MLI QUICK REFERENCE

Avery Dennison's MONARCH LANGUAGE INTERPRETER™ (MLI™) and this *Quick Reference* are intended to help you use the MONARCH® ADTP1 printer or MONARCH® ADTP2 printer, which were set up for use with ZIH Corp.'s ZPL II®. If you have any questions about using a MONARCH® printer with these data streams, please contact your Monarch representative.

This *Quick Reference* lists the ZPL II® commands (with any applicable notes) that the ADTP1/ADTP2 printers can interpret.

Note: Information in this document supercedes information in previous versions. Check our Web site (http://printers.averydennison.com) for the latest release and documentation information.

Selecting the Interpreter

When you turn on the printer, you must set the interpreter to MLI or MPCL to print non-MLI data streams.

```
Main      >  Setup  >  Inter
Menu                    preter
```

To change this setting from the **Main Menu**, select **Setup**, **Interpreter**, **MLI**.

♦ The printer reboots automatically after selecting an interpreter. This process may take several seconds.

♦ When you print test labels with MLI set as the interpreter, the model number appears as **ADTP1 (MLI)** or **ADTP2 (MLI)**.

Overview of Differences

♦ ZPL II® formats have a reference point at the upper left-hand corner of the printed label. These printer's reference point is at the lower left-hand corner of the printed label.

♦ These MONARCH printers are center justified, maximum supply width is 4.2 inches wide, and the maximum image size is 4.09 inches.

♦ The MONARCH printers calibrate when it receives the first byte of data from the host or whenever the printhead is closed.

♦ The MONARCH printers, using the MLI™ interpreter, only report the following errors: 409-426; 497, 499, and 703-793. Refer to your printer's *Packet Reference Manual* for descriptions of these errors.

Setting MLI Options

The MLI options are listed in the table below.

```
Main      >  Setup  >  MLI
Menu
```

Option	Choices	Default
Print Mode	Tear Off/Cutter	Tear Off
Supply Width	203 to 832	832
Supply Length	100 to 3900	1218

Setting the Print Mode

The printer must be set for the correct print mode for your application: Tear Off or Cutter.

```
        MLI
     Print Mode
     Tear Off      →
       SET    CANCEL
```

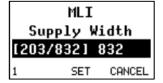| Select	To
Tear Off	Print tags or labels without using a cutter.
Cutter	Prints tags or label with a cutter.

Entering the Supply Width

The printer must be set for the width of the loaded supply. Follow these instructions any time you load supplies with a different supply width. Entered in 203 dots.

```
        MLI
     Supply Width
    [203/832] 832
    1    SET    CANCEL
```

After you load supplies, select **Supply Width** from the MLI Menu.

Select	To
←	Decrease the supply width.
→	Increases the supply width.

Note: Press the left function button to change the amount (by 1, 10, or 100).

Entering the Supply Length

Set the printer for a custom supply length, if necessary. Entered in 203 dots. This option sets the cut length with non-indexed supply for an Avery Dennison® Monarch® EcoCut™ Tabletop Printer 2.

```
        MLI
     Supply Length
        1218
    1    SET    CANCEL
```

After you load supplies, select **Supply Length** from the MLI menu.

Select	To
←	Decrease the supply width.
→	Increases the supply width.

Note: Press the left function button to change the amount (by 1, 10, or 100).

Interpreted ZPL II® Commands

The following lists the ZPL II® commands interpreted by the MONARCH® ADTP1/ADTP2 printer's MLI™ interpreter.

Imaging

ZPL II® Cmds	Notes:
^A	
^A@	
^B2	
^B3	
^B7	If the number of rows or columns is not specified, the bar code size is different.
^B8	No interpretation line (human readable char.) when narrow element is wider than 4 dots.
^B9	No interpretation line (human readable char.) when narrow element is wider than 4 dots.
^BA	
^BB	Supports CODABLOCK F
^BC	
^BD	Supports modes 2, 3, and 4.
^BE	No interpretation line (human readable char.) when narrow element is wider than 4 dots.
^BK	
^BL	
^BM	The printer only uses one mod-10 check digit.
^BO	Aztec bar codes are supported with Version 3.4 or greater firmware.
^BQ	QR Code bar codes are supported with Version 3.1 or greater firmware.
^BU	No interpretation line (human readable char.) when narrow element is wider than 4 dots.
^BX	The bar code size is different. Only use the value of 200 for the error correction level, no rectangular symbols or custom formats.
^BY	
^CF	
^CI	Only supports changing the character set to 28 (UTF-8) or 13 (Page 850).
~DB	No support for double-wide char. fonts.
^DF	We only support downloading to RAM.
~DG	Rotation of PNG type only
~DY	Rotation of PNG type only
~EF	
~EG	Graphics cannot be erased from within a format.
^FB	Use only for text justification.
^FC	
^FD	%m 2 digit month 01-12, %d 2 digit day of month 01-31, %Y 4 digit year 20xx, %y 2 digit year xx, %H 2 digit military hour 00-23, %I 2 digit hour 1-12, %M 2 digit minute 0-59, %S 2 digit second 0-59, %p 2 character AM\PM
^FH	

Imaging (Continued)

ZPL II® Cmds	Notes:
^FN	
^FO	
^FR	
^FS	
^FT	The X and Y coordinates must be specified.
^FV	This command works the same as the ^FD command.
^FW	
^FX	
^GB	No support for rounded corners.
^GF	Rotation of PNG type only
^ID	
^IL	
^IS	
~JA	
^LH	
^LL	
^LR	
^LS	
^LT	
^MM	We support t and c. Command is ignored when the printer is set to ignore configuration packets.
^MU	
^PO	
^RF	No support for ^RFr or ^RFe.
^RT	Does not read an RFID tag, but is required if an ^HV command is used.
^SF	
^WT	Number of retries, etc. is not used.
^XA	
^XF	
^XG	No magnification.
^XZ	

Parser

ZPL II® Cmds	Notes:
^CC ~CC	
^CD ~CD	Does not change delimiter to a period (**.**) character.
^CM	
^CT ~CT	
^CW	

Printer Setup

ZPL II® Cmds	Notes:
^MT	Command is ignored when the printer is set to ignore configuration packets.
^PQ	No support for the pause and serial number replication options.
^PR	Each unsupported speed is mapped to the printer's next lower speed. No support for backfeed speed or blank-label feeding speeds.
^PW	
^SC	
~SD	Command is ignored when the printer is set to ignore configuration packets.
~TA	Adjustment applies to the next label printed. Use 0 to turn off backfeed.
^XB	

Host

ZPL II® Cmds	Notes:
~HS	Fixed status response only.
^HV	Only used in conjunction with an RFID tag that uses the ^WT command followed by the ^RT command.