

# BSH-20B

## Wireless 2D Hand-held Scanner

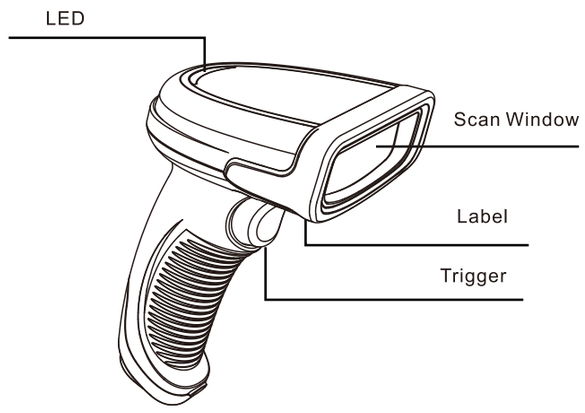
# Quick Start

For the detailed user manual and additional information please visit:
www. starmicronics.com/help-center/

V2.0



## Overview




Good Read LED:
Red LED flashes slowly - Low battery alert.
Red LED on - Scanner is charging.
Red LED off and green LED on - Full charged
Blue LED flashes slowly - Paired but no connection established.
Blue LED on - Connection established.
Green LED flashes once - Good read.

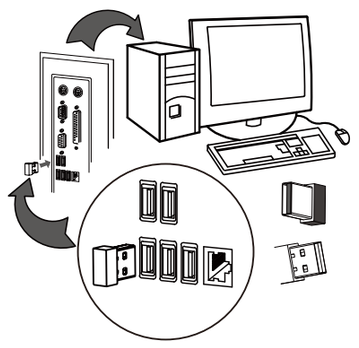


## Communicate with the Host

**Direct Bluetooth connection**

1. Scan the Enter Setup Programming Barcode followed by the preferred Direct Bluetooth Mode barcode.Scan the Exit Programing Barcode after all changes are made.
2. Open the Bluetooth Settings of the host.
3. Pull the trigger of the scanner to wake it from Sleep mode. Wait until the LED becomes solid Blue and a Beep is heard.
4. Find the scanner in the list of available Bluetooth devices.
5. Connect the scanner to the host.

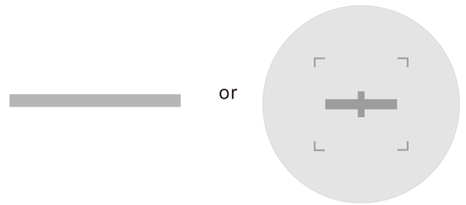
**USB Bluetooth Dongle**



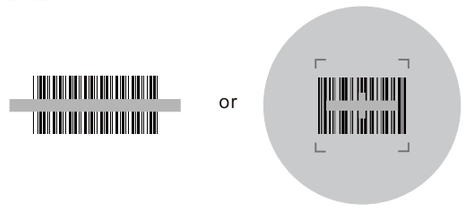


## Optimum Scanning

1. Press & hold Trigger. Illumination LED and Aiming LED cast an Illumination Pattern and an Aiming Pattern.



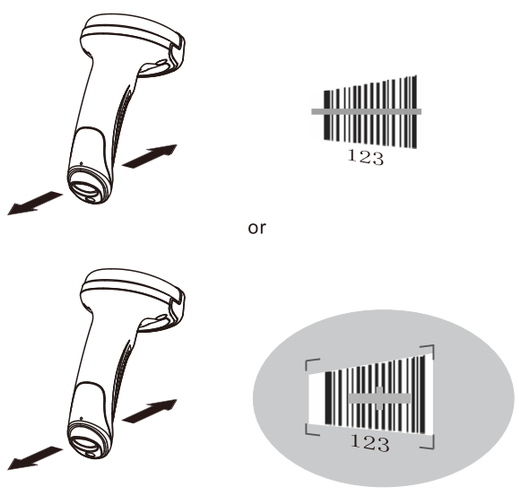

2. Keep Illumination Pattern in the center of a bar code. Zoom in and zoom out to allocate the Optimum Reading Stance.






## Optimum Scanning

3. On a successful reading, there will be a beep sound, illumination & aiming patterns die out. The Scanner then transmits barcode data to the Host.




NOTE: Experiences tell a certain range of distances has higher successful reading rate. This range is the Optimum Reading Distance.



## Barcode Programming

**1.Use of Programming Barcodes**

@SETUPE1
【Enter Setup】

@SETUPE0
**【Exit Setup】

**2. Factory Defaults**

@FACDEF
【Restore All Factory Defaults】



## Barcode Programming

**3.Wireless Communication**

**3.1 Direct Bluetooth connection(Bluetooth Mode)**

@INTERF10
【 Bluetooth HID 】

@INTERF11
【 Bluetooth BLE 】

**3.2 USB Bluetooth Dongle Connection(Bluetooth Dongle Mode)**

@INTERF19
** 【 Bluetooth Dongle KBW 】

@INTERF17
【 Bluetooth Dongle CDC 】

@INTERF18
【 Bluetooth Dongle HID POS 】



## Barcode Programming

**4 Terminating Character Suffix**

@TSUENA1
【Enable Terminating Character Suffix】

@TSUENA0
【Disable Terminating Character Suffix】

@TSUSET0D
** 【Terminating Character CR ( 0x0D)】

@TSUSET0D0A
【Terminating Character CRLF (0x0D, 0x0A)】



## Barcode Programming

**5. Scan Mode**

@SCNMOD3
【Continuous Mode】

@SCNMOD0
【Level Mode】

@SCNMOD2
【Sense Mode】



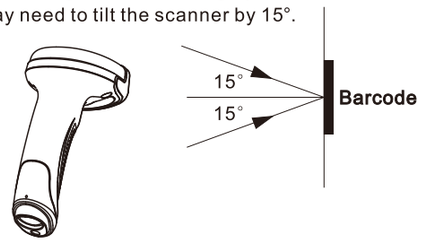
## Troubleshooting

When the scanner is not working, please:

1. Ensure that all cable connections are secure and that only the supplied cables are used.
2. Ensure that the barcode is not defaced. Wrinkled, soiled or torn barcodes might be unreadable.
3. Ensure that the barcode symbology is enabled.

If the problem still persists, please contact your dealer or Star Micronics.

When scanning barcodes on highly reflective surfaces, you may need to tilt the scanner by 15°.




Note:
In order not to affect battery life, we recommend that the scanner not be continuously plugged into a charger.

In order to avoid excessive battery discharge,We advise to charge and discharge the device every 6 months if they are not used for a long time.
Step1: **Charge**(stop charge when the electric quantity reaches about 100%)
Step2: **Discharge** (stop discharging when the electric quantity reaches to 0% or the device shutdowns automatically)
Step3: **Charge**(stop charge when the electric quantity reaches about 80% )



## CE/NOM

**Marking and European Economic Area (EEA)**

**Statement of Compliance**

We hereby declares that this device is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU.

The ventilation should not be impeded by covering the ventilation openings with items, such as newspapers, table-cloths, curtains, etc.;

This product max operating ambient temperate is 60 degree C.

⎓ Direct Current Symbol

La operación de este equipo está sujeta a las siguientes dos condiciones:
(1) es posible que este equipo o dispositivo no cause interferencia perjudicial y
(2) este equipo o dispositivo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operación no deseada



## WEEE / UKCA

**RECYCLING:**

This product bears the selective sorting symbol for Waste electrical and electronic equipment (WEEE).
This means that this product must be handled pursuant to European directive 2012/19/EU in order to be recycled or dismantled to minimize its impact on the environment.

1) Bluetooth:
Maximum RF power: 6dBm.
frequency range: 2402-2480MHz

2)We hereby declares that this device is in compliance with the essential requirements and other relevant provisions of Radio Equipment Regulations 2017.

3) The full test of the UK declaration of conformity is available at the following internet address: www.starmicronics.com



## FCC

**Radio Frequency Interference Requirements**

**Radio Transmitters (Part 15)**

This device complies with Part 15 of the FCC Rules.
Operation is subject to the following two conditions:
(1)This device may not cause harmful interference,and
(2)This device must accept any interference received, including interference that may cause undesired operation.

Tested to comply with FCC Standards
FOR HOME OR OFFICE USE

**FCCID:SL9BSH-20B**

**Note**

This equipment has been tested and found to comply with the limits for a Class B digital device,pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.
This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.
However, there is no guarantee that interference will not occur in a particular installation.
If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/ TV technician for help.



## FCC/IC

Note:
Changes or modifications to this equipment not expressly approved by the party responsible for compliance could void the user's authority to operate theequipment.

**FCC/IC Radiation Exposure Statement**

This device must not be co-located or operating in conjunction with any other antenna or transmitter.
This equipment complies with FCC/IC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines in Supplement C to OET65 and RSS-102 of the IC radio frequency (RF) Exposure rules.
This equipment has very low levels of RF energy that it deemed to comply without maximum permissive exposure evaluation(MPE).
But it is desirable that it should be installed and operated keeping the radiator at least 20cm or more away from person's body (excluding extremities: hands, wrists, feet and ankles).

Cet appareil ne doit pas être situé à proximité ou fonctionner en conjonction avec une autre antenne ou un autre émetteur.
Cet équipement est conforme aux limites d'exposition aux rayonnements énoncées pour un environnement non contrôlé et respecte les règles les radioélectriques (RF) de la FCC lignes directrices d'exposition dans le Supplément C à OET65 et d'exposition aux fréquences radioélectriques (RF) CNR-102 de l'IC.Cet équipement émet une énergie RF très faible qui est considérée conforme sans évaluation de l'exposition maximale autorisée.
Cependant, cet équipement doit être installé et utilisé en gardant une distance de 20 cm ou plus entre le dispositif rayonnant et le corps (à l'exception des extrémités : mains, poignets, pieds et chevilles)



## IC

**IC Statement**

This device complies with Industry Canada license-exempt RSS standard(s).
Operation is subject to the following two conditions:
(1) this device may not cause interference, and
(2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence.
L'exploitation est autorisée aux deux conditions suivantes :
(1) l'appareil ne doit pas produire de brouillage, et
(2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

The device is compliance with RF field strength limits, users can obtain Canadian information on RF exposure and compliance.

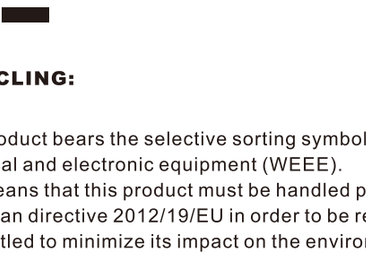
Le présent appareil est conforme de ce matériel aux conformités ou aux limites d'intensité de champ RF, les utilisateurs peuvent sur l'exposition aux radiofréquences et la conformité d'acquérir les informations correspondante.

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.
CAN ICES-003 (B)/NMB-003(B)



## PN



# BSH-20B

## Hand Held Barcode Scanner

# Quick Start

BSH-20B BLK PN:37950940
BSH-20B WHT PN:37950950