

Honeywell

SF61

Cordless Scanner



User Guide

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TABLE OF CONTENTS

Customer Support	vii
Technical Assistance	vii
Product Service and Repair	vii
Limited Warranty	vii
Chapter 1 - About the SF61B Cordless Scanner.....	1
About the SF61B Cordless Scanner.....	1
Unpack Your Device	1
SF61B Overview	1
Battery and Charge Information	2
To Charge the Scanner Battery	3
Battery Charge Status during Operation	4
Understand Bluetooth Terms	4
Default Settings and Custom Settings	4
Turn On the SF61B	5
Pair with a Bluetooth Host Device.....	5
Connect on Power-Up.....	5
Inactivity Shutdown Period.....	6
Understand the SF61B Behavior	6
Blue Honeywell-Ready-to-Work Indicator.....	6
Status Light.....	7
Beeps and Vibrate Alert.....	8
Scan Barcodes.....	9
Accessories	10
Required Accessories	11

Optional Accessories	13
Chapter 2 - Connect the SF61B.....	15
Bluetooth Connection Considerations	15
Supported Bluetooth Devices	15
Bluetooth Versions	15
EasySet Setup Software	15
SF61B Bluetooth Device Address Location.....	16
Connection Lost Behavior	16
Connect the SF61B to Honeywell Computer.....	16
To Activate Bluetooth on the Honeywell Computer.....	17
Disconnect the SF61B from Honeywell Computer.....	17
Connect the SF61B to Other Bluetooth Devices.....	18
Bluetooth Device Profile.....	18
Bluetooth Connections	19
Connect to Other HID Devices (Smartphones, Tablets, PDAs, etc.).....	25
Keyboard Wedge Emulation using the SmartWedgeLite Application.....	26
Run SmartWedgeLite	26
Scanner-initiated (Incoming) Connection with SmartWedgeLite.....	26
Host-initiated (Outgoing) Connection with SmartWedgeLite	27
Successful Scanner Connection (SmartWedgeLite).....	29
Disconnect Your Scanner from SmartWedgeLite	30
Chapter 3 - Configure the SF61B Cordless Scanner.....	31
Basic Setup with Configuration Barcodes	31
Reset Your Scanner (Software Reset).....	31
Select an International Keyboard (HID Connections Only).....	32
Configure the Postamble	33
Configure Your Scanner with EasySet.....	33
Online Setup with EasySet	34
Offline Setup with EasySet.....	35
Configure Your Scanner from Your Honeywell Computer.....	35
To Configure the SF61B from Your Honeywell Computer	35

Chapter 4 - Troubleshoot and Maintain the SF61B.....37

Troubleshoot the SF61B.....	37
Problems and Possible Solutions	37
Recover the SF61B	40
Force a Hardware Reset	41
Force a Software Reset.....	41
Call Product Support	42
Get SF61B Version Information.....	42
Upgrade the SF61B Firmware.....	43
Prepare for Firmware Upgrade with EasySet and WinFlash	44
Use EasySet and WinFlash to Upgrade Your SF61B Firmware.....	45
Replace the Battery of the SF61B	48
To Change the Battery	48
Replace the End-Caps of the SF61B.....	49
Remove the SF61B End-Cap	49
Install the SF61B End-Cap.....	50
Clean the SF61B.....	50
Clean Scanner Window	51
Clean Scanner Trigger Button	51

Appendix A - Specifications and Reading Distances53

Specifications	53
Reading Distances.....	55
SF61BHP	55

Customer Support

Technical Assistance

To search our knowledge base for a solution or to log in to the Technical Support portal and report a problem, go to www.hsmcontactsupport.com.

For our latest contact information, see www.honeywellaidc.com/locations.

Product Service and Repair

Honeywell International Inc. provides service for all of its products through service centers throughout the world. To obtain warranty or non-warranty service, return your product to Honeywell (postage paid) with a copy of the dated purchase record. To learn more, go to www.honeywellaidc.com and select **Service & Repair** at the bottom of the page.

Limited Warranty

For warranty information, go to www.honeywellaidc.com and click **Resources > Product Warranty**.

ABOUT THE SF61B CORDLESS SCANNER

About the SF61B Cordless Scanner

This User Guide provides installation and programming instructions for the SF61B Cordless Scanner. Product specifications, and dimensions are also included.

Honeywell devices are factory programmed for the most common terminal and communications settings. If you need to change these settings, programming is accomplished by scanning the barcodes in this guide.

An asterisk (*) next to an option indicates the default setting.

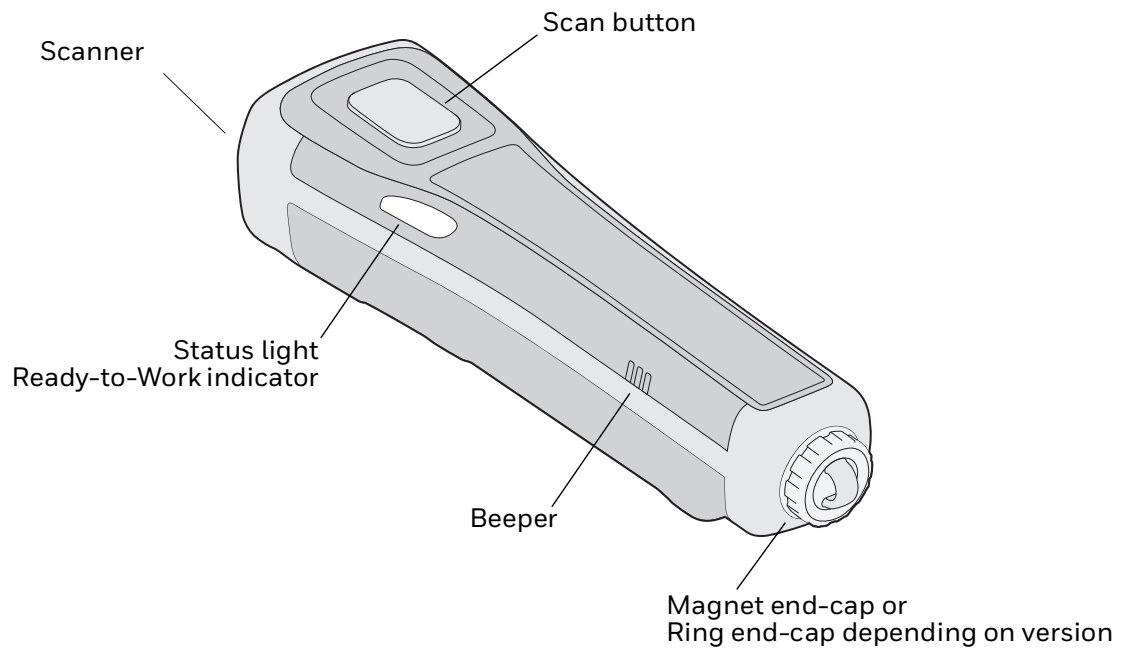
Unpack Your Device

After you open the shipping carton containing the product, take the following steps:

- Check for damage during shipment. Report damage immediately to the carrier who delivered the carton.
- Make sure the items in the carton match your order.
- Save the shipping container for later storage or shipping.

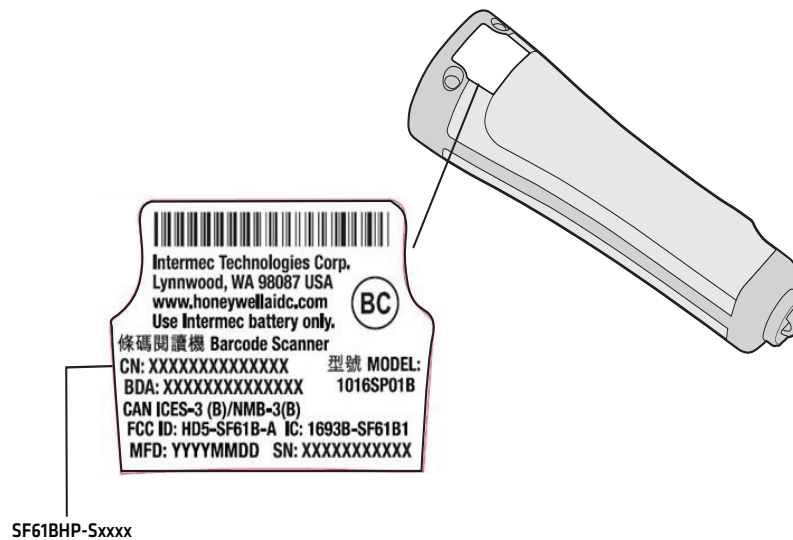
SF61B Overview

The SF61B Cordless Scanner is a rugged purpose-built handheld scanner with an ergonomic design. It uses a Bluetooth® radio for RF communication.



The SF61B is available in the following model:

- High performance 2D imager—SF61BHP-Sxxxx



Note: SF61B Model Type: The model type of your SF61B is indicated in the first part of the configuration number. In this illustration, the model type is SF61BHP-Sxxxx for high performance 2D imager.

Battery and Charge Information

The SF61B uses a lithium-ion battery as its main power source. You need to fully charge the scanner before using it.



Caution: Improper battery replacement or incompatible device usage may result in risk of burns, fire, explosion, or other hazard. Dispose of lithium-ion batteries according to local regulations. Risk of fire and burns if improperly handled. Do not open, crush, heat above 60°C (140°F), or incinerate.

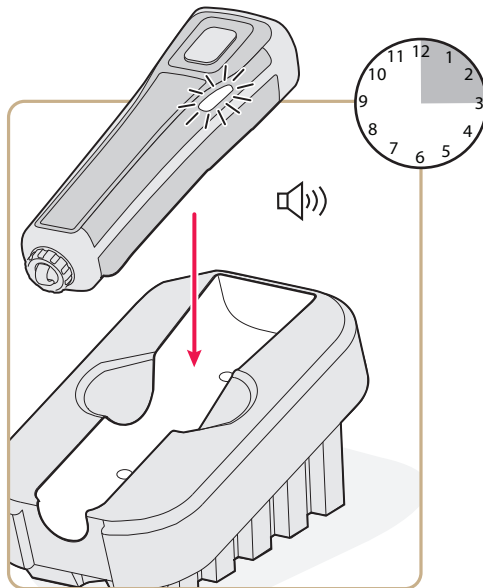
The SF61B can be charged using various types of charger (Single Bay Charge Cradle, Single Bay USB Charger, Quad Charge FlexDock Kit, Single Bay AC Charger and Vehicle Power Adapter Kit). For more details see [Accessories](#) on page 10.

Make sure you fully charge the battery before you start to use the SF61B. Should a problem arise with the battery, you can replace it ([see Replace the Battery of the SF61B](#) on page 48).

To Charge the Scanner Battery

Place the SF61B in a charger bay or connect it to the vehicle power adapter. The scanner beeps twice (two-tone beep) and the status light shows the charge status:

- A fixed red light indicates "Scanner Charging"
- A fixed green light indicates "Scanner Fully Charged"



SF61B with the 1-Bay Charger

It takes approximately 3 hours to charge a fully discharged battery.

Note: Charging time is longer in temperatures of 35° C/95° F and higher.

Battery Charge Status during Operation

During SF61B operation, the status light blinks red when the battery charge is less than 20% to indicate that you should charge the battery.

Understand Bluetooth Terms

The following terms are used in this User Guide:

Pairing: To be able to connect and exchange data with a Bluetooth host device, your Bluetooth product must be "paired" with that device. The way you authorize the pairing to take place depends on the type of Bluetooth host device you are pairing with - for more details see [Connect the SF61B](#) beginning on page 15.

If your Bluetooth product and your Bluetooth host device are paired but, for some reason, the connection cannot be established (your product is out of range, one or both devices have been switched off, etc), the pairing association is not lost and the devices can communicate again when they are switched on and in range.

Discoverable: Your Bluetooth product is not yet paired with a Bluetooth host device but it can be "seen" by that device (the Bluetooth host device may also be able to "see" other Bluetooth products that are nearby).

When your Bluetooth product is trying to connect or is connected to a Bluetooth host device, it is no longer discoverable.

HID and SPP: Honeywell Bluetooth scanners can use two specific Bluetooth profiles to communicate with Bluetooth-enabled host devices:

- **HID:** When you use the HID (Human Interface Device) profile, your scanner is recognized as a keyboard by the host. Connection information is stored so that if the scanner loses the connection (out of range, low battery, etc.), it will try to reconnect as soon as this becomes possible again (back into range, charged battery...). No specific software is needed to collect data using the HID profile (this is not the case if you use the SPP profile).
- **SPP:** The SPP profile (Serial Port Profile) allows your scanner to communicate with the host device through the Bluetooth link as if it were a serial port. In this way, your scanner is immediately compatible with data management applications that collect data through a serial port.

Default Settings and Custom Settings

The product behavior described in this manual corresponds to the default settings of your SF61B cordless scanner. Most of these settings can be customized using EasySet, the Honeywell scanner setup software.

EasySet provides the full range of setup options for your SF61B for details on how to install and use EasySet (see [Configure Your Scanner with EasySet](#) on page 33).

In this Manual and in EasySet, default settings are indicated by “(*)” after the name of the default setup command.

Turn On the SF61B

To turn the scanner On, press and release the scan button. The SF61B beeps twice and vibrates at power-up (default behavior).

If your scanner connects or reconnects to a Bluetooth host device / application, it emits a series of beeps from low to high and the blue Honeywell Ready-to-Work indicator turns solid blue (default scanner behavior).

Pair with a Bluetooth Host Device

If your SF61B is discoverable (not connecting or not already connected to a Bluetooth host) you can pair it with a Bluetooth host device and establish a Bluetooth connection between the two devices (see [Connect the SF61B](#) beginning on page 15).

Note: *Being discoverable is the default behavior of the SF61B, but you can use EasySet to make your product not discoverable if you wish (**Interface > Bluetooth > Discoverable > Not discoverable**).*

Connect on Power-Up

While the scanner is waiting for a connection, the blue Honeywell Ready-To-Work LED blinks slowly.

Host-Initiated (Outgoing) SPP Connection

If your scanner is paired with a Bluetooth host device and was connected when it powered down, you will have to re-establish the connection manually when it powers up again.

After 5 minutes of inactivity (default behavior, modifiable), it will power down if the connection is not established.

All Other Connection Types

If your scanner is paired with a Bluetooth host device and was connected when it powered down, it will automatically try to reconnect at power-up.

After 5 minutes of inactivity (default behavior, modifiable), it will power down if the connection is not established.

Inactivity Shutdown Period

By default the SF61B shuts down after a period of inactivity of 1 hour if it is connected to a Bluetooth host and after 5 minutes of inactivity if it is not connected.

You can use EasySet to modify these inactivity timeouts (**Operating settings > Scanning / Triggering > Power down**).

Understand the SF61B Behavior

The SF61B uses lights, beeps and vibrations to indicate if a barcode has been successfully decoded.

Note: *The SF61B has a different behavior (lights, beeps, vibrate alert) to its predecessor, the SF51. If you prefer to use the beep and LED mode of the SF51, you can use EasySet to activate the legacy mode (**Operating settings > Beeps / LEDs > Beep and LED mode > Legacy mode**).*

Blue Honeywell-Ready-to-Work Indicator

Note: *The blue Honeywell Ready-to-Work light is enabled by default but you can use EasySet to disable the light or choose another color if you wish (**Operating settings > Beeps / LEDs > Ready-to-Work LED**).*

The blue Honeywell Ready-to-Work indicator LED gives information about the Bluetooth connection. When a connection has been established the light is always On (blue) unless the scanner is docked in a charger (in this case the LED displays a green or red battery charge indication even though the Bluetooth connection is still active).

Blue Honeywell Ready-to-Work Indicator

Light State	What it Means
Off	A Bluetooth connection has not been established.
Blinking, slow	The scanner is trying to establish a Bluetooth connection with a Bluetooth host device.
On	A Bluetooth connection is established with a Bluetooth base station or host computer and the scanner is ready to scan barcodes and send data.

When using your scanner to scan barcodes (blue light On) your scanner will also flash status information using green or red lights. See the Status Light information in the next section.

Status Light

Note: The following tables show the default behavior of the status light, you can use EasySet to modify this behavior if you wish (**Operating settings > Beeps / LEDs**).

The status light flashes green or red to indicate the status of the scanner and/or battery. Status information is sometimes shown even if the Honeywell Ready-to-Work Indicator is On. This way the scanner can communicate more than one type of information at the same time.

For example while the blue LED is On to show that there is a Bluetooth connection, the scanner will flash green when you have successfully scanned and transmitted a barcode.

Default Status Light Description During Scanner Operation

Light State	What it Means
Green light On for 2 seconds	The scanner successfully decoded a barcode and sent the data to the host.
Green light flashes twice	A configuration barcode was successfully read.
Red light comes On for 2 seconds	Transmission error or Configuration barcode was not accepted.
Red blinking slow	Battery power is low (< 20% - need to charge).
Red continuously On and 6 fast beeps every 2 seconds	NVM (non-volatile memory) problem.

Default Status Light Description When the Scanner is Docked in a Charger

Light State	What it Means
Red continuously On	The battery is not fully charged and is charging.
Green continuously On	The battery is fully charged.
Red continuously On and 6 fast beeps every 2 seconds	NVM (non-volatile memory) problem.
Amber blinking	Battery charging problem: • battery failure Solution: Replace the battery. • Temperature problem: The integrated charge handler in the SF61B refuses to charge the battery due to storage or use of the SF61B and/or the battery charger outside the recommended battery charging temperature range (see recommended “Charging” temperature range in Temperature and Environmental Specifications on page 53) • Solution: Move the SF61B (and battery) and/or battery charger to a location where they can regain the recommended charging temperature and charge the battery (no need to replace the battery).

Beeps and Vibrate Alert

Note: The following table shows the default behavior of the beeps and vibrate alert, you can use EasySet to modify many of these settings if you wish (**Operating settings > Beeps / LEDs**).

The SF61B beeps to give you audio feedback and vibrates when performing some functions. For example, you hear a beep each time you scan a valid barcode.

Default SF61B Beep and Vibrate Alert Descriptions

Beep Sequence	What it Means
Single beep and vibrate alert	Good read - the scanner successfully scanned a barcode.
Two fast beeps and vibrate alert	Power-up.
Two fast beeps	The scanner successfully scanned a configuration barcode.
Two beeps, bi-tonal	The scanner is docked correctly in a battery charger.
Six very fast beeps and vibrate alert	Transmission error or Configuration barcode was not accepted.
Series of beeps from low to high	The scanner is connecting to a Bluetooth host.
Series of beeps from high to low (cannot be deactivated)	The scanner is disconnecting from a Bluetooth host. Note 1: The scanner does not beep when disconnecting automatically after a long period of inactivity. Note 2: The scanner performs a hardware reset (restart) when it is disconnected from EasySet (two beeps and a vibrate alert by default).
Six-beep melody (cannot be deactivated)	Scanner confirmation after rescue procedure (see Chapter 4).

Using Vibrate Alert

Note: You can use EasySet to modify the default vibrate alert settings if you wish (**Operating settings > Beeps / LEDs > Vibrate alert**).

In this Manual and in EasySet, default settings are indicated by “(*)” after the name of the default setup command.

You can configure the SF61B to vibrate when it successfully decodes a barcode. This feature can be useful in these situations:

- You are in a noisy environment, such as a busy warehouse, where it can be difficult to hear the beeps.
- You are working in a quiet environment, such as a library, where you do not want to make a lot of noise.

To Turn On Vibrate Alert for a Good Read

- Scan this barcode:



Vibrate alert - On good read - Enable (*)

To Turn Off Vibrate Alert for a Good Read

- Scan this barcode:



Vibrate alert - On good read - Disable

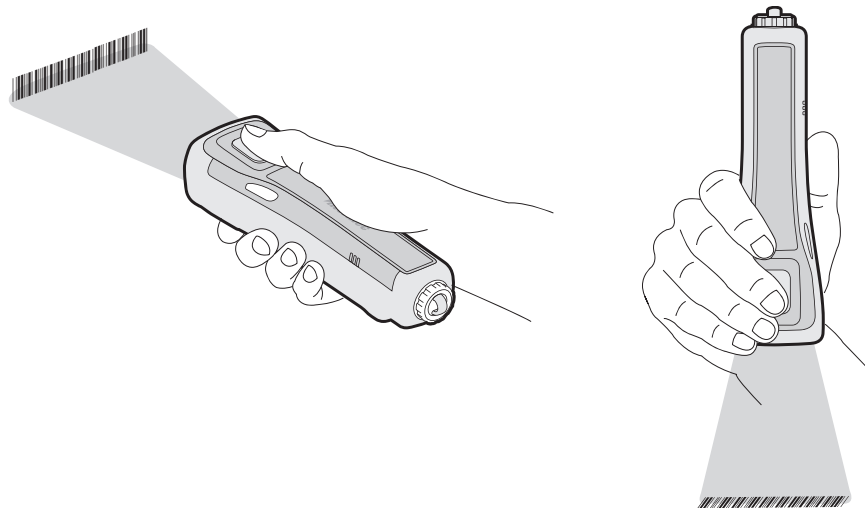
Scan Barcodes

The SF61BHP contains a 2D area imager to scan barcode data. When you unpack the SF61BHP, the following barcode symbologies are enabled by default:

- Code 39 (*)
- Code 128 / GS1-128 (*)
- EAN/UPC (*)
- Data Matrix (*)
- PDF417 (*)
- QR Code (*)

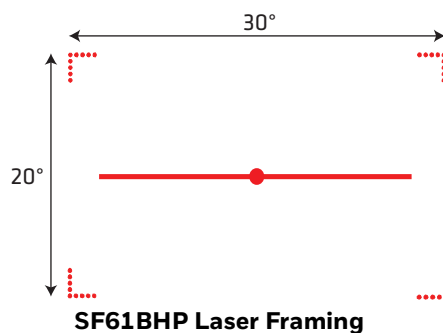
Note: Use EasySet to enable and configure other symbologies (you will find them in the **Symbologies** section of the EasySet commands window). see [Configure Your Scanner with EasySet](#) on page 33 for details on how to use EasySet.

Before you can scan barcodes and send data to your data collection application, you need to establish a Bluetooth connection between your SF61B and your Bluetooth host device. If your scanner is not connected it will emit an error beep when scanning barcodes. For more information about establishing a Bluetooth connection, see [Connect the SF61B](#), beginning on page 15.



To Scan with the SF61B2D and SF61BHP

1. Turn your scanner On by pressing the scan button.
2. Connect your scanner to a Bluetooth device.
3. Point the scanner at the barcode and hold it steady a few inches from the label.
4. Press the scan button:
 - Use the laser framing to position the imager over the barcode or area to capture.



Note: When reading barcode labels that are printed close to each other:

- Use EasySet to activate the “Center Decoding” option to minimize the risk of reading the wrong code (**Operating settings > Data decoding security > Center decoding**).
- Try to frame only the barcode you want to read to avoid reading the wrong barcode.

Accessories

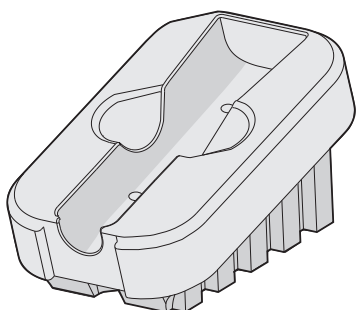
This section provides a list of required and optional accessories for your SF61B cordless scanner.

Required Accessories

Note: Most of the chargers in this section require a dedicated power supply. You will need to acquire a country-specific power cable to connect it, ask your Honeywell supplier or local contact for more information.

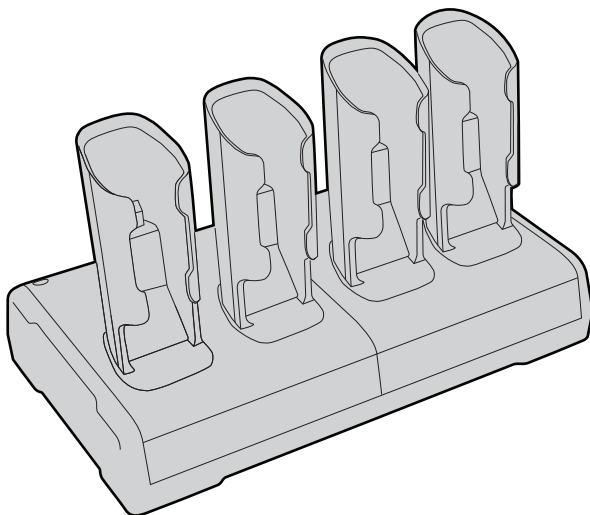
You will need one of the following chargers for your SF61B.

Single Bay Charge Cradle



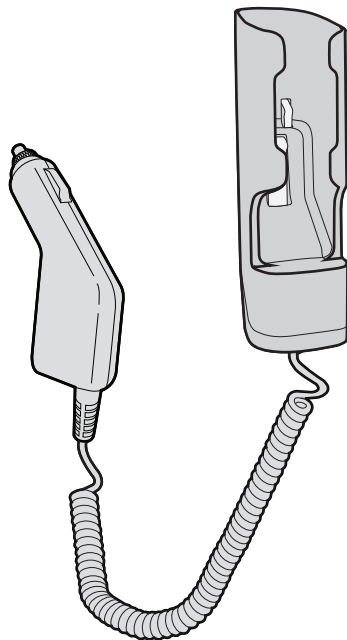
Single Bay Charge Cradle (P/N 871-221-xxx): Used to charge a single SF61B scanner, operates with a Universal 5V power supply (P/N 851-089-306).

Quad Charge FlexDock Kit



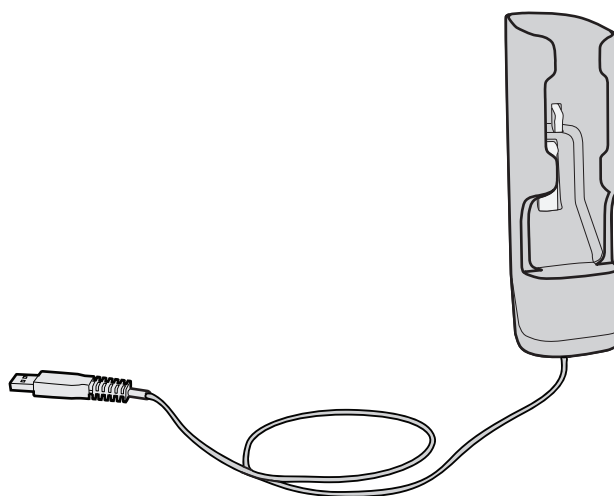
Quad Charge FlexDock Kit (P/N DX2A28820): Used to charge up to four SF61B scanners in two FlexDock Cups, operates with a dual-base power supply (P/N XXXXXXXX).

Vehicle Power Adapter Kit



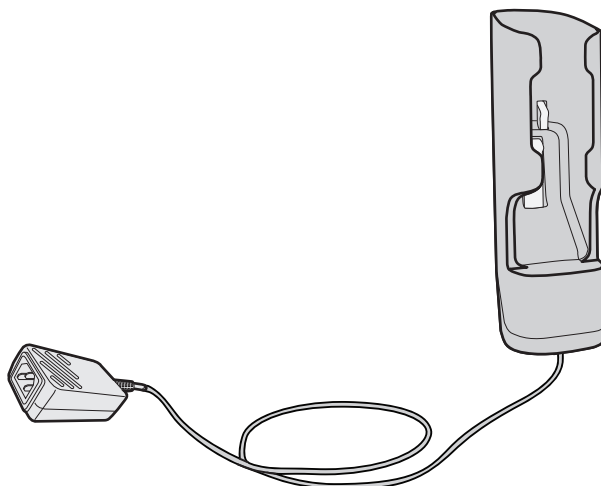
Vehicle Power Adapter Kit (P/N SF61-VPK-Sxxx): Used to charge a single SF61B scanner from a vehicle battery (cigar lighter connection).

Single Bay USB Charger



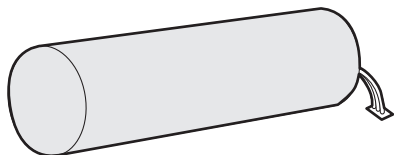
Single Bay USB Charger (P/N SF61-UPK-Sxxx): Used to charge a single SF61B scanner from a USB port.

Single Bay AC Charger



Single Bay AC Charger (P/N SF61-APK-Sxxx): Used to charge a single SF61B scanner from an AC power supply. You will need a country specific power cord (sold separately).

SF61B Battery

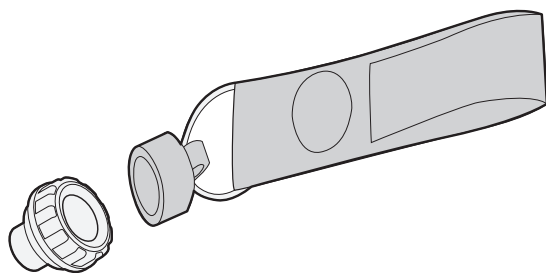


SF61B Battery (P/N SF61-BAT-xxx): Replacement battery for the SF61B.

Optional Accessories

The following accessories are optional.

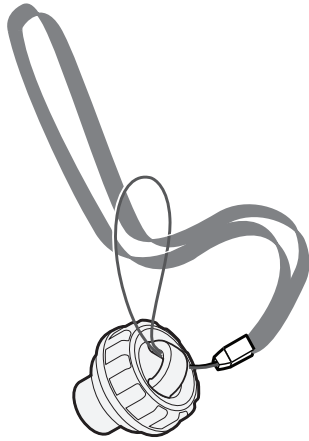
SF61B Magnet End-Cap & Belt Loop



SF61B Magnet End-Cap & Belt Loop (P/N SF61-MAG-Sxxx): Convenient belt attachment accessory for the SF61B scanner, can be installed in place of a ring end-cap.

Note: For details on how to replace an SF61B end-cap, see [Replace the End-Caps of the SF61B](#) on page 49.

SF61B Ring End-Cap & Wrist Strap



SF61B Ring End-Cap & Wrist Strap (P/N SF61-RIN-Sxxx): Convenient wrist attachment accessory for the SF61B scanner, can be installed in place of a magnet end-cap.

Note: For details on how to replace an SF61B end-cap, see [Replace the End-Caps of the SF61B](#) on page 49.

CONNECT THE SF61B

The Following information describes wireless settings. For information about connecting to a wireless or Bluetooth network, see [Turn On the SF61B](#) on page 5.

Bluetooth Connection Considerations

Supported Bluetooth Devices

You can use Bluetooth radio communication to connect up to seven SF61B scanners to the following devices:

- Bluetooth-enabled Honeywell computers.
- Other Bluetooth-enabled devices that support the HID (Human Interface Device) or SPP (Serial Port Profile) Bluetooth profiles.

Note: *Honeywell SmartWedgeLite software provides an interesting alternative for keyboard wedge emulation for this last category of “other Bluetooth-enabled devices” as it allows simplified pairing / connection with the host.*

Bluetooth Versions

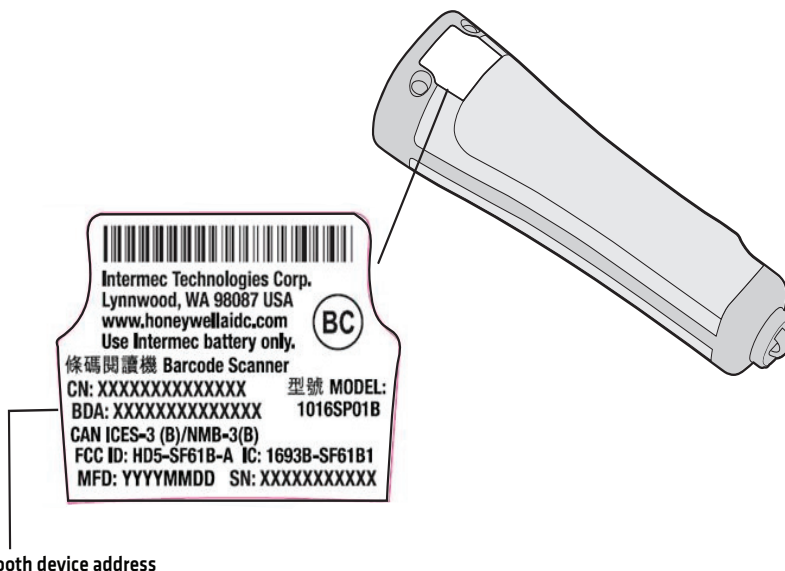
Product behavior may be different depending on the Bluetooth version you are using with your product (version 2.0, 2.1, etc.).

EasySet Setup Software

To connect to a host device, you may need to install EasySet, the Honeywell scanner setup software. EasySet provides the full range of setup options for your SF61B cordless scanner (see [Configure Your Scanner with EasySet](#) on page 33) for details on how to install and use EasySet).

SF61B Bluetooth Device Address Location

When connecting your SF61B to a host device you may need to note its Bluetooth Device Address (BDA) which you will find on the product label:



SF61B Bluetooth Device Address: The SF61B Bluetooth Device Address (BDA) is located on the scanner label.

You may also need the BDA of the Bluetooth host device you want to connect to.

Connection Lost Behavior

If the Bluetooth connection is lost (out of range, scanner battery too low, host reboot, etc.) the scanner will automatically try to reconnect once the problem is resolved (back into range, recharge scanner battery, etc.). If you try to read a barcode while the scanner is disconnected from the host, the scanner will emit an error beep.

Note: *This automatic reconnection will not occur if the SPP Outgoing (host-initiated) profile is used to pair with the host.*

Connect the SF61B to Honeywell Computer

Note: *The following procedure is valid for recent Honeywell computers. If your Honeywell computer has a different interface to the one described here, the general principle will be the same.*

Refer to the product-specific documentation for your Honeywell computer for full details on how to connect Bluetooth devices to your product.

This procedure tells you how to connect your SF61B Cordless Scanner to a recent Honeywell computer running Windows®.

To Activate Bluetooth on the Honeywell Computer

1. Tap **Start** > **Settings** > **Bluetooth** > **Mode** and check the **Turn On Bluetooth** check box.

To Pair and Connect the SF61B with the Honeywell Computer

1. Tap **Start** > **Settings** > **System** > **Wireless Scanning** > **Add Device** > **Quick Connect** > **Next**.

The computer displays a Bluetooth association barcode containing the computer Bluetooth Device Address (BDA).

2. Read the association barcode with your SF61B (you should be able to read it on the screen of the Honeywell computer). The SF61B blue Honeywell Ready-to-Work indicator blinks slowly to show that it is waiting for a Bluetooth connection and the computer asks if you want to add the scanner to its device list.
3. Tap **Yes**, enter the scanner pairing code in the **Passcode** field if it is requested (the default Honeywell Bluetooth pairing code is “0000”) and tap **Next**.

The SF61B emits the “connection successful” beep sequence (series of beeps from low to high) and the Honeywell Ready-to-Work indicator comes On (continuous blue by default).

The Honeywell computer displays a **Device Added** message to indicate successful pairing and connection.

4. Tap **Done** and **Finish** to exit the connection procedure.

To Test the Bluetooth Communication

1. Open a data input application on the Honeywell computer (**Start** > **Text** for example).
2. Read the following test code to make sure your connection is working correctly:

Code 39 Test Barcode



123456

Disconnect the SF61B from Honeywell Computer

Note: The following procedure is valid for recent Honeywell computers. If your Honeywell computer has a different interface to the one described here, the general principle will be the same.

Refer to the product-specific documentation for your Honeywell computer for full details on how to disconnect Bluetooth devices from your product.

This procedure tells you how to disconnect your SF61B Cordless Scanner from a recent Honeywell computer.

To Remove the SF61B from the Honeywell Computer

1. Tap **Start > Settings > System > Wireless Scanning > Remove Device > Remove**.

The SF61B emits the “disconnect successful” beep sequence (series of beeps from high to low) and the Honeywell Ready-to-Work indicator goes off.

2. Tap **Finish** to exit the disconnect procedure.

Connect the SF61B to Other Bluetooth Devices

Bluetooth Device Profile

Choose the appropriate Bluetooth profile to communicate with your host device (a Bluetooth-enabled PC for example) depending on the requirements of your data management application:

- HID (Human Interface Device Profile) emulates keyboard data entry.
- SPP (Serial Port Profile) emulates data acquisition through a virtual COM port.

HID Bluetooth Profile

With the HID (Human Interface Device) profile, your SF61B is recognized as a keyboard. No specific software is needed to collect data using the HID profile (this is not the case if you use the SPP profile).

When you pair using the HID profile, you connect straight away directly with the host.

SPP Bluetooth Profile

The SPP profile (Serial Port Profile) allows your SF61B to communicate with the host device as if the Bluetooth link was a serial port. In this way, your SF61B is immediately compatible with data management applications that collect data through a serial port.

When you pair using the SPP profile, you do not connect straight away with the host, you must then connect with your host application either through an Outgoing (host-initiated) SPP connection or through an Incoming (scanner-initiated) SPP connection.

Bluetooth Connections

You can connect to your Bluetooth device using one of the following Bluetooth connections:

- HID connection (host initiated)
- SPP outgoing connection (host initiated)
- SPP incoming connection (scanner initiated)

This section will provide the procedure for each type of connection.

Note: To connect up to EasySet, Honeywell scanner setup software, running on a Windows® PC you can use either of the following:

- A HID Bluetooth connection
- A host-initiated (Outgoing) SPP Bluetooth connection

See [Configure Your Scanner with EasySet](#) on page 33 for details on how to install and use EasySet.

HID Connection

When connected in HID, connection information is stored, meaning that if the scanner loses the connection (out of range, low battery, etc.), it will try to reconnect as soon as possible (back into range, charged battery, etc.).

To Connect in HID Device Profile

1. Before trying to pair and connect your scanner, make sure that:
 - The scanner is not already trying to establish a Bluetooth connection (blinking blue Honeywell Ready-to-Work indicator), in this case read the **Bluetooth Device Disconnect** barcode:



Bluetooth Device Disconnect

- The scanner is not already paired with your Bluetooth device using another profile, in this case remove it from your host list of Bluetooth devices.
 - Your host is equipped for Bluetooth communication.
 - The scanner is turned on (if not pull the trigger to turn it on).
2. Scan the **HID Bluetooth Device Profile** configuration code:



Bluetooth Device Profile - HID

3. Pair the scanner with your device.

- Double-click the Bluetooth icon in the Windows system tray (or equivalent). The Bluetooth Devices window showing the current list of paired devices is displayed.
- Click **Add a device** or the equivalent command depending on your operating system.
- The host searches for all active Bluetooth devices within range. Your SF61B scanner appears in the Bluetooth device list with the name **SF61B - BDA**, where *BDA* is the scanner Bluetooth Device Address (by default - name can be changed).

Note: *If the scanner does not appear in the list, it might already be paired with the host (under some operating systems, already-paired Bluetooth devices do not appear in the Bluetooth device search list). It may also be switched off and therefore not visible to the host, press the scan button to restart the scanner.*

- Select your scanner in the list and click **Next** (or the equivalent command).

Note: *If a pairing code is requested, click **Enter the device pairing code** (or the equivalent command), enter the scanner pairing code (the default Honeywell Bluetooth pairing code is "0000") and confirm.*

- Your SF61B scanner is now displayed in the host PC list of paired devices.

After a successful pairing the scanner is automatically connected to the host - you hear the "connection successful" beep sequence (series of beeps from low to high) and see the Honeywell Ready-to-Work indicator (continuous blue by default).

Test Your HID Connection With the Host

Start a simple data acquisition software such as Microsoft® Notepad and read the following test code to make sure your connection is working correctly:

Code 39 Test Barcode



123456

Note: *By default the SF61B uses the North American keyboard layout. See "[Select an International Keyboard \(HID Connections Only\)](#)" on page 32" if you are working with a different keyboard configuration.*

To Disconnect from the Host

To disconnect from the host, scan the disconnect barcode:



Bluetooth Device Disconnect

Check that the scanner is no longer in the host device list. If necessary, manually remove the scanner from the list.

SPP Outgoing Connection (Host Initiated)

A host-initiated (Outgoing) SPP connection requires opening the Outgoing virtual COM port from your host application (EasySet or a terminal emulation program for example).

The advantage of this method is that no Bluetooth association barcode is required. However, if the connection with the host application is lost, you must reconnect by re-opening the COM port (s).

To Connect in SPP Device Profile—Outgoing Connection

1. Before trying to pair and connect your scanner, make sure that:
 - The scanner is not already trying to establish a Bluetooth connection (blinking blue Honeywell Ready-to-Work indicator), in this case read the **Bluetooth Device Disconnect** barcode:



Bluetooth Device Disconnect

- The scanner is not already paired with your Bluetooth device using another profile, in this case remove it from your host list of Bluetooth devices.
 - Your host is equipped for Bluetooth communication.
 - The scanner is turned on (if not pull the trigger to turn it on).
2. Scan the **SPP Bluetooth Device Profile** configuration code:



Bluetooth Device Profile - SPP (*)

3. Pair the scanner with your device:
 - Double-click the Bluetooth icon in the Windows system tray (or equivalent). The Bluetooth Devices window showing the current list of paired devices is displayed.
 - Click **Add a device** or the equivalent command depending on your operating system.

The host searches for all active Bluetooth devices within range. Your SF61B scanner appears in the Bluetooth device list with the name **SF61B - BDA**, where *BDA* is the scanner Bluetooth Device Address (by default - name can be changed).

Note: *If the scanner does not appear in the list, it might already be paired with the host (under some operating systems, already-paired Bluetooth devices do not appear in the Bluetooth device search list). It may also be switched off and therefore not visible to the host, press the scan button to restart the scanner.*

- Select your scanner in the list and click **Next** (or the equivalent command).

Note: *If a pairing code is requested, click **Enter the device pairing code** (or the equivalent command), enter the scanner pairing code (the default Honeywell Bluetooth pairing code is "0000") and confirm.*

Your SF61B scanner is now displayed in the host PC list of paired devices. The scanner is paired but not connected to your host application - you will not hear the "connection successful" beep sequence (series of beeps from low to high) or see the blue Honeywell Ready-to-Work indicator (default scanner behavior) until you connect to your host application.

SPP pairing created two Bluetooth virtual serial ports (Outgoing and Incoming).

For an Outgoing SPP Bluetooth connection, you will need to know which Outgoing virtual COM port to open from your host application.

4. Note the outgoing virtual COM port that has been created:
 - Right-click the Bluetooth icon in the Windows system tray and choose **Open Settings** (or its equivalent). A Bluetooth settings window is displayed.
 - Locate the **COM Ports** section and note the **outgoing COM** port number.
 - Close the Bluetooth settings window.
5. Connect the host to the scanner by opening the COM port:
 - Press the scan button to turn on your SF61B.
 - Start your host application and select the Outgoing COM port that you noted on [page 22](#).
Depending on your host configuration and the time elapsed since your last connection / scanner reset, a popup may indicate that a Bluetooth device is trying to connect.
 - If a pairing code is requested, click **Enter the device pairing code** (or the equivalent command) and enter the scanner pairing code (the default Honeywell Bluetooth pairing code is "0000").
 - When the scanner connects to your host application, it emits a series of beeps from low to high, and the blue Honeywell Ready-to-Work indicator turns solid blue (default scanner behavior).

Test Your SPP Outgoing Connection with the Host

Read the following test code and check that it is correctly displayed by the host application to make sure that your connection is working correctly:

Code 39 Test Barcode



123456

To Disconnect from the Host

Use the Bluetooth disconnect procedure specific to your host application.

When the scanner disconnects from the host, it emits a “disconnect successful” beep sequence (series of beeps from high to low), and the blue Honeywell Ready-to-Work indicator turns off (default scanner behavior).

SPP Incoming Connection (Scanner Initiated)

A scanner-initiated (Incoming) SPP connection requires reading a Bluetooth association barcode then opening the Incoming port from the host application (a terminal emulation program for example).

The advantage of this method is that the scanner automatically tries to reconnect to the host application each time the connection is lost. This method is recommended when you are collecting data for a data management application.

To Connect in SPP Device Profile—Incoming Connection

1. Before trying to connect your scanner, make sure that:
 - It is not already trying to establish a Bluetooth connection with another host (blinking blue Honeywell Ready-to-Work indicator), in this case read the **Bluetooth Device Disconnect** barcode:



Bluetooth Device Disconnect

- It is not already paired with your Bluetooth device using another profile, in this case remove it from your host list of Bluetooth devices.
 - Your host is equipped for Bluetooth communication.
2. Scan the **SPP Bluetooth Device Profile** configuration code:



Bluetooth Device Profile - SPP (*)

3. Make sure that your host PC is enabled for Bluetooth connection from an external device (your SF61B).
 - Right-click the Bluetooth icon in the Windows system tray and choose **Open Settings** (or its equivalent).
A Bluetooth settings window is displayed.
 - Under the **Options** tab (or equivalent), activate the following options or their equivalents:
Allow Bluetooth devices to find this computer
Allow Bluetooth devices to connect to this computer
Alert me when a new Bluetooth device wants to connect
 - Under the **COM Ports** tab (or equivalent):
Note the host computer Incoming COM port. If there is no incoming COM port, you must create one.
 - Under the **Hardware** tab (or equivalent):
Select **Properties > Advanced** and note the host computer Bluetooth address.
4. Create a Bluetooth connection barcode in EasySet
 - Run the EasySet scanner setup software and select the SF61B product (**Product > Select > Handheld scanners > SF61B**).
 - In the EasySet commands window, open the **Interface > Bluetooth > Bluetooth connection** folder and choose **Bluetooth Quick Connect**.
 - Double-click the **Compose BT address** command to enter the host Bluetooth Device Address (BDA) you noted previously (see above), and click **OK** to confirm.
A Bluetooth association barcode is created containing the BDA of your host computer.
5. Read the Bluetooth connection barcode. You may be able to read it on the screen in EasySet, if not you can print it out as a label and perhaps stick it on your host device where it is easy to read (suggestion).
 - The blue Honeywell Ready-to-Work indicator blinks slowly for 5 minutes to indicate it is waiting to connect (default scanner behavior).
 - If a pairing code or validation is requested, click **Enter the device pairing code** (or the equivalent command) and enter the scanner pairing code (the default Honeywell Bluetooth pairing code is "0000")
6. Start the host application you want to connect to and open the Incoming COM port you noted previously.
 - When the scanner connects to your host application, it emits a series of beeps from low to high, and the blue Honeywell Ready-to-Work indicator turns solid blue (default scanner behavior).

Test Your SPP Incoming Connection with the Host

Read the following test code and check that it is correctly displayed by the host application to make sure that your connection is working correctly:

Code 39 Test barcode



123456

To Disconnect from the Host

Use the Bluetooth disconnect procedure specific to your host application to close the Incoming COM port.

When the scanner disconnects from the host PC, it emits a “disconnect successful” beep sequence (series of beeps from high to low), and the blue Honeywell Ready-to-Work indicator blinks slowly for 5 minutes to indicate it is waiting to connect (default scanner behavior).

When you open the Incoming COM port again, if the scanner is switched on it will reconnect to the host application.

Note: Using the **Bluetooth Device Disconnect** barcode to disconnect your scanner will disconnect it permanently - it will not go into the “waiting to connect” state (no blinking blue light) and you will have to read the hosts’ association barcode label again to re-establish the connection.



Bluetooth Device Disconnect

Connect to Other HID Devices (Smartphones, Tablets, PDAs, etc.)

You can use your SF61B with many types of portable computer devices running various operating systems (Win32, Android, WinCE, iOS, ...).

EasySet provides some useful predefined quick-setup commands to simplify the HID Bluetooth connection for devices of this type (see the **Interface > Device profile > Predefined HID profile** folder in the EasySet commands window):

- PC/Linux
- WinCE 5 / WinMobile 6.x / Android
- iOS & MacOS (including a way to control the iOS virtual keyboard from your scanner)

The Honeywell website also provides Technical Bulletins to help you connect to devices of this type:

- **Connecting a scanner via HID to an Android tablet**
- **Connecting a scanner via HID to iPad or iPhone**

Note: When using your SF61B with an iPad tablet computer, reading barcodes containing more than 200 characters may cause problems (iPad application crash, unwanted restart of the scanner).

We recommend that you take this limitation into account when working with an iPad.

Keyboard Wedge Emulation using the SmartWedgeLite Application

Honeywell SmartWedgeLite software provides an interesting alternative for keyboard wedge emulation as it allows simplified pairing / connection with the host.

SmartWedgeLite uses the SPP Bluetooth profile to make the connection but sends data from the scanner as if it was entered from a keyboard.

Note: For more information about SmartWedgeLite, see the application integrated help or online help at <https://support.honeywellaidc.com/s/article/What-is-SmartWedge-Lite-as-virtual-wedge>.

Run SmartWedgeLite

Note: You can download SmartWedgeLite at: <https://hsmftp.honeywell.com/>

Navigate to **Software > barcodes > Software > Tools and Utilities > SmartWedgeLite**.

Before connecting your scanner using SmartWedgeLite, make sure that your host PC is Bluetooth-enabled and that SmartWedgeLite is installed.

To Connect Your Scanner as a Keyboard Wedge using SmartWedgeLite

7. Scan the **Bluetooth Device Profile - SPP** configuration barcode:



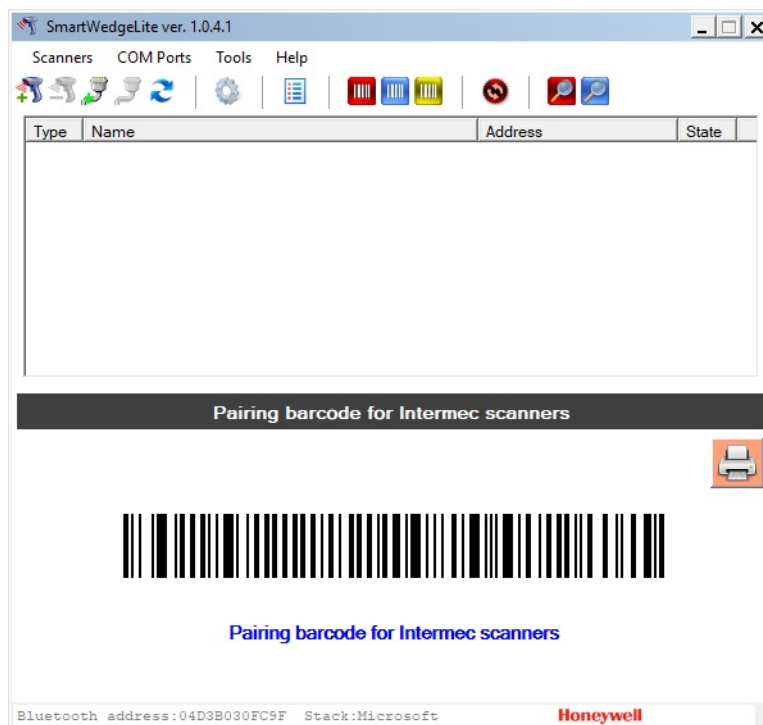
Bluetooth Device Profile - SPP (*)

8. Start SmartWedgeLite.
9. Perform one of the following procedures to connect to the host.

Scanner-initiated (Incoming) Connection with SmartWedgeLite

Note: With the scanner-initiated (Incoming) connection, if your scanner loses the connection with the host PC it will automatically try to re-establish it.

Read the Host Association Barcode in SmartWedgeLite



SmartWedgeLite main screen with the host association barcode

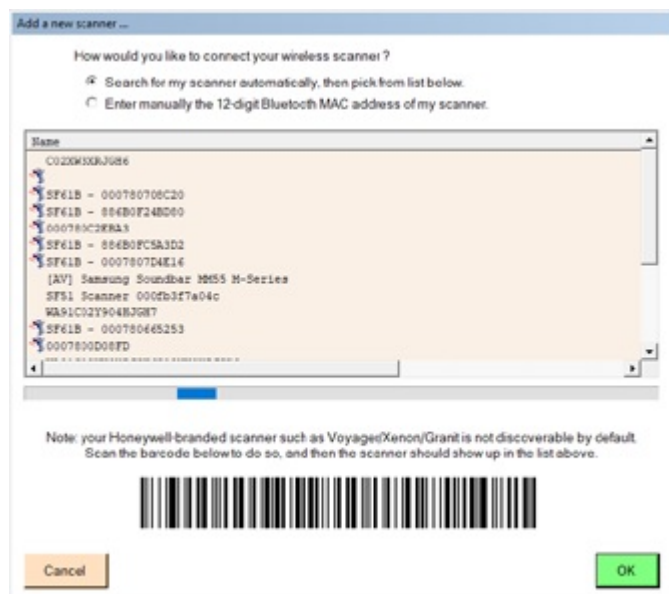
To Read the Host Association Barcode in SmartWedgeLite

1. Read the association barcode displayed in the SmartWedgeLite main window (the barcode contains the host Bluetooth Device Address).

Host-initiated (Outgoing) Connection with SmartWedgeLite

Note: With the host-initiated (Outgoing) connection, if your scanner later loses the connection with the host PC, you will need to follow the connection procedure again to re-establish the Bluetooth connection.

Use the SmartWedgeLite Device List to Connect

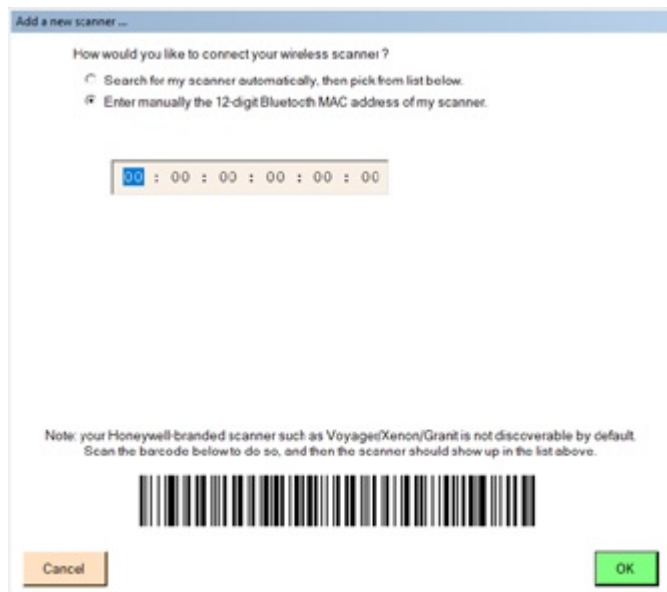


Host-initiated connection: Choosing your scanner from SmartWedgeLite list of detected Bluetooth devices.

To Choose Scanner from the SmartWedgeLite device list

1. Click on **Scanners > Add Scanner** (or the  icon).
2. Select **Search for My Scanner Automatically**.
3. Choose your scanner from the list of detected Bluetooth devices and click **OK**.

Use the Scanner Bluetooth Device Address to Connect

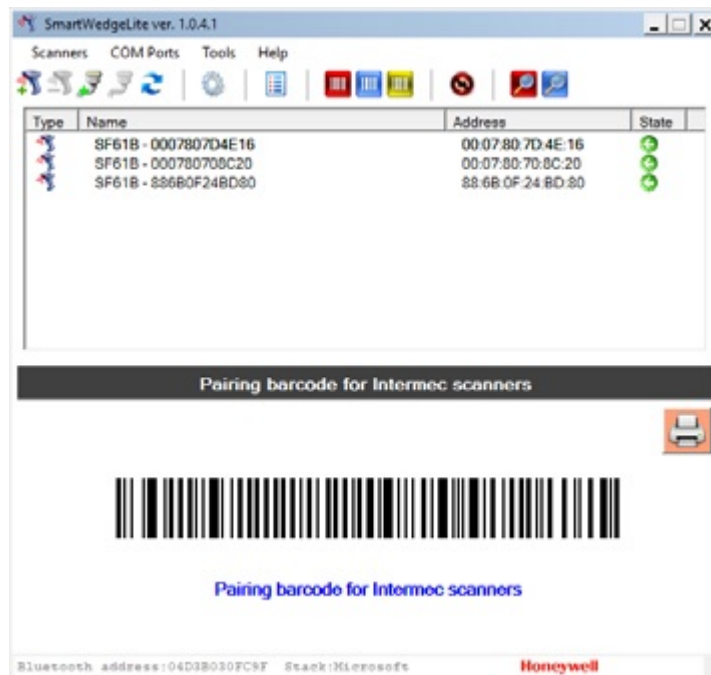


Host-initiated connection: Entering your scanner Bluetooth Device Address in SmartWedgeLite.

To Enter Your Scanner Bluetooth Device Address in SmartWedgeLite

1. Click on **Scanners > Add scanner** (or the  icon).
2. Select **Type in manually the Bluetooth address of my scanner**.
3. Enter your scanner Bluetooth Device Address and click **OK**.

Successful Scanner Connection (SmartWedgeLite)



Connected Scanners and Connection Statuses: An operational Incoming connection and a problem with an Outgoing connection.

When the scanner connects to the host PC, it emits a “connection successful” beep sequence (series of beeps from low to high) and the Honeywell Ready-to-Work indicator comes on (continuous blue by default).

The scanner is added to the list of connected scanners in the SmartWedgeLite *Scanners* window.

An arrow indicates if the connection is incoming  or outgoing . The color of the arrow indicates if the connection is operational (green) or if there is a connection problem (red).

Disconnect Your Scanner from SmartWedgeLite

To Disconnect Your Scanner

1. Select your scanner in the list of connected devices in the SmartWedgeLite *Scanners* window.
2. Do one of the following:
 - Click **Scanners > Remove Scanner**.
 - Click the  icon.
 - Press the key on your keyboard.

Your scanner is disconnected.

CONFIGURE THE SF61B CORDLESS SCANNER

Basic Setup with Configuration Barcodes

This section provides configuration barcodes for a basic setup of your scanner. Many more configuration options are available with EasySet or with your Honeywell computer, see [Configure Your Scanner with EasySet](#) and [Configure Your Scanner from Your Honeywell Computer](#).

Default values are indicated by “(*)” in this manual and in EasySet.

Reset Your Scanner (Software Reset)

Read the **Reset Factory Defaults** configuration barcode to reset your scanner parameter settings to their initial values.



Reset Factory Defaults

You can also perform a software reset of your SF61B using one of the following methods:

- By sending a **Reset Factory Defaults** command to the scanner in online setup with EasySet (see [Online Setup with EasySet](#) in the present chapter).
- By forcing a software reset of the scanner (see [Force a Software Reset](#) on page 41).

The resulting software reset will reset your scanner parameter settings to their initial values so you will have to reconfigure any custom settings you have programmed in your scanner.

Note: Depending on your host configuration (device, Bluetooth version), after a software reset of your scanner (**Reset factory defaults**) you may have to re-pair your product with your host device /application (see the appropriate section in [Chapter 2, Connect the SF61B](#)), and in all cases you will have to re-connect with your host.

Select an International Keyboard (HID Connections Only)

By default the SF61B uses the **North American Windows** keyboard layout when it is connected using the HID Bluetooth profile.

Use the following configuration barcodes to select the keyboard for your country. Additional keyboards are available in EasySet.



North American Windows (*)



French Windows



French Canadian Windows 95/98



French Canadian Windows XP/2000



German Windows



Spanish Windows



Spanish Windows



UK English Windows



Japanese Windows



Brazilian Portuguese Windows



Czech Republic Windows



Slovakian Windows



Hungarian 101-key

Configure the Postamble

The default postamble is **<CR> <LF>**. For certain applications or when using your scanner as an HID Bluetooth device you may need to change this setting. Use the following configuration barcodes to change the default postamble in your scanner.

More postamble options are available with EasySet or with your Honeywell computer (see [Configure Your Scanner with EasySet](#) and [Configure Your Scanner from Your Honeywell Computer](#) in the present chapter).



Carriage Return + Line Feed (*)



None



Carriage Return



Enter

Configure Your Scanner with EasySet

EasySet is Honeywell Windows-based scanner setup software application.

You can use EasySet to set up your scanner product in two ways:

- Online setup—send configuration commands from EasySet directly to your scanner.
- Online setup via the SD62 base station—send configuration commands from EasySet to the scanner via the SD62 base station
- Offline setup—send configuration commands to a barcode setup sheet, print out the setup sheet and scan the barcodes with your scanner.

If it is not already installed on your host PC, download and install the latest version of EasySet at this link on the Honeywell website: <https://hsmftp.honeywell.com/>.

Navigate to **Software > Tools and Utilities > EasySet**

We recommend that you install EasySet in the default location proposed by the installer.

Online Setup with EasySet

Note: In the following procedure you will use one of the following methods to connect your scanner to EasySet for online setup:

- HID Bluetooth connection
- Host-initiated (Outgoing) SPP Bluetooth connection

To Configure Your Scanner Online by Sending Commands from EasySet

1. Pair your SF61B with your EasySet host PC and connect it using one of the following methods described in Chapter 2:
 - **For an HID connection:** see [To Connect in HID Device Profile](#) on page 19 (with HID, pairing and connection are simultaneous).
 - **For a Host-initiated (Outgoing) SPP connection:** see [To Connect in SPP Device Profile—Outgoing Connection](#) on page 21.
2. Start EasySet and select the SF61B product (**Product > Select > Handheld Scanners > SF61B**).

If the Select product dialog box does not appear, choose Product > Select or click on the product icon in the upper left corner of the EasySet window.
3. Select **Communication > Select Communication Interface**. The Device Selection dialog box appears.
4. Select the connection channel corresponding to the connection method you have chosen (Bluetooth Keyboard for an HID connection or the Outgoing virtual COM port for a host-initiated SPP connection) and click **OK**.
5. EasySet connects to your scanner and displays your scanner current configuration settings in blue next to the commands.
 - These settings are indicated by a blue check mark or blue text.
 - Open the folders in the EasySet commands window to find the configuration commands you need and double-click each command to send it to your scanner.

Note: The Scanner does not beep when you send configuration commands online from EasySet. It powers off when you select **Disconnect** from the **Communication** menu in EasySet.

To Disconnect Your Scanner from EasySet

1. Select **Disconnect** from the **Communication** menu in EasySet.

HID connection: the scanner disconnects from EasySet and restarts, and then goes into “ready to work” mode (the blue Honeywell Ready-to-Work indicator comes on) as it is still connected to the host PC.

Host-initiated Outgoing SPP connection: the scanner disconnects from EasySet and restarts but it is no longer connected to the host PC.

Offline Setup with EasySet

To configure your scanner offline by scanning barcodes

1. Start EasySet. The first time you start EasySet, the Select product dialog box appears.

If the **Select product** dialog box does not appear, choose Product > **Select** or click on the product icon in the upper left corner of the EasySet window.

2. Select your product.
3. Open the folders in the EasySet commands window to find the configuration commands you need and double-click each command to send it to the setup sheet.
4. Click on the **Print** icon to print out the setup sheet and then scan the commands with your SF61B cordless scanner.

Configure Your Scanner from Your Honeywell Computer

You can configure many settings for the SF61B from your Honeywell computer using Honeywell Settings.

To Configure the SF61B from Your Honeywell Computer

Note: *The description in this section is provided as a general guideline. Consult your Honeywell computer documentation for full details on how to set up your Bluetooth scanner from your Honeywell computer.*

Note: *When you first connect to Honeywell computer, only SF61B settings common to the Honeywell computer internal scanner settings are changed to the internal scanner default settings.*

1. Establish a Bluetooth connection with your Honeywell computer (see [Connect the SF61B to Honeywell Computer](#) on page 16).
2. On your Honeywell computer, start the Honeywell Settings application which may be located in **Settings > System** folder depending on your Honeywell computer.
3. Select **Data Collection > SF61 Scanner *BDA***, where *BDA* is the Bluetooth Device Address (BDA) of your SF61B. The SF61B Bluetooth address is located on the label of your SF61B, see [SF61B Bluetooth Device Address Location](#) on page 16.
4. Configure commands from the SF61 Scanner menu for your SF61B.
5. Select **File > Save Settings**. The SF61B is updated with the new configuration command settings.
6. Close **Honeywell Settings**.

TROUBLESHOOT AND MAINTAIN THE SF61B

Troubleshoot the SF61B

Problems and Possible Solutions

If you have problems using your SF61B, use this section to try to find a solution.

Problems and Possible Solutions

Problem	Possible Solution
You press the scan button, but nothing happens.	The SF61B is powered by a rechargeable lithium-ion battery. Make sure the battery is not fully discharged. Charge the battery then try scanning again (see Battery and Charge Information on page 2).
The Status Light blinks red slowly.	The battery is low. Charge the battery (see Battery and Charge Information on page 2).
You press the scan button, the red scanning beam (1D) or laser framing (2D) turns on, but you cannot successfully scan a barcode.	Try these possible solutions: • Make sure that the SF61B is configured for the symbology you are scanning. • Make sure that the SF61B is at the appropriate scanning distance and angle from the barcode. Move the SF61B closer and farther away and tilt it up and down to find the appropriate distance and angle. • Make sure that the SF61B is able to read the type of barcode you are scanning (1D, 2D). • Make sure the barcode you are trying to scan is not poorly printed or not too small. Scan a known good barcode to make sure that the SF61B is working properly. • Clean the scan window if it is dirty. For more information (see Scan Barcodes on page 9).
You scan a barcode, the SF61B vibrates and emits six very fast beeps.	This indicates a transmission error, check that: • Your product is correctly connected to your host device / application • Your host device / application is able to receive the data from your scanner

Problems and Possible Solutions (Continued)

Problem	Possible Solution
You scan a barcode, the SF61B beeps twice, and the status light blinks green twice, but the data is not transmitted to the host computer.	Try these possible solutions: • Make sure that your data collection application is set up to receive data from the SF61B. • If you are using an SD61 Base Station connected to your host using an RS-232 cable, make sure that the serial parameters on the SD61 match the serial parameters of the host computer. The default serial parameters for the SD61 are 19200 baud, 8 data bits, no parity, and 1 stop bit.
You scan a configuration barcode and the SF61B emits six very fast beeps.	The SF61B does not recognize or support the configuration barcode you scanned.
You scan a barcode and the status light turns on, but the SF61B does not beep.	The beep duration, volume, frequency, and number may be deactivated: • Use EasySet to check your product settings (see Online Setup with EasySet on page 34) and reconfigure your product if required.
You cannot establish a Bluetooth connection with your scanner.	There may be a problem with your host Bluetooth interface, try one or more of the following: • Disable then enable your host Bluetooth radio from the Device Manager (Windows host) or equivalent for your host device. • Disconnect then reconnect your Bluetooth adapter if applicable. • Force a restart of your SF61B (hardware reset), see Force a Hardware Reset in the present chapter. • Re-pair your scanner with your host device / application (see the appropriate section in Chapter 2, Connect the SF61B). • Your scanner may be connecting with / connected to another Bluetooth host, disconnect the other Bluetooth connection if required (see Chapter 2, Connect the SF61B).
After a software reset: • By reading / sending a Reset Factory Defaults command • By performing a firmware upgrade You can see the Outgoing and Incoming virtual COM ports in your host's Bluetooth settings (SPP connection) but your host device / application tells you that they are not available.	Depending on your host configuration (host device, Bluetooth version), you may have to re-pair your product with your host device / application to reset your scanner-host Bluetooth settings (see the appropriate section in Chapter 2, Connect the SF61B).

Problems and Possible Solutions (Continued)

Problem	Possible Solution
You have added your scanner to your host device during an SPP pairing procedure but you cannot see the corresponding Outgoing and Incoming COM ports in your host's Bluetooth settings.	There may be a Bluetooth management problem on your host device, try the following procedure: • Disconnect your scanner from your host device (see Chapter 2, Connect the SF61B). • Remove your scanner from the host's device list. • Restart your host device (power down / power up). • Re-pair your scanner with your host for SPP connection and check the available COM ports in your host device's Bluetooth settings. If this does not solve the problem, try this workaround (see Chapter 2, Connect the SF61B for details on the different pairing / connection methods): • Pair / connect your scanner with your host device using the HID profile. • Disconnect your scanner from the host device. • Remove your scanner from the host's device list if applicable. • Re-pair your scanner with your host for SPP connection and check the available COM ports in your host device's Bluetooth settings.
You are trying to establish a Bluetooth connection from a host device to your SF61B, but the host device cannot find your scanner.	Your SF61B may be switched off or connected to another Bluetooth host, or there may be a Bluetooth management problem on your host device. Try one or more of the following (see Chapter 2, Connect the SF61B for details on the different pairing / connection methods): • Press the scan button to power up your product. • Disconnect your product if it is connected to another host. • Re-pair your product with your host device. • Restart your host device (power down / power up).
You established a Bluetooth connection with Honeywell computer, and the settings on your SF61B were restored to their default values.	When you first connect to Honeywell computer, only SF61B settings common to the Honeywell computer's internal scanner settings are changed to the internal scanner's default settings. Scan configuration barcodes, or use Honeywell Settings on your Honeywell computer to change your SF61B settings.
You cannot use your SF61B to change the configuration settings of an SD61 base station.	You must use an SF51 scanner or another compatible product if you want to change the settings of an SD61 base station.
Your scanner is unresponsive or appears to be locked.	Try to perform a hardware reset of your scanner (see Force a Hardware Reset on page 41). A hardware reset will restart your scanner but it will not reset your custom configuration settings. Depending on the type of Bluetooth connection you are using, your scanner will automatically reconnect with your host device / application or you will have to reconnect manually.

Problems and Possible Solutions (Continued)

Problem	Possible Solution
The trigger button is stuck.	Clean around the edges of the trigger button with a can of compressed air.
None of the previous suggestions have solved your problem.	Perform a software reset (Reset factory defaults) of your SF61B using one of the following methods: • Read the Reset factory defaults configuration code (see Reset Your Scanner (Software Reset) on page 31). • Send a Reset factory defaults command from EasySet to the scanner in online setup mode (see Online Setup with EasySet on page 34). • Force a software reset of the scanner (see Force a Hardware Reset on page 41). Bear in mind however: • This will reset your scanner's parameter settings to their initial values so you will have to reconfigure any custom settings you have programmed in your scanner (see Chapter 3, Configure the SF61B Cordless Scanner). • Depending on your host configuration (host device, Bluetooth version), you may have to re-pair your product with your host device /application (see the appropriate section in Chapter 2, Connect the SF61B). • In all cases you will have to re-connect with your host (see the appropriate section in Chapter 2, Connect the SF61B).

Note: You may find a solution to your problem at <https://support.honeywellaidc.com> the online knowledge base for Honeywell products.

Recover the SF61B

If your SF61B appears “dead” or does not respond when you press the scan button, you can try to:

- Restart the product (hardware reset)
- Reset the product configuration settings to their initial values (software reset)

A hardware reset does not lose the current configuration settings.

A software reset sets all the configuration settings of the scanner back to their default values, including custom default settings (same effect as when you read the **Reset factory defaults** configuration barcode).

Note: If your scanner does not turn on after a hardware and/or software reset and you are using a correctly charged and functioning Honeywell battery pack (P/N SF61-BAT-002), please contact your Honeywell representative.

Force a Hardware Reset

A hardware reset will restart your scanner, keeping the current configuration.

To Force a Hardware Reset (Restart) of your SF61B

1. Turn the scanner on by pressing the trigger one time, then release.

Note: *You may not be able to tell if the scanner is on, for example if the LEDs have been disabled and do not light up when you pull the trigger.*

2. Press and hold the scan button for more than 20 seconds until the scanner beeps twice and vibrates (no red LED).
3. Release the scan button.
 - If you have a Bluetooth connection, the SF61B disconnects from the host device when it switches off.
 - After a restart, your scanner may try to re-establish the Bluetooth connection with the host depending on the type of connection (it will do so with an HID connection or a scanner-initiated Incoming SPP connection for example).

Force a Software Reset

A software reset of your scanner will reset its parameter settings to their initial values so you will have to reconfigure any custom settings you have programmed in your scanner (see [Chapter 3, Configure the SF61B Cordless Scanner](#)).

To Force a Software Reset (Reset Factory Defaults) of Your SF61B

1. Turn the scanner on by pressing the trigger one time, then release.

Note: *You may not be able to tell if the scanner is On, for example if the LEDs have been disabled and do not light up when you pull the trigger.*

2. Press and hold the scan button for 30 seconds until the red LED comes on.

The scanner will beep after 20 seconds (hardware reset) however, keep the trigger pressed until the red LED comes On (10 more seconds after the hardware reset).

3. Press the scan button very rapidly five times in succession while the red LED is On (you need to be quick as the red LED only stays on for 2 seconds).

The green LED comes On, the scanner beeps a reset confirmation (six-beep melody) and Powers Off and Powers On (two beeps and vibrate alert by default).

If you had a Bluetooth connection before the software reset, the SF61B will disconnect from the host device.

Note: Depending on your host configuration (device, Bluetooth version), after a software reset of your scanner (Reset factory defaults) you may have to re-pair your product with your host device /application (see the appropriate section in [Chapter 2, Connect the SF61B](#)).

Call Product Support

To talk to Honeywell Product Support representative:

- In the U.S.A. and Canada, call 1-800-755-5505
- Outside the U.S.A. and Canada, contact your local Honeywell representative. For help, go to www.honeywellaidc.com and click **Contact Us**.

Before you call Honeywell Product Support, make sure you have the following information for your **SF61B** product:

- Configuration number (“CN” on the product label)
- Serial number (“SN” on the product label)
- Firmware version
- Sub-system versions
- Decode version

Get SF61B Version Information

There are two ways to get the firmware version, subsystem versions and decode version of your SF61B:

- Read **Get version** barcodes and display your product version information on your host device’s screen.
- Use EasySet in online setup mode to display your product version information.

Read “Get Version” Barcodes

You can read **Get version** barcodes to display your product version information if your SF61B is connected to a Bluetooth host device / application.

To Get Version Information by Reading Barcodes

1. Connect your SF61B to a Bluetooth host using the appropriate procedure for your host device /application (see [Chapter 2, Connect the SF61B](#)).
2. Run an application that can accept barcode information from your SF61B (Microsoft Notepad if you are using an HID connection for example, or the host application you use for Bluetooth serial emulation).

3. Scan the following Barcodes:



Get Firmware Version



Get Sub-system Version



Get Decode Version

The version information is displayed in your host application.

Use EasySet to Display Current Version Information

You can use EasySet to get version information if your SF61B is connected using an HID connection or a host-initiated (Outgoing) SPP connection.

To Get Version Information by Reading Barcodes

1. Follow the procedure for online setup with EasySet (see [Online Setup with EasySet](#) on page 34).
2. When the scanner is connected to EasySet, open the **Configuration modes and utilities** section in the EasySet commands window.

The current firmware, subsystem and decode versions appear in blue next to the **Get Firmware version**, **Get Sub-system versions** and **Get Decode version** commands.

Upgrade the SF61B Firmware

You may need to upgrade the SF61B firmware if there is an update that incorporates changes to a feature or adds functionality to the scanner. When you upgrade your scanner, the current settings are erased and replaced with the default settings.

After a firmware upgrade, you will need to re-establish Bluetooth communication between your SF61B and the other Bluetooth devices and applications in your data collection system.

Upgrading the SF61B takes about 10 minutes to complete.

Note: Depending on your host configuration (device, Bluetooth version), after a firmware upgrade of your scanner you may have to re-pair your product with your host device /application (see the appropriate section in [Chapter 2, Connect the SF61B](#)).

Prepare for Firmware Upgrade with EasySet and WinFlash

To upgrade the SF61B you will need:

- A Bluetooth connection with a Bluetooth enabled host (Internal Bluetooth controller or External Bluetooth adapter).
- A host PC running Microsoft Windows XP with SP2, Microsoft Windows 2000 with SP4, or a more recent version of Microsoft Windows.
- The latest version of EasySet (includes the WinFlash firmware upgrade utility) installed on the host PC (available at <https://hsmftp.honeywell.com/> Navigate to **Software > Barcode Scanner > Software > Tools and Utilities > EasySet**).
- The SF61B .bin firmware file for your SF61B model (1D or 2D) available at <https://hsmftp.honeywell.com/> Navigate to **Software > Barcode Scanner > Wireless Barcode Scanner > SF61B > Current > standard > 2D > Current**.

Note: If your SF61B LED blinks red before you start the upgrade procedure, you will need to charge it before you perform the firmware upgrade (see [Battery and Charge Information](#) on page 2).

Download the Latest SF61B Firmware Version

To Download the Latest Firmware Upgrade Package

1. Go to the SF61B section of the Honeywell website:
<https://hsmftp.honeywell.com/>
Navigate to **Software > Barcode Scanner > Wireless Barcode Scanner > SF61B > Current > standard > 2D > Current**.
2. Open the **Downloads** tab.
3. Click the link to download the appropriate SF61B firmware upgrade package for your SF61B model (1D or 2D) and save it to your PC.

Disconnect any Existing Bluetooth Connection with Your SF61B

Firmware upgrade using EasySet and WinFlash requires a host-initiated (Outgoing) SPP Bluetooth connection. If your SF61B is currently connected to the host with another type of Bluetooth connection, you will have to disconnect/deactivate that connection before you perform the firmware upgrade procedure.

To Disconnect Your Scanner from the Host

1. If your SF61B is connected to the host, read the **Bluetooth Device Disconnect** barcode to disconnect it.



Bluetooth Device Disconnect

2. Remove your SF61B from the host's list of Bluetooth devices:
 - Double-click the Bluetooth icon in the system tray, select your scanner and click **Remove device** (or equivalent).
3. Close the host's Outgoing COM port if it is open.

Use EasySet and WinFlash to Upgrade Your SF61B Firmware

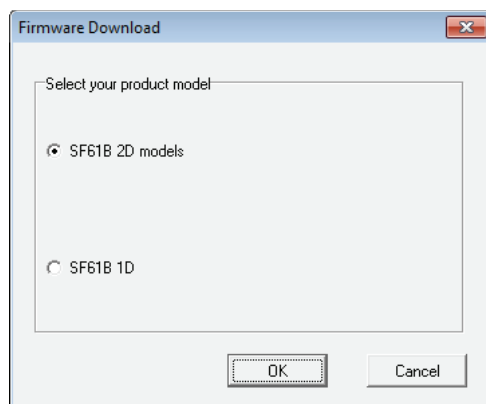
To Upgrade Your Scanner Firmware

1. Connect the SF61B to the host in SPP outgoing (host initiated) connection - see [To Connect in SPP Device Profile—Outgoing Connection](#) on page 21.
2. Start the latest version of EasySet and select the **SF61B** product (**Product > Select > Handheld scanners**) if it is not already selected.
3. From the **Tools** menu, select **Upgrade product firmware** to start WinFlash.

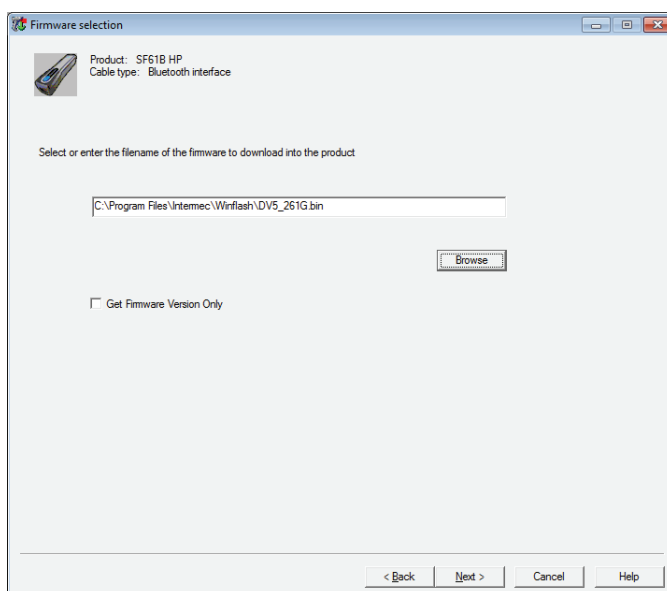
If WinFlash is not already installed you will be asked to install it - click **Yes** and follow the installation instructions.

If you are connected to EasySet for online setup, a message will ask if you want to quit online setup mode and start WinFlash.exe. Click **Yes** to continue, the scanner disconnects (the blue Honeywell Ready-to-Work indicator goes off) and then restarts (2 beeps and vibrate alert by default).

4. Select your scanner model and click **OK**.



5. Click **Browse** to find the correct **.bin** firmware upgrade file you downloaded for your product model and click **Next**.



6. Scan the **Firmware upgrade** barcode that appears on the screen - print out and read the code on this page if you can't read it on the screen.



The scanner emits two beeps and two green flashes to indicate a good configuration barcode read and then blinks with a regular red blink.

7. Click **OK** to continue.

Note: *If you do not proceed with the firmware upgrade procedure within 5 minutes, the scanner performs a restart (emits two beeps and vibrates). Close WinFlash and close EasySet and repeat the entire procedure including removing your SF61B from the host's list of Bluetooth devices and re-pairing with the host system.*

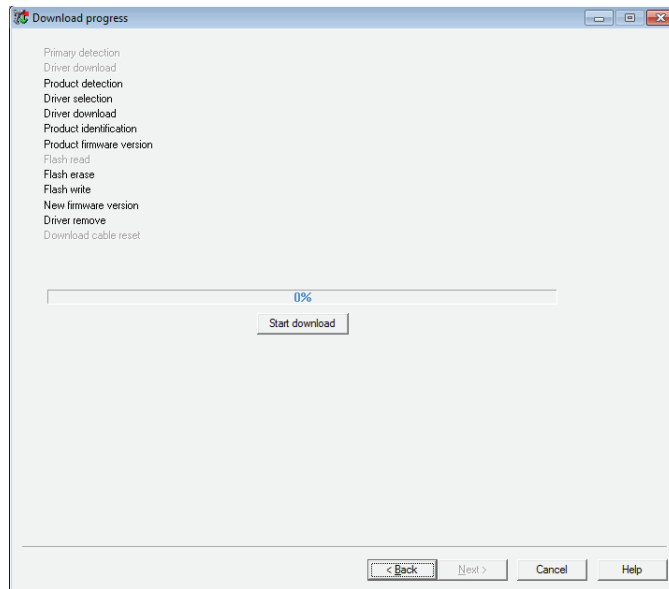
If you cannot re-pair successfully after interrupting the software upgrade (you cannot see the Outgoing and Incoming virtual COM ports in your host PC's Bluetooth settings), try the following workaround:

- Remove your scanner from your host's device list if present
- Pair and connect your scanner using the HID profile
- Disconnect your scanner from this HID connection (your scanner should no longer be present in the host's device list)

- Repeat the entire firmware upgrade procedure including removing your SF61B from the host's list of Bluetooth devices (if applicable) and re-pairing with the host system
8. Select the Outgoing COM port your SF61B is connected to.

Note: To identify the correct Outgoing port, right-click the Bluetooth icon in the Windows system tray, choose the **Open Settings** option (or equivalent) and look at the **COM Ports** details.

9. Click **Start download**.



Your host PC may display a message saying that a Bluetooth device is trying to connect, if this is the case, click **OK** to launch the upgrade process (you may have to enter your scanner's pairing code, the default pairing code is "0000").

The scanner blinks with a slower red blink when the firmware upgrade has started and is in progress.

When the firmware upgrade is complete, an "Operation successful" message is displayed in the Download progress window, the scanner emits a "success" beep sequence and then powers down and restarts.

10. Click **Finish**. You have successfully upgraded your scanner firmware.

Note: If the firmware upgrade procedure is interrupted, with a "Can't open communication port" message for example, close WinFlash and close EasySet and repeat the entire procedure including removing your SF61B from the host's list of Bluetooth devices and re-pairing with the host system.

When the firmware upgrade is completed you will need to pair again with your host device and re-establish your Bluetooth connection.

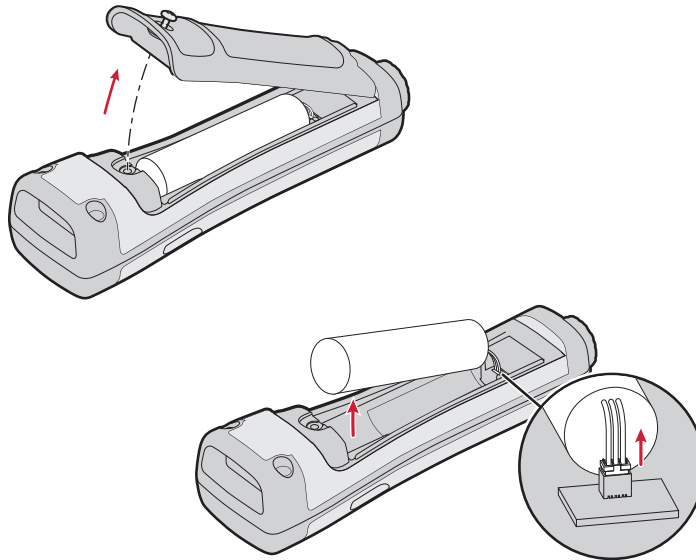
Replace the Battery of the SF61B



Caution: Integrated circuits on printed circuit boards (PCBs) in this equipment are sensitive to damage by electrostatic discharge (ESD). Prevent ESD by always wearing skin contact ground straps firmly attached to the equipment metal base assembly when working inside of the equipment housing. Failure to comply may result in damage to PCB components.

To Change the Battery

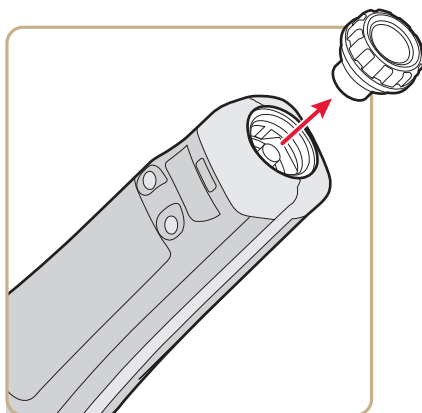
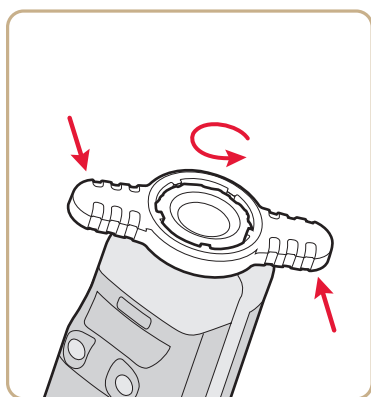
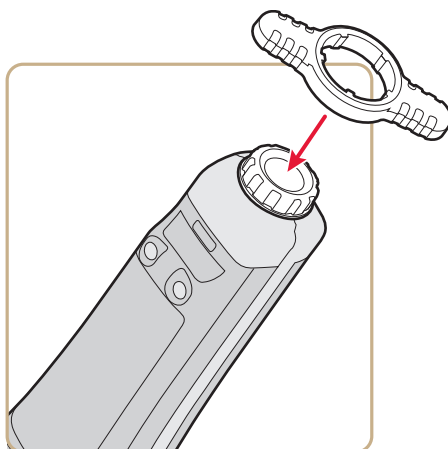
1. Loosen the screw holding the battery cover.
2. Remove the battery cover.
3. Disconnect the battery cable and remove the battery.
4. Install the new battery
 - Plug in connector
 - Place connector side of battery gently against foam padding
 - Lower the battery in to place
5. Install the battery cover and tighten the screw (56 N cm/4.956 in-lb).



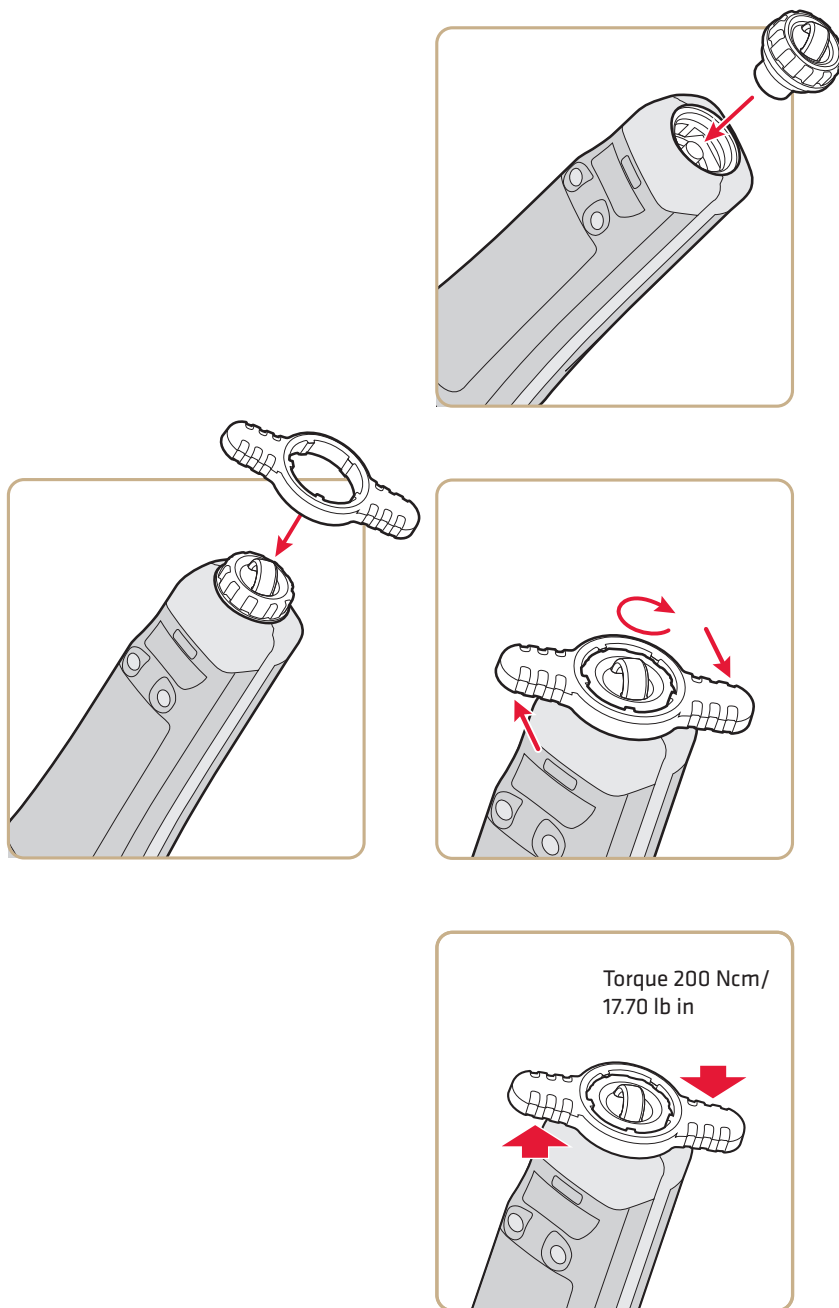
Note: Do not apply excessive pressure to the battery cover when removing and installing the screw (applying excessive pressure on the battery cover during removal/ installation may damage your product).

Replace the End-Caps of the SF61B

Remove the SF61B End-Cap



Install the SF61B End-Cap



Clean the SF61B



Caution: Opening the SF61B may cause damage to the internal components.

Clean Scanner Window

Clean the scanner window as often as needed for the environment in which you are using the SF61B. To clean the scanner window, you can use soapy water or isopropyl alcohol.

To Clean the Scanner Window

1. Dip a clean towel or rag in soapy water or isopropyl alcohol and wring out the excess. Wipe the scanner window. Do not allow any abrasive material to touch the window.
2. Wipe dry with a lint-free cloth.

Clean Scanner Trigger Button

When working in a dusty environment, the trigger may collect dust around it and even become stuck if there is too much dust. Clean around the trigger button using compressed air (standard can of compressed air).

SPECIFICATIONS AND READING DISTANCES

Specifications

Use this section to find technical information about the SF61B scanner models.

Physical Dimensions

Length	15.6 cm (6.1 in) with magnet end-cap 16.0 cm (6.3 in) with ring end-cap
Height	3.9 cm (1.5 in)
Width	4.6 cm (1.8 in)
Weight	185.5 g (6.5 oz) with the battery 137 g (4.8 oz) without the battery Battery = 48.5 g (1.7 oz)

Power and Electrical Specifications

Operating	Rechargeable lithium-ion battery (2730 mAh)
Electrical rating	x 5V, 2A
ESD sensitivity	± 8 kV (air discharge) ± 4 kV (contact discharge)

Temperature and Environmental Specifications

Operating	-20°C to 50°C (-4°F to 122°F)
Storage	-40 °C to 70°C (-40 °F to 158 °F)
Charging	0°C to 45°C (32°F to 113°F)
Relative humidity	5 to 95% non-condensing
Shock	40G, half sinus, 6 ms, 6 directions
Vibrations	8G, from 10Hz to 500Hz, 2hr/axis, 3 axes
Tumble test	2000 tumbles at 1m height
Environmental	IP65

Temperature and Environmental Specifications

Ambient light	0 to 100 000 lux
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Bluetooth Radio

Radio Type	Bluetooth Class 1 version 2.1 + EDR
Frequency	2400 - 2483.5 MHz

Scanning Performance

SF61BHP	Scan angles: 34.4° horizontal, 22.2° vertical Framing angles: 30° horizontal, 20° vertical
	Minimum X dimension 1D: 4 mils (0.1 mm) Minimum X dimension 2D: 6.6 mils (0.17 mm)
	Minimum print contrast: 20%

Barcode Symbolologies for 2D Models (SF61BHP)

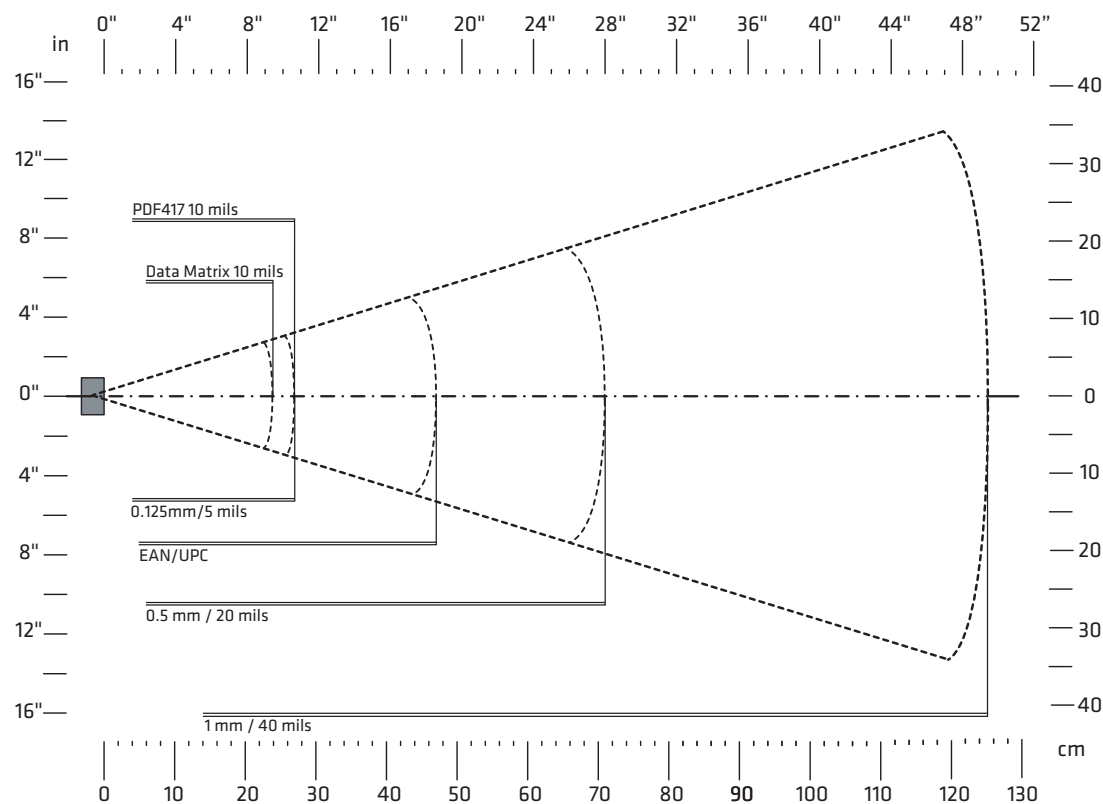
Australian Post	Han Xin Code
Aztec	Infomail
BPO	Intelligent mail
Canada Post	Interleaved 2 of 5
Codabar	Japan Post
Codablock A	Matrix 2 of 5
Codablock F	Maxicode
Code 11	Micro PDF417
Code 39	MSI
Code 93/93i	Multicode
Code 128 / GS1-128	PDF417
DataMatrix	Planet
Dutch Post	Plessey
EAN/UPC	Postnet
GS1 Composite	QR Code
GS1 DataBar Expanded	Standard 2 of 5
GS1 DataBar Limited	Sweden Post
GS1 DataBar Omni-Directional	Telepen
GS1 DataBar Stacked	TLC 39

Reading Distances

Values shown are for typical distances measured from the front end of the scanner bezel in an office environment (200 lux) with extended reading range activated.

Note: Minimum distances depend on the number of characters encoded in the barcode.

SF61BHP



Symbology	Density	Minimum Distance	Maximum Distance
Code 39	0.1 mm (4 mils)	5 cm (1.97 in)	22 cm (8.66 in)
	0.125 mm (5 mils)	4 cm (1.57 in)	27 cm (10.63 in)
	0.5 mm (20 mils)	6 cm (2.36 in)	71 cm (27.95 in)
	1 mm (40 mils)	14 cm (5.51 in)	125 cm (49.21 in)
EAN/UPC	0.33 mm (13 mils)	5 cm (1.97 in)	47 cm (18.50 in)
PDF417	0.25 mm (10 mils)	4 cm (1.57 in)	27 cm (10.63 in)
	0.38 (15 mils)	4 cm (1.57 in)	36 cm (14.17 in)
DataMatrix	0.25 mm (10 mils)	6 cm (2.36 in)	22 cm (8.66 in)

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