

PSC®



• **VS1000**

• **SP*ACE®**



**RS-232 Interface
Programming Kit**

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PROGRAMMING YOUR SCANNER

To program your scanner:

1. Power-up the scanner to be programmed by plugging the power cord into the scanner and an electrical outlet of the appropriate voltage. Wait for the scanner to complete the selftest routine and emit a tone. The green lamp will light steadily, indicating that the scanner is in normal Operating Mode.
2. Put the scanner into Programming Mode by scanning the Switch Label (located on the inside back cover).

The green LED flashes continuously indicating that the scanner is in Programming Mode.

3. Scan a programming label(s) for the feature you want to change (see the Table of Contents for a listing of available RS-232 options). The scanner will emit a 'good read' tone to indicate that the label has been read and the setting has been stored in the scanner's memory. Scan the remaining programming labels as required.

If a label scanned is not a valid programming label, the scanner will emit a low rejection tone.

4. After all the desired programming labels have been successfully scanned, exit Programming Mode by scanning the Switch Label. The green lamp will light dimly, indicating that the scanner is ready for normal operation.

PROGRAMMING CONVENTIONS

- All options set while in Programming Mode are stored in default memory, and will be retained even if the scanner is powered-down.
- Settings are stored on a first-in, first-out basis. The last programming label scanned for a given option is the setting stored in memory. For example, if a programming label which sets the baud rate at 9600 is scanned, followed by a label which sets the baud rate at 19,200, the scanner will be programmed with a baud rate of 19,200.
- Only labels included in this manual will be accepted as valid programming labels. Labels which attempt to set features not implemented in a scanner's software revision will be rejected as invalid. Programming labels which are not printed in accordance with industry standards may also be rejected.
- If an invalid label is scanned when in Programming Mode, the scanner will emit a low tone to indicate that the label is either not a programming label or that it contains values outside of the acceptable programming range.

- After five minutes of inactivity in Programming Mode, the scanner will revert to normal Operating Mode. Any options set during the programming session will be stored and activated.
- We recommend that you record all changes you make to your scanner's factory default configuration. This will be very helpful to return the scanner to desired operation if, for some reason, your changes are lost through malfunction, or reset to factory defaults.

RS-232 RESTRICTIONS

Certain restrictions apply to programming for RS-232 interfaces:

- If your **configuration** is 7 Data Bits, No Parity, **Stop Bits must be set to 2.**
- If your **configuration** is 8 Data Bits, Odd or Even Parity, **Stop Bits must be set to 1.**

INTERFACE REQUIREMENTS

Your scanner's RS-232 interface has user programmable features that may need to be set or changed to match your specific interface requirements. To ensure compatibility, consult with your technical support personnel before changing these settings.

RS-232 INTERFACE SPECIFICATIONS

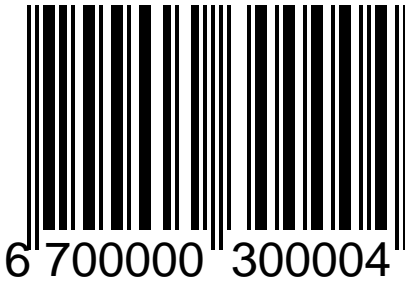
The following labels pertain only to POS terminals with an RS-232 communication interface. In order for the POS terminal and scanner to communicate the scanner's configuration must match the communication settings of the POS terminal. Typically, the scanner's factory default configuration has been set to match your POS terminal requirements.

The RS-232 interface communication options are:

- Baud Rate
- Stop Bits
- Clear to Send (CTS)
- Parity
- Data Bits
- Label Identifiers (Label ID)
- Host Echo

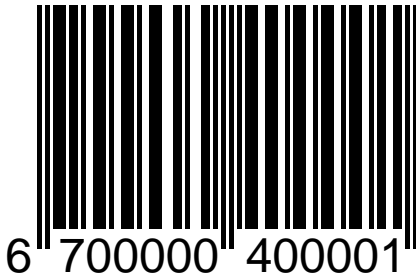
BAUD RATE = 2400

Use this label to set the RS-232
Baud Rate to 2400.



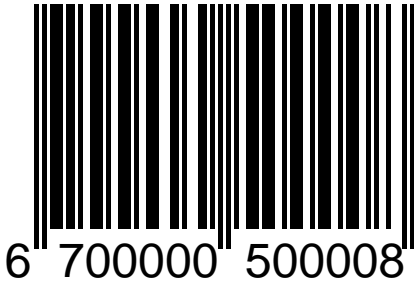
BAUD RATE = 4800

Use this label to set the RS-232
Baud Rate to 4800.



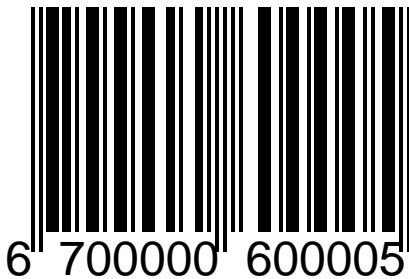
BAUD RATE = 9600

Use this label to set the RS-232
Baud Rate to 9600.



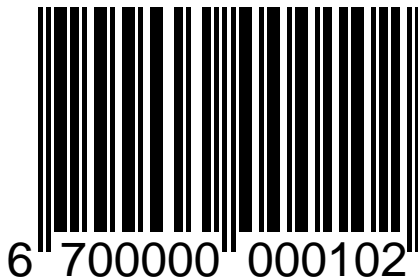
BAUD RATE = 19200

Use this label to set the RS-232
Baud Rate to 19200.



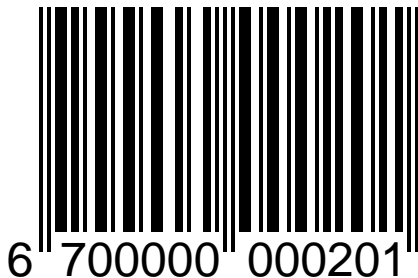
STOP BITS = 1

Use this label to set the number of Stop Bits to one.



STOP BITS = 2

Use this label to set the number of Stop Bits to two.

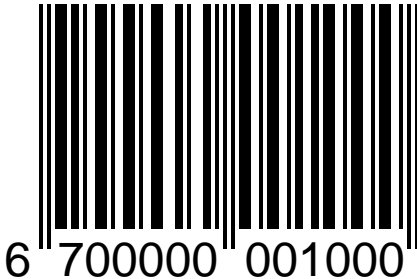


CLEAR TO SEND – ENABLE

Use this label to enable CTS/RTS hardware flow control.

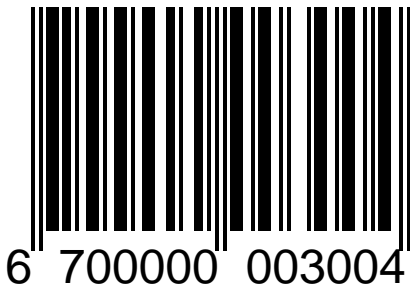
NOTE

To avoid possible communication conflicts, ensure that Host Echo is disabled when activating the Clear To Send feature. These two features cannot be used concurrently.



CLEAR TO SEND - DISABLE

Use this label to disable CTS/RTS hardware flow control.



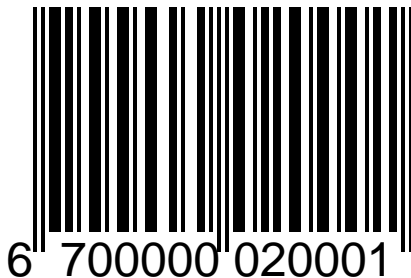
PARITY = SPACE

Use this label to set Parity to Space.



PARITY = EVEN

Use this label to set Parity to Even.



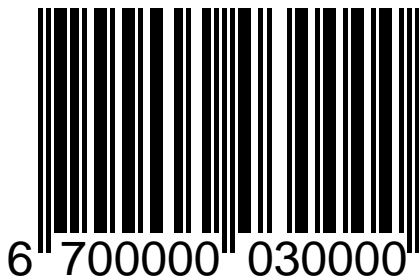
PARITY = MARK

Use this label to set Parity to Mark.



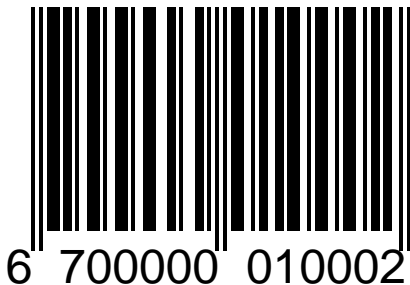
PARITY = ODD

Use this label to set Parity to Odd.



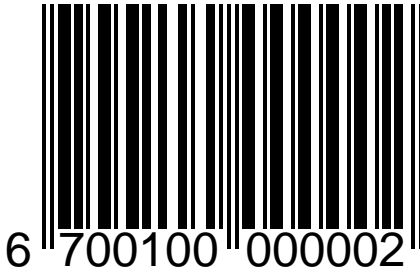
PARITY = NONE

Use this label to set Parity to None.



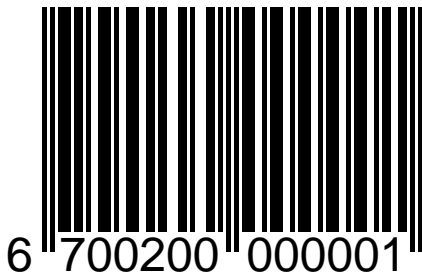
DATA BITS = 7

Use this label to set RS-232 data format equals seven bits.



DATA BITS = 8

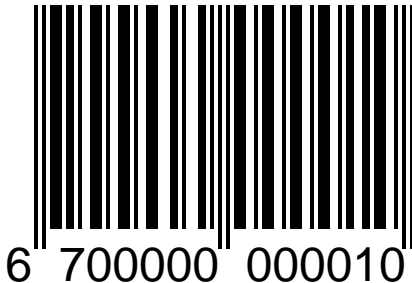
Use this label to set RS-232 data format equals eight data bits.



LABEL IDs — SEND

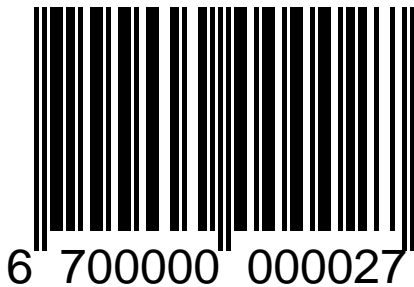
Enables sending a label identifier which tells the host the barcode label's symbology. For example, here are the industry standard default label identifiers for some common symbologies:

Code 39	'*'
UPC-A	'A'
UPC-E	'E0'
EAN-8	'FF'
EAN-13	'F'



LABEL IDs — DON'T SEND

Disables sending of label identifier.



HOST ECHO — ENABLE

Use this label to ENABLE the retransmission of all received data to the host.

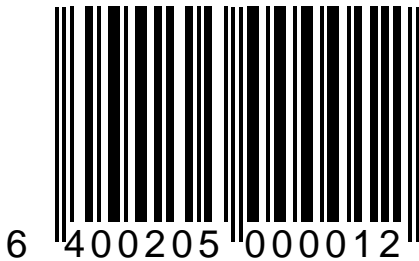
Use "RS-232 Handshake = None" with this feature. Disable all handshaking on all devices communicating with the scanner.

Host commands cannot be used with this feature.



HOST ECHO — DISABLE

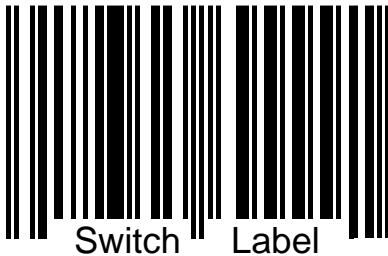
Use this label to DISABLE the re-
transmission of received data.



SWITCH LABEL

The Switch label affects the scanner when in normal Operating Mode. Scanning the Switch label in normal Operating Mode causes the scanner to enter Programming Mode. Scanning the Switch label while in Programming Mode instructs the scanner to save all changes made while in Programming Mode, exit Programming Mode, reset the scanner to implement the changes you made, and return to normal Operating Mode. All programming sessions must begin with the Switch label in order for the scanner to recognize them as programming labels and end with the Switch label for the scanner to store the changes you have made.

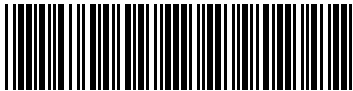
It is a good practice to cover the label on the opposite page to prevent the scanner from reading both labels when changing a feature.





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©PSC
R44-1141 (Rev. C)
Printed in U.S.A.
2/97



R44-1141