

**DYMO**<sup>®</sup>

*PC-10*

*9000*

# Dymo Printer Driver User Documentation

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# Dymo Printer Driver User Document

## Introduction

This document is aimed at empowering users to understand the Dymo printer driver software and how the same could be installed, configured and used with various Windows application. This document assumes that the users are very familiar with the Dymo series printers (D9000 and PC-10), and printing to these printers from the DLS application.

It will not be possible to describe the entire printing framework of Windows and how printers, OS and the applications interact with each other in this document. Readers are advised to learn or familiarize themselves with the Windows printing framework by reading on-line help (Start/Help/How to.../Print).

## Terms and Definitions

1. Label: The word label is used to indicate a printed label of definite length. It is synonymous to page in other printers.
2. Tape: The word tape is used to refer to an un-printed tape, without a definite length. The tape width is one of 6 12, 19, 24 or 32mm.
3. Label Setup Tab: Some times also referred to as document property sheet. In Windows 95/98 this tab can be reached through the 'Properties' menu command of the printer. In Windows NT this tab is reached by following 'Document Defaults...' menu command. Label Setup tab provides the user facility to change the properties of printed label.

## About Dymo Printer Driver

The Dymo Printer driver feature allows users to configure the way Dymo Label Maker behaves. Applications used by the user may also provide similar functionality. The Dymo Label Maker driver has three standard tabs in Windows 95([Label Setup](#), Graphics and [Printer Diagnostics](#)) and Windows NT ([Label Setup](#), Options and [Printer Diagnostics](#)).

## Installation

The Dymo printer driver is installed through standard Windows *Add Printer Wizard*. The user needs to double click on 'Add Printer' icon in the Printers folder and point to the driver files. The 'Add Printer Wizard will take the user through simple steps to install the printer driver files. The typical installation procedure will follow these steps.

### Typical Installation

#### Windows 95/98

1. Start/Settings/Printer
2. Double click on Add printer
3. Click on Next.
4. Select Network or Local printer
5. Click on Have Disk button and point to the directory/drive where Dymo printer driver files are present.
6. Select Dymo Label Maker
7. Click on Next
8. Select the serial port to which the printer is connected. (For better performance you should install Dymo port monitor now. For more information see [Installing and Configuring Dymo Port](#)).

9. If you choose a Dymo Port then skip this step. Click on Configure port; set these parameters: 9600 Bits per second, 8 data bits, 1 stop bit, no parity and no flow control.
10. Type a name for the printer
11. The system will prompt you to print a test page. Print a test page if you want and finish installation.

## Windows NT

1. Start/Settings/Printers
2. Double click on Add printer
3. Choose My Computer and click on Next to add a local printer
4. Select the COM port to which the Dymo Label Maker is connected.
5. Click on Configure port button
6. Select the COM port to which the Dymo Label Maker is connected
7. Click on Settings and set these parameters: 9600 Bits per second, 8 data bits, 1 stop bit, no parity and no flow control.
8. Click OK
9. Click Close
10. Click on Have Disk button and point to the directory/drive where the Dymo printer driver files are located.
11. Select Dymo Label Maker
12. Click on Next button
13. Enter a name for the printer
14. Select if you want the printer to be shared. If you want to share the printer, you also need to select the Operating systems from which you want to print to this printer. (Currently only Windows NT 4.0 and 95/98 are supported)
15. The system will prompt you to print a test page. Print a test page if you want and finish installation

Now the printer driver must be installed and you should be able to print to the Dymo printer from any Windows application.

## Installing and Configuring Dymo Port Monitor

Dymo Label Maker Driver includes a highly customized port monitor that gives a high performance printing and a high throughput. This port monitor, if used, will result in communication speed of as high as 38,400 bps. Use of this port monitor also eliminates the need for the user to correctly set the COM port parameters such as data bits, parity bits, etc.

*Use of Dymo port monitor is highly recommended for improved performance and ease of operation.*

## Windows 95

### During Driver Installation

You can install and configure the Dymo Port monitor while you are installing the printer driver. When the installation wizard request you to select the port to which the printer is connected, click on 'Add Port' button. This will present you with a dialog box. Select the COM port to which the Dymo Label Maker is connected. This will add a new entry in the available ports as DCOM<x>. That is, if you have selected COM1 as the port, the list box will have a new entry as 'DCOM1' to indicate that a Dymo Port is created for COM1. Select this port and continue with rest of the installation.

**At Any Other Time**

The files needed by the Dymo Port monitor will be installed on your system while you install the Dymo printer driver. You would just need to add the appropriate COM port to be used by the Dymo port monitor. To accomplish this, follow these steps:

1. Select Start/Settings/Printers/<Dymo Printer>/Properties.
2. Select Details tab
3. Click Add Port button
4. Select 'Other' and Dymo Port.
5. Click on OK button
6. Select the COM port to which the Dymo Label Maker is connected and click on OK button.
7. Click on Apply or OK to make the changes permanent.

**Windows NT****During Driver Installation**

When the Add printer Wizard requests you to select the port to which the printer is connected, click on Add port button and follow these steps

1. Click on New Monitor
2. Point to the directory/drive on which the Dymo printer driver files are located and click on OK button
3. Click on New port
4. Select the COM port to which the Dymo Label Maker is connected and click on OK button
5. Click on Close
6. Click Next button to continue Add Printer Wizard steps.

**At Any Other Time**

If you choose to install the Dymo port monitor after you have installed the Dymo printer driver, follow these steps:

1. Start/Settings/Printers/<Dymo Label Maker>/Properties
2. Select Ports tab
3. Click on Add Port button
4. Click on New Monitor
5. Point to the directory/drive on which the Dymo printer driver files are located
6. Click on New port
7. Select the COM port to which the Dymo Label Maker is connected and click on OK.
8. Click on Close
9. Click OK to make the changes permanent

If the Dymo port monitor is already installed in your system, you can configure the printer driver to use appropriate Dymo Port by the following steps.

1. Start/Settings/Printers/<Dymo Label Maker>/Properties
2. Select Port tab
3. Select the appropriate Dymo port (DCOM)
4. Click OK to make the changes permanent

If the Dymo port monitor is already installed in your system and you want to add a new Dymo Port then follow the steps below.

1. Start/Settings/Printers/<Dymo Label Maker>/Properties
2. Select Port tab
3. Click on Add Port
4. Choose Dymo Port and click on New Port
5. Select the COM port to which the Dymo Label Maker is connected and click on OK
6. Click on Close
7. Click OK to make the changes permanent.

### **Printing Test Page During Installation**

During installation of the printer driver Add printer wizard will prompt the user to print a test page on to the printer. This may not work always fine. The test printing will generate a printout only if the printer has 32mm tape in it. Other wise an error message 'Selected tape size exceeds tape in printer' will be displayed. This does not indicate any problem with your printer driver installation. The reason for this message is that the Windows operating system tries to print by default to 32mm tape.

Even if you have 32mm tape in the printer, the test page printout will not be complete. This again is due to the small printable region of the tape and Windows operating system's non-awareness of this fact.

## **Label Setup**

All configuration and related settings can be done through the Label Setup Tab in the printer properties dialog. User can reach this tab through:

Start/Settings/Printers/<Dymo Printer>/Properties/Label Setup tab - on Windows 95/98

Start/Settings/Printers/<Dymo Printer>/Document Properties/Label Setup tab - on Windows NT

### **Cutting Options**

The selections for cutting options decide how the labels will be cut between pages and at the end of a print job.

<b>Through Cut between Labels</b>	The driver will cut the tape after every page with an easy peel-off tab.
<b>Score Cut between Labels</b>	The driver will only make a score (tab) cut after every page printed.
<b>Chain Print</b>	Instead of performing a cut operation after a page, the driver will place dots to indicate the location at which the user can make the cuts later to separate labels.
<b>Through Cut at Last Label</b>	Driver will cut the tape after all the pages or copies in the current print job is done with an easy peel-off tab.
<b>Score Cut at Last Label</b>	Driver will make only a score (tab) cut after all the pages or copies in the current print job is done.

### **Tape Width**

The tapes have a constant size only on the shorter side (width) – which can be 32, 24, 19, 12 or 6mm. The user should select one of these sizes and he must make sure that the printer has the selected tape size. If the printer has a tape that is of smaller width, no labels will be printed and ‘Selected tape size exceeds tape in printer’ message will be displayed. If printer has a tape that is of larger width, a message ‘Tape size in printer is larger than requested’ will be displayed with ‘Retry’ and ‘Cancel’ buttons. User can continue to print the label by selecting ‘Retry’ or cancel the job.

### **Maximum Length**

The tapes have almost indefinite length. The user can set the length of the tape to anything between 100mm to 999mm.

### **Shortest Label Length**

If this option is selected, the driver will optimize the label usage by eliminating all white region of the printed page. The elimination of white region is done both at the beginning and the end of label.

### **Orientation**

Unlike most printer drivers the default orientation of Dymo printer driver is landscape, which the natural way in which the label appears on the printer. User can select the Portrait orientation if desired. Please remember that the Orientation selected in the application will over-ride this selection.

### **Unit**

Let's users select the measurement system that is convenient to them. This selection automatically changes the display for [Tape Width](#) and [Maximum Length](#).

### **Mirror Printing**

The driver will flip the original image received from the application and print the resulting image. This lets the users to create images that are suited to print on transparent tape very easily.

### **Copies**

Sets the number of copies user wants printed. It can be set to any value between 1 and 99 copies. Some programs may override this setting. It is advisable to set the number of copies in the applications' print or page setup dialog.

### **Commands**

#### **Cut Tape**

Issues a command to printer to cut the tape at its current position.

#### **Advance Tape**

This command will advance the tape in the printer to 25mm.

## **Graphics**

The printer driver provides features by which the user can customize the way their graphics are printed on the printer. The features provided depend on the operating system.

## Windows 95/98

### Dithering

Specifies the type of dithering used in printing. For non-color printing such as printing on Dymo printers, dithering produces gray shading in graphics. Select one of the following to get the desired result.

<b>None</b>	no dithering.
<b>Fine</b>	resolution setting is 200 dpi or less.
<b>Coarse</b>	resolution setting is 300 dpi or higher.
<b>Line Art</b>	If graphics include well-defined borders between black, white, and gray shadings.
<b>Error Diffusion</b>	Suitable for printing photographs or pictures that do not have sharp, well-defined edges.

### Intensity

Specifies how dark to print graphics on the label. Dymo printer works well with an intensity of 150.

## Windows NT

Under Windows NT, Dymo Label Maker driver provides the following features to control graphics printing on the label. The graphics 'Option' tab can be reached through:

Start/Settings/Printer/<Dymo Label Maker>/Document Defaults/Options tab

The Options tab provides two dialogs namely Halftone Color Adjustment and Halftone properties.

<b>Halftone Color Adjustment</b>	Lets user specify values for Contrast, Brightness, Input RGB Gamma, Black Reference, White Reference, etc.
<b>Halftone Properties</b>	Lets user specify value for Halftone pattern, Device Gamma, Pixel diameter, Device Alignment White, etc.

## Printer Diagnostics

The Printer Diagnostics tab can be reached through:

Start/Settings/Printer/<Dymo Label Maker>/Properties/Printer Diagnostics tab

This tab provides users to trouble shoot the printer or get more information about the printer. Following are the features provided by this tab.

### Printer ID

Clicking on this button will display a dialog box that contains information about the printer. This may be required when you report any problems to the help desk. This feature will not be available if the printer is accessed via network.

### Request Status

Clicking on this button will display a dialog box that contains the current status of the printer. This may be used to trouble shoot any problems with the printer. This feature will not be available if the printer is accessed via network.

### Print Test Label

Clicking on this button will print a test label on the printer. The test label contains test pattern of triangles for a length of at least 37mm and the Dymo Printer driver version number. The test label pattern is always customized to the appropriate tape width available in the printer.

### Suppress 'Tape at Exit' message

If the printer does a through cut on the tape, the cut label partially falls out of the printer. If this label is not removed from the printer's tape exit, further printing will not be possible. Whenever the driver detects the tape at the printer's exit, a warning message is displayed on the screen. This message will disappear soon as the label is removed. If the

printer is shared, this message will still be displayed for all print jobs that are spooled from other systems and hence disturbing the user. By selecting this option, the warning messages are suppressed.

## Label Margins

The top and bottom margins depend on the tape size selected. Following table provides top and bottom margin sizes for all tape widths.

Tape Width		Top margin		Bottom Margin	
mm	inches	mm	inches	mm	inches
32	1 1/4	3.9	0.15	3.9	0.15
24	1	0.8	0.03	0.9	0.04
19	3/4	1.3	0.05	1.6	0.06
12	1/2	1.1	0.04	0.8	0.03
6	1/4	1.1	0.04	1.1	0.04

The left and right margins depend on the cut options selected. The following table provides left and right margins for all cut options.

Cut Option	Left Margin		Right Margin	
	mm	inches	mm	inches
Through Cut between Labels	25.1	0.99	25.1	0.99
Score Cut between Labels	37.1	1.46	37.1	1.46
Chain Print	6.1	0.24	6.1	0.24

*These values can be used to set page margins in the applications' Page setup dialog.*

## Working with Applications' Page Setup

*Note: The terms Page and Paper are used instead of the term Label, since the standard Windows applications use them.*

Most applications provide Page setup dialog through which parameters like page size, margin size, orientation, specific paper, number of copies etc can be selected by the user. Some of the parameters like number of copies and Orientation that are specified in the application will always override what is set in the printer driver ([Label Setup](#) Tab).

### Paper Names and Sizes

Dymo Label Maker provides six papers to the applications, they are

Units set to mm	Units set to Inches
32mm Tape	1¼in Tape
24mm Tape	1in Tape
19mm Tape	¾in Tape
12mm Tape	½in Tape
6mm Tape	¼in Tape
User-Defined Size	

The names of the paper depend on the Units selected in the [Label Setup](#) tab. These papers have the width as indicated in the name itself and the length as set in the [Maximum Length](#) field in the [Label Setup](#) tab.

The User-Defined Size paper is a special paper whose width can be varied in the application by selecting any width in its page setup dialog. But the height of the User-Defined Page will always be one of 32mm, 24mm, 19mm, 12mm or 6mm.

### Applications and Margins

Most applications have default page margins that are not appropriate for the Dymo Label Maker labels. You need to manually change these settings after selecting the appropriate paper. For example, in Word, selecting '32mm Tape' in Page Size tab in Page Setup dialog will not set the margins correctly. Word may present an error message such as 'The top/bottom margins are too large for the page height in some sections.' or 'Settings you chose for the left and right margins, column spacing, or paragraph indents are too large for the page width in some sections'. You should select the margins tab and set appropriate margin values. For correct margin values please refer to [Label Margins](#). Alternatively you can set all the margin values to 0 in the margins tab and click on OK. This will present a message – "One or more margins are set outside the printable area of the page. Choose the fix button to increase the appropriate margins". Clicking on Fix button will make Word to query the printer driver and set all the margins to the correct size. Some applications may automatically set correct or minimum margin sizes when '0' is entered. The margins may have to be adjusted every time you change the paper/tape size.

### Label Setup from Applications' Print Dialog

Though it is possible to reach [Label Setup](#) tab from the applications' Print dialog and change label settings, it is not advised to do so. The changes made to the label settings by this path is not reflected in many applications (MS Word, PowerPoint), while some other applications (WordPad) re-adjust the page settings depending on the new settings. Also changes made to the label settings via this path are temporary – that is they hold good only for the current printing.

*It is not advisable to change label parameters like Cut options, Tape Width and Maximum Label Size that affect margins and printable regions by reaching the [Label Setup](#) tab from the applications' Print dialog. But you may change other parameters like Mirror Printing or Shortest Label Length to print only the current document with the new settings.*

## Error and Warning Messages

Error Message	Description
Error occurred while adding the property page(s).	Internal error.
Internal error has occurred.	Internal error.
Command could not be spooled.	Spooler system may be down – verify and re-issue print command
Could not open port. Check if the port is in use by any other printer.	The COM port to which the driver is trying to print is already in use by some other application or assigned to some other printer.
Could not save settings Registry Entries are corrupted. Please reinstall the printer driver. Label is printed with default values.	Registry entries used by Dymo Label Maker are corrupted. Driver will print with default values.
Current port name could not be retrieved.	Internal error.
Cutter jammed.	Cutter mechanism is jammed. Please refer to printer manual to rectify this error.
Default properties could not be saved to the registry.	User may have insufficient rights to update registry. Or registry may be corrupted.
Error while communicating with the printer.	The printer returned an error. Retry the print job.
Incorrect number of copies.	Number of copies can only be between 1 and 99.
Ink tape out.	The ink tape has run out. Please replace with a new ink tape cartridge and retry print job.
Invalid DEVMODE size.	Internal error.
Invalid DEVMODE version.	Internal error.
Invalid driver version.	Internal error.
Invalid handle value.	Internal error.
Invalid label length.	Maximum Label length can only be between 100mm and 999mm. Please enter a value within this range.
Invalid port name.	Internal error.
Invalid private members.	Internal error.
Invalid tape width.	Internal error.
Message is still being actioned.	Printer is executing the last command issued.
No tape or lid open.	There is no tape/ink tape or the printer lid is open. Place a tape/ink tape cartridge ad/or close the lid and then retry print job.
Print out may be incomplete, feed tape and cut if necessary.	While printing a page, printer encountered an error, so printout may be incomplete.
Property sheet could not be displayed.	Internal error.
Registry entries are corrupted. Please reinstall the printer driver.	Registry entries are corrupted. To fix this problem, the printer driver may be re-installed. While re-installation the 'Replace existing driver option must be selected
Requested operation cannot be completed.	Requested operation could not be completed since printer returned error.
Scissor cut engaged.	Tape cut operation is in progress.

Error Message	Description
Selected tape size exceeds tape in printer.	Printer has a tape that is smaller than the tape size selected in the Label Setup tab. Place a tape cartridge of correct size in the printer or select a new tape size in Label Setup tab.
Tape at printer's exit. Please remove tape before continuing.	Cut tape must be removed from the printer's exit before printer can print more labels. Feed & Cut if needed.
Tape motor jammed.	Tape motor is jammed. Please refer to the printer manual to see how this can be corrected.
Tape size in printer is larger than requested.	Printer has tape that is larger than the requested size. Click on Retry to ignore this warning and print. Click on Cancel to stop printing and replace a new tape cartridge in the printer.
The current label will not be printed as it is empty.	If the application prints an empty page and if 'Shortest Label Length' option is selected, the label will not be printed at all. Disable the 'Shortest Label Length' option to print empty labels also.
Unable to communicate with the label printer. Check that the printer power is applied and that printer interface cable is attached to the computer serial port.	The driver could not communicate to the printer.
Wrong printer selected.	Internal Error.