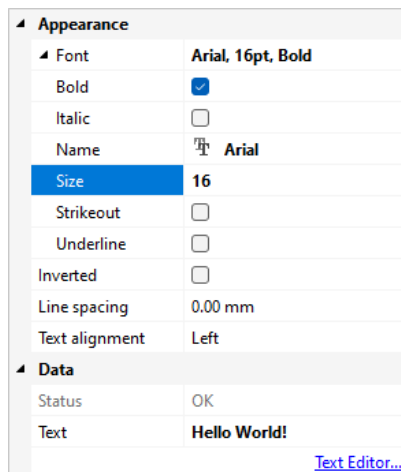
### Insert Text

1. On the **Home** tab, in the **Tools** group, click the **A Text** button.
  2. Move the cursor  to the location where the text object will be inserted and click the mouse button.  
The **Text Editor** dialog opens.
  3. Enter **Hello World!**, then click **OK**.
- ✓ The text is placed on the label.

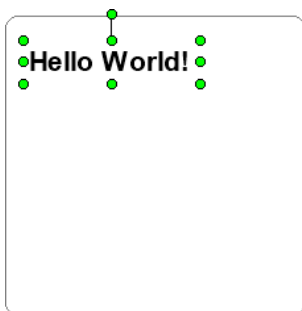
Use the mouse to position the text object at the top of the label.

### Change Font



Go to **Properties > Appearance > Font**, and choose Arial font, 16 point size, and bold style.



The screen should show the following:



## Insert Horizontal Line

1. On the **Home** tab, in the **Tools** group, click the  **Line** button.
  2. Move the cursor  to the starting point of the line.
  3. Press **[SHIFT]** key, hold down the mouse button and move the cursor to the end position of the line, then release the mouse button.
- ✓ The line is placed on the label.

Use the mouse to position the line object below the text object.



You can draw a straight or 45° tilted line by line tool with pressing **[SHIFT]** key.

## Change Line Weight

Go to **Properties > Appearance**, and change **Line weight** to 1 mm.

▲ <b>Appearance</b>	
Line weight	1.00 mm
▲ <b>General</b>	
Name	Line1
▲ <b>Layout</b>	
X1	5.29 mm
X2	55.29 mm
Y1	16.66 mm
Y2	16.66 mm

## Change Line Size

Go to **Properties > Layout**, and change **X1** to 0 mm and **X2** to 60 mm.

▲ <b>Appearance</b>	
Line weight	1.00 mm
▲ <b>General</b>	
Name	Line1
▲ <b>Layout</b>	
X1	0.00 mm
X2	60.00 mm
Y1	16.66 mm
Y2	16.66 mm


The screen should show the following:





## Insert Barcode

Now you will add a [Code 128](#) barcode on the label.

1. On the **Barcodes** tab, select **Code 128**.
  2. Hold down the mouse button and move the cursor  to the desired location, then release the mouse button.
- ✓ The barcode is placed on the label.

Use the mouse to position the barcode below the horizontal line.

## Change Module Width

Go to **Properties > Appearance**, and change **Module width** to 5 pt.

▲ Appearance	
Human readable	<input checked="" type="checkbox"/>
Inverted	<input type="checkbox"/>
Module width	5 pt
▲ Data	
Barcode type	Code 128
Data	ABCabc
Status	OK

## Change Barcode Height

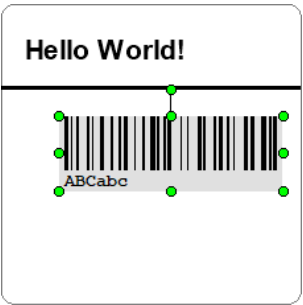
Go to **Properties > Layout**, and change **Height** to 15 mm.

▲ General	
Name	Barcode2
▲ Layout	
Height	15.00 mm
▸ Quiet zone	1.00 mm
Rotation	0°
Width	44.75 mm
X	47.62 mm
Y	28.04 mm





You can change the barcode size by dragging the object handles. The handles are small circles surrounding the object when it is selected.

The screen should show the following:



## Insert Image

1. On the **Home** tab, in the **Tools** group, click the  **Image** button.
  2. Move the cursor  to the location where the image object will be inserted and click the mouse button.  
The **Open File** dialog box opens.
  3. Go to %Public%c\Documents\Labelstar Office Lite\Samples and open `Globe.bmp`.
- ✓ The image is placed on the label.

Use the mouse to position the image below the barcode.

**The screen should show the following:**




## Step 3: Align Objects

You have placed the objects on the label. Now you want to make sure they are aligned horizontally centered of the label.

### 1. Select all objects

To select all objects on the label, perform one of the following actions:

- On the **Home** tab, in the **Tools** group, click the  **Select** button and draw a frame around all objects on the label.
- Select an object on the label. Hold down **[SHIFT]** key and click another object. Repeat for all objects on the label.
- Press **[CTRL] + [A]**.

### 2. On the **Home** tab, in the **Arrange** group, click **Align > Align Center**.

✓ The selected objects will be rearranged and positioned on the horizontal center of the label.

**The screen should show the following:**



## Step 4: Use Variable Data

So far, only fixed objects have been inserted on the label. If you want to define a label which data changes during printing, Labelstar Office Lite offers different variable fields ([Counter](#), [Date/Time](#), and [User Input](#)) that you can use with text or barcode objects.

In this step, you change the fixed content of the barcode object to a [counter](#) that is incremented by two for each label.

### Insert Counter


1. Double-click the barcode object on the label.  
The **Data Editor** dialog box opens.
2. Click **Insert Variable** > [Counter](#).  
The **Counter** dialog box opens. Change **Increment** to 2 and click **OK**.
3. Click **OK** to close dialog.

The screen should show the following:



## Step 5: Print Label

1. Perform one of the following actions:

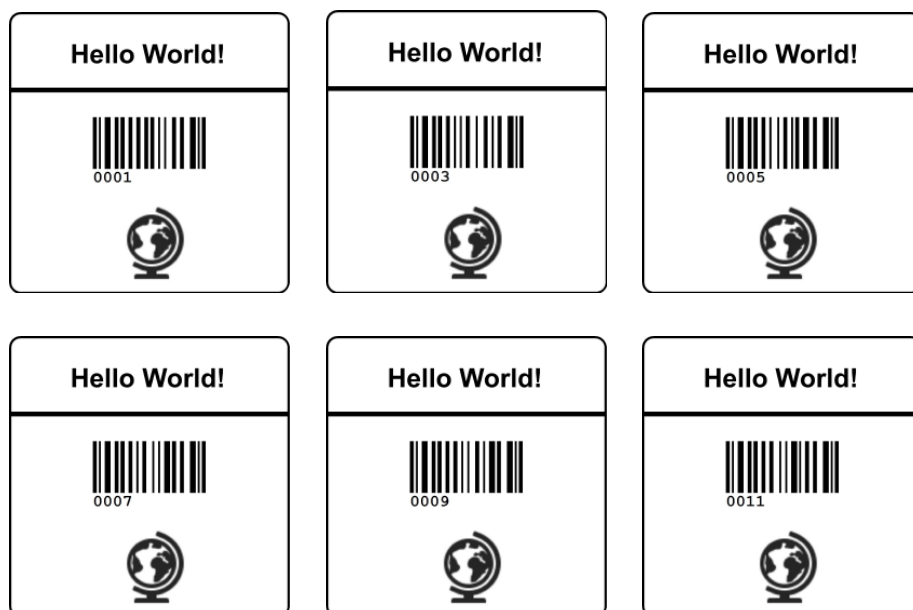
- Click **File > Print**.
- Click  in the title bar.
- Press **[CTRL] + [P]**.

The **Print** dialog box opens.

2. Choose the printer on which the labels are to be printed and enter 6 as the **Number of Copies**.

3. Click **OK** to start printing.

### Print-Out



# Barcodes

This section gives you an overview of the supported barcode types.

## Codabar

The **Codabar** is mainly used in libraries, in photo sector and in medical ranges (blood banks). The **Codabar** is a universal, numeric barcode that contains 6 special characters additionally to the numbers 0 to 9. The number of representable signs is not given of the code.

Additionally four different start/stop signs (A-D) are defined, i.e. each code must begin and end with A, B, C or D. However, the start/stop signs cannot be used in the bar code itself.

Each sign of the code consists of elf units, four bars and three spaces. A fourth gap is always narrow.



<b>Length</b>	Variable
<b>Valid characters</b>	Digits 0-9 Special characters - \$ : / . +
<b>Check digit</b>	None Modulo 16

## Code 128

**Code 128** is a universal, alphanumeric barcode mainly used in shipping/transport, on documents of identification and in warehousing/distribution.

**Code 128** can encode the complete ASCII character set. This code uses an internal check digit that won't be displayed in the text line under the code. By the use of four different widths for bars and gaps, the information density is very high.

The structure of a **Code 128** consists of a start sign, data area, check digit and a stop sign. Before the start sign and behind the stop sign a white zone (quiet zone) with a width of at least 10 modules must be defined.



<b>Length</b>	Variable
<b>Valid characters</b>	128 ASCII characters Control characters
<b>Check digit</b>	Modulo 103

## Code 2/5 Interleaved

**Code 2/5 Interleaved** is a two-width numeric code that can encode information of any length as long as the code contains an even number of digits.

Every two digits are interleaved with each other to create a single symbol. The first digit is displayed with five bars (or black lines). The second digit is represented by the spaces (or white lines) following the bars. Five bars and spaces encode a pair of digits.

If an uneven number of digits is to be displayed, a zero must be prefixed or a check digit must be added at the end.

The barcode is mainly used in industry, especially in logistics.



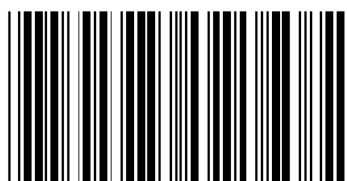
Length	Variable (Even number of digits)
Valid characters	Digits 0-9
Check digit	None Modulo 10 Modulo 10 (Luhn Algorithm)

## Code 39

**Code 39** is a popular non-retail symbology mainly used in shipping/transport, electronics and chemical industries, the health sector and in warehousing/distribution. It supports numbers, upper-case letters, and several special characters.

Each character is composed of nine elements: five bars and four spaces. Three of the nine elements in each character are wide (binary value 1), and six elements are narrow (binary value 0). The width ratio between narrow and wide is not critical, and may be chosen between 1:2 and 1:3. The barcode itself does not contain a check digit, but it can be considered self-checking on the grounds that a single erroneously interpreted bar cannot generate another valid character.

Possibly the most serious drawback of **Code 39** is its low data density: It requires more space to encode data in **Code 39** than, for example, in [Code 128](#).



\*ABCDEF\*

<b>Length</b>	Variable
<b>Valid characters</b>	Digits 0-9 Upper case letters A-Z Special characters - . \$ / + % Space
<b>Check digit</b>	None Modulo 43 Modulo 11 (weighting 7) Modulo 10 (Luhn Algorithm)

## Code 39 Extended

**Code 39 Extended** supports all 128 ASCII characters by using double character encoding. For example, the lower-case letter "a" is represented by "+A".

Because of the possibility of misrepresentation of a symbol, most barcode scanners must be switched to extended mode in order to recognize **Code 39 Extended**.



\*ABCabc\*

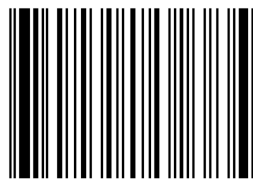
<b>Length</b>	Variable
<b>Valid characters</b>	128 ASCII characters
<b>Check digit</b>	None Modulo 43 Modulo 11 (weighting 7) Modulo 10 (Luhn Algorithm)



## Code 93

**Code 93** is an alphanumeric barcode similar to [Code 39](#) and can encode 48 different characters.

By the use of various bar widths and gap widths it has a higher information density. Each character is nine modules width, and always has three bars and three spaces.

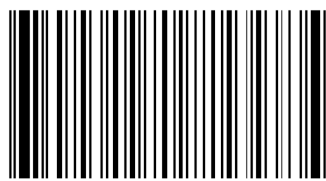


ABCDEF

Length	Variable
Valid characters	Digits 0-9 Upper case letters A-Z Special characters - . \$ / + % Space
Check digit	Modulo 47

## Code 93 Extended

**Code 93 Extended** is a variant of [Code 93](#), extending it to support all 128 ASCII characters.



ABCabc

Length	Variable
Valid characters	128 ASCII characters
Check digit	Modulo 47

## Deutsche Post Identcode

**Identcode** is a variant of [Code 2/5 Interleaved](#), but with a different check digit. This code is used by the Deutsche Post AG (DHL) and serves the automatic distribution of freight parcels in the post-office centres.

Structure of **Identcode**:

- **1..2:** Mail center (outgoing)
- **3..5:** Customer code
- **6..11:** Delivery number
- **12:** Check digit



<b>Length</b>	12
<b>Valid characters</b>	Digits 0-9
<b>Check digit</b>	Modulo 10

## Deutsche Post Leitcode

**Leitcode** is a variant of [Code 2/5 Interleaved](#), but with a different check digit. This code is used by the Deutsche Post AG (DHL) and serves the automatic distribution of freight parcels in the post-office centres.

Structure of **Leitcode**:

- **1..5:** ZIP code
- **6..8:** Street's code number
- **9..11:** House number
- **12..13:** Product code
- **14:** Check digit



<b>Length</b>	14
<b>Valid characters</b>	Digits 0-9
<b>Check digit</b>	Modulo 10

## EAN-13, GTIN-13

**EAN barcodes** are used world-wide for marking retail goods. Each packaging is uniquely identified by the GTIN - Global Trade Item Number (formerly European Article Number - EAN).

**EAN barcode sizes** are standardized. The module width and height are only allowed to vary within certain limits. The default, or 100%, size is called SC 2, resulting in a code that is roughly 26 mm high and 35 mm wide. It is permitted to vary the width down to 81% and up to 200%. In addition it is permitted to reduce the height to some degree, this is also known as truncation.

The symbol encodes 13 characters: the first two or three are a country code which identify the country in which the manufacturer is registered (not necessarily where the product is actually made). The country code is followed by 9 or 10 data digits (depending on the length of the country code) and a single check digit.



EAN-13

**EAN-13** can carry an add-on barcode. The add-on can encode another two or five digits of data. With such an add-on **EAN-13** usually encodes an ISBN or ISSN.



EAN-13 AddOn 2



EAN-13 AddOn 5

<b>Length</b>	13-18
<b>Valid characters</b>	Digits 0-9
<b>Check digit</b>	Modulo 10

## EAN-8, GTIN-8

**EAN-8** is a shortened version of the [EAN-13](#) barcode.

It includes a 2 or 3 digit country code, 4 or 5 data digits (depending on the length of the country code), and a check digit.



A GTIN short number will only be output upon request since these numbers have limited availability. The EAN-8 barcodes with a 2 as the starting digit can be used freely within the company, but they are not unique in the world.



<b>Length</b>	8
<b>Valid characters</b>	Digits 0-9
<b>Check digit</b>	Modulo 10

## ITF-14, SCC-14

**ITF-14**, which is based on [Code 2/5 Interleaved](#), is used to create the Shipping Container Code (SCC). This code is used to mark cartons and palettes that are including goods with an [EAN-13](#) code.

A **ITF-14** number contains the following information:

- **1:** Package indicator
- **2..3:** UPC numbering system/GS1 country prefix
- **4..8:** GS1 company prefix
- **9..13:** Item identification number
- **14:** Check digit



<b>Length</b>	14
<b>Valid characters</b>	Digits 0-9
<b>Check digit</b>	Modulo 10

## Pharmacode

**Pharmacode** is a simple, numeric barcode placed on the marked from company Laetus. It is used in pharmaceutical industry for the control of packaging means and/or for the control of packaging machines.

**Pharmacode** applied on the packaging and on the package insert provides that the correct package insert is sorted into the appropriate packaging. With the **Pharmacode** only integers can be coded from 3 to 131070.



Length	1-6
Valid characters	Digits 0-9
Check digit	None

## PZN-8

**PZN barcodes** serves for marking of drugs and other pharmacy products according to trademarks, dosage form, intensity and package size. The **PZN** (Pharmazentralnummer) is assigned by the [Informationsstelle für Arzneispezialitäten \(IFA\)](#).



Length	8
Valid characters	Digits 0-9
Check digit	Modulo 11

## UPC-A, GTIN-12

The **Universal Product Code (UPC)** is a barcode symbology that is widely used in the United States, Canada, the United Kingdom, Australia, New Zealand and in other countries for tracking trade items in stores.

Its most common form, the **UPC-A**, consists of 12 numerical digits, which are uniquely assigned to each trade item. Along with the related [EAN-13](#) barcode, the **UPC-A** is the bar code mainly used for scanning of trade items at the point of sale.

The symbol encodes 12 characters:

- **1:** System identification
- **2..6:** UPC ID number (manufacturer)
- **7..11:** Individual article number (issued by the manufacturer)
- **12:** Check digit



<b>Length</b>	12
<b>Valid characters</b>	Digits 0-9
<b>Check digit</b>	Modulo 10

## UPC-E

The **UPC-E** is intended to be used on packaging which would be otherwise too small to use [UPC-A](#).

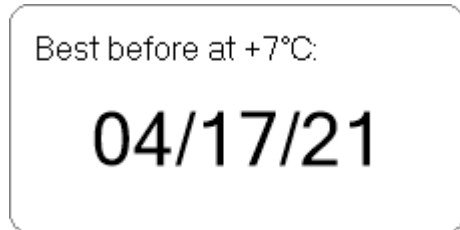
The code is smaller because it drops out zeros which would otherwise occur in the symbol. For example, the code 59300-00066 would be encoded as 593663. The last digit (3 in the example) indicates the type of compression.



<b>Length</b>	8
<b>Valid characters</b>	Digits 0-9
<b>Check digit</b>	Modulo 10

# Variables

The purpose of variables is to insert certain changeable values on a label, for example the current date. This enables flexible label design.



Variables can be used in text and barcode objects.

## Define a Variable

1. Double-click the object in which you want to insert a variable.  
The **Text Editor** opens.
2. Position the cursor in the input field where you want to insert the variable, and click **Insert Variable**.
3. Choose the type of variable you want to use.  
The corresponding dialog box opens.
4. Specify the variable and click **OK**.  
The variable specification is displayed in the editor.
5. Click **OK** to close the editor.

# General Structure

**\$Variablename** (*Argument1, Argument2, Argument3, ...*)

A variable starts always with a dollar sign (\$). The name of the variable follows the dollar sign, followed by the recommended arguments in brackets. If multiple arguments are used, they are separated by commas. Texts, numbers or other variables can be indicated as variable arguments. Some variables do not require arguments, but the brackets are still required.

## Reserved Characters

Character	Definition
\$	Indicates a variable.
(	Indicates the beginning of the parameter list.
)	Indicates the end of the parameter list.
"	Delineates the beginning or ending of a string.
,	Parameter separator.
=	Parameter name-value separator.

## Print Out Dollar Sign

Whenever a sign has a special meaning, problems will follow. In general, it is assumed that the function and not the sign itself is meant. This means that if you enter a dollar sign, Labelstar Office Lite assumes that you want to define a variable – the dollar sign is interpreted as the beginning of a variable.

### What is to be done if you really want to print a dollar sign?

There is a very simple trick: double the dollar sign. This devalues the dollar sign and uses it as a normal sign.

In order to get the output "The article costs 13\$" the source text must look like this: "The article costs 13\$\$".

The article  
costs 13\$



## Syntax Conventions

The following conventions are used in the syntax statements:

- Keywords that must be entered literally are in **bold**.
- Parameters representing variables that must be replaced with an appropriate value or expression are in *italics*.
- Parameters enclosed in brackets (`[]`) are optional.
- Parameters not enclosed in brackets or parameters enclosed in braces (`{}`) are required.
- A vertical bar (`|`) separates two or more parameters, of which exactly one can be selected. The default value is underlined.

For example, `[a|b]` indicates that you can choose a, b, or nothing. Similarly, `{a|b}` indicates that you must choose either a or b.

- Comma-Ellipsis (`, . . .`) indicates that the parameter can optionally be repeated, separated by commas. If no repetition is specified, the comma is omitted.

# Counter

Use the `$Counter` variable to define a simple numeric counter and display the current counter value on the label.

## Syntax

```
$Counter ("start_value" [, UpdateInterval=update_interval] [, Increment=increment])
```

## Parameters

*start\_value* (9 digits max.)

The start value to count from.

**Note:** The number of digits of the start value determines the output format.

*update\_interval* (optional, default = 1)

Indicates how often the counter is to be incremented during a print job.

**1:** After each label

**n:** After n labels

*increment* (optional, default = 1)

A positive number to indicate the amount by which you want the counter to increase.

## Example 1

Define a counter that increases by 1 on each label.

```
$Counter ("1")
```

```
1, 2, 3, 4, 5, 6, 7, 8, 9, 0, 1, 2, 3, 4, 5
6, 7, 8, 9, 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 0
```



The counter starts again (roll over) once it reached the maximum number, in this case 9.

## Example 2

Define a counter that increases by 5 on every second label.

```
$Counter ("01", UpdateInterval=2, Increment=5)
```

```
01, 01, 06, 06, 11, 11, 16, 16, 21, 21
```

# Date/Time

Use the `$DateTime` variable to display a date and time value on the label. The value is obtained from the system clock.

## Syntax

```
$DateTime ("output_format"[, UpdateInterval=update_interval][, DayOffset=day_offset])
```

## Parameters

*output\_format*

The format in which the date and time value is displayed.

This can be either an individual format specifier (see [Standard Date Formats](#)) or a customized format pattern (see [Custom Date Formats](#)). If output format is empty, the general format identifier "G" is used.

*update\_interval (optional, default = 1)*

Indicates how often the variable is to be updated during a print job.

**0:** At print start

**1:** After each label

**n:** After n labels

*day\_offset (optional, default = 0)*

The number of days added to the current date.

## Examples

Date used in examples: 2013-09-11 13:20:35

```
$DateTime ("") -> 9/11/2013 1:20:35 PM
```

```
$DateTime ("d") -> 9/11/2013
```

```
$DateTime ("D") -> Wednesday, September 11, 2013
```

```
$DateTime ("MM/dd/yy", DayOffset=10) -> 09/21/13
```

```
$DateTime ("hh:mm") -> 01:20
```

```
$DateTime ("HH:mm") -> 13:20
```

## Standard Date Formats

Standard date and time format strings use a single format specifier to define the text representation of a date and time value. Any date and time format string that contains more than one character, including white space, is interpreted as a [custom date format](#).

	Format specifier	Output example
<b>Date, short</b>	d	7/27/2022
	G	7/27/2022 8:57:54 AM
	g	7/27/2022 8:57 AM
<b>Date, long</b>	D	Wednesday, July 27, 2022
	F	Wednesday, July 27, 2022 8:57:54 AM
	f	Wednesday, July 27, 2022 8:57 AM
<b>Time</b>	T	08:57:54 AM
	t	08:57 AM

## Custom Date Formats

	Output example
yyyy-MM-dd HH:mm:ss	2022-07-27 14:51:18
ddd h	Wed 2
yy-MM-dd (dddd)	22-07-27 (Wednesday)

## Format Tokens

	Token	Output
<b>Month</b>	M	1, 2, ... 11, 12
	MM	01, 02, ... 11, 12
	MMM	Jan, Feb, ... Nov, Dez
	MMMM	January, February, ... November, December
<b>Day of month</b>	d	1, 2, ... 30, 31
	dd	01, 02, ... 30, 31
<b>Day of week</b>	ddd	Sun, Mon, ... Fri, Sat
	dddd	Sunday, Monday, ... Friday, Saturday
<b>Week of year</b>	w	1, 2, ... 52, 53
	ww	01, 02, ... 52, 53
<b>Year</b>	yy	70, 71, ... 29, 30
	yyyy	1970, 1971, ... 2029, 2030
<b>Hour</b>	H	0, 1, ... 22, 23
	HH	00, 01, ... 22, 23
	h	1, 2, ... 11, 12
	hh	01, 02, ... 11, 12
<b>Minute</b>	m	0, 1, ... 58, 59
	mm	00, 01, ... 58, 59
<b>Second</b>	s	0, 1, ... 58, 59
	ss	00, 01, ... 58, 59

# User Input

Use the **\$UserInput** variable to display an input control to ask the user to enter a value at print time.

## Syntax

```
$UserInput ( )
```

## Internal Parameters

## Settings

**Prompt text.** A message to the user indicating what kind of input is expected.

**Update interval.** Here you can specify how often the user input should be displayed during a print job.

**Start text.** The text that the input control starts with. Enable the **Overwrite start text after input** option if you always want to use the recently entered text.

## Input Control Settings

**Allowable characters.** Here you can specify which characters may be entered in the input control.

**Min length.** The minimum number of characters that must be entered.

**Max length.** The maximum number of characters that may be entered.

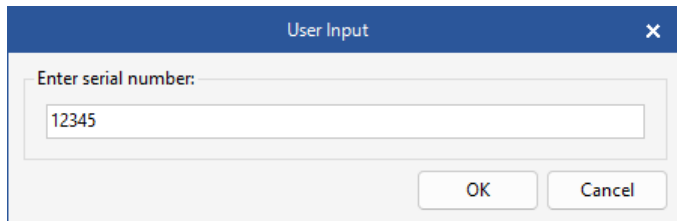
To verify that the user input works like expected click **Test Input**.

## Example 1

Create a user input that accepts only numeric input.

Prompt text = Enter serial number:

Allowable characters = Numbers only

A dialog box titled "User Input" with a close button (X) in the top right corner. Inside the dialog, there is a text prompt "Enter serial number:" followed by a text input field containing the value "12345". At the bottom right of the dialog, there are two buttons: "OK" and "Cancel".

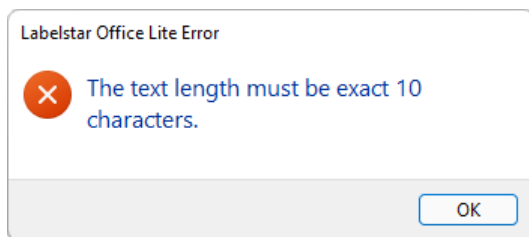
## Example 2

Create a user input that expects an input of exactly 10 characters.

Min length = 10

Max length = 10

If less than 10 characters are entered, an error message is displayed to the user.

An error dialog box titled "Labelstar Office Lite Error". It features a red circular icon with a white 'X' on the left. To the right of the icon, the text reads "The text length must be exact 10 characters." in blue. At the bottom right, there is an "OK" button.

## Technical Support

If you encounter any issues installing or using the Labelstar Office Lite, before requesting for the assistance of the technical support, take advantage of the following options:

- Update your program.  
Our experience shows that many technical issues can be addressed by a software update.  
The current program version can be downloaded from [www.labelstar-lite.carl-valentin.de](http://www.labelstar-lite.carl-valentin.de).
- Search our online resources.  
Our user manual covers all features of the Labelstar Office Lite and all known problems.

If you have not found a solution for the problem, you can request direct assistance from Carl Valentin GmbH technical support by one of the following ways:

- Send an email at: [support@carl-valentin.de](mailto:support@carl-valentin.de)
- Call by phone: +49 7720 9712 - 97