

# Portable Labeler **PL300** User Guide



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## **Important Safety Instructions**

## Keep this manual for future reference!

This document will support you during the use of the 3M™ Portable Labeler PL300 handheld printer. Read these warnings carefully and use the product as described in this user quide to avoid accidental injury or damage.

The following table provides brief descriptions of the symbols and labels used with this product and its documentation

Warning Symbol Images			
$\triangle$	DANGER:	Indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury.	
Ŵ	WARNING:	Indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury and/or property damage.	
<u>^</u>	CAUTION:	Indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury and/or property damage.	
<u>^</u>	NOTICE:	This is how important information is shown for proper handling of device.	

Device Label Safety Information	
$\bigcirc$	Only for indoor use.
	Power supply unit (PSU) is double insulated.
{ u	LI Battery - Lithium cells must be completely discharged before disposal.
	Battery Directive - Don't throw into the normal domestic waste.
X	
冱	WEEE - Don't throw this product into the normal domestic waste!
General Information	
CE	CE mark according EMC Directive 2004/108/EC
	GS Mark Safety Tested

#### Intended Use

The 3M™ Portable Labeler PL300 is a portable label printer intended for industrial use. The printer is powered using a rechargeable battery pack and 110V-240V power adapter. It can also be powered by six AA alkaline batteries. The printer is approved for use only in closed rooms and dry environments.



#### WARNING

#### To reduce the risks with all residual hazards:

• Read, understand, follow and retain for future reference all safety statements in this user guide.

## To reduce the risks associated with short circuit, fire and/or electrical shock, which if not avoided, could result in serious injury or death and/or property damage:

- Do not use the PSU (Power Supply Unit) when damaged.
- The PSU shall only be connected to a mains voltage of 110-240VAC/50-60Hz via a main socket which is fused.
- Other usage as described for the intended use could cause damage to the product and/or hazards, for example, short circuit, fire, electric shock.
- · Do not modify the PSU.
- Do not use the device and PSU outdoors or in a wet environment.
- Do not operate with a damaged cord or plug. Replace power supply immediately.
- Do not disassemble; don't try to repair the product. Only authorized people should do this. The product is not foreseen for any servicing. Incorrect reassembly may result in electric shock or fire.

## To reduce the risks associated with explosion and/or risk of fire, which if not avoided, could result in serious injury or death:

• Do not operate in an explosive atmosphere.



#### CAUTION

## To reduce the risks associated with misuse, which if not avoided, may result in minor or moderate injury and/or property damage:

• Do not press the cutter button if no label cassette is inserted. Be careful when cleaning the cutter blade.

## To reduce the risks associated with environmental contamination, which if not avoided, may result in minor or moderate injury and/or property damage:

- Remove the batteries if the printer will not be used for a long period of time.
- Dispose of device and/or batteries at end of life in accordance with local regulations. Refer to the environmental information included in this User Guide.

## Safety Precautions for Lithium-Ion Rechargeable Battery Pack

Inaccurate handling of a Lithium-ion rechargeable battery may cause leakage, heat, smoke, an explosion, or fire. This could cause deterioration of performance or failure. This may also damage the protection device installed in the battery pack. This could damage equipment or injure users. Thoroughly follow the instructions below.

## While Charging



#### DANGER

## To reduce the risks associated with fire and explosion, which if not avoided, could result in serious injury or death:

- Danger of explosion if a battery is incorrectly handled, charged, disposed or replaced. Replace only with the same or
  equivalent type recommended by 3M™.
- When charging the battery, use dedicated chargers and follow the specified conditions.
- Do not connect directly to an electric outlet or cigarette lighter charger.
- Do not store the battery close to fire or at extremely high temperatures over 60°C (for example, a vehicle, strong direct sunlight).
- Do not short-circuit the batteries under any circumstances.
- Never charge batteries near highly flammable objects.



#### WARNING

## To reduce the risks associated with fire and explosion, which if not avoided, could result in serious injury or death and/or property damage:

- Stop charging the battery if charging is not completed within the specified time.
- Never leave the batteries unattended during charging. Do not attempt to charge a cell that is damaged.
- Immediately remove the battery from the device or battery charger and stop use if the battery gives off an odor, generates heat, becomes discolored or deformed, or in any way appears abnormal during use.



#### **CAUTION**

## To reduce the risks associated with various hazards, which if not avoided, may result in minor or moderate injury and/or property damage:

- Thoroughly read this User Guide before charging the battery.
- Lithium cells must be completely discharged before disposal.
- Always dispose the batteries in a manner consistent with local, regional and national regulation.
- Battery can only be charged within a temperature range of 0°C~45°C.

## When Discharging the Battery



#### WARNING

To reduce the risks associated with fire and explosion, which if not avoided, could result in serious injury or death and/or property damage:

- Use the battery only in the specified equipment.
- Do not discharge the battery close to fire or at extremely high temperatures over 60°C (for example, a vehicle, strong direct sunlight).



#### CAUTION

To reduce the risks associated with various hazards, which if not avoided, may result in minor or moderate injury and/or property damage:

• Battery can only be used within a temperature rage of -20°C~60°C.

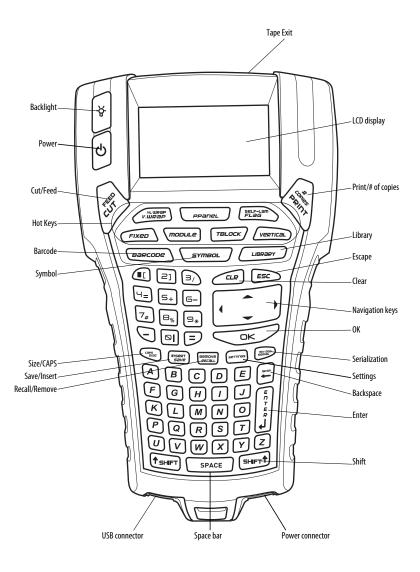


Figure 1 3M™ Portable Labeler PL300

### **About Your New Printer**

With your new 3M™ Portable Labeler PL300 printer, you can create a wide variety of high-quality, self-adhesive labels. You can choose to print your labels in many different sizes, and styles. The printer uses 3M™ Portable Labeler Refill Cartridges in widths of 1/4″ (6 mm), 3/8″ (9 mm), 1/2″ (12 mm), 3/4″ (19 mm), or 1″ (24 mm). 3M™ refill cartridges are also available in a wide range of materials, such as flexible nylon, permanent polyester, vinyl, non-adhesive tag, and heat shrink tubes.

Visit www.3m.com/electrical for information on the full line of labels and accessories for your printer.

#### **Product Registration**

Please visit www.3m.com/portablelabeler to complete the product registration form within seven days.

## **Getting Started**

Follow the instructions in this section to start using your printer for the first time.

## **Connecting the Power**

The printer can operate on battery or AC power. A power adapter and a rechargeable battery pack is included with your printer.

The printer can operate with six AA alkaline batteries for power; however, alkaline batteries should only be used as temporary backup power.

To save power, the printer will automatically turn off after five minutes of inactivity.

## **Connecting the Power Adapter**

The printer uses a 110V-240V power adapter.
Connecting the power adapter with the battery pack inserted recharges the battery pack.

#### To connect the power adapter

1. Plug the power adapter into the power connector on the bottom of the printer. See Figure 2.



Figure 2

2. Plug the other end of the power adapter into a power outlet.

## **Inserting the Battery Pack**

The printer uses the rechargeable, Lithium-ion battery pack when not connected to the power adapter. As temporary backup power, the printer can operate using six AA alkaline batteries.

#### To insert the battery pack

1. Press the thumb latch on the back of the printer to remove battery compartment cover. See Figure 3.



Figure 3

- 2. Insert the battery pack into the battery compartment. See Figure 3.
- 3. Replace the battery compartment cover.

Remove the batteries if the printer will not be used for a long period of time.

## **Recharging the Battery Pack**

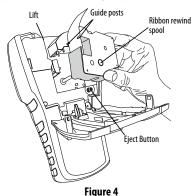
The battery pack automatically recharges while the printer is connected to a power source through the power adapter. Charging the battery pack for the first time will take approximately eight hours; recharging the battery pack will take approximately two hours.

## Inserting and Removing the Tape Cartridge

Your printer comes with a starter tape cartridge. Visit www.3m.com/electrical for information about purchasing additional tape cartridges.

## To insert the refill cartridge

- 1. Gently lift the tape cartridge door on the back of the printer.
- Make sure the tape and ribbon are taut across the mouth of the cartridge and that the tape passes between the guides. If necessary, turn the ribbon rewind spool clockwise to tighten the ribbon.
- 3. Insert the cartridge with the tape and ribbon positioned between the guideposts.



- Press gently on the cartridge until the cartridge moves into place. The insertion mechanism will guide the cartridge into place.
- 5. Close the tape cartridge door.

#### To remove the refill cartridge

- Gently lift the tape cartridge door on the back of the printer.
- 2. Press the cartridge eject button. The refill cartridge is lifted from the printer.
- 3. Gently remove the cartridge.
- 4. Insert a new cartridge as described above.
- Reset the tape width as described in **Setting the Tape Width**.

## **Setting the Tape Width**

Each time you insert a refill cartridge into the printer, you are prompted to set the tape width so the printer knows what size label tape you are currently using. Some of the features you use to design labels are dependent on the width of the tape.

However, to create a label for a tape width different than what is currently in the printer, you can set the tape width from the Settings menu.

## To set the tape width

- Press SETTINGS. The Settings menu appears on the display.
- 2. Select Tape Width.
- Select the width of the label tape currently inserted in the printer.
- 4. Press **OK** and then select **Done** (**ESC**).

## Selecting a Language

Several language-related features on the printer are determined by the language setting, such as special characters, menu text, and so on. By default the language is set to English.

## To select a language

- 1. Press **SETTINGS** and select **Language**.
- 2. Select the language.
- 3. Press **OK** and then select **Done** (**ESC**).

## **Selecting Units of Measure**

You can choose to work in inches or millimeters.

#### To select the units of measure

- 1. Press **SETTINGS** and select **Units**.
- Select Inch or mm.
- 3. Press **OK** and then select **Done** (**ESC**).

## **Getting to Know Your Printer**

Become familiar with the location of the feature and function keys on your printer. See Figure 1 on page 10. The following sections describe each feature in detail.

#### **Power**

The  $\circlearrowleft$  button turns the power on and off. If no keys are pressed after five minutes, the power is turned off automatically.

When the printer is turned off, the current label file and its settings are remembered for the next time the printer is turned on. If the battery pack and power adapter are disconnected at the same time, some of the settings are remembered; however, the current label file is lost and you will need to reset the tape width when you reconnect the power and turn on the printer.

## **LCD Display**

The printer's LCD display includes a caption bar across the top, showing the current label type, and feature indicators on the right side, showing which features are currently selected. See Figure 5.

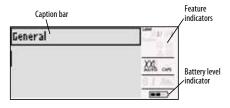


Figure 5

When the text you have entered will not fit on the label as currently defined, the portion of the text that will not fit is shaded. If you attempt to print the label containing text that will not fit, the excess text will not be printed.

## **Using the Backlight**

In low light conditions, you can turn on the backlight to make it easier to see the display. To save power, the back light will turn off automatically after 15 seconds of inactivity. Pressing any key will turn the backlight back on again. The backlight key acts as a toggle to turn the light on and off.

#### To toggle backlighting on and off

♦ Press - \rightarrow .

### **Adjusting the Display Contrast**

In addition to backlighting, you can adjust the display contrast to help in different lighting conditions.

## To adjust the display contrast

- 1. Press SETTINGS.
- 2. Select **LCD contrast** and press **OK**.
- Use the arrow keys to select a value between
   (lighter) and 8 (darker). The contrast changes as you select the different settings.
- 4. Press **OK**, and then select **Done** (**ESC**).

#### **Hiding the Caption Bar**

The Caption bar at the top of the display shows the current label type and for some label types, additional information about the label, such as size or barcode type. The Caption bar can be hidden to allow more lines of the label to be shown in the display. This is very useful for multi-line labels.

#### To hide the Caption bar

- 1. Press SETTINGS.
- 2. Select **Caption bar** and press **OK**.
- 3. Select **Hide**, press **OK**, and then select **Done** (**ESC**).

## **CAPS Mode**

The **CAPS** key toggles capitalization on and off. When CAPS mode is turned on, the CAPS indicator is shown on the display and all letters that you enter will be capitalized. The factory default setting is CAPS mode on. When CAPS mode is off, all letters entered appear in lower case.

#### To toggle CAPS on and off

◆ Press CAPS (SHIFT + SIZE).

## **Shift Key**

The **SHIFT** keys are used to select the function or symbol printed above a key. For example, when you press the **9** key, the number 9 appears in the display; however, if you press **SHIFT** and then **9**, an asterisk (\*) appears in the display. Pressing one of the Shift keys toggles the function on and off, so you do not need to hold down both keys together.

## **Escape Key**

The **ESC** key returns you to the previous menu from within any menu without making a selection.

## **Navigation Keys**

The navigation keys operate as follows:

Key	Function		
ı	Moves one character to the left in the display Returns to the previous menu (can also use <b>ESC</b> )		
SHIFT Moves one label to the left in the display			
=	Moves one character to the right in the display Moves to the next menu level (can also use <b>OK</b> )		
SHIFT Moves one label to the right in the display			
;	Moves up in a list of items		
:	Moves down in a list of items		
OK	Selects a menu item		

## **Backspace Key**

The key removes the character to the left of the cursor.

## **Clear Key**

The **CLR** key clears all current text settings and format, returning the display to the General label type.

#### **Cutter Button**

The Cutter button cuts the label tape. When printing multiple labels, the printer pauses after printing each label so that you can cut the label. You can turn this feature off, so that multiple labels will print continuously. See **Pausing between Labels** on page 24.

## **Hot Keys**

A number of hot keys are available for creating specific types of labels, adding barcodes, inserting symbols, and using the text from the library. These hot keys are described in detail later in this user guide.

## **Working with Label Files**

The printer creates and stores labels as label files. A label file can contain one or more labels. When you create a new label, you also create a new label file. You can then insert additional labels, remove labels, and store the group of labels as a label file in memory.

## **Creating a Label File**

The printer remembers the last label that you were working on when the power was turned off. You need to clear that label text and formatting before you create a new label.

#### To create a new label file

- If necessary, press CLR to clear the previous label and formatting from the display.
- 2. Type some text using the keypad.
- 3. Format the text using Text Size or Text Style. See **Formatting a Label** on page 16.
- 4. Save the label to memory. See **Saving a Label File** on page 25.

## Adding Labels to a Label File

You can add additional labels to an existing label file.

#### To add a label to a file

- 1. Press INSERT (SHIFT + SAVE).
- Select **To the right** to add a label to the right of the cursor position or **To the left** to add a label to the left of the cursor position.
- 3. Press OK.

A new blank label is inserted in the display to the left or right of the current label.

You can move from label to label using the arrow keys.

## **Removing Labels from a File**

You can remove one or more labels from a label file.

#### To remove a label

- 1. Press **REMOVE** (SHIFT + RECALL).
- 2. Select one of the following:
  - All to remove all of the labels in the file.
  - Current to remove the label at the current cursor position.
  - Range and then select the range of labels to remove.
- Press **OK**. The selected labels are removed from the display.

## **Printing a Label File**

When you print a label file, you choose whether to print all of the labels, the current label, or a range of labels in the file.

#### To print labels

- 1. Press **PRINT**. If your label file contains more than one label, a print menu is displayed.
- 2. Select one of the following:
  - All to print all of the labels in the file.
  - Current to print the label at the current cursor position.
  - Range and then select the range of labels to print.
- 3. Press **OK**. The labels selected are printed.
- 4. Press CUT and remove the labels.

## Formatting a Label

You can choose from a number of formatting options to enhance the appearance of your labels.

## **Changing the Text Size**

You can print the text on your label in eight sizes: extra-extra-small, extra-small, small, medium, large, extra-large, extra-extra-large and BIG (all capital letters). The text size selected applies to all the text on all the labels in a label file.

You can also select Auto as the text size. When Auto is selected, the best text size is automatically determined for the height and width of the label you are creating. BIG font is not used when Auto text size is selected.

The text size available for you to use depends on the width set for the label tape and the type of label you are creating.

#### To set the font size

 Press SIZE. Each time you press SIZE, the next available font size is highlighted on the Size feature indicator on the display.

You can also select the font size from the Settings menu.

## **Changing the Text Style**

You can print the text on your label in several styles: bold, italic, underlined, and boxed. And, you can choose normal width or narrow width. The text style applies to all the text on all the labels in the label file, including most symbols. Text style is not applied to user defined symbols.

#### To set the text style

- 1. Press SETTINGS.
- 2. Select **Text style** and press **OK**.
- 3. Use the arrow keys to select a style.
- 4. Press **OK** and then select **Done** (**ESC**).

## **Creating Multi-Line Labels**

You can create multi-line labels depending upon the width of the label tape, as follows:

Tape	1/4"	3/8"	1/2"	3/4"	1"
Width	(6 mm)	(9 mm)	(12 mm)	(19 mm)	(24 mm)
# Lines	1	3	3	5	

The display shows two lines of text with the Caption bar displayed; or three lines with the caption bar hidden. Use the arrow keys to scroll through multiple lines. See **Hiding the Caption Bar** on page 14.

#### To create a multi-line label

- 1. Type the text for the first line, and press **ENTER**.
- 2. Type the text for the next line.
- 3. Repeat these steps for each additional line.

## **Using International Characters**

The printer supports the extended Latin character set using RACE technology. Similar to using a mobile phone keypad, holding down a letter key will scroll through variations of that letter.

For example, if you hold down the letter **a**, you will see **a** à á â ã à å and so on through all the variations available. The order in which the character variations appear depends on the language you selected to use.

## **Creating Industrial Labels**

You can quickly create labels for special industrial applications, such as cable wraps, flags, patch panels, terminal blocks, or modules. You can create fixed length labels or self-laminated labels.

Hot keys are available for each of the label types available. The current label type is displayed in the Caption bar. By default, the label type is General with no special formatting, text centered, and the length automatically determined by the amount of text.

The hot keys toggle the label type on and off. For example, if you choose Flag and later want a General label, just press the Flag key a second time to remove the Flag settings and return to General label type.

## **Creating Wire Wrap Labels**

You can create several types of labels that *wrap around* a cable or wire: vertical wire wrap, horizontal wire wrap, self-laminating, and flag labels.

## **Creating Vertical Wrap Labels**

A Vertical Wrap label is placed around the width of a wire or cable. You can enter up to five lines of text and the text is repeated as many times as



possible depending on the size of the text and the length of the label.

You select from a number of different wire gauges or cable lengths. The printer then determines the size of the label. The following table shows the selections available.

CAT X	CABLE 3.0"
COAX	CABLE 4.0"
22-16 AWG	CABLE 5.0"
14-10 AWG (Default)	CABLE 6.0"
8-4 AWG	FIBER 0.1" - 1/4"
3-1 AWG	FIBER 1/4" - 1/2"
1/0-4/0 AWG	FIBER 1/2" - 1"

#### To create a vertical wrap label

- 1. Press V.WRAP.
- Select the desired wire gauge or cable size, and press **OK**.
- 3. Select **Done (ESC)** to create the label. To create multiple labels quickly, see **Creating a Series of Labels** on page 22.

## **Creating Horizontal Wrap Labels**

A Horizontal Wrap label is placed horizontally along the length of the wire or cable. The label text is repeated as many



times as possible depending on the size of the text and the width of the tape.

## To create a horizontal wrap label

- 1. Press H.WRAP (SHIFT + V.WRAP).
- 2. Enter the label length and press **OK**. Select **AUTO** to have the length automatically set to fit the text.
- 3. Select **Done** (**ESC**) to create the label. To create multiple labels quickly, see **Creating a Series of Labels** on page 22.

## **Creating Self-Laminating Labels**

The Self-Laminating label is designed to be used with 3M<sup>™</sup> Self-Laminating Labels. The text of the label is printed on the top portion of the label so the clear, bottom half of the label can wrap around and cover the text.



Self-Laminating tape is 24 mm wide; however, you can only enter two lines of text and are limited to using extra-extra-small, extra-small, and small font sizes.

#### To print a self-laminating label

- 1. Press SELF-LAM (SHIFT + FLAG).
- Enter the label length or select AUTO to have the label length automatically set to fit the text.
- 3. Press **OK** to create the label. To create multiple labels quickly, see **Creating a Series of Labels** on page 22.

## **Creating Flag Labels**

Flag labels wrap around a wire or cable leaving the text part of the label extending out from the cable. The text on flag labels is automatically printed on both ends of the label leaving a blank



space in the middle that wraps around the cable. When the label is applied to the cable, both ends of the label are applied back to back leaving a tail or *flag*. The result is a label that can be read from both sides.

#### To print a flag label

- 1. Press FLAG.
- Enter the length for the flag portion of the label. Select AUTO to have the length automatically set to fit the text. The total length of the label is calculated by doubling the flag length and adding 34 mm to wrap around the cable.
- 3. Press **OK** to create the label.
- 4. Enter the text for the label and press **PRINT**. To create multiple labels quickly, see **Creating a Series of Labels** on page 22.

## **Creating Fixed Length Labels**

Normally, the length of the label is determined by the length of the text entered. However, you may wish to make a label for a specific purpose that is a fixed length regardless of the length of the text.

The factory default fixed length is 1.0" (25 mm). Any change you make to the fixed length setting remains in effect until you change it.

#### To set the label length

- 1. Press FIXED.
- 2. Enter the length of the label and press **OK**. Any text that does not fit within the fixed length appears shaded in the display and will be truncated when the label is printed.

## **Creating Patch Panel Labels**

Patch panel mode allows you to label a row of ports on a patch panel. You select the distance between ports, enter the desired text, and print. The result is a long label with multiple, evenly spaced text for each port.



#### To create a patch panel label

- 1. Press PPANEL.
- 2. Select Port distance.
- 3. Enter the distance between each port and press **OK**. The factory default is 0.6" (15 mm).
- 4. Select # of ports.
- 5. Enter the number of ports and press OK.
- Select **Done** (**ESC**) to create the label.
   Each port is separated by a solid black line on the display.
- 7. Enter the text for each port in the label. Use the left or right arrow key to move from port to port.

To create data for the ports automatically, see

Creating a Series of Labels on page 22.

To print vertical lines between the ports, see **Printing Vertical Lines between Cells** on page 20.

## **Creating Terminal Block Labels**

Terminal block labels are very similar to patch panel labels; however, the text is printed vertically for each block.



## To create a terminal block label

- 1. Press TBLOCK.
- 2. Select # of blocks and press OK.
- 3. Enter the number of blocks and press **OK**.
- 4. Select **Block size** and press **OK**.

- 5. Enter the width of each block and press **OK**. The factory default is 0.5" (17.5 mm).
- 6. Select **Done** (**ESC**) to create the label.
- Enter the text for each terminal.
   Use SHIFT + , or = to move among terminals.
   To create data for the terminal blocks automatically, see Creating a Series of Labels on page 22.

## **Creating Module Labels**

The Module label type allows you to label a row of fuses. You set the width of a fuse and the number of fuses, enter the desired text for each fuse, and print. The result is a long label with multiple, evenly



spaced text for each port. You can use fuse multipliers to adjust the width of individual modules as necessary.

#### To create a module label

- 1. Press MODULE.
- 2. Select Fuse length and press OK.
- Enter the fuse length and press **OK**. Select the length that applies to the smallest size fuse in the module. You can then use fuse multipliers to increase the size of any individual modules that are larger. See step 6. The factory default fuse length is 0.5".
- 4. Select # of modules and press OK.
- 5. Enter the number of modules for this label and press **OK**.
- Adjust the size of individual modules using fuse multipliers. See **Using Fuse Multipliers**.
- 7. Select **Done** (**ESC**) to create the label.
- 8. Enter the text for each module. Use the left or right arrow key to move from module to module.

To create the data for the modules automatically, see **Creating a Series of Labels** on page 22.

## **Using Fuse Multipliers**

Fuse multipliers allow you to adjust the size of individual fuse modules within a module type label.

#### To adjust the size of an individual module

- Create a module label as described in Creating Module Labels.
- Press SETTINGS.
- 3. Select Current label config. and press OK.
- 4. Select Multipliers and press OK.
- Use the arrow keys to select the module number to adjust and press = .
- 6. Select the multiplier for that module.
- Press **OK** and then **Done** (**ESC**) to return to the label.

## **Printing Empty Modules**

You can choose to print empty modules at the end of Module labels. By default, printing empty modules is turned off.

#### To print empty modules

- 1. Press SETTINGS.
- 2. Select Print empty modules and press OK.
- 3. Select On and press OK.
- 4. Select **Done** (**ESC**) to return to the label.

Any empty modules at the end of a module label will now be printed.

## **Creating Vertical Labels**

You can choose to print labels with the text running vertically. Labels with multiple lines of text will print as multiple columns of text.



#### To print a vertical label

- 1. Enter the text for your label.
- Press VERTICAL.
- 3. Enter a length for the label. Select **AUTO** to have the length of the label automatically set to fit the text.
- 4. Press **OK** to create the label.

## **Changing the Label Type**

Once you create a label using one label type, you can easily change the label type without losing your data. When you change from a multi-cell label, such as a patch panel, to a single cell label, such as General or Flag, each cell becomes a new label. All blank cells are deleted.

If the data from one label type will not fit in the new label type, the text that will not fit is shaded in the display.

#### To change the label type

- 1. Press the hot key for the new label type.
- Make any necessary adjustments to the settings for the label type.

## **Changing the Label Settings**

Once you create a specific label, you can change the settings without starting all over again.

#### To change the label settings

- 1. Press **SETTINGS**.
- Select Current label config. and press OK. The settings for the particular label type are displayed.
- 3. Make the necessary changes.
- 4. Press **OK** and then select **Done** (**ESC**).

## **Printing Vertical Lines between Cells**

For multiple cell labels, such as Patch Panel, Terminal Block, and Module, you can choose to print a vertical line between each of the cells.

#### To print vertical lines between cells

- 1. Press SETTINGS.
- 2. Select **Vert. lines** and press **OK**.
- 3 Select On
- 4. Press OK and then select Done (ESC).

A vertical mark is printed between each cell.

## **Using Barcodes**

The printer can generate the following types of barcodes.

Code 39 EAN 8
Code 128 Auto EAN13
UPC A UPC E

You can only print a barcode on 3/4" (19 mm) and 1" (24 mm) wide label tape. You can choose to print the human-readable text or not, and you can serialize barcodes.

The barcode prints horizontally along the label with the text in small print underneath the barcode. You can optionally add text before and after the barcode.

## **Adding a Barcode**

The barcode text appears on the label in the display just like any other text. However, if the cursor is positioned within the barcode text, **Barcode** and the type of barcode are displayed in the Caption bar.

#### To add a barcode

- 1. Press BARCODE.
- 2. Use the arrow keys to select the barcode type, and press **OK**.
- Enter the text for the barcode within the barcode and press **OK**.

### **Editing a Barcode**

You edit an existing barcode or delete a barcode in the same manner.

#### To edit a barcode

- 1. Move the cursor anywhere within the barcode text.
- 2. Press **BARCODE** or type a character. A message appears asking if you would like to edit the barcode.
- 3. Press **OK**. The text of the existing barcode appears.
- 4. Edit the barcode text and press **OK**.

## **Deleting a Barcode**

A barcode is entered on the label as one character.

#### To delete a barcode

- 1. Place the cursor at the end of the barcode on the display.
- 2. Press -.

## **Hiding Barcode Text**

You can choose to hide the human-readable text for the barcode.

#### To hide barcode text

- 1. Press SETTINGS.
- 2. Select Barcode HR and press OK.
- Select Off.
- 4. Press **OK** and then select **Done** (**ESC**).

## **Adding Symbols**

Your printer includes a set of default symbols to use on your labels. The symbols are separated into several categories:

Electrical Brackets
Voice/Data Arrows
Audio/Video Numbers
Warning Currency

Punctuation

A complete list of the default symbols can be found beginning on page 27.

Some of the more popular symbols can be accessed from the number keys using **SHIFT** plus the number. For example, pressing **SHIFT** + **1** inserts an open bracket ([).

If you transfer a custom set of symbols from the 3M<sup>™</sup> Portable Labeler Software to the printer, an additional set of User symbols becomes available. See **Using** 3M<sup>™</sup> Portable Labeler Software on page 26 for more information

## **Inserting Symbols**

Symbols added to a label can be formatted or deleted just like any other character you enter.

#### To insert a symbol

- 1. Press SYMBOL.
- 2. Select **Default**, if necessary.
- 3. Select a category of symbols.
- 4. Use the arrow keys to find the symbol you want.
- 5. Press **OK** to insert the symbol on the label.

## **Inserting User Symbols**

Custom symbols downloaded from 3M™ Portable Labeler Software are stored as User symbols. See

**Using 3M™ Portable Labeler Software** on page 26 for more information.

You insert User symbols in the same manner as predefined symbols; however, User symbols cannot be formatted.

## To insert a User symbol

- 1. Press SYMBOL.
- 2. Select User.

Video

- 3. Use the arrow keys to find the symbol you want.
- 4. Press **OK** to insert the symbol on the label.

## **Using the Text Library**

Your printer includes a pre-defined text library. The library is separated into several categories:

Location Voice/Data
Audio Security

An additional category, called My Library, is available for you to add custom text to use on your labels.

My Library text is not included when you select All from the Library menu.

A complete list of pre-defined text strings can be found beginning on page 28.

## **Inserting Library Text**

Library text added to a label can be edited, formatted, or deleted just like text you enter from the keypad.

#### To add text to a label

- 1. Press LIBRARY.
- 2. Select one of the categories.
- Press the first letter of the text string you wish to use. The cursor jumps to the first text string that begins with that letter.
- 4. Press **OK** to insert the text on the label.

## **Adding My Library Text**

You can download custom text from 3M™ Portable Labeler Software or you can add custom text to the library directly from the printer. See **Using 3M™ Portable Labeler Software** on page 26 for more information.

#### To add custom text

- 1. Press LIBRARY.
- 2. Use the arrow keys to select My Library.
- 3. Select Add new text and press OK.
- 4. Enter the text and press **OK**. The text is added to My Library.

## **Deleting My Library Text**

You can delete custom text from My Library.

## To delete My Library text

- 1. Press LIBRARY.
- 2. Use the arrow keys to select My Library.
- 3. Select the text to delete.
- 4. Press —. A confirmation message appears.
- 5. Press **OK** to delete the text.

## **Adding Graphics**

When labels are transferred to the printer from 3M™ Portable Labeler Software, any images are stored separately in the printer as graphic files. You can apply these graphic files to most labels. When a graphic cannot be used with a certain label, a warning appears on the display.

See 3M<sup>™</sup> Portable Labeler Software Online Help for more information about placing images on a label.

#### To add a graphic

- 1. Press SETTINGS.
- 2. Select Choose graphic and press OK.
- 3. Select the graphic file you want to use and press **OK**. The graphic does not appear in the display, but will print on the label.

## **Creating a Series of Labels**

You can automatically generate labels by creating a series. You create a starting pattern, and then set the increment and count for the series.

You can serialize any number or letter by selecting the position to be incremented, such as the number 2 in 123 or the letter B in ABC. For example, when the 2 is selected in 123 and the increment #=3, the resulting labels would print as 123, 153, and 183.

Letters can be incremented from A to Z and a to z, and numbers from 1 to 9. When the letter Z or the number 9 is reached during serialization, a letter or number is added to increase the increment. For example, Az increments to Aaa, AZ increments to BA, and A9 increments to A10.

Three methods of serialization are available: simple, simultaneous, and advanced.

## **Using Simple Serialization**

Simple serialization creates a series of labels by incrementing one alphanumeric character in the pattern. For example, 101, 102, 103, 104, and so on.

#### To use simple serialization

- 1. Enter the text for your label.
- Press SERIAL. A box appears around the first character in the label.
- Use the arrow keys to move the cursor to the position you wish to increment and press OK.
- 4. Select the amount you want to increment each label and press **OK**. You choose to increment in steps up to 10.
- Select the number of labels you want to create and press **OK**. You can choose to create up to 99 labels.
   A new label is added in the display for each label in the series.

To print multiple copies of the same serialized label, press # COPIES (SHIFT + PRINT) and enter the number of copies of each label to print. See **Printing Multiple Copies** on page 24.

## **Using Simultaneous Serialization**

Simultaneous serialization creates a series of labels by incrementing two different alphanumeric characters at the same time. For example, A-101, B-102, C-103, and so on.

#### To use simultaneous serialization

- 1. Enter the text for your label.
- 2. Press ADV.SER. (SHIFT + SERIAL).
- Select Simultaneous and press OK. A box appears around the character where the cursor was positioned.
- 4. Select the first character position you want to increment and press **OK**.

- Select the second character position you want to increment and press **OK**.
- Select the amount you want to increment these characters on each label and press **OK**. You can choose to increment in steps up to 10.
- Select the number of times to increment these characters and press **OK**.

A new label is added in the display for each label in the series.

## **Using Advanced Serialization**

Advanced serialization creates a series of labels by allowing you to select two sequences in the pattern and increment them consecutively.

For example, A-101, A-102, A-103, B-101, B-102, B-103, C-101, C-102, C-103, and so on.

#### To use advanced serialization

- 1. Enter the text for your label.
- 2. Press ADV.SER. (SHIFT + SERIAL).
- Select **Advanced** and press **OK**. A box appears around the character where the cursor was positioned.
- 4. Select the first character position you want to increment and press **OK**.
- Select the amount you want to increment this character position and press **OK**. You can choose to increment in steps up to 10.
- Select the number of times to increment this character position and press **OK**.
- Repeat Steps 4 through 6 for the second character position you want to increment.

A new label is added in the display for each label in the series.

## **Printing Options**

You can choose to print multiple copies of the same label, collate the copies, pause to cut between labels, advance the label tape, and adjust the print contrast.

## **Printing Multiple Copies**

You can print up to 99 copies of the same label at one time.

#### To print multiple copies

- 1. Press # COPIES (SHIFT + PRINT).
- Press the ▲ arrow to increase the number of copies to print. The default is 2 copies.
- Press the ▼ arrow to decrease the number of copies (maximum is 99).
- 4. Press **OK** or **PRINT** to begin printing.

You may notice a brief pause in printing between each label for more complex formats. When printing is finished, the number of copies to print returns to 2.

## **Collating Multiple Copies**

When printing multiple copies of a label file containing more than one label, all the copies of a label are printed before the next label starts printing. You can choose to have the label file print collated, so each complete copy of the file prints before the second copy starts. The following example shows three copies of a label file containing three labels printed normally and collated.

#### Normal

A101 A101 A101 A102 A102 A102 A103 A103 A103 Collated

A101 A102 A103 A101 A102 A103 A101 A102 A103

#### To collate multiple copies

- 1. Press SETTINGS.
- 2. Select Collate multi. copies and press OK.
- 3. Select On.
- 4. Press **OK** and then select **Done** (**ESC**).

## Pausing between Labels

By default the printer pauses after printing each label so you can cut the label. You can turn this feature off to have the labels print continuously.

#### To set the printer to print continuously

- 1. Press SETTINGS.
- 2. Select Pause to cut btw labels and press OK.
- Select Off.
- 4. Press **OK** and then select **Done** (**ESC**).

## **Advancing the Label Tape**

The default leader space for all labels is approximately 5/16" (10 mm). To add additional blank space to the beginning or end of your label, you can feed the tape in 5/16" (10 mm) increments.

#### To advance the tape

- 1. Press **FEED** (**SHIFT** + **CUT**).
- 2. Press **OK** to advance the tape.

## **Adjusting Print Contrast**

Depending on the label material you choose, you may need to lighten or darken the print on the label.

#### To adjust the print contrast

- 1. Press SETTINGS.
- 2. Select Print contrast and press OK.
- 3. Use the arrow keys to adjust the print contrast.
- 4. Press **OK** and then select **Done** (**ESC**).
- Repeat as necessary until you are satisfied with the print quality.

## **Using Printer Memory**

The printer has a powerful memory feature that can store label files for later recall. The number of label files that can be stored is dependent on the size of the label files and the number of images they contain. The more images a file contains, the less memory that is available for storing label files.

## Saving a Label File

You can save label files for later use. When you save a label file, all the label text and formatting are saved. A label file name can be up to 20 alphanumeric characters in length.

#### To save a label file

- 1. Create the labels in your label file.
- Press SAVE.
- 3. Use the arrow keys to select **New** and press **OK**.
- 4. Enter a name for your label file and press OK.
- 5. Press **CLR** to start a new label.

## **Recalling a Label File from Memory**

Once a label is saved to memory, you can recall the label to print or edit. Recalling a label replaces the current label.

#### To recall a label from memory

- 1. Press **RECALL**. The memory locations are displayed.
- Use the arrow keys to move to the memory location that contains the label you want and press **OK**.
   A message appears confirming that you want to clear the current label text and formatting.
- 3. Press OK.

## **Deleting a Label File from Memory**

When you no longer need a stored label, you can delete it from memory.

#### To delete a label from memory

- 1. Press **RECALL**. The saved label files are displayed.
- 2. Use the arrow keys to move to the label file you wish to delete.
- 3. Press ← and then press **OK** to clear the memory location.

## **Cleaning Your Printer**

Your printer is designed to give you long and trouble-free service, while requiring very little maintenance. Clean your printer from time to time to keep it working properly.

### To clean the print head

- 1. Remove the tape cartridge.
- Remove the cleaning tool from inside the tape cartridge door.
- 3. Gently wipe the padded side of the tool across the print head.

## Using 3M™ Portable Labeler Software

Your printer can be used as a standalone label printer or you can print labels directly from your computer using 3M™ Portable Labeler Software.

This software is optional, and is not included with all printers.

3M™ Portable Labeler Software offers the following features:

- Upload and download label files for in-the-field and on-demand printing
- Insert customized graphics, logos, symbols, and industry terms
- Import data from any Windows program
- · Create labels using the step-by-step wizard
- Print labels directly from 3M™ Portable Labeler Software

Visit www.3m.com/electrical for more information about obtaining the software.

## **Connecting to your Computer**

The 3M<sup>™</sup> Portable Labeler PL300 printer connects to your computer using the USB connection located on the bottom of the printer.

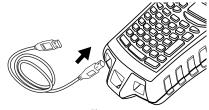


Figure 6

While data is being transferred between the printer and your computer, **PC Connected... Do not disconnect** is displayed on the printer and you cannot use any of the printer functions.

Refer to the  $3M^{\text{TM}}$  Portable Labeler Software Online Help for complete information about using the printer while connected to your computer.

## **Symbols**

The following tables list the default symbols by category.

#### Electrical

- $\perp \square \Omega \varnothing^2$
- 。 ※ ※ ➡ 宀
- **□ H H ⊕ Ø**
- + A < + 4
- $\lambda = -\infty$

#### Voice/Data







## Audio/Video













## Warning









### **Punctuation**

- : & \! i
- خ ? ⊱
- $+ \pm / =$
- ≠ ÷ @ # %
- <>≤≥

## **Brackets**

[]() {}

#### **Arrows**

 $\leftarrow \uparrow \rightarrow \downarrow$ 

#### Numbers

1/2 1/4 3/4

#### Currency

\$ ¢ £ ¥ €

## **Library Text**

The following tables list the library text by category.

## Location

ATTIC	KITCHEN
BACK	LAUNDRY ROOM
BASEMENT	LEFT
BATH	LIBRARY
BEDROOM	LIVING ROOM
BILLIARDS ROOM	LOBBY
CENTER	LOWER
CLOSET	MAIN FLOOR
DECK	MASTER BATH
DEMARC	MASTER BEDROOM
DEN	MEDIA ROOM
DINING ROOM	OFFICE
DRESSING ROOM	OUTSIDE
DRIVEWAY	PATIO
FAMILY ROOM	PLAY ROOM
FLOOR	POOL
FOYER	PORCH
FRONT	RIGHT
GARAGE	SITTING ROOM
GATE	SPA
GUEST BATH	STUDY
GUEST HOUSE	SUNROOM
GUEST ROOM	THEATER
GYM	UPPER
HOT TUB	UTILITY ROOM
INSIDE	YARD

## Audio

ANALOG	PHONO
AUDIO	RIGHT BACK SPKR
CD	RIGHT FRONT SPKR
CENT FRONT SPKR	RIGHT OUTD. SPKR
CENTER BACKSPKR	RIGHT SIDE SPKR
DIGITAL	RIGHT SURR. SPKR
LEFT BACK SPKR	SPEAKER
LEFT FRONT SPKR	SUBW00FER
LEFT OUTD SPKR	SURROUND
LEFT SIDE SPKR	TAPE
LEFT SURR. SPKR	VOLUME CONTROL
OPTICAL	ZONE

## Video

Video	
CATV	RF
COMPONENT	RCB
COMPOSITE	RS-232
DVD	REMOTE
DVI	S-VIDEO
DVR	SAT
HDMI	TV
HDTV	TOUCH SCREEN
IR	VCR
KEYPAD	VESA
MONITOR	VIDEO
NANNY CAM	VIDEO GAME
PROJECTOR	

#### Voice/ Data

CO LAN **CABLE MODEM** LAPTOP DSL **NETWORK** DSLAM PHONE DEMARC PHONE SYSTEM DESKTOP USB FAX VolP INTERNET WIRELESS

## **Security**

**GROUND** 

BACK DOOR HEAT DETECTOR CCTV **HIGH WATER** CAMERA HORN **CARBON MONOXIDE** LOW TEMP CELL MOTION SENSOR CONTACT PIR CONTROLLER **PHONE** P00L DOOR DOOR CONTACT **POWER** DRIVEWAY **REMOTE DUAL TECH** SENSOR SHOCK SENSOR DUCT FAN CUTOFF SIREN FRONT DOOR **SLIDERS GARAGE DOOR** SMOKE DETECTOR GAS SPARE GATE STROBE **GLASS BREAK** WATER DETECTOR

## Troubleshooting

Review the following possible solutions if you encounter a problem while using your printer.

Problem/Error Message	Solution
Battery Low Battery Empty	<ul> <li>Attach the power adapter.</li> <li>Recharge the battery pack. See Recharging the Battery Pack.</li> <li>Insert new AA alkaline batteries as a temporary power source. AA batteries are less stable and should be used as a temporary solution only.</li> </ul>
Poor Print Quality	<ul><li>Clean the print head. See Cleaning Your Printer.</li><li>Adjust the Print Contrast. See Adjusting Print Contrast.</li></ul>
<b>Tape Jam</b> Motor is stalled due to tape jam.	<ul> <li>Open the tape cartridge compartment and press the eject button to release the cartridge.</li> <li>Remove the tape, clearing the jam.</li> <li>Make sure the tape passes smoothly through the guideposts on the tape cartridge. See Inserting and Removing the Tape Cartridge.</li> <li>When the jam is cleared, press OK to clear the display.</li> </ul>
Uneven or slanted printing The cartridge is not inserted correctly.	<ul> <li>Check the tape cartridge compartment to make sure the cartridge is inserted properly. See Inserting and Removing the Tape Cartridge.</li> <li>Make sure the two levers in the tape compartment are locked on either side of the cartridge holding the cartridge in place.</li> </ul>
Cannot close the tape cartridge lid The cartridge is not inserted correctly.	Make sure nothing is blocking the cartridge cover and that the tape cartridge is inserted properly. See <b>Inserting and Removing the Tape Cartridge</b> .
Unable to return to the previous menu	<ul> <li>Press <b>Esc</b> to return to the previous menu.</li> <li>Press <b>Clr</b> to return to return to the display and clear all settings.</li> </ul>
Nothing shows on the display	<ul> <li>Ensure the printer is turned on.</li> <li>Recharge battery pack or plug in power adapter.</li> <li>Remove power adapter and batteries and then reattach power to restart the printer.</li> </ul>
End of Tape Tape cartridge is empty.	The printer cannot detect the end of the tape cartridge. Make sure you have tape left in the cartridge before starting a large print job.

Problem/Error Message	Solution
Display text is too light to read	<ul> <li>Turn on backlight. See Using the Backlight.</li> <li>Adjust the display contrast. See Adjusting the Display Contrast.</li> </ul>
<b>Too many lines</b> Too many lines for this tape width.	<ul><li>Reduce the number of text lines.</li><li>Insert a wider tape cartridge.</li></ul>
Barcode not allowed Barcodes can only be printed on 19 mm and 24 mm tape.	<ul><li>Replace the tape cartridge.</li><li>Change the tape width.</li></ul>
<b>Printing Self-Lam label not allowed</b> Self-Lam labels can only be printed on 24 mm Self-Laminated tape.	<ul><li>Replace the tape cartridge.</li><li>Change the tape width.</li></ul>
Print error The tape is jammed.	<ul> <li>Open the tape cartridge lid and check that the tape is not jammed.</li> <li>Pull a small amount of tape from the cartridge to make sure the tape moves freely.</li> </ul>
No response when pressing keys One of the keys may be jammed.	<ul> <li>Press each key to determine which key is jammed.</li> <li>Press the jammed key firmly until it returns to its normal position.</li> </ul>

This product is CE marked in accordance with the EMC directive and the low voltage directive and is designed to conform with the following international standards: **US FCC Class B Compatibility** 

Safety - EN 60950, IEC 950, UL 1950

EMC Compatibility EN 61000 3-2/3: EN 61000 4-2/3/4/5/6/8/11: ENV 50204:

EU Immunity – EN 55024 & addendums A1, A2 Electromagnetic Compatibility (EMC) - Information Technology equipment, Immunity Characteristics Emissions – EN 61000-6-3: Electromagnetic Compatibility (EMC) - Part 6: Generic Standards - Section 3: Emission standard for residential, commercial and light industrial environments.

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