# User Guide

## HP USB Barcode Scanner for Point of Sale System

Document Part Number:419218-002

**August 2006**

Print this document before setting up the HP USB Barcode Scanner. The document provides the programming bar codes necessary for selecting features for the scanner.

**WARNING:** Text set off in this manner indicates that failure to follow directions could result in bodily harm or loss of life.

**CAUTION:** Text set off in this manner indicates that failure to follow directions could result in damage to equipment or loss of information.

**User Guide**
HP USB Barcode Scanner

First Edition (August 2006)

Document Part Number: 419218-002

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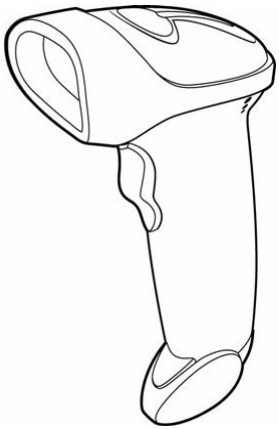
# 1

# Product Features

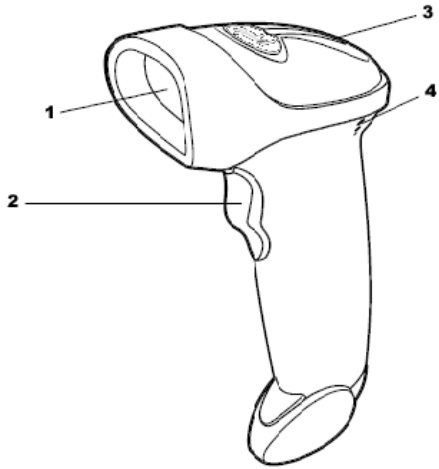


The HP USB Barcode Scanner is designed to work with point of sale system hardware and program applications. The barcode scanner features:

- Hand-held or hands-free scanning operation.
- Stand assembly kit for hands free operation.
- USB connection that autodetects a USB host and defaults to the HID keyboard interface type.
- USB cable assembly provided.
- Supports international keyboards for Microsoft Windows environment: North America, German, French, Spanish, Italian, Swedish, Brazilian Portuguese and Japanese.

- Software and regulatory notices for this product are available on the *Point of Sale System Software and Documentation* CD.

# Identifying Barcode Scanner Components




| | |
|---|---|
| 1 | Scan Window - scans bar code symbols with laser light and produces a digitized pattern that corresponds to the bars and spaces of the symbols. |
| 2 | Scan Trigger - press to scan bar codes. |
| 3 | LED - light indicator that communicates successful decoding, data transmission error or malfunction. |
| 4 | Beeper - emits different beeper sequences and patterns that are defined by you while programming the scanner and during normal scanning. |

# 2

# Safety and Maintenance Guidelines

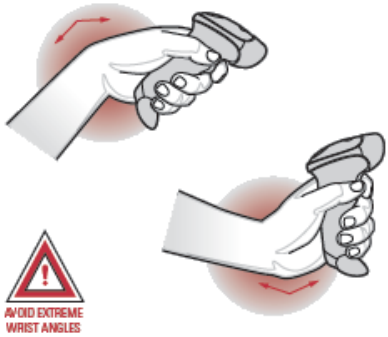
## Important Safety Information

Follow the recommendations below to avoid potential risk of ergonomic injury when using the HP USB Barcode Scanner.

**WARNING:** To reduce the risk of serious injury, read the *Safety and Comfort Guide*. It describes proper workstation, setup, posture, and health habits for users, and provides important electrical and mechanical safety information. This guide is located on the Web at http://www.hp.com/ergo and/or on the documentation CD if one is included with the product.

1. Use the optimum arm position.

2. Avoid extreme wrist angles.




3. Avoid Bending.

4. Avoid reaching.


# Maintenance Guidelines

Cleaning the scan window is the only maintenance required. A dirty window may affect scanning accuracy.

- Do not allow any abrasive material to touch the window.
- Remove any dirt particles with a damp cloth.
- Wipe the window using a tissue moistened with mild detergent and water.
- Do not spray water or other cleaning liquids directly into the window.

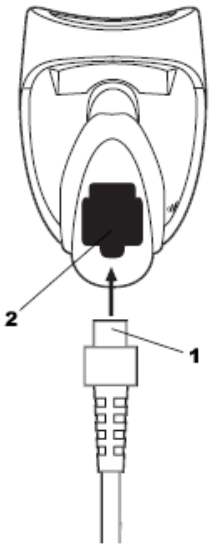
# 3

# Setting Up the Scanner

The scanner attaches directly to a USB port on the POS computer and is powered by the computer. No additional power supply is required.

## Connecting the USB Interface Cable

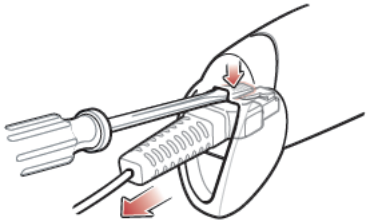
1. Plug the USB interface cable ❶ into the cable interface port ❷ on the bottom of the scanner.



2. Gently tug the cable to ensure the connector is properly secured.
3. Connect the other end of the interface cable into a USB port on the POS computer.

## Removing the USB Interface Cable

1. Unplug the installed cable's modular connector by depressing the connector clip with the tip of a screwdriver.



2. Carefully slide out the cable.

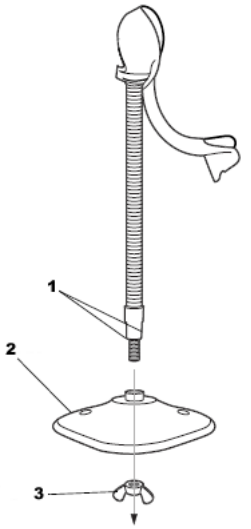
# Assembling the Stand

The stand allows hands-free scanning when attached to the scanner.

1. Unscrew the wingnut from the bottom of the neckpiece scanner cup.
2. Fit the bottom of the neck piece ❶ into the opening on the top of the stand base ❷.
3. Tighten the wingnut ❸ underneath the base to secure the cup and neck piece to the base.

Before tightening the wingnut under the base, ensure that the flat areas on the flexible neck fit securely in the grooves in the base.

4. Bend the neck to the desired position for scanning.




# Mounting the Stand

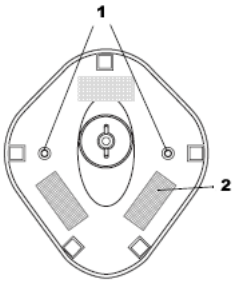
You can attach the base of the scanner's stand to a flat surface using two screws or double-side tape (not provided).

## Screw Mount

1. Position the assembled base on a flat surface.
2. Screw one #10 wood screw (not provided) into each screw-mount hole ❶ until the base of the stand is secure.

## Tape Mount

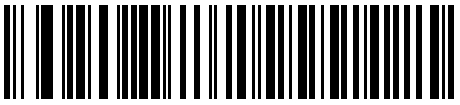
1. Peel the paper liner off one side of each piece of tape (not provided) ❷ and place the sticky surface over each of the three rectangular tape holders.
2. Peel the paper liner off the exposed sides of each piece of tape and press the stand on a flat surface until it is secure.




# Setting Up the USB Interface

To set up the scanner for USB:

1. Turn on the POS computer.
2. Using the barcode scanner, scan the HID Keyboard Emulation barcode below.



***HID Keyboard Emulation**

3. On first installation when using Windows, the software prompts you to select or install the “Human Interface Device” driver. To install the “Human Interface Device” driver

provided by Windows, click “Next” through all the choices and click “Finished” on the last choice. The scanner powers up during this installation.

4. If you are not using a North American keyboard, scan the appropriate country bar code in **USB Country Keyboard Types (Country Codes)** in this chapter.

# USB Default Parameters

The following table lists the defaults for USB host parameters. If you want to change any option, scan the appropriate bar codes provided in the “Parameters Descriptions” section of this chapter.

| USB Host Default Parameters | Default |
|---|---|
| USB Device Type | HID Keyboard Emulation |
| USB Country Keyboard Types (country codes) | North American |
| USB Keystroke Delay | No Delay |
| USB CAPS Lock Override | Disable |
| USB Ignore Unknown Characters | Enable |
| Emulate Keypad | Disable |
| USB FN1 Substitution | Disable |
| Function Key Mapping | Disable |
| Simulated Caps Lock | Disable |
| Convert Case | None |

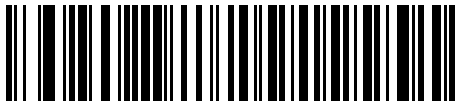
# Parameters Descriptions

## USB Country Keyboard Types (Country Codes)

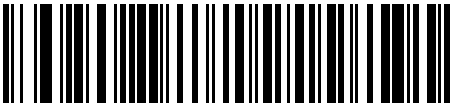
Scan the bar code corresponding to your country keyboard type. This setting applies only to the USB HID (Human Interface Devices) Keyboard Emulation device.

When changing country selection, the scanner automatically restarts. The scanner issues the standard startup beep sequences.

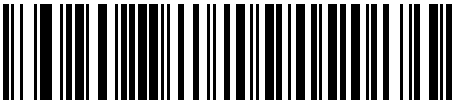
Throughout the programming bar code menus, default values are indicated with an asterisks (*).



***North American Standard USB Keyboard**



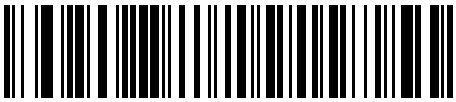
**German Windows**



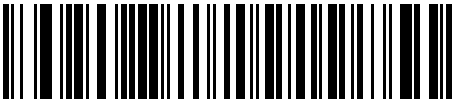
**French Windows**

**French Canadian Windows 95/98**

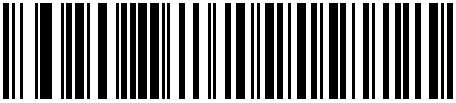
**French Canadian Windows 2000/XP**



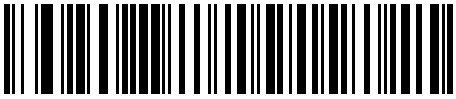
**Spanish Windows**



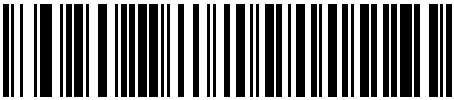
**Italian Windows**



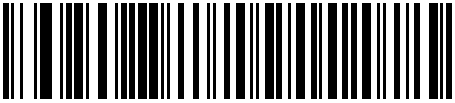
**Swedish Windows**



**UK English Windows**



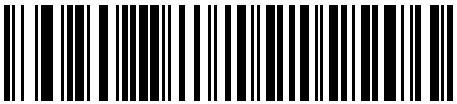
**Japanese Windows (ASCII)**



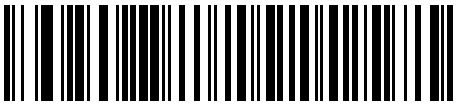
**Portuguese-Brazilian Windows**

# USB Keystroke Delay

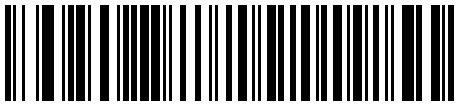
This parameter sets the delay, in milliseconds, between emulated keystrokes. Scan a barcode below to increase the delay when hosts require a slower transmission of data.



***No Delay**



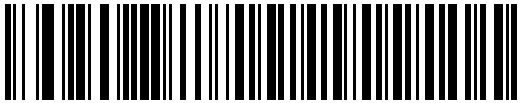
**Medium Delay (20 msec)**



**Long Delay (40 msec)**

# USB Caps Lock Override

When enabled, the case of the data is preserved regardless of the state of the Caps Lock key. This setting is always enabled for the "Japanese, Windows (ASCII)" keyboard type and can not be disabled.

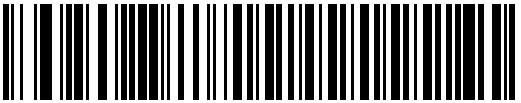


**Override Caps Lock Key (Enable)**

***Do Not Override Caps Lock Key (Disable)**

# USB Ignore Unknown Characters

Unknown characters are characters the host does not recognize. When “Send Bar Codes With Unknown Characters” is selected, all bar code data is sent except for unknown characters, and no error beeps sound. When “Do Not Send Bar Codes With Unknown Characters” is selected, bar codes containing at least one unknown character are not sent to the host, and an error beep sounds.



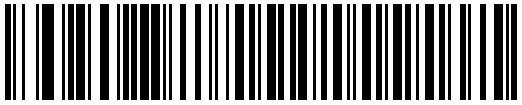
***Send Bar Codes with Unknown Characters (Transmit)**

**Do Not Send Bar Codes with Unknown Characters (Disable)**

## Emulate Keypad

When enabled, all characters are sent as ASCII sequences over the numeric keypad. For example ASCII A would be sent as "ALT make" 0 6 5 "ALT Break".

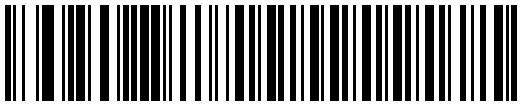
***Disable Keypad Emulation**



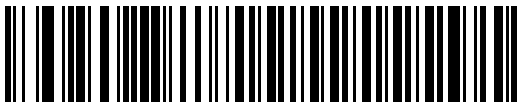
**Enable Keypad Emulation**

## USB Keyboard FN 1 Substitution

When enabled, this allows replacement of any FN 1 characters in an EAN 128 bar code with a Key Category and value chosen by the user (see FN 1 Substitution Values in chapter 3 of the *Programming Reference Guide* to set the Key Category and Key Value).



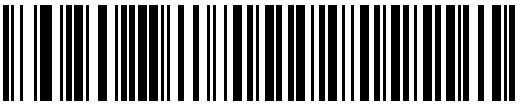
**Enable**



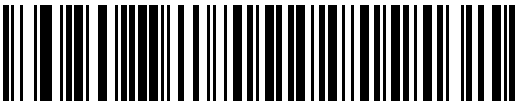
***Disable**

# Function Key Mapping

ASCII values under 32 are normally sent as a control-key sequences (see the USB ASCII Character Set table in this chapter). When this parameter is enabled, the keys in bold in the USB ASCII Character Set table are sent in place of the standard key mapping. Table entries that do not have a bold entry remain the same whether or not this parameter is enabled.



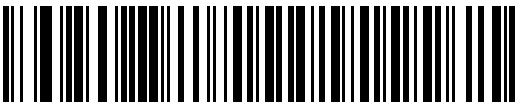
***Disable Function Key Mapping**



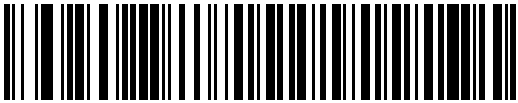
**Enable Function Key Mapping**

# Simulated Caps Lock

When enabled, the scanner will invert upper and lower case characters on the scanner barcode as if the Caps Lock state is enabled on the keyboard. This inversion is done regardless of the current state of the keyboard's Caps Lock state.



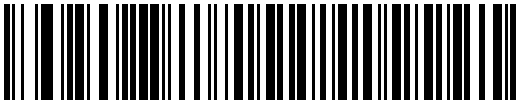
**Disable Simulated Caps Lock**



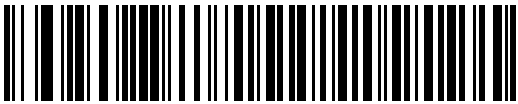
**Enable Simulated Caps Lock**

## Convert Case

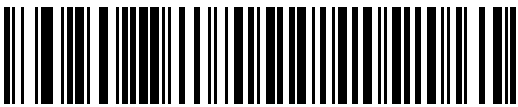
When enabled, the scanner will convert all bar code data to the selected case.



***No Case Conversion**



**Convert All to Upper Case**



**Convert All to Lower Case**

# USB ASCII Character Set

This table provides ASCII character conversions for standard data transmission code.

| Prefix/Suffix Value | Full ASCII Code 39 Encode Char. | Keystroke |
|---|---|---|
| 1000 | %U | CTRL 2 |
| 1001 | $A | CTRL A |
| 1002 | $B | CTRL B |
| 1003 | $C | CTRL C |
| 1004 | $D | CTRL D |
| 1005 | $E | CTRL E |
| 1006 | $F | CTRL F |
| 1007 | $G | CTRL G |
| 1008 | $H | CTRL H/**BACKSPACE**[1] |
| 1009 | $I | CTRL I/**HORIZONTAL TAB**[1] |
| 1010 | $J | CTRL J |
| 1011 | $K | CTRL K |
| 1012 | $L | CTRL L |
| 1013 | $M | CTRL M/**ENTER**[1] |
| 1014 | $N | CTRL N |
| 1015 | $O | CTRL 0 |

| Prefix/Suffix Value | Full ASCII Code 39 Encode Char. | Keystroke |
|---|---|---|
| 1016 | $P | CTRL P |
| 1017 | $Q | CTRL Q |
| 1018 | $R | CTRL R |
| 1019 | $S | CTRL S |
| 1020 | $T | CTRL T |
| 1021 | $U | CTRL U |
| 1022 | $V | CTRL V |
| 1023 | $W | CTRL W |
| 1024 | $X | CTRL X |
| 1025 | $Y | CTRL Y |
| 1026 | $Z | CTRL Z |
| 1027 | %A | CTRL [/**ESC**[1] |
| 1028 | %B | CTRL \ |
| 1029 | %C | CTRL ] |
| 1030 | %D | CTRL 6 |
| 1031 | %E | CTRL - |
| 1032 | Space | Space |
| 1033 | /A | ! |
| 1034 | /B | “ |
| 1035 | /C | # |

| Prefix/Suffix Value | Full ASCII Code 39 Encode Char. | Keystroke |
|---|---|---|
| 1036 | /D | $ |
| 1036 | /D | $ |
| 1037 | /E | % |
| 1038 | /F | & |
| 1039 | /G | ‘ |
| 1040 | /H | ( |
| 1041 | /I | ) |
| 1042 | /J | * |
| 1043 | /K | + |
| 1044 | /L | ‘ |
| 1045 | - | - |
| 1046 | . | . |
| 1047 | /O | / |
| 1048 | 0 | 0 |
| 1049 | 1 | 1 |
| 1050 | 2 | 2 |
| 1051 | 3 | 3 |
| 1052 | 4 | 4 |
| 1053 | 5 | 5 |
| 1054 | 6 | 6 |

| Prefix/Suffix Value | Full ASCII Code 39 Encode Char. | Keystroke |
|---|---|---|
| 1055 | 7 | 7 |
| 1058 | /Z | : |
| 1059 | %F | ; |
| 1060 | %G | < |
| 1061 | %H | = |
| 1062 | %I | > |
| 1063 | %J | ? |
| 1064 | %V | @ |
| 1065 | A | A |
| 1066 | B | B |
| 1067 | C | C |
| 1068 | D | D |
| 1069 | E | E |
| 1070 | F | F |
| 1071 | G | G |
| 1072 | H | H |
| 1073 | I | I |
| 1074 | J | J |
| 1075 | K | K |
| 1076 | L | L |

| Prefix/Suffix Value | Full ASCII Code 39 Encode Char. | Keystroke |
|---|---|---|
| 1077 | M | M |
| 1078 | N | N |
| 1079 | O | O |
| 1080 | P | P |
| 1081 | Q | Q |
| 1082 | R | R |
| 1083 | S | S |
| 1084 | T | T |
| 1085 | U | U |
| 1086 | V | V |
| 1087 | W | W |
| 1088 | X | X |
| 1089 | Y | Y |
| 1090 | Z | Z |
| 1091 | %K | [ |
| 1092 | %L | \ |
| 1093 | %M | ] |
| 1094 | %N | ^ |
| 1095 | %O | _ |
| 1096 | %W | ‘ |

| Prefix/Suffix Value | Full ASCII Code 39 Encode Char. | Keystroke |
|---|---|---|
| 1097 | +A | a |
| 1098 | +B | b |
| 1099 | +C | c |
| 1100 | +D | d |
| 1101 | +E | e |
| 1102 | +F | f |
| 1103 | +G | g |
| 1104 | +H | h |
| 1105 | +I | i |
| 1106 | +J | j |
| 1107 | +K | k |
| 1108 | +l | l |
| 1109 | +M | m |
| 1110 | +N | n |
| 1111 | +O | o |
| 1112 | +P | p |
| 1113 | +Q | q |
| 1114 | +R | r |
| 1115 | +S | s |
| 1116 | +Y | t |

| Prefix/Suffix Value | Full ASCII Code 39 Encode Char. | Keystroke |
|---|---|---|
| 1117 | +U | u |
| 1118 | +V | v |
| 1119 | +W | w |
| 1120 | +X | x |
| 1121 | +Y | y |
| 1122 | +Z | z |
| 1123 | %P | { |
| 1124 | %Q | \| |
| 1125 | %R | } |
| 1126 | %S | ~ |

[1] The keystroke in bold is sent only if the "Function Key Mapping" is enabled. Otherwise, the unbolden keystroke is sent.

| ALT Keys | Keystroke |
|---|---|
| 2064 | ALT 2 |
| 2065 | ALT A |
| 2066 | ALT B |
| 2067 | ALT C |
| 2068 | ALT D |
| 2069 | ALT E |
| 2070 | ALT F |

| | |
|---|---|
| 2071 | ALT G |
| 2072 | ALT H |
| 2073 | ALT I |
| 2074 | ALT J |
| 2075 | ALT K |
| 2076 | ALT L |
| 2077 | ALT M |
| 2078 | ALT N |
| 2079 | ALT O |
| 2080 | ALT P |
| 2081 | ALT Q |
| 2082 | ALT R |
| 2083 | ALT S |
| 2084 | ALT T |
| 2085 | ALT U |
| 2086 | ALT V |
| 2087 | ALT W |
| 2088 | ALT X |
| 2089 | ALT Y |
| 2090 | ALT Z |

GUI Shift Keys

Windows-based systems have a GUI key to the left of the left ALT key and to the right of the right ALT key.

| Other Value | Keystroke |
|---|---|
| 3000 | Right Control Key |
| 3048 | GUI 0 |
| 3049 | GUI 1 |
| 3050 | GUI 2 |
| 3051 | GUI 3 |
| 3052 | GUI 4 |
| 3053 | GUI 5 |
| 3054 | GUI 6 |
| 3055 | GUI 7 |
| 3056 | GUI 8 |
| 3057 | GUI 9 |
| 3065 | GUI A |
| 3066 | GUI B |
| 3067 | GUI C |
| 3068 | GUI D |
| 3069 | GUI E |
| 3070 | GUI F |
| 3071 | GUI G |

| | |
|---|---|
| 3072 | GUI H |
| 3073 | GUI I |
| 3074 | GUI J |
| 3075 | GUI K |
| 3076 | GUI L |
| 3077 | GUI M |
| 3078 | GUI N |
| 3079 | GUI O |
| 3080 | GUI P |
| 3081 | GUI Q |
| 3082 | GUI R |
| 3083 | GUI S |
| 3084 | GUI T |
| 3085 | GUI U |
| 3086 | GUI V |
| 3087 | GUI W |
| 3088 | GUI X |
| 3089 | GUI Y |
| 3090 | GUI Z |

| **F1 Keys** | **Keystroke** |
|---|---|
| 5001 | F1 |

| | |
|---|---|
| 5002 | F2 |
| 5003 | F3 |
| 5004 | F4 |
| 5005 | F5 |
| 5006 | F6 |
| 5007 | F7 |
| 5008 | F8 |
| 5009 | F9 |
| 5010 | F10 |
| 5011 | F11 |
| 5012 | F12 |
| 5013 | F13 |
| 5014 | F14 |
| 5015 | F15 |
| 5016 | F16 |
| 5017 | F17 |
| 5018 | F18 |
| 5019 | F19 |
| 5020 | F20 |
| 5021 | F21 |
| 5022 | F22 |

| | |
|---|---|
| 5023 | F23 |
| 5024 | F24 |

| Keypad | Keystroke |
|---|---|
| 6042 | * |
| 6043 | + |
| 6044 | undefined |
| 6045 | - |
| 6046 | . |
| 6047 | / |
| 6048 | 0 |
| 6049 | 1 |
| 6050 | 2 |
| 6051 | 3 |
| 6052 | 4 |
| 6053 | 5 |
| 6054 | 6 |
| 6055 | 7 |
| 6056 | 8 |
| 6057 | 9 |
| 6058 | Enter |
| 6059 | Num Lock |

| Extended Keypad | Keystroke |
|---|---|
| 7001 | Break |
| 7002 | Delete |
| 7003 | PgUp |
| 7004 | End |
| 7005 | Pg Dn |
| 7006 | Pause |
| 7007 | Scroll Lock |
| 7008 | Backspace |
| 7009 | Tab |
| 7010 | Print Screen |
| 7011 | Insert |
| 7012 | Home |
| 7013 | Enter |
| 7014 | Escape |
| 7015 | Up Arrow |
| 7016 | Down Arrow |
| 7017 | Left Arrow |
| 7018 | Right Arrow |

# 4

# Operating the Scanner

This chapter covers techniques, tips and instructions involved in scanning bar codes and defining beeper and LED indicators.

Before using the scanner, you will need to install and program your scanner.

- For instructions on installing the scanner, refer to Chapter 3, "Setting Up the Scanner."
- To configure or program your scanner, refer to Chapter 5, "Programming User Preferences."
- To program different or additional bar code features, refer to the *Programming Reference Guide*, included on the *Point of Sale System Software and Documentation* CD. This guide provides the programming bar codes necessary for selecting non-default features, customizing data, and other programming selections for your scanner.

## Defining Beeper Sequences

The scanner communicates with the user by emitting different beeper sequences and patterns. Refer to the "Standard Beeper Definitions" table in the chapter to define beep sequences that occur during both normal scanning and while programming the scanner.

## Standard Beeper Definitions

| Beeper Sequence | Indication |
|---|---|
| Low/medium/high beep | Power Up. |
| Short high beep | A bar code symbol was decoded (if decode beeper is enabled). |
| 4 long low beeps | A transmission error was detected in a scanned symbol. The data is ignored. This occurs if a unit is not properly configured. Check beeper sequence option setting. |
| 5 low beeps | Conversion or format error. |
| Lo/hi/lo beep | ADF transmit error. |
| **Parameter Menu Scanning** | |
| Short high beep | Correct entry scanned or correct menu sequence performed. |
| Lo/hi beep | Input error, incorrect bar code or "Cancel" scanned, wrong entry, incorrect bar code programming sequence; remain in program mode. |
| Hi/lo beep | Keyboard parameter selected. Enter value using bar code keypad. |
| Hi/lo/hi/lo beep | Successful program exit with change in the parameter setting. |
| Low/hi/low/hi beep | Out of host parameter storage space. Scan *Set Default Parameter* in this chapter. |

### Standard Beeper Definitions

| Beeper Sequence | Indication |
|---|---|
| **Code 39 Buffering** | |
| Hi/lo beep | New Code 39 data was entered into the buffer. |
| 3 Beeps - long high beep | Code 39 buffer is full. |
| Lo/hi/lo beep | The Code 39 buffer was erased or there was an attempt to clear or transmit an empty buffer. |
| Lo/hi beep | A successful transmission of buffered data. |
| 4 short high beeps | Scanner has not completed initialization. Wait several seconds and scan again. |
| Scanner gives a power-up beep after scanning a USB Device Type | Communication with the bus must be established before the scanner can operate at the highest power level. |
| The power-up beep occurs more than once | The USB bus may put the scanner in a state where power to the scanner is cycled on and off more than once. This is normal and usually happens when the PC cold boots. |

# Defining LED Indicators

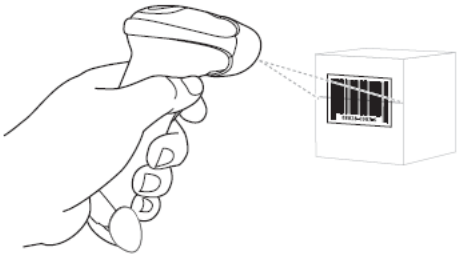
In addition to beeper sequences, the scanner communicates using a two-color LED display. Refer to the “Standard LED Definitions” table in this chapter to define the LED colors that display during scanning.

### Standard LED Definitions

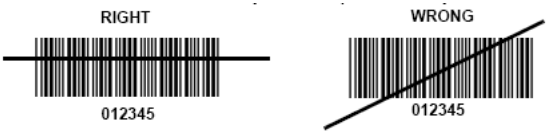
| LED | Indication |
|---|---|
| Off | No power is applied to the scanner, or the scanner is on and ready to scan. |
| Green | A bar code was successfully decoded. |
| Red | A data transmission error or scanner malfunction occurred. |

# Scanning in Hand-Held Mode

1. Ensure all connections are secure.
2. Aim the scanner at the bar code. Press the trigger.



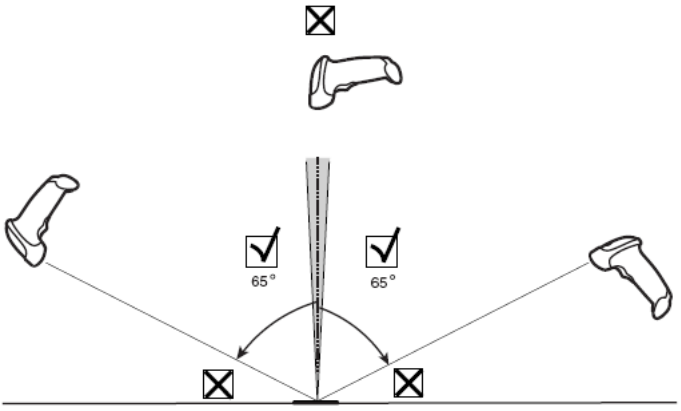
3. Ensure the scan line crosses every bar and space of the symbol.




4. Upon successful decode, the scanner beeps and the LED turns green.

# Aiming the Scanner

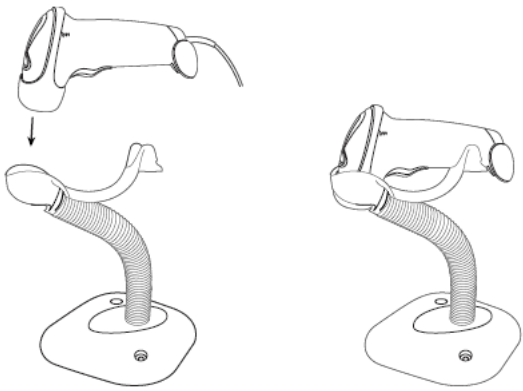
Do not hold the scanner directly over the bar code. Laser light reflecting directly back into the scanner from the bar code is known as specular reflection. This specular reflection can make decoding difficult. You can tilt the scanner up to 55° forward or back and achieve a successful decode. Simple practice quickly shows what tolerances to work within.



# Scanning in Hands-Free Mode

When the scanner is seated in the stand's "cup," the scanner's built-in sensor places the scanner in hands-free mode. When the scanner is removed from the stand it operates in its normal hand-held mode.

1. Ensure all cable connections are secure.
2. Insert the scanner in the stand by placing the front of the scanner into the stand's "cup."



3. To scan a bar code, place the bar code up to the scanner and ensure the scan line crosses every bar and space of the symbol.
4. Upon successful decode, the scanner beeps and the LED turns green.

# 5

# Programming User Preferences

You have the option to program the scanner to perform various functions, or activate different features. This chapter describes each user preference feature and provides the programming bar codes necessary for selecting these features for your scanner.

The scanner is shipped with the settings listed in the "User Preferences Default" table in this chapter (also see the section "USB Default Parameters" in chapter 3 of this guide). If the default values suit your requirements, programming may not be necessary.

Features values are set by scanning single bar codes or short bar code sequences. The settings are stored in non-volatile memory and are preserved even when the scanner is powered down.

To return all features to their default values, all you need to do is scan the **Set All Defaults** bar code.

Throughout the programming bar code menus, default values are indicated with asterisks (*).

## Scanning Sequence Examples

In most cases you need only scan one bar code to set a specific parameter value. For example, if you want to set the beeper tone to high, simply scan the **High Frequency** (beeper tone) bar code listed under Beeper Tone. The scanner issues a fast warble beep and the LED turns green, signifying a successful parameter entry. Other parameters, such as specifying **Serial Response Time-Out**

or setting **Data Transmission Formats**, require that you scan several bar codes. Refer to "Laser On Time" in this chapter and "Scan Data Transmission Format" in the *Programming Reference Guide* on the software and documentation CD for descriptions of this procedure.

# Errors While Scanning

Unless otherwise specified, if you make an error during a scanning sequence, just re-scan the correct parameter.

# User Preferences Default Parameters

The following table lists the defaults for user preferences parameters. If you want to change any option, scan the appropriate bar code(s) provided in the "User Preferences" section of this chapter.

### User Preferences Default

| Parameter | Default |
|---|---|
| Set Default Parameter | All Defaults |
| Beeper Tone | Medium |
| Beeper Volume | High |
| Power Mode | Continuous On |
| Laser On Time | 3.0 Sec. |
| Beep After Good Decode | Enable |

# User Preferences

## Set Default Parameter

Scanning this bar code returns all parameters to the default values listed in Chapter 5, “Standard Default Parameters” of the *Programming Reference Guide* on the software and documentation CD.

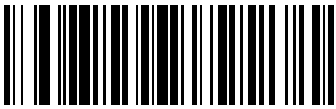
**Set All Defaults**

# Beeper Tone

To select a decode beep frequency (tone), scan the Low Frequency, Medium Frequency, or High Frequency bar code.

**Low Frequency**

***Medium Frequency**
**(Optimum Settings)**



**High Frequency**

# Beeper Volume

To select a beeper volume, scan the Low Volume, Medium Volume, or High Volume bar code.

**Low Volume**

**Medium Volume**

***High Volume**

# Power Mode

This parameter determines whether or not power remains on after a decode attempt. When in reduced power mode, the scanner enters into a low power consumption mode to preserve battery life after each decode attempt. When in continuous power mode, power remains on after each decode attempt.

***Continuous On**

**Reduced Power Mode**

# Laser On Time

This parameter sets the maximum time that decode processing continues during a scan attempt. It is programmable in 0.1 second increments from 0.5 to 9.9 seconds. The default **Laser On Time** is 3.0 seconds.

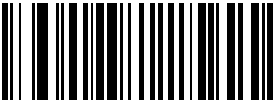
To set a Laser On Time, scan the bar code below. Next, scan two numeric bar codes in Chapter 8, “Numeric Bar Codes,” of the *Programming Reference Guide*, that correspond to the desired on time. Single digit numbers must have a leading zero. For example, to set an On Time of 0.5 seconds, scan the bar code below, then scan the “0” and “5” bar codes. If you make an error, or wish to change your selection, scan Cancel.

**Laser On Time**

# Beep After Good Decode

Scan a bar code below to select whether or not the scanner beeps after a good decode. If **Do Not Beep After Good Decode** is selected, the beeper still operates during parameter menu scanning and indicates error conditions.

***Beep After Good Decode**
**(Enable)**



**Do Not Beep After Good Decode**
**(Disable)**

# A

# Troubleshooting

## Solving Common Problems

The following table lists possible problems, the possible cause of each problem, and the recommended solutions.

| Problem | Possible Cause | Solution |
|---|---|---|
| Nothing happens when you follow the operating instructions, or the scanner displays erratic behavior (laser does not come on, scanner emits frequent beeps). | No power to the scanner. | Check the system power. |
| | Interface/power cables are loose. | Check for loose cable connections. |
| Laser comes on, but barcode symbol does not decode. | Scanner is not programmed for the correct bar code type. | Be sure the scanner is programmed to read the type of bar code you are scanning. |
| | Bar code symbol is unreadable. | Check the symbol to make sure it is not defaced. Try scanning test symbols of the same bar code type. |
| | Distance between scanner and bar code is incorrect. | Move the scanner closer to or further from the bar code. |

| Problem | Possible Cause | Solution |
|---|---|---|
| Symbol is decoded, but not transmitted to the host. | Scanner is not programmed for the correct host type. | Scan the appropriate host type bar code. |
| Scanned data is incorrectly displayed on the host. | Scanner is not programmed to work with the host. Check scanner host type parameters or editing options. | Be sure the USB host is selected.<br>Ensure that the POS system is programmed for the correct keyboard type and language, and the Caps Lock key is in the correct state.<br>Be sure editing options found in the *Programming Reference Guide* on the *Point of Sale System Software and Documentation* CD (e.g., ADF, UPCE to UPC-A Conversion) are properly programmed. |

# Using the Worldwide Web

For the online access to technical support information, self-solve tools, online assistance, community forums or IT experts, broad multivendor knowledge base, monitoring and diagnostic tools, go to http://www.hp.com/support.

# Preparing to Call Technical Support

If you can not solve a problem using the troubleshooting tips in this section, you may need to call technical support. Refer to the *Support Telephone Numbers* guide on the *Point of Sale System Software and Documentation* CD. Have the following information available when you call:

- Barcode Scanner model number
- Serial number for the scanner

- Purchase date on invoice
- Condition under which the problem occurred
- Error messages received
- Hardware configuration
- Hardware and software you are using

# B

# Technical Specifications

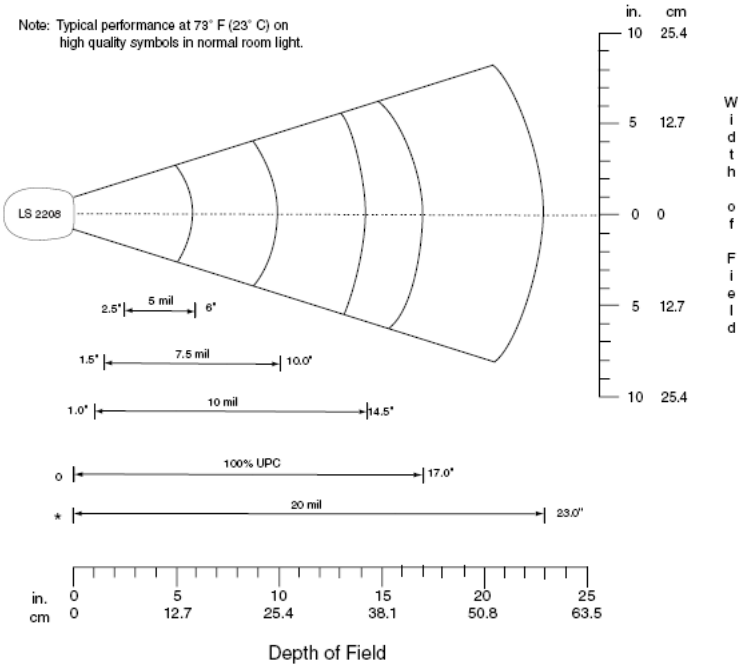
## HP USB Barcode Scanner

| | |
|---|---|
| **Power Requirements** | Decoded: 5 VDC +/- 10% @ approximately 200mA (nominal) |
| **Stand-By Current** | 500mA (max) |
| **Power Source** | Depending on USB host:<br>Hosted powered converts a 9 Volt battery to a 5 Volt battery |
| **Decode Capability** | Decoded:<br>UPC/EAN, UPC/EAN with supplementals, UCC/EAN, JAN 8 & 13, 128, Code 39, Code 39 Full ASCII, Code 39 Trioptic, Codabar (NW7), Interleaved 2 of 5, Discrete 2 of 5, Code 128, Code 93, MSI, Code 11, UCC/EAN RSS, Code 32, Coupon Code, Bookland EAN, 1ATA, and RSS. |
| **Beeper Operation** | User-selectable: Enable, Disable |
| **Beeper Volume** | User-selectable: three levels |
| **Beeper Tone** | User-selectable: three tones |
| **Scan Repetition Rate** | 100 +/- 5 scans/seconds |
| **Yaw Tolerance** | +/- 10° from nominal |

## HP USB Barcode Scanner

| | |
|---|---|
| **Pitch Tolerance** | +/- 65° from nominal |
| **Roll Tolerance** | +/- 60° from nominal |
| **Print Contrast Minimum** | 25% minimum reflectance differential, measure at 650 nm. |
| **Ambient Light Immunity** | |
| • **Indoor** | 450 ft. candles (4,842 Lux) |
| • **Outdoor** | 10,000 ft. candles (107, 600 Lux) |
| **Durability** | 5 ft. (1.5 m) drops to concrete |
| **Operating Temperature** | 32° to 120° F (0° to 50° C) |
| **Storage Temperature** | -40° to 140° F (-40° to 60° C) |
| **Humidity** | 5% to 95% (non-condensing) |
| **Weight (without cable)** | 5.15 oz. (146 g) |
| **Dimensions:** | |
| **Weight** | 6.0 in (15.2 cm) |
| **Width** | 2.5 in (6.3 cm) |
| **Depth** | 3.34 in (8.4 cm) |
| **Laser** | 650 nm laser diode |
| **Laser Classifications** | IEC 825-1 Class 2 |
| **ESD** | 15kV area discharge<br>8 kV contact discharge |
| **Minimum Element Width** | 5 mil (0.127 mm) |
| **Interfaces Supported** | Decoded: USB |
| **Electrical Safety** | Certified Pending to UL1950, CSA C22.2 No. 950 EN60950/IC950 |

# Decode Zone




*Minimum distance determined by symbol length and scan angle

# Disposal of Waste Equipment by Users in Private Household in the European Union

This symbol on the product or on its packaging indicates that this product must not be disposed of with your other household waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service or the shop where you purchased the product.