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# Real Time Clock

This appendix contains the information needed to install, program, and operate the Real Time Clock (RTC) option.

## Overview

This hardware option is available as either a factory-installed or field-installable option in specific printer products manufactured and sold by Zebra Technologies Corporation.

The Real Time Clock option is currently available for following printers, and requires that the firmware version shown is installed on that printer.

Supported Zebra Printer and Print Engine Models		Requires this Firmware Version or Later
105SL printers that meet any one of the following criteria: <ul style="list-style-type: none"> <li>if the printer was manufactured after April 2006</li> <li>if the RTC Date and the RTC Time fields are printed on the configuration label</li> <li>if the RTC Date and the RTC Time appear on the LCD display</li> </ul>		60.13.0.13Z
DA402 & T402 printers		32.8.4
LP2844-Z, TPL2844-Z, and TPL3844-Z printers		45.10.x
PAX Series print engines	170PAX2 print engines	29.9.x or 31.9.x
	110PAX3 print engines using Standard Font	34.10.x
	110PAX3 print engines using TT Font	49.10.x
	116PAX3 print engines using TT Font	35.10.x
	170PAX3 print engines using Standard Font	37.10.x
	170PAX3 print engines using TT Font	38.10.x
	110PAX4 and 170PAX4 print engines	60.13.0.12
S4M printers (field-installable kit)		50.13.x
S600 printers		27.10.3
Xi Series printers	90XiII, 140XiII, 170XiII & 220XiII printers	18.9.x
	90XiIII, 96XiIII, 140XiIII, 170XiIII, and 220XiIII printers	33.10.0
	90XiIIIPlus, 96XiIIIPlus, 140XiIIIPlus, 170XiIIIPlus, and 220XiIIIPlus printers	60.13.0.12
Z4Mplus and Z6Mplus printers		60.13.0.12
ZM400/ZM600/RZ400/RZ600 printers		53.15.xZ

## Control Panel Programming

New parameters for the Real Time Clock have been added to the Control Panel Configuration. These parameters are located immediately following the **FORMAT CONVERT** prompt. Refer to the printer/print engine *User Guide* for complete configuration information.

- X.9.x firmware added the parameters to *XiII* printers and 170PAX/170PAX2 print engines.
- X.10.x firmware added the parameters to *XiIII* printers and PAX3 print engines.
- X.13.x firmware added the parameters to *XiIIIPlus* printers, PAX4 print engines.
- X.13.0.13Z firmware added the parameters to 105SL printers.

### Real Time Clock Parameters

The parameters listed on the following pages are added to the Control Panel Configuration prompts only when both the Real Time Clock hardware option and the appropriate version of firmware are installed:

- X.9.x or later firmware installed in the *XiII* series printers or the 170PAX/170PAX2 series print engines.
- X.10.x or later firmware installed in the *XiIII* series printers or the PAX3 series print engines.
- X.13.0.13Z or later firmware installed in the 105SL printers
- X.13.x or later firmware installed in the *XiIIIPlus* series printers, the PAX4 series print engines, or the S4M printers.

The RTC ZPL II commands apply to all printers/print engines with the Real Time Clock hardware option and proper firmware.

### Idle Display

Selects the printer/print engine Idle Display format and the method of displaying the time/date information. This parameter also affects the Configuration Label printout and the **RTC DATE** and **RTC TIME** formats.

#### Selections

- FW VERSION
- MM/DD/YY 24HR
- MM/DD/YY 12HR
- DD/MM/YY 24HR
- DD/MM/YY 12HR

If FW VERSION is selected, the format on the Configuration Label and on the RTC DATE and RTC TIME parameters is MM/DD/YY 24HR.

## RTC Date

Allows entry of the RTC date in the format selected by the **IDLE DISPLAY** parameter.



**Note** • The RTC parameters are password-protected. Refer to your printer's user guide for specific instructions on accessing and modifying printer parameters.

Printer Model	Action
<i>PAX</i> Series print engines, <i>Xi</i> Series printers, and <i>105SL</i> printers	<ol style="list-style-type: none"> <li>1. Use the <b>LEFT</b> oval key to select the position to be adjusted</li> <li>2. Then, use the <b>RIGHT</b> oval key to select the correct value for that position.</li> </ol>
<i>Z4Mplus</i> and <i>Z6Mplus</i> printers	<ol style="list-style-type: none"> <li>1. Press <b>SELECT</b> to select the parameter.</li> <li>2. Use the <b>MINUS (-)</b> key to select the position to be adjusted</li> <li>3. Then, use the <b>PLUS (+)</b> key to select the correct value for that position.</li> <li>4. Press <b>SELECT</b> to accept any changes and deselect the parameter.</li> </ol>
S4M printer	<ol style="list-style-type: none"> <li>1. Press <b>ENTER</b>. The printer displays the current RTC date.</li> <li>2. Modify the values as follows: <ul style="list-style-type: none"> <li>• Press the right arrow to move to the next digit position.</li> <li>• To increase the value, press the up arrow.</li> <li>• To decrease the value, press the down arrow.</li> </ul> </li> <li>3. Press <b>ENTER</b> to accept the value shown.</li> </ol>



**Note** • Invalid dates, such as 2/29/1999, may be entered, but will not be saved.

## RTC Time

Allows entry of the RTC time in the format selected by the **IDLE DISPLAY** parameter.



**Note** • The RTC parameters are password-protected. Refer to your printer's user guide for specific instructions on accessing and modifying printer parameters.

Printer Model	Action
<i>PAX</i> Series print engines, <i>Xi</i> Series printers, and <i>105SL</i> printers	<ol style="list-style-type: none"> <li>1. Use the <b>LEFT</b> oval key to select the position to be adjusted</li> <li>2. Use the <b>RIGHT</b> oval key to select the correct value for that position.</li> </ol>
<i>Z4Mplus</i> and <i>Z6Mplus</i> printers	<ol style="list-style-type: none"> <li>1. Press <b>SELECT</b> to select the parameter.</li> <li>2. Use the <b>MINUS (-)</b> key to select the position to be adjusted.</li> <li>3. Use the <b>PLUS (+)</b> key to select the correct value for that position.</li> <li>4. Press <b>SELECT</b> to accept any changes and deselect the parameter.</li> </ol>
S4M printer	<ol style="list-style-type: none"> <li>1. Press <b>ENTER</b>. The printer displays the current RTC date.</li> <li>2. Modify the values as follows: <ul style="list-style-type: none"> <li>• Press the right arrow to move to the next digit position.</li> <li>• To increase the value, press the up arrow.</li> <li>• To decrease the value, press the down arrow.</li> </ul> </li> <li>3. Press <b>ENTER</b> to accept the value shown.</li> </ol>

## RTC General Information

The Real Time Clock commands are only applicable if the Real Time Clock option is installed in the printer. For those printers with an LCD control panel display, additional control panel configuration parameters are also included.

The ZPL II Field Clock **^FC** command is used to specify the clock-indicator character for the primary, secondary, and third clocks. This command must be included within each label field command string whenever the date or time clock values are required within the field. No date or time clock information can be printed in a label field unless this command is included. The **^FC** command can now be combined with the **^SN** command in V60.13.0.10 and later.

A clock-indicator can be any printable character except the ZPL II Format Prefix, Control Prefix, or Delimiter characters. The default value for the primary clock-indicator is the percent sign **%**. The secondary and third clock-indicators have no defaults and must be specified in order for that clock to be used.

The Field Data **^FD** command has been expanded to recognize the clock-indicators and associated command characters, and to replace them during the printing process with the corresponding time or date parameter. For example, if the primary clock-indicator is the percent sign **%**, then during printing, the character sequence **%H** in the **^FD** statement would be replaced by the 2-digit current hour.



**Note** • If the Real Time Clock is not installed, or the **^FC** command has not preceded the **^FD** statement, no replacement would occur. In this case, the characters **%H** would print as text on the label.

The name of the day of the week, the name of the month, and the AM or PM designation can also be inserted in place of a specific clock-indicator/command character sequence. See [Table 48](#) for the list of command characters and their functions.

**Table 48 • Command Characters**

Command Character	Function
%a	is replaced by the abbreviated weekday name
%A	is replaced by the weekday name
%b	is replaced by the abbreviated month name
%B	is replaced by the month name
%d	is replaced by the day of the month number, 01 to 31
%H	is replaced by the hour of the day (military), 00 to 23
%I	is replaced by the hour of the day (civilian), 01 to 12
%j	is replaced by the day of the year, 001 to 366
%m	is replaced by the month number, 01 to 12
%M	is replaced by the minute, 00 to 59
%p	is replaced by the AM or PM designation
%S	is replaced by the seconds, 00 to 59
%U	is replaced by the week# of the year, 00 to 53, Sunday is 1st day*
%W	is replaced by the week# of the year, 00 to 53, Monday is 1st day**
%w	is replaced by the day# of the week, 00 (Sunday) to 06 (Saturday)
%y	is replaced by the 2 digits of the year, 00 to 99
%Y	is replaced by the full 4 digit year number—where% is the specified clock-indicator character

\*. %U establishes Sunday as the first day of the year.

\*\*.%W establishes Monday as the first day of the year.

The Set Offset **^SO** command permits the printing of specific times and dates relative to the primary clock. The secondary (or third) clock is enabled when secondary (or third) offsets are entered using this command. The secondary (or third) clock time and date are determined by adding the offsets to the current clock reading.

One **^SO** command is required to set the secondary offset; an additional **^SO** command is required for a third offset. The offsets remain until changed or until the printer is either powered down or reset.



**Note** • Only dates from January 1, 1998 to December 31, 2097 are supported. Setting the offsets to values that result in dates outside this range is not recommended and may have unexpected results.

The Set Mode/Language (see [^SL on page 345](#)) command is used to select the language the days of the week and the months are printed in. This command also sets the printing mode, which can be **S** for START TIME, **T** for TIME NOW, or a Numeric Value for the time accuracy. In START TIME mode, the time printed on the label is the time that is read from the Real Time Clock when the label formatting begins (when the **^XA** command is received by the printer). In TIME NOW mode, the time printed on the label is the time that is read from the Real Time Clock when the label is placed in the queue to be printed. In Numeric Value mode, a time accuracy tolerance can be specified.

## First Day of the Week Affects Calendar Week

The **%U** and **%W** commands set the first day of the week. The week numbering starts at the beginning of the year with Week 01 representing the **first full week** of the year. Any day(s) before that established first day of the week are part of the Week 00. The following examples show how setting different days as the first day of the week affect the calendar week.



**Important** • The **%U** and **%W** commands determine the numbering for all weeks in the year.



### Example • January, 2005 with Week 00

Set Sunday as the first day of the week using the **%U** command. In this example, notice that Saturday, January 1st is Week 00 and Sunday, January 2nd begins Week 01.

	Sun	Mon	Tue	Wed	Thu	Fri	Sat	
							1	← Week 00
First Day of the Week →	2	3	4	5	6	7	8	← Week 01
	9	10	11	12	13	14	15	
	16	17	18	19	20	21	22	
	23	24	25	26	27	28	29	
	30	31						



→ **Example • January, 2005 with Week 00**

Set Monday as the first day of the week using the %W command. In this example, notice that Saturday, January 1st **and** Sunday, January 2nd are Week 00 and Monday, January 3rd begins Week 01.

Mon	Tue	Wed	Thu	Fri	Sat	Sun
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

Annotations: An arrow labeled "First Day of the Week" points to the "Mon" header. An arrow labeled "Week 00" points to the row containing days 1 and 2. An arrow labeled "Week 01" points to the row containing days 3 through 9.

→ **Example • January, 2006 without Week 00**

Set Sunday as the first day of the week using the %U command. Since 2006 begins on a Sunday, there is no Week 00 in this example.

Sun	Mon	Tue	Wed	Thu	Fri	Sat
No Week 00						
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

Annotations: An arrow labeled "First Day of the Week" points to the "Sun" header. An arrow labeled "Week 01" points to the row containing days 1 through 7.

→ **Example • January, 2006 with Week 00**

Set Monday as the first day of the week using the %W command. In this example, Saturday, January 1st is Week 00 and Sunday, January 2nd begins Week 01.

Mon	Tue	Wed	Thu	Fri	Sat	Sun
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

Annotations:  
 - Arrow pointing to Mon: **First Day of the Week**  
 - Arrow pointing to Sun (1): **Week 00**  
 - Arrow pointing to Sun (8): **Week 01**

## Time and Date Precision

As of V60.13.0.1 firmware, the ^CO command is now ignored. While the S4M printer has a lower firmware version number (V50.x), its firmware was recently released and follows the rule to ignore the ^CO command.

The time and date placed in a label field is determined at the time the label bitmap is created by the printer (start time mode). If a batch of labels is formatted, the date and time will be the same for all labels in the batch. If the printer is paused during the printing process and remains in that state for a period of time, when printing resumes, the time and date will still be the same as when the batch was first started.

If more precise time and date stamps are required on versions prior to V60, follow the process below. For versions after V60, use the Numeric Value mode as shown in ^SL on page 345.

Cycle the printer/print engine power Off (O) and On (I) to clear the memory before performing the steps below.

1. Print a Memory Usage Label (^XA^WD\*:\*.\*^XZ)  
and note the following value: (A) \_\_\_\_\_  
Available RAM (in BYTES)
2. Print a Configuration Label and note these values:  
Printer "Print Width" (in DOTS) (B) \_\_\_\_\_  
(NOT the Label Width)  
Label Length (in DOTS) (C) \_\_\_\_\_
3. Determine the desired maximum number of queued labels with the (D) \_\_\_\_\_  
same Time and Date value.



**Note** • Increasing the number of queued labels will improve throughput performance, but Real Time Clock values will be less accurate. Two is usually a good compromise.

4. Substitute the values for B through D from the previous page into the following formula:  
 The “label queue” memory required (in BYTES) (E) \_\_\_\_\_  
 $(B \times C \times D)/8 =$
  
5. Substitute the values for A and E into the following formula:  
 The ^CO command memory required (in KBYTES) (F) \_\_\_\_\_  
 $(A-E)/1024-5=$



**Note •** If the value of (F) is less than zero, then no ^CO command is needed. If the value of (F) is greater than zero, use the integer portion in the ^CO command.



**Example •**

Available RAM (A) = 71478 BYTES  
 Print Width (B) = 832 DOTS  
 Label Length (C) = 1000 DOTS  
 Max Labels Queued (D) = 2

Then —  
 The label queue memory required (E) =  
 $(B \times C \times D)/8 = 208000$  BYTES

And —  
 The ^CO command memory required (F) =  
 $(71478-208000)/1024-5=489.87$  KBYTES

Therefore, the correct ^CO command string to add to the label format would be:

**^XA^COY,489^XZ**

This command string will cause 489 KBYTES to be set aside as Font Memory and make it unavailable as label format memory. The memory remaining will only allow two labels to be formatted at one time, and the time and date will be more precise for those two labels.



**Note •** For the 170PAX2 print engine, you must disable the Reprint Function for the Time Now Mode to function properly.

## ZPL II Samples

The ZPL II scripts shown on this page establish the initial settings for the date and time clock. The script below then references these settings to provide the output shown in [Figure 8](#) on page 1233.

Setting the date and time for the Real Time Clock only needs to be done once. The date and time are maintained by an on-board battery when the printer is reset or the printer is turned Off (O).

To set the date and time to April 23, 2005 at 2:30pm, the following command string should be sent to the printer:

```
^XA
  ^ST04,23,2005,02,30,0,P^FS
^XZ
```

To initialize the Real Time Clock and set up two offset values (offset #2 set to 3 months and 1 hour in the future, offset #3 set to 1 year in the past), the following command sequence should be sent to the printer:

```
^XA
  ^SL
  ^S02,3,0,0,1,0,0^FS
  ^S03,0,0,-1,0,0,0^FS
^XZ
```

The above ZPL II scripts initialize the RTC date and time and must be sent to a printer to provide proper date and time parameters for the ZPL II script below.

The following ZPL II script illustrates the various methods of printing the date and time initialized in the script above within separate fields on continuous media. [Figure 8](#) on page 1233 illustrates the printout of this script on a label.

For the below example, the **^FC** command delimiters are:

- % Primary clock indicator
- { Secondary clock indicator
- # Third clock indicator

```
^XA
  ^LL175
  ^F010,025^AD^FC%,{,#{^FD1: Mil: %H:%M:%S Civ: %I:%M:%S %p^FS
  ^F010,050^AD^FC%,{,#{^FD2: Mil: {H:{M:{S Civ: {I:{M:{S {p^FS
  ^F010,075^AD^FC%,{,#{^FD3: Mil: #H:#M:#S Civ: #I:#M:#S #p^FS
  ^F010,100^AD^FC%,{,#{^FD1: On %A, %B %d
  , %Y (%a, %m/%d/%y, %d %b %Y).^FS
  ^F010,125^AD^FC%,{,#{^FD2: On {A, {B {d, {Y (
  {a, {m/{d/{y, {d {b {Y).^FS
  ^F010,150^AD^FC%,{,#{^FD3: On #A, #B #d, #Y (
  #a, #m/#d/#y, #d #b #Y).^FS
^XZ
```

**Figure 8 • Printed Result of the Above ZPL II Script**

- 1: Mil: 14:30:00 Civ: 02:30:00 PM
- 2: Mil: 15:30:00 Civ: 03:30:00 PM
- 3: Mil: 14:30:00 Civ: 02:30:00 PM
- 1: On Wed, April 23, 2005 (Fri, 04/23/05, 23 Apr 2005)
- 2: On Saturday, July 23, 2005 (Sat, 07/23/05, 23 Jul 2005)
- 3: On Friday, April 23, 2004 (Fri, 04/23/04, 23 Apr 2004)

The following are examples of the time stamp using the **^SL1** and **^SL5** at 2 ips and 10 ips for the Enhanced Real Time Clock (V60.13.0.10 and later).

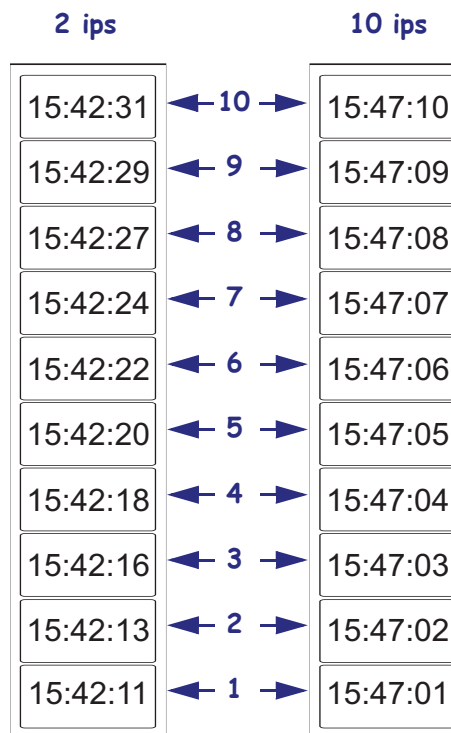


**Note** • They show the variation of time due to print speed and label complexity.

```

^XA
  ^SL1^FS
  ^F0187,184^A0N,101,121^FC%^FD%H:%M:%S^FS
  ^PQ10
^XZ
  
```

**Figure 9 • Example of ^SL1, 2 ips and 10 ips**

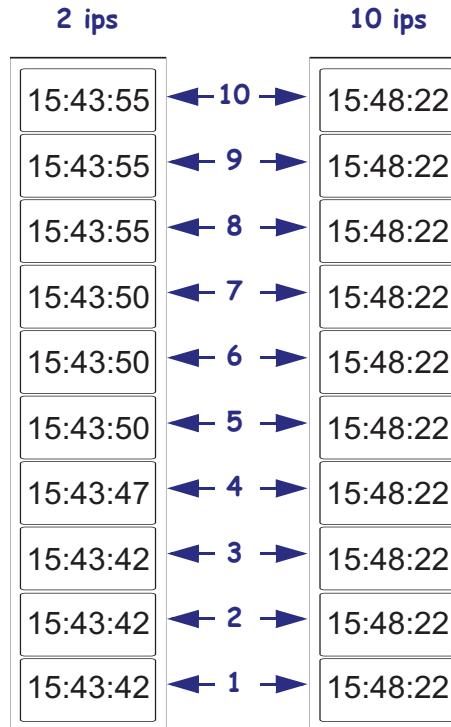


<b>1</b>	Label 1	<b>4</b>	Label 4	<b>7</b>	Label 7	<b>10</b>	Label 10
<b>2</b>	Label 2	<b>5</b>	Label 5	<b>8</b>	Label 8		
<b>3</b>	Label 3	<b>6</b>	Label 6	<b>9</b>	Label 9		

```

^XA
^SL5^FS
^FO187,184^A0N,101,121^FC%^FD%H:%M:%S^FS
^PQ10
^XZ
    
```

**Figure 10 • Example of ^SL5, 2 ips and 10 ips**



<b>1</b>	Label 1	<b>6</b>	Label 6
<b>2</b>	Label 2	<b>7</b>	Label 7
<b>3</b>	Label 3	<b>8</b>	Label 8
<b>4</b>	Label 4	<b>9</b>	Label 9
<b>5</b>	Label 5	<b>10</b>	Label 10

## ^KD – Select Date and Time Format (for Real Time Clock)

**Description** The ^KD command selects the format that the Real-Time Clock's date and time information presents as on a configuration label. This is also displayed on the *Printer Idle* LCD control panel display, and displayed while setting the date and time.

**Format** ^KDa

Parameters	Details
a = value of date and time format	<p><i>Accepted Values:</i></p> <ul style="list-style-type: none"><li>0 = normal, displays <i>Version Number</i> of firmware</li><li>1 = MM/DD/YY (24-hour clock)</li><li>2 = MM/DD/YY (12-hour clock)</li><li>3 = DD/MM/YY (24-hour clock)</li><li>4 = DD/MM/YY (12-hour clock)</li></ul> <p><i>Default Value:</i> 0</p>

**Comments** If the Real-Time Clock hardware is not present, Display Mode is set to 0 (Version Number).

If Display Mode is set to 0 (Version Number) and the Real-Time Clock hardware is present, the date and time format on the configuration label is presented in format 1.

If Display Mode is set to 0 (Version Number) and the Real-Time Clock hardware is present, the date and time format on the control panel display is presented in format 1.

For more details on select date and time format for the Real Time Clock, see [Real Time Clock on page 1221](#).

## ^SL – Set Mode and Language (for Real-Time Clock)

**Description** The ^SL command is used to specify the Real-Time Clock's mode of operation and language for printing information.



**Important •**


- Time is read when the image is created. If the image stays in the queue longer than the specified time the image will be recreated with a new time.
- There are incidents when the same time or a larger space of time may be printed on labels. This is due to the format complexity and print speed.

**Format** ^SLa,b

Parameters	Details
a = mode	<p><i>Accepted Values:</i></p> <p><b>S</b> = Start Time Mode. This is the time that is read from the Real-Time Clock when label formatting begins (when ^XA is received). The first label has the same time placed on it as the last label.</p> <p><b>T</b> = Time Now Mode. This is the time that is read from the Real-Time Clock when the label to be printed is placed in print queue. <i>Time Now</i> is similar to a serialized time or date field.</p> <p><b>Numeric Value</b> = With the Enhanced Real Time Clock (V60.13.0.10 or later) a time accuracy tolerance can be specified. Range = 1 to 999 seconds, 0 = one second tolerance</p> <p>Example: SL30,1 = Accuracy tolerance of 30 seconds and use English.</p> <p><i>Default Value:</i> S</p>

a. These values are only supported on the Xi4, RXi4, ZM400/ZM600, and RZ400/RZ600 printers.



Parameters	Details
b = language   Value 13 is only supported in firmware versions V60.14.x, V50.14.x, or later.	<p><i>Accepted Values:</i></p> <ul style="list-style-type: none"> <li>1 = English</li> <li>2 = Spanish</li> <li>3 = French</li> <li>4 = German</li> <li>5 = Italian</li> <li>6 = Norwegian</li> <li>7 = Portuguese</li> <li>8 = Swedish</li> <li>9 = Danish</li> <li>10 = Spanish 2</li> <li>11 = Dutch</li> <li>12 = Finnish</li> <li>13 = Japanese</li> <li>14 = Korean <sup>a</sup></li> <li>15 = Simplified Chinese <sup>a</sup></li> <li>16 = Traditional Chinese <sup>a</sup></li> <li>17 = Russian <sup>a</sup></li> <li>18 = Polish <sup>a</sup></li> </ul> <p><i>Default Value:</i> the language selected with ^KL or the control panel</p>

a. These values are only supported on the Xi4, RXi4, ZM400/ZM600, and RZ400/RZ600 printers.

**Comments** These are some comments to be aware of:

- The ^SL command must be placed before the first ^FO command.
- As of V60.13.0.10 all supported printers have Enhanced Real Time Clock capabilities the RTC will not print time fields that are more than sixty seconds old, rather it will update the time prior to printing (^SLT or ^SL60). To control time with increments other than sixty seconds the ^SL command can be used with a numeric value (^SL30).  
^SLS can keep times longer than sixty seconds.

For more details on set mode and language with the Real-Time Clock, see [Real Time Clock on page 1221](#).

## ^SO – Set Offset (for Real-Time Clock)

**Description** The ^SO command is used to set the secondary and the tertiary offset from the primary Real-Time Clock.



**Note** • For each label only one S02 command can be used. If more than one offset is required, S03 must be used.

**Format** ^SOa,b,c,d,e,f,g

Parameters	Details
a = clock set	<p><i>Accepted Values:</i></p> <p>2 = secondary 3 = third</p> <p><i>Default Value:</i> value must be specified</p>
b = months offset	<p><i>Accepted Values:</i> -32000 to 32000</p> <p><i>Default Value:</i> 0</p>
c = days offset	<p><i>Accepted Values:</i> -32000 to 32000</p> <p><i>Default Value:</i> 0</p>
d = years offset	<p><i>Accepted Values:</i> -32000 to 32000</p> <p><i>Default Value:</i> 0</p>
e = hours offset	<p><i>Accepted Values:</i> -32000 to 32000</p> <p><i>Default Value:</i> 0</p>
f = minutes offset	<p><i>Accepted Values:</i> -32000 to 32000</p> <p><i>Default Value:</i> 0</p>
g = seconds offset	<p><i>Accepted Values:</i> -32000 to 32000</p> <p><i>Default Value:</i> 0</p>

For more detail on set offset, see *Real Time Clock* on page 1221.

## ^ST – Set Date and Time (for Real-Time Clock)

**Description** The ^ST command sets the date and time of the Real-Time Clock.

**Format** ^STa,b,c,d,e,f,g

Parameters	Details
a = month	<i>Accepted Values:</i> 01 to 12 <i>Default Value:</i> current month
b = day	<i>Accepted Values:</i> 01 to 31 <i>Default Value:</i> current day
c = year	<i>Accepted Values:</i> 1998 to 2097 <i>Default Value:</i> current year
d = hour	<i>Accepted Values:</i> 00 to 23 <i>Default Value:</i> current hour
e = minute	<i>Accepted Values:</i> 00 to 59 <i>Default Value:</i> current minute
f = second	<i>Accepted Values:</i> 00 to 59 <i>Default Value:</i> current second
g = format	<i>Accepted Values:</i> A = a.m. P = p.m. M = 24-hour military <i>Default Value:</i> M

For more details on set date and time, see *Real Time Clock* on page 1221.